

MEETING OF THE BOARD OF DIRECTORS OF THE
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Jointly with the
ADMINISTRATION & FINANCE COMMITTEE
October 11, 2023, 8:30 a.m.

Teleconference Site:
1620 NW Mulholland Drive
Roseburg, OR 97470

Director McVicker will participate from the teleconference location.
Members of the public may attend and participate in the meeting at both in-person locations.

This meeting will be held in person at 18700 Ward Street, Fountain Valley, California, 92708 (Conference Room 101). As a convenience for the public, the meeting may also be accessed by Zoom Webinar and will be available by either computer or telephone audio as indicated below. Because this is an in-person meeting and the Zoom component is not required, but rather is being offered as a convenience, if there are any technical issues during the meeting, this meeting will continue and will not be suspended.

Computer Audio: You can join the Zoom meeting by clicking on the following link:
<https://zoom.us/j/8828665300>

Telephone Audio: (669) 900 9128 fees may apply
(877) 853 5247 Toll-free
Webinar ID: 882 866 5300#

A&F Committee:
Director Dick, Chair
Director Thomas
Director Crane

Staff: H. De La Torre, C. Harris,
H. Chumpitazi, M. Baum-Haley,
K. Davanaugh

Ex Officio Member: Director Yoo Schneider

MWDOC Committee meetings are noticed and held as joint meetings of the Committee and the entire Board of Directors and all members of the Board of Directors may attend and participate in the discussion. Each Committee has designated Committee members, and other members of the Board are designated alternate committee members. If less than a quorum of the full Board is in attendance, the Board meeting will be adjourned for lack of a quorum and the meeting will proceed as a meeting of the Committee with those Committee members and alternate members in attendance acting as the Committee.

ROLL CALL

PUBLIC COMMENTS - Public comments on agenda items and items under the jurisdiction of the Committee should be made at this time.

ITEMS RECEIVED TOO LATE TO BE AGENDIZED - Determine there is a need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda. (Requires a unanimous vote of the Committee)

ITEMS DISTRIBUTED TO THE BOARD LESS THAN 72 HOURS PRIOR TO MEETING -- Pursuant to Government Code section 54957.5, non-exempt public records that relate to open session agenda items and are distributed to a majority of the Board less than seventy-two (72) hours prior to the meeting will be available for public inspection in the lobby of the District's business office located at 18700 Ward Street, Fountain Valley, California 92708, during regular business hours. When practical, these public records will also be made available on the District's Internet Web site, accessible at <http://www.mwdoc.com>.

PRESENTATION ITEMS

1. PRESENTATION BY PARS REGARDING OTHER POST-EMPLOYMENT BENEFITS TRUST & PENSION RATE STABILIZATION PROGRAM (PRSP) TRUST CLIENT REVIEW

2. SUMMARY OF ORANGE COUNTY FY 2022-23 IMPORTED WATER SALES

PROPOSED BOARD CONSENT CALENDAR ITEMS

3. TREASURER'S REPORT

- a. Revenue/Cash Receipt Report – September 2023
- b. Disbursement Approval Report for the month of October 2023
- c. Disbursement Ratification Report for the month of September 2023
- d. GM Approved Disbursement Report for the month of September 2023
- e. Consolidated Summary of Cash and Investment – August 2023
- f. OPEB and Pension Trust Fund statement

4. FINANCIAL REPORT - Combined Financial Statements and Budget Comparative for the Period Ending August 31, 2023

ACTION ITEMS

5. AWARD OF CONTRACT FOR DISTRICT CLASSIFICATION AND BENEFITS STUDY

INFORMATION ITEMS – (THE FOLLOWING ITEMS ARE FOR INFORMATIONAL PURPOSES ONLY – BACKGROUND INFORMATION IS INCLUDED IN THE PACKET. DISCUSSION IS NOT NECESSARY UNLESS REQUESTED BY A DIRECTOR.)

6. INDIVIDUAL CHARGES DISCLOSURE REPORT

7. DISPOSAL OF FIXED ASSETS

8. CALPERS ANNUAL VALUATION REPORT AS OF JUNE 30, 2022

9. DEPARTMENT ACTIVITIES REPORTS

- a. Administration
- b. Finance and Information Technology

10. MONTHLY WATER USAGE DATA AND WATER SUPPLY INFORMATION

OTHER ITEMS

11. REVIEW ISSUES REGARDING DISTRICT ORGANIZATION, PERSONNEL MATTERS, EMPLOYEE BENEFITS FINANCE AND INSURANCE

ADJOURNMENT

NOTE: At the discretion of the Committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated, and may be subject to action by the Committee. On those items designated for Board action, the Committee reviews the items and makes a recommendation for final action to the full Board of Directors; final action will be taken by the Board of Directors. Agendas for Committee and Board meetings may be obtained from the District Secretary. Members of the public are advised that the Board consideration process includes consideration of each agenda item by one or more Committees indicated on the Board Action Sheet. Attendance at Committee meetings and the Board meeting considering an item consequently is advised.

Accommodations for the Disabled. Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by telephoning Maribeth Goldsby, District Secretary, at (714) 963-3058, or writing to Municipal Water District of Orange County at P.O. Box 20895, Fountain Valley, CA 92728. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.



TRUSTED SOLUTIONS. LASTING RESULTS.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

PARS 115 Trust - OPEB Prefunding Program &
Pension Rate Stabilization Program Plan Client Review

October 11, 2023

CONTACTS



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Ashley Baires
Client Services Coordinator
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abaires@pars.org



J. Keith Stribling, CFA
Senior Portfolio Manager
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james.stribling@usbank.com

PARS 115 TRUST TEAM

Trust Administrator & Consultant



TRUSTED SOLUTIONS. LASTING RESULTS.

- Serves as record-keeper, consultant, and central point of contact
- Sub-trust accounting
- Coordinates all agency services
- Monitors plan compliance (IRS/GASB/State Government Code)
- Processes contributions/disbursements
- Hands-on, dedicated support teams

39

Years of Experience
(1984-2023)

2,000+

Plans under
Administration

1,000+

Public Agency
Clients

500+

115 Trust Clients

500k+

Plan Participants

\$7.0B

Assets under
Administration

Trustee



- 5th largest commercial bank and one of the nation's largest trustees for Section 115 trusts
- Safeguard plan assets
- Oversight protection as plan fiduciary
- Custodian of assets

160

Years of Experience
(1863-2023)

\$9.5T

Assets under Trust
Custody

Investment Manager



- Investment sub-advisor to trustee U.S. Bank
- Investment policy assistance
- Uses open architecture
- Active and passive platform options
- Customized portfolios (with minimum asset level)

104

Years of Experience
(1919-2023)

\$8.7B

Assets under
Management

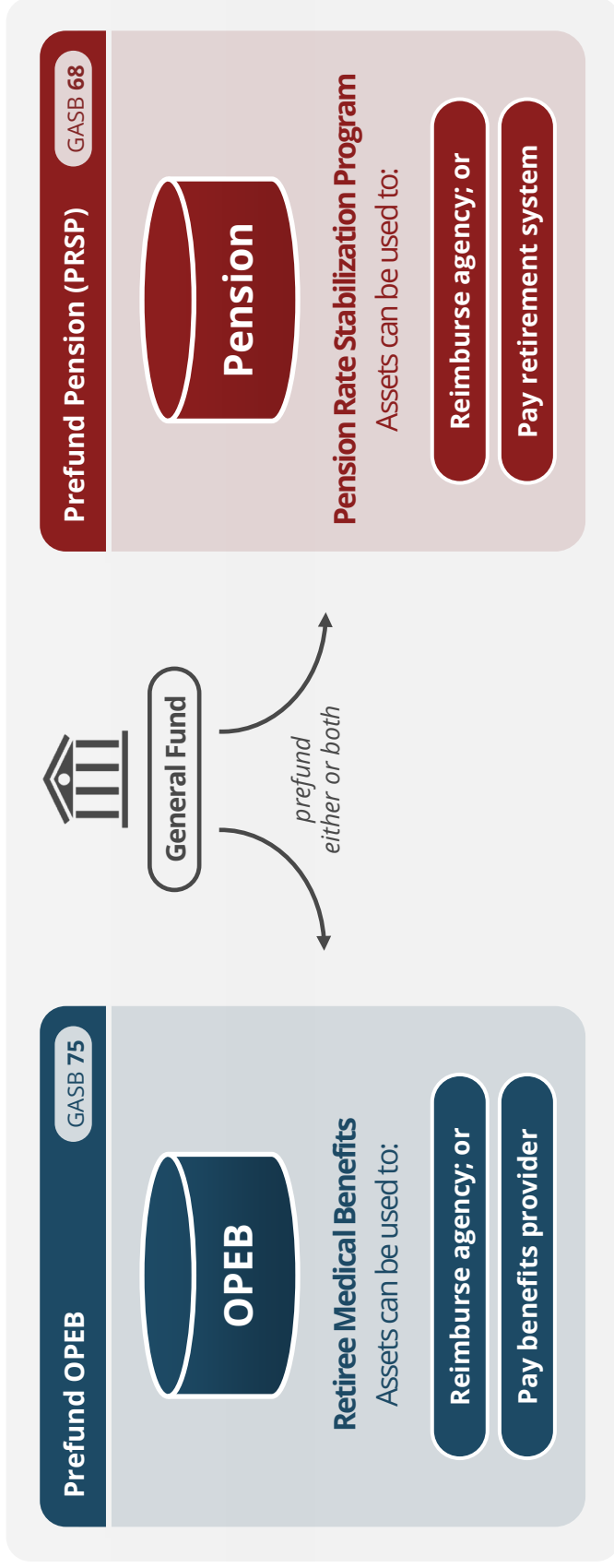


TRUSTED SOLUTIONS. LASTING RESULTS.

SECTION 115 TRUST BACKGROUND

- Section 115 Trusts are used by local governments to fund essential governmental functions (i.e., pension benefits and retiree health care) into an irrevocable trust
- The PARS Trust received the first IRS Private Letter Ruling (PLR) in June 2015 to fund both OPEB and Pension Liabilities for a multiple-employer trust
- Any income derived from a Section 115 Trust is tax exempt
- Govt Code Section 53216.6 and 53620 govern plan investments within the Trust
- Once contributions are placed into The PARS Trust, assets from the Trust can be used for specific benefit plan purposes including:
 - Reimbursing the City for OPEB Pay-as-you-Go expenses
 - Reimbursing the City for PERS Contributions
 - Pay OPEB expenses directly to retiree
 - Paying down specific CalPERS liabilities
 - Paying plan expenses (actuarial valuation or audit)

PARS IRS-APPROVED SECTION 115 TRUST



Subaccounts

OPEB and pension assets are individually sub-accounted, and can be divided by dept., bargaining group, or cost center.



Financial Stability

Assets in the PARS Section 115 Combination Trust can be used to address unfunded liabilities.



Flexible Investing

Allows separate investment strategies for OPEB and pension subaccounts.



Anytime Access

Trust funds are available anytime; OPEB for OPEB and pension for pension.



Economies-of-Scale

OPEB and pension assets aggregate and reach lower fees on tiered schedule sooner – saving money!



No Set Up Cost or Minimums

No set-up costs, no minimum annual contribution amounts, and no fees until assets are added.

OPEB ACTUARIAL RESULTS

- We have received the actuarial report by Demsey Filliger & Associates, LLC dated August 9, 2023 with a measurement date as of June 30, 2023. In the table below, we have summarized the results.

Demographic Study	Measurement Date: June 30, 2021	Measurement Date: June 30, 2023
Actives	13	9
Retirees	12	13
Total	25	22

OPEB ACTUARIAL RESULTS

	Measurement Date: June 30, 2021 Discount Rate: 6.00%	Measurement Date: June 30, 2023 Discount Rate: 6.00%
Total OPEB Liability (TOL) <i>Actuarial Accrued Liability (AAL)</i>	\$2,691,904	\$2,371,670
Fiduciary Net Position <i>Actuarial Value of Assets</i>	\$2,781,100	\$2,574,618
Net OPEB Liability (NOL) <i>Unfunded Actuarial Accrued Liability (UAAL)</i>	(\$89,196)	(\$202,948)
Funded Ratio (%)	103.31%	108.56%
Actuarially Determined Contribution (ADC) <i>Annual Required Contribution (ARC)</i>	\$50,448 For FY 2021-22	\$13,516 For FY 2023-24
Annual Benefit Payments (Pay-as-you-Go)	\$97,452	\$87,253

Rule of thumb: For every one percent increase in the discount rate, the unfunded liability is lowered by 10-12%.

IRC Section 115 Irrevocable Exclusive Benefit Trust

Discretionary

July 20, 2011

General Manager

Moderate HighMark PLUS (Active) Strategy; Pooled Account

October 2011: \$500,000

\$1,080,656

\$1,580,656

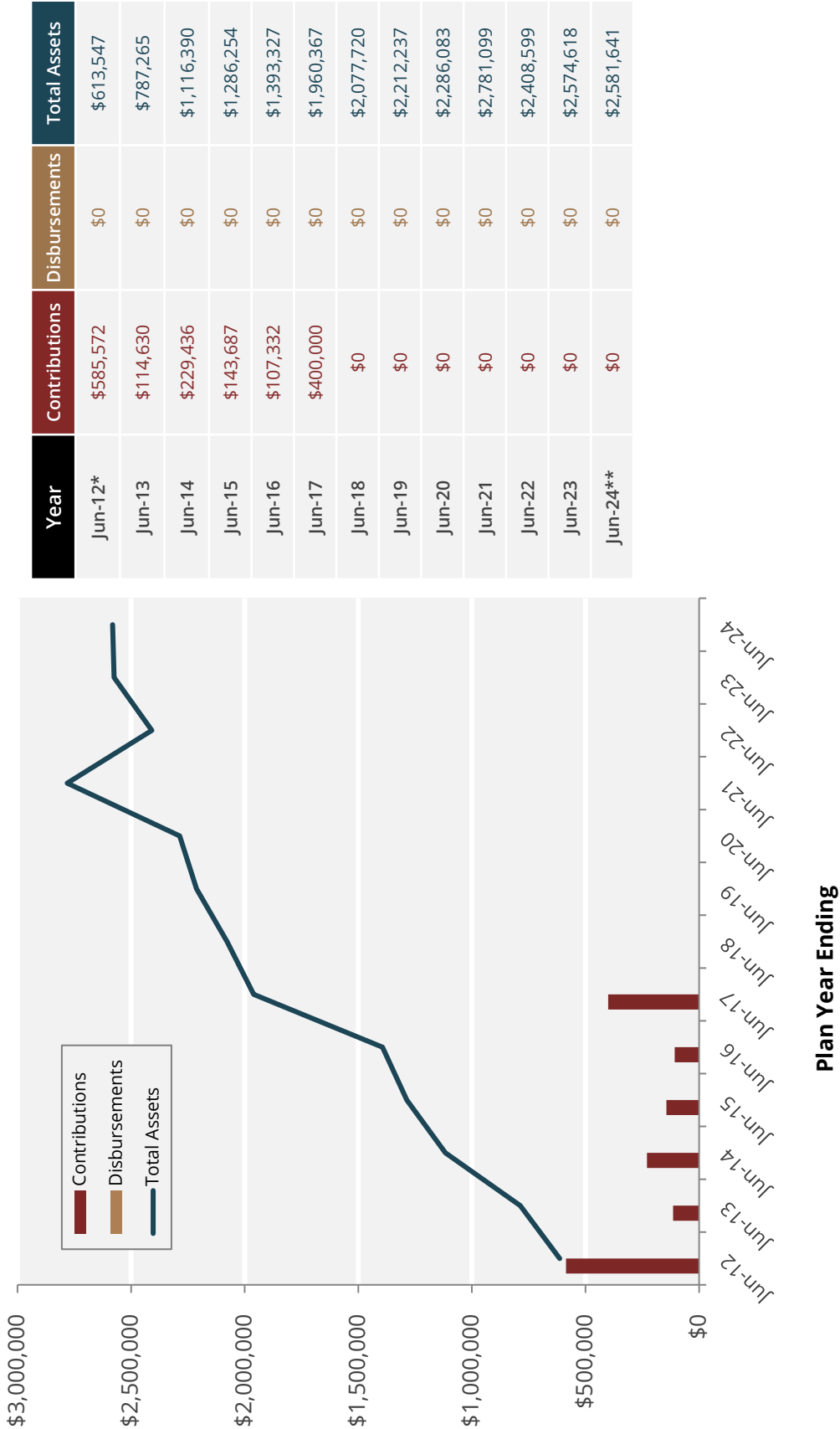
\$0

\$1,115,991

\$2,581,641

SUMMARY OF AGENCY'S OPEB PLAN

HISTORY OF CONTRIBUTIONS, DISBURSEMENTS, AND TOTAL ASSETS AS OF AUGUST 31, 2023:



*Plan Year Ending June 2012 is based on 9 months of activity.
 **Plan Year Ending June 2024 is based on 2 months of activity.

SUMMARY OF AGENCY'S PENSION PLAN

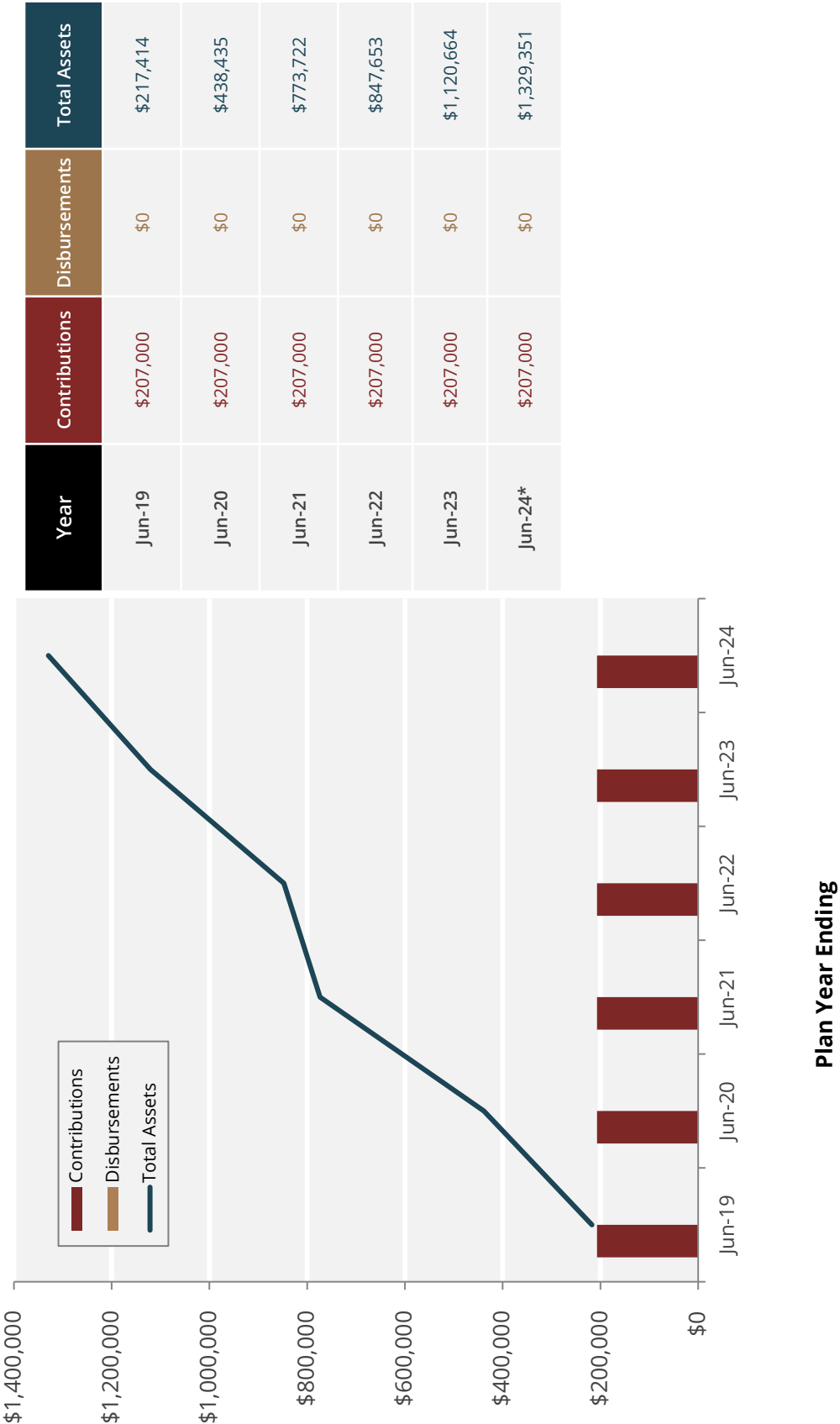
Plan Type:	IRC Section 115 Irrevocable Exclusive Benefit Trust
Trustee Approach:	Discretionary
Plan Effective Date:	February 21, 2018
Plan Administrator:	General Manager
Current Investment Strategy:	Moderate HighMark PLUS (Active) Strategy; Pooled Account

AS OF AUGUST 31, 2023:

Initial Contribution:	July 2018: \$207,000
Additional Contributions:	\$1,035,000
Total Contributions:	\$1,242,000
Disbursements:	\$0
Total Investment Earnings:	\$106,312
Account Balance:	\$1,329,351

SUMMARY OF AGENCY'S PENSION PLAN

HISTORY OF CONTRIBUTIONS, DISBURSEMENTS, AND TOTAL ASSETS AS OF AUGUST 31, 2023:



**Plan Year Ending June 2024 is based on 2 months of activity.



PENSION FUNDING STATUS

As of June 30, 2022, Municipal Water District of Orange County's CalPERS pension plan is funded as follows*:

Combined Miscellaneous Groups	Valuation as of June 30, 2021	Valuation as of June 30, 2022	Change
Actuarial Liability	\$18.0 M	\$19.6 M	9.0% ↑
Assets	\$16.3 M	\$15.3 M	6.2% ↓
Unfunded Liability	\$1.7 M	\$4.3 M	159.3% ↑
Funded Ratio	90.8%	78.1%	14.0% ↓
Employer Contribution Amount	\$684 K (FY 22-23)	\$761 K (FY 23-24)	11.2% ↑
Employer Contribution Amount – Projected*	---	\$1.0 M (FY 29-30)	34.6% ↑

* Data through 2029-30 from Agency's latest CalPERS actuarial valuation.

HIGHMARK CAPITAL MANAGEMENT INVESTMENT REVIEW

Municipal Water District of Orange County

October 2023

**Presented by
Keith Stribling, CFA**

DISCUSSION HIGHLIGHTS- Municipal Water District of Orange County

Investment objective – Moderate HM Plus – PENSION

Asset Allocation: PARS/Moderate HM Plus (As of 8-31-23)

- Allocation Target – 47.14 stocks (40-60% range), 48.43% bonds (40-60% range), 4.43% cash (0-20% range)
- Large cap 25.44%, Mid-cap 4.06%, Small cap 6.56%, International 9.55%, REIT 1.55%

Performance: Municipal Water District of Orange County

(as of 8-31-22) gross of investment management fees, net of fund fees

- 3 Months: 3.48%
- 8 months (YTD): 7.95%
- 1 year: 5.86%
- 7-1-2018 (ITD): 4.63%

Investment objective – Moderate HM Plus – OPEB

Asset Allocation: PARS/Moderate HM Plus (As of 8-31-23)

- Allocation Target – 47.14 stocks (40-60% range), 48.43% bonds (40-60% range), 4.43% cash (0-20% range)
- Large cap 25.44%, Mid-cap 4.06%, Small cap 6.56%, International 9.55%, REIT 1.55%

Performance: Municipal Water District of Orange County

(as of 8-31-23) gross of investment management fees, net of fund fees

- 3 Months: 3.48%
- 8 months (YTD): 7.95%
- 1 year: 5.86%
- 11-1-2011 (ITD): 6.30%

Asset Allocation:

- Modestly underweight equities
- Favoring value style over growth
- Recently added to international
- Neutral duration fixed income
- Added mortgages & eliminated high yield

DISCUSSION HIGHLIGHTS – Municipal Water District of Orange County

Economic Review

- Aggressive fiscal policy
- Monetary policy changing from inflationary to restrictive with rate hikes and a pullback on QE
- Rate hikes expected to curb inflation expectations but is the Fed done hiking
- Yield curve inverted implying a recession is in the offing
- Regional banks under duress
- Eventually global economies will improve
- Risks: Inflation...further policy mistake at the Fed; China slowing; Russian aggression in Ukraine

PARS/PRSP MODERATE HIGHMARK PLUS (****050106)
Performance Report

As of: August 31, 2023



	3 Months	Year to Date (8 Months)	1 Year	3 Years	5 Years	Inception to Date 08/01/2018
Cash Equivalents	1.27	3.17	4.24	1.55	1.55	1.58
Lipper Money Market Funds Index	1.28	3.18	4.28	1.58	1.54	1.54
Total Fixed Income	-27	2.57	.36	-3.10	.89	.96
Bloomberg US Aggregate Bd Index (USD)	-1.06	1.37	-1.19	-4.41	.49	.61
Total Equities	7.64	14.21	11.85	8.03	7.52	7.85
Large Cap Funds	8.78	19.99	16.14	9.97	10.29	10.78
S&P 500 Composite Index	8.28	18.73	15.94	10.52	11.12	11.63
Mid Cap Funds	8.66	9.12	8.07	9.04	7.10	7.61
Russell Midcap Index	8.74	9.40	8.38	9.25	7.35	7.87
Small Cap Funds	9.13	8.53	6.50	9.58	5.11	5.98
Russell 2000 Index (USD)	9.00	8.96	4.65	8.12	3.14	3.95
International Equities	3.87	8.52	11.69	3.68	3.71	3.09
MSCI EAFE Index (Net)	3.80	10.87	17.92	6.05	4.14	3.67
MSCI EM Free Index (Net USD)	3.47	4.55	1.25	-1.39	.98	.42
REIT Funds	4.07	1.82	-7.47	3.82	3.08	3.55
Wilshire REIT Index	5.57	6.87	-2.44	6.92	3.69	4.23
Total Managed Portfolio	3.48	7.95	5.86	2.67	4.43	4.63

Returns are gross of fees not including account level advisory fees unless otherwise stated. Gross returns are presented before management and custodial fees but after all trading expenses, embedded and reflect the reinvestment of dividends and other income. Net returns are net of investment management fees in effect for the respective time period. Returns for periods over one year are annualized. An investor cannot invest directly in unmanaged indices. The information presented has been obtained from sources believed to be accurate and reliable. Past performance is not indicative of future returns. Securities are not FDIC insured have no bank guarantee and may lose value.

Municipal Water District of OC - OPEB (**00670)**
Performance Report

As of: August 31, 2023



	3 Months	Year to Date (8 Months)	1 Year	3 Years	5 Years	10 Years	Inception to Date 11/01/2011
Cash Equivalents	1.27	3.17	4.24	1.55	1.55	.98	.83
Lipper Money Market Funds Index	1.28	3.18	4.28	1.56	1.54	.94	.80
Total Fixed Income	-.27	2.57	.36	-3.10	.89	1.67	1.91
Bloomberg US Aggregate Bd Index (USD)	-1.06	1.37	-1.19	-4.41	.49	1.48	1.45
Total Equities	7.64	14.21	11.85	8.03	7.52	9.68	10.68
Large Cap Funds	8.78	19.99	16.14	9.97	10.29	12.23	13.14
S&P 500 Composite Index	8.28	18.73	15.94	10.52	11.12	12.81	13.62
Mid Cap Funds	8.66	9.12	8.07	9.04	7.10	8.99	10.07
Russell Midcap Index	8.74	9.40	8.38	9.25	7.35	10.04	11.45
Small Cap Funds	9.13	8.53	6.50	9.58	5.11	9.92	11.81
Russell 2000 Index (USD)	9.00	8.96	4.65	8.12	3.14	7.96	9.77
International Equities	3.87	8.52	11.99	3.68	3.71	4.81	4.70
MSCI EAFE Index (Net)	3.80	10.87	17.92	6.05	4.14	4.93	5.74
MSCI EM Free Index (Net USD)	3.47	4.55	1.25	-1.39	.98	2.99	2.34
REIT Funds	4.07	1.82	-7.47	3.82	3.08		
Wilshire REIT Index	5.57	6.87	-2.44	6.92	3.69	7.07	7.41
Total Managed Portfolio	3.48	7.95	5.86	2.67	4.43	5.70	6.30

Returns are gross of fees not including account level advisory fees unless otherwise stated. Gross returns are presented before management and custodial fees but after all trading expenses, embedded and reflect the reinvestment of dividends and other income. Net returns are net of investment management fees in effect for the respective time period. Returns for periods over one year are annualized. An investor cannot invest directly in unmanaged indices. The information presented has been obtained from sources believed to be accurate and reliable. Past performance is not indicative of future returns. Securities are not FDIC insured have no bank guarantee and may lose value.

ASSET ALLOCATION – Moderate HM Plus- PENSION & OPEB xxxxxxx50106

	Ticker	Investment Vehicle	Weight
Equity			
Large Cap Core	COFYX	Columbia Contrarian Core Cl Y	47.14%
	VGIAx	Vanguard Gro & Inc Admiral Shares	4.62%
Large Cap Value	DODGX	Dodge & Cox Stock Fund	9.12%
	IVE	iShares S&P 500 Value ETF	4.35%
Large Cap Growth	HNACX	Harbor CP Appre Rtrmt Cl	1.88%
	IWw	iShares S&P 500 Growth ETF	2.72%
Mid Cap Growth	IWR	iShares Russell Mid Cap ETF	2.74%
Small Cap Value	UBVFX	Undiscovered Mgrs Behavrl R6	4.06%
Small Cap Growth	FGROX	Emerald Growth Fund	3.41%
International Core	DFALX	DFA Large Cap International Port	3.14%
International Value	DODFX	Dodge & Cox International Stock Fund	3.57%
International Growth	MGRDX	MFS International Growth Fund	1.22%
Emerging Markets	HHHFX	Hartford Schrodr Mkts Eq	1.19%
REIT	VNQ	Vngrd Index Tr Reit Viper Shs	3.58%
			1.55%
Fixed Income			48.43%
Intermediate-Term	PTRQX	Prudential Total Return BD	14.08%
	DBLFX	Doubleline Core Fixed Inc Cl I	14.09%
	DODIX	Dodge & Cox Income	14.12%
	GOVT	iShares US Treasury ETF	3.07%
Mortgage Backed	MBB	iShares MBB ETF	3.07%
Cash			4.43%
	FGXXX	First Amern Govt Oblig Fd CL X	4.43%
TOTAL			100.00%

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

For Period Ending August 31, 2023

LARGE CAP EQUITY FUNDS							
Fund Name	1-Month Return	3-Month Return	Year-to-Date	1-Year Return	3-Year Return	5-Year Return	10-Year Return
Columbia Contrarian Core Inst3	-1.30	8.79	23.25	18.70	11.06	11.86	12.61
Vanguard Growth & Income Adm	-1.78	8.53	17.01	14.19	10.56	10.57	12.65
Dodge & Cox Stock I	-2.35	9.55	9.80	12.26	16.22	9.22	11.41
iShares S&P 500 Value ETF	-2.75	7.45	12.68	17.09	14.06	9.35	10.25
Harbor Capital Appreciation Retirement	-0.97	9.19	39.96	25.30	2.42	11.88	15.00
iShares S&P 500 Growth ETF	-0.64	8.89	24.00	13.18	6.68	11.53	14.25
S&P 500 TR USD	-1.59	8.28	18.73	15.94	10.52	11.12	12.81
MID CAP EQUITY FUNDS							
iShares Russell Mid-Cap ETF	-3.48	8.70	9.32	8.24	9.07	7.20	9.87
SMALL CAP EQUITY FUNDS							
Undiscovered Managers Behavioral Val R6	-4.63	12.21	4.87	7.44	23.86	6.84	10.15
Emerald Growth Institutional	-6.60	6.01	11.00	7.89	2.60	3.37	9.38
Russell 2000 TR USD	-5.00	9.00	8.96	4.65	8.12	3.14	7.96
INTERNATIONAL EQUITY FUNDS							
Dodge & Cox International Stock I	-3.34	8.52	12.27	18.46	11.07	5.07	5.18
DFA Large Cap International I	-3.64	4.15	10.47	17.26	7.11	4.57	5.16
MFS International Growth R6	-3.78	2.30	10.91	16.71	4.41	6.08	7.13
MSCI EAFE NR USD	-3.83	3.80	10.87	17.92	6.05	4.14	4.93
Hartford Schroders Emerging Mkts Eq F	-7.15	2.56	4.54	3.02	-2.30	1.35	3.48
MSCI EM NR USD	-6.16	3.47	4.55	1.25	-1.39	0.98	2.99
REAL ESTATE FUNDS							
Fund Name	1-Month Return	3-Month Return	Year-to-Date	1-Year Return	3-Year Return	5-Year Return	10-Year Return
Vanguard Real Estate ETF	-3.28	4.20	2.10	-7.16	4.01	3.43	6.65
BOND FUNDS							
Dodge & Cox Income I	-0.57	0.00	2.87	1.26	-2.45	1.80	2.52
DoubleLine Core Fixed Income I	-0.46	-0.76	2.43	-0.65	-3.22	0.38	1.92
PGIM Total Return Bond R6	-0.51	-0.04	2.99	0.27	-3.91	0.93	2.41
Vanguard Short-Term Investment-Grade Adm	0.19	0.55	2.65	2.32	-0.89	1.56	1.74
iShares MBS ETF	-0.87	-1.38	0.96	-2.17	-4.16	-0.30	0.96
iShares US Treasury Bond ETF	-0.53	-1.60	1.02	-1.99	-5.14	0.11	0.84

Source: SEI Investments, Morningstar Investments

Returns less than one year are not annualized. Past performance is no indication of future results. The information presented has been obtained from sources believed to be accurate and reliable. Securities are not FDIC insured, have no bank guarantee and may lose value.

PARS DIVERSIFIED PORTFOLIOS CONSERVATIVE

Q2 2023

WHY THE PARS DIVERSIFIED CONSERVATIVE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

PORTFOLIO FACTS

HighMark Plus (Active)

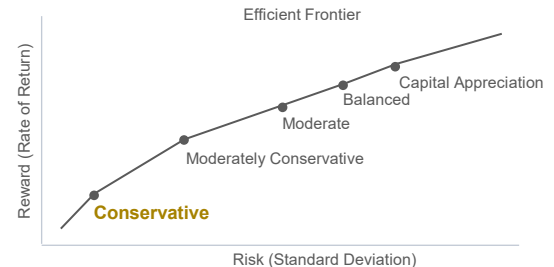
Composite Inception Date	07/2004
No of Holdings in Portfolio	20

Index Plus (Passive)

Composite Inception Date	07/2004
No of Holdings in Portfolio	13

INVESTMENT OBJECTIVE

To provide a consistent level of inflation-protected income over the long-term. The major portion of the assets will be fixed income related. Equity securities are utilized to provide inflation protection.



ASSET ALLOCATION — CONSERVATIVE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	5 – 20%	15%	14%
Fixed Income	60 – 95%	80%	82%
Cash	0 – 20%	5%	4%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

	Gross	Net
Current Quarter*	0.74%	0.65%
Blended Benchmark*, **	0.51%	
Year To Date*	4.14%	3.95%
Blended Benchmark*, **	3.54%	
1 Year	2.65%	2.28%
Blended Benchmark**	2.49%	
3 Year	-0.40%	-0.76%
Blended Benchmark**	-0.30%	
5 Year	2.30%	1.94%
Blended Benchmark**	2.33%	
10 Year	2.90%	2.54%
Blended Benchmark**	2.81%	

Index Plus Composite (Passive)

	Gross	Net
Current Quarter*	0.30%	0.21%
Blended Benchmark*, **	0.51%	
Year To Date*	3.57%	3.38%
Blended Benchmark*, **	3.54%	
1 Year	1.97%	1.60%
Blended Benchmark**	2.49%	
3 Year	-0.94%	-1.30%
Blended Benchmark**	-0.30%	
5 Year	2.11%	1.75%
Blended Benchmark**	2.33%	
10 Year	2.64%	2.28%
Blended Benchmark**	2.81%	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 - Present: 7.5% S&P500, 1.5% Russell Mid Cap, 2.5% Russell 2000, 1% MSCI EM (net), 2% MSCI EAFE (net), 52.25% Bloomberg US Agg, 25.75% ICE BofA 1-3 Yr US Corp/Gov't, 2% ICE BofA US High Yield Master II, 0.5% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 - 9/30/2012, the blended benchmark was 12% S&P 500, 1% Russell 2000, 2% MSCI EAFE (net), 40% ICE BofA 1-3 Year Corp./Gov't, 40% Bloomberg US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007, the blended benchmark was 15% S&P 500, 40% ICE BofA 1-3Yr Corp/Gov, 40% Bloomberg US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-9.04%
2009	15.59%
2010	8.68%
2011	2.19%
2012	8.45%
2013	3.69%
2014	3.88%
2015	0.29%
2016	4.18%
2017	6.73%
2018	-1.35%
2019	11.05%
2020	9.03%
2021	2.20%
2022	-12.63%

Index Plus Composite (Passive)

2008	-6.70%
2009	10.49%
2010	7.67%
2011	3.70%
2012	6.22%
2013	3.40%
2014	4.32%
2015	0.06%
2016	3.75%
2017	5.52%
2018	-1.09%
2019	10.37%
2020	8.56%
2021	1.97%
2022	-12.06%

HOLDINGS

HighMark Plus (Active)

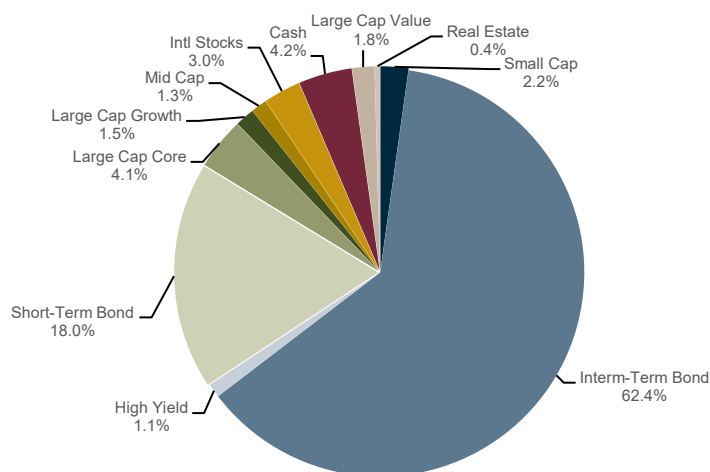
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
Vanguard Short-Term Invest-Grade Adm
PIMCO High Yield Instl
Dodge & Cox Income-I
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
Vanguard High-Yield Corp Adm
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark with full investment authority according to the PARS Conservative active and passive objectives.

The adviser to the PARS portfolios is U.S. Bank, and HighMark serves as sub-adviser to U.S. Bank to manage these portfolios. U.S. Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. U.S. Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with U.S. Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a \$10 million initial value would grow to \$12.53 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT Index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark) is an investment adviser registered with the U.S. Securities and Exchange Commission and a subsidiary of U.S. Bank National Association ("U.S. Bank"). U.S. Bank is a separate entity and subsidiary of U.S. Bancorp. U.S. Bank is not responsible for and does not guarantee the products, services or performance of HighMark. HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. Individual account management and construction will vary depending on each client's investment needs and objectives. U.S. Bank provides certain services to HighMark and is compensated for these services. **Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.**

HIGHMARK CAPITAL MANAGEMENT

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has over 100 years (including predecessor organizations) of institutional money management experience with \$8.7 billion in assets under management*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®

Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®

Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Asset Allocation Committee

Number of Members: 13
Average Years of Experience: 29
Average Tenure (Years): 17

Manager Review Group

Number of Members: 4
Average Years of Experience: 26
Average Tenure (Years): 14

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. As of 6/1/2023 HighMark previously listed Assets under Advisement ("AUA") are no longer advised by HighMark.

PARS DIVERSIFIED PORTFOLIOS MODERATELY CONSERVATIVE

Q2 2023

WHY THE PARS DIVERSIFIED MODERATELY CONSERVATIVE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

PORTFOLIO FACTS

HighMark Plus (Active)

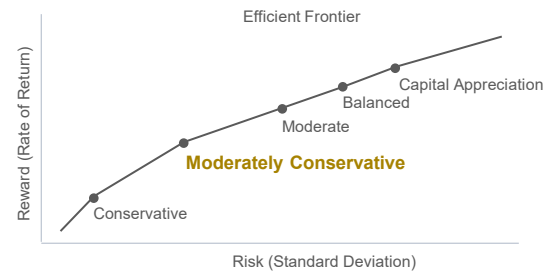
Composite Inception Date	08/2004
No of Holdings in Portfolio	20

Index Plus (Passive)

Composite Inception Date	05/2005
No of Holdings in Portfolio	13

INVESTMENT OBJECTIVE

To provide current income, with capital appreciation as a secondary objective. The major portion of the assets is committed to income-producing securities. Market fluctuations should be expected.



ASSET ALLOCATION — MODERATELY CONSERVATIVE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	20 - 40%	30%	29%
Fixed Income	50 - 80%	65%	67%
Cash	0 - 20%	5%	4%

ANNUALIZED TOTAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

	Gross	Net
Current Quarter*	1.76%	1.66%
Blended Benchmark*, **	1.52%	
Year To Date*	5.58%	5.39%
Blended Benchmark*, **	5.26%	
1 Year	4.83%	4.46%
Blended Benchmark**	4.88%	
3 Year	1.81%	1.44%
Blended Benchmark**	1.75%	
5 Year	3.44%	3.07%
Blended Benchmark**	3.59%	
10 Year	4.14%	3.77%
Blended Benchmark**	4.23%	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 - Present: 15.5% S&P500, 3% Russell Mid Cap, 4.5% Russell 2000, 2% MSCI EM (net), 4% MSCI EAFE (net), 49.25% Bloomberg US Agg, 14% ICE BofA 1-3 Yr US Corp/Gov't, 1.75% ICE BofA US High Yield Master II, 1% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 - 9/30/2012: the blended benchmark was 25% S&P 500; 1.5% Russell 2000, 3.5% MSCI EAFE (net), 25% ICE BofA 1-3 Year Corp./Gov't, 40% Bloomberg US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007, the blended benchmark was 30% S&P 500, 25% ICE BofA 1-3Yr Corp/Gov, 40% Bloomberg US Agg, and 5% FTSE 1 Mth US T-Bill.

Index Plus Composite (Passive)

	Gross	Net
Current Quarter*	1.26%	1.17%
Blended Benchmark*, **	1.52%	
Year To Date*	5.03%	4.84%
Blended Benchmark*, **	5.26%	
1 Year	4.13%	3.75%
Blended Benchmark**	4.88%	
3 Year	1.24%	0.87%
Blended Benchmark**	1.75%	
5 Year	3.32%	2.95%
Blended Benchmark**	3.59%	
10 Year	3.97%	3.60%
Blended Benchmark**	4.23%	

ANNUAL RETURNS

(Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-15.37%
2009	18.71%
2010	10.46%
2011	1.75%
2012	10.88%
2013	7.30%
2014	4.41%
2015	0.32%
2016	4.94%
2017	9.56%
2018	-2.60%
2019	13.73%
2020	10.76%
2021	5.15%
2022	-13.46%

Index Plus Composite (Passive)

2008	-12.40%
2009	11.92%
2010	9.72%
2011	3.24%
2012	8.24%
2013	6.78%
2014	5.40%
2015	-0.18%
2016	5.42%
2017	8.08%
2018	-2.33%
2019	13.53%
2020	9.74%
2021	5.33%
2022	-13.00%

HOLDINGS

HighMark Plus (Active)

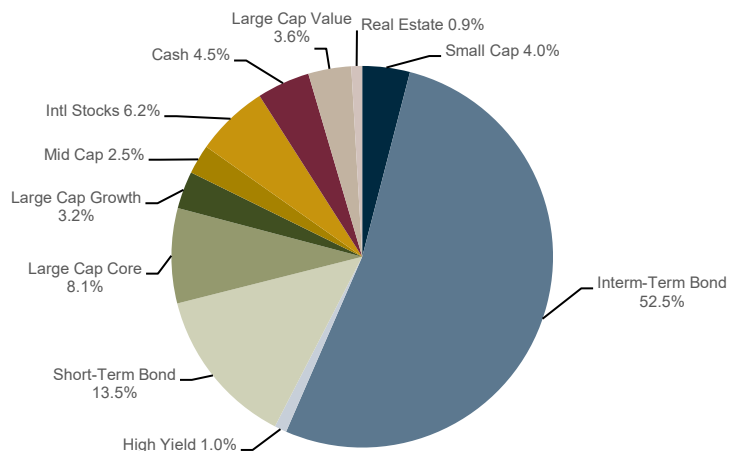
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
Vanguard Short-Term Invest-Grade Adm
PIMCO High Yield Instl
Dodge & Cox Income-I
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
Vanguard High-Yield Corp Adm
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent a size-weighted composite of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark with full investment authority according to the PARS Moderately Conservative active and passive objectives.

The adviser to the PARS portfolios is U.S. Bank, and HighMark serves as sub-adviser to U.S. Bank to manage these portfolios. U.S. Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. U.S. Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with U.S. Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a \$10 million initial value would grow to \$12.53 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

HighMark Capital Management, Inc. (HighMark) is an investment adviser registered with the U.S. Securities and Exchange Commission and a subsidiary of U.S. Bank National Association ("U.S. Bank"). U.S. Bank is a separate entity and subsidiary of U.S. Bancorp. U.S. Bank is not responsible for and does not guarantee the products, services or performance of HighMark. HighMark manages institutional separate account portfolios for a wide variety of for-profit and nonprofit organizations, public agencies, and public and private retirement plans. Individual account management and construction will vary depending on each client's investment needs and objectives. U.S. Bank provides certain services to HighMark and is compensated for these services. **Investments employing HighMark strategies are NOT insured by the FDIC or by any other Federal Government Agency, are NOT Bank deposits, are NOT guaranteed by the Bank or any Bank affiliate, and MAY lose value, including possible loss of principal.**

HIGHMARK CAPITAL MANAGEMENT

350 California Street
Suite 1600
San Francisco, CA 94104
800-582-4734

ABOUT THE ADVISER

HighMark® Capital Management, Inc. (HighMark) has over 100 years (including predecessor organizations) of institutional money management experience with \$8.7 billion in assets under management*. HighMark has a long term disciplined approach to money management and currently manages assets for a wide array of clients.

ABOUT THE PORTFOLIO MANAGEMENT TEAM

Andrew Brown, CFA®

Senior Portfolio Manager
Investment Experience: since 1994
HighMark Tenure: since 1997
Education: MBA, University of Southern California; BA, University of Southern California

Salvatore "Tory" Milazzo III, CFA®

Senior Portfolio Manager
Investment Experience: since 2004
HighMark Tenure: since 2014
Education: BA, Colgate University

J. Keith Stribling, CFA®

Senior Portfolio Manager
Investment Experience: since 1985
HighMark Tenure: since 1995
Education: BA, Stetson University

Christiane Tsuda

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2010
Education: BA, International Christian University, Tokyo

Anne Wimmer, CFA®

Senior Portfolio Manager
Investment Experience: since 1987
HighMark Tenure: since 2007
Education: BA, University of California, Santa Barbara

Asset Allocation Committee

Number of Members: 13
Average Years of Experience: 29
Average Tenure (Years): 17

Manager Review Group

Number of Members: 4
Average Years of Experience: 26
Average Tenure (Years): 14

*Assets under management ("AUM") include assets for which HighMark provides continuous and regular supervisory and management services. As of 6/1/2023 HighMark previously listed Assets under Advisement ("AUA") are no longer advised by HighMark.

PARS DIVERSIFIED PORTFOLIOS MODERATE

Q2 2023

WHY THE PARS DIVERSIFIED MODERATE PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

PORTFOLIO FACTS

HighMark Plus (Active)

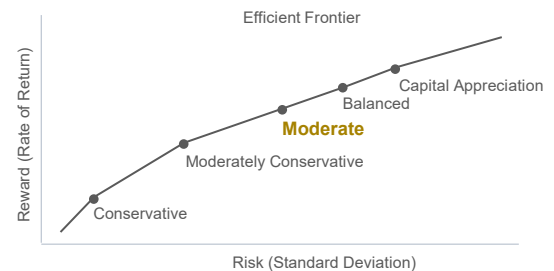
Composite Inception Date 10/2004
No of Holdings in Portfolio 20

Index Plus (Passive)

Composite Inception Date 05/2006
No of Holdings in Portfolio 13

INVESTMENT OBJECTIVE

To provide current income and moderate capital appreciation. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important.



ASSET ALLOCATION — MODERATE PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	40 - 60%	50%	47%
Fixed Income	40 - 60%	45%	48%
Cash	0 - 20%	5%	5%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

	Gross	Net
Current Quarter*	3.00%	2.91%
Blended Benchmark*, **	2.98%	
Year To Date*	7.56%	7.36%
Blended Benchmark*, **	7.50%	
1 Year	7.66%	7.28%
Blended Benchmark**	8.25%	
3 Year	4.73%	4.35%
Blended Benchmark**	4.91%	
5 Year	5.01%	4.64%
Blended Benchmark**	5.28%	
10 Year	5.80%	5.42%
Blended Benchmark**	6.06%	

Index Plus Composite (Passive)

	Gross	Net
Current Quarter*	2.62%	2.53%
Blended Benchmark*, **	2.98%	
Year To Date*	7.02%	6.83%
Blended Benchmark*, **	7.50%	
1 Year	7.18%	6.79%
Blended Benchmark**	8.25%	
3 Year	4.34%	3.96%
Blended Benchmark**	4.91%	
5 Year	4.86%	4.49%
Blended Benchmark**	5.28%	
10 Year	5.61%	5.23%
Blended Benchmark**	6.06%	

* Returns less than one year are not annualized. ** Breakdown for Blended Benchmark: From 10/1/2012 – Present: 26.5% S&P500, 5% Russell Mid Cap, 7.5% Russell 2000, 3.25% MSCI EM (net), 6% MSCI EAFE (net), 33.50% Bloomberg US Agg, 10% ICE BofA 1-3 Yr US Corp/Gov't, 1.50% ICE BofA US High Yield Master II, 1.75% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 43% S&P 500; 2% Russell 2000, 5% MSCI EAFE (net), 15% ICE BofA 1-3 Year Corp/Gov't, 30% Bloomberg US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 50% S&P 500, 15% ICE BofA 1-3Yr Corp/Gov, 30% Bloomberg US Agg, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-22.88%
2009	21.47%
2010	12.42%
2011	0.55%
2012	12.25%
2013	13.06%
2014	4.84%
2015	0.14%
2016	6.45%
2017	13.19%
2018	-4.03%
2019	17.71%
2020	12.92%
2021	9.31%
2022	-14.63%

Index Plus Composite (Passive)

2008	-18.14%
2009	16.05%
2010	11.77%
2011	2.29%
2012	10.91%
2013	12.79%
2014	5.72%
2015	-0.52%
2016	7.23%
2017	11.59%
2018	-4.03%
2019	17.52%
2020	11.23%
2021	10.18%
2022	-14.21%

HOLDINGS

HighMark Plus (Active)

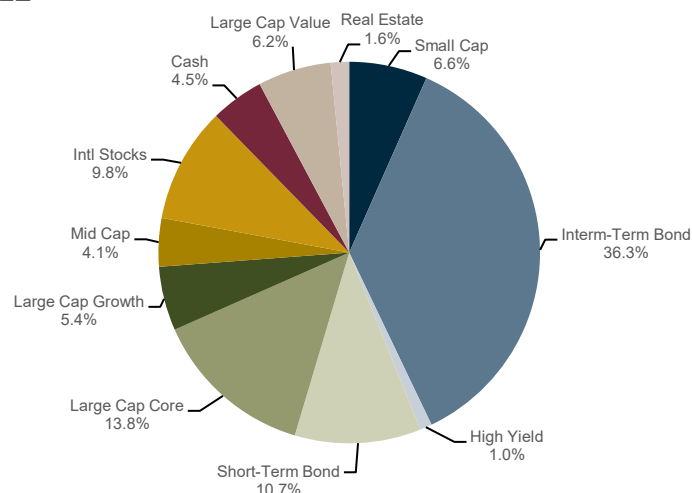
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
MFS International Growth - R6
Hartford Schroders Emerging Markets Eq
Vanguard Short-Term Invest-Grade Adm
PIMCO High Yield Instl
Dodge & Cox Income-I
PGIM Total Return Bond - R6
DoubleLine Core Fixed Income - I
First American Government Obligations Z

Index Plus (Passive)

iShares Core S&P 500 ETF
iShares S&P 500 Value ETF
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
iShares Russell 2000 Value ETF
iShares Russell 2000 Growth ETF
iShares Core MSCI EAFE ETF
Vanguard FTSE Emerging Markets ETF
Vanguard Short-Term Invest-Grade Adm
iShares Core U.S. Aggregate
Vanguard High-Yield Corp Adm
First American Government Obligations Z

Holdings are subject to change at the discretion of the investment manager.

STYLE



The performance records shown represent size-weighted composites of tax exempt accounts that meet the following criteria: Accounts are managed by HighMark with full investment authority according to the PARS Moderate active and passive objectives.

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Blended benchmarks represent HighMark's strategic allocations between equity, fixed income, and cash and are rebalanced monthly. Benchmark returns do not reflect the deduction of advisory fees or other expenses of investing but assumes the reinvestment of dividends and other earnings. An investor cannot invest directly in an index. The unmanaged S&P 500 Index is representative of the performance of large companies in the U.S. stock market. The MSCI EAFE Index is a free float-adjusted market capitalization index designed to measure developed market equity performance, excluding the U.S. and Canada. The MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. The ICE BofA U.S. High Yield Master II Index tracks the performance of below investment grade U.S. dollar-denominated corporate bonds publicly issued in the U.S. domestic market. Wilshire REIT Index measures U.S. publicly traded Real Estate Investment Trusts. The unmanaged Bloomberg U.S. Aggregate Bond Index is generally representative of the U.S. taxable bond market as a whole. The ICE BofA 1-3 Year U.S. Corporate & Government Index tracks the bond performance of the ICE BofA U.S. Corporate & Government Index, with a remaining term to final maturity less than 3 years. The unmanaged FTSE 1-Month U.S. Treasury Bill Index tracks the yield of the 1-month U.S. Treasury Bill.

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Asset Allocation Committee

Number of Members: 13
Average Years of Experience: 29
Average Tenure (Years): 17

Manager Review Group

Number of Members: 4
Average Years of Experience: 26
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PARS DIVERSIFIED PORTFOLIOS BALANCED

Q2 2023

WHY THE PARS DIVERSIFIED BALANCED PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

Our manager review committee utilizes a rigorous screening process that searches for investment managers and styles that have not only produced above-average returns within acceptable risk parameters, but have the resources and commitment to continue to deliver these results. We have set high standards for our investment managers and funds. This is a highly specialized, time consuming approach dedicated to one goal: competitive and consistent performance.

Flexible Investment Options

In order to meet the unique needs of our clients, we offer access to flexible implementation strategies: HighMark Plus utilizes actively managed mutual funds while Index Plus utilizes index-based securities, including exchange-traded funds. Both investment options leverage HighMark's active asset allocation approach.

Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

PORTFOLIO FACTS

HighMark Plus (Active)

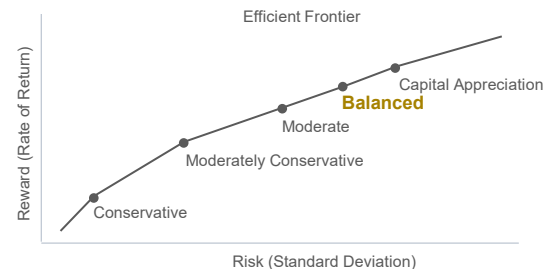
Composite Inception Date	10/2006
No of Holdings in Portfolio	20

Index Plus (Passive)

Composite Inception Date	10/2007
No of Holdings in Portfolio	13

INVESTMENT OBJECTIVE

To provide growth of principal and income. While dividend and interest income are an important component of the objective's total return, it is expected that capital appreciation will comprise a larger portion of the total return.



ASSET ALLOCATION — BALANCED PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	50 – 70%	60%	57%
Fixed Income	30 – 50%	35%	38%
Cash	0 – 20%	5%	5%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

	Gross	Net
Current Quarter*	3.66%	3.57%
Blended Benchmark*,**	3.69%	
Year To Date*	8.48%	8.28%
Blended Benchmark*,**	8.62%	
1 Year	9.02%	8.63%
Blended Benchmark**	9.87%	
3 Year	6.16%	5.78%
Blended Benchmark**	6.42%	
5 Year	5.72%	5.34%
Blended Benchmark**	6.08%	
10 Year	6.59%	6.21%
Blended Benchmark**	6.95%	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: From 10/1/2012 – Present: 32% S&P500, 6% Russell Mid Cap, 9% Russell 2000, 4% MSCI EM (net), 7% MSCI EAFE (net), 27% Bloomberg US Agg, 6.75% ICE BofA 1-3 Yr US Corp/Gov't, 1.25% ICE BofA US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill. From 4/1/2007 – 9/30/2012: the blended benchmark was 51% S&P 500, 3% Russell 2000, 6% MSCI EAFE (net), 5% ICE BofA 1-3 Year Corp/Gov't, 30% Bloomberg US Agg, 5% FTSE 1 Mth US T-Bill. Prior to April 2007: the blended benchmark was 60% S&P 500, 5% ICE BofA 1-3Yr Corp/Gov't, 30% Bloomberg US Agg, and 5% FTSE 1 Mth US T-Bill.

Index Plus Composite (Passive)

	Gross	Net
Current Quarter*	3.31%	3.22%
Blended Benchmark*,**	3.69%	
Year To Date*	8.04%	7.85%
Blended Benchmark*,**	8.62%	
1 Year	8.67%	8.28%
Blended Benchmark**	9.87%	
3 Year	5.85%	5.47%
Blended Benchmark**	6.42%	
5 Year	5.60%	5.22%
Blended Benchmark**	6.08%	
10 Year	6.42%	6.04%
Blended Benchmark**	6.95%	

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

HighMark Plus Composite (Active)

2008	-25.72%
2009	21.36%
2010	14.11%
2011	-0.46%
2012	13.25%
2013	16.61%
2014	4.70%
2015	0.04%
2016	6.81%
2017	15.46%
2018	-4.88%
2019	19.85%
2020	13.85%
2021	11.44%
2022	-15.28%

Index Plus Composite (Passive)

2008	-23.22%
2009	17.62%
2010	12.76%
2011	1.60%
2012	11.93%
2013	15.63%
2014	6.08%
2015	-0.81%
2016	8.26%
2017	13.39%
2018	-5.05%
2019	19.59%
2020	12.07%
2021	12.63%
2022	-14.97%

HOLDINGS

HighMark Plus (Active)

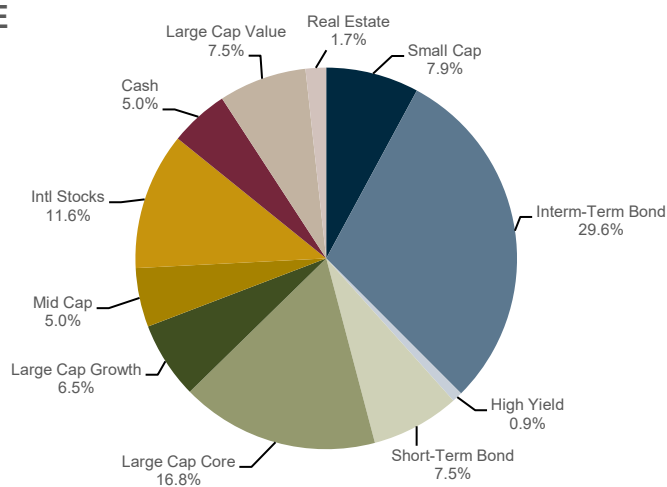
Columbia Contrarian Core I3
Vanguard Growth & Income Adm
Dodge & Cox Stock Fund
iShares S&P 500 Value ETF
Harbor Capital Appreciation - Retirement
iShares S&P 500 Growth ETF
iShares Russell Mid-Cap ETF
Vanguard Real Estate ETF
Undiscovered Managers Behavioral Value-R6
Emerald Growth Fund-I
DFA Large Cap International Portfolio
Dodge & Cox International Stock
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STYLE



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The composite name has been changed from PARS Balanced/Moderately Aggressive to PARS Balanced on 5/1/2013. The adviser to the PARS portfolios is U.S. Bank, and HighMark serves as sub-adviser to U.S. Bank to manage these portfolios. U.S. Bank may charge clients as much as 0.60% annual management fee based on a sliding scale. U.S. Bank pays HighMark 60% of the annual management fee for assets sub-advised by HighMark under its sub-advisory agreement with U.S. Bank. The 0.36% paid to HighMark, as well as other expenses that may be incurred in the management of the portfolio, will reduce the portfolio's returns. Assuming an investment for five years, a 5% annual total return, and an annual sub-advisory fee rate of 0.36% deducted from the assets at market at the end of each year, a \$10 million initial value would grow to \$12.53 million after fees (Net-of-Fees) and \$12.76 million before fees (Gross-of-Fees). Gross returns are presented before management and custodial fees but after all trading expenses and reflect the reinvestment of dividends and other income. A client's return will be reduced by the advisory fees and other expenses it may incur as a client. Additional information regarding the firm's policies and procedures for calculating and reporting performance results is available upon request. Performance results are calculated and presented in U.S. dollars and do not reflect the deduction of investment advisory fees, custody fees, or taxes but do reflect the deduction of trading expenses. Returns are calculated based on trade-date accounting.

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Average Years of Experience: 29
Average Tenure (Years): 17

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PARS DIVERSIFIED PORTFOLIOS CAPITAL APPRECIATION

Q2 2023

WHY THE PARS DIVERSIFIED CAPITAL APPRECIATION PORTFOLIO?

Comprehensive Investment Solution

HighMark® Capital Management, Inc.'s (HighMark) diversified investment portfolios are designed to balance return expectations with risk tolerance. Key features include: sophisticated asset allocation and optimization techniques, four layers of diversification (asset class, style, manager, and security), access to rigorously screened, top tier money managers, flexible investment options, and experienced investment management.

Rigorous Manager Due Diligence

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Flexible Investment Options

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Risk Management

The portfolio is constructed to control risk through four layers of diversification – asset classes (cash, fixed income, equity), investment styles (large cap, small cap, international, value, growth), managers and securities. Disciplined mutual fund selection and monitoring process helps to drive return potential while reducing portfolio risk.

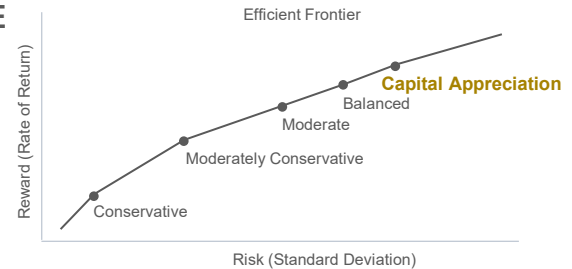
PORTFOLIO FACTS

Consolidated Composite

Composite Inception Date	01/2009
No of Holdings in Portfolio	20

INVESTMENT OBJECTIVE

To provide growth of principal. The major portion of the assets are invested in equity securities and market fluctuations are expected.



ASSET ALLOCATION — CAPITAL APPRECIATION PORTFOLIO

	Strategic Range	Policy	Tactical
Equity	65 - 85%	75%	71%
Fixed Income	10 - 30%	20%	23%
Cash	0 - 20%	5%	6%

ANNUALIZED TOTAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

Consolidated Composite

	Gross	Net
Current Quarter*	4.52%	4.43%
Blended Benchmark*, **	4.70%	
Year To Date*	9.94%	9.74%
Blended Benchmark*, **	10.31%	
1 Year	11.33%	10.93%
Blended Benchmark**	12.48%	
3 Year	8.19%	7.80%
Blended Benchmark**	8.67%	
5 Year	6.75%	6.36%
Blended Benchmark**	7.15%	
10 Year	7.86%	7.48%
Blended Benchmark**	8.16%	

* Returns less than one year are not annualized. **Breakdown for Blended Benchmark: 39.5% S&P500, 7.5% Russell Mid Cap, 10.5% Russell 2000, 5.25% MSCI EM (net), 10.25% MSCI EAFE (net), 16% Bloomberg US Agg, 3% ICE BofA 1-3 Yr US Corp/Gov't, 1% ICE BofA US High Yield Master II, 2% Wilshire REIT, and 5% FTSE 1 Mth US T-Bill.

ANNUAL RETURNS (Gross of Investment Management Fees, but Net of Embedded Fund Fees)

Consolidated Composite

2008	N/A
2009	23.77%
2010	12.95%
2011	-1.35%
2012	13.87%
2013	20.33%
2014	6.05%
2015	-0.26%
2016	8.79%
2017	16.72%
2018	-5.82%
2019	22.62%
2020	14.50%
2021	14.96%
2022	-16.08%

HOLDINGS

HighMark Plus (Active)

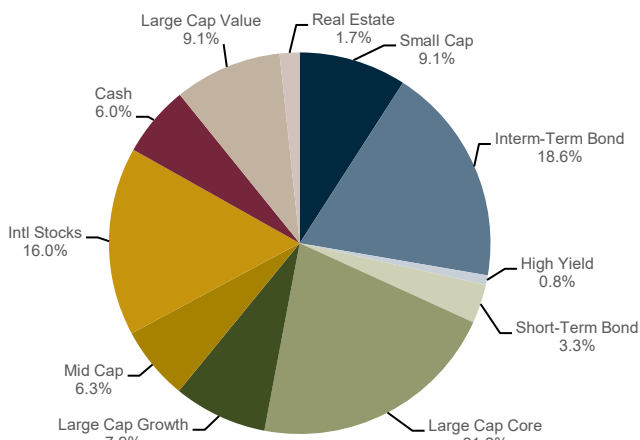
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PRESENTATION ITEM

October 11, 2023

TO: Administration & Finance Committee
(Directors Crane, Dick, Thomas)

FROM: Harvey De La Torre, Interim General Manager

Staff Contact: Kevin Hostert

SUBJECT: Summary of Orange County's Annual Water Usage and MWDOC Annual Water Sales

STAFF RECOMMENDATION

Staff recommends the Administration & Finance Committee receive and file this information.

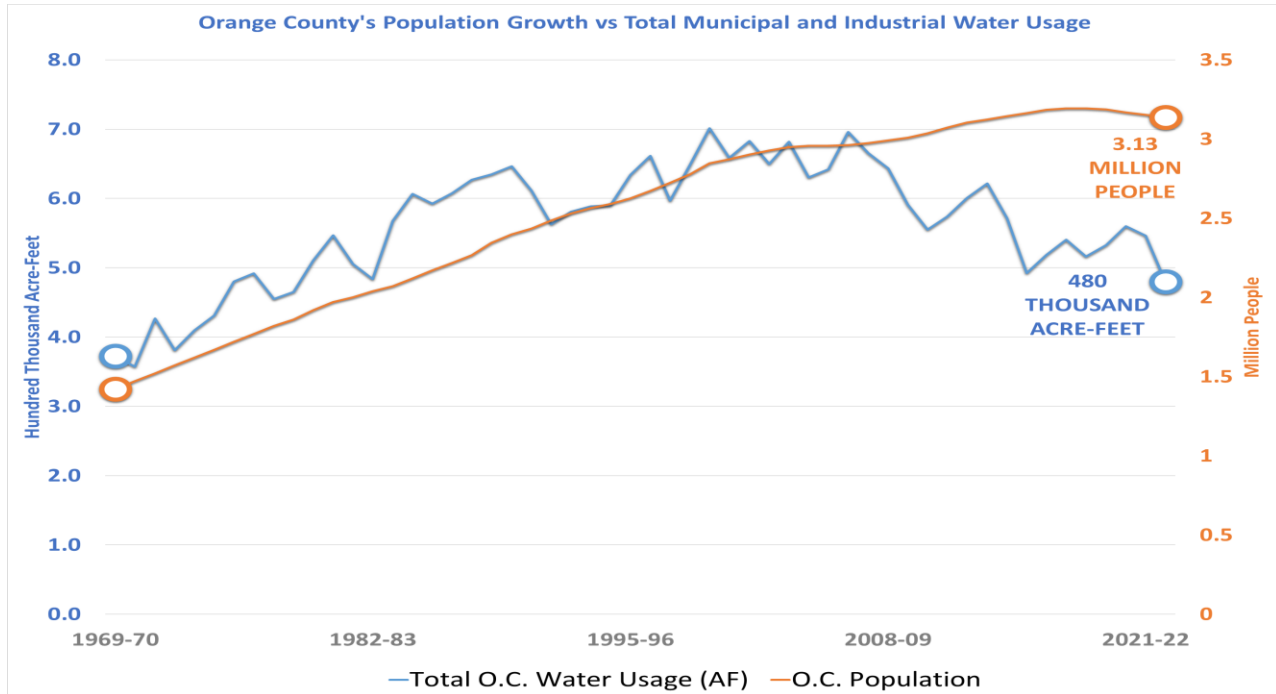
COMMITTEE RECOMMENDATION

To be determined

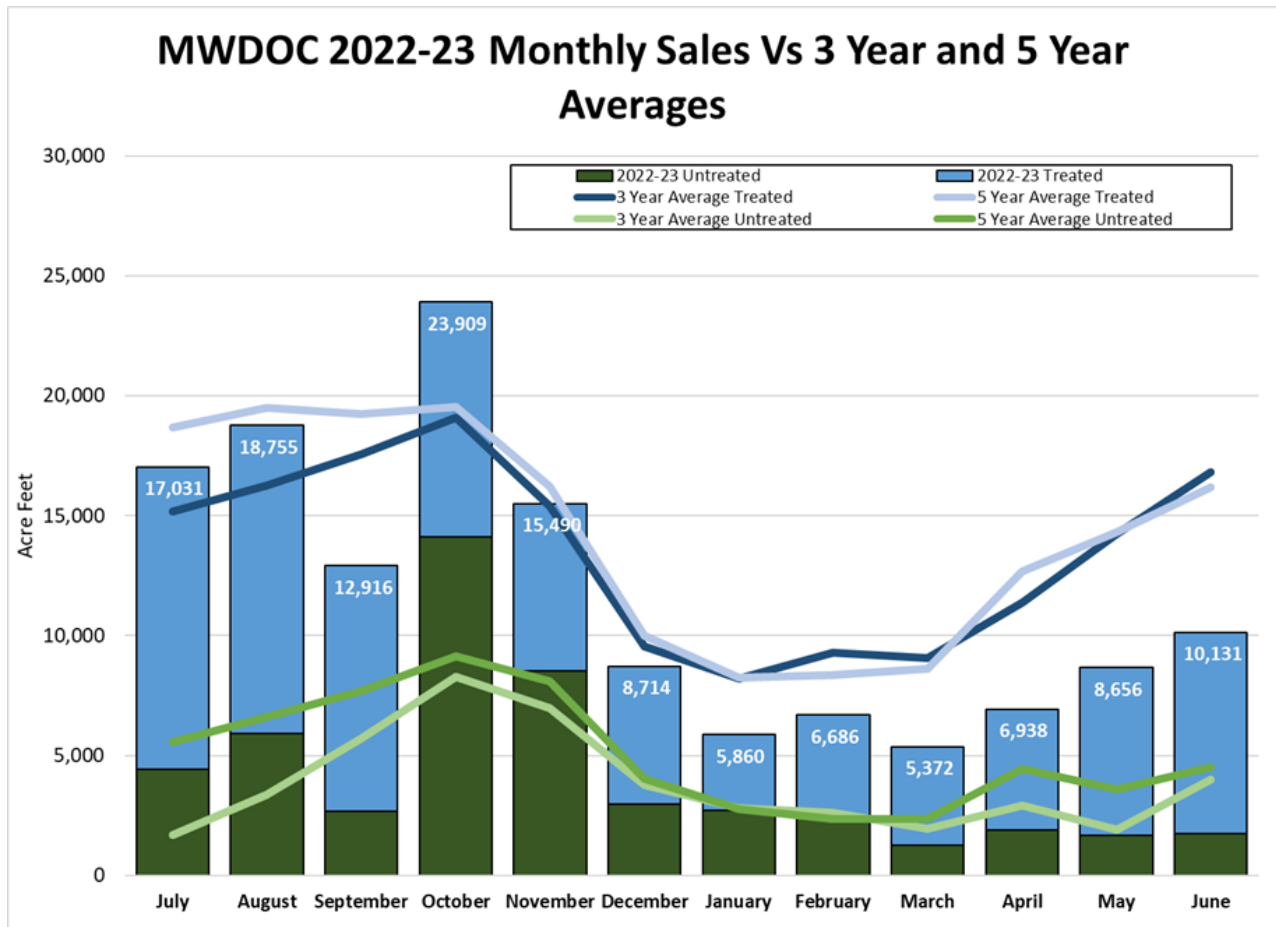
REPORT

Fiscal Year (FY) 2023 was an extremely wet and cool year for Orange County, California compared to normal. Average high temperatures for Santa Ana were the lowest since FY 2002. In addition, FY 2023 rainfall amounts were 22.31 inches, which was the highest amount of rainfall for the county since FY 2005. Orange County experienced a remarkable 51 days of measurable precipitation in FY 2023. Furthermore, there have been great advances in Water Use Efficiency and overall public awareness to use water wisely. In addition, population figures for Orange County have declined by approximately 50,000 people since the start of the COVID-19 Pandemic. The combination of all these factors has resulted in extremely low water usage in Orange County compared to historical amounts. Municipal and Industrial Water Usage (M&I) for Orange County was approximately 480,000 Acre Feet for FY 2023. This amount of water usage was the lowest since FY 1979 (44 years). This is quite a remarkable feat given that the county has added 1,277,164 residents and has incorporated seven new municipalities since FY 1979. The chart below gives a visualization of Orange County water usage over the years.

Budgeted (Y/N): N	Budgeted amount: N/A	Core <u>X</u>	Choice <u> </u>
Action item amount: N/A		Line item:	
Fiscal Impact (explain if unbudgeted):			



In regards to MWDOC Imported Water Sales they were also extremely low compared to historical annual sales. Unlike M&I was demand, MWDOC sales are not solely driven by retail customer water usage. MWDOC water sales are affected by retail water demand, available local supply by retail agencies, groundwater/Irvine Lake replenishment demands, and Cyclic Storage/ In Lieu availability. MWDOC water Sales for FY 2023 were approximately 140,000 AF which was the lowest amount of sales for MWDOC going back to the 1970s. In addition, due to PFAS contamination in the Orange County Groundwater Basin (OCWD Basin) and the large amount of storm/natural runoff recharged into the ground by OCWD, untreated water sales were significantly below average compared to the historical amounts. Irvine Lake also filled up this FY 2023 resulting in additional low water sales. Below is a chart comparing MWDOC Treated and Untreated sales compared to the 3-year and 5-year averages.



Summary of MWD OC Imported Water Sales and O.C. Water Usage

- Kevin Hostert, Senior Water Resources Analyst
Municipal Water District of Orange County
- October 11, 2023



1

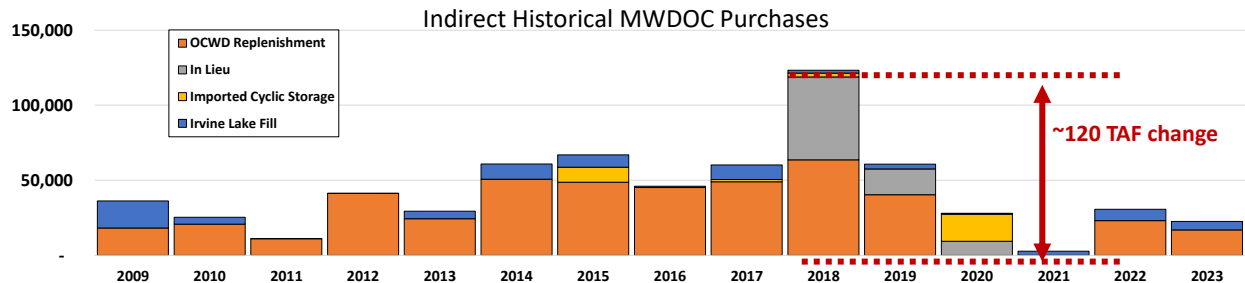
MWD OC Historical Annual Water Sales (Acre Feet)

Retail Water Demand Drivers

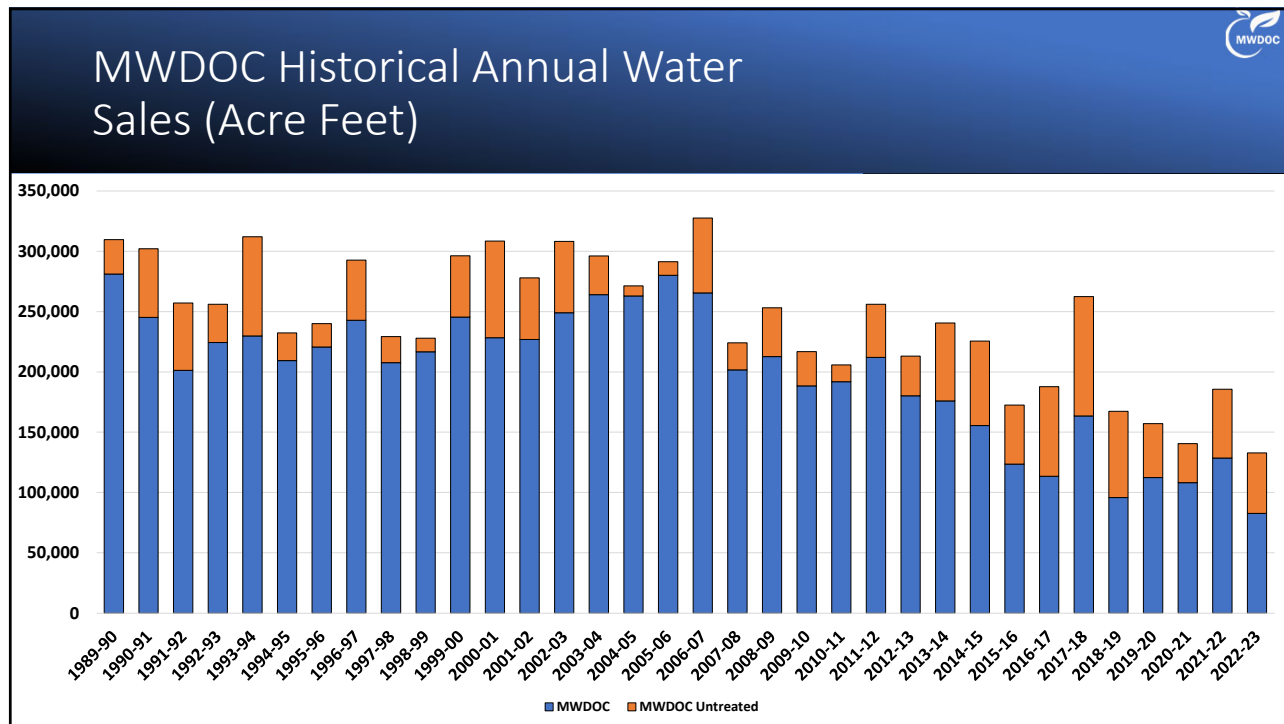
Precipitation (Wet Year = 35% Dry Year = 65%)
 Temperature (i.e. April can be hot or cold and wet/dry)
 Economic (i.e. 2007-09 Great Recession)
 Public Awareness (i.e. 2015 Governor's Drought Declaration)
 Water Use Efficiency

Wholesale Water Demand Drivers

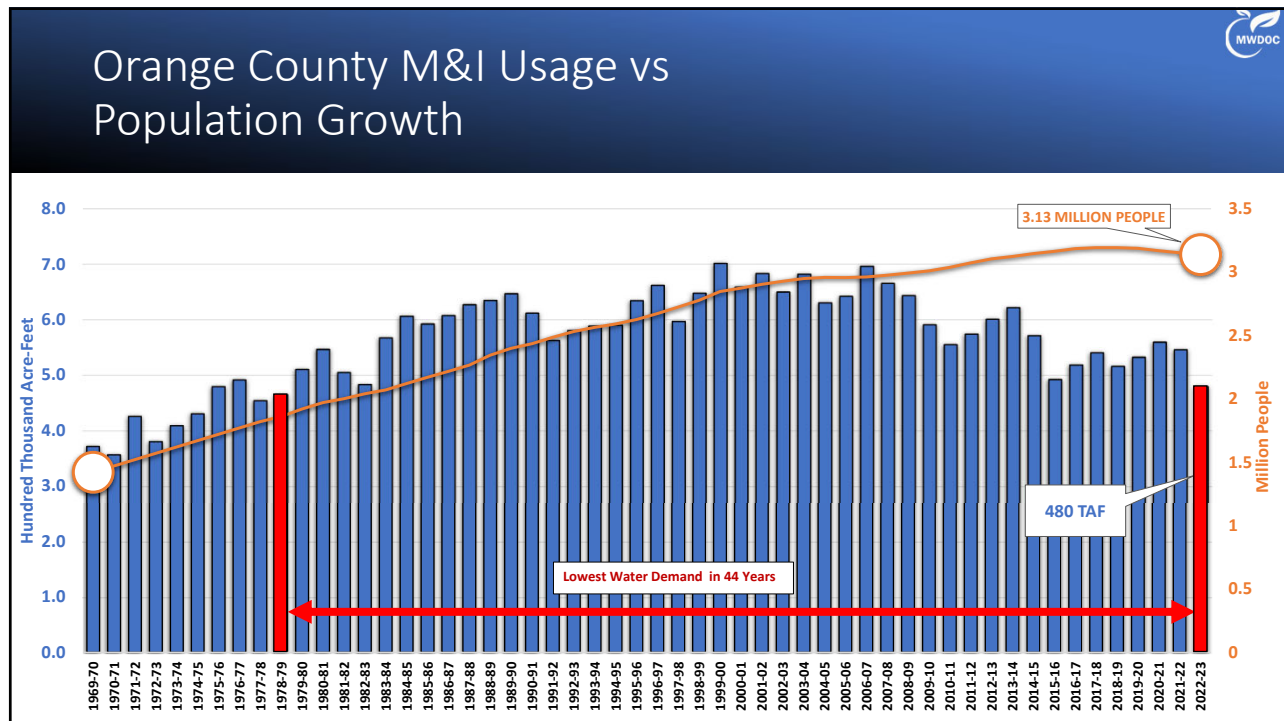
Retail Water Demand
 Availability of Local Supply (i.e. PFAS)
 Groundwater Replenishment demands
 Irvine Lake Replenishment demands
 MWD CUP, Cyclic and In Lieu availability



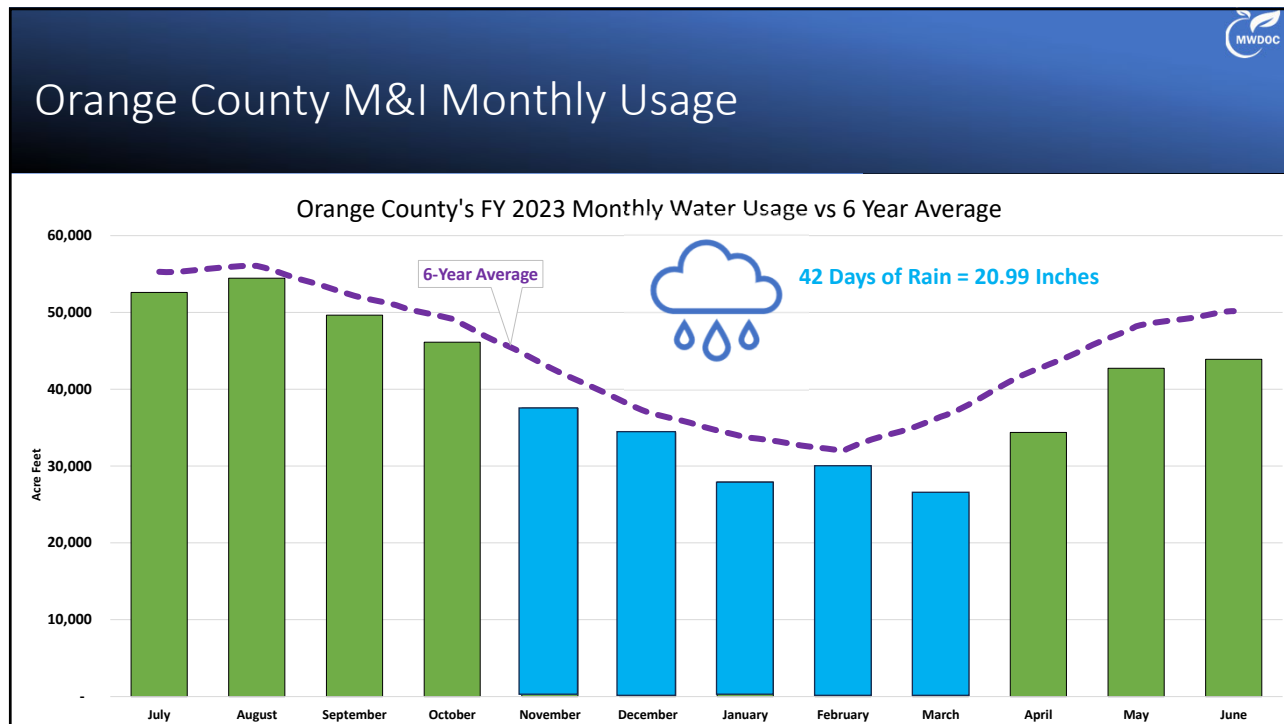
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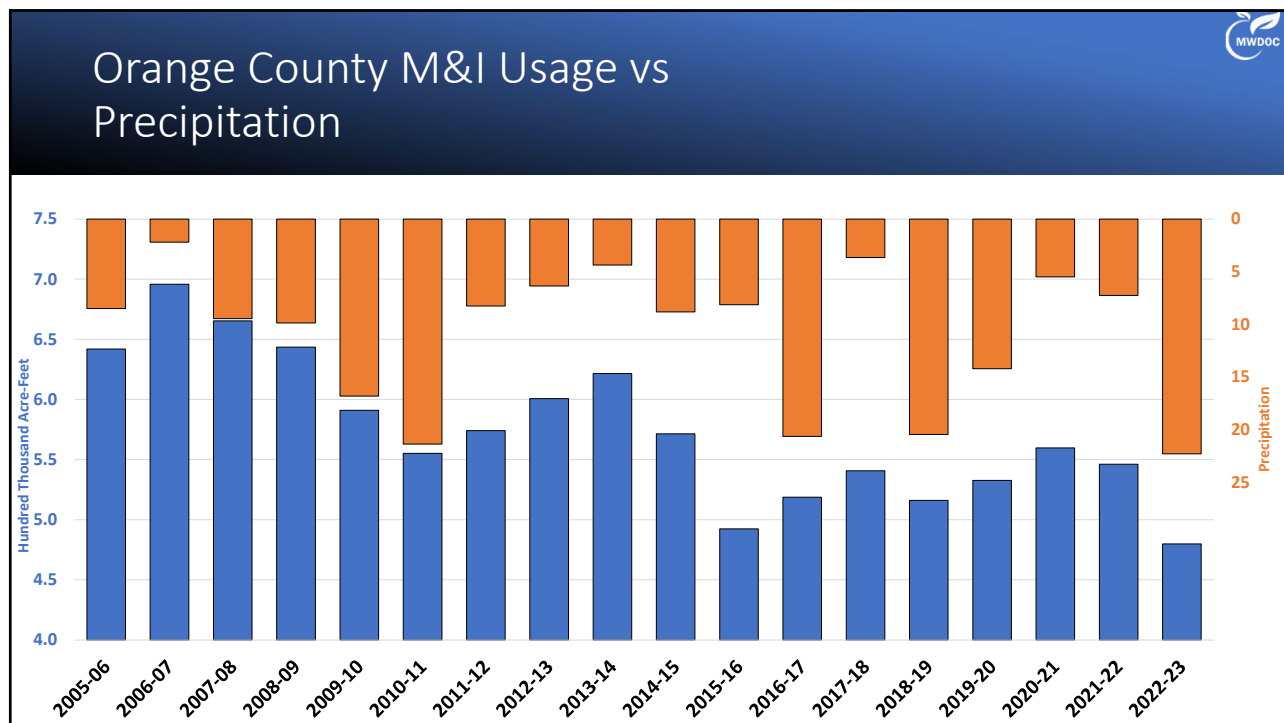
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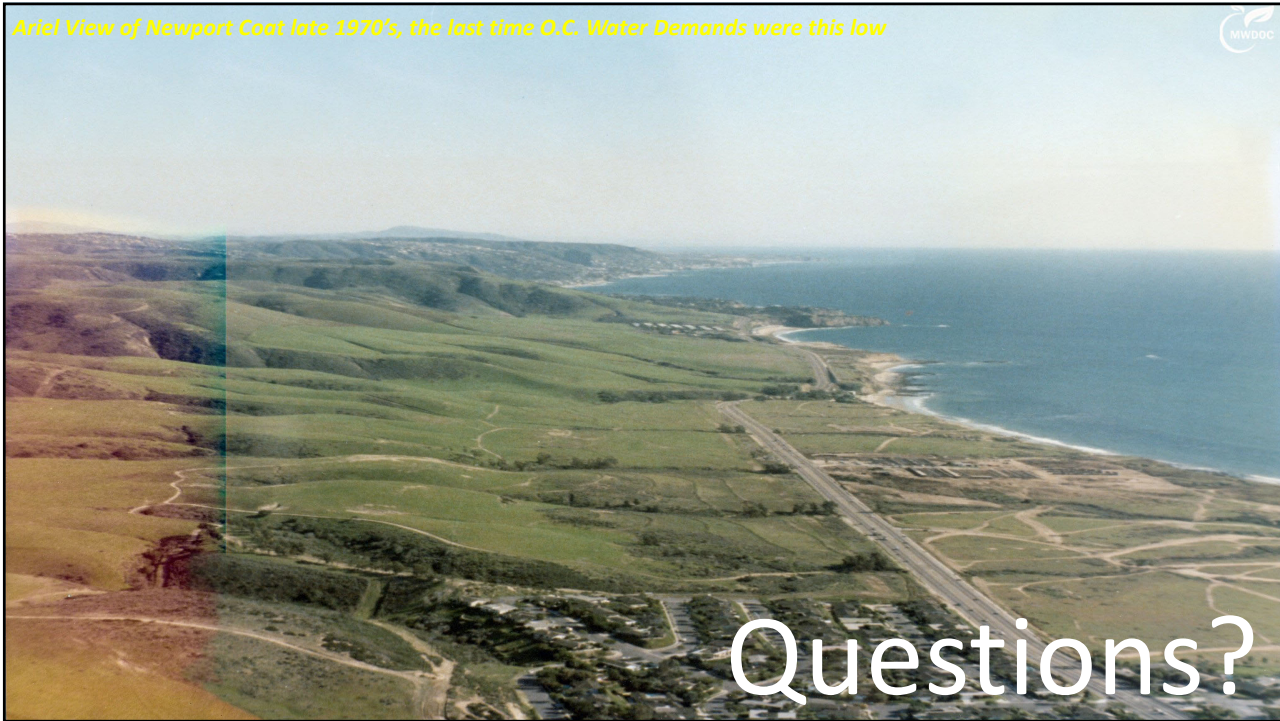


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6

Ariel View of Newport Coast late 1970's, the last time O.C. Water Demands were this low



7

**Municipal Water District of Orange County
REVENUE / CASH RECEIPT REPORT
September 2023**

WATER REVENUES

<u>Date</u>	<u>From</u>	<u>Description</u>	<u>Amount</u>
9/01/2023	City of Brea	July 2023 Water deliveries	82,644.01
9/05/2023	City of Buena Park	July 2023 Water deliveries	292,632.00
9/05/2023	El Toro Water District	July 2023 Water deliveries	848,557.82
9/07/2023	Serrano Water District	July 2023 Water deliveries	8,906.38
9/08/2023	City of La Palma	July 2023 Water deliveries	964.18
9/08/2023	City of San Clemente	July 2023 Water deliveries	865,128.62
9/08/2023	Irvine Ranch Water District	July 2023 Water deliveries	1,027,230.97
9/08/2023	South Coast Water District	July 2023 Water deliveries	585,178.04
9/11/2023	City of Garden Grove	July 2023 Water deliveries	64,535.80
9/11/2023	Santa Margarita Water District	July 2023 Water deliveries	2,593,257.44
9/11/2023	Santa Margarita Water District (ID9)	July 2023 Water deliveries	802,687.27
9/12/2023	City of Seal Beach	July 2023 Water deliveries	12,890.23
9/14/2023	City of Orange	July 2023 Water deliveries	522,301.99
9/14/2023	East Orange Co Water District	July 2023 Water deliveries	914,666.17
9/14/2023	Yorba Linda Water District	July 2023 Water deliveries	493,794.31
9/15/2023	Golden State Water Company	July 2023 Water deliveries	1,031,020.01
9/15/2023	Moulton Niguel Water District	July 2023 Water deliveries	2,313,319.46
9/15/2023	Orange County Water District	July 2023 Water deliveries	156,733.74
9/15/2023	Trabuco Canyon Water District	July 2023 Water deliveries	20,802.94
9/21/2023	Serrano Water District	August 2023 Water deliveries	8,906.38
9/25/2023	City of La Habra	August 2023 Water deliveries	7,889.29
9/25/2023	City of Newport Beach	August 2023 Water deliveries	304,457.21
9/28/2023	City of Westminster	August 2023 Water deliveries	11,513.51
9/29/2023	City of Brea	August 2023 Water deliveries	6,477.01
9/29/2023	City of Huntington Beach	August 2023 Water deliveries	450,377.40
9/29/2023	South Coast Water District	August 2023 Water deliveries	653,506.53

TOTAL WATER REVENUES \$ 14,080,378.71

Municipal Water District of Orange County
REVENUE / CASH RECEIPT REPORT
September 2023

MISCELLANEOUS REVENUES

<u>Date</u>	<u>From</u>	<u>Description</u>	<u>Amount</u>
9/05/2023	WePay	9/28/2023 ISDOC Luncheon Registrations	366.40
9/05/2023	Karl Seckel	September 2023 Retiree Health insurance	184.29
9/08/2023	Steve Hedges	Sep-Oct 2023 Retiree Health insurance	93.56
9/25/2023	Stan Sprague	October 2023 Retiree Health insurance	184.29
9/29/2023	Karl Seckel	October 2023 Retiree Health insurance	184.29
9/29/2023	Keith Lyon	October 2023 Retiree Health insurance	184.29
9/06/2023	Igoe and Company Inc	Jul- Aug 2023 COBRA Health and Vision insurance	5,502.64
9/18/2023	Igoe and Company Inc	COBRA Health and Vision insurance	781.66
9/05/2023	US Bank	CAL Card rebate check	929.61
9/19/2023	US Bank Custodial Account	Citigroup Interest payment	1,335.08
9/22/2023	US Bank Custodial Account	Toyota Financial Bank Interest payment	4,600.00
9/29/2023	US Bank	Monthly Interest	135.39
9/05/2023	WePay	Scouts BSA Clinic	345.22
9/15/2023	State of California	Refund for Special Filing/ Trademark	75.00
9/15/2023	Mesa Water District	Late payment penalty for June 2023 Water deliveries	1.05
9/25/2023	Santa Margarita Water District	June 2023 Smartimer rebate program	8.99
9/12/2023	City of Seal Beach	July 2023 Turf Removal rebate program	111.00
9/05/2023	City of La Habra	July 2023 Turf Removal and Spray to Drip rebate program	541.43
9/08/2023	City of Brea	July 2023 Turf Removal and Spray to Drip rebate program	666.00
9/14/2023	City of Westminster	July 2023 Turf Removal and Spray to Drip rebate program	222.00
9/15/2023	2 Checks	July 2023 Turf Removal and Spray to Drip rebate program	31,821.25
9/19/2023	2 Checks	July 2023 Turf Removal and Spray to Drip rebate program	1,082.90
9/15/2023	Mesa Water District	June 2023 Smartimer and Turf Removal rebate program	2,499.35
9/15/2023	Irvine Ranch Water District	July 2023 Smartimer and Rotating Nozzles rebate program	229.19
9/15/2023	Mesa Water District	July 2023 Smartimer, Turf Removal and Spray to Drip rebate program	602.00
9/29/2023	City of San Clemente	July 2023 Turf Removal, Spray to Drip, High Efficiency Clothes Washer and Toilets rebate program	988.91
9/11/2023	Laguna Beach County Water District	July 2023 High Efficiency Clothes Washers rebate program	65.00
9/15/2023	Trabuco Canyon Water District	July 2023 High Efficiency Clothes Washers rebate program	290.00
9/05/2023	City of Garden Grove	Dedicated Irrigation Meters Measurement Program FY 2022-24	71,100.00
9/05/2023	Mesa Water District	Water Loss Control Shared Services FY 2022-23	4,066.00
9/28/2023	City of Westminster	Water Loss Control Shared Services FY 2023-24	713.25
9/05/2023	City of Garden Grove	Water Loss Control Technical Assistance CY 2023 - E Source	28,940.00
9/29/2023	South Coast Water District	Water Loss Control Technical Assistance CY 2023 - E Source	35,040.00
9/11/2023	City of Orange	FY 2023-24 Choice Programs Billing invoice	58,939.26
9/01/2023	Irvine Ranch Water District	FY 2023-24 Choice Programs Billing invoice	129,668.70
9/05/2023	City of Buena Park	FY 2023-24 Choice Programs Billing invoice	13,934.83
9/05/2023	City of Fountain Valley	FY 2023-24 Choice Programs Billing invoice	18,607.59
9/05/2023	City of Garden Grove	FY 2023-24 Choice Programs Billing invoice	24,492.18
9/05/2023	City of Newport Beach	FY 2023-24 Choice Programs Billing invoice	56,187.79
9/07/2023	City of Seal Beach	FY 2023-24 Choice Programs Billing invoice	1,881.83
9/07/2023	Serrano Water District	FY 2023-24 Choice Programs Billing invoice	4,894.91
9/08/2023	City of La Palma	FY 2023-24 Choice Programs Billing invoice	2,407.42
9/08/2023	City of Tustin	FY 2023-24 Choice Programs Billing invoice	45,313.44
9/08/2023	South Coast Water District	FY 2023-24 Choice Programs Billing invoice	85,124.08
9/11/2023	Santa Margarita Water District	FY 2023-24 Choice Programs Billing invoice	143,353.04
9/15/2023	City of Fullerton	FY 2023-24 Choice Programs Billing invoice	456.47
9/15/2023	City of Huntington Beach	FY 2023-24 Choice Programs Billing invoice	104,018.53
9/15/2023	El Toro Water District	FY 2023-24 Choice Programs Billing invoice	27,218.23
9/15/2023	Trabuco Canyon Water District	FY 2023-24 Choice Programs Billing invoice	49,767.04
9/19/2023	Moulton Niguel Water District	FY 2023-24 Choice Programs Billing invoice	252,154.28
9/19/2023	Yorba Linda Water District	FY 2023-24 Choice Programs Billing invoice	30,436.16
9/21/2023	East Orange Co Water District	Addition to the Choice School Program FY 2023-24	1,313.25
9/28/2023	City of Garden Grove	Addition to the Choice School Program FY 2023-24	2,181.32
9/06/2023	Mesa Water District	FY 2023-24 Annual Retail Service Connection Charge with Reserve fund credit	329,772.00
9/15/2023	LA Department of Water and Power	WEEA Sponsorship FY 2023-24	5,000.00

TOTAL MISCELLANEOUS REVENUES \$ 1,581,012.39
TOTAL REVENUES \$ 15,661,391.10


Harvey De La Torre, Interim General Manager


Hilary Chumtazi, Treasurer

**Municipal Water District of Orange County
Disbursement Approval Report
For the month of October 2023**

Vendor/ Invoice	Description	Amount to Pay
Core Disbursements:		
Accent Computer Solutions LLC		
158605	Final payment for WatchGuard Firewall	2,800.00
Total		2,800.00
Ackerman Consulting-Richard C Ackerman		
1385	September 2023 Legal and regulatory specialized consulting services	3,500.00
Total		3,500.00
Alta FoodCraft		
12334118	September 2023 Coffee and tea supplies	239.98
Total		239.98
Best Best and Krieger LLP		
55401-AUG23	August 2023 Legal Services	14,318.26
974565	August 2023 Legal Services (Human Resources)	2,268.00
975609	August 2023 State Advocacy Agreement services	8,000.00
55401-SEP23	September 2023 Legal Services	21,575.29
976493	September 2023 Legal Services (Human Resources)	144.00
Total		46,305.55
Brown and Caldwell		
12495765	Augut 2023 Hydraulic model work services for Moulton Niguel Water District	922.55
Total		922.55
Bryton Printing Inc		
17429	Water Cycle poster on Foamcore for community and education events	150.85
Total		150.85
Colleague LLC-Nina H. Spencer		
1053	15% Retainer Fee for Professional Services for MWDOC General Manager Search	15,800.00
Total		15,800.00
Hunter T Cook		
93023	July-September 2023 Retiree medical premium	1,536.00
Total		1,536.00
Costco Wholesale Corp		
673499833	Costco Wholesale annual membership renewal	120.00
Total		120.00

**Municipal Water District of Orange County
Disbursement Approval Report
For the month of October 2023**

Vendor/ Invoice	Description	Amount to Pay
Green Thumb (Indoor Plant Care) LLC-Dedo Verde Interior		
20230961	September 2023 Indoor plant service	305.50
Total		<u>305.50</u>
Means Consulting-Edward G Means III		
MWDOC-1312	September 2023 East Orange County Feeder #2 Project Consulting Services	1,031.25
Total		<u>1,031.25</u>
E Source Companies LLC		
11270	August 2023 Retail Agency Technical Assistance Services	5,360.00
Total		<u>5,360.00</u>
GTS Architecture Inc		
1299	September 2023 MWDOC Office kitchen architectural and engineering services	9,597.28
Total		<u>9,597.28</u>
Hashtag Pinpoint Corporation		
1783	September 2023 Social Media consultation and services	7,913.00
Total		<u>7,913.00</u>
Steve Hedges		
93023	July-September 2023 Retiree medical premium	692.40
Total		<u>692.40</u>
Jill Promotions		
11860	Promotional items for community events	898.42
11881	Promotional item for community events	618.28
Total		<u>1,516.70</u>
Lawnscape Systems Inc		
440630	September 2023 Landscape Maintenance for Atrium	495.00
440631	September 2023 Landscape Maintenance for Atrium (secondary)	395.00
Total		<u>890.00</u>
Phil Letrong		
93023	July-September 2023 Retiree medical premium	494.70
Total		<u>494.70</u>
Keith Lyon		
93023	July-September 2023 Retiree medical premium	989.40
Total		<u>989.40</u>

**Municipal Water District of Orange County
Disbursement Approval Report
For the month of October 2023**

Vendor/ Invoice	Description	Amount to Pay
Patricia Meszaros		
93023	July-September 2023 Retiree medical premium	494.70
Total		494.70
Natural Resource Results LLC		
4569	September 2023 Federal Advocacy Agreement services	8,000.00
Total		8,000.00
NDS		
824073	09/01 and 09/08 Board packet delivery service	269.44
824252	09/15/23 Board packet delivery service	134.72
824620	9/29/23 Board packet delivery service	106.97
Total		511.13
ODP Business Solutions LLC		
330890412001	09/08/23 Office supplies	36.41
330893234001	09/08/23 Office supplies	413.52
Total		449.93
Office Solutions		
I-02156832	09/08/23 Office supplies	227.65
I-02158508	09/14/23 Office supplies	187.32
I-02160417	09/21/23 Office supplies	73.68
I-02161622	09/26/23 Office supplies	301.40
Total		790.05
Orange County Water District		
25763	August 2023 Postage, shared office & maintenance expense	16,069.63
Total		16,069.63
Judy Pfister		
93023	July-September 2023 Retiree medical premium	494.70
Total		494.70
Planet Bids		
93023	Fiscal Year 2023-24 Bid support services	4,803.03
Total		4,803.03
Roth Staffing Companies LP		
16066267	09/10/23 Week Ending Temporary Employee Services for Finance Department	1,482.96
16069257	09/17/23 Week Ending Temporary Employee Services for Finance Department	2,471.60
16072082	09/24/23 Week Ending Temporary Employee Services for Finance Department	2,471.60
Total		6,426.16

**Municipal Water District of Orange County
Disbursement Approval Report
For the month of October 2023**

Vendor/ Invoice	Description	Amount to Pay
Special District Risk Management Authority		
74598	Fiscal Year 2022-23 Workers Compensation Audit Premium	3,700.50
Total		<u>3,700.50</u>
Karl Seckel		
93023	July-September 2023 Retiree medical premium	1,384.80
Total		<u>1,384.80</u>
Mary Snow		
93023	June-September 2023 Retiree medical premium	659.60
Total		<u>659.60</u>
Spectrum Specialties & Awards		
37271	Promotional Items	593.73
Total		<u>593.73</u>
VC3, Inc		
159342	September 2023 IT Support Services	7,084.00
Total		<u>7,084.00</u>
Whittingham Public Affairs Advisors		
2144	October 2023 Strategic guidance services on local & regional issues	7,500.00
Total		<u>7,500.00</u>
Total Core Expenditures		<u>159,127.12</u>
 Choice Expenditures:		
Mission RCD		
3391	September 2023 Field inspection and verification for Water Use Efficiency rebate programs	5,696.64
Total		<u>5,696.64</u>
Office Solutions		
I-02159818	09/19/2023 Supplies for Water Loss Control Shared Services	56.93
I-02159912	09/20/2023 Supplies for Water Loss Control Shared Services	105.48
Total		<u>162.41</u>
Orange County Water District		
25763	August 2023 Postage for Water Use Efficiency rebate programs	87.77
Total		<u>87.77</u>

**Municipal Water District of Orange County
Disbursement Approval Report
For the month of October 2023**

Vendor/ Invoice	Description	Amount to Pay
South Coast Water District		
4773	PRV Replacement Program (Admiralty HOA)	3,380.00
Total		<u>3,380.00</u>
Total Choice Expenditures		<u>9,326.82</u>
 Other Funds Expenditures:		
El Toro Water District		
453	August 2023 Soft Costs & Site Grading South EOC	17,000.00
Total		<u>17,000.00</u>
E Source Companies LLC		
11270	August 2023 Retail Agency Technical Assistance Services	12,610.00
Total		<u>12,610.00</u>
Mission RCD		
3391	September 2023 Field inspection and verification for Water Use Efficiency rebate programs	5,983.28
Total		<u>5,983.28</u>
Motorola Solutions Inc		
8281710150	09/07/23 WEROC 800MHz Radios and Accessories	249.16
8281724845	09/27/23 WEROC 800MHz Radios and Accessories	589.95
Total		<u>839.11</u>
The Plant Nerd		
8154	September 2023 Landscape Design and Landscape Maintenance Assistance Program	11,820.00
Total		<u>11,820.00</u>
TerraWorks Studio		
MW0025	September 2023 Landscape Design Assistance Program	2,700.00
Total		<u>2,700.00</u>
Total Other Funds Expenditures		<u>50,952.39</u>
Total Expenditures		<u><u>219,406.33</u></u>

**Municipal Water District of Orange County
Disbursement Ratification Report
For the Month of September 2023**

Name/ Date	Check/ EFT	Invoice	Description	Amount
Core Disbursements:				
Tiffany Baca				
9/29/2023	EFT	82823	August 2023 Business expense	87.37
Total				<u>87.37</u>
Joseph Berg				
9/29/2023	EFT	83123	August 2023 Business expense	232.96
Total				<u>232.96</u>
Hilary Chumpitazi				
9/29/2023	EFT	82223	August 2023 Business expense	71.80
Total				<u>71.80</u>
Corodata Records Management Inc				
9/29/2023	EFT	RS4940666	August 2023 Records Storage Fee	102.77
Total				<u>102.77</u>
Randall Crane				
9/29/2023	EFT	82523	August 2023 Business expense	194.82
Total				<u>194.82</u>
Katie Davanaugh				
9/29/2023	EFT	82323	August 2023 Business expense	75.00
Total				<u>75.00</u>
Harvey De La Torre				
9/29/2023	EFT	82423	August 2023 Business expense	403.51
Total				<u>403.51</u>
Larry Dick				
9/29/2023	EFT	82923	August 2023 Business expense	144.10
Total				<u>144.10</u>
Maribeth Goldsby				
9/29/2023	EFT	83123	August 2023 Business expense	19.94
Total				<u>19.94</u>
Lina Gunawan				
9/29/2023	EFT	71923	July 2023 Business expense	97.04
Total				<u>97.04</u>
Claire Johnson				
9/29/2023	EFT	81923	August 2023 Business expense	38.78
Total				<u>38.78</u>

**Municipal Water District of Orange County
Disbursement Ratification Report
For the Month of September 2023**

Name/ Date	Check/ EFT	Invoice	Description	Amount
Robert McVicker				
9/29/2023	EFT	81723	August 2023 Business expense	<u>15.72</u>
****Total****				15.72
Al Nederhood				
9/29/2023	EFT	82323	August 2023 Business expense	<u>286.88</u>
****Total****				286.88
Megan Schneider				
9/29/2023	EFT	72023	July 2023 Business expense	<u>611.33</u>
****Total****				611.33
Karl Seckel				
9/29/2023	EFT	83023	August 2023 Business expense	<u>76.01</u>
****Total****				76.01
Nathan Shepherd				
9/29/2023	EFT	81923	August 2023 Business expense	<u>119.48</u>
****Total****				119.48
Spectrum Business				
9/15/2023	142635	343564091023	September 2023 Telephone expense for one fax line	39.99
9/06/2023	142622	375210083023	September 2023 Telephone and internet expense	1,725.05
****Total****				<u>1,765.04</u>
Jeffery Thomas				
9/29/2023	EFT	82423	August 2023 Business expense	<u>196.86</u>
****Total****				196.86
Verizon Wireless				
9/06/2023	142623	9942764370	August 2023 4G Mobile broadband unlimited service	114.03
****Total****				<u>114.03</u>
Sarah Wilson				
9/29/2023	EFT	81923	August 2023 Business expense	<u>79.56</u>
****Total****				79.56
Total Core Disbursements				<u>4,733.00</u>

**Municipal Water District of Orange County
Disbursement Ratification Report
For the Month of September 2023**

Name/ Date	Check/ EFT	Invoice	Description	Amount
Choice Disbursements:				
US Bank Voyager Fleet Systems				
9/15/2023	EFT	8694349932334	07/25/23-08/24/23 Fuel for Water Loss Control Shared Services vehicles	841.11
Total				841.11
Total Choice Disbursements				841.11
Other Funds Disbursements:				
City of Big Bear Lake				
9/29/2023	142689	82423	Prop 1 Project Partner Reimbursement per Report 9	845.20
Total				845.20
AT&T				
9/15/2023	142627	20440562	August 2023 Telephone expense for WEROC N. EOC	36.06
Total				36.06
Mesa Water District				
9/15/2023	EFT	11222	July 2023 Credit for Local Resources program	20,150.93
Total				20,150.93
Metropolitan Water District				
9/29/2023	EFT09292023	11209	July 2023 Water deliveries	13,373,053.46
Total				13,373,053.46
Santa Margarita Water District				
9/29/2023	EFT	73123	July 2023 SCP Operation Surcharge	32,021.12
Total				32,021.12
Santiago Aqueduct Commission				
9/29/2023	142696	73123	July 2023 SAC Pipeline Operation Surcharge	1,816.36
Total				1,816.36
Spray to Drip Rebate				
9/28/2023	142657	S2D5-R-TUST-47185-18971	S. Maurath	1,769.50
9/28/2023	142667	S2D6-C-BP-51318-21968	Pri Valley View Industrial Ca LLC (Buena Park)	6,159.00
9/28/2023	142654	S2D6-C-IRWD-42794-21892	Lake Forest Townhomes (Lake Forest)	1,362.40
9/28/2023	142674	S2D6-C-IRWD-44331-21793	Serrano Park HOA (Lake Forest)	4,070.40
9/28/2023	142672	S2D6-C-MNT-26835-19355	San Marin HOA (Laguna Niguel)	6,960.80
9/28/2023	142649	S2D6-C-MNT-44331-21926	Gateway Mission Viejo Inc (Mission Viejo)	24,185.00
9/28/2023	142666	S2D6-C-NWPT-38663-19651	Plaza Homeowners Community Assoc (Newport Be	1,259.00
9/28/2023	142662	S2D6-C-SM-44331-19633	Oso Valley Greenbelt Assoc (Mission Viejo)	4,087.50
9/28/2023	142638	S2D6-R-ETWD-49851-19660	G. Bender	1,422.00
9/28/2023	142641	S2D6-R-GSWC-51130-21928	R. Cheng	1,574.00

**Municipal Water District of Orange County
Disbursement Ratification Report
For the Month of September 2023**

Name/ Date	Check/ EFT	Invoice	Description	Amount
Spray to Drip Rebate-Continued				
9/28/2023	142645	S2D6-R-IRWD-46459-22010	G. Verrill	326.40
9/28/2023	142678	S2D6-R-IRWD-51589-22076	A. Strayer	942.40
9/28/2023	142682	S2D6-R-MESA-47470-22059	K. Whelan	935.50
9/28/2023	142648	S2D6-R-O-51351-21903	D. Friedl	239.50
9/28/2023	142688	S2D6-R-O-51475-21985	W. Zimmer	1,435.00
9/28/2023	142643	S2D6-R-SM-49593-19494	G. Clark	2,225.00
9/28/2023	142652	S2D6-R-SM-51640-22066	R. Hendrix	285.50
9/28/2023	142640	S2D6-R-SOCO-51696-22095	L. Bridges	1,083.00
9/28/2023	142670	S2D6-R-TC-51424-21944	K. Robertson	325.00
9/28/2023	142664	S2D6-R-TUST-47113-19096	M. Perlof	718.00
9/28/2023	142684	S2D6-R-TUST-51097-21851	L. White	882.00
Total				62,246.90
Turf Rebate				
9/28/2023	142669	TR14-R-O-42115-40857-ADJ	M. Richardson	329.85
9/28/2023	142660	TR15-R-GG-44217-45768	A. Nguyen	2,475.00
9/28/2023	142683	TR15-R-MESA-47470-46063	K. Whelan	3,549.00
9/28/2023	142665	TR15-R-TUST-47113-45723	M. Perlof	3,540.00
9/28/2023	142658	TR15-R-TUST-47185-45797	S. Maurath	4,902.00
9/28/2023	142668	TR16-C-BP-51318-49881	Pri Valley View Industrial Ca LLC (Buena Park)	24,636.00
9/28/2023	142659	TR16-C-ETWD-51543-50005	Mea Properties Inc (Laguna Hills)	6,656.00
9/28/2023	142655	TR16-C-IRWD-42794-49636	Lake Forest Townhomes (Lake Forest)	8,515.00
9/28/2023	142675	TR16-C-IRWD-44331-49607	Serrano Park HOA (Lake Forest)	23,189.60
9/28/2023	142687	TR16-C-IRWD-49845-49560	Ziani Homeowners Assoc (Newport Beach)	25,904.00
9/28/2023	142686	TR16-C-MNT-38663-49615	Windsong Comm Assoc (Aliso Viejo)	33,120.00
9/28/2023	142676	TR16-C-MNT-38663-49732	Southpeak HOA (Laguna Niguel)	2,256.00
9/28/2023	142644	TR16-C-MNT-38663-49755	Colinas De Capistrano Comm Assoc (Laguna Niguel)	11,445.00
9/28/2023	142650	TR16-C-MNT-49740-48282	Gateway Mission Viejo Inc (Mission Viejo)	102,597.00
9/28/2023	142673	TR16-C-NWPT-4463-49744	Seawind Assoc (Newport Beach)	5,662.00
9/28/2023	142680	TR16-C-NWPT-4463-49847	Villa Balboa Comm Assoc (Newport Beach)	5,392.00
9/28/2023	142651	TR16-C-SB-49544-48150	Golden Rain Foundation (Seal Beach)	27,228.00
9/28/2023	142663	TR16-C-SM-44331-48369	Oso Valley Greenbelt Assoc (Mission Viejo)	18,210.00
9/28/2023	142639	TR16-R-ETWD-49851-48403	G. Bender	7,584.00
9/28/2023	142661	TR16-R-GG-50963-49545	D. Nguyen	4,341.00
9/28/2023	142642	TR16-R-GSWC-51130-49717	R. Cheng	4,878.00
9/28/2023	142646	TR16-R-IRWD-46459-45095	G. Verrill	2,040.00
9/28/2023	142681	TR16-R-IRWD-49625-48146	H. Vu	2,985.00
9/28/2023	142679	TR16-R-IRWD-51589-50051	A. Strayer	3,550.00
9/28/2023	142637	TR16-R-MNT-49420-48051	H. Amini	1,080.00
9/28/2023	142677	TR16-R-MNT-51592-50055	R. Steuckrath	4,520.00
9/28/2023	142656	TR16-R-O-51327-49766	C. MacGillivray	1,563.00
9/28/2023	142647	TR16-R-SC-51114-49700	C. Fedele	5,712.00
9/28/2023	142653	TR16-R-SM-51640-50100	R. Hendrix	609.00
9/28/2023	142671	TR16-R-TC-51424-49870	K. Robertson	975.00
9/28/2023	142685	TR16-R-TUST-51097-49683	L. White	4,392.00
Total				353,835.45

**Municipal Water District of Orange County
Disbursement Ratification Report
For the Month of September 2023**

Name/ Date	Check/ EFT	Invoice	Description	Amount
Verizon Wireless				
9/06/2023	142623	9942764370	August 2023 4G Mobile broadband unlimited service	76.02
Total				76.02
Western Municipal Water District				
9/29/2023	142699	82423	Prop 1 Project Partner Reimbursement per Report 9	116,126.35
Total				116,126.35
Total Other Funds Disbursements				13,960,207.85
Total Disbursements				13,965,781.96



Harvey De La Torre, Interim General Manager



Hilary Chumpitazi, Treasurer

Cal Card Charges
Statement Date: August 22, 2023
Payment Date: September 15, 2023

Date	Description	Amount
Interim General Manager Card:		
7/31/2023	CSMFO Orange County Chapter Meeting in Orange, CA on August 17, 2023 - Registration for H. Chumpitazi	45.00
7/31/2023	CalWEP's Fall Plenary in Sacramento, CA on August 31, 2023 - Airfare for J. Berg	370.96
8/04/2023	08/04/23 Southwest refund	(238.98)
8/06/2023	CSDA Annual Conference in Monterey, CA on August 28-31, 2023 registration for H. Baez	675.00
8/07/2023	08/07/23 Paypal Urban Water Institute refund due to sponsorship	(1,785.00)
8/9/2023	CSDA Annual Conference in Monterey, CA on August 28-31, 2023 - Airfare for H. Baez	364.96
8/14/2023	08/04-14/23 Business meals	266.75
8/16/2023	CSDA Annual Conference in Monterey, CA on August 28-31, 2023 - Accommodations for H. Baez	277.91
8/17/2023	Controlling Non-Revenue Water in Drinking Water Utilities Certificate Program (R. Davis)	460.00
8/17/2023	Urban Water Institute Spring Water Conference in San Diego, CA from August 23-25, 2023 - Registration for H. De La Torre	695.00
8/21/2023	North American Water Loss Conference 2023 in Denver, CO from December 5-7, 2023 - Flights - R. Davis	204.96
8/22/2023	ACWA Fall Conference in Indian Wells, CA from 11/28-30, 2023 - Registration for A. Nederhood, D. Micalizzi, H. De La Torre, H. Baez, J. Thomas, M. Baum-Haley	4,890.00
Total:		6,226.56
Administration Card:		
7/25/2023	07/25/23 Kitchen utensils	17.47
7/25/2023	07/25/23 Office Supplies	155.42
7/25/2023	Laptop docking station	149.48
7/25/2023	06/25/23-07/24/23 Monthly charge for website hosting	15.65
7/28/2023	07/28/23 Water Loss Control Shared Services supplies	59.55
7/28/2023	Dell Latitude laptop for Water Loss Control Supervisor	1,302.22
7/30/2023	Water Loss Control Shared Services supplies	228.03
7/30/2023	Printhead for large plotter/HP Z9	135.71
8/1/2023	Accountant/Sr. Accountant job posting with Water District Jobs	145.00
8/3/2023	Laptop docking station	149.12
8/3/2023	Print head for DeskJet Z9 Plotter	128.11
8/3/2023	Laptop power supply	29.34
8/3/2023	Displayport adapters for various workstations	39.10
8/7/2023	Binding strips	190.81
8/7/2023	Keyboard/mouse for Sr. Accountant	59.64
8/10/2023	Windows 11 operation system upgrade for staff laptop	99.99
8/11/2023	Black toner cartridge for finance	95.91
8/11/2023	Laptop docking station for the Director of WUE	178.08
8/15/2023	Trackball mouse for Director of Engineering	103.97
8/15/2023	Power cord extensions for MWD OC conference room 101	38.14
8/15/2023	30' ethernet cable to improve wifi for conf room 101	18.41
8/17/2023	08/16/2023 Lunch for management staff	225.00
Total:		3,564.15

Cal Card Charges
Statement Date: August 22, 2023
Payment Date: September 15, 2023

Date	Description	Amount
Public Affairs Card:		
7/24/2023	Scouts supplies for clinic activities	8.79
7/25/2023	iStock images for WEEA presentation	12.00
7/25/2023	Shutterstock images for WEEA	29.00
7/25/2023	Vietnamese translation for Department of Motor Vehicles video	7.78
7/30/2023	California Association of Public Information Officials annual membership renewal for S. Wilson	275.00
8/01/2023	Department of Water Resources Water Education Committee Annual Meeting on July 31 and August 1, 2023 at MWD - Train fare for six Public Affairs staff	165.00
8/02/2023	08/02/23-09/01/23 Zoom Video Communications fee with audio licenses	174.93
8/03/2023	August 2023 Public Storage Unit for Public Affairs	485.00
8/11/2023	Scouts Clinic supplies	20.55
8/11/2023	Scouts Clinic supplies	35.34
8/14/2023	Scouts Clinic supplies	23.90
8/14/2023	Scouts Clinic supplies	24.22
Total:		1,261.51
WEROC Card:		
7/28/2023	Laptop computer docking station	161.57
8/10/2023	California Specialized Training Institute Emergency Management training and certificates for member agencies (G611 Courses)	2,006.44
8/21/2023	(4) Windows Home to Pro Licenses for WEROC	399.96
Total:		2,567.97

Municipal Water District of Orange County
GM Approved Disbursement Report ⁽¹⁾
For the Month of September 2023

Name/ Date	Check/ EFT	Invoice	Description	Amount
Core Disbursements:				
Flume Inc				
9/29/2023	142693	1808	June 2023 Water Efficiency Potential and Opportunities Study	43,625.00
Total				<u>43,625.00</u>
Roth Staffing Companies LP				
9/29/2023	EFT	16063507	09/03/23 Week Ending Temporary Employee Services for Finance Department	2,471.60
Total				<u>2,471.60</u>
Total Core Disbursements				<u>46,096.60</u>
Choice Disbursements:				
Total Choice Disbursements				<u>-</u>
Other Funds Disbursements:				
Total Other Funds Disbursements				<u>-</u>
Total Disbursements				<u><u>46,096.60</u></u>


Harvey De La Torre, Interim General Manager


Hilary Chumpitazi, Treasurer

⁽¹⁾ For disbursements that did not make the cut-off of previous month's Disbursement Approval report. Disbursements are approved by GM for payment and need A & F Committee ratification.



Municipal Water District of Orange County
Consolidated Summary of Cash and Investment
 August 31, 2023

District investments and cash balances are held in various funds designated for certain purposes as follows:

Fund	Book Value	% of Portfolio
Restricted Reserves		
WEROC Operating Fund	\$608,535	3.21%
Designated Reserves		
Operating Reserves	\$3,819,350	20.16%
Election Reserve	482,587	2.55%
OPEB Reserve	297,147	1.57%
Total Designated Reserves	\$4,599,084	24.28%
General Operations Fund	\$13,323,730	70.34%
Water Purchase Payments Fund	799,834	4.22%
Conservation Fund	(407,785)	(2.15%)
Trustee Activities - AMP	18,637	0.10%
Total Other Funds	\$13,734,416	72.51%
Total	\$18,942,035	100.00%

The funds are invested as follows:

Term of Investment	% of Portfolio	Book Value	Market Value
Cash	2.44%	\$461,723	\$461,723
Short-term investment			
• LAIF	59.34%	11,239,986	11,239,986
• OCIP	21.86%	4,140,387	4,140,387
Long-term investment			
• US Government Issues	1.32%	249,939	226,177
• Corporate Bond	6.33%	1,200,000	1,082,873
• Certificates of Deposit	8.71%	1,650,000	1,572,921
Total	100.00%	\$18,942,035	\$18,724,067

The average number of days to maturity/call as of August 31, 2023 equaled 127 and the average yield to maturity is 3.335%. During the month, the District's average daily balance was \$24,853,043.13. Funds were invested in US Bank Checking Account, Negotiable Certificate of Deposits, Corporate Bonds, US Government Issues, Local Agency Investment Funds (LAIF) and Orange County Investment Pool (OCIP) during the month of August 2023.

The (\$217,968) difference between the book value and the market value on August 31, 2023 represents the exchange difference if all investments had been liquidated on that date. Since it is the District's practice to "buy and hold" investments until maturity, the market values are a point of reference, not an indication of actual loss or gain. There are no current plans or cash flow requirements identified in the near future that would require the sale of these securities prior to maturity.


 Harvey De La Torre
 Interim General Manager


 Hilary Chumpitazi
 Treasurer

Street Address:
 18700 Ward Street
 Fountain Valley, California 92708

Mailing Address:
 P.O. Box 20895
 Fountain Valley, CA 92728-0895

(714) 963-3058
 Fax: (714) 964-9389
www.mwdoc.com

Megan Yoo Schneider, P.E.
 President

Bob McVicker, P.E., D.WRE
 Vice President

Randall Crane, Ph.D.
 Director

Larry D. Dick
 Director

Al Nederhood
 Director

Karl W. Seckel, P.E.
 Director

Jeffery M. Thomas
 Director

Harvey De La Torre
 Interim General Manager

MEMBER AGENCIES

City of Brea
 City of Buena Park
 East Orange County Water District
 El Toro Water District
 Emerald Bay Service District
 City of Fountain Valley
 City of Garden Grove
 Golden State Water Co.
 City of Huntington Beach
 Irvine Ranch Water District
 Laguna Beach County Water District
 City of La Habra
 City of La Palma
 Mesa Water District
 Moulton Niguel Water District
 City of Newport Beach
 City of Orange
 Orange County Water District
 City of San Clemente
 Santa Margarita Water District
 City of Seal Beach
 Serrano Water District
 South Coast Water District
 Trabuco Canyon Water District
 City of Tustin
 City of Westminster
 Yorba Linda Water District



MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

Portfolio Management - Portfolio Summary August 31, 2023

8/31/2023	Par Value	Market Value	Book Value	% of Portfolio	Days to Mat/Call	YTM @ Cost
Negotiable Certificate Of Deposit	1,650,000.00	1,572,920.50	1,650,000.00	8.93	1,170	3.126
Corporate Bond	1,200,000.00	1,082,873.50	1,200,000.00	6.50	314	1.518
US Government Issues	250,000.00	226,177.50	249,939.10	1.35	87	0.860
Local Agency Investment Funds	11,239,985.81	11,239,985.81	11,239,985.81	60.82	1	3.428
Orange County Investment Pool	4,140,387.08	4,140,387.08	4,140,387.08	22.40	1	3.843
Total Investments	18,480,372.89	18,262,344.39	18,480,311.99	100.00	127	3.335
Cash						
Cash	461,722.67	461,722.67	461,722.67		1	0.00
Total Cash and Investments	18,942,095.56	18,724,067.06	18,942,034.66		127	3.335

Total Earnings	Month Ending August	Fiscal Year to Date
Current Year	68,888.32	113,358.37
Average Daily Balance	24,853,043.13	
Effective Rate of Return	3.335%	

We certify that this report reflects the cash and investments of the Municipal Water District of Orange County and is in conformity with the Government Code requirements and the District Investment Policy and Guidelines in effect at the time of investment. The Investment Program herein shown provides sufficient cash flow liquidity to meet the next six month's estimated expenditure. The source for the market values are from U.S. Bank. Per Resolution 2059 there are no compliance exceptions to report.


Harvey De La Torre, Interim General Manager

10/05/2023
Date


Hilary Chumplitazi, Treasurer

10/05/2023
Date

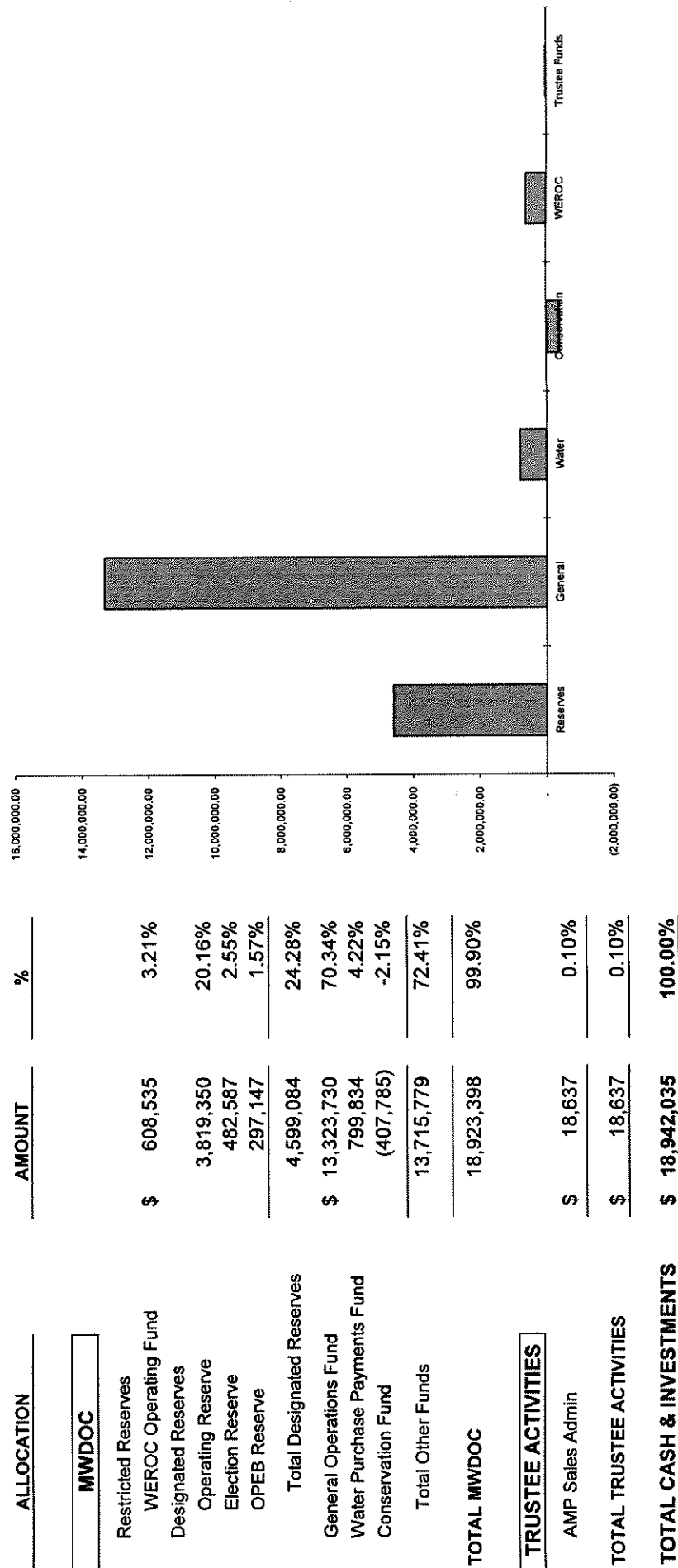
MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Portfolio Management
Long-Term Portfolio Details - Investments
August 31, 2023

Issuer	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
Negotiable Certificate Of Deposit									
American Express Bank	02589ADE9	7/20/2022	200,000.00	187,168.00	200,000.00	3.350	3.350	1,419	7/20/2027
Capital One Bank	14042TBO9	8/7/2019	250,000.00	242,477.50	250,000.00	2.250	2.250	342	8/7/2024
Capital One NA	14042RMJ7	7/24/2019	250,000.00	242,702.50	250,000.00	2.200	2.200	328	7/24/2024
Discover Bank	2546736R2	7/26/2023	250,000.00	241,860.00	250,000.00	4.500	4.500	1,789	7/24/2028
Sallie Mae Bank	7954507A7	7/14/2021	200,000.00	177,040.00	200,000.00	1.000	1.000	1,048	7/14/2026
State Bank of India	8562852Q3	8/10/2023	250,000.00	245,492.50	250,000.00	4.550	4.550	1,806	8/10/2028
Toyota Financial SGS Bank	89235MPD7	9/27/2022	250,000.00	236,180.00	250,000.00	3.650	3.650	1,483	9/22/2027
Sub Total			1,650,000.00	1,572,920.50	1,650,000.00	3.126	3.126	1,170	
US Government Issues									
FHLB	3130ALGR9	3/1/2021	250,000.00	226,177.50	249,939.10	0.850	0.860	87	2/26/2026
Sub Total			250,000.00	226,177.50	249,939.10	0.850	0.860	87	
Corporate Bond									
Bank of America Corp	06048WK41	12/7/2020	250,000.00	224,087.50	250,000.00	0.850	0.800	817	11/25/2025
Citigroup Global Markets	17328WFZ6	9/16/2020	250,000.00	225,800.00	250,000.00	1.000	1.000	16	9/16/2025
JP Morgan Chase	48128GV56	8/18/2020	250,000.00	224,342.50	250,000.00	0.800	0.800	353	8/18/2025
Morgan Stanley Fin LLC	61766YKH3	6/29/2022	200,000.00	187,386.00	200,000.00	4.500	4.500	303	6/29/2027
Societe Generale	83369MD25	8/19/2020	250,000.00	221,257.50	250,000.00	1.150	1.088	80	8/19/2025
Sub Total			1,200,000.00	1,082,873.50	1,200,000.00	1.542	1.518	314	
Total Investments			3,100,000.00	2,881,971.50	3,099,939.10	2.329	2.321	751	
Total Earnings									
Current Year		Month Ending August	5,989.23	Fiscal Year To Date	11,624.33				

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
Portfolio Management
Short-Term Portfolio Details - Cash and Investments
August 31, 2023

Investments	CUSIP/Ticker	Settlement Date	Par Value	Market Value	Book Value	Coupon Rate	YTM @ Cost	Days To Call/Maturity	Maturity Date
Local Agency Investment Funds									
LAIF LGIP	LAIF	6/30/2010	11,239,985.81	11,239,985.81	11,239,985.81	3.428	3.428	1	N/A
Sub Total			11,239,985.81	11,239,985.81	11,239,985.81	3.428	3.428	1	
Orange County Investment Pool									
County of Orange LGIP	OCIP	6/29/2005	4,140,387.08	4,140,387.08	4,140,387.08	3.843	3.843	1	N/A
Sub Total			4,140,387.08	4,140,387.08	4,140,387.08	3.843	3.843	1	
Total Investments			15,380,372.89	15,380,372.89	15,380,372.89	3.540	3.540		
Cash									
Petty Cash Cash	CASH	7/1/2010	500.00	500.00	500.00	0.000	0.000	1	N/A
US Bank Cash	CASHUSBANK	7/25/2018	461,222.67	461,222.67	461,222.67	0.000	0.000	1	N/A
Total Cash			461,722.67	461,722.67	461,722.67	0.000	0.000	1	
Total Cash and Investments			15,842,095.56	15,842,095.56	15,842,095.56	3.540	3.540	1	
Total Earnings									
Current Year			62,899.09		Fiscal Year To Date				
					101,734.04				

**Municipal Water District of Orange County
Cash and Investments at August 31, 2023**



MUNICIPAL WATER DIST OF ORANGE COUNTY
PARS Post-Employment Benefits TrustAccount Report for the Period
8/1/2023 to 8/31/2023Hilary Chumpitazi
Accounting Manager
Municipal Water Dist of Orange County
18700 Ward Street
Fountain Valley, CA 92708

Account Summary

Source	Balance as of 8/1/2023	Contributions	Earnings	Expenses	Distributions	Transfers	Balance as of 8/31/2023
OPEB	\$2,626,959.50	\$0.00	-\$44,083.91	\$1,234.58	\$0.00	\$0.00	\$2,581,641.01
PENSION	\$1,143,447.23	\$207,000.00	-\$20,558.60	\$537.38	\$0.00	\$0.00	\$1,329,351.25
Totals	\$3,770,406.73	\$207,000.00	-\$64,642.51	\$1,771.96	\$0.00	\$0.00	\$3,910,992.26

Investment Selection

Source	
OPEB	Moderate HighMark PLUS
PENSION	Moderate HighMark PLUS

Investment Objective

Source	
OPEB	The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments.
PENSION	The dual goals of the Moderate Strategy are growth of principal and income. It is expected that dividend and interest income will comprise a significant portion of total return, although growth through capital appreciation is equally important. The portfolio will be allocated between equity and fixed income investments.

Investment Return

Source	1-Month	3-Months	1-Year	Annualized Return			Plan's Inception Date
				3-Years	5-Years	10-Years	
OPEB	-1.68%	3.50%	5.87%	2.67%	4.42%	5.71%	10/26/2011
PENSION	-1.64%	3.54%	5.91%	2.69%	4.42%	-	7/31/2018

Information as provided by US Bank, Trustee for PARS; Not FDIC Insured; No Bank Guarantee; May Lose Value

Past performance does not guarantee future results. Performance returns may not reflect the deduction of applicable fees, which could reduce returns. Information is deemed reliable but may be subject to change.

Investment Return: Annualized rate of return is the return on an investment over a period other than one year multiplied or divided to give a comparable one-year return.

Account balances are inclusive of Trust Administration, Trustee and Investment Management fees

**MUNICIPAL WATER DISTRICT OF ORANGE COUNTY
COMBINED FINANCIAL STATEMENTS
AND
BUDGET COMPARATIVE
JULY 1, 2023 THRU AUGUST 31, 2023**

**Municipal Water District of Orange County
Combined Balance Sheet
As of August 31, 2023**

	<u>Amount</u>
<u>ASSETS</u>	
Cash in Bank	461,722.67
Investments	18,480,311.99
Accounts Receivable	28,558,801.39
Accounts Receivable - Other	333,567.63
Accrued Interest Receivable	125,779.59
Prepays/Deposits	429,161.52
Leasehold Improvements	7,011,190.45
Furniture, Fixtures & Equipment	888,428.70
Less: Accumulated Depreciation	<u>(4,040,837.80)</u>
TOTAL ASSETS	<u>52,248,126.14</u>
<u>LIABILITIES AND FUND BALANCES</u>	
<u>LIABILITIES</u>	
Accounts Payable	27,361,415.38
Accrued Salaries and Benefits Payable	681,545.14
Other Liabilities	546,440.74
Unearned Revenue	<u>1,364,885.44</u>
TOTAL LIABILITIES	<u>29,954,286.70</u>
<u>FUND BALANCES</u>	
<u>Restricted Fund Balances</u>	
WERO Reserve	<u>317,999.82</u>
Total Restricted Fund Balances	<u>317,999.82</u>
<u>Unrestricted Fund Balances</u>	
<u>Designated Reserves</u>	
General Operations	3,819,350.00
Election Expense	482,587.00
OPEB	<u>297,147.00</u>
Total Designated Reserves	<u>4,599,084.00</u>
General Fund	7,948,699.52
General Fund Capital	<u>86,023.20</u>
Total Unrestricted Fund Balances	<u>12,633,806.72</u>
<u>Excess Revenue over Expenditure</u>	
Operating Fund	9,223,815.87
Other Funds	<u>118,217.03</u>
TOTAL FUND BALANCES	<u>22,293,839.44</u>
TOTAL LIABILITIES AND FUND BALANCES	<u>52,248,126.14</u>

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
General Fund
July 1, 2023 thru August 31, 2023

	<u>Month to Date</u>	<u>Year to Date</u>	<u>Annual Budget</u>	<u>% Used</u>	<u>Encumbrance</u>	<u>Budget Remaining</u>
REVENUES						
Retail Connection Charge	0.00	9,206,255.25	9,206,255.25	100.00%	0.00	0.00
Ground Water Customer Charge	0.00	383,697.00	383,697.00	100.00%	0.00	0.00
Water Rate Revenues	0.00	9,589,952.25	9,589,952.25	100.00%	0.00	0.00
Interest Revenue	70,708.71	116,995.00	319,410.00	36.63%	0.00	202,415.00
Subtotal	70,708.71	9,706,947.25	9,909,362.25	97.96%	0.00	202,415.00
Choice Programs	1,390,433.18	1,390,433.18	2,026,982.00	68.60%	0.00	636,548.82
MWD Revenue - Shared Services	0.00	66,589.00	0.00	0.00%	0.00	(66,589.00)
Miscellaneous Income	0.00	0.00	3,000.00	0.00%	0.00	3,000.00
Revenue - Other	309.15	309.15	0.00	0.00%	0.00	(309.15)
Delinquent Payment Penalty	1.05	1.05	0.00	0.00%	0.00	(1.05)
Transfer-In from Reserve	0.00	0.00	404,537.00	0.00%	0.00	404,537.00
Subtotal	1,390,743.38	1,457,332.38	2,434,519.00	59.86%	0.00	977,186.62
TOTAL REVENUES	1,461,452.09	11,164,279.63	12,343,881.25	90.44%	0.00	1,179,601.62

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
General Fund
July 1, 2023 thru August 31, 2023

	<u>Month to Date</u>	<u>Year to Date</u>	<u>Annual Budget</u>	<u>% Used</u>	<u>Encumbrance</u>	<u>Budget Remaining</u>
<u>EXPENSES</u>						
Salaries & Wages	425,365.84	801,985.57	5,135,358.00	15.62%	0.00	4,333,372.43
Salaries & Wages - Grant Recovery	0.00	0.00	(30,000.00)	0.00%	0.00	(30,000.00)
Director's Compensation	22,265.24	43,875.62	275,041.00	15.95%	0.00	231,165.38
MWD Representation	12,769.77	24,229.82	117,875.00	20.56%	0.00	93,645.18
Employee Benefits	126,679.62	240,028.98	1,507,382.00	15.92%	0.00	1,267,353.02
CalPers Unfunded Liability Contribution	207,000.00	207,000.00	207,000.00	100.00%	0.00	0.00
Director's Benefits	8,877.00	17,560.04	104,447.00	16.81%	0.00	86,886.96
Health Insurance for Retirees	3,566.33	7,132.66	84,847.00	8.41%	0.00	77,714.34
Training Expense	460.00	460.00	36,000.00	1.28%	0.00	35,540.00
Tuition Reimbursement	0.00	0.00	5,000.00	0.00%	0.00	5,000.00
Temporary Help Expense	7,167.64	8,031.64	5,000.00	160.63%	0.00	(3,031.64)
Personnel Expenses	814,151.44	1,350,304.33	7,447,950.00	18.13%	0.00	6,097,645.67
Engineering Expense	900.00	9,505.25	307,000.00	3.10%	81,534.25	215,960.50
Legal Expense	16,586.26	35,628.68	241,000.00	14.78%	205,371.32	0.00
Audit Expense	0.00	0.00	36,500.00	0.00%	31,500.00	5,000.00
Professional Services	117,512.31	216,979.06	1,798,425.00	12.06%	1,271,243.45	310,202.49
Professional Fees	134,998.57	262,112.99	2,382,925.00	11.00%	1,589,649.02	531,162.99
Conference - Staff	4,080.00	6,155.00	49,832.00	12.35%	0.00	43,677.00
Conference - Directors	3,415.00	3,415.00	23,065.00	14.81%	0.00	19,650.00
Travel & Accom. - Staff	1,720.58	3,737.90	102,200.00	3.66%	0.00	98,462.10
Travel & Accom. - Directors	574.62	2,446.35	42,400.00	5.77%	0.00	39,953.65
Travel & Conference	9,790.20	15,754.25	217,497.00	7.24%	0.00	201,742.75
Membership/Sponsorship	10,275.00	102,846.58	167,366.00	61.45%	0.00	64,519.42
CDR Support	0.00	0.00	62,433.00	0.00%	0.00	62,433.00
Dues & Memberships	10,275.00	102,846.58	229,799.00	44.76%	0.00	126,952.42
Business Expense	177.85	445.19	2,000.00	22.26%	0.00	1,554.81
Office Maintenance	16,514.26	23,317.71	175,860.00	13.26%	135,142.29	17,400.00
Building Repair & Maintenance	1,056.48	1,514.65	25,200.00	6.01%	11,029.35	12,656.00
Storage Rental & Equipment Lease	102.77	167.91	1,800.00	9.33%	632.09	1,000.00
Office Supplies	802.40	1,907.69	27,000.00	7.07%	2,683.62	22,408.69
Supplies - Water Loss Control	344.51	735.18	4,000.00	18.38%	0.00	3,264.82
Postage/Mail Delivery	456.54	995.31	11,675.00	8.53%	1,598.23	9,081.46
Subscriptions & Books	0.00	159.99	1,000.00	16.00%	0.00	840.01
Reproduction Expense	0.00	1,688.88	93,000.00	1.82%	4,311.12	87,000.00
Maintenance - Computers	1,297.90	1,994.90	5,000.00	39.90%	0.00	3,005.10
Software Purchase	5,372.20	11,577.99	106,498.00	10.87%	1,749.30	93,170.71
Software Support	16,591.45	22,069.58	50,185.00	43.98%	0.00	28,115.42
Computers and Equipment	7,861.62	7,861.62	43,000.00	18.28%	0.00	35,138.38
Maintenance Expense	0.00	0.00	6,000.00	0.00%	0.00	6,000.00
Automotive Expense	1,286.59	2,029.74	9,400.00	21.59%	0.00	7,370.26
Vehicle Expense	841.11	4,272.27	12,000.00	35.60%	0.00	7,727.73
Toll Road Charges	43.18	43.18	975.00	4.43%	0.00	931.82
Insurance Expense	15,531.77	30,728.06	182,976.00	16.79%	0.00	152,247.94
Utilities - Telephone	3,210.35	6,410.63	46,063.00	13.92%	1,140.30	38,512.07
Bank Fees	0.00	0.00	2,600.00	0.00%	0.00	2,600.00
Miscellaneous Expense	873.87	22,573.91	154,200.00	14.64%	4,850.00	126,776.09
MWDOC's Contrb. to WEROC	24,442.25	48,884.50	293,307.00	16.67%	0.00	244,422.50
Depreciation Expense	9,278.05	18,556.16	0.00	0.00%	0.00	(18,556.16)
Other Expenses	106,085.15	207,935.05	1,253,739.00	16.59%	163,136.30	882,667.65
Capital Aquisition	1,510.56	1,510.56	25,892.00	5.83%	0.00	24,381.44
Building Expense	0.00	0.00	222,686.00	0.00%	31,679.49	191,006.51
TOTAL EXPENSES	1,076,810.92	1,940,463.76	11,780,488.00	16.47%	1,784,464.81	8,055,559.43
NET INCOME (LOSS)	384,641.17	9,223,815.87	563,393.25	1,637.19%	(1,784,464.81)	(6,875,957.81)

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
Water Fund
July 1, 2023 thru August 31, 2023

	<u>Month to Date</u>	<u>Year to Date</u>	<u>Annual Budget</u>	<u>% Used</u>	<u>Budget Remaining</u>
<u>WATER REVENUES</u>					
Water Sales	12,404,453.90	24,642,155.00	181,024,108.00	13.61%	156,381,953.00
Readiness to Serve Charge	1,143,238.00	2,286,474.41	13,768,707.00	16.61%	11,482,232.59
Capacity Charge CCF	293,620.00	587,240.00	4,816,710.00	12.19%	4,229,470.00
SCP/SAC Pipeline Surcharge	32,625.98	66,463.46	358,000.00	18.57%	291,536.54
TOTAL WATER REVENUES	13,873,937.88	27,582,332.87	199,967,525.00	13.79%	172,385,192.13
<u>WATER PURCHASES</u>					
Water Sales	12,404,453.90	24,642,155.00	181,024,108.00	13.61%	156,381,953.00
Readiness to Serve Charge	1,143,238.00	2,286,474.41	13,768,707.00	16.61%	11,482,232.59
Capacity Charge CCF	293,620.00	587,240.00	4,816,710.00	12.19%	4,229,470.00
SCP/SAC Pipeline Surcharge	32,625.98	66,463.46	358,000.00	18.57%	291,536.54
TOTAL WATER PURCHASES	13,873,937.88	27,582,332.87	199,967,525.00	13.79%	172,385,192.13
EXCESS OF REVENUE OVER EXPENDITURE	0.00	0.00	0.00	0.00%	0.00

Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
Water Use Efficiency
July 1, 2023 thru August 31, 2023

	<u>Year to Date Actual</u>	<u>Annual Budget</u>	<u>% Used</u>
Spray To Drip Conversion(3423)			
Revenues	68,728.82	613,600.00	11.20%
Expenses	118,266.02	613,600.00	19.27%
Excess of Revenues over Expenditures	(49,537.20)	0.00	
Member Agency Administered Pass-Thru(3425)			
Revenues	0.00	338,000.00	0.00%
Expenses	0.00	338,000.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
ULFT Rebate Program(3410)			
Revenues	120.00	1,000.00	12.00%
Expenses	340.00	1,000.00	34.00%
Excess of Revenues over Expenditures	(220.00)	0.00	
HECW Rebate Program(3411)			
Revenues	12,484.02	40,000.00	31.21%
Expenses	10,175.00	40,000.00	25.44%
Excess of Revenues over Expenditures	2,309.02	0.00	
CII Rebate Program(3416)			
Revenues	0.00	1,000.00	0.00%
Expenses	0.00	1,000.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
Turf Removal Program(3418)			
Revenues	752,498.26	11,298,000.00	6.66%
Expenses	805,275.73	11,298,000.00	7.13%
Excess of Revenues over Expenditures	(52,777.47)	0.00	
Comprehensive Landscape (CLWUE)(3427)			
Revenues	32,845.24	152,400.00	21.55%
Expenses	48,806.88	152,400.00	32.03%
Excess of Revenues over Expenditures	(15,961.64)	0.00	
Recycled Water Program(3433)			
Revenues	0.00	50,000.00	0.00%
Expenses	0.00	50,000.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
WSIP - Industrial Program(3432)			
Revenues	0.00	53,720.00	0.00%
Expenses	0.00	53,720.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	
Land Design Program(3431)			
Revenues	0.00	300,000.00	0.00%
Expenses	30,605.00	300,000.00	10.20%
Excess of Revenues over Expenditures	(30,605.00)	0.00	
Pressure Regulation Program(3435)			
Revenues	4,655.96	15,000.00	31.04%
Expenses	1,275.96	15,000.00	8.51%
Excess of Revenues over Expenditures	3,380.00	0.00	
Dedicated Irrigation Meters Measurement Project (DIMM)(3439)			
Revenues	0.00	743,000.00	0.00%
Expenses	0.00	743,000.00	0.00%
Excess of Revenues over Expenditures	0.00	0.00	

**Municipal Water District of Orange County
Revenues and Expenditures Budget Comparative Report
Water Use Efficiency
July 1, 2023 thru August 31, 2023**

	<u>Year to Date Actual</u>	<u>Annual Budget</u>	<u>% Used</u>
Total WUE Projects			
Revenues	871,332.30	13,605,720.00	6.40%
Expenses	<u>1,014,744.59</u>	<u>13,605,720.00</u>	<u>7.46%</u>
Excess of Revenues over Expenditures	(143,412.29)	0.00	
 WEROC			
Revenues	338,684.50	586,614.00	57.74%
Expenses	<u>96,801.25</u>	<u>586,614.00</u>	<u>16.50%</u>
Excess of Revenues over Expenditures	241,883.25	0.00	



ACTION ITEM
October 18, 2023

TO: Board of Directors

FROM: **Administration & Finance Committee**
(Directors Dick, Thomas, Crane)

Harvey De La Torre, Interim General Manager

Staff Contact: Cathy Harris, Director of Human Resources/Administration

SUBJECT: AWARD OF CONTRACT FOR DISTRICT CLASSIFICATION AND BENEFITS STUDY

STAFF RECOMMENDATION

It is recommended that the Board of Directors: Authorize the Interim General Manager to enter into a professional services contract with Ralph Andersen and Associates to conduct the Classification and Benefits Study, in the amount of \$42,800.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

SUMMARY

MWDOC issued a Request for Proposals (RFP) to find and contract an experienced firm to perform the District's triennial Classification and Benefits Study. The selected firm will work with Human Resources to review the District's current job descriptions, classifications and ranges, review and identify current labor market, evaluate current practice regarding salary adjustments to pay structure, review District health and welfare benefits and make recommendations accordingly. The project is anticipated to start in November 2023 with a target completion date of April 2024.

DETAILED REPORT

In accordance with the Personnel Manual, Section 2203, a comprehensive classification and benefits survey shall be conducted every three years to evaluate market practices and job classifications to ensure that pay and benefits are competitive with the market. The last

Budgeted (Y/N): Y	Budgeted amount: \$45,000	Core _X	Choice _
Action item amount: \$42,800			
Fiscal Impact (explain if unbudgeted):			

survey was completed in April 2021. During the FY 2023-2024 budget process, an amount of \$45,000 was approved for this effort.

In accordance with Section 8000 of the District's Administrative Code, staff issued a Request for Proposal on August 23, 2023, for a Classification and Benefits Study with a submission date of September 13, 2023, and project start date of November 2023.

The comprehensive study will include some of the following:

- Comprehensive review of District classification schedule and pay structure for approximately 57 classifications representing 45 employees (full and part-time and interns)
- Review of job descriptions
- Evaluate labor market
- Complete internal and external salary relationship analysis
- Review of all health and welfare benefits

Proposals and Proposal Evaluation:

MWDOC received six proposals by the submission date. The review committee consisting of MWDOC Human Resources staff and Dave Anderson, IT Analyst, independently reviewed and scored all six proposals received. The scoring criteria included:

- Approach to Work
 - Responses to project needs and issues identified in RFP
 - Proposed Timelines that meet the District's needs
 - Ability of the Consultant to perform the tasks outlined in the RFP
- Project Manager and Team Qualifications and References
 - Experience of the project manager and team
 - Depth of familiarity within the water industry
 - Similarity of other projects completed
 - Quality of references
- Project Costs and Terms

Based on the final scoring and review, Ralph Andersen and Associates was the unanimous choice for the Committee. Staff's recommendation is to proceed with a contract with Ralph Andersen and Associates to complete a Classification and Compensation Study.

Ralph Andersen's proposal stood out based on the following:

- They were responsive to the project needs and issues identified in RFP.
- They have a depth of familiarity with public agencies throughout the state which includes, cities, higher education, water districts, other districts and authorities.
- They have completed many similar projects
- Their proposal was within MWDOC's budgeted amount

BOARD OPTIONS

Option #1

- Authorize the Interim General Manager to enter into a professional services contract with Ralph Andersen and Associates to conduct the Classification and Benefits Study in the amount of \$42,800.

Fiscal Impact: An amount of \$45,000 was included in the budget for this study.

Business Analysis: Completing the study provides a third-party review of salaries and benefits; and ensures the District remains competitive with the market in attracting and retaining the best available team and avoid significantly falling behind.

Option #2

- Do not complete the Study.

Fiscal Impact: \$45,000 would be added to the District's general fund.

Business Analysis: Not completing a triennial comprehensive classification and compensation study is not consistent with the intent of our Policy which is to attract and retain the best available team. This could result in falling behind the market and making it difficult to attract and retain employees.

STAFF RECOMMENDATION

Option #1



5800 Stanford Ranch Road
Suite 410
Rocklin, California 95765
916.630.4900

September 13, 2023

Ms. Cathy Harris
Director of Human Resources and Administration
Municipal Water District of Orange County
18700 Ward Street
Fountain Valley, California 92728

Via Email: HumanResources@mwdoc.com

RE: Classification and Compensation RFP

Dear Cathy:

We are pleased to submit our proposal to conduct a Classification and Compensation Study. The scope of the study will include all of the District's full-time and part-time positions (45 employees). To facilitate your review, the proposal includes the following:

- **Executive Summary** – Our understanding of the requirements of the project and our ability to provide the services required.
- **Qualifications and Experience** – A summary of the firm, proposed staff, and our expertise in conducting classification and compensation studies.
- **Work Plan and Schedule** – A summary of methodologies and proposed tasks to accomplish the study's objectives and anticipated end-products.
- **Project Cost** – A fixed cost for the proposed project as well as hourly rates.
- **References** – References for similar studies conducted by the firm.

I am certain that you will find our work plan is responsive to each of your study objectives, and our reputation and experience are unmatched in successfully completing consulting engagements of this nature. Ralph Andersen & Associates is a leader in providing local government consulting services and has successfully completed hundreds of classification and compensation studies.

The full resources of the firm will be available to perform consulting services for the duration of the project. Doug Johnson, Vice President, will be the Project Manager for this engagement and will have the assistance of an experienced consulting team.

If you have any questions or need additional information, please do not hesitate to contact Mr. Doug Johnson at (916) 630-4900. We look forward to the opportunity to work with you again on this important assignment. This proposal will remain valid for 120 days.

Sincerely,

Heather Renschler
President/CEO

Table of Contents

Introductory Letter

Executive Summary..... 1

Qualifications and Experience..... 3

Firm Background..... 3

Project Approach 4

Project Staffing 5

Staff Resumes 6

Work Plan and Schedule..... 9

Project Understanding..... 9

Background Data Analysis 10

Job Analysis Questionnaires 10

Job Analysis Interviews 10

Compensation Policy Development..... 11

Compensation Data Collection and Analysis 11

Project Tasks 11

Task 1 – Project Kick-off Meetings11

Task 2 – Employees Complete Questionnaires 12

Task 3 – Conduct Job Analysis Interviews 12

Task 4 – Prepare and Review Preliminary Classification Report..... 12

Task 5 – Prepare Class Specifications 13

Task 6 – Undertake Management/Employee Review Process 13

Task 7 – Finalize the Classification Recommendations 14

Task 8 – Discuss and Document Compensation Policy 14

Task 9 – Collect Compensation Data 14

Task 10 – Compile and Format Compensation Data 15

Task 11 – Audit and Finalize Compensation Data 15

Task 12 – Conduct Internal Relationship Analysis..... 15

Task 13 – Develop Salary Recommendations 16

Task 14 – Develop Implementation Strategy Options and Compute Implementation Costs 16

Task 15 – Prepare and Review Preliminary Report..... 16

Task 16 – Prepare and Submit Final Reports 17

Proposed Schedule17

Project Cost 19

References20

APPENDIX A – FIVE YEAR CLIENT LISTING A-1

Executive Summary

Ralph Andersen & Associates is a recognized leader in providing a full range of management consulting services to special districts, cities, counties, educational institutions, and non-profit organizations. The firm has a long tradition of providing a customized approach that uniquely meets the specific objectives of the organization. Our consultants are practitioners in the latest methods used for data collection, analysis, and application in developing classification and compensation plans. Our proposal provides you with a thorough understanding of our approach to the study and is based upon:

- Our unmatched experience in human resource consulting; Ralph Andersen & Associates continues a 51-year tradition of providing quality consulting services to local government agencies
- The proven track record of our staff working with cities and public agencies throughout California
- Our ability to design and implement creative and tailored classification and compensation systems; we believe in customizing our products and systems to meet specific policy objectives
- Comprehensive data analysis and reporting; our firm has experts in data analysis using spreadsheet applications to guarantee efficiency and a highly customized approach
- Successful study engagements involving elected officials, study committees, management staff, labor representatives, and general employees; we understand the importance of building consensus among study participants
- Our commitment, sensitivity, and responsiveness to completing quality products on time and within budget.

The firm provides human resource consulting services to clients of all sizes and types, with special expertise in meeting the unique needs of public sector agencies. Our results-oriented approach and methodologies produce recommendations that are directly responsive to our clients' needs and are easily implemented and maintained over time.

Our proposal provides you with detailed information regarding the background of the firm, our consulting staff, project methodologies, a proposed work plan, project timing, and other additional information requested by the District. A summary of this information is as follows:

- **The Firm** – The project team assigned to this project have performed hundreds of similar compensation studies for clients throughout California and the Western United States. Doug Johnson, Vice President, will serve as the project manager and will be assisted by Jeff McMurdo who will perform data collection duties. The full resources of the firm will be available to ensure successful and timely completion of the project.
- **Methodologies** – The firm has successfully developed proven methodologies that will meet all of the policy/project goals identified by the District. Our approach

is tailored to ensure the project work plan and deliverables meet all of the study objectives in a cost effective and timely manner.

- **Timeline** – Our work plan completes all study tasks within a twelve-week timeline which meets the District's completion requirements. We have an outstanding track record at completing compensation studies with the full participation of survey agencies.

Ralph Andersen & Associates will not be using any subcontractors/consultants for this project with all work being performed by full-time staff members. The firm is an Equal Opportunity Employer and is not only committed to non-discriminatory practices but also conducts significant outreach efforts through internships and college foundation programs.

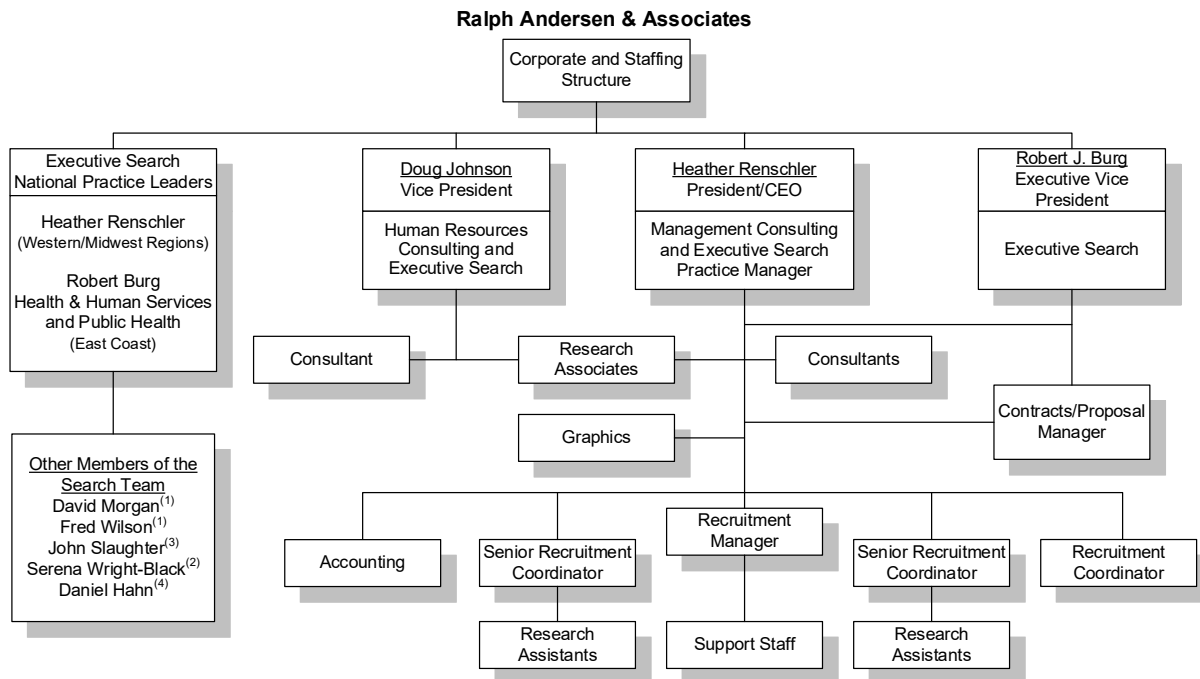
Qualifications and Experience

Firm Background

Ralph Andersen & Associates has over 51 years of local government consulting experience serving the needs of cities, counties, utilities, special districts, community colleges, schools, non-profit organizations, and state governments. Key service areas of the firm include:

- Human Resources Consulting
- Executive Search
- Management Consulting.

Ralph Andersen & Associates serves a nationwide clientele through its Corporate Office in the Sacramento area (Rocklin, California). A multi-disciplined, full-service local government consulting organization, Ralph Andersen & Associates is dedicated to helping our clients improve operating efficiency and organizational effectiveness. The firm employs 14 full-time staff, 3 part-time staff, and has additional contractors and affiliations as needed to provide a full range of services.



⁽¹⁾Former City Manager
⁽²⁾Former Assistant City Manager
⁽³⁾Former County Manager
⁽⁴⁾Former Chief of Police

For this project, staff from the firm's human resources practice will provide the consulting services. The human resource practice focuses on those services that are not easily provided by in-house human resources staff. Key services include:

- **Classification Studies** – These projects include job analysis, class plan development, position allocation, career ladders, class specifications, FLSA analysis, ADA compliance, and related analysis.
- **Compensation Studies** – The firm provides a full range of compensation services including labor market selection, base salary and benefit surveys, private-public data comparisons, benchmark selection, and internal relationship analysis.
- **Expert Testimony and Arbitration Support** – The firm has had significant experience providing technical support in arbitration and mediation hearings and has significant experience working with labor and management groups. This expertise includes the selection of comparable agencies and the elements of compensation appropriate for labor market surveys.
- **Job Evaluation Systems** – In addition to having a copyrighted Point Factor Job Evaluation System, the staff of Ralph Andersen & Associates have significant expertise in developing customized job evaluation systems and “hybrid” solutions.
- **Performance Management Programs** – Performance management serves as a foundation for measuring/tracking organization and employee performance. We have several standard systems that have demonstrated success in a variety of public agencies. In addition, Ralph Andersen & Associates can develop tailored performance management systems to fit the unique needs of our clients.
- **Pay-for-Performance/Incentive Programs** – Ralph Andersen & Associates is a leader in developing effective pay-for-performance programs for public agencies including merit progression systems, lump sum and incentive programs, and other mechanisms tied to employee or organizational measurement criteria.
- **Technical Assistance** – Ralph Andersen & Associates also provides a full range of hourly technical assistance including conducting job audits, support for labor relations, and expert testimony.

The firm has no conflict of interest with the staff or officials of the Municipal Water District of Orange County and is independent of the District as defined by generally accepted auditing standards. Additional information about the firm's services and background can be found at our web site at www.ralphandersen.com.

Project Approach

The approach our firm uses to conduct classification and compensation studies is customized to the specific needs and objectives of each client. While the work plan we have provided in this proposal is proven, we are happy to adapt our work plan and approach as needed during project initiation meetings and throughout the process. Our firm has an outstanding reputation working with elected officials, managers, and labor representatives. Our goal is to provide products and deliverables that ensure implementation by the District. Highlights of our approach include:

- A transparent and collaborative process. We have significant experience working with diverse stakeholders and ensuring that the project deliverables meet the objectives of the District. Our efforts include briefing sessions, meetings, workshops, and a comprehensive and interactive review of draft reports. We are confident in our ability to research and respond to issues that require clarification and to provide information and data that responds to issues of disagreement.
- Custom data presentations including base salary and benefits data. We do not rely on “canned” data analysis tools. The firm uses dynamic Excel spreadsheets and can prepare total compensation datasheets for all survey jobs.
- We are one of the few firms that has experience with private sector data analysis. We subscribe to the largest private sector database in North America, which is updated quarterly. This data can be regionalized to fit the recruitment region of the District.
- Extensive review and input by managers, employees, labor representatives, and elected officials. We provide easy to review draft reports and work with the District to ensure that the final reports meet or exceed all study objectives.

We will review our recommended approach including communication and stakeholder interaction plans with the District at the beginning of the project to ensure the District's requirements are fully incorporated into the work plan.

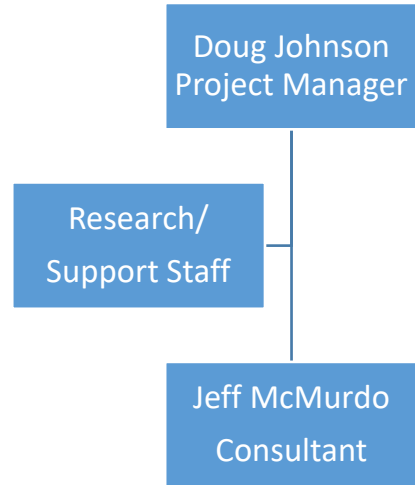
Project Staffing

Consultants, complemented by consulting firms, define the difference between success and failure in projects of this nature. Ralph Andersen & Associates understands that selection of a project team with the right mix of skills and experience is the most important decision that will be made during the study. The team must be well led and the project well managed if the study objectives are to be achieved.

In defining the project team for this engagement, consideration of the current workload of all consulting staff was taken into account to ensure our ability to fully meet your stated needs and objectives. Doug Johnson, Vice President, will serve as the Project Manager and will have responsibility for all primary contact with the District as well as all on-site review meetings and presentations. Mr. Johnson has managed hundreds of consulting engagements including large public agencies throughout California and the United States.

The staffing for this project will include:

- **Doug Johnson, Vice President** – Mr. Johnson will serve as the Project Manager and will conduct all on-site meetings, prepare all written reports, and serve as chief analyst on the project. He is the firm's most experienced Project Manager and has expertise in working with special districts, cities, and other local government agencies similar to the District involving complex classification and compensation issues.
- **Jeff McMurdo, Consultant** – Mr. McMurdo is the most experienced consultant at the firm and has extensive experience conducting employee interviews, developing classification recommendations, developing job descriptions, and collecting and analyzing market data.



All staff members are available for the scheduled duration of the project. Anticipated workloads for all staff have been considered in assigning staff to this project. The firm's staffing and project management systems allow for multiple studies to be conducted simultaneously without impacting the completion dates of the project. Brief staff resumes are provided below.

Staff Resumes

Doug Johnson, Vice President

Mr. Johnson is currently a Vice President with Ralph Andersen & Associates and has 34 years of local government consulting experience. Mr. Johnson has 20 years of experience with Ralph Andersen & Associates in addition to 13 years as President of Johnson & Associates, some human resources consulting firm. Mr. Johnson is the firm's expert in job analysis, market comparability, compensation, benefits, and related matters. He has served as an expert witness in arbitration proceedings and mediation sessions, mostly involving police and fire issues. He has extensive experience working with elected officials, public executives, staff members, labor organizations, and ad-hoc committees. He leads the firm's human resource consulting services and participates in all facets of the firm's recruitments.



Mr. Johnson's expertise includes consulting experience with public agencies throughout the United States including special districts, cities, counties, utilities, community colleges, school districts, nonprofit organizations, and private companies. Mr. Johnson has provided consulting assistance to hundreds of public sector agencies and is a recognized expert in compensation issues. Specific areas of expertise include:

- Job classification studies
- Job evaluation system design and implementation
- Pay plan development and administration
- Market comparability research and analysis
- Total compensation analysis
- Private sector data analysis
- Performance management.

Mr. Johnson's experience includes serving as project manager and chief analyst for hundreds of local government agencies. Recent municipal projects include the cities of Auburn, Union City, Hollister, Indio, Arcadia, Carson, Hermosa Beach, Simi Valley, Carlsbad, Paramount, Signal Hill, Redondo Beach, Hermosa Beach, Port Hueneme, Modesto, Monterey, Sacramento, Lake Forest, and Petaluma. Special district projects include Sac Sewer, Turlock Irrigation District, Nevada Irrigation District, Alameda County Water Authority, Mesa Water, South Lake Tahoe PUD, East Bay MUD, South Placer MUD, Olivenhain Water District, Sweetwater Authority, San Diego Water District, Orange County Sanitation District, Valley of the Moon Water District, and Otay Water District.

Mr. Johnson holds a Bachelor of Arts degree in Psychology with a minor in Communication Studies from California State University, Sacramento. His course work emphasized organizational development and performance incentives. He is an active member of WorldAtWork, The Total Rewards Association.

Jeff McMurdo, Consultant

Mr. McMurdo has over 20 years of human resources consulting experience and serves on a variety of project consulting teams focusing on classification and compensation plan development. He is an experienced classification analyst and has developed hundreds of classification plans in addition to ad-hoc reclassification and targeted classification studies for large and small organizations. His duties also include leading and participating in total compensation studies including comprehensive market research, data collection, data analysis, and data presentation. Key responsibilities of Mr. McMurdo include:



- Conducting job analysis interviews, analyzing positions and job classifications, and preparing job descriptions.
- Designing survey data collection forms, questionnaires, and related instruments.
- Market survey research including the review and analysis of budgets, organization charts, MOUs, job descriptions, salary schedules, and benefit documents.
- Data compilation including job comparability, range structure analysis, benefit data, and related survey information.

He has conducted over a hundred compensation surveys including recent surveys for the cities of Anaheim, Arcadia, Paramount, Temple City, Ketchikan, Laguna Hills, Reno, Sacramento, Monterey, Irwindale, Palm Springs, Tracy, and Sunnyvale. He has also worked with a number of special districts including Olivenhain Municipal Water District, Otay Water District, South Placer MUD, San Diego Water Authority, Mesa Water, Sweetwater Authority, and Alameda County Water District. Mr. McMurdo holds a Bachelor of Science degree in Business Administration from California State University, Sacramento. His course work emphasized human resource management.

Additional firm resources, including support staff and project consultants, will be available to ensure successful and timely completion of the study.

Work Plan and Schedule

Project Understanding

The Municipal Water District of Orange County is interested in conducting a Classification and Compensation Study involving all District full and part time employees and job classifications.

To ensure that the District's objectives are met, the following key study components and anticipated end-products are included in the work plan developed by Ralph Andersen & Associates.

- Conduct a meeting with District representatives at project initiation to confirm the study goals, objectives, and deliverables
- Conduct briefing sessions with employees at the beginning of the study to explain the study process and answer questions
- Conduct an extensive review of background documents
- Distribute job analysis questionnaires and conduct supplemental interviews with a sampling of employees in the study
- Develop classification recommendations, FLSA designations, and update job descriptions
- Review historical practices and confirm survey agencies, survey job classifications, and identify data collection needs
- Conduct a custom salary and benefit survey and analyze the market data
- Conduct internal relationship analyses, survey benchmarking, and develop salary range recommendations for all District job classifications
- Develop draft and final reports incorporating all study recommendations and supporting data including implementation plans
- Conduct a classification and compensation review and appeal process to fully resolve all classification issues and recommendations
- Present the findings to managers, employees, labor representatives, project committees, and the Board of Directors, as needed.

Ralph Andersen & Associates has a strong commitment to develop and implement customized and tailored classification and compensation systems. While we have broad expertise and experience from hundreds of successful consulting assignments, we are committed to a “customer service” approach to all of our client engagements. This assures the preparation of study end-products that are uniquely customized to the Municipal Water District of Orange County.

Ralph Andersen & Associates will apply several technical and administrative methodologies in creating the District's updated compensation systems. An overview of all key methodologies is described below.

Background Data Analysis

The consultant team will identify a wide range of background data that will be collected from the District as part of the study. The consultant team will provide the District with a complete list of background needs upon initiation of the project.

Materials collected and reviewed during this initial stage of the project will, at a minimum, include:

- Organization charts
- Planning documents
- Existing class specifications
- Budgets
- Current pay plan and related salary schedules
- Benefits summaries
- Memorandums of Understanding
- Relevant administrative rules and procedures.

These materials provide an understanding of the District's personnel system and of current applicable policies and procedures.

Job Analysis Questionnaires

Project consultants will distribute a Job Analysis Questionnaire (JAQ) to all study employees identified for analysis in the classification phase of the study. Two versions of the questionnaire will be used with one focusing more on job description updates while the other will be used for more detailed analysis of issue areas. The questionnaire provides an opportunity for employees to fully describe the duties and responsibilities of their position and provides the information necessary to resolve classification issues including job function consolidation resulting from workforce reductions. The questionnaire is also designed to record data regarding other job-related information such as the knowledge, skills, abilities, and physical requirements necessary to perform the work, as well as supervisory and managerial responsibilities.

Each questionnaire will be reviewed by the employee's supervisory and managerial staff to ensure completeness and accuracy. Once completed, they will be forwarded to the consultants for examination prior conducting job analysis interviews. The questionnaire will be distributed and explained in detail during an employee briefing session at the initiation of the project. All questionnaires used by Ralph Andersen & Associates can be tailored to the specific objectives of the study and the unique organizational characteristics of the District.

Job Analysis Interviews

As a supplement to the questionnaires, project consultants will conduct interviews with at least one employee in each classification, a sampling of employees in multiple position classifications, all employees requesting an interview, and employees where significant

classification issues are identified during project initiation tasks. This will ensure that the consultants are able to obtain information regarding any existing job classification issues as well as confirm job duties and tasks performed.

Compensation Policy Development

This methodology relates to the identification and documentation of the District's compensation philosophies, policies, and procedures. The consulting team will confirm specific policies, both implicit and explicit, and assess their impact on the District's overall ability to attract, recruit, employ, advance, and retain high quality personnel. These policies and practices will include the relative labor market position the District seeks to maintain in the competitive labor market, the types of employers with which the District chooses to compete, and the relative importance placed on internal equity vs. market forces in the development of the salary plan. This assessment can be conducted through meetings with managers or with broader input using a workshop session that includes project team members, managers, labor representatives, and the Board of Directors.

Compensation Data Collection and Analysis

The methodology utilized in collecting and analyzing compensation data involves an extensive process to ensure accuracy, reliability, and completeness. Ralph Andersen & Associates does not rely on published or previously collected data; all data is collected personally by the consulting team, who have, based on the classification analysis, an in-depth knowledge and understanding of the survey classifications.

Supporting our approach to labor market surveys, this component of the study will include the development of a comprehensive survey packet, the collection of base salary, salary structure, and optional total compensation data through written and electronic materials and telephone calls, and the analysis of the data at the survey market mean, median, and requested percentiles.

Project Tasks

Task 1 – Project Kick-off Meetings

The consultants will begin all administrative and coordinative efforts in support of the project initiation meetings and briefings. Among other things, this will include:

- Preparation of a project schedule
- Identification and review of background data including existing class specifications, organization charts, budgets, employee listings, salary schedules, and related information
- Identification of scheduling parameters for meetings and interaction with various District employee groups.

This initial step in the study process will be used to identify significant classification and compensation concerns that should be addressed during the course of the study. The

consultants will discuss the best approach for identifying issue areas including an independent assessment of the current classification plan by the consultant, input by human resources staff, and input from managers, labor representatives, and other stakeholders.

The consultants will meet with the District's project manager and other staff as appropriate to ensure a full understanding of project objectives and deliverables. The project work plan and schedule will be adapted to achieve the objectives.

Initial project meetings will also include employee orientation and briefing sessions in relation to the study process, timing, and objectives.

Task 2 – Employees Complete Questionnaires

The JAQ provides employees with an opportunity to describe the duties and responsibilities of their positions with an emphasis on job related information such as knowledge, skills, abilities, and physical capabilities required to perform the work assigned. Space is also provided on the questionnaire for employees to make any additional comments they wish. The completed questionnaires are reviewed by supervisory and managerial staff, with space provided for their comments. A short form questionnaire will be available to all employees to provide updated information regarding assigned duties. A more detailed questionnaire will be used for positions and classifications where specific issues or questions have been identified. A sample JAQ is provided in Appendix B.

Task 3 – Conduct Job Analysis Interviews

Prior to conducting interviews, the consultants will thoroughly review the completed questionnaires. The consultants will evaluate position duties and responsibilities, classification series, class titles, job families, reporting relationships, and internal relationships. Based on this preliminary analysis, the project team will identify areas of concern that will be clarified or probed during the job analysis interviews.

The consultants will assume responsibility for the preparation of the employee interview schedule. The District's Project Manager, or designee, will be responsible for scheduling interview rooms, notifying employees, and related coordinative activities. We anticipate interviewing at least one person from each job classification, all employees where significant position classification issues exist, and a sampling of employees beyond the issue areas.

Task 4 – Prepare and Review Preliminary Classification Report

With the completion of the employee interviews, a preliminary classification report will be prepared. Key components of the preliminary report will include:

- Identification of all key issues identified in the classification analysis
- Recommended job titles
- Employee allocations.

In preparing the preliminary classification report, each position is analyzed according to the criteria set forth at initial review meetings. Such criteria typically will include factors relating to job knowledge, experience, training, decision making, management control, working conditions, and outside contacts. Like positions are grouped into tentative classes forming the basis for initial class definition.

The preliminary classification report will be reviewed with key management staff prior to preparing class specifications. Because the concepts provide the foundation for the resulting classification plan, management review of the recommendations in their respective areas of responsibility is essential.

Task 5 – Prepare Class Specifications

Once the preliminary classification recommendations have been reviewed, the project consultants will revise, update, or create new class specifications based on the issues identified in previous tasks. The District's current job description format will be maintained as appropriate. The class specifications will be drafted and undergo a management/employee review process to ensure they accurately and adequately describe the scope of responsibilities. Once finalized, they will be provided to the District in both an electronic and hard-copy format. This process will include FLSA analysis and designation.

Task 6 – Undertake Management/Employee Review Process

As an important component of the overall classification study, the project consultant team will provide additional opportunities for employee participation and input through the conduct of an employee review process. These steps will (1) build and facilitate the District's understanding of the newly developed classification plan, (2) enhance employee commitment and understanding of the recommended system by giving each employee the opportunity to comment on the system and (3) ensure that the consultants receive as much information as possible regarding the nature and responsibilities of the various positions in order to make appropriate and equitable final classification recommendations. The various subtasks within this portion of the project are as follows.

Task 6.1 – Distribute class specifications to all employees included within the study scope – Each employee will receive an individual copy of the specification for the class to which his/her position has been allocated along with a Position Allocation Notice and Employee Review Form. This will provide employees with an opportunity to review and comment on their proposed classification and allocation. These comments will then be forwarded to management for review and comment.

Task 6.2 – Review written comments received from employees – All written comments or suggestions from employees regarding the recommended class plan will be thoroughly reviewed and analyzed by the project consultants. Based upon written responses received, the consultant team will incorporate appropriate suggested revisions into the final classification plan.

Task 6.3 – Conduct follow-up telephone interviews as necessary – Based upon the analysis of written comments forwarded to the project consultants and

where consultant staff needs further information prior to finalizing recommendations, follow-up interviews will be conducted by the project consultants with individual employees. This step will further clarify and refine any remaining problems or issues.

This task will further include any additional informal appeal processes/steps established or desired by the District.

Task 7 – Finalize the Classification Recommendations

With the completion of the employee appeal process, the consultants will finalize all classification study recommendations. Supporting the finalization of the classification plan, each employee who submitted a notice for review will receive a direct response from the project consultants. This response will specifically outline the consultant's understanding of the employee's concern, specify the steps taken to resolve the concern, and indicate to the employee the substance of the consultant's final recommendation.

Task 8 – Discuss and Document Compensation Policy

The District's compensation policy directly impacts all study end-products resulting from the compensation components of the analysis. As a starting point for this phase of the study, therefore, we propose that the consulting team meet with key management staff to clarify and confirm the District's compensation policy. Important considerations to be discussed include historical practices, recruitment and retention issues, pros and cons of the current compensation system, and reliance on external market data versus internal equity for purposes of setting salaries. The consultants will work with appropriate District representatives to determine comparison agencies and the scope of compensation data to be collected. Our proposal includes the tasks necessary to identify comparable employers and conduct a custom market survey.

Our analysis of the potential and recommended survey employers will be documented in a memorandum report after consultation with appropriate District representatives. If desired, the consultants can conduct a workshop session that identifies labor market selection parameters, options, and pros/cons of different market approaches. The draft labor market recommendations will be reviewed by appropriate District representatives so that all questions and issues are resolved. In that these decisions directly impact the parameters of the market survey, as well as the design and structure of the resulting compensation plan, our suggested approach recommends that these study tasks occur prior to the collection and analysis of the market data.

Task 9 – Collect Compensation Data

After the compensation policy discussion, the consultant team will collect and analyze the compensation data. Our proposed approach would include:

- An initial contact to each labor market employer included in the study to explain the purpose and scope of the survey and confirm cooperation.

- The collection and analysis of source documents from each survey agency including position control documents, job descriptions, salary schedules, benefit summaries, and MOUs.
- The confirmation of all compensation data through telephone calls, email, and other means. This will assure that comparability is established and that all compensation data is factual and complete.

The compensation survey elements will be discussed and confirmed with the District before the survey is initiated.

Task 10 – Compile and Format Compensation Data

The salary data, once collected and thoroughly reviewed for completeness and accuracy, will be appropriately formatted and the results tabulated in a consistent and uniform manner by the project consultants. The analysis will include pay structure trends and base salary analysis to ensure all appropriate comparison criteria is available for developing recommendations. Through the use of spreadsheet applications developed by our office, it is anticipated that standard formulas will be applied in the calculation of the survey data mean, median, and selected percentiles, with the corresponding percentage relationship to the market data also calculated. Data presentation will be customized to fit the District's objectives.

Task 11 – Audit and Finalize Compensation Data

Prior to developing specific salary recommendations, the consultants will thoroughly review and audit the collected survey data. This will include a detailed analysis of data reliability, comparability, statistical validity, and consistency. This audit will be conducted by the Project Manager independent of the consultant who collected that data. This will ensure that the most accurate and defensible survey data is utilized in comparing the District's compensation plan to the pay practices of the labor market. This analysis will also include the preparation of graphs and other presentation materials to aide in understanding the market relationships broken down by employee/bargaining group.

Task 12 – Conduct Internal Relationship Analysis

This task will include the development and application of an appropriate job evaluation methodology in order to meet with the District's policy objectives and comply with local laws, rules, and regulations. The firm has a number of job evaluation systems available and will recommend and adapt the methodology that best aligns with the District's historical practices and policy objectives.

Using the results of the job evaluation analysis, the consultants will analyze internal pay relationships. The internal pay relationship analysis will involve a number of steps in order to arrive at sound and equitable relationships for the new compensation plan. Among others, the most important of these will include:

- Analysis of existing and historical pay relationships
- Development of consistent, uniform, and realistic guidelines for determining internal relationships

- Recommendation of equitable and appropriate internal relationship differentials based on the above.

In developing consistent internal relationship guidelines, the results of the job evaluation tasks will be used to determine an equitable pay structure. Since the balance of market values versus internal values can be a policy issue, options and methodologies for achieving an appropriate balance of internal and external salary equity will be reviewed with the District before developing the salary range recommendations.

Task 13 – Develop Salary Recommendations

Based upon the results of the internal relationships analysis and the labor market survey, the project consultants will develop salary recommendations for all job classes included as a part of the study process. These salary recommendations will clearly document the means of determining the appropriate pay range and the computation of the dollar and percentage difference between the current maximum salary and the recommended maximum salary.

Before finalizing the recommendations, a careful audit of the results will be undertaken to ensure that internal salary compression or compaction does not result.

Task 14 – Develop Implementation Strategy Options and Compute Implementation Costs

Recognizing that public agencies often have limited funds available for implementation, the project consultants will develop several strategies for implementing the recommended salary structure. Such strategies will address:

- The placement of individual employees into ranges and steps
- Implementation phasing according to the needs and priorities of the District
- Integration of the study recommendations with the balance of the District's human resource management system including recruitment, selection, and performance appraisal.

The cost estimates will reflect District-wide impacts, as well as impacts on individual employees. The cost estimates will serve as a basis for the District to make necessary policy decisions to implement the compensation system in an orderly and effective manner.

Task 15 – Prepare and Review Preliminary Report

The Preliminary Report documents all classification and compensation study recommendations and the supporting information used for developing the recommendations. Specifically, the Preliminary Report will include the following:

- The District's documented compensation policy including survey agencies and survey classifications
- Results of the labor market salary survey using tables and graphs
- Documentation of selected benchmark classifications and the related job families

- Appendices containing detailed labor market data sheets, recommended salary schedules, and supporting documentation.

The project consultants will conduct an in-depth review of the Preliminary Compensation Report with the District. Any needed corrections, clarifications, or modifications will be discussed at this time.

Review of the Draft Compensation Report will also include an appeal process that meets the District's objectives. Employees, managers, and/or labor representatives will be able to submit specific issues and comments which will be researched, analyzed, and documented by the consultants. The consultants will provide the District with a written response to these issues as well as any changes in our draft recommendations.

Task 16 – Prepare and Submit Final Reports

The Final Reports will incorporate any appropriate revisions identified and submitted during the review of the preliminary reports and will serve as the administrative and procedural manuals for updating and maintaining the classification and compensation plans. The submittal of final reports will also include on-site presentations to managers, labor representatives, and the Board of Directors. It is not uncommon for a series of draft reports to be prepared, each incrementally addressing feedback and policy direction by the District. Submittal of the final reports will also include training of District staff as needed.

Proposed Schedule

Projects of this nature are highly sensitive. Because of this sensitivity and the anxiety experienced by many employees when going through this type of process, it is beneficial to complete the analysis in the most expedient manner feasible. Assuming full cooperation of the District and the survey agencies, our schedule assumes that all study activities can be completed within twelve (12) weeks. If this schedule is too aggressive, we can adjust the schedule to fit the District's timing objectives while also allowing additional review time by the District.

	1	2	3	4	5	6	7	8	9	10	11	12
Task 1-Conduct project initiation meetings *												
Task 2-Employees complete questionnaires												
Task 3-Conduct job analysis interviews *												
Task 4-Prepare and review preliminary classification report												
Task 5-Prepare class specifications												
Task 6-Undertake review process *												
Task 7-Finalize classification plan												
Task 8-Discuss and document compensation policy *												
Task 9-Collect compensation data												
Task 10-Compile and format data												
Task 11-Audit and finalize compensation data												
Task 12-Conduct internal relationship analysis												
Task 13-Develop salary recommendations												
Task 14-Develop implementation strategies												
Task 15-Prepare/review preliminary reports *												
Task 16-Prepare and present final reports *												

* Anticipated on-site meetings; key milestones shown in blue

Project Cost

The total fixed cost for professional service fees and non-travel expenses to conduct the Classification and Compensation Study, as proposed, amounts to \$42,800. The cost of professional services is based upon the project as described in the work plan and is a “fixed fee” regardless of which consultant performs the task and/or the number of hours needed to complete a particular element of the study.

The proposed professional services costs are based on the following hourly rates:

- Project Manager - \$155
- Project Consultant - \$135
- Research/Support Staff - \$85

Due to continued Covid-19 restrictions, the firm has completed almost 50 classification and compensation studies using virtual meeting platforms such as Zoom and Microsoft Teams. For efficiency, our proposed cost assumes virtual meetings will be used for kick-off meetings, employee briefing sessions, employee interviews, and the review and presentation of draft and final reports. There is no limit to the number of virtual meetings.

If on-site meetings are required, the additional cost would be \$2,500 per day which includes professional fees and expenses.

Project invoicing will be done monthly based on the percentage completion of the project. If the scope of the analysis creates budget problems for the District, or if additional analysis is desired, we are willing to review the work plan and adjust it and the cost so that it is mutually satisfactory.

References

The following references represent just a small sample of similar assignments conducted by the firm. We are certain you will find that our record and our reputation are outstanding. Doug Johnson served as the project manager and Jeff McMurdo served as the primary consultant for all of the following projects.

City of Auburn, CA

Scope of Work: Classification and Compensation Study 2022-2023.

Contact: Nathan Bagwill, Director of Administrative Services
1225 Lincoln Way, Auburn, CA 95603
(530) 823-4211, Ext 110
nbagwill@auburn.ca.gov

City of Reno/City of Sacramento/Sloan Sakai Law Firm Support

Scope of Work: Classification and Compensation Studies and Expert Witness Services.* Various projects totaling over \$500,000.

Contact: Mr. Mark Gregersen
(775) 556-3000
markgregersen@gmail.com

**Mr. Gregersen can speak to a number of projects conducted by the firm including classification and compensation studies conducted for Napa County, San Luis Obispo County, and the cities of Sacramento, Vallejo, and Reno.*

Otay Water District

Scope of Work: Total Compensation Studies in 2012, 2014, 2016, and 2017-18 in support of labor negotiations.

Contact: Suzie Lawson, Human Resources Manager
2554 Sweetwater Springs, Spring Valley, CA 91978
(619) 670-2227
slawson@otaywater.gov

Additional references can be provided on request.

Appendix A

Five-Year Listing of Clients

Appendix A

Five Year Client Listing

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Cities			
City of Albany 1000 San Pablo Ave. Albany, CA 94706	Classification & Compensation Study Compensation Study Update	Melissa Rojas Human Resources Director	(510) 528-5714 MRojas@albanyca.org
City of Arcadia 240 W. Huntington Drive Arcadia, CA 91066	Classification & Compensation Study	Tracey Hause Administrative Services Director	(626) 574-5425 thause@ci.arcadia.ca.us
City of Auburn 1225 Lincoln Way Auburn, CA 95603	Classification & Compensation Study	Nathan Bagwill Director of Administrative Services	(530) 823-4211, ext. 110 nbagwill@auburn.ca.gov
City of Baldwin Park 14403 E. Pacific Avenue Baldwin Park, CA 91706	Salary Compensation Survey	Laura J. Thomas Human Resources/Risk Manager	(626) 960-4011 ext. 355 lthomas@baldwinpark.com
City of Beaumont 550 E 6 th Street Beaumont, CA 92223	Classification & Compensation Study Compensation Study Survey Update 2022	Kari Mendoza Administrative Services Director	(951) 572-3228 karim@beaumont-ca.gov
City of Big Bear Lake 39707 Big Bear Blvd. P.O. Box 10000 Big Bear Lake, CA 92315	Salary Survey – Chief Operations Officer	Erica Stephenson Administrative Services Manager	(909) 866-5831 x120 estephenson@citybigbearlake.com
City of Carlsbad 1635 Faraday Ave. Carlsbad, CA 92008	Compensation Study – Management CSEA Survey Update 2021 Range Structure Analysis CCEA Compensation/Benefits Study Benefits Update 2022	Drew Cook Human Resources Department	(760) 602-7536 drew.cook@carlsbadca.gov
City of Carson 701 E. Carson Street Carson, CA 90749	Compensation Survey	Faye Moseley Director of Human Resources and Risk Management	(310) 952-1735 fmoseley@carson.ca.us

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
City of Coachella 1515 Sixth Street Coachella, CA 92236	Compensation Study	Sandy Krause Human Resources Manager	(760) 398-3502 ext. 132 skrause@coachella.org
Cordova Recreation & Park District 2729 Prospect Park Drive, Suite 230 Rancho Cordova, CA 95670	Classification and Compensation Study	Andrea White, SPHR Human Resource Manager	(916) 842-3315 awhite@crpd.com
City of Coronado 1825 Strand Way Coronado, CA 92118	Executive and Division Manager Compensation Analysis	Jim Krueger Administrative Services Director	(619) 522-7309 jkrueger@coronado.ca.us
City of Cupertino 10300 Tore Avenue Cupertino, CA 95014	Compensation Survey	Kristina Alfaro Director of Administrative Services	(408) 777-3220 KristinaA@cupertino.org
City of Hercules	Classification and Compensation Study	Jenny E. Smith Human Resources Specialist	(510) 799-8214 jenny.smith@ci.hercules.ca.us
City of Hermosa Beach 1315 Valley Drive Hermosa Beach, CA 90254	City Council Compensation Survey Compensation Survey 2023 Base Salary Update	Vanessa Godinez Human Resources Manager	(310) 318-0202 vgodinez@hermosabch.org
City of Hollister 327 Fifth Street Hollister, CA 95023	Total Compensation Study	Diana Hillstock Human Resources Manager	(831) 636-4301 ext. 1124 diana.hillstock@hollister.ca.gov
City of Indio 100 Civic Center Mall Indio, CA 92201	Classification and Compensation Study	Terry Derringer Director of Human Resources & Risk Management	(760) 391-4009 tdeeringer@indio.org
City of Irwindale 5050 North Irwindale Avenue Irwindale, CA 91706	Compensation Study	Mary Hull Human Resources Manager	(626) 430-2204 mhull@IrwindaleCA.gov
City of Ketchikan, AK 334 Front Street Ketchikan, AK 99901	Compensation Study and Technical Assistance on Related Matters Technical Assistance	Marie Miller Human Resources Manager	(907) 228-5623 mariem@city.ketchikan.ak.us
City of La Mirada 13700 La Mirada Blvd. La Mirada, CA 90638	Total Compensation Study	Cristina Cota Human Resources Manager	(562) 943-0131 ccota@cityoflamirada.org
City of Laguna Hills 24035 El Toro Road Laguna Hills, CA 92653	Classification and Compensation Study	Melissa Au-Yeung Deputy City Manager	(949) 707-2621 mau-yeung@ci.laguna-hills.ca.us

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
City of Lake Forest 25550 Commercentre Drive, Suite 100 Lake Forest, CA 92630	Classification and Compensation Study City Manager Survey Technical Assistance Class Analysis Memo Classification and Compensation 2022-23	Debra Rose Director of Management Services	(949) 461-3414 drose@lakeforestca.gov
City of Menlo Park 428 J Street, Ste. 400 Sacramento, CA 95814	Police Chief Compensation Survey	Mark Gregersen Former Director of Human Resources, City of Reno Former Consultant with Sloan Sakai	(916) 300-8441 mark@mgregersen.com
City of Merced 678 West 18 th Street Merced, CA 95340	Classification Study	Deneen Proctor Director of Support Services	(209) 385-4780 proctord@cityofmerced.org
City of Mercer Island 9611 SE 36th Street Mercer Island, WA 98040	Classification & Compensation Study	Ali Spietz Chief of Administration	(206) 275-7667 ali.spietz@mercerisland.gov
City of Modesto 1010 10 th Street Modesto, CA 95354	Classification & Compensation Study	Joseph P. Lopez Assistant City Manager	(209) 571-5809 joelopez@modestogov.com
City of Monterey 735 Pacific Street, Suite B Monterey, CA 93940	FFMA Survey Update	Allyson Hauck Human Resources Director	(831) 646-3767 hauck@monterey.org
City of Monterey 735 Pacific Street, Suite B Monterey, CA 93940	Compensation Study MPA Update (February 2020)	Jeff Sloan Partner	(415) 678-3800 jsloan@sloansakai.com
City of Monterey Park 320 West Newmark Avenue Monterey Park, CA 91754	Classification & Compensation Study	Christine Tomikawa Director of Human Resources and Risk Management	(626) 307-1345 ctomikawa@montereypark.ca.gov
City of National City 1243 National City Blvd. National City, CA 91950	Compensation Survey	Eddie Kreisberg Attorney	(650) 248-2125 eddie@kreisberg-law.com
City of Oakland 1220 7 th Street Berkeley, CA 94710	Fire Arbitration	Jeff Sloan Partner	(415) 678-3800 jsloan@sloansakai.com

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
City of Palm Springs 3200 E. Tahquitz Canyon Way Palm Springs, CA 92262	Total Compensation Survey Total Compensation Survey (Police) Compensation Survey – Airport Operations Supervisor	Perry Madison Director of Human Resources	(760) 323-8215 Perry.Madison@palmspringsca.gov
City of Palo Alto 250 Hamilton Avenue Palo Alto, CA 94303	Compensation Survey – POA / IAFF / FCA Compensation Survey – UMPAPA Market Study – SEIU – Inspector Field Services Management and Professional Group Market Study	Rumi Portillo Chief People Officer	(650) 329-2376 rumi.portillo@cityofpaloalto.org
City of Paramount 16400 Colorado Avenue Paramount, CA 90723	Compensation Study Minimum Wage Compression Study 2022 Compensation Study Update	Jonathan Masannat Human Resources Manager	(562) 220-2022 jmasannat@paramountcity.com
City of Petaluma 11 English Street Petaluma, CA 94952	Classification and Compensation Study – Full-time Miscellaneous Non-Sworn Positions POA Non-Sworn Survey Update	Amy Reeve Director of Human Resources	(707) 778-4343 areeve@ci.petaluma.ca.us
City of Port Hueneme 250 N. Ventura Road Port Hueneme, CA 93041	Classification & Compensation Study 2021	Melanie Hanisco Human Resources Manager	(805) 986-6501 mhanisco@ci.port-hueneme.ca.us
City of Red Bluff 555 Washington St. Red Bluff, CA 96080	Compensation Study	Scott Garrison Human Resources Administrator	(530) 527-2605 ext. 3051 sgarrison@cityofredbluff.org
City of Redondo Beach 415 Diamond Street Redondo Beach, CA 90277	Targeted Classification & Compensation Study	Diane Strickfaden Director of Human Resources	(310) 318-0659 ext. 2832 Diane.strickfaden@redondo.org
City of Reno, NV P.O. Box 1900 Reno, NV 89505	Labor Market Analysis Police and Fire Compensation Study	Mark Gregersen Former Director of Human Resources	(916) 300-8441 mark@mgregersen.com
City of Reno, NV 1 E. First Street, 11 th Fl Reno, NV 89501	Total Compensation Survey	Jesse Puett Management Analyst	(775) 348-6901 puettj@reno.gov

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
City of Sacramento, CA 428 J Street, Ste. 400 Sacramento, CA 95814	Compensation Services Police Officers Association Arbitration EMT/Paramedic 2022 Fire Survey 2021 Fire Survey 2022 POA Survey 2021 Mayor and City Council Survey 2022 Survey – Deputy Attorney	Mark Gregersen Former Director of Human Resources, City of Reno Former Consultant with Sloan Sakai	(916) 300-8441 mark@mgregersen.com
City of Sacramento 915 I Street Sacramento, CA 95814	Salary Surveys 2017-18 Fire and Locksmith Survey Salary Surveys (4 positions) Fire Survey Update 2018 6 Class Survey May 2019 Sacramento Fire Local 2019 Treasury Study – Salary Survey 2 Positions POA Survey 2019 LOC 39 – 5 Classes Survey POA Local Market Survey July 2019 Fire Retiree Health Survey 2019 Fire Arbitration Compensation Survey – Procurement Services Manager Salary Survey – Fire 2020 POA 2020 Survey Update POA 2021 Survey Mayor and City Council Survey 2022	Shelley Banks-Robinson Labor Relations Manager	(916) 808-5541 SMBanks-Robinson@ cityofsacramento.org
City of St. Helena 1480 Main Street St. Helena, CA 94574	Classification & Compensation and Organization Review of the Public Works Department Technical Assistance – Human Resources Technician Compensation Study Update Base Salary Survey	Kathy Robinson, SPHR Human Resources & Information Technology Director	(707) 968-2741 krobinson@cityofstheleena.org

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
City of Santa Barbara 735 Anacapa Street Santa Barbara, CA 93101	Supervisor's Association Salary Survey	Sam Ramirez Administrative Analyst III, Labor Relations	(805) 564-5304 scramirez@santabarbaraca.gov
City of Santa Clara 1500 Warburton Avenue Santa Clara, CA 95050	Compensation Study Fire Survey Update 2019 Survey Update (3 classes)	Julia Hill Assistant Director of Human Resources	(408) 615-2161 JHill@santaclaraca.gov
City of Santa Rosa 350 Sansome Street, Suite 300 San Francisco, CA 94104	Fire Arbitration	Jonathan Holtzman Partner	(415) 848-7235 jholtzman@publiclawgroup.com
City of Santee 10601 Magnolia Avenue Santee, CA 92071	Classification Study	Erica Hardy Director of Human Resources	(619) 258-4100 ext. 132 EHarding@CityofSanteeCa.gov
City of Shoreline 17500 Midvale Ave. N Shoreline, WA 98133	Compensation Study	Melissa Muir Human Resources Director	(206) 801-2241 mmuir@shorelinewa.gov
City of Signal Hill 2175 Cherry Avenue Signal Hill, CA 90755	Compensation Study Comprehensive Compensation Study of City-wide Job Classes	Sylvia Soong Human Resources Manager	(562) 989-7307 ssoong@cityofsignalhill.org
City of Simi Valley 2929 Tapo Canyon Road Simi Valley, CA 93063	Job Analysis (Waterworks Meter Reader and Water system Supervisor Classification Study – Emergency Services Manager Technical Assistance – Classification and Compensation Survey (4 Positions) and Purchasing Agent Technical Assistance Purchasing Agent Survey and Job Description 4 Class Survey Assistant Public Works Director Survey	Elizabeth Foushee Deputy Director/Human Resource	(805) 583-6741 EFoushee@simivalley.org
City of Snoqualmie, WA 38624 SE River Street Snoqualmie, WA 98065	Classification and Compensation Study of all Management and Professional Positions	Debra Vigil Director of Administrative Services	(425) 888-8004 dvigil@ci.snoqualmie.wa.us

Five Year Client Listing

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
City of South Lake Tahoe 1901 Airport Road, S Lake Tahoe, CA 96150	Classification & Compensation Study On-going Technical Assistance	Ember E. Buckman Human Resources Manager	(530) 542-6050 ebuckman@cityofslt.us
City of South Pasadena 1414 Mission Street South Pasadena, CA 91030	Technical Assistance on Classification and Compensation Matters	Tara Schultz Interim Human Resources Director	(626) 403-7312 tschultz@southpasadenaca.gov
City of Stockton 22 E. Weber Ave., Suite 150 Stockton, CA 95202	Department Head Survey Update 2017 Technical Assistance	Teresia Zadroga-Haase Human Resources Director	209-937-8344 Teresia.Haase@stocktongov.com
City of Suisun City 701 Civic Center Blvd. Suisun City, CA 94585	Compensation Study	Joe Dingman Administrative Services Director	(707) 421-7300 jdingman@suisun.com
City of Sunnyvale P.O. Box 3707 Sunnyvale, CA 94088	Technical Assistance (Master Contract) Survey Update – COA (Dispatchers) Fire Protection Classification and Compensation Study PSOA Annual Survey IT Structure and Survey 2022 COA Survey 2023 PSOA Survey 2023	Tammy Parkhurst Human Resources Manager	(408) 730-7498 tparkhurst@ci.sunnyvale.ca.us
City of Tracy 333 Civic Center Plaza Tracy, CA 95376	Total Compensation Study	Midori Lichtwardt Director of Human Resources	(209) 831.6159 midori.lichtwardt@ci.tracy.ca.us
City of Tulare 411 E. Kern Avenue Tulare, CA 93274	Total Compensation Survey Sworn Fire Total Compensation Survey	Irene M. Santos Management Analyst	(559) 684-4204 isantos@tulare.ca.gov
City of Union City 34009 Alvarado Niles Rd. Union City, CA 94587	Total Compensation Survey	Lilybell Nakamura Director of Human Resources	(510) 675-5381 lilybelln@Unioncity.org
City of Watsonville 1220 7 th Street Berkeley, CA 94710	Fire Arbitration	Jeff Sloan Partner	(415) 678-3800 jsloan@sloansakai.com
Counties			
Mono County P.O. Box 696 Bridgeport, CA 93517	Salary and Compensation Analysis	Dave Butters Human Resources Director	(760) 932-5413 dbutters@mono.ca.go

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Napa County 1195 Third Street Napa, CA 94559	SEIU Limited Compensation and Internal Alignment Management Survey Update – 2018 PSE Compensation Survey 2019 SEIU Compensation Survey Update 2020 PSE Survey Update October 2021 Management Conf. Benchmark Survey 2021 Union Survey (2022) Fire Compensation Cost Study Management Compensation Study	Christine M. Briceno Director of Human Resources	(707) 259-8341 Christine.briceno@countyofnapa.org
Sacramento County 700 H Street, Room 7650 Sacramento, CA 95814	Unrepresented Management Compensation Survey Compensation Survey – Board of Supervisor Class Total Compensation Study – Unrepresented Job Classifications	Karen Farrel Senior Personnel Analyst	(916) 874-7974 farrelk@sacounty.gov
San Benito County 481 4 th Street Hollister, CA 95023	Classification & Compensation Study	Edgar Nolasco Deputy County Administrative Officer	(831) 636-4000 ext. 16 Enolasco@cosb.us
San Joaquin County 24 South Hunter Street Stockton, CA 95202	Multiple classification and compensation studies of various employee groups conducted since 1998	Marilyn Maskell Principal Human Resources Analyst	(209) 468-3276 mmaskell@sjgov.org
San Joaquin County 428 J Street, Ste. 400 Sacramento, CA 95814	SEIU Factfinding 2019	Jeff Sloan Partner	(415) 678-3800 jsloan@sloansakai.com
San Luis Obispo County 1220 7 th Street Berkeley, CA 94710	Factfinding SLOCEA – Technical Assistance Factfinding SDSA – Technical Assistance Compensation Study	Jeff Sloan Partner	(415) 678-3800 jsloan@sloansakai.com
Solano County 675 Texas Street Fairfield, CA 94533	Compensation & Benefits Studies	Marc A. Fox Director of Human Resources	(707) 784-2552 MAFox@SolanoCounty.com

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Sonoma County 575 Administration Drive #116B Santa Rosa, CA 95403	Total Compensation Survey – Phase I (18 Job Classes) Total Compensation Survey – Phase II (141 Job Classes) Total compensation Survey – Phase III (9 Water Agency Job Classes) Human Resources Classification Study EFS Manager 2018 Compensation Survey Update Classification Study Community Development Commission	Lisa Conner Human Resources Analyst III	(707) 565-5119 Lisa.conner@sonoma-county.org
Higher Education			
Mendocino College 1000 Hensley Creek Road Ukiah, CA 95482	Technical Assistance on Classification and Compensation Matters	Nicole Marin, SHRM-CP Director of Human Resources	(707) 468-3056 nmarin@mendocino.edu
Southwestern Community College District 900 Otay Lakes Rd. Chula Vista, CA 91910	Ad-Hoc Technical Assistance	Rose C. DelGaudio Executive Assistant Superintendent/Vice President for Human Resources	(619) 482-6328 rdelgaudio@swccd.edu
Water Districts			
Alameda County Water District 43885 S. Grimmer Blvd. Fremont, CA 94538	Classification and Compensation Study	Jennifer Solito, M.A., SPHR Human Resources & Risk Manager	(510) 668-4220 Jennifer.solito@acwd.com
East Bay Regional Park District P.O. Box 5381 Oakland, CA 94605- 0381	Classification and Compensation for Management, Confidential, POA, and Seasonal Employees Technical Assistance	Dr. Ana M. Alvarez Deputy General Manager	(510) 544-2011 AAlvarez@ebparks.org
East Bay Regional Park District 2225 E Bayshore Road, Suite 200 Palo Alto, CA 94303	AFSCME Survey Update 2021 Survey Update 2021 Management, Confidentials, Police Association	Eddie Kreisberg Attorney	(650) 248-2125 eddie@kreisberg-law.com
Irvine Ranch Water District 15600 Sand Canyon Avenue Irvine, CA 92618	2014/2015 Compensation Survey Compensation Study 2018 Compensation Survey 2021	Gretchen C. Ronin Human Resources Manager	(949) 453-5438 Maswadeh@irwd.com

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Mesa Water District 1965 Placentia Avenue Contra Costa, CA 92627	Technical Assistance on Classification and Compensation Matters	Coleen L. Monteleone Administrative Services Manager	(949) 631-1205 coleenm@mesawater.org
Municipal Water District of Orange County 18700 Ward Street Fountain Valley, CA 92728	Classification and Compensation Study	Cathleen Harris Director of Human Resources and Administration	(714) 593-5007 charris@mwdoc.com
Nevada Irrigation District 1036 West Main Street Grass Valley, CA 95945	Salary Survey	Jana Kolakowski Human Resources Manager	(530) 271-6825 kolakowskij@nidwater.com
Olivenhain Municipal Water District 1966 Olivenhain Road Encinitas, CA 92024	Compensation Survey Salary Survey	Thomas Wood Human Resources Manager	(760) 632-4211 twood@olivenhain.com
Otay Water District 2554 Sweetwater Springs Spring Valley, CA 91978	Compensation and Benefits Study Technical Assistance Compensation Study	Kelli Williamson Human Resources Manager	(619) 670-2227 kwilliamson@otaywater.gov
Sacramento Suburban Water District 3701 Marconi Avenue, Suite 100 Sacramento, CA 95821	2018 Compensation Study	Dan Bills Finance Director	(916) 679-3970 dbills@sswd.org
South Coast Water District 31592 West Street Laguna Beach, CA 92651	Classification, Compensation, and Benefits Study Additional Classification and Compensation Study 2021	Robin Wiessner, CPBA, HCS HR & Risk Manager	(949) 499-4555 ext. 3118 RWiessner@scwd.org
South Placer Municipal Utility District 5807 Springview Drive Rocklin, CA 95677	Classification and Compensation Study	Emilie Costan, CRM Administrative Services Manager	(916) 786-8555 ecostan@spmud.ca.gov
Sweetwater Authority 505 Garrett Avenue Chula Vista, CA 91910	Salary and Benefits Survey	Jennifer Sabine Assistant General Manager	(619) 409-6702 jsabine@sweetwater.org
Trabuco Canyon Water District 32003 Dove Canyon Drive Trabuco Canyon, CA 92679	Classification and Compensation Matters	Fernando Paludi General Manager	(949) 709-5721 fpaludi@tcwd.ca.gov
Turlock Irrigation District 333 East Canal Drive Turlock, CA 95381	Compensation Study	Jorian Reed Director of Human Resources	(209) 883-8252 jhreed@tid.org

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Vallecitos Water District 201 Vallecitos de Oro San Marcos, CA 92069	Classification and Compensation Study 2022 Compensation Study	Rhondi Emmanuel Administrative Services Manager	(760) 744-0460 ext. 240 remmanuel@vwd.org
Valley of the Moon Water District P.O. Box 280 El Verano, CA 95433	Compensation Study	Matthew Fullner General Manager	(707) 996-1037 x10 mfullner@vomwd.org
West Basin Municipal Water District 17140 S. Avalon Blvd., Suite 210 Carson, CA 90746	Classification and Compensation Study	Michelle Green Human Resources Officer	(310) 660-6228 michelleg@westbasin.org
Other Districts and Authorities			
Housing Authority of the City of Alameda 701 Atlantic Avenue Alameda, CA 94501	Total Compensation Study Compensation Study – Exempt Positions Compensation Study of Non- Exempt Positions Management Compensation Review (Amended Scope) Compensation Study – Executive Director Compensation Study for AHA Director Positions	Vanessa M. Cooper Executive Director	(510) 747-4320 vcooper@alamedahsg.org
Alameda County Housing Authority 22941 Atherton Street Hayward, CA 94541	Management Compensation Study	Thomas Makin Deputy Director for Operations	(510) 727-8516 TomM@haca.net
Aptos-La Selva Fire Protection District 428 J Street, Ste. 400 Sacramento, CA 95814	Business Manager Survey	Charles Sakai Managing Partner	(415) 299-0856 csakai@publiclawgroup.com
Association of Regional Center Agencies (ARCA) 980 9 th Street, Ste. 1450 Sacramento, CA 95814	Compensation Analysis – Executive Director	Kathy Hebert ARCA Board of Directors President	(916) 446-7961 Mom2gjc@gmail.com
Black Gold Cooperative Library System 580 Camino Mercado Arroyo Grande, CA 93420	Classification Study and Total Compensation Survey	Glynis Fitzgerald Director of Operations	(805) 543-6082 gfitzgerald@blackgold.org

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Conejo Recreation and Park District 403 West Hillcrest Drive Thousand Oaks, CA 91360	Technical Assistance – Class & Compensation Matters	Phyllis Bluhm Human Resources Supervisor	(805) 381-1221 pbluhm@crpd.org
Contra Costa County Schools Insurance Group 550 Ellinwood Way Pleasant Hill, CA 94523	Compensation Study	Erica Williamson Human Resources Manager	(866) 922-2744 ewilliamson@cccsig.org
Costa Mesa Sanitary District 290 Paularino Avenue Costa Mesa, CA 92626	Classification and Compensation Study	Dyana Bojarski Management Analyst II	(949) 645-8400 ext. 226 DBojarski@cmsdca.gov
Menlo Park Fire Protection District 170 Middlefield Road Menlo Park, CA 94025	AFSCME Compensation Survey Classification & Compensation Study	Brenna Rowe Human Resources Manager	(650) 688-8400 browe@menlofire.org
North Bay Schools Insurance Group 380A Chadbourne Road Fairfield, CA 94534	Compensation Study	Jan DeGracia Executive Director	(707) 428-1830 ext. 105 jand@nbsia.org
Oakland School of the Arts 1220 7 th Street Berkeley, CA 94710	Compensation Study and Research	Jeff Sloan Partner	(415) 678-3800 jsloan@sloansakai.com
Orange County Fire Authority 1 Fire Authority Road Irvine, CA 92602	Classification and Compensation As Needed	Debbie Casper, C.P.M., CPPB Purchasing & Materials Manager	(714) 573-6641 debbiecasper@ocfa.org
Redwood Empire Schools' Insurance Group 5760 Skylane Blvd., Suite 100 Windsor, CA 95492	Compensation Survey	Ronda Bergesen Business Manager	(707) 836-0779 x105 rbergesen@resig.org
Sacramento County Employees' Retirement System 980 9 th Street, Suite 750 Sacramento, CA 98512	CEO Compensation Analysis CEO Performance Evaluation System Management Compensation Survey Update 2017 Compensation Study	Kathy Ragalia Chief Operations Officer	(916) 874-9119 regaliak@saccounty.net
San Diego County Water Authority 4677 Overland Avenue San Diego, CA 92123	Classification and Compensation Study Survey Update – 14 Positions	Ashley Kite Senior Human Resources Analyst	(858) 522-6667 akite@sdcwa.org

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Santa Barbara County Air Pollution Control District 260 North San Antonio Road, Suite A Santa Barbara, CA 93110	Compensation Study	Kristina Aguilar, CPA Administrative Manager	(805) 961-8800 AguilarK@sbcapcd.org
Santa Clara County Central Fire Protection District 14700 Winchester Blvd. Los Gatos, CA 95032	Total Compensation Survey – Firefighter / Engineer Compensation Survey Services for the Fire Prevention Division Fire Survey Update 2018 Total Compensation Study Salary Survey Wage Compensation Study for EMS Coordinator Position	Rebecca Lo Management Analyst	(408) 341-4457 Rebecca.lo@sccfd.org
Schools Insurance Authority P.O. Box 276710 Sacramento, CA 95827	Compensation Study	Todd Cheli Human Resources Manager	(916) 364-1281 tcheli@sia-jpa.org
South Tahoe Public Utility District 1275 Meadow Crest Dr. South Lake Tahoe, CA 96150	Compensation Study One (1) Class Survey	Liz Kauffman Human Resources Director	(530) 543-6222 lkauffman@stpubd.us
State Bar of California 180 Howard St. San Francisco, CA 94105	Salary Survey and Related Services	Steve Mazer Chief Administrative Officer	(415) 538-2326 steve.mazer@calbar.ca.gov
Sweetwater Authority 505 Garrett Avenue Chula Vista, CA 91910	2023 Compensation Study	Carlos Quintero General Manager	(619) 420-1413 equintero@sweetwater.org
Tahoe Truckee Unified School District 11603 Donner Pass Road Truckee, CA 96161	Management Classification and Compensation Study	Thomas Gemma Executive Director of Administrative Services	(530) 582-2500 tgemma@ttusd.org
Teton County Fire Protection District 911 North Highway 33 PO Box 474 Driggs, ID 83422	Compensation Study and Analysis	Bret Campbell Fire Chief	(208) 715-5201 bcampbell@tetoncountyfire.com

Agency	Scope of Services	Contact Name Contact Title	Telephone Number E-mail Address
Ventura County Employees' Retirement Association 1190 South Victoria Avenue, Suite 200 Ventura, CA 93003	Market-based Compensation Analysis	Chris Ayala Program Assistant	(805) 339-4261 Chris.Ayala@ventura.org
Whatcom Transportation Authority 2011 Young Street Bellingham, WA 98225	Compensation Study	Kimberly Somers	(360) 738-4588 kimberlys@ridewta.com

Municipal Water District of Orange County
Individual Charges Disclosure
For the period of 7/1/2022 - 6/30/2023

Item No. 6

POSITION:	VENDOR:	EVENT:	ITEM:	AMOUNT
WUE Assistant	Reimbursement	Water Education Seminar Registration 8/17/2022	Miscellaneous Expense	\$ 150.00
Water Use Efficiency Assistant Total:				\$ 150.00
WEROC Specialist	Reimbursement	CESA 2023 Conference 04/30/23 - 05/07/23	Travel & Accommodations	\$ 1,409.45
Specialist Total:				\$ 1,409.45
Governmental Affairs Mgr	Reimbursement	ACWA Symposium - Sacramento 3/24/2023	Travel & Accommodations	\$ 432.57
Governmental Affairs Mgr	Reimbursement	CSDA Annual Conference - Palm Springs 8/25/2022	Travel & Accommodations	\$ 418.72
Governmental Affairs Mgr	Reimbursement	CSDA & ACWA Legislative Planning 10/27/22 - 10/28/22	Travel & Accommodations	\$ 575.27
Governmental Affairs Manager Total:				\$ 1,426.56
Director	Reimbursement	Cal WEP Board Meeting 3/8/2023	Travel & Accommodations	\$ 237.91
Director	Reimbursement	Toner for Home Office 3/13/2023	Office Supplies	\$ 140.06
Director	Reimbursement	ACWA meetings with SWRCB Board - WUE 11/30/2022	Travel & Accommodations	\$ 227.25
Director Total:				\$ 605.22
WLC Programs Supervisor	Reimbursement	AWWA Cross Connection Control Certification	Certification	\$ 100.00
WLC Programs Supervisor	Reimbursement	AWWA WUE Practitioner Grade 2 Cerrtification	Certification	\$ 100.00
Water Loss Control Supervisor Total:				\$ 200.00
WUE Analyst I	Reimbursement	AWWA - WUE Practitioner I Certification	Certification	\$ 100.00
Water Use Efficiency Analyst Total:				\$ 100.00
Executive Assistant	Reimbursement	Collapsible Photography Backdrop 10/18/2022	Office furniture	\$ 108.74
Executive Assistant Total:				\$ 108.74
Senior Accountant	Amazon	High Yield Toner Cartridge for home office use 1/5/2023	Office supplies	\$ 127.12
Senior Accountant Total:				\$ 127.12
Director	Enterprise	ACWA Soring Conference - Monterey (car rental) 5/11/2023	Travel & Accommodations	\$ 262.43
Director Total:				\$ 262.43
WEROC Coordinator	Reimbursement	CESA 2023 Conference - Olympic Valley, CA 04/30/23 - 05/07/23	Travel & Accommodations	\$ 672.69
				\$ 1,122.48
Coordinator Total:				\$ 1,795.17

Municipal Water District of Orange County
Individual Charges Disclosure
For the period of 7/1/2022 - 6/30/2023

POSITION:	VENDOR:	EVENT:	ITEM:	AMOUNT
Director	Fiverr	Toner for Home Office	Office Supplies	\$ 234.87
		Legislative Affairs trip to Washington DC	Travel & Accommodations	\$ 458.65
		02/27/23 - 02/28/23		
		Transportation	Travel & Accommodations	\$ 149.02
			Director Total:	\$ 842.54
Director	Reimbursement	CRUA Conference @ Las Vegas	Travel & Accommodations	\$ 197.28
		12/13/2022		
		Mileage - CRUA Conference @ Las Vegas	Travel & Accommodations	\$ 325.00
		12/13/22 and 12/16/22		
			Director Total:	\$ 522.28
			Grand Total	\$ 7,549.51

Municipal Water District of Orange County
Asset Disposal Form
FY 2022-23

	<u>Item Description</u>	<u>Reason</u>	<u>Asset No.</u>	<u>Sold</u>	<u>Donated</u>	<u>Disposed</u>
1	Ricoh Pro C5110S Printer	Replaced	FA03055			7/29/2022


Interim General Manager


Director of Finance/IT

Disposal Information

Sold To:

Date of Sale

\$ _____
Total Amount of Sale

Donated To:

Date of Donation

Disposal Method:

Ricoh traded for new machine

7/29/2022
Date of Disposal



INFORMATION ITEM

October 11, 2023

TO: Administration & Finance Committee
(Directors Dick, Thomas, Crane)

FROM: Harvey De La Torre, Interim General Manager

Staff Contact: Hilary Chumpitazi

SUBJECT: CalPERS Annual Valuation Report as of June 30, 2022

STAFF RECOMMENDATION

Staff recommends the Administration & Finance Committee receive and file the CalPERS Annual Valuation Report.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

DETAILED REPORT

MWDOC received its CalPERS Annual Valuation Reports as of June 30, 2022 and staff attended one meeting to go over the details of the report and any changes. The key components of the reports are as follows:

Miscellaneous Plan (Classic)

- Page 4 of the report shows MWDOC's Normal Cost Rate at 12.47% for July 1, 2023 and effective July 1, 2024 it will be 12.52%. Employees continue to contribute 7%, which brings the total obligation to 19.47% and 19.52%, respectively.
 - The District pays the Required Employer Contribution via the Annual Prepayment Option, which saved the District \$7,489 for FY 2023-24 and FY 2024-25 will have a savings of \$9,649.
- Page 6 shows the plan's funded status and as of June 30, 2022, the District is 77.3% funded with an Unfunded Accrued Liability (UAL) of \$4,081,537. If we subtract the

Budgeted (Y/N):	Budgeted amount:	Core ____	Choice ____
Action item amount:		Line item:	
Fiscal Impact (explain if unbudgeted):			

balance of our Section 115 Trust for pension as of June 30, 2023 in the amount of \$1,120,664 we have a UAL of \$2,960,873, which is 83.5% funded.

- The actuaries are seeing an approximate return of 6.5% in the next valuation report.
- Page 8 is our projected required contributions for future years.

PEPRA Plan

- Page 4 of the report shows MWDOC's Normal Cost Rate at 7.68% and the Plan's Employee Contribution Rate was increased from 6.75% to 7.75% for July 1, 2023. Effective July 1, 2024 the Normal cost rate will be 7.87% and the Employee Contribution Rate will remain the same at 7.75%.
 - There is no Required Employer Contribution for FY 2023-24 due to the 21.3% investment increase from last year's report but FY 2024-25 we will prepay \$7,160 to save \$239.
- Page 6 shows the plan's funded status and as of June 30, 2022. The District is 87.4% funded with an Unfunded Accrued Liability (UAL) of \$210,695.
- Page 7 is our projected future required contributions for the upcoming years.

Economic Assumption Changes

Inflation has been higher than expected and is anticipated to put upward pressure on contribution requirements and possibly decrease the funded status in next year's evaluation. (This information can be found on page 9).

The result of our Reserve Policy discussions designated \$1 million to be deposited towards our unfunded pension liability. Based on the projected increased liability to our Classic plan staff will make an additional discretionary employer contribution to CalPERS of \$500,000 and the remaining \$500,000 will be made to the District's Section 115 Pension Trust. In addition, the District made its 6th annual deposit of \$207,000 for FY 2023-24 to this Trust.



**California Public Employees' Retirement System
Actuarial Office**

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888 CalPERS (or 888-225-7377) | TTY: (877) 249-7442 | www.calpers.ca.gov

July 2023

**Miscellaneous Plan of the Municipal Water District of Orange County (CalPERS ID: 6497938438)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability
2024-25	12.52%	\$298,193
<i>Projected Results</i>		
2025-26	12.5%	\$330,000

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at (888)-CalPERS or (888-225-7377).

Sincerely,



SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS



RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



**Actuarial Valuation
as of June 30, 2022**

**for the
Miscellaneous Plan
of the
Municipal Water District of Orange County
(CalPERS ID: 6497938438)**

**Required Contributions
for Fiscal Year
July 1, 2024 - June 30, 2025**

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**Plan Specific Information
for the
Miscellaneous Plan
of the
Municipal Water District of Orange County**

**(CalPERS ID: 6497938438)
(Rate Plan ID: 4054)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Miscellaneous Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	15
Employer Contribution History	17
Funding History	17
Risk Analysis	
Future Investment Return Scenarios	19
Discount Rate Sensitivity	20
Mortality Rate Sensitivity	20
Maturity Measures	21
Maturity Measures History	22
Funded Status – Termination Basis	23
Participant Data	24
List of Class 1 Benefit Provisions	24
Plan's Major Benefit Options	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the Miscellaneous Plan of the Municipal Water District of Orange County and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Municipal Water District of Orange County, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



KERRY J. WORGAN, MAAA, FSA, FCIA
Supervising Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the Miscellaneous Plan of the Municipal Water District of Orange County of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the Miscellaneous Plan of the Municipal Water District of Orange County of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The agency should contact the plan actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by the agency.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the guidance of Actuarial Standard of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 5.8% and 7.8%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current post-retirement mortality assumptions adopted in 2021.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Contributions

Required Employer Contributions		Fiscal Year
		2024-25
Employer Normal Cost Rate		12.52%
<i>Plus</i>		
Required Payment on Amortization Bases ¹		\$298,193
<i>Paid either as</i>		
1) Monthly Payment		\$24,849.42
<i>Or</i>		
2) Annual Prepayment Option*		\$288,544
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>		
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>		

	Fiscal Year	Fiscal Year
	2023-24	2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	18.76%	18.81%
Surcharge for Class 1 Benefits ²		
a) FAC 1	0.63%	0.64%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	19.39%	19.45%
Offset Due to Employee Contributions	6.92%	6.93%
Employer Normal Cost Rate	12.47%	12.52%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

² Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges.

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$298,193. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$293,886	\$298,193	\$0	\$298,193	\$592,079

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$293,886	\$298,193	\$78,320	\$376,513	\$670,399
15 years	\$293,886	\$298,193	\$141,042	\$439,235	\$733,121
10 years	\$293,886	\$298,193	\$273,335	\$571,528	\$865,414
5 years	\$293,886	\$298,193	\$684,656	\$982,849	\$1,276,735

¹ The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$20,657,967	\$21,827,729
2. Entry Age Accrued Liability	16,610,967	17,947,370
3. Market Value of Assets (MVA)	14,899,590	13,865,833
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	\$1,711,377	\$4,081,537
5. Funded Ratio [(3) / (2)]	89.7%	77.3%

A funded ratio of 100% (UAL of \$0) implies that the funding of the plan is on target and that future contributions equal to the normal cost of the active plan members will be sufficient to fully fund all retirement benefits if future experience matches the actuarial assumptions. A funded ratio of less than 100% (positive UAL) implies that in addition to normal costs, payments toward the UAL will be required. Plans with a funded ratio greater than 100% have a negative UAL (or surplus) but are required under current law to continue contributing the normal cost in most cases, preserving the surplus for future contingencies.

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$20,494,714	\$17,947,370	\$15,858,231
2. Market Value of Assets (MVA)	13,865,833	13,865,833	13,865,833
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$6,628,881	\$4,081,537	\$1,992,398
4. Funded Ratio [(2) / (1)]	67.7%	77.3%	87.4%

The "Risk Analysis" section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. In particular, the investment return beginning with FY 2022-23 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 4054 Results					
Normal Cost %	12.52%	12.5%	12.5%	12.5%	12.5%	12.5%
UAL Payment	\$298,193	\$330,000	\$361,000	\$385,000	\$446,000	\$454,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 4054. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRAs members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	\$4,487,133	\$4,399,390
Estimated Employer Normal Cost	\$478,135	\$455,383
Required Payment on Amortization Bases	\$231,436	\$305,592
Estimated Total Employer Contributions	\$709,571	\$760,975
Estimated Total Employer Contribution Rate (illustrative only)	15.81%	17.30%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$8,713,836
Transferred Members	1,410,345
Separated Members	831,817
Members and Beneficiaries Receiving Payments	<u>6,991,372</u>
Total	\$17,947,370

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1. Plan's Accrued Liability	\$17,947,370
2. Projected UAL Balance at 6/30/2022	1,652,461
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	1,652,461
5. Pool's Accrued Liability ¹	22,021,735,002
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	2,453,954,297
7. Pool's 2021-22 Investment (Gain)/Loss ¹	2,614,071,182
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	309,490,972
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	2,176,846
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	252,230
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	2,429,076
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	2,176,846

¹ Does not include plans that transferred to Pool on the valuation date.

Development of the Plan's Share of Pool's Market Value of Assets

18. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$4,081,537
19. Plan's Share of Pool's MVA: $(1) - (18)$	\$13,865,833

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2022.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2024-25.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level	Ramp Shape	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	21	982,957	70,697	976,737	70,894	969,890	72,879
Non-Investment (Gain)/Loss	6/30/13	100%	Up/Down	2.80%	21	(9,450)	(680)	(9,390)	(682)	(9,324)	(701)
Share of Pre-2013 Pool UAL	6/30/13	No Ramp				528,093	47,724	514,683	48,120	499,952	49,467
Assumption Change	6/30/14	100%	Up/Down	2.80%	12	457,730	49,055	438,160	49,599	416,697	50,988
Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	22	(815,177)	(56,940)	(811,765)	(57,050)	(808,007)	(58,647)
Non-Investment (Gain)/Loss	6/30/14	100%	Up/Down	2.80%	22	864	60	861	61	857	62
Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	23	513,992	34,935	512,840	34,973	511,571	35,952
Non-Investment (Gain)/Loss	6/30/15	100%	Up/Down	2.80%	23	(40,299)	(2,739)	(40,209)	(2,742)	(40,110)	(2,819)
Assumption Change	6/30/16	100%	Up/Down	2.80%	14	207,080	19,729	200,773	19,910	193,850	20,468
Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	24	696,800	46,166	696,473	46,178	696,111	47,471
Non-Investment (Gain)/Loss	6/30/16	100%	Up/Down	2.80%	24	(82,192)	(5,446)	(82,153)	(5,447)	(82,110)	(5,600)
Assumption Change	6/30/17	100%	Up/Down	2.80%	15	266,027	19,613	263,848	24,719	256,244	25,412
Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	25	(387,794)	(20,322)	(393,162)	(25,390)	(393,658)	(26,101)
Non-Investment (Gain)/Loss	6/30/17	100%	Up/Down	2.80%	25	(18,904)	(991)	(19,165)	(1,238)	(19,189)	(1,272)
Assumption Change	6/30/18	100%	Up/Down	2.80%	16	441,779	24,098	446,916	32,361	443,863	41,585
Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	26	(127,670)	(5,027)	(131,156)	(6,692)	(133,159)	(8,599)
Method Change	6/30/18	100%	Up/Down	2.80%	16	117,045	6,385	118,406	8,574	117,597	11,017
Non-Investment (Gain)/Loss	6/30/18	100%	Up/Down	2.80%	26	59,681	2,350	61,311	3,128	62,248	4,020
Investment (Gain)/Loss	6/30/19	80%	Up Only	0.00%	17	62,254	2,604	63,796	3,836	64,170	5,114
Non-Investment (Gain)/Loss	6/30/19	No Ramp			17	57,744	5,412	56,078	5,317	54,396	5,317

Schedule of Amortization Bases (continued)

Reason for Base	Date Est.	Ramp Level	Ramp Shape	Escala- tion Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Investment (Gain)/Loss	6/30/20	60%	Up Only	0.00%	18	305,273	6,687	319,121	13,118	327,265	19,677
Non-Investment (Gain)/Loss	6/30/20	No Ramp	No Ramp	0.00%	18	51,924	4,747	50,549	4,662	49,168	4,662
Assumption Change	6/30/21	No Ramp	No Ramp	0.00%	19	71,669	(20,026)	97,238	8,744	94,814	8,744
Net Investment (Gain)	6/30/21	40%	Up Only	0.00%	19	(1,595,548)	0	(1,704,045)	(36,628)	(1,782,067)	(73,256)
Non-Investment (Gain)/Loss	6/30/21	No Ramp	No Ramp	0.00%	19	(71,729)	0	(76,607)	(6,889)	(74,697)	(6,889)
Risk Mitigation	6/30/21	No Ramp	No Ramp	0.00%	0	442,901	(20,346)	494,045	510,566	0	0
Risk Mitigation Offset	6/30/21	No Ramp	No Ramp	0.00%	0	(462,589)	0	(494,045)	(510,566)	0	0
Investment (Gain)/Loss	6/30/22	20%	Up Only	0.00%	20	2,176,846	0	2,324,872	0	2,482,963	53,371
Non-Investment (Gain)/Loss	6/30/22	No Ramp	No Ramp	0.00%	20	252,230	0	269,382	0	287,700	25,871
Total						4,081,537	207,745	4,144,392	231,436	4,187,035	298,193

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pool's Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a fresh start, please contact the plan actuary.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over an appropriate period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization</u>		<u>Alternate Schedules</u>			
	<u>Schedule</u>		15 Year Amortization		10 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2024	4,187,035	298,193	4,187,035	439,235	4,187,035	571,528
6/30/2025	4,163,589	329,930	4,017,830	439,235	3,881,113	571,528
6/30/2026	4,105,749	360,590	3,837,119	439,235	3,554,388	571,528
6/30/2027	4,012,292	384,895	3,644,120	439,235	3,205,446	571,528
6/30/2028	3,887,360	446,038	3,437,997	439,236	2,832,776	571,528
6/30/2029	3,690,748	454,035	3,217,856	439,235	2,434,764	571,527
6/30/2030	3,472,502	462,245	2,982,747	439,236	2,009,689	571,528
6/30/2031	3,230,928	470,694	2,731,649	439,235	1,555,707	571,527
6/30/2032	2,964,197	466,655	2,463,478	439,236	1,070,856	571,528
6/30/2033	2,683,500	462,152	2,177,070	439,235	553,034	571,528
6/30/2034	2,388,373	451,759	1,871,187	439,236		
6/30/2035	2,083,916	433,660	1,544,503	439,235		
6/30/2036	1,777,460	399,669	1,195,606	439,235		
6/30/2037	1,485,294	307,327	822,984	439,236		
6/30/2038	1,268,690	282,442	425,022	439,235		
6/30/2039	1,063,075	262,246				
6/30/2040	864,347	248,726				
6/30/2041	666,080	216,400				
6/30/2042	487,738	176,364				
6/30/2043	338,643	343,668				
6/30/2044	6,510	6,728				
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		7,264,416		6,588,530		5,715,278
Interest Paid		3,077,381		2,401,495		1,528,243
Estimated Savings				675,886		1,549,138

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	8.880%	\$64,364	N/A
2017 - 18	8.921%	83,180	N/A
2018 - 19	9.409%	112,790	N/A
2019 - 20	10.221%	144,402	0
2020 - 21	11.031%	170,837	0
2021 - 22	10.88%	208,891	0
2022 - 23	10.87%	248,117	0
2023 - 24	12.47%	231,436	
2024 - 25	12.52%	298,193	

Funding History

The table below shows the recent history of the actuarial accrued liability, share of the pool's market value of assets, unfunded accrued liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2013	\$7,189,485	\$5,842,865	\$1,346,620	81.3%	\$2,378,088
06/30/2014	8,295,329	7,150,851	1,144,478	86.2%	2,274,325
06/30/2015	8,587,815	7,077,429	1,510,386	82.4%	2,090,151
06/30/2016	9,638,398	7,445,211	2,193,187	77.2%	2,170,501
06/30/2017	10,883,341	8,720,332	2,163,009	80.1%	2,346,800
06/30/2018	12,474,635	9,849,234	2,625,401	79.0%	2,352,803
06/30/2019	13,422,370	10,589,127	2,833,243	78.9%	2,481,377
06/30/2020	14,522,790	11,309,200	3,213,590	77.9%	2,660,274
06/30/2021	16,610,967	14,899,590	1,711,377	89.7%	2,565,921
06/30/2022	17,947,370	13,865,833	4,081,537	77.3%	2,528,106

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projections below reflect the impact of the CalPERS Funding Risk Mitigation policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2042.

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	12.5%	12.5%	12.5%	12.5%	12.5%
UAL Contribution	\$343,000	\$399,000	\$463,000	\$578,000	\$653,000
10.8% (95th percentile)					
Normal Cost Rate	12.8%	13.0%	13.3%	13.5%	13.8%
UAL Contribution	\$318,000	\$325,000	\$313,000	\$322,000	\$261,000

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 3.0% or greater than 10.8% over a 20-year period, the likelihood of a single investment return less than 3.0% or greater than 10.8% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -5.2% or less and a 2.5% probability that the annual return will be -17.2% or less. These returns represent one and two standard deviations below the expected return of 6.8%.

The following table shows the effect of a one or two standard deviation investment loss in FY 2022-23 on the FY 2025-26 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2025-26.

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	12.52%	12.5%
UAL Contribution	\$298,193	\$411,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	12.52%	12.5%
UAL Contribution	\$298,193	\$371,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.5% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2022 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	24.48%	19.45%	15.62%
b) Accrued Liability	\$20,494,714	\$17,947,370	\$15,858,231
c) Market Value of Assets	\$13,865,833	\$13,865,833	\$13,865,833
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$6,628,881	\$4,081,537	\$1,992,398
e) Funded Ratio	67.7%	77.3%	87.4%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	20.42%	19.45%	17.74%
b) Accrued Liability	\$18,581,780	\$17,947,370	\$16,550,906
c) Market Value of Assets	\$13,865,833	\$13,865,833	\$13,865,833
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$4,715,947	\$4,081,537	\$2,685,073
e) Funded Ratio	74.6%	77.3%	83.8%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2022 plan costs and funded status under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2021. This type of analysis highlights the impact on the plan of a change in the mortality assumption.

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	19.78%	19.45%	19.14%
b) Accrued Liability	\$18,338,980	\$17,947,370	\$17,587,932
c) Market Value of Assets	\$13,865,833	\$13,865,833	\$13,865,833
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$4,473,147	\$4,081,537	\$3,722,099
e) Funded Ratio	75.6%	77.3%	78.8%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the pension plan is impacted by investment return volatility, other economic variables, and changes in longevity or other demographic assumptions.

Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$6,314,070	\$6,991,372
2. Total Accrued Liability	16,610,967	17,947,370
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.38	0.39

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the support ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures and members retire, the ratio declines. A mature plan will often have a ratio near or below one.

To calculate the support ratio for the rate plan, retirees and beneficiaries receiving a continuance are each counted as one, even though they may have only worked a portion of their careers as an active member of this rate plan. For this reason, the support ratio, while intuitive, maybe less informative than the ratio of retiree liability to total accrued liability above.

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2021, was 0.78 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	19	18
2. Number of Retirees	15	16
3. Support Ratio [(1) / (2)]	1.27	1.13

Maturity Measures (continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have a higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with LVR of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility, since the AVR, described above, will tend to move closer to the LVR as the funded ratio approaches 100%.

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$14,899,590	\$13,865,833
2. Payroll	2,565,921	2,528,106
3. Asset Volatility Ratio (AVR) [(1) / (2)]	5.8	5.5
4. Accrued Liability	\$16,610,967	\$17,947,370
5. Liability Volatility Ratio (LVR) [(4) / (2)]	6.5	7.1

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.30	2.33	3.7	4.6
06/30/2018	0.31	2.00	4.2	5.3
06/30/2019	0.28	2.00	4.3	5.4
06/30/2020	0.29	1.82	4.3	5.5
06/30/2021	0.38	1.27	5.8	6.5
06/30/2022	0.39	1.13	5.5	7.1

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%			Discount Rate: 4.50% Price Inflation: 2.75%			
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$13,865,833	\$37,628,089	36.8%	\$23,762,256	\$23,748,583	58.4%	\$9,882,750

¹ The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. Before beginning this process, please consult with the plan actuary.

Participant Data

The table below shows a summary of the plan's member data upon which this valuation is based:

	June 30, 2021	June 30, 2022
Active Members		
Counts	19	18
Average Attained Age	51.7	52.1
Average Entry Age to Rate Plan	40.2	39.8
Average Years of Credited Service	11.7	12.5
Average Annual Covered Pay	\$135,048	\$140,450
Annual Covered Payroll	\$2,565,921	\$2,528,106
Present Value of Future Payroll	\$20,058,658	\$19,270,751
Transferred Members	11	11
Separated Members	15	15
Retired Members and Beneficiaries*		
Counts	15	16
Average Annual Benefits	\$35,983	\$37,973
Total Annual Benefits	\$539,752	\$607,563

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- One Year Final Compensation (FAC 1)

Plan’s Major Benefit Options

Shown below is a summary of the major optional benefits for which the agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

Member Category	Benefit Group		
	Misc	Misc	Misc
Demographics			
Actives			
Transfers/Separated			
Receiving	Yes	No	
	Yes	No	
	Yes	Yes	
Benefit Provision			
Benefit Formula	2% @ 55		
Social Security Coverage	No		
Full/Modified	Full		
Employee Contribution Rate	7.00%		
Final Average Compensation Period	One Year		
Sick Leave Credit	Yes		
Non-Industrial Disability	Standard		
Industrial Disability	No		
Pre-Retirement Death Benefits			
Optional Settlement 2	Yes		
1959 Survivor Benefit Level	Level 4		
Special	No		
Alternate (firefighters)	No		
Post-Retirement Death Benefits			
Lump Sum	\$2000	\$2000	
Survivor Allowance (PRSA)	No	No	
COLA	2%	2%	

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

**Section 2 may be found on the
CalPERS website (www.calpers.ca.gov)
in the Forms and Publications section**



**California Public Employees' Retirement System
Actuarial Office**

400 Q Street, Sacramento, CA 95811 | Phone: (916) 795-3000 | Fax: (916) 795-2744
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July 2023

**PEPRA Miscellaneous Plan of the Municipal Water District of Orange County (CalPERS ID: 6497938438)
Annual Valuation Report as of June 30, 2022**

Dear Employer,

Attached to this letter is the June 30, 2022 actuarial valuation report for the rate plan noted above. **Provided in this report is the determination of the minimum required employer contributions for fiscal year (FY) 2024-25.** In addition, the report contains important information regarding the current financial status of the plan as well as projections and risk measures to aid in planning for the future.

Because this plan is in a risk pool, the following valuation report has been separated into two sections:

- Section 1 contains specific information for the plan including the development of the current and projected employer contributions, and
- Section 2 contains the Risk Pool Actuarial Valuation appropriate to the plan as of June 30, 2022.

Section 2 can be found on the CalPERS website (www.calpers.ca.gov). From the home page, go to "Forms & Publications" and select "View All". In the search box, enter "Risk Pool" and from the results list download the Miscellaneous Risk Pool Actuarial Valuation Report for June 30, 2022.

Actuarial valuations are based on assumptions regarding future plan experience including investment return and payroll growth, eligibility for the types of benefits provided, and longevity among retirees. The CalPERS Board of Administration (board) adopts these assumptions after considering the advice of CalPERS actuarial and investment teams and other professionals. Each actuarial valuation reflects all prior differences between actual and assumed experience and adjusts the contribution requirements as needed. This valuation is based on an investment return assumption of 6.8%, which was adopted by the board in November 2021. Other assumptions used in this report are those recommended in the CalPERS Experience Study and Review of Actuarial Assumptions report from November 2021.

Required Contributions

The table below shows the minimum required employer contributions and the PEPRA member contribution rate for FY 2024-25 along with estimates of the required contributions for FY 2025-26. Employee contributions other than cost sharing (whether paid by the employer or the employee) are in addition to the results shown below. **The required employer contributions in this report do not reflect any cost sharing arrangement between the agency and the employees.**

Fiscal Year	Employer Normal Cost Rate	Employer Amortization of Unfunded Accrued Liability	PEPRA Member Contribution Rate
2024-25	7.87%	\$7,399	7.75%
<i>Projected Results</i>			
2025-26	7.9%	\$12,000	TBD

The actual investment return for FY 2022-23 was not known at the time this report was prepared. The projections above assume the investment return for that year would be 6.8%. ***To the extent the actual investment return for FY 2022-23 differs from 6.8%, the actual contribution requirements for FY 2025-26 will differ from those shown above.*** For additional details regarding the assumptions and methods used for these projections, please refer to the "Projected Employer Contributions" in the "Highlights and Executive Summary" section. This section also contains projected required contributions through FY 2029-30.

Changes from Previous Year's Valuations

There are no significant changes in actuarial assumptions or policies in the 2022 actuarial valuation. There may be changes specific to the plan such as contract amendments and funding changes.

Further descriptions of general changes are included in "Highlights and Executive Summary" and in Appendix A of the Section 2 report in "Actuarial Methods and Assumptions." The effects of any changes on the required contributions are included in "Reconciliation of Required Employer Contributions," also in the Section 2 report.

Questions

A CalPERS actuary is available to answer questions about this report. Other questions may be directed to the Customer Contact Center at (888)-CalPERS or (888-225-7377).

Sincerely,



SCOTT TERANDO, ASA, EA, MAAA, FCA, CFA
Chief Actuary, CalPERS



RANDALL DZIUBEK, ASA, MAAA
Deputy Chief Actuary, Valuation Services, CalPERS



**Actuarial Valuation
as of June 30, 2022**

**for the
PEPRA Miscellaneous Plan
of the
Municipal Water District of Orange County
(CalPERS ID: 6497938438)**

**Required Contributions
for Fiscal Year
July 1, 2024 - June 30, 2025**

Table of Contents

Section 1 – Plan Specific Information

Section 2 – Risk Pool Actuarial Valuation Information

Section 1

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

**Plan Specific Information
for the
PEPRA Miscellaneous Plan
of the
Municipal Water District of Orange County**

**(CalPERS ID: 6497938438)
(Rate Plan ID: 26684)**

Table of Contents

Actuarial Certification	1
Highlights and Executive Summary	
Introduction	3
Purpose of Section 1	3
Required Contributions	4
Additional Discretionary Employer Contributions	5
Funded Status – Funding Policy Basis	6
Projected Employer Contributions	7
Other Pooled Miscellaneous Risk Pool Rate Plans	8
Cost	9
Changes Since the Prior Year's Valuation	10
Subsequent Events	10
Assets and Liabilities	
Breakdown of Entry Age Accrued Liability	12
Allocation of Plan's Share of Pool's Experience/Assumption Change	12
Development of Plan's Share of Pool's Market Value of Assets	12
Schedule of Amortization Bases	13
Amortization Schedule and Alternatives	14
Employer Contribution History	16
Funding History	16
Risk Analysis	
Future Investment Return Scenarios	18
Discount Rate Sensitivity	19
Mortality Rate Sensitivity	19
Maturity Measures	20
Maturity Measures History	21
Funded Status – Termination Basis	22
Participant Data	23
List of Class 1 Benefit Provisions	23
Plan's Major Benefit Options	24
PEPRA Member Contribution Rates	25

Actuarial Certification

To the best of our knowledge, this report, comprised of Sections 1 and 2, is complete and accurate and contains sufficient information to disclose, fully and fairly, the funded condition of the PEPRA Miscellaneous Plan of the Municipal Water District of Orange County and satisfies the actuarial valuation requirements of Government Code section 7504. This valuation is based on the member and financial data as of June 30, 2022 provided by the various CalPERS databases and the benefits under this plan with CalPERS as of the date this report was produced. Section 1 of this report is based on the member and financial data for Municipal Water District of Orange County, while Section 2 is based on the corresponding information for all agencies participating in the Miscellaneous Risk Pool to which the plan belongs.

As set forth in Section 2 of this report, the pool actuaries have certified that, in their opinion, the valuation of the Miscellaneous Risk Pool has been performed in accordance with generally accepted actuarial principles, in accordance with standards of practice prescribed by the Actuarial Standards Board, and that the assumptions and methods are internally consistent and reasonable for the risk pool as of the date of this valuation and as prescribed by the CalPERS Board of Administration according to provisions set forth in the California Public Employees' Retirement Law.

Having relied upon the information set forth in Section 2 of this report and based on the census and benefit provision information for the rate plan, it is my opinion as the plan actuary that the Unfunded Accrued Liability amortization bases as of June 30, 2022 and employer contribution as of July 1, 2024 have been properly and accurately determined in accordance with the principles and standards stated above.

The undersigned is an actuary who satisfies the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* with regard to pensions.



KERRY J. WORGAN, MAAA, FSA, FCIA
Supervising Actuary, CalPERS

Highlights and Executive Summary

- **Introduction**
- **Purpose of Section 1**
- **Required Contributions**
- **Additional Discretionary Employer Contributions**
- **Funded Status – Funding Policy Basis**
- **Projected Employer Contributions**
- **Other Pooled Miscellaneous Risk Pool Rate Plans**
- **Cost**
- **Changes Since the Prior Year's Valuation**
- **Subsequent Events**

Introduction

This report presents the results of the June 30, 2022 actuarial valuation of the PEPRA Miscellaneous Plan of the Municipal Water District of Orange County of the California Public Employees' Retirement System (CalPERS). This actuarial valuation sets the minimum required contributions for fiscal year (FY) 2024-25.

Purpose of Section 1

This Section 1 report for the PEPRA Miscellaneous Plan of the Municipal Water District of Orange County of CalPERS was prepared by the Actuarial Office using data as of June 30, 2022. The purpose of the valuation is to:

- Set forth the assets and accrued liabilities of this rate plan as of June 30, 2022;
- Determine the minimum required employer contributions for this rate plan for FY July 1, 2024 through June 30, 2025;
- Determine the required member contribution rate for FY July 1, 2024 through June 30, 2025 for employees subject to the California Public Employees' Pension Reform Act of 2013 (PEPRA); and
- Provide actuarial information as of June 30, 2022 to the CalPERS Board of Administration (board) and other interested parties.

The pension funding information presented in this report should not be used in financial reports subject to Governmental Accounting Standards Board (GASB) Statement No. 68 for a Cost Sharing Employer Defined Benefit Pension Plan. A separate accounting valuation report for such purposes is available on the CalPERS website (www.calpers.ca.gov).

The measurements shown in this actuarial valuation may not be applicable for other purposes. The agency should contact the plan actuary before disseminating any portion of this report for any reason that is not explicitly described above.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; changes in actuarial policies; changes in plan provisions or applicable law; and differences between the required contributions determined by the valuation and the actual contributions made by the agency.

Assessment and Disclosure of Risk

This report includes the following risk disclosures consistent with the guidance of Actuarial Standard of Practice No. 51 and recommended by the California Actuarial Advisory Panel (CAAP) in the Model Disclosure Elements document:

- A "Scenario Test," projecting future results under different investment income returns.
- A "Sensitivity Analysis," showing the impact on current valuation results using alternative discount rates of 5.8% and 7.8%.
- A "Sensitivity Analysis," showing the impact on current valuation results assuming rates of mortality are 10% lower or 10% higher than our current post-retirement mortality assumptions adopted in 2021.
- Plan maturity measures indicating how sensitive a plan may be to the risks noted above.

Required Contributions

	Fiscal Year 2024-25
Required Employer Contributions	
Employer Normal Cost Rate	7.87%
<i>Plus</i>	
Required Payment on Amortization Bases ¹	\$7,399
<i>Paid either as</i>	
1) Monthly Payment	\$616.58
<i>Or</i>	
2) Annual Prepayment Option*	\$7,160
Required PEPRA Member Contribution Rate	7.75%
<i>The total minimum required employer contribution is the sum of the Plan's Employer Normal Cost Rate (expressed as a percentage of payroll and paid as payroll is reported) plus the Employer Unfunded Accrued Liability (UAL) Contribution Amount (billed monthly (1) or prepaid annually (2) in dollars).</i>	
<i>* Only the UAL portion of the employer contribution can be prepaid (which must be received in full no later than July 31).</i>	
<i>For additional detail regarding the determination of the required contribution rate for PEPRA members, see "PEPRA Member Contribution Rates" section.</i>	

	Fiscal Year 2023-24	Fiscal Year 2024-25
Development of Normal Cost as a Percentage of Payroll		
Base Total Normal Cost for Formula	15.43%	15.62%
Surcharge for Class 1 Benefits ²		
None	0.00%	0.00%
Phase out of Normal Cost Difference ³	0.00%	0.00%
Plan's Total Normal Cost	15.43%	15.62%
Offset Due to Employee Contributions	7.75%	7.75%
Employer Normal Cost Rate	7.68%	7.87%

¹ The required payment on amortization bases does not take into account any additional discretionary payment made after April 28, 2023.

² Section 2 of this report contains a list of Class 1 benefits and corresponding surcharges.

³ When a rate plan joins the pool, the difference in normal cost between the pool and the rate plan is phased out over a five-year period in accordance with the CalPERS contribution allocation policy.

Additional Discretionary Employer Contributions

The minimum required employer contribution towards the Unfunded Accrued Liability (UAL) for this rate plan for FY 2024-25 is \$7,399. CalPERS allows agencies to make additional discretionary payments (ADPs) at any time and in any amount. These optional payments serve to reduce the UAL and future required contributions and can result in significant long-term savings. Agencies can also use ADPs to stabilize annual contributions as a fixed dollar amount, percent of payroll or percent of revenue.

Provided below are select ADP options for consideration. Making such an ADP during FY 2024-25 does not require an ADP be made in any future year, nor does it change the remaining amortization period of any portion of unfunded liability. For information on permanent changes to amortization periods, see the "Amortization Schedule and Alternatives" section of the report.

Agencies considering making an ADP should contact CalPERS for additional information.

Minimum Required Employer Contribution for Fiscal Year 2024-25

Estimated Normal Cost	Minimum UAL Payment	ADP	Total UAL Contribution	Estimated Total Contribution
\$161,497	\$7,399	\$0	\$7,399	\$168,896

The minimum required contribution above is less than interest on the UAL. With no ADP the UAL is projected to increase over the following year. If the minimum UAL payment were split between interest and principal, the principal portion would be negative. This situation is referred to as **negative amortization**. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY **2027-28**, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labeled "Current Amortization Schedule").

Fiscal Year 2024-25 Employer Contribution Necessary to Avoid Negative Amortization

Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
\$161,497	\$7,399	\$9,637	\$17,036	\$178,533

Alternative Fiscal Year 2024-25 Employer Contributions for Greater UAL Reduction

Funding Horizon	Estimated Normal Cost	Minimum UAL Payment	ADP ¹	Total UAL Contribution	Estimated Total Contribution
20 years	\$161,497	\$7,399	\$15,883	\$23,282	\$184,779
15 years	\$161,497	\$7,399	\$19,762	\$27,161	\$188,658
10 years	\$161,497	\$7,399	\$27,943	\$35,342	\$196,839
5 years	\$161,497	\$7,399	\$53,378	\$60,777	\$222,274

¹ The ADP amounts are assumed to be made in the middle of the fiscal year. A payment made earlier or later in the fiscal year would have to be less or more than the amount shown to have the same effect on the UAL amortization.

Note that the calculations above are based on the projected UAL as of June 30, 2024 as determined in the June 30, 2022 actuarial valuation. New unfunded liabilities can emerge in future years due to assumption or method changes, changes in plan provisions, and actuarial experience different than assumed. Making an ADP illustrated above for the indicated number of years will not result in a plan that is exactly 100% funded in the indicated number of years. Valuation results will vary from one year to the next and can diverge significantly from projections over a period of several years.

Funded Status – Funding Policy Basis

The table below provides information on the current funded status of the plan under the funding policy. The funded status for this purpose is based on the market value of assets relative to the funding target produced by the entry age actuarial cost method and actuarial assumptions adopted by the board. The actuarial cost method allocates the total expected cost of a member's projected benefit (**Present Value of Benefits**) to individual years of service (the **Normal Cost**). The value of the projected benefit that is not allocated to future service is referred to as the **Accrued Liability** and is the plan's funding target on the valuation date. The **Unfunded Accrued Liability** (UAL) equals the funding target minus the assets. The UAL is an absolute measure of funded status and can be viewed as employer debt. The **funded ratio** equals the assets divided by the funding target. The funded ratio is a relative measure of the funded status and allows for comparisons between plans of different sizes.

	June 30, 2021	June 30, 2022
1. Present Value of Benefits	\$3,876,749	\$4,107,719
2. Entry Age Accrued Liability	1,389,347	1,671,894
3. Market Value of Assets (MVA)	1,445,130	1,461,199
4. Unfunded Accrued Liability (UAL) [(2) – (3)]	(\$55,783)	\$210,695
5. Funded Ratio [(3) / (2)]	104.0%	87.4%

A funded ratio of 100% (UAL of \$0) implies that the funding of the plan is on target and that future contributions equal to the normal cost of the active plan members will be sufficient to fully fund all retirement benefits if future experience matches the actuarial assumptions. A funded ratio of less than 100% (positive UAL) implies that in addition to normal costs, payments toward the UAL will be required. Plans with a funded ratio greater than 100% have a negative UAL (or surplus) but are required under current law to continue contributing the normal cost in most cases, preserving the surplus for future contingencies.

Calculations for the funding target reflect the expected long-term investment return of 6.8%. If it were known on the valuation date that future investment returns will average something greater/less than the expected return, calculated normal costs and accrued liabilities provided in this report would be less/greater than the results shown. Therefore, for example, if actual average future returns are less than the expected return, calculated normal costs and UAL contributions will not be sufficient to fully fund all retirement benefits. Under this scenario, required future normal cost contributions will need to increase from those provided in this report, and the plan will develop unfunded liabilities that will also add to required future contributions. For illustrative purposes, funded statuses based on a 1% lower and higher average future investment return (discount rate) are as follows:

	1% Lower Average Return	Current Assumption	1% Higher Average Return
Discount Rate	5.8%	6.8%	7.8%
1. Entry Age Accrued Liability	\$2,017,714	\$1,671,894	\$1,400,705
2. Market Value of Assets (MVA)	1,461,199	1,461,199	1,461,199
3. Unfunded Accrued Liability (UAL) [(1) – (2)]	\$556,515	\$210,695	(\$60,494)
4. Funded Ratio [(2) / (1)]	72.4%	87.4%	104.3%

The "Risk Analysis" section of the report provides additional information regarding the sensitivity of valuation results to the expected investment return and other factors. Also provided in that section are measures of funded status that are appropriate for assessing the sufficiency of plan assets to cover estimated termination liabilities.

Projected Employer Contributions

The table below shows the required and projected employer contributions (before cost sharing) for the next six fiscal years. The projection assumes that all actuarial assumptions will be realized and that no further changes to assumptions, contributions, benefits, or funding will occur during the projection period. In particular, the investment return beginning with FY 2022-23 is assumed to be 6.80% per year, net of investment and administrative expenses. Future contribution requirements may differ significantly from those shown below. The actual long-term cost of the plan will depend on the actual benefits and expenses paid and the actual investment experience of the fund.

	Required Contribution	Projected Future Employer Contributions (Assumes 6.80% Return for Fiscal Year 2022-23 and Beyond)				
Fiscal Year	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
	Rate Plan 26684 Results					
Normal Cost %	7.87%	7.9%	7.9%	7.9%	7.9%	7.9%
UAL Payment	\$7,399	\$12,000	\$17,000	\$22,000	\$27,000	\$27,000

For ongoing plans, investment gains and losses are amortized using a 5-year ramp up. For more information, please see "Amortization of the Unfunded Actuarial Accrued Liability" under "Actuarial Methods" in Appendix A of the Section 2 Report. This method phases in the impact of the change in UAL over a 5-year period in order to reduce employer cost volatility from year to year. As a result of this methodology, dramatic changes in the required employer contributions in any one year are less likely. However, required contributions can change gradually and significantly over the next five years. In years when there is a large investment loss, the relatively small amortization payments during the ramp up period could result in contributions that are less than interest on the UAL (i.e. negative amortization) while the contribution impact of the increase in the UAL is phased in.

The required contribution for FY 2024-25 is less than interest on the UAL, a situation referred to as **negative amortization**, as explained in the "Additional Discretionary Employer Contributions" section earlier in this report. If only the minimum required contribution is made, contributions are not expected to exceed interest on the UAL until FY 2027-28, as shown in the "Amortization Schedule and Alternatives" section of the report (see columns labelled "Current Amortization Schedule").

For projected contributions under alternate investment return scenarios, please see the "Future Investment Return Scenarios" in the "Risk Analysis" section. Our online pension plan projection tool, Pension Outlook, is available in the Employers section of the CalPERS website. Pension Outlook can help plan and budget pension costs under various scenarios.

Other Pooled Miscellaneous Risk Pool Rate Plans

All of the results presented in this Section 1 report, except those shown on this page, correspond to rate plan 26684. In many cases, employers have additional rate plans within the same risk pool. For cost analysis and budgeting it is useful to consider contributions for these rate plans as a whole rather than individually. The estimated contribution amounts and rates for all of the employer's rate plans in the Miscellaneous Risk Pool are shown below and assume that the total employer payroll within the Miscellaneous Risk Pool will grow according to the overall payroll growth assumption of 2.80% per year for three years. In a refinement since the prior year's report, Classic members who are projected to terminate employment are assumed to be replaced by PEPRAs members.

	Fiscal Year 2023-24	Fiscal Year 2024-25
Estimated Combined Employer Contributions for all Pooled Miscellaneous Rate Plans		
Projected Payroll for the Contribution Year	\$4,487,133	\$4,399,390
Estimated Employer Normal Cost	\$478,135	\$455,383
Required Payment on Amortization Bases	\$231,436	\$305,592
Estimated Total Employer Contributions	\$709,571	\$760,975
Estimated Total Employer Contribution Rate (illustrative only)	15.81%	17.30%

Cost

Actuarial Determination of Plan Cost

Contributions to fund the plan are comprised of two components:

- Normal Cost, expressed as a percentage of total active payroll
- Amortization of the Unfunded Accrued Liability (UAL), expressed as a dollar amount

For fiscal years prior to 2015-16, the Amortization of UAL component was expressed as a percentage of total active payroll. Starting with FY 2015-16, the Amortization of UAL component was expressed as a dollar amount and invoiced on a monthly basis. There is an option to prepay this amount during July of each fiscal year.

The Normal Cost component is expressed as a percentage of active payroll with employer and employee contributions payable as part of the regular payroll reporting process.

The determination of both components requires complex actuarial calculations. The calculations are based on a set of actuarial assumptions which can be divided into two categories:

- Demographic assumptions (e.g., mortality rates, retirement rates, employment termination rates, disability rates)
- Economic assumptions (e.g., future investment earnings, inflation, salary growth rates)

These assumptions reflect CalPERS' best estimate of future experience of the plan and are long term in nature. We recognize that all assumptions will not be realized in any given year. For example, the investment earnings at CalPERS have averaged 6.9% over the 20 years ending June 30, 2022, yet individual fiscal year returns have ranged from -23.6% to +21.3%. In addition, CalPERS reviews all actuarial assumptions by conducting in-depth experience studies every four years, with the most recent experience study completed in 2021.

Changes Since the Prior Year's Valuation

Benefits

The standard actuarial practice at CalPERS is to recognize mandated legislative benefit changes in the first annual valuation following the effective date of the legislation. Voluntary benefit changes by plan amendment are generally included in the first valuation that is prepared after the amendment becomes effective, even if the valuation date is prior to the effective date of the amendment.

This valuation generally reflects plan amendments effective before the date of the report. Please refer to the "Plan's Major Benefit Options" in this report and Appendix B of the Section 2 Report for a summary of the plan provisions used in this valuation.

In 2022, SB 1168 increased the standard retiree lump sum death benefit from \$500 to \$2,000 for any death occurring on or after July 1, 2023. For pooled plans this is a Class 3 benefit and there is no normal cost surcharge. The impact on the unfunded liability is included in the pool's (gain)/loss.

Actuarial Methods and Assumptions

There are no significant changes to the actuarial methods or assumptions for the June 30, 2022 actuarial valuation.

Subsequent Events

This actuarial valuation report reflects fund investment return through June 30, 2022 and statutory/regulatory changes and board actions through January 2023.

During the time period between the valuation date and the publication of this report, inflation has been significantly higher than the expected inflation of 2.3% per annum. Since inflation influences cost-of-living increases for retirees and beneficiaries and active member pay increases, higher inflation is likely to put at least some upward pressure on contribution requirements and downward pressure on the funded status in the June 30, 2023 valuation. The actual impact of higher inflation on future valuation results will depend on, among other factors, how long higher inflation persists. At this time, we continue to believe the long-term inflation assumption of 2.3% is appropriate.

To the best of our knowledge, there have been no other subsequent events that could materially affect current or future certifications rendered in this report.

Assets and Liabilities

- **Breakdown of Entry Age Accrued Liability**
- **Allocation of Plan's Share of Pool's Experience/Assumption Change**
- **Development of Plan's Share of Pool's Market Value of Assets**
- **Schedule of Amortization Bases**
- **Amortization Schedule and Alternatives**
- **Employer Contribution History**
- **Funding History**

Breakdown of Entry Age Accrued Liability

Active Members	\$1,481,669
Transferred Members	121,863
Separated Members	68,362
Members and Beneficiaries Receiving Payments	0
Total	\$1,671,894

Allocation of Plan's Share of Pool's Experience/Assumption Change

It is the policy of CalPERS to ensure equity within the risk pools by allocating the pool's experience gains/losses and assumption changes in a manner that treats each employer equitably and maintains benefit security for the members of the System while minimizing substantial variations in employer contributions. The Pool's experience gains/losses and impact of assumption/method changes is allocated to the plan as follows:

1. Plan's Accrued Liability	\$1,671,894
2. Projected UAL Balance at 6/30/2022	(41,725)
3. Other UAL Adjustments (Golden Handshake, Prior Service Purchase, etc.)	0
4. Adjusted UAL Balance at 6/30/2022 for Asset Share	(41,725)
5. Pool's Accrued Liability ¹	22,021,735,002
6. Sum of Pool's Individual Plan UAL Balances at 6/30/2022 ¹	2,453,954,297
7. Pool's 2021-22 Investment (Gain)/Loss ¹	2,614,071,182
8. Pool's 2021-22 Non-Investment (Gain)/Loss ¹	309,490,972
9. Plan's Share of Pool's Investment (Gain)/Loss: $[(1) - (4)] \div [(5) - (6)] \times (7)$	228,923
10. Plan's Share of Pool's Non-Investment (Gain)/Loss: $(1) \div (5) \times (8)$	23,497
11. Plan's New (Gain)/Loss as of 6/30/2022: $(9) + (10)$	252,420
12. Increase in Pool's Accrued Liability due to Change in Assumptions ¹	0
13. Plan's Share of Pool's Change in Assumptions: $(1) \div (5) \times (12)$	0
14. Increase in Pool's Accrued Liability due to Funding Risk Mitigation ¹	0
15. Plan's Share of Pool's Change due to Funding Risk Mitigation: $(1) \div (5) \times (14)$	0
16. Offset due to Funding Risk Mitigation	0
17. Plan's Investment (Gain)/Loss: $(9) - (16)$	228,923
18. Partial Fresh Start Base: $(2) + (17)$	187,198

¹ Does not include plans that transferred to Pool on the valuation date.

Development of the Plan's Share of Pool's Market Value of Assets

19. Plan's UAL: $(2) + (3) + (11) + (13) + (15)$	\$210,695
20. Plan's Share of Pool's MVA: $(1) - (19)$	\$1,461,199

Schedule of Amortization Bases

Below is the schedule of the plan's amortization bases. Note that there is a two-year lag between the valuation date and the start of the contribution year.

- The assets, liabilities, and funded status of the plan are measured as of the valuation date: June 30, 2022.
- The required employer contributions determined by the valuation are for the fiscal year beginning two years after the valuation date: FY 2024-25.

This two-year lag is necessary due to the amount of time needed to extract and test the membership and financial data, and the need to provide public agencies with their required employer contribution well in advance of the start of the fiscal year.

The Unfunded Accrued Liability (UAL) is used to determine the employer contribution and therefore must be rolled forward two years from the valuation date to the first day of the fiscal year for which the contribution is being determined. The UAL is rolled forward each year by subtracting the expected payment on the UAL for the fiscal year and adjusting for interest. The expected payment for the first fiscal year is determined by the actuarial valuation two years ago and the contribution for the second year is from the actuarial valuation one year ago. Additional discretionary payments are reflected in the Expected Payments column in the fiscal year they were made by the agency.

Reason for Base	Date Est.	Ramp Level	Escalation Rate	Amort. Period	Balance 6/30/22	Expected Payment 2022-23	Balance 6/30/23	Expected Payment 2023-24	Balance 6/30/24	Minimum Required Payment 2024-25
Non-Investment (Gain)/Loss	6/30/22	No Ramp	0.00%	20	23,497	0	25,095	0	26,801	2,410
Partial Fresh Start	6/30/22	20% Up Only	0.00%	20	187,198	(16,843)	217,334	0	232,113	4,989
Total					210,695	(16,843)	242,429	0	258,914	7,399

The (gain)/loss bases are the plan's allocated share of the risk pool's (gain)/loss for the fiscal year as disclosed in "Allocation of Plan's Share of Pools Experience/Assumption Change" earlier in this section. These (gain)/loss bases will be amortized in accordance with the CalPERS amortization policy in effect at the time the base was established.

The partial fresh start base established June 30, 2022 is the sum of the UAL balance from the June 30, 2021 valuation (projected to June 30, 2022) and the June 30, 2022 investment loss, as shown on the previous page.

Amortization Schedule and Alternatives

The amortization schedule on the previous page(s) shows the minimum contributions required according to the CalPERS amortization policy. Many agencies have expressed a desire for a more stable pattern of payments or have indicated interest in paying off the unfunded accrued liabilities more quickly than required. As such, we have provided alternative amortization schedules to help analyze the current amortization schedule and illustrate the potential savings of accelerating unfunded liability payments.

Shown on the following page are future year amortization payments based on 1) the current amortization schedule reflecting the individual bases and remaining periods shown on the previous page, and 2) alternative "fresh start" amortization schedules using two sample periods that would both result in interest savings relative to the current amortization schedule. To initiate a fresh start, please contact the plan actuary.

The Current Amortization Schedule typically contains both positive and negative bases. Positive bases result from plan changes, assumption changes, method changes or plan experience that increase unfunded liability. Negative bases result from plan changes, assumption changes, method changes, or plan experience that decrease unfunded liability. The combination of positive and negative bases within an amortization schedule can result in unusual or problematic circumstances in future years, such as:

- When a negative payment would be required on a positive unfunded actuarial liability; or
- When the payment would completely amortize the total unfunded liability in a very short time period, and results in a large change in the employer contribution requirement.

In any year when one of the above scenarios occurs, the actuary will consider corrective action such as replacing the existing unfunded liability bases with a single "fresh start" base and amortizing it over an appropriate period.

The Current Amortization Schedule on the following page may appear to show that, based on the current amortization bases, one of the above scenarios will occur at some point in the future. It is impossible to know today whether such a scenario will in fact arise since there will be additional bases added to the amortization schedule in each future year. Should such a scenario arise in any future year, the actuary will take appropriate action based on guidelines in the CalPERS amortization policy.

Amortization Schedule and Alternatives (continued)

Date	<u>Current Amortization</u>		<u>Alternate Schedules</u>			
	<u>Schedule</u>		20 Year Amortization		15 Year Amortization	
	Balance	Payment	Balance	Payment	Balance	Payment
6/30/2024	258,914	7,399	258,914	23,282	258,914	27,161
6/30/2025	268,874	12,388	252,460	23,283	248,451	27,161
6/30/2026	274,355	17,378	245,566	23,283	237,276	27,161
6/30/2027	275,052	22,367	238,203	23,283	225,341	27,161
6/30/2028	270,640	27,356	230,339	23,282	212,595	27,161
6/30/2029	260,773	27,356	221,941	23,282	198,982	27,161
6/30/2030	250,235	27,356	212,972	23,282	184,443	27,161
6/30/2031	238,981	27,356	203,394	23,283	168,916	27,161
6/30/2032	226,961	27,356	193,163	23,282	152,333	27,161
6/30/2033	214,123	27,356	182,238	23,283	134,622	27,161
6/30/2034	200,412	27,356	170,569	23,283	115,707	27,161
6/30/2035	185,769	27,356	158,106	23,282	95,506	27,161
6/30/2036	170,130	27,356	144,797	23,283	73,931	27,160
6/30/2037	153,428	27,356	130,582	23,283	50,890	27,161
6/30/2038	135,591	27,356	115,400	23,283	26,281	27,160
6/30/2039	116,541	27,357	99,186	23,283		
6/30/2040	96,194	27,356	81,869	23,282		
6/30/2041	74,465	27,357	63,376	23,283		
6/30/2042	51,257	27,357	43,624	23,283		
6/30/2043	26,471	27,356	22,529	23,282		
6/30/2044						
6/30/2045						
6/30/2046						
6/30/2047						
6/30/2048						
6/30/2049						
Total		497,231		465,652		407,413
Interest Paid		238,317		206,738		148,499
Estimated Savings				31,579		89,818

Employer Contribution History

The table below provides a recent history of the required and discretionary employer contributions for the plan. The required amounts are based on the actuarial valuation from two years prior without subsequent adjustments, if any. Additional discretionary payments before July 1, 2019 or after April 28, 2023 are not included.

Fiscal Year	Employer Normal Cost	Unfunded Liability Payment (\$)	Additional Discretionary Payments
2016 - 17	6.555%	\$149	N/A
2017 - 18	6.533%	230	N/A
2018 - 19	6.842%	2,172	N/A
2019 - 20	6.985%	2,438	0
2020 - 21	7.732%	6,138	0
2021 - 22	7.59%	6,671	0
2022 - 23	7.47%	7,772	0
2023 - 24	7.68%	0	
2024 - 25	7.87%	7,399	

Funding History

The table below shows the recent history of the actuarial accrued liability, share of the pool's market value of assets, unfunded accrued liability, funded ratio, and annual covered payroll.

Valuation Date	Accrued Liability (AL)	Share of Pool's Market Value of Assets (MVA)	Unfunded Accrued Liability (UAL)	Funded Ratio	Annual Covered Payroll
06/30/2014	\$32,950	\$34,415	(\$1,465)	104.5%	\$219,432
06/30/2015	95,833	91,620	4,213	95.6%	447,122
06/30/2016	204,458	183,981	20,477	90.0%	601,671
06/30/2017	345,872	327,242	18,630	94.6%	883,832
06/30/2018	515,011	471,223	43,788	91.5%	940,133
06/30/2019	707,720	642,900	64,820	90.8%	989,019
06/30/2020	988,167	889,718	98,449	90.0%	1,413,501
06/30/2021	1,389,347	1,445,130	(55,783)	104.0%	1,564,455
06/30/2022	1,671,894	1,461,199	210,695	87.4%	1,521,503

Risk Analysis

- **Future Investment Return Scenarios**
- **Discount Rate Sensitivity**
- **Mortality Rate Sensitivity**
- **Maturity Measures**
- **Maturity Measures History**
- **Funded Status – Termination Basis**

Future Investment Return Scenarios

Analysis using the investment return scenarios from the Asset Liability Management process completed in 2021 was performed to determine the effects of various future investment returns on required employer contributions. The projections below reflect the impact of the CalPERS Funding Risk Mitigation policy. The projections also assume that all other actuarial assumptions will be realized and that no further changes in assumptions, contributions, benefits, or funding will occur.

The first table shows projected contribution requirements if the fund were to earn either 3.0% or 10.8% annually. These alternate investment returns were chosen because 90% of long-term average returns are expected to fall between them over the 20-year period ending June 30, 2042.

Assumed Annual Return FY 2022-23 through 2041-42	Projected Employer Contributions				
	2025-26	2026-27	2027-28	2028-29	2029-30
3.0% (5th percentile)					
Normal Cost Rate	7.9%	7.9%	7.9%	7.9%	7.9%
UAL Contribution	\$14,000	\$21,000	\$31,000	\$41,000	\$48,000
10.8% (95th percentile)					
Normal Cost Rate	8.1%	8.3%	8.5%	8.7%	8.4%
UAL Contribution	\$11,000	\$14,000	\$15,000	\$8,200	\$0

Required contributions outside of this range are also possible. In particular, whereas it is unlikely that investment returns will average less than 3.0% or greater than 10.8% over a 20-year period, the likelihood of a single investment return less than 3.0% or greater than 10.8% in any given year is much greater. The following analysis illustrates the effect of an extreme, single year investment return.

The portfolio has an expected volatility (or standard deviation) of 12.0% per year. Accordingly, in any given year there is a 16% probability that the annual return will be -5.2% or less and a 2.5% probability that the annual return will be -17.2% or less. These returns represent one and two standard deviations below the expected return of 6.8%.

The following table shows the effect of a one or two standard deviation investment loss in FY 2022-23 on the FY 2025-26 contribution requirements. Note that a single-year investment gain or loss decreases or increases the required UAL contribution amount incrementally for each of the next five years, not just one, due to the 5-year ramp in the amortization policy. However, the contribution requirements beyond the first year are also impacted by investment returns beyond the first year. Historically, significant downturns in the market are often followed by higher than average returns. Such investment gains would offset the impact of these single year negative returns in years beyond FY 2025-26.

Assumed Annual Return for Fiscal Year 2022-23	Required Employer Contributions	Projected Employer Contributions
	2024-25	2025-26
(17.2)% (2 standard deviation loss)		
Normal Cost Rate	7.87%	7.9%
UAL Contribution	\$7,399	\$21,000
(5.2)% (1 standard deviation loss)		
Normal Cost Rate	7.87%	7.9%
UAL Contribution	\$7,399	\$17,000

- Without investment gains (returns higher than 6.8%) in FY 2023-24 or later, projected contributions rates would continue to rise over the next four years due to the continued phase-in of the impact of the illustrated investment loss in FY 2022-23.
- The Pension Outlook Tool can be used to model projected contributions for these scenarios beyond FY 2025-26 as well as to model other investment return scenarios.

Discount Rate Sensitivity

The discount rate assumption is calculated as the sum of the assumed real rate of return and the assumed annual price inflation, currently 4.5% and 2.3%, respectively. Changing either the price inflation assumption or the real rate of return assumption will change the discount rate. The sensitivity of the valuation results to the discount rate assumption depends on which component of the discount rate is changed. Shown below are various valuation results as of June 30, 2022 assuming alternate discount rates by changing the two components independently. Results are shown using the current discount rate of 6.8% as well as alternate discount rates of 5.8% and 7.8%. The rates of 5.8% and 7.8% were selected since they illustrate the impact of a 1.0% increase or decrease to the 6.8% assumption.

Sensitivity to the Real Rate of Return Assumption

As of June 30, 2022	1% Lower Real Return Rate	Current Assumptions	1% Higher Real Return Rate
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	2.3%	2.3%	2.3%
Real Rate of Return	3.5%	4.5%	5.5%
a) Total Normal Cost	19.53%	15.62%	12.65%
b) Accrued Liability	\$2,017,714	\$1,671,894	\$1,400,705
c) Market Value of Assets	\$1,461,199	\$1,461,199	\$1,461,199
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$556,515	\$210,695	(\$60,494)
e) Funded Ratio	72.4%	87.4%	104.3%

Sensitivity to the Price Inflation Assumption

As of June 30, 2022	1% Lower Price Inflation	Current Assumptions	1% Higher Price Inflation
Discount Rate	5.8%	6.8%	7.8%
Price Inflation	1.3%	2.3%	3.3%
Real Rate of Return	4.5%	4.5%	4.5%
a) Total Normal Cost	16.48%	15.62%	14.20%
b) Accrued Liability	\$1,758,718	\$1,671,894	\$1,520,117
c) Market Value of Assets	\$1,461,199	\$1,461,199	\$1,461,199
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$297,519	\$210,695	\$58,918
e) Funded Ratio	83.1%	87.4%	96.1%

Mortality Rate Sensitivity

The following table looks at the change in the June 30, 2022 plan costs and funded status under two different longevity scenarios, namely assuming post-retirement rates of mortality are 10% lower or 10% higher than our current mortality assumptions adopted in 2021. This type of analysis highlights the impact on the plan of a change in the mortality assumption.

As of June 30, 2022	10% Lower Mortality Rates	Current Assumptions	10% Higher Mortality Rates
a) Total Normal Cost	15.89%	15.62%	15.37%
b) Accrued Liability	\$1,708,364	\$1,671,894	\$1,638,378
c) Market Value of Assets	\$1,461,199	\$1,461,199	\$1,461,199
d) Unfunded Liability/(Surplus) [(b) - (c)]	\$247,165	\$210,695	\$177,179
e) Funded Ratio	85.5%	87.4%	89.2%

Maturity Measures

As pension plans mature they become more sensitive to risks. Understanding plan maturity and how it affects the ability of a pension plan sponsor to tolerate risk is important in understanding how the pension plan is impacted by investment return volatility, other economic variables, and changes in longevity or other demographic assumptions.

Since it is the employer that bears the risk, it is appropriate to perform this analysis on a pension plan level considering all rate plans. The following measures are for one rate plan only. One way to look at the maturity level of CalPERS and its plans is to look at the ratio of a plan's retiree liability to its total liability. A pension plan in its infancy will have a very low ratio of retiree liability to total liability. As the plan matures, the ratio starts increasing. A mature plan will often have a ratio above 60%-65%.

Ratio of Retiree Accrued Liability to Total Accrued Liability	June 30, 2021	June 30, 2022
1. Retired Accrued Liability	\$0	\$0
2. Total Accrued Liability	1,389,347	1,671,894
3. Ratio of Retiree AL to Total AL [(1) / (2)]	0.00	0.00

Another measure of maturity level of CalPERS and its plans is to look at the ratio of actives to retirees, also called the support ratio. A pension plan in its infancy will have a very high ratio of active to retired members. As the plan matures and members retire, the ratio declines. A mature plan will often have a ratio near or below one.

To calculate the support ratio for the rate plan, retirees and beneficiaries receiving a continuance are each counted as one, even though they may have only worked a portion of their careers as an active member of this rate plan. For this reason, the support ratio, while intuitive, maybe less informative than the ratio of retiree liability to total accrued liability above.

For comparison, the support ratio for all CalPERS public agency plans as of June 30, 2021, was 0.78 and was calculated consistently with how it is for the individual rate plan. Note that to calculate the support ratio for all public agency plans, a retiree with service from more than one CalPERS agency is counted as a retiree more than once.

Support Ratio	June 30, 2021	June 30, 2022
1. Number of Actives	19	17
2. Number of Retirees	0	0
3. Support Ratio [(1) / (2)]	N/A	N/A

Maturity Measures (continued)

The actuarial calculations supplied in this communication are based on various assumptions about long-term demographic and economic behavior. Unless these assumptions (e.g., terminations, deaths, disabilities, retirements, salary growth, investment return) are exactly realized each year, there will be differences on a year-to-year basis. The year-to-year differences between actual experience and the assumptions are called actuarial gains and losses and serve to lower or raise required employer contributions from one year to the next. Therefore, employer contributions will inevitably fluctuate, especially due to the ups and downs of investment returns.

Asset Volatility Ratio

Shown in the table below is the asset volatility ratio (AVR), which is the ratio of market value of assets to payroll. Plans that have a higher AVR experience more volatile employer contributions (as a percentage of payroll) due to investment return. For example, a plan with AVR of 8 may experience twice the contribution volatility due to investment return volatility than a plan with AVR of 4. It should be noted that this ratio is a measure of the current situation. It increases over time but generally tends to stabilize as a plan matures.

Liability Volatility Ratio

Also shown in the table below is the liability volatility ratio (LVR), which is the ratio of accrued liability to payroll. Plans that have a higher LVR experience more volatile employer contributions (as a percentage of payroll) due to changes in liability. For example, a plan with LVR of 8 is expected to have twice the contribution volatility of a plan with LVR of 4. It should be noted that this ratio indicates a longer-term potential for contribution volatility, since the AVR, described above, will tend to move closer to the LVR as the funded ratio approaches 100%.

Contribution Volatility	June 30, 2021	June 30, 2022
1. Market Value of Assets	\$1,445,130	\$1,461,199
2. Payroll	1,564,455	1,521,503
3. Asset Volatility Ratio (AVR) [(1) / (2)]	0.9	1.0
4. Accrued Liability	\$1,389,347	\$1,671,894
5. Liability Volatility Ratio (LVR) [(4) / (2)]	0.9	1.1

Maturity Measures History

Valuation Date	Ratio of Retiree Accrued Liability to Total Accrued Liability	Support Ratio	Asset Volatility Ratio	Liability Volatility Ratio
06/30/2017	0.00	N/A	0.4	0.4
06/30/2018	0.00	N/A	0.5	0.5
06/30/2019	0.00	N/A	0.7	0.7
06/30/2020	0.00	N/A	0.6	0.7
06/30/2021	0.00	N/A	0.9	0.9
06/30/2022	0.00	N/A	1.0	1.1

Funded Status – Termination Basis

The funded status measured on a termination basis is an estimate of the financial position of the plan had the contract with CalPERS been terminated as of June 30, 2022. The accrued liability on a termination basis (termination liability) is calculated differently compared to the plan's ongoing funding liability. For the termination liability calculation, both compensation and service are frozen as of the valuation date and no future pay increases or service accruals are assumed. This measure of funded status is not appropriate for assessing the need for future employer contributions in the case of an ongoing plan, that is, for an employer that continues to provide CalPERS retirement benefits to active employees. Unlike the actuarial cost method used for ongoing plans, the termination liability is the present value of the benefits earned through the valuation date.

A more conservative investment policy and asset allocation strategy was adopted by the board for the Terminated Agency Pool. The Terminated Agency Pool has limited funding sources since no future employer contributions will be made. Therefore, expected benefit payments are secured by risk-free assets and benefit security for members is increased while limiting the funding risk. However, this asset allocation has a lower expected rate of return than the PERF and consequently, a lower discount rate is assumed. The lower discount rate for the Terminated Agency Pool results in higher liabilities for terminated plans.

The effective termination discount rate will depend on actual market rates of return for risk-free securities on the date of termination. As market discount rates are variable, the table below shows a range for the hypothetical termination liability based on the lowest and highest interest rates observed during an approximate 19-month period from 12 months before the valuation date to seven months after.

Discount Rate: 1.75% Price Inflation: 2.50%			Discount Rate: 4.50% Price Inflation: 2.75%			
Market Value of Assets (MVA)	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability	Termination Liability ^{1,2}	Funded Ratio	Unfunded Termination Liability
\$1,461,199	\$3,702,864	39.5%	\$2,241,665	\$1,964,947	74.4%	\$503,748

¹ The termination liabilities calculated above include a 5% contingency load. The contingency load and other actuarial assumptions can be found in Appendix A of the Section 2 report.

² The discount rate used for termination valuations is a weighted average of the 10-year and 30-year U.S. Treasury yields where the weights are based on matching asset and liability durations as of the termination date. The discount rates used in the table are based on 20-year Treasury bonds, rounded to the nearest quarter percentage point, which is a good proxy for most plans. The 20-year Treasury yield was 3.38% on June 30, 2022, the valuation date.

In order to terminate the plan, first contact our Pension Contract Services unit to initiate a Resolution of Intent to Terminate. The completed Resolution will allow the plan actuary to provide a preliminary termination valuation with a more up-to-date estimate of the plan liabilities. Before beginning this process, please consult with the plan actuary.

Participant Data

The table below shows a summary of the plan's member data upon which this valuation is based:

	June 30, 2021	June 30, 2022
Active Members		
Counts	19	17
Average Attained Age	39.9	41.2
Average Entry Age to Rate Plan	36.0	36.8
Average Years of Credited Service	3.7	4.3
Average Annual Covered Pay	\$82,340	\$89,500
Annual Covered Payroll	\$1,564,455	\$1,521,503
Present Value of Future Payroll	\$17,120,851	\$16,430,439
Transferred Members	6	8
Separated Members	3	6
Retired Members and Beneficiaries*		
Counts	0	0
Average Annual Benefits	\$0	\$0
Total Annual Benefits	\$0	\$0

Counts of members included in the valuation are counts of the records processed by the valuation. Multiple records may exist for those who have service in more than one valuation group. This does not result in double counting of liabilities.

* Values include community property settlements.

List of Class 1 Benefit Provisions

This plan has the additional Class 1 Benefit Provisions:

- None

Plan's Major Benefit Options

Shown below is a summary of the major optional benefits for which the agency has contracted. A description of principal standard and optional plan provisions is in Section 2.

Member Category	Benefit Group	
	Misc	
Demographics		
Actives	Yes	
Transfers/Separated	Yes	
Receiving	No	
Benefit Provision		
Benefit Formula	2% @ 62	
Social Security Coverage	No	
Full/Modified	Full	
Employee Contribution Rate	7.75%	
Final Average Compensation Period	Three Year	
Sick Leave Credit	Yes	
Non-Industrial Disability	Standard	
Industrial Disability	No	
Pre-Retirement Death Benefits		
Optional Settlement ²	Yes	
1959 Survivor Benefit Level	Level 4	
Special	No	
Alternate (firefighters)	No	
Post-Retirement Death Benefits		
Lump Sum	\$2000	
Survivor Allowance (PRSA)	No	
COLA	2%	

PEPRA Member Contribution Rates

The California Public Employees’ Pension Reform Act of 2013 (PEPRA) established new benefit formulas, final compensation period, and contribution requirements for “new” employees (generally those first hired into a CalPERS-covered position on or after January 1, 2013). In accordance with Government Code Section 7522.30(b), “new members ... shall have an initial contribution rate of at least 50% of the normal cost rate.” The normal cost for the plan is dependent on the benefit levels, actuarial assumptions, and demographics of the risk pool, particularly members’ entry age. Should the total normal cost rate change by more than 1% from the base total normal cost rate, the new member rate shall be 50% of the new normal cost rate rounded to the nearest quarter percent.

The table below shows the determination of the PEPRA member contribution rates effective July 1, 2024, based on 50% of the total normal cost rate as of the June 30, 2022 valuation.

Rate Plan Identifier	Benefit Group Name	Basis for Current Rate		Rates Effective July 1, 2024			
		Total Normal Cost	Member Rate	Total Normal Cost	Change	Change Needed	Member Rate
26684	Miscellaneous PEPRA Level	15.43%	7.75%	15.62%	0.19%	No	7.75%

Section 2

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

Risk Pool Actuarial Valuation Information

**Section 2 may be found on the
CalPERS website (www.calpers.ca.gov)
in the Forms and Publications section**

**Administration Activities Report****September 8, 2023 – October 5, 2023**

Activity	Summary
Administration/ Board	<p>Administration team worked on the following:</p> <ul style="list-style-type: none">• Scheduled meetings for Harvey De La Torre and Board members (including Special meetings and Ad Hoc meetings).• Assisted Harvey with various write-ups and follow-up for the Committees and Board.• Conducted research for various board members.• Continue to send the Water Supply Reports to the member agencies.• Processed and reviewed agreements for appropriate Board approval and insurance requirements as well as execution following approval.• Coordinated with Legal Counsel re changes to the District's master agreement.• Responded to one Public Records Act request.• Made various updates/changes to the website including WACO items, District calendar, Transparency items, etc.• Completed and submitted ACWA Committee forms.• Worked with IT regarding Director Compensation Voucher forms (issues).• Met with staff regarding Sole Source contract requirements.• Attended meeting regarding Laserfiche requirements, etc.• Solicited availability and scheduled in-person and Zoom meetings for the Engineering Department and staff.• Registered Staff and Directors for various conferences training, made travel accommodations, and processed business expenses.• Prepared agreements, followed up on insurance forms, and solicited signatures for Interim GM, Director of Engineering, and Principal Engineer.• Hosted the ISDOC Executive Meeting.• Assisted with ISDOC In Person Quarterly Luncheon: planning, corresponding with guests & Directors, ordering lunch, and putting together the agenda.• Formatted letters for the Director of Government Affairs and the Engineering Department.• Assisted with the planning of Water Professionals Appreciation Week.
Records Management	<ul style="list-style-type: none">• Arranged district-wide records management training refresher for November.• Met with WUE staff to review files in Laserfiche to streamline and reorganize.• Continued to review incoming mail and log necessary documents into the Laserfiche system.



Records Management (continued)	<ul style="list-style-type: none"> • Staff continue to review documents and update information in Laserfiche. • Participated in an internal planning meeting to discuss Laserfiche and upgrading to the latest version.
Health and Welfare Benefits	<ul style="list-style-type: none"> • Staff attended the JPIA open enrollment webinar to receive information on benefits, changes and rates for 2024 and are working on open enrollment information which will be scheduled for late October through early November. All information will be shared with eligible participants as soon as it is compiled.
Recruitment / Departures	<ul style="list-style-type: none"> • An offer has been presented to fill the Accountant vacancy and the candidate is anticipated to start late October, early November timeframe. • Recruitment efforts for the WEROC Specialist position are underway. • Interviews are scheduled for the Water Loss Control Program Intern position. • Letty Aguilar, WUE Program Assistant, departed the District on September 15th to start her Master's Program at UC Santa Barbara.
Projects/ Activities	<p>Administration Team worked on the following:</p> <ul style="list-style-type: none"> • Assisted with WACO on Meetings via Zoom, PowerPoint. presentations, preparing for hybrid meetings, various correspondence and note taking. Coordinating with WACO president and speakers. • Attended Board Meetings and Committee Meetings, as well as preparation for these meetings, including packet preparation, meeting setup/take-down, Zoom coordination, etc. • Assist Finance Department with filing, processing of invoices, purchase requisitions, business expense reports and credit card reconciliations. • Reviewed and evaluated Request for Proposals (RFP) for Compensation and Benefits Study; and responded to inquiries related to the RFP and prepared item for A&F Committee review. • Worked with Executive Management on Board Strategic Priorities • Respond to inquiries pertaining to retirement benefits, health and welfare benefits from active employees as well as retirees. • Researched policies and protocol related to GPS monitoring for field staff safety as well as loss prevention. • Continue to work on scheduling for staff development workshop. • Researching new vendors and pricing on MWDOC Logo Apparel. • Responded to Las Virgenes Municipal Water District survey regarding Director's Compensation and Benefits. • Met with IT to review and evaluate current ACT Database system and opportunities for improving efficiencies. • Assisted Director of Governmental Affairs with preparing Grant contact lists and spreadsheet and legislative contact lists. • Participated in final interviews for the Accountant/Sr. Accountant position.



	<ul style="list-style-type: none">• Hosted an HR Member Agency Meeting on September 21st.• Attended AI chat in Government Technology webinar.
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**INFORMATION ITEM**

October 11, 2023

TO: Administration & Finance Committee
(Directors Dick, Thomas, Crane)

FROM: Harvey De La Torre, Interim General Manager
Staff Contact: Steven Hung

SUBJECT: Finance and IT Pending Items Report

SUMMARY

The following list details the status of special projects in progress or to be completed during FY this Fiscal Year.

Finance

Accounting	Rebate Program(s)	W-9 collection for conservation rebates. Currently holding 8 rebate check(s) awaiting W-9 form(s).
	Audit	FY22/23 audit is 80% complete
	Other	RFP for Custodial Services
Finance	Cyber Security Training (Knowbe4)	Training completion by all MWDOC Staff and directors is 75% complete
	Budget	The FY24/25 Budget is 0% complete

Information Technology (IT)

Hardware	Redundant Internet	Contract signed with Internet Service Provider (ISP) for a backup internet connect
	Routers, Switches, and Cables	Initiated project research to assess/replace dated routers, switches, and cabling in server room.
Software	Backup	Assessed and tuned on-premises and cloud-based backup schedules with vendor. Anticipate starting integrity testing through a restoral simulation/project in coming month.
	Document Archival	Upgrade of document archival system and clients software scheduled for mid-October

	Operating System	Four machines upgraded to enhance security, provides additional enterprise functionality, and improves remote management.
		Building plans to address servers approaching Operating System end-of-life support
	Wireless	Initiated project research to consolidate firewalls and enhance wireless security
Security	Cyber Threat	Entered into agreement with DHS Cybersecurity and Infrastructure Security Agency (CISA) for on-going cost-free scanning and testing of District network to reduce exposure to cyber threats.
	Reports	Efforts underway to review cyber best practices and recommendations from prior assessments.
	VPN	Testing secure protocols between remote and on-premises machines to provide secure connections.
	Vulnerability	Enhancements made to Water Use Efficiency server to further protect and secure information
Service/Support	Renewals	Beginning discussions with internal staff on renewal of Customer Relationship Management (CRM) subscription



INFORMATION ITEM

October 11, 2023

TO: Administration & Finance Committee
(Directors Crane, Dick, Thomas)

FROM: Harvey De La Torre, Interim General Manager

Staff Contact: Kevin Hostert

SUBJECT: Monthly Water Usage Data and Water Supply Info.

STAFF RECOMMENDATION

Staff recommends the Administration & Finance Committee receive and file this information.

COMMITTEE RECOMMENDATION

Committee recommends (To be determined at Committee Meeting)

REPORT

The attached figures show the recent trend of water consumption in Orange County (OC), an estimate of Imported Water Sales for MWD OC, and selected water supply information.

- OC Water Usage, Monthly by Supply **OCWD Groundwater was the main supply in August.**
- Estimated OC Water Usage, Monthly, Comparison to Previous Years Water usage in August **2023 was below average compared to the last 5 years.** We are projecting an increase in overall water usage compared to FY 2022-23. On March 24th 2023, state officials eased back drought emergency provisions that were in place since July 2021.
- Historical OC Water Consumption Orange County M & I projected water consumption is **524,000 AF for FY 2023-24** (this includes ~7 TAF of agricultural usage and non-retail water agency usage). This is about **44,000 AF more than FY 2022-23** and is about **22,000 AF less than FY 2021-22**. Water usage per person is projected to be slightly lower in **FY 2022-23 for Orange County at 149 gallons per day** (This includes recycled water usage). Although OC population has increased

Budgeted (Y/N): N	Budgeted amount: N/A	Core <u>X</u>	Choice <u> </u>
Action item amount: N/A	Line item:		
Fiscal Impact (explain if unbudgeted):			

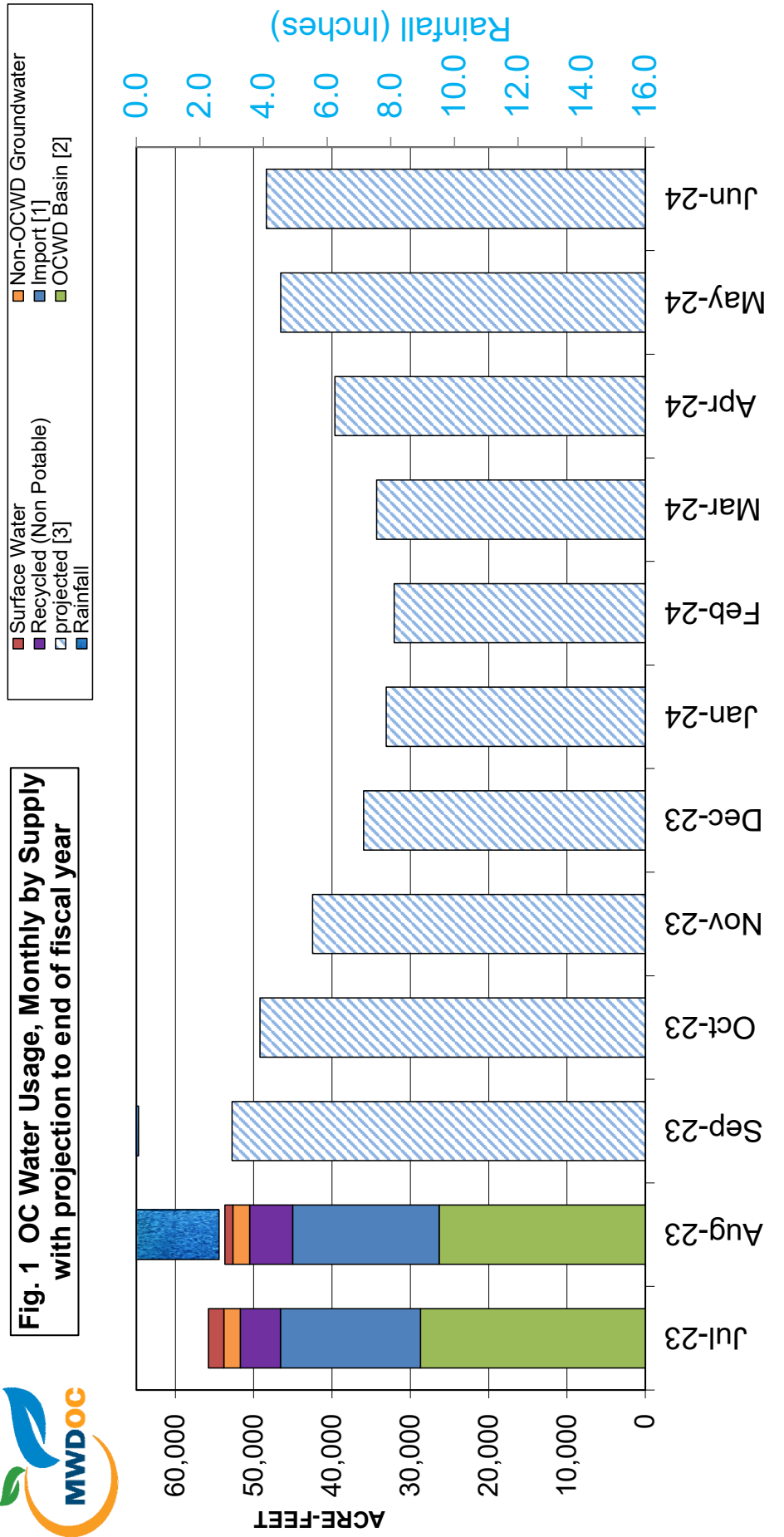
20% over the past two decades, water usage has not increased, on average. A long-term decrease in per-capita water usage is attributed mostly to Water Use Efficiency (water conservation) efforts. ***O.C. Water Usage has declined significantly since the end of FY 2013-14. Since FY 2013-14 average O.C. Annual Water usage is 528,500 AF, a decline of 93,000 AF since FY 2013-14. FY 2023-24 Orange County M & I water consumption was the lowest since FY 1978-79 (44 Years).***

Water Supply Information Includes data on Rainfall in OC; the OCWD Basin overdraft; Northern California and Colorado River Basin hydrologic data; the State Water Project (SWP) Allocation, and regional storage volumes. The data have implications for the magnitude of supplies from the three watersheds that are the principal sources of water for OC. Note that a hydrologic year is Oct. 1st through Sept. 30th.

- Orange County's accumulated precipitation through ***early October was average*** for this period. Water year to date rainfall in Orange County is ***0.04 inches***, which is ***100% of normal***.
- Northern California accumulated precipitation through ***early October was 70% of normal for this period***. Water Year 2023 was 133% of normal while water year 2022 was 48% of normal. The ***Northern California snowpack was 215% of normal as of April 9th, 2023. As of late September, 0.07% of California is experiencing moderate drought conditions. 0.0% of California is experiencing severe to exceptional drought conditions.*** The State Water Project Contractors Table A Allocation was increased to 100% as of April for WY 2023.
- Colorado River Basin accumulated precipitation through ***early October was 100% of normal*** for this period. The ***Upper Colorado Basin snowpack was 131% of normal*** as of April 10th 2023. ***Lake Mead and Lake Powell*** combined have about ***52.0% of their average storage volume*** for this time of year and are at ***35.3% of their total capacity***. Lake Mead's ***levels have been below the "trigger" limit of 1,075 ft. since the start of CY 2022.*** The US Bureau of Reclamation (USBR) has declared a shortage at Lake Mead, impacting Colorado River water deliveries to the Lower Basin states. Lake Mead as of early October was ***9.17' BELOW the "trigger" limit***. The USBR has declared a ***shortage on the Colorado River that started on January 1st 2022. There is a 100% chance of shortage continuing in 2024, 93% in 2025 and 77% in 2026.*** Lake Mead as of early October was ***20.83' ABOVE the State of California "trigger" limit. There is a 0% chance of mandatory cutbacks for California in 2024, 0% in 2025 and 20% in 2026.***



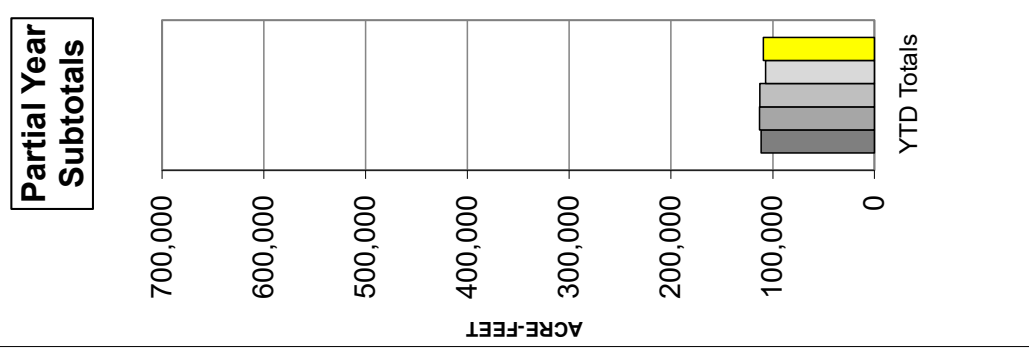
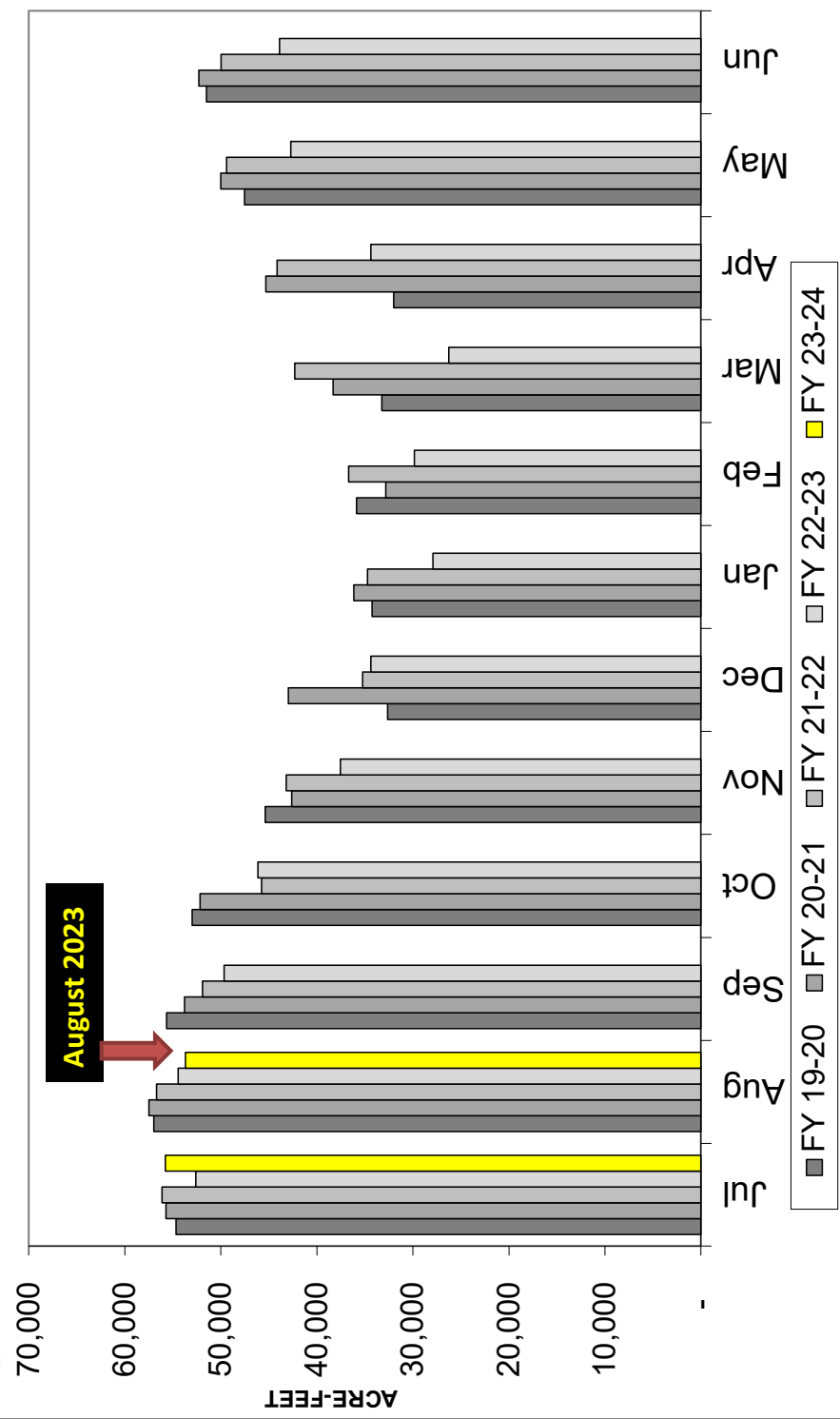
**Fig. 1 OC Water Usage, Monthly by Supply
with projection to end of fiscal year**



- [1] Imported water for consumptive use. Includes "In-Lieu" deliveries and CUP water extraction. Excludes "Direct Replenishment" deliveries of spreading water and deliveries into Irvine Lake.
- [2] GW for consumptive use only. Excludes In-Lieu water deliveries and CUP water extraction that are counted with Import. BPP in FY '23-24 is 85%.
- [3] MWDOC's estimate of monthly demand is based on the projected 5 Year historical retail water demand and historical monthly demand patterns.
- [4] Total water usage includes IRWD groundwater agricultural use and usage by non-retail water agencies.

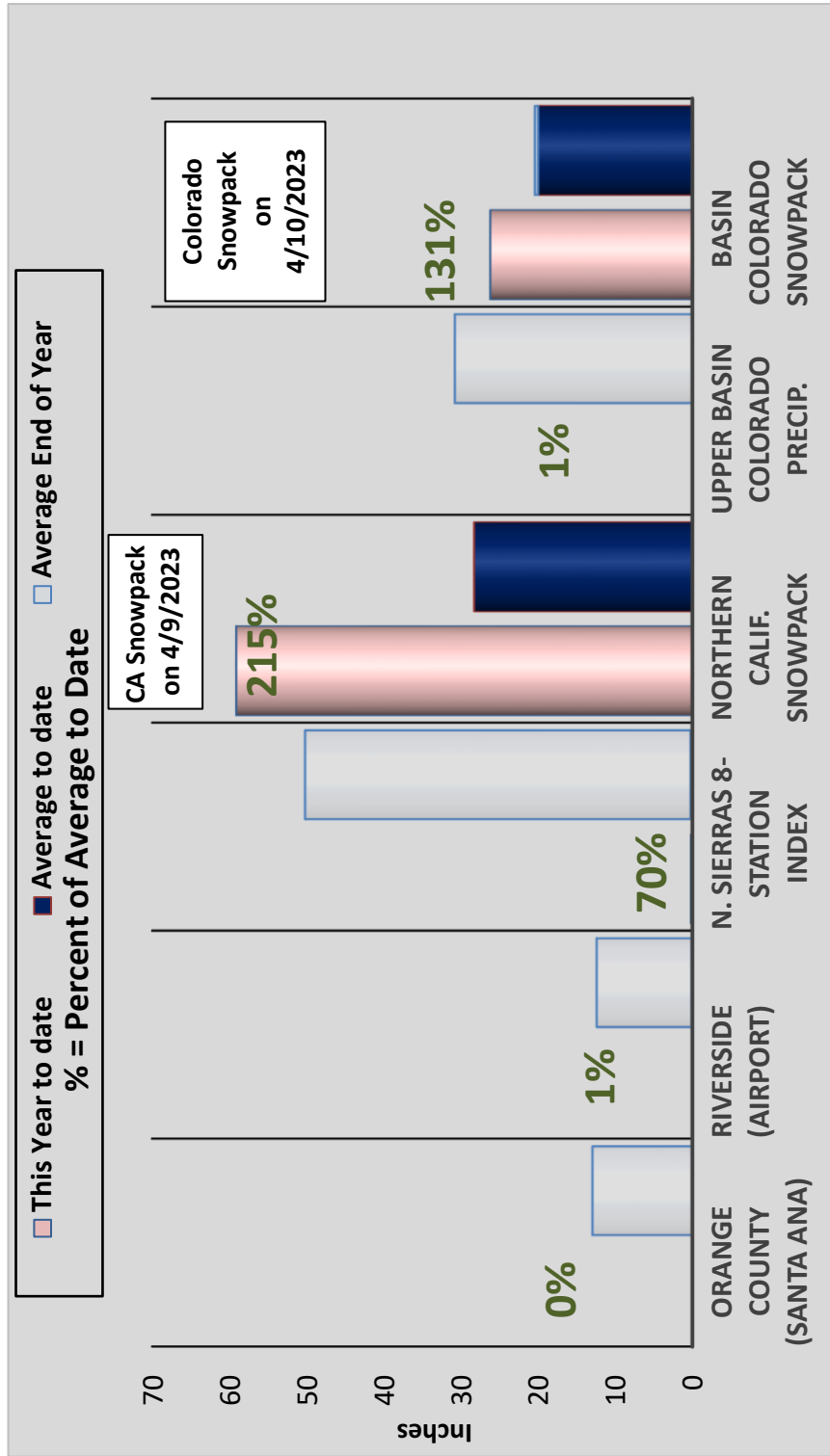


Fig. 2 OC Monthly Water Usage [1]: Comparison to Last 4 Fiscal Years



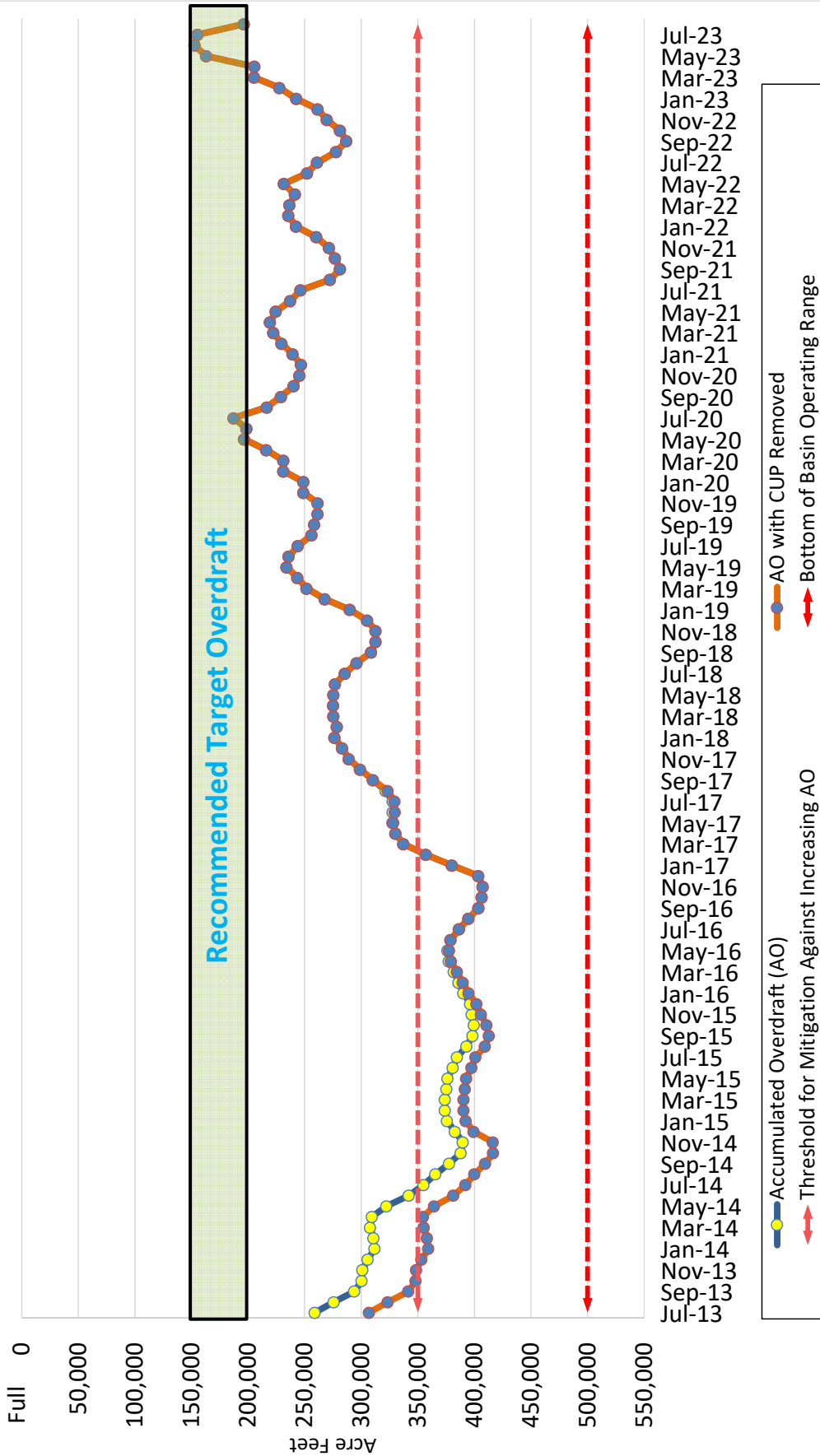
[1] Sum of Imported water for consumptive use (includes "In-Lieu" deliveries; excludes "Direct Replenishment" and "Barrier Replenishment") and Local water for consumptive use (includes recycled and non-potable water and excludes GWR/S production) Recent months numbers include some estimation.

Accumulated Precipitation for the Oct.-Sep. water year, early of October 2023



* The date of maximum snowpack accumulation (April 1st in Northern Calif. , April 15th in the Upper Colorado Basin) is used for year to year comparison.

Accumulated Overdraft of the OCWD Groundwater Basin as of August 2023



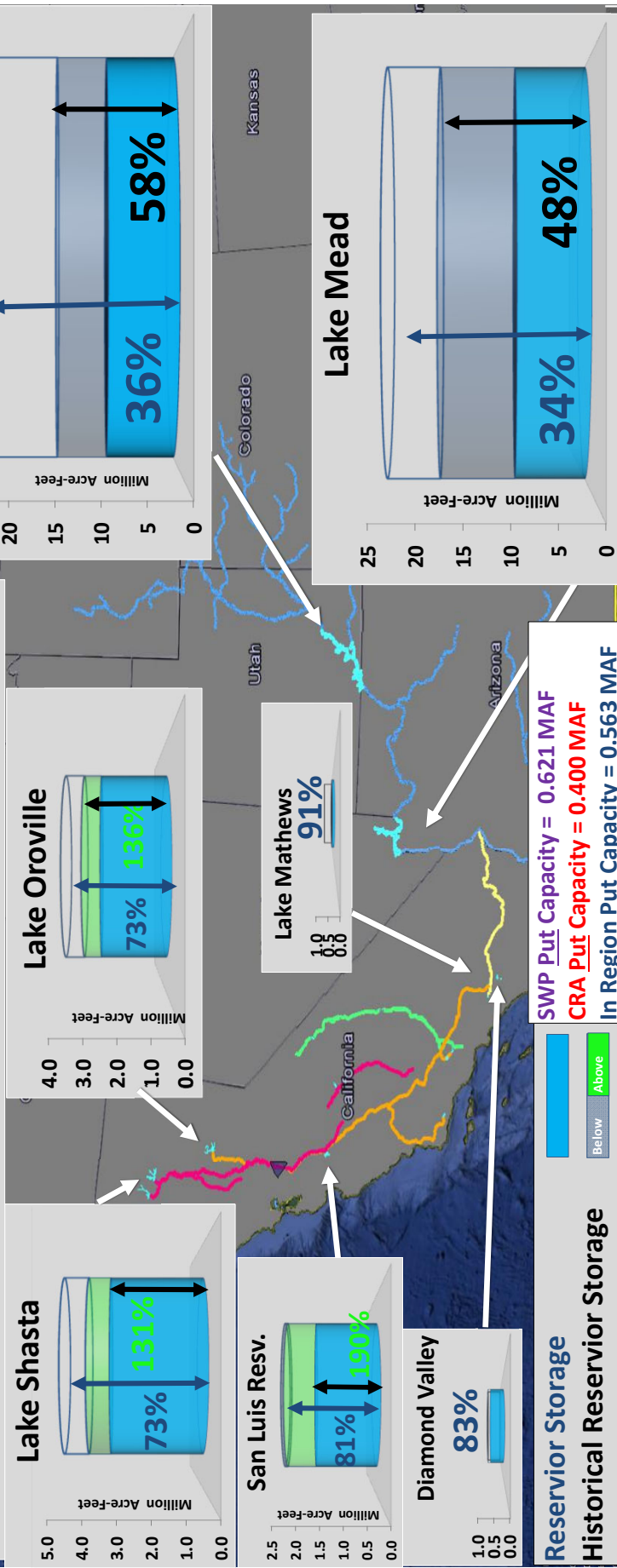
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
AO (AF)	261,145	277,756	286,988	281,407	269,746	261,614	242,610	227,738	205,331	205,717	162,963	152,904
AO w/CUP removed (AF)	261,145	277,756	286,986	281,407	269,746	261,614	242,610	227,738	205,331	205,717	162,964	152,904
	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24
AO (AF)	155,360	196,275										
AO w/CUP removed (AF)	155,360											

* Source ~ OCWD Monthly Board of Directors Packet, Water Resources Summary



State Water Project, Colorado River, and MWD Reservoir Storage

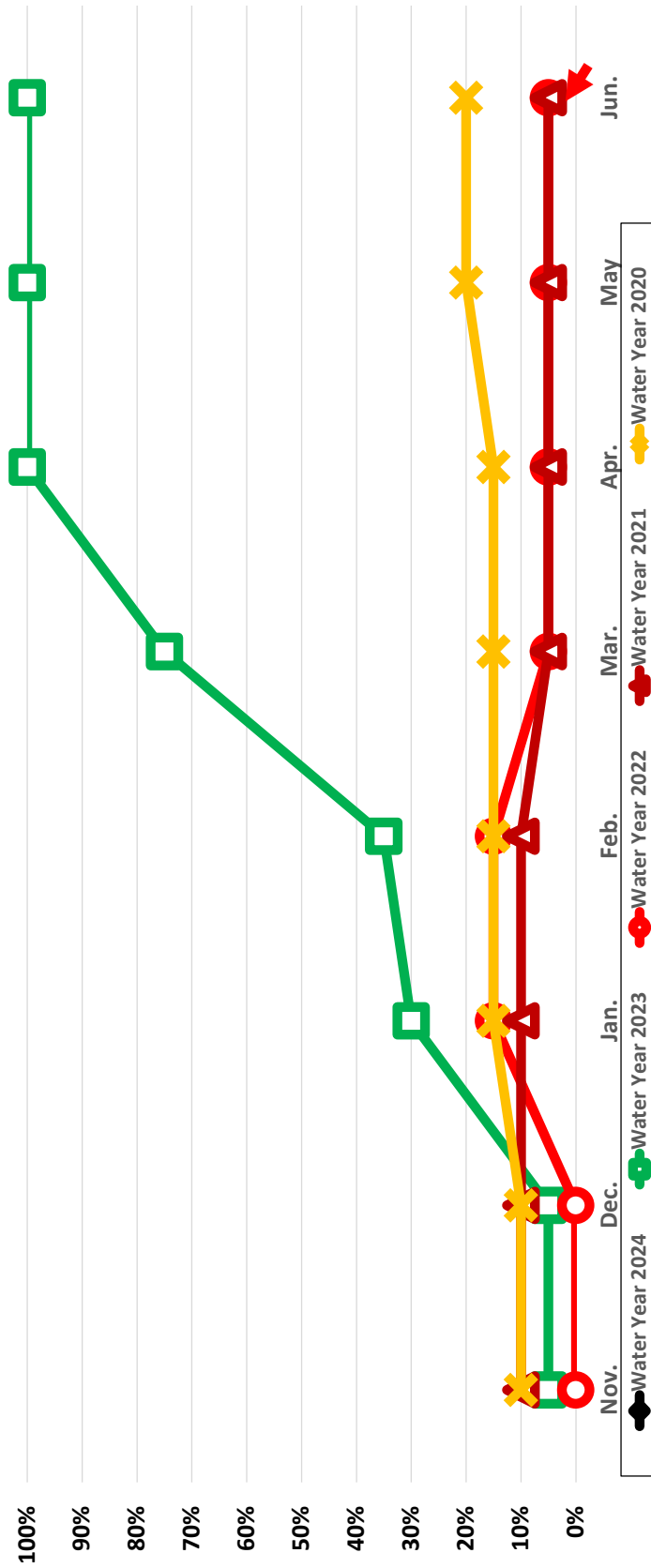
as of October 1, 2023



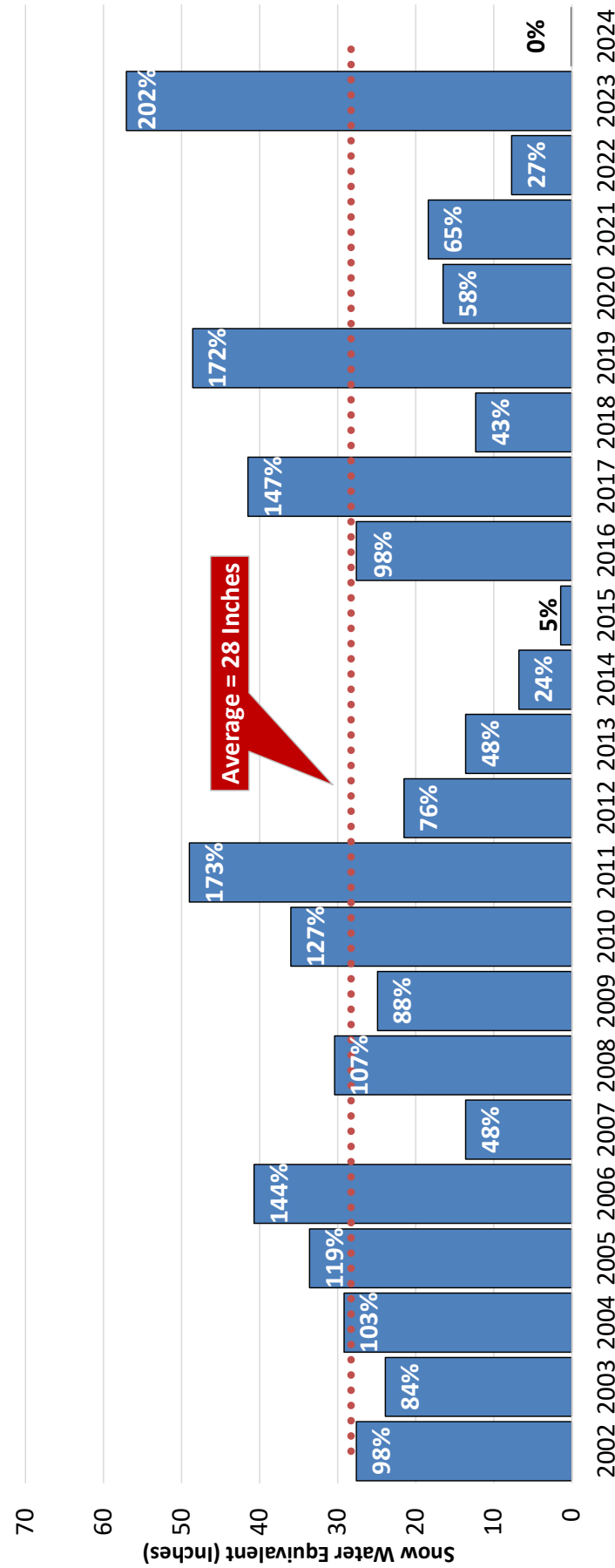
prepared by the Municipal Water District of Orange County
Numbers are subject to change

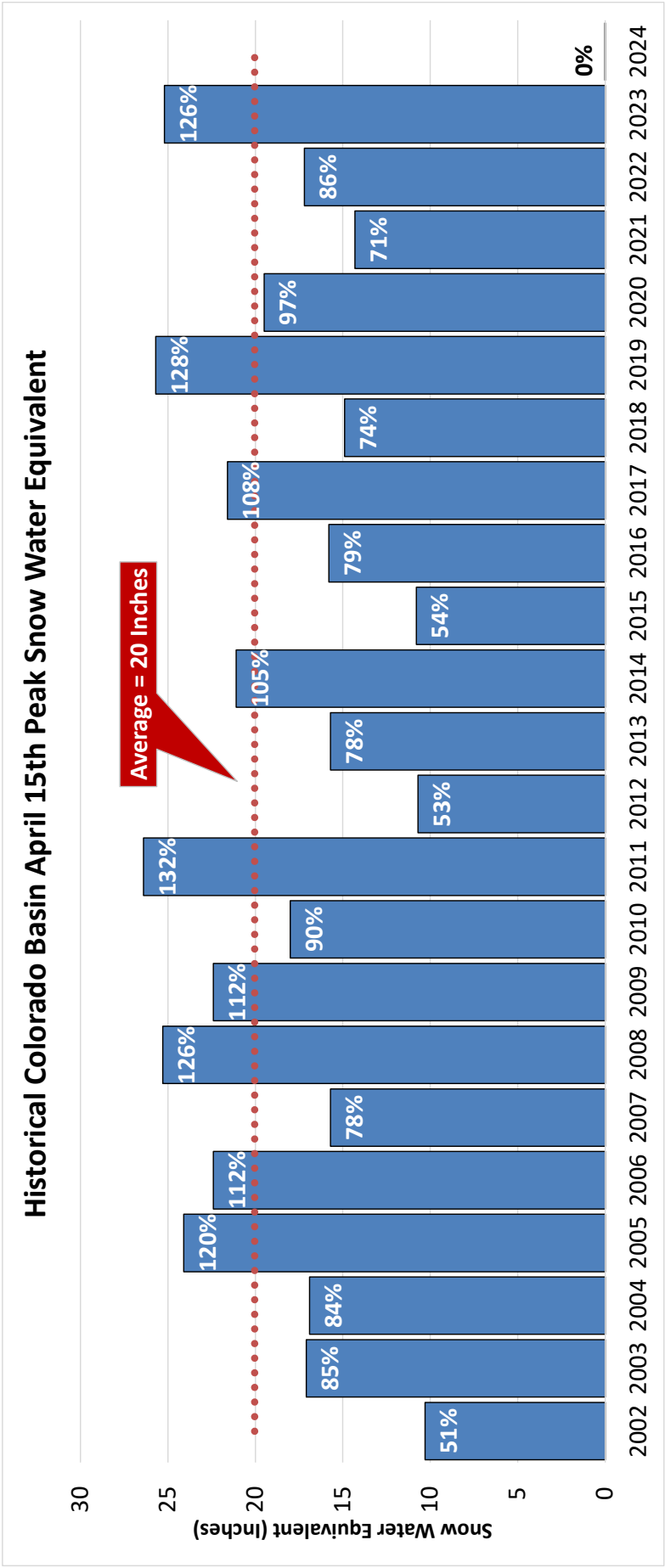
SWP TABLE A ALLOCATION PERCENTAGE

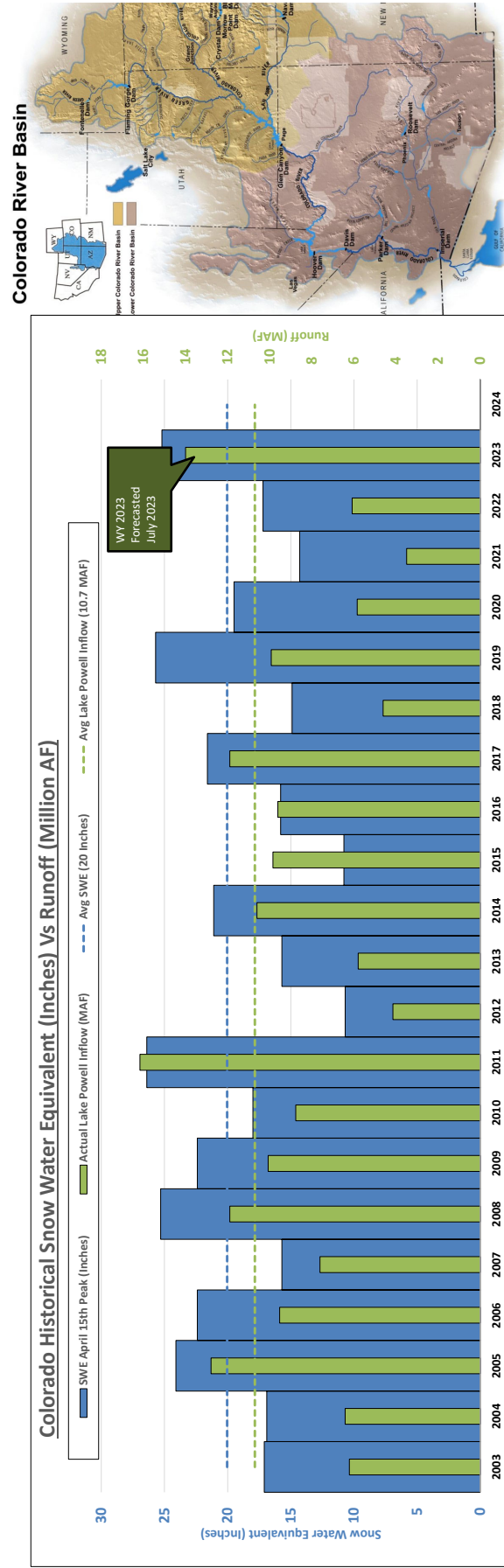
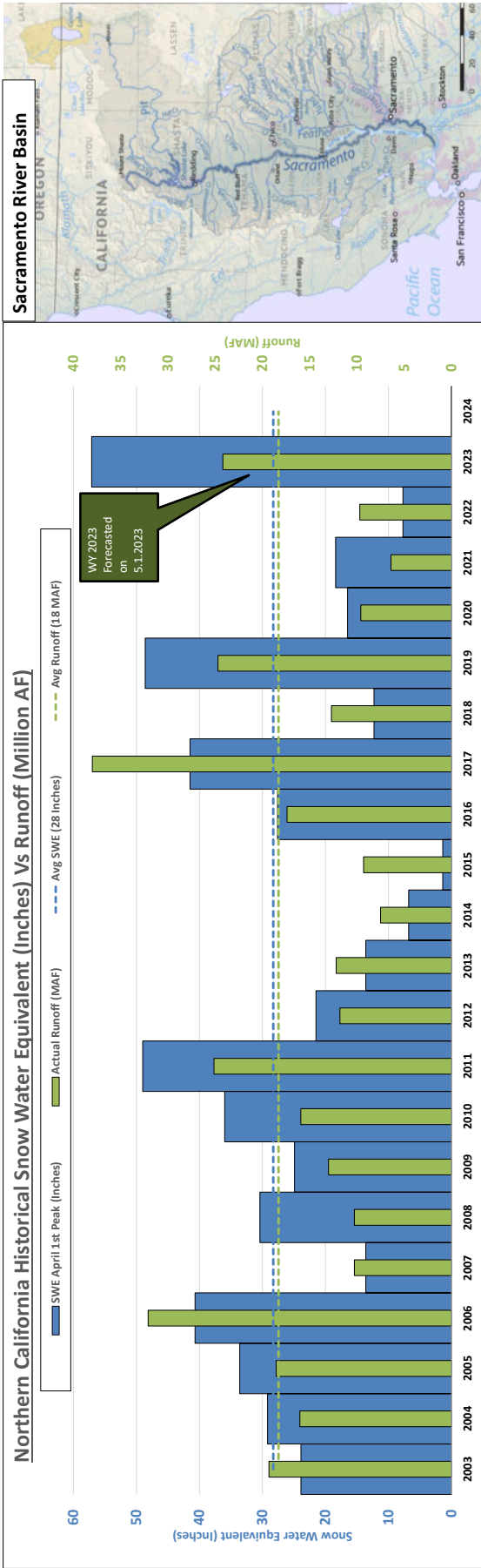
FOR STATE WATER PROJECT CONTRACTORS



Historical Northern California April 1st Peak Snow Water Equivalent

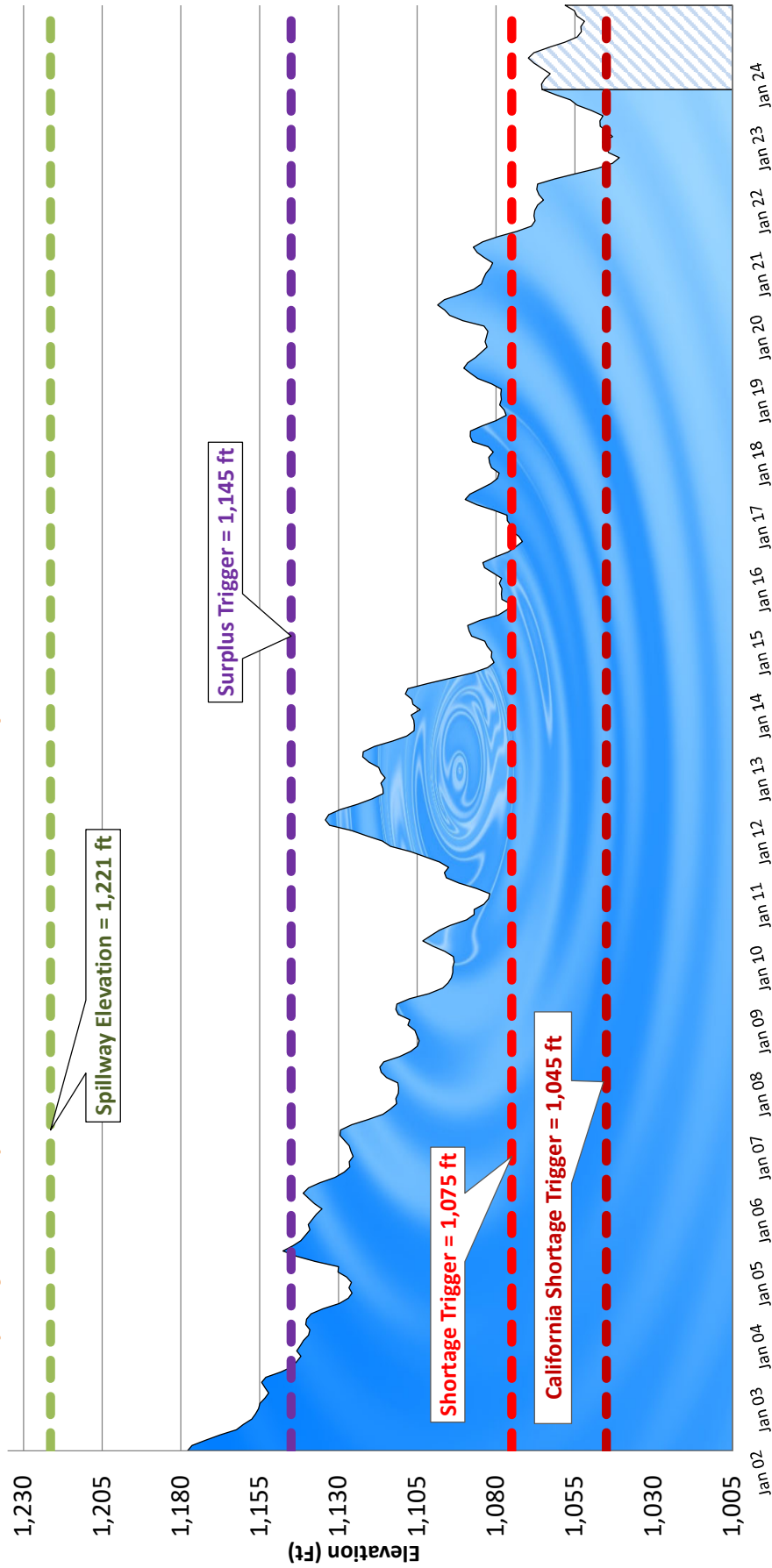








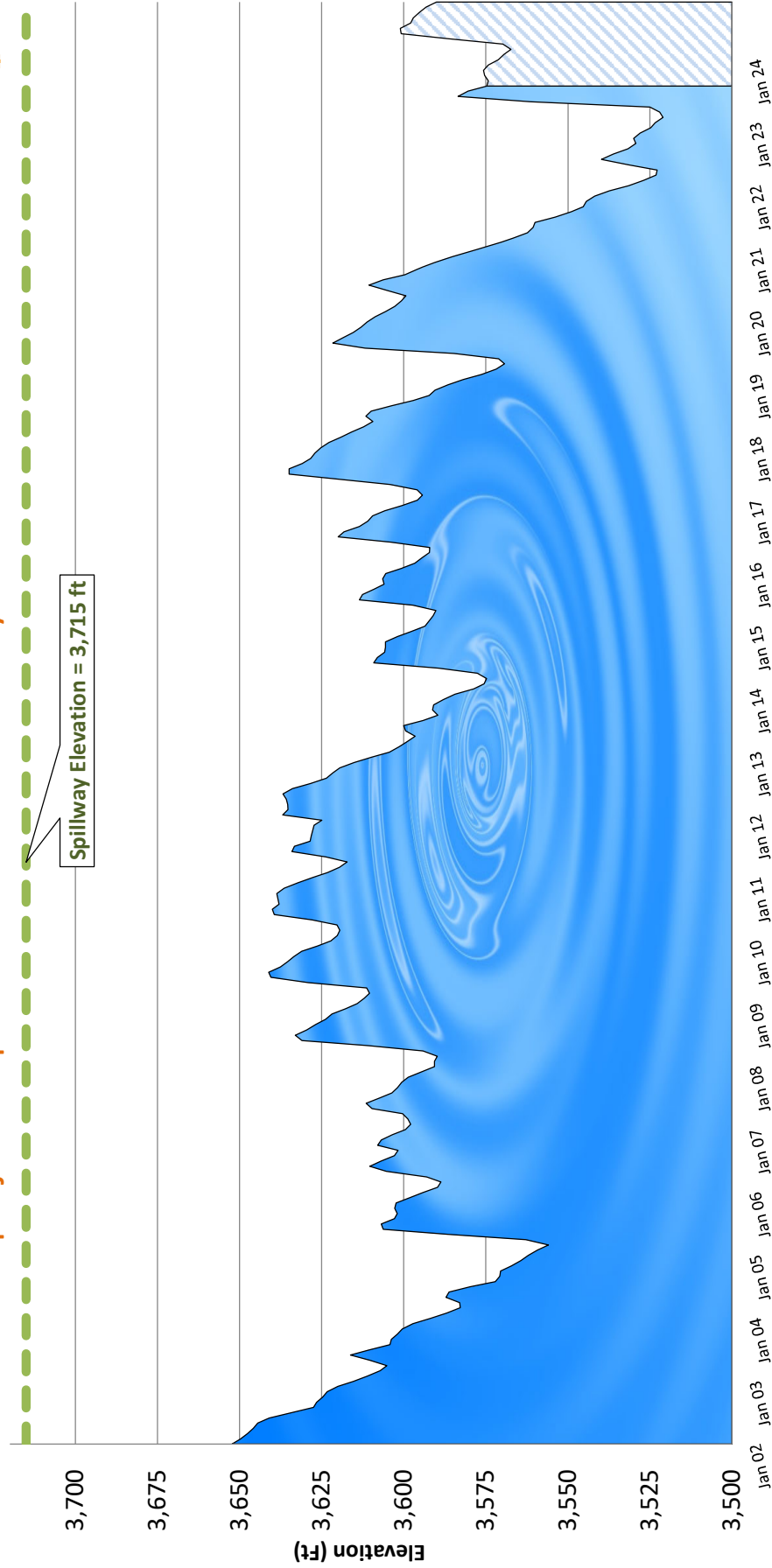
Lake Mead Levels: Historical and Projected projection per USBR 24-Month Study





Lake Powell Levels: Historical and Projected projection per USBR 24-Month Study

■ Historical □ Projected



Lake Mead Historical Water Elevation Level

Intake Tower

Hoover Dam

