

I hereby certify that the following agenda was posted at least 72 hours prior to the time of the meeting so noticed below at 24251 Los Alisos Boulevard, Lake Forest, California.



DENNIS P. CAFFERTY, Secretary  
of the El Toro Water District and  
the Board of Directors thereof



**AGENDA**  
**EL TORO WATER DISTRICT**  
**REGULAR MEETING OF THE BOARD OF DIRECTORS**  
**ENGINEERING COMMITTEE MEETING AND**  
**FINANCE AND INSURANCE COMMITTEE MEETING**

**June 24, 2024**

**7:30 a.m.**

**BOARDROOM, DISTRICT OFFICE**  
**24251 LOS ALISOS BLVD., LAKE FOREST, CA 92630**

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This meeting will be held in person. As a convenience for the public, the meeting may also be accessed by Zoom and will be available by either computer or telephone audio as indicated below. Because this is an in-person meeting and the virtual 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.

Members of the public who wish to comment on any item within the jurisdiction of the District or on any item on the agenda, may attend the meeting in person at the District's office or may observe and address the Meeting by joining at this link:

<https://us02web.zoom.us/j/89903438091> (Meeting ID: 899 0343 8091).

Members of the public who wish only to listen to the telephonic meeting may dial in at the following numbers (669) 900-6833 or (346) 248-7799 with the same Meeting ID noted above. Please be advised the Meeting is being recorded.

**CALL TO ORDER – President Monin**

**PLEDGE OF ALLEGIANCE – Director Adjarian**

**ROLL CALL (Determination of a Quorum)**

**ORAL COMMUNICATIONS/PUBLIC COMMENTS**

Members of the public may address the Board at this time or they may reserve this opportunity with regard to an item on the agenda until said item is discussed by the Board. Comments on other items will be heard at the times set aside for “COMMENTS REGARDING NON-AGENDA ENGINEERING COMMITTEE ITEMS” or for “COMMENTS REGARDING NON-AGENDA FIC ITEMS.” The public may identify themselves when called on and limit their comments to three minutes.

**ITEMS RECEIVED TOO LATE TO BE AGENDIZED**

Determine need and take action to agendize item(s) which arose subsequent to the posting of the Agenda. (ROLL CALL VOTE: Adoption of this recommendation requires a two-thirds vote of the Board members present, or, if less than two-thirds of the Board members are present, a unanimous vote of those members present.)

**1. Consider Board Member’s Request for Remote Participation (AB 2449)**

**FINANCE AND INSURANCE COMMITTEE MEETING**

**CALL MEETING TO ORDER – Director Havens**

**2. Consent Calendar (Reference Material Included)**

(All matters under the Consent Calendar will be approved by one motion unless a Board member or a member of the public requests separate action or discussion on a specific item)

- a. Consider approving the minutes of the April 11, 2024 Special Board Meeting. (Minutes included)
- b. Consider approving the minutes of the May 20, 2024 Finance and Insurance Committee meeting (Minutes included).

**Recommended Action:** The Board will be requested to approve the above Consent Calendar.

## FINANCIAL INFORMATION ITEMS

3. **Quarterly Review of the District's 401(k) Retirement Savings Plan**  
(Reference Material Included)

Keith Stribling (Highmark Capital Management) will review and comment on the investment performance of the District's 401(k) Retirement Savings Plan.

4. **El Toro Water District Deferred Compensation Plan (457 Plan) Quarterly Performance Report** (Reference Material Included)

Staff will provide an update on the performance of the investment options in the District's Deferred Compensation Plan (457 Plan) for the fourth quarter of the 2024 calendar year.

5. **Update on the Implementation of the Springbrook Software System**  
(Reference Material Included)

Staff will provide an update on the status of the implementation of the Springbrook Software System.

## FINANCIAL ACTION ITEMS

6. **Resolution 24-6-1 California Office of Emergency Services Authorized Agents Designation** (Reference Material Included)

Staff will review and comment on Resolution No. 24-6-1 which identifies Authorized Agents to submit applications for federal financial assistance with Cal OES.

**Recommended Action:** Staff recommends approval of Resolution No. 24-6-1 identifying Authorized Agents to submit applications for federal financial assistance with Cal OES.

### RESOLUTION NO. 24-6-1

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE EL TORO WATER DISTRICT  
AUTHORIZING THE GENERAL MANAGER AND CHIEF FINANCIAL OFFICER  
TO SUBMIT APPLICATIONS FOR FEDERAL FINANCIAL ASSISTANCE WITH  
THE CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES

7. **Financial Package - Authorization to Approve Payment of Bills for the Month Ending June 24, 2024 and Receive and File Financial Statements as of May 31, 2024** (Reference Material Included)

The Board will consider approving Bills for Consideration dated June 24, 2024 and Receive and File Financial Statements as of May 31, 2024.

**Recommended Action:** Staff recommends that the Board 1) approve, ratify and confirm payment of those bills as set forth in the Payment Summary for the month ending June 24, 2024, and 2) receive and file the Financial Statements for the month ending May 31, 2024.

**COMMENTS REGARDING NON-AGENDA FIC ITEMS**

**CLOSE FINANCE AND INSURANCE COMMITTEE MEETING**

**ENGINEERING COMMITTEE**

**CALL MEETING TO ORDER – Director Freshley**

8. **Consent Calendar**

(All matters under the Consent Calendar will be approved by one motion unless a Board member or a member of the public requests separate action or discussion on a specific item)

- a. Consider approving the minutes of the May 20, 2024 Engineering Committee meeting. (Minutes Included).

**Recommended Action:** The Board will be requested to approve the subject minutes.

**ENGINEERING ACTION ITEMS**

9. **Aliso Creek Lift Station Rehabilitation Project**  
(Reference Material Included)

Staff will review and comment on proposals received for the final design of the Aliso Creek Lift Station Rehabilitation Project.

**Recommended Action:** Staff recommends that the Board of Directors authorize the District's General Manager to enter into a contract with Tetra Tech in the amount of \$497,000.00 for the final design of the Aliso Creek Lift Station Rehabilitation Project. Staff also recommends that the Board authorize the General Manager to fund the project costs from the District's Capital Reserves in accordance with the District's adopted Capital Reserve Policy.

**10. New Warehouse Security System (Reference Material Included)**

Staff will review and comment on the proposed installation of an access control, fire alarm, intrusion detection, and camera system at the New Warehouse.

**Recommended Action:** Staff recommends that the Board of Directors authorize the District's General Manager to issue a contract to Convergent in the amount of \$61,512.30 for the installation of an access control, fire alarm, intrusion detection, and camera system at the New Warehouse. Staff further recommends that the Board authorize the General Manager to fund the project costs from the District's Capital Reserves in accordance with the District's adopted Capital Reserve Policy.

**ENGINEERING INFORMATION ITEMS**

**11. El Toro Water District Operations Report (Reference Material Included)**

Staff will review and comment on the El Toro Water District Operations Report.

**12. El Toro Water District Capital Project Status Report  
(Reference Material Included)**

Staff will review and comment on the El Toro Water District Capital Project Status Report.

**13. Engineering Items Discussed at Various Conferences and Meetings**

The Committee will discuss any pertinent Engineering items discussed at Conferences.

**COMMENTS REGARDING NON-AGENDA ENGINEERING COMMITTEE ITEMS**

**CLOSE ENGINEERING COMMITTEE MEETING**

# ATTORNEY REPORT

## CLOSED SESSION

At this time the Board will go into Closed Session as follows:

1. At this time the Board will go into Closed Session pursuant to Government Code Section 54956.8 to consult with the District's designated negotiator (Dennis P. Cafferty, General Manager) with respect to the terms and conditions pertaining to the proposed exchange and/or transfer of ownership in the Joint Regional Treatment Plant presently owned and operated by the South Orange County Wastewater Authority (in which the District is a member agency) to the Moulton Niguel Water District and the assignment of capacity in the Effluent Transmission Main and Aliso Creek Ocean Outfall from Moulton Niguel Water District to El Toro Water District.

## REGULAR SESSION

### REPORT ON CLOSED SESSION (Legal Counsel)

Mr. Granito will provide an oral report on the Closed Session.

## ADJOURNMENT

*The agenda material for this meeting is available to the public at the District's Administrative Office, which is located at 24251 Los Alisos Blvd., Lake Forest, Ca. 92630. If any additional material related to an open session agenda item is distributed to all or a majority of the board of directors after this agenda is posted, such material will be made available for immediate public inspection at the same location.*

### Request for Disability-Related Modifications or Accommodations

*If you require any disability-related accommodation, including auxiliary aids or services, in order to participate in this public meeting, please telephone the District's Recording Secretary, Polly Welsch at (949) 837-7050, extension 225 at least forty-eight (48) hours prior to said meeting. If you prefer, your request may be submitted in writing to El Toro Water District, P.O. Box 4000, Laguna Hills, California 92654, Attention: Polly Welsch.*

MINUTES OF THE BOARD BUDGET WORKSHOP  
MEETING OF THE  
EL TORO WATER DISTRICT

April 11, 2024

President Monin called the meeting of the Board Budget Workshop of the Board of Directors of the ELTORO WATER DISTRICT to order at 4:00 p.m.

Vice President Gaskins led the Pledge of Allegiance.

Directors MARK MONIN, MIKE GASKINS, KATHRYN FRESHLEY, KAY HAVENS, and FRED ADJARIAN were present.

Also present were DENNIS P. CAFFERTY, General Manager, VISHAV SHARMA, CFO, HANNAH FORD, Director of Engineering, JUDY CIMORELL, Director of Human Resources, SCOTT HOPKINS, Operations Superintendent, RORY HARNISCH, Senior Engineer, and POLLY WELSCH, Recording Secretary.

ORAL COMMUNICATIONS - PUBLIC COMMENT

President Monin stated that at this time members of the public may address the Board or they may reserve this opportunity with regard to an item on the agenda, until said item is discussed by the Board later in the meeting.

There was no public.

Consider Board Members Request for Remote Participation (AB 2449)

All Board members were present and as such, there was no need to consider this request.

## Orange County LAFCO Regular Special District Member Seat – Election

Mr. Cafferty stated that the LAFCO election process requires that the District designate a regular voting member and an alternate voting member to cast votes on the District's behalf.

President Monin asked for a Motion.

Motion: Director Havens made a Motion, seconded by Vice President Gaskins to authorize President Mark Monin to vote in the OC LAFCO Special District Selection Committee election as the regular voting member and designate Vice President Gaskins as the alternate voting member, and 2) to direct staff to complete and submit to LAFCO the LAFCO Declaration of Qualification to Vote form by the April 15, 2024 deadline.

### Roll Call Vote

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

## Warehouse Construction Contract Change Orders

Mr. Cafferty stated that Change Order No. 2 brings additional cost of \$21,966.78 and this brings the total Change Orders to \$57,841.78. He further stated that there will be a deduct Change Order No. 3 due to postponing the restoration process to a later date because of MET's Allen-McCulloch Pipeline repair which will damage the current asphalt at the new warehouse site.

President Monin asked for a Motion.

Motion: Director Havens made a Motion, seconded by Director Freshley to authorize the General Manager to issue a Change Order No. 2 to the contract with Dumarc Corp. in the amount of \$21,966.78 for additional scope of work necessary for the construction of the ETWD Warehouse Project.

Roll Call Vote

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

At approximately 4:11 p.m. Mr. Harnisch left the meeting.

Review Minutes of the March 26, 2024 Budget Committee #2 Meeting

President Monin asked for a Motion.

Motion: Vice President Gaskins made a Motion, seconded by Director Havens to approve the March 26, 2024 Budget Committee #2 minutes.

Roll Call Vote

Vice President Gaskins	aye
Director Havens	aye

ETWD 2024/25 Budget

Mr. Cafferty stated that staff spent a significant amount of time reviewing and developing this proposed budget. He further stated that we don't plan to pursue any additional bond funding.

Mr. Cafferty stated that new CPI data came out this morning and the March CPI number is 3.9%, and what the draft budget was based on was the average 2023 calendar year which was 2.8%.

Mr. Cafferty stated that staff will consider an alternative for the Prop 218 Notice and what it means with the impact of the new CPI number. He further stated that most of the Capital Reserves funds will be spent on Capital Improvement Projects this next fiscal year.

Mr. Cafferty stated that the Prop 218 Notice is only focused on the change in the Commodity Rate. He further stated that the Cost of Service last year addressed the 3-year plan that Raftelis prepared for the District.

Mr. Cafferty stated that because we are increasing the Commodity Rate more than what was in the Prop 218 Notice last year, we are required to do a new Cost of Service Study. He further stated that in the Ten-Year Revenue and Cash Flow Analysis, the majority of Reserves were due to the Capital Reserves.

Mr. Cafferty stated that we are funding all of our debt service through our Capital Programs by dedicating Capital Revenue to pay the debt of the water and wastewater projects funded by the Bond. He further stated that it does not include the Recycled Water debt which is paid through the Recycled Program.

Mr. Cafferty stated that other sources of income are rebate money from MET, a share of property taxes, MNWD and SMWD, and the Recycled Water enterprise. He further stated that Recycled Water sales should increase in drier conditions.

President Monin asked for a Motion.

Motion: Director Adjarian made a Motion, seconded by Vice President Gaskins to 1) authorize the distribution of the Prop 218 Notice with minor language changes, and 2) authorize noticing of a Rate Public Hearing to be scheduled for June 27, 2024.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

Consideration of approval of the 2024/25 Fiscal Year Operating & Capital

Budget was postponed to the April 22, 2024 Finance Committee meeting to allow staff to update numbers based on the 3.9% CPI number.

ADJOURNMENT

There being no further business to come before the Board the meeting was adjourned at 7:05 p.m.

Respectfully submitted,

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Marisol Melendez  
Recording Secretary

APPROVED:

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MARK MONIN, President of  
the El Toro Water District and  
the Board of Directors thereof

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DENNIS P. CAFFERTY, Secretary  
of the El Toro Water District and  
the Board of Directors thereof

MINUTES OF THE REGULAR MEETING OF THE BOARD OF DIRECTORS  
AND THE  
FINANCE & INSURANCE COMMITTEE MEETING

May 20, 2024

At approximately 7:35 a.m. President Monin called the regular meeting to order.

Vice President Gaskins led the Pledge of Allegiance to the flag.

Committee Members MARK MONIN, MIKE GASKINS, KAY HAVENS,  
KATHRYN FRESHLEY, and FRED ADJARIAN participated.

Also participating were DENNIS P. CAFFERTY, General Manager, VISHAV SHARMA, CFO, HANNAH FORD, Director of Engineering, SCOTT HOPKINS, Operations Superintendent, GILBERT J. GRANITO, General Counsel, MIKE MIAZGA, IT Manager (Zoom), SHERRI SEITZ, Public Affairs Manager, VU CHU, Water Use Efficiency Analyst (Zoom), VICKI TANIOUS, Senior Accountant/Payroll (Zoom), MICHAEL SNOW, Chief Plant Operator (7:50am), POLLY WELSCH, Recording Secretary and MARISOL MELENDEZ, Recording Secretary.

Determination of a Quorum

Roll Call:

Director Adjarian	present
Director Freshley	present
Director Havens	present
Vice President Gaskins	present
President Monin	present

Five Board members are present at the meeting and therefore a quorum has been determined.

Oral Communications/Public Comment

There were no comments.

### Items Too Late to be Agendized

President Monin asked if there were any items received too late to be agendized.

Mr. Cafferty replied no.

### Finance and Insurance Committee Meeting

At approximately 7:40 a.m. Director Havens called the Finance and Insurance Committee meeting to order.

### Consent Calendar

Director Havens asked for a Motion.

Motion: Director Freshley made a motion, seconded by Director Adjarian to approve the Consent Calendar.

### Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

### Financial Information Items

#### CAMP Performance Report Quarter Ending March 31, 2024

Mr. Cafferty stated that this is the written report provided by Mr. Babbe for informational purposes. Director Havens asked if investment activity is currently on hold as we await the maturation of funds. Mr. Sharma explained that the District is extending duration to gauge the timing of changing interest rates. President Monin agreed and stated that when interest rates drop prices go up and added that CD's don't accrue interest on principal. Mr. Cafferty stated that the District is trying to balance the timing of liquidity and upcoming capital spending. Mr. Sharma stated that a decision will be made over the next few months.

### Update on the Implementation of the Springbrook Software System

Mr. Sharma stated that the implementation of the Springbrook Billing System is scheduled for the week of June 7, 2024. Mr. Sharma explained that customer communication regarding upcoming changes will begin over the next few weeks. Director Freshley asked if testing has been completed. Mr. Sharma replied that staff has completed testing that can be thought of and that there will be a one-week period of mirroring before going live. Director Havens asked if a couple of weeks would be enough time to notify customers. Mr. Cafferty explained that we would have liked more time for notification however, the key customer information on the billing statements will remain the same. Mr. Cafferty also stated that outreach to customers on automatic payment is most important because they will have to re-sign up for the automatic payment program and that efforts on direct contact with said customers has been made. Director Havens asked if the timing of the rate increases and new billing software system will overlap. Mr. Cafferty explained that timing will be close but not overlap because customers will receive statements with new rates in July/August. Director Adjarian asked how many customers were on automatic payment. Mr. Sharma explained that approximately 800 customers or 8-10% are on automatic payment. Director Adjarian suggested to reach automatic payment customers via telephone. Mr. Cafferty explained that the main form of contact is via telephone in addition to email and bill messages.

### Arrearage Payment Program Report

Mr. Cafferty stated that the second phase of the program is now complete and that it is not anticipated that there will be additional federal funding for the program.

Mr. Cafferty stated that approximately \$100,000.00 has been applied to customers' accounts as a result of program funds. Director Freshley asked for explanation on wastewater accounts. Mr. Cafferty explained that customers pay both a water and sewer charges. Mr. Cafferty further explained that the residential waste water charge is a fixed charge.

#### 2024/25 Fiscal Year Budget

Mr. Cafferty stated that the Proposition 218 Notices were mailed out last Monday. Mr. Cafferty further explained that the Proposition 218 Notices focused on the increase of the commodity rate charges and that all the other charges for O&M and Capital are being implemented as defined in last year's Proposition 218 Notice. Mr. Cafferty stated that since the commodity rates are increasing more than was anticipated, a new Proposition 218 Notice had to be issued. Mr. Cafferty further noted that the Proposition 218 Notice defines the commodity rate increase which includes a 26-cent increase on all potable water tiers and a 24-cent increase on recycled water. Mr. Cafferty stated that the District received a first protest and it is the only one so far. Mr. Cafferty further explained that the increase is purely a passthrough increase on what it costs the District to buy the water.

Mr. Cafferty stated that the cost of service study is now complete and is posted on the District website. Mr. Cafferty further stated that customers are going to be notified of the rate increase tied to last year's Proposition 218 Notice via the May billing statements bill message. Mr. Cafferty noted that this notification is also being advertised in the newsletter, on the District website, and via social media. Mr. Cafferty further stated there are two upcoming community information meetings and the public hearing is taking place on the same day as the June Board Meeting.

## Financial Action Items

### 2024 Potable Water Commodity Rate and Recycled Water Rate

Mr. Cafferty stated in order to support the commodity rate increases defined in the Proposition 218 Notice, a cost of service study focused on said rates was performed by Raftelis and the final report will be posted on the District website. Director Havens asked if there was an error on page 90, table 3-3, item 2 “error reference source not found”. Mr. Cafferty stated that the error in the excel file table would be corrected. Director Adjarian commented on a great report done by Raftelis and their consistency in the last few reports.

Director Havens asked for a Motion.

Motion: Vice President Gaskins made a Motion, seconded by Director Adjarian to approve the 2024 Potable Water Commodity Rate and Recycled Water Rate Update Report.

#### Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

### Financial Package - Authorization to Approve Payment of Bills for the Month Ending May 20, 2024 and Receive and File Financial Statements as of April 30, 2024

Director Freshley asked for clarification on payment made for bicycle tires and tubes. Mr. Cafferty explained that there are a couple of bicycles at the Water Recycling Plant that are used by the plant operators to get around the large facility. Mr. Cafferty explained that the bicycles needed repairs for which Chief Plant Operator, Michael

Snow made purchases for and was then reimbursed.

Director Havens asked for explanation on the cost increase of natural gas line item located on page 104. Mr. Cafferty explained that in early 2023, there was a huge spike in natural gas costs. Mr. Cafferty also stated that a further explanation for the increase of natural gas would be looked at.

Director Havens asked for a Motion.

Motion: Director Freshley made a motion, seconded by President Monin to 1) approve, ratify and confirm payment of those bills as set forth in the Payment Summary for the month ending May 20, 2024, and 2) receive and file the Financial Statements for the month ending April 30, 2024.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

Comments Regarding Non-Agenda FIC Items

President Monin applauded the work done on the new CCTV system. President Monin also asked for explanation of light attendance (32) at the recent CAG meeting; noting that 16 attendees were District staff. President Monin suggested to either expand the marketing of the CAG meeting, reduce the number of meetings, or consider it a onetime occurrence. Ms. Seitz explained that the CAG meeting date had been moved due to the ACWA Conference.

Adjournment

There being no further business the Finance and Insurance Committee meeting was closed at approximately 8:00 a.m.

Respectfully submitted

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MARISOL MELENDEZ  
Recording Secretary

APPROVED:

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MARK MONIN, President  
of the El Toro Water District and the  
Board of Directors thereof

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DENNIS P. CAFFERTY, Secretary  
of the El Toro Water District and the  
Board of Directors thereof



# El Toro Water District

## **Investment Performance Review For the Quarter Ended March 31, 2024**

Client Management Team

PFM Asset Management LLC

Keith Stribling, CFA Senior Portfolio Manager

1 California Street  
Suite 1000  
San Francisco, CA 94111

1735 Market Street  
43rd Floor  
Philadelphia, PA 19103

# **Financial Markets & Investment Strategy Review**

	QTD	YTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>DOMESTIC EQUITY</b>							
S&P 500	10.56%	10.56%	29.88%	11.49%	15.05%	14.09%	12.96%
Russell 3000 Index	10.02%	10.02%	29.29%	9.78%	14.34%	13.45%	12.33%
Russell 1000 Value Index	8.99%	8.99%	20.27%	8.11%	10.31%	9.16%	9.01%
Russell 1000 Index	10.30%	10.30%	29.87%	10.45%	14.76%	13.85%	12.68%
Russell 1000 Growth Index	11.41%	11.41%	39.00%	12.50%	18.52%	18.06%	15.98%
Russell Midcap Index	8.60%	8.60%	22.35%	6.07%	11.10%	10.58%	9.95%
Russell 2000 Value Index	2.90%	2.90%	18.75%	2.22%	8.17%	6.55%	6.87%
Russell 2000 Index	5.18%	5.18%	19.71%	-0.10%	8.10%	7.73%	7.58%
Russell 2000 Growth Index	7.58%	7.58%	20.35%	-2.68%	7.38%	8.40%	7.89%
<b>INTERNATIONAL EQUITY</b>							
MSCI EAFE (Net)	5.78%	5.78%	15.32%	4.78%	7.33%	6.70%	4.80%
MSCI AC World Index (Net)	8.20%	8.20%	23.22%	6.96%	10.92%	10.23%	8.66%
MSCI AC World ex USA (Net)	4.69%	4.69%	13.26%	1.94%	5.97%	5.88%	4.25%
MSCI AC World ex USA Small Cap (Net)	2.11%	2.11%	12.80%	0.38%	6.24%	5.74%	4.74%
MSCI EM (Net)	2.37%	2.37%	8.15%	-5.05%	2.22%	3.72%	2.95%
<b>ALTERNATIVES</b>							
FTSE NAREIT Equity REIT Index	-0.20%	-0.20%	10.54%	4.14%	4.15%	5.08%	6.61%
FTSE EPRA/NAREIT Developed Index	-1.05%	-1.05%	8.57%	-0.19%	0.75%	3.08%	4.00%
FTSE Global Core Infrastructure 50/50 Index (Net)	1.55%	1.55%	3.22%	2.91%	3.78%	5.27%	5.60%
Bloomberg Commodity Index Total Return	2.19%	2.19%	-0.56%	9.11%	6.38%	4.26%	-1.56%
<b>FIXED INCOME</b>							
Blmbg. U.S. Aggregate	-0.78%	-0.78%	1.70%	-2.46%	0.36%	1.06%	1.54%
Blmbg. U.S. Government/Credit	-0.72%	-0.72%	1.74%	-2.35%	0.62%	1.27%	1.70%
Blmbg. Intermed. U.S. Government/Credit	-0.15%	-0.15%	2.69%	-1.06%	1.09%	1.43%	1.61%
Blmbg. U.S. Treasury: 1-3 Year	0.28%	0.28%	2.94%	0.01%	1.13%	1.20%	1.06%
ICE BofAML Global High Yield Constrained (USD)	1.47%	1.47%	11.09%	0.43%	3.12%	3.63%	3.52%
Blmbg. Global Aggregate Ex USD	-3.21%	-3.21%	-0.71%	-6.53%	-2.50%	-0.82%	-1.38%
JPM EMBI Global Diversified	2.04%	2.04%	11.28%	-1.39%	0.71%	1.71%	3.05%
<b>CASH EQUIVALENT</b>							
90 Day U.S. Treasury Bill	1.30%	1.30%	5.35%	2.65%	2.06%	1.94%	1.41%

Source: Investment Metrics. Returns are expressed as percentages. Please refer to the last page of this document for important disclosures relating to this material.

### Investment Strategy Overview










Asset Class	Our Q2 2024 Investment Outlook	Comments
<b>U.S. Equities</b>		<ul style="list-style-type: none"> <li>Fed's guidance of higher economic growth and moderating inflation a positive but recent uptick in inflation data warrants attention. Markets reacted positively to March Fed projections with S&amp;P hitting all time high.</li> <li>Rising valuations are supported by improving earnings growth expectations but any negative news could lead to a pullback.</li> <li>Mid- and small-cap valuations are attractive and would benefit as investor sentiment/earnings growth expectations improve. Exposure to interest rate sensitive sectors such as regional banks remains a concern.</li> </ul>
Large-Caps		
Mid-Caps		
Small-Caps		
<b>Non-U.S. Equities</b>		<ul style="list-style-type: none"> <li>International equities continue to trade at a discount to U.S. equities but slowing economic growth in Europe and China is a headwind.</li> <li>EM equities trade at attractive valuations relative to developed market equities. We remain cautious on China and are closely monitoring the recent change in investor sentiment towards Chinese equities.</li> <li>International small-caps provide exposure to foreign local economies, but uneven economic growth and geopolitical tensions leads us to be at neutral positioning.</li> <li>Overall, we maintain neutral exposure to international equities.</li> </ul>
Developed Markets		
Emerging Markets		
International Small-Caps		
<b>Fixed Income</b>		<ul style="list-style-type: none"> <li>The Fed's recent guidance points towards soft-landing scenario with three expected rate cuts in 2024. Yields at short-end of the curve look attractive even as long-term yields fell back from the recent highs. We expect a further fall in yields as inflation continues to moderate.</li> <li>Credit markets remain attractive due to strong corporate fundamentals. We continue to seek diversified credit exposure and are closely watching signs for any distress in the corporate credit space.</li> </ul>
Long-Duration, Interest Rate-Sensitive Sectors		
Credit-Sensitive Sectors		
<b>Alternatives</b>		<ul style="list-style-type: none"> <li>Higher interest rates and rising foreclosure for office buildings are headwinds for private real estate returns. Public REITs have recovered from the lows in 2023. We expect this trend to continue helped by falling rates and economic soft landing.</li> <li>Private equity is facing headwinds from higher leverage costs and falling valuations. Debt strategies may benefit from banks' tighter lending standards as long as default rates remain low.</li> <li>Increased infrastructure investment in the U.S. post the passing of Jobs Act and Chips Act a positive for infrastructure. Transition to renewable energy is another tailwind for both private and listed infrastructure while higher interest rates are headwinds.</li> </ul>
Real Estate		
Private Equity		
Private Debt		
Infrastructure		

● Current outlook ○ Outlook one quarter ago



The view expressed within this material constitute the perspective and judgment of PFM Asset Management LLC at the time of distribution (March 31, 2024) and are subject to change.

**Factors to Consider Over the Next 6-12 Months**

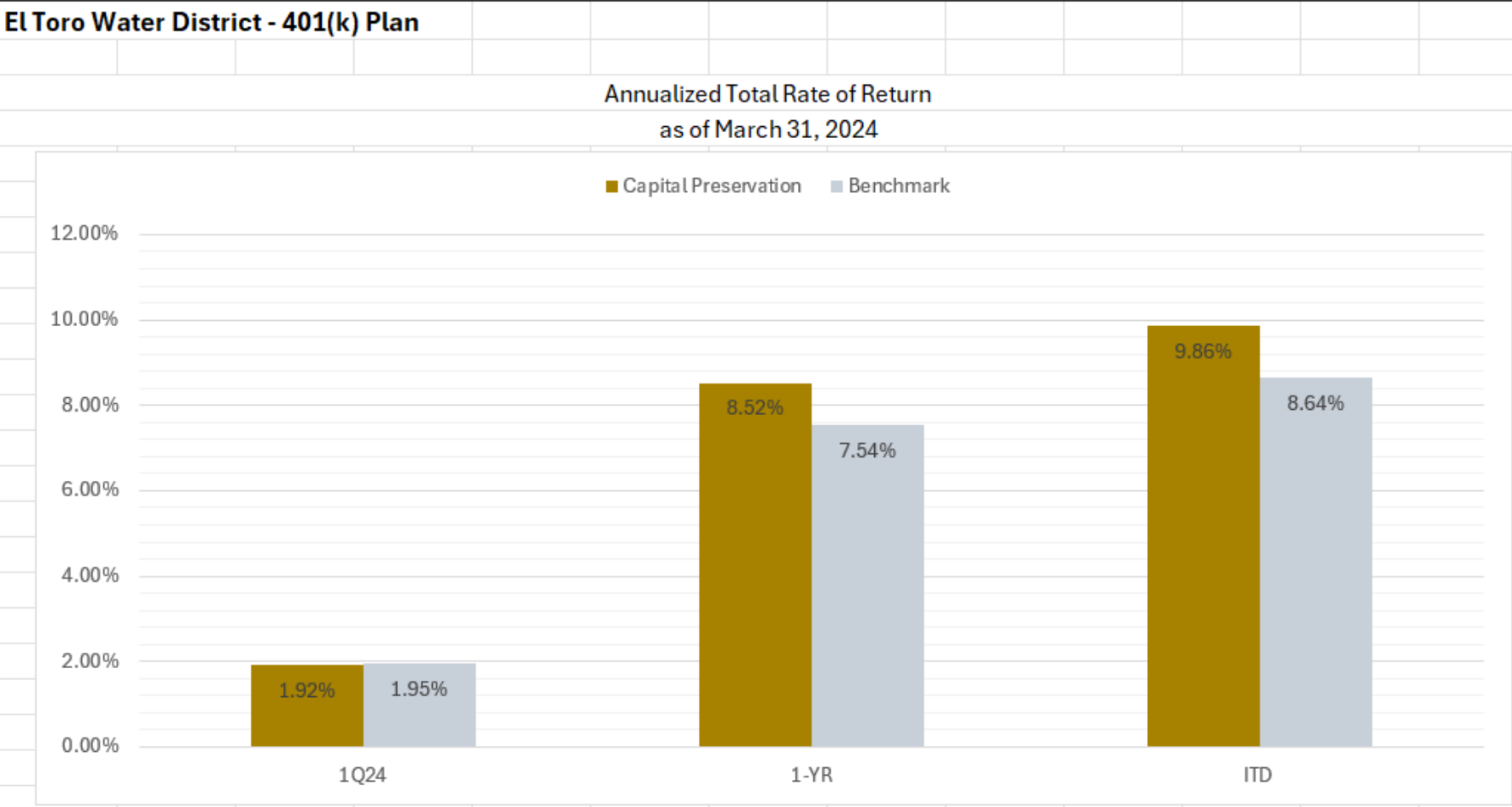
<b>Monetary Policy:</b>  <ul style="list-style-type: none"> <li>Recent Fed guidance implies three rate cuts in 2024 and points to an economic soft landing but path of rate cuts remains uncertain.</li> <li>Globally, central banks are nearing the start of rate cutting cycle in reaction to moderating inflation with the Swiss central bank being the first to cut.</li> </ul>	<b>Economic Growth:</b>  <ul style="list-style-type: none"> <li>U.S. economic growth is led by consumers and supported by a robust labor market. Recent recovery in manufacturing activity along with continued strength in services a tailwind.</li> <li>Economic growth outside U.S. remain mixed with slower growth projected in Eurozone.</li> </ul>	<b>Inflation:</b>  <ul style="list-style-type: none"> <li>Inflation continues to moderate but has proven to be stickier than expected, predominantly in housing and service sectors. Globally, inflation has continued to moderate.</li> <li>Recent upside surprises in the U.S. warrants closer attention but expect moderating trend to continue.</li> </ul>
<b>Financial Conditions:</b>  <ul style="list-style-type: none"> <li>Financial conditions continue to ease as the Fed pivot remains in play alongside strength in various economic indicators.</li> <li>With interest rates remaining elevated, we continue to focus on identifying pockets of stress within financial markets.</li> </ul>	<b>Consumer Spending (U.S.):</b>  <ul style="list-style-type: none"> <li>Consumer confidence reached a multi-year high following strong wage growth, a resilient labor market, and moderating inflation.</li> <li>Hiring, wage growth, and increased hours worked have all played a role in boosting personal income and spending and we expect consumer strength to continue as labor markets remain healthy.</li> </ul>	<b>Labor Markets:</b>  <ul style="list-style-type: none"> <li>The labor market remains strong, but we have seen cooling conditions from the extreme levels of 2022.</li> <li>Strong wage increases reflect a competitive labor market and is a key focus for monetary policy moving forward.</li> </ul>
<b>Corporate Fundamentals:</b>  <ul style="list-style-type: none"> <li>Earnings growth expectations are improving while profit margins are stabilizing at pre-pandemic levels.</li> <li>Higher cash levels especially across S&amp;P 500 companies, increasing stock buybacks and lower credit default rates are positives.</li> </ul>	<b>Valuations:</b>  <ul style="list-style-type: none"> <li>U.S. equity and credit markets have experienced a run up in valuations amid strong corporate fundamentals and continued economic growth.</li> <li>International equities look attractive but continued economic and geopolitical uncertainty is leading to increased volatility.</li> </ul>	<b>Political Risks:</b>  <ul style="list-style-type: none"> <li>Geopolitical risks continue to remain elevated. U.S./China tensions, Russia/Ukraine war, Israel/Hamas conflict, China's moves in South China Sea and Taiwan Strait further add to risks.</li> <li>Elections across the globe could also lead to short-term volatility.</li> </ul>

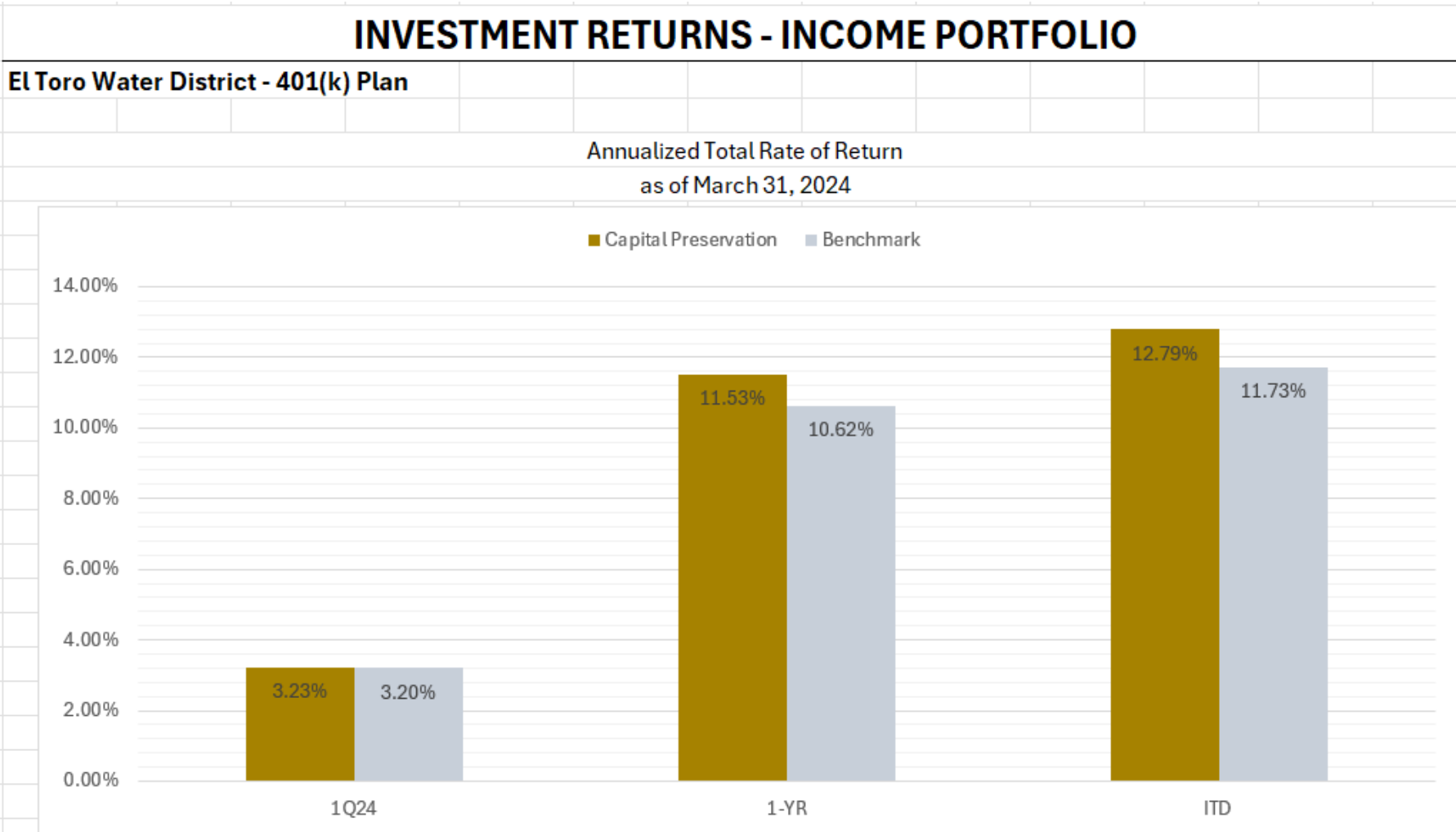
● Current outlook
○ Outlook one quarter ago
Stance Unfavorable to Risk Assets
Negative
Slightly Negative
Neutral
Slightly Positive
Positive
Stance Favorable to Risk Assets

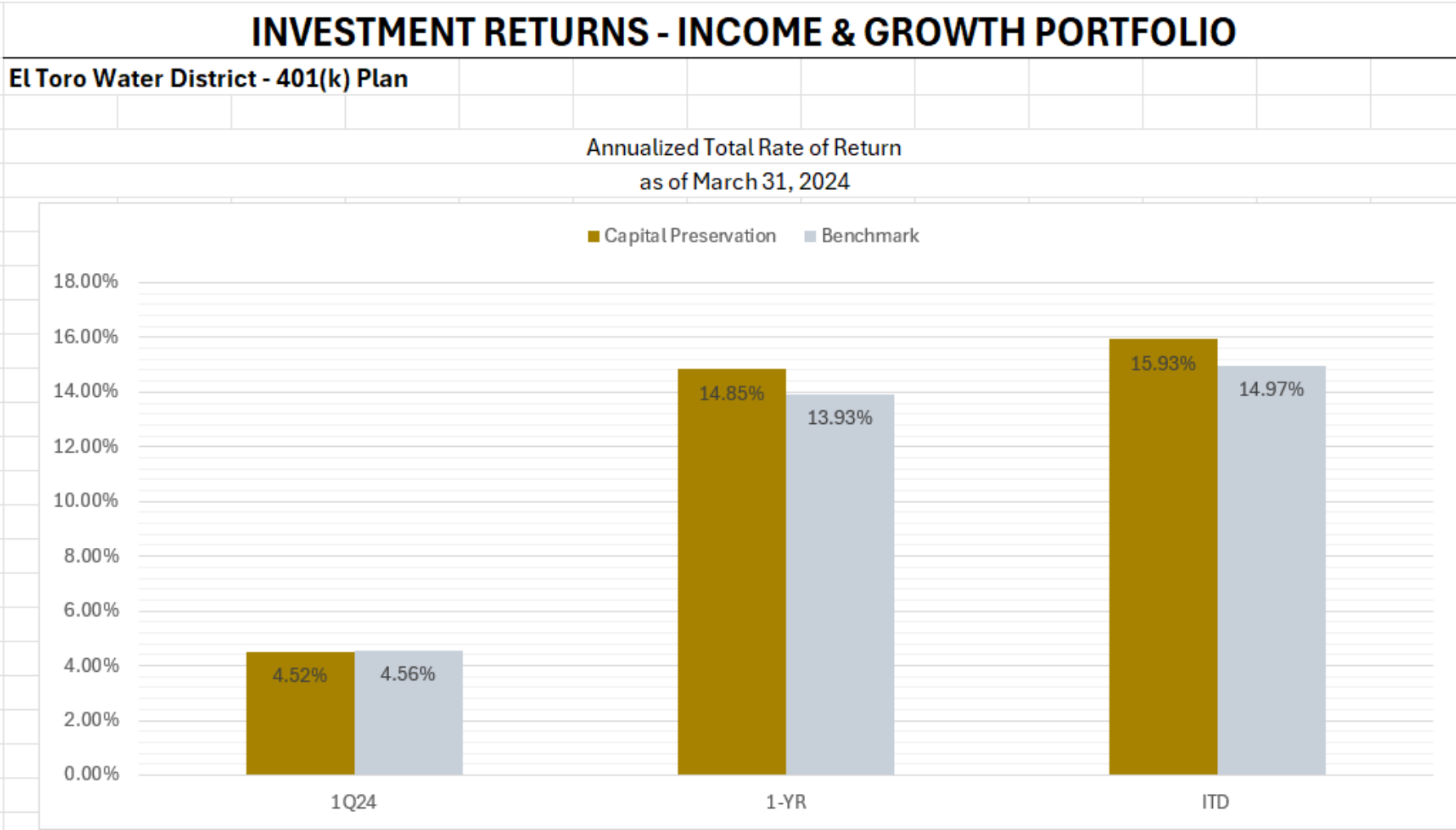
Statements and opinions expressed about the next 6-12 months were developed based on our independent research with information obtained from Bloomberg. The views expressed within this material constitute the perspective and judgment of PFM Asset Management LLC at the time of distribution (March 31, 2024) and are subject to change. Information is obtained from sources generally believed to be reliable and available to the public; however, PFM Asset Management LLC cannot guarantee its accuracy, completeness, or suitability.

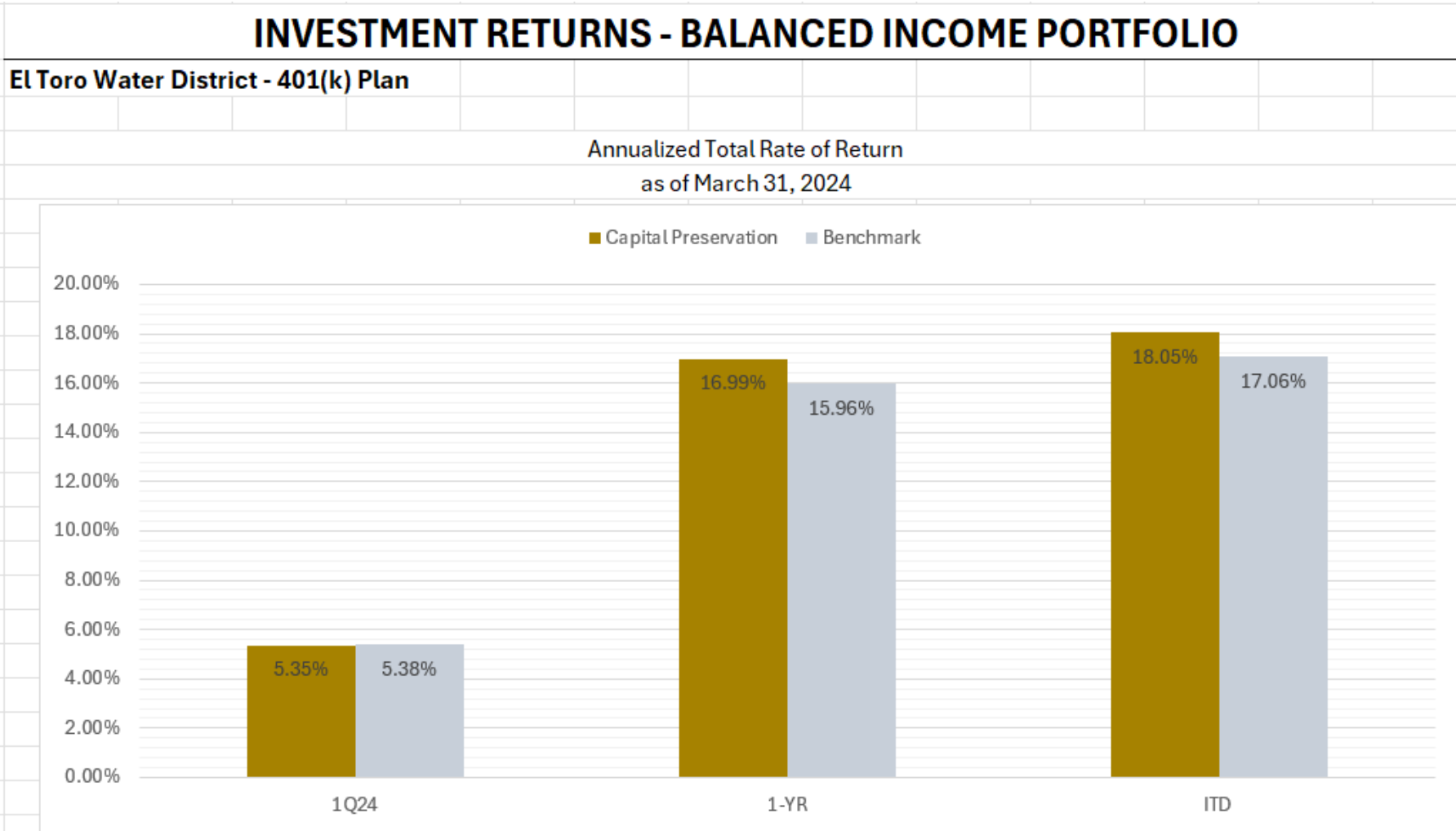
## **Plan Performance Summary**

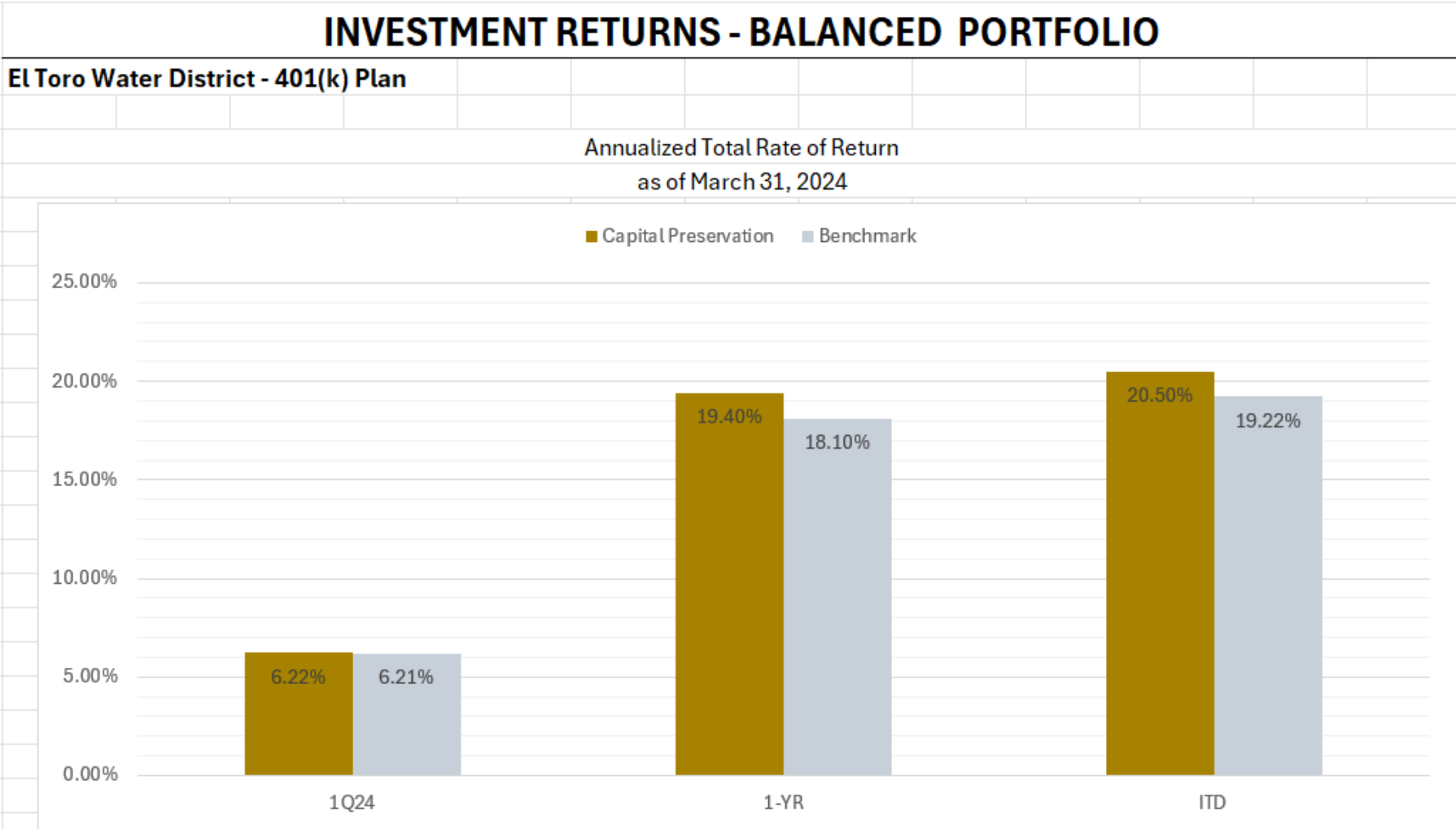
INVESTMENT RETURNS - CAPITAL PRESERVATION PORTFOLIO

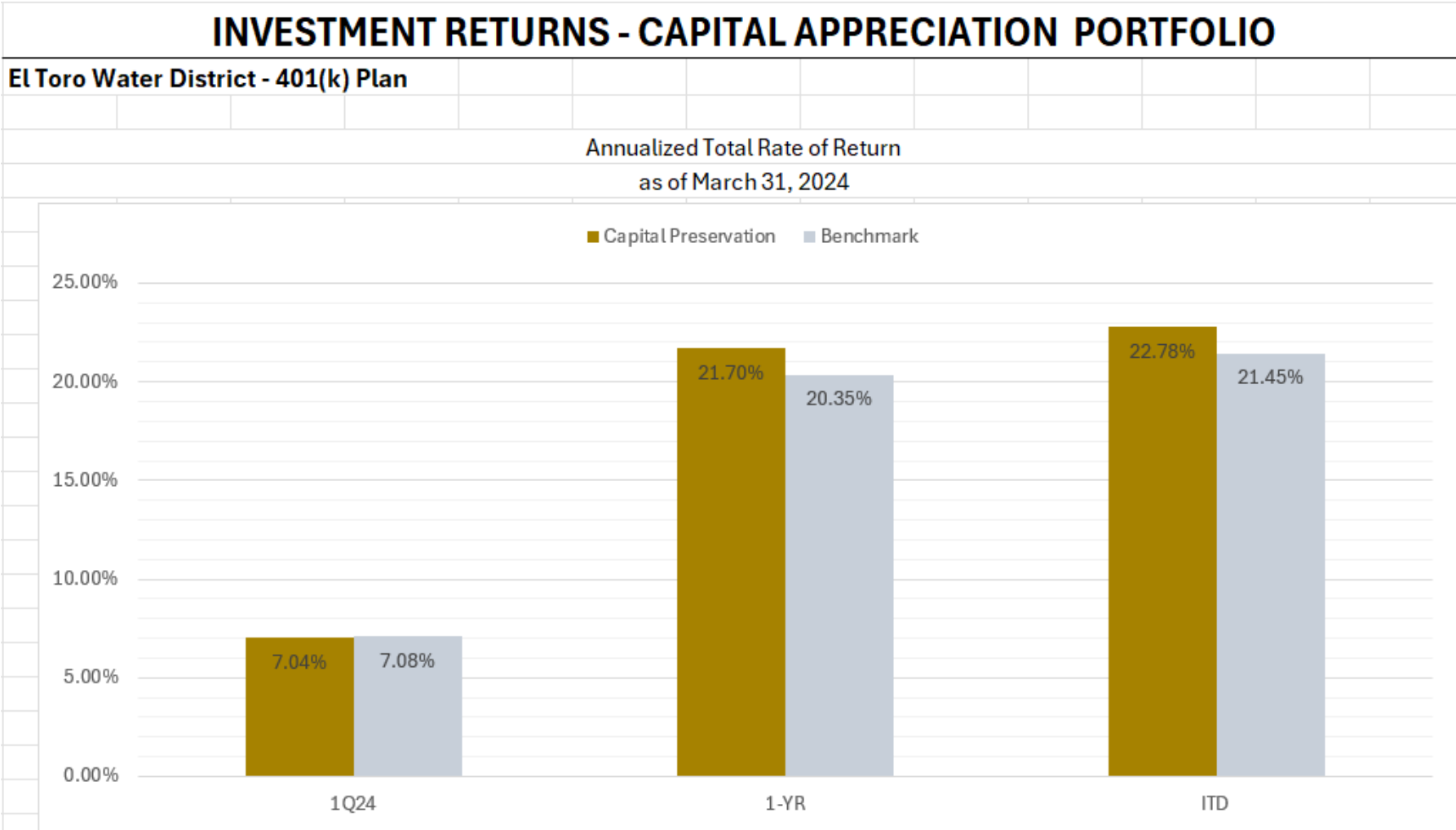


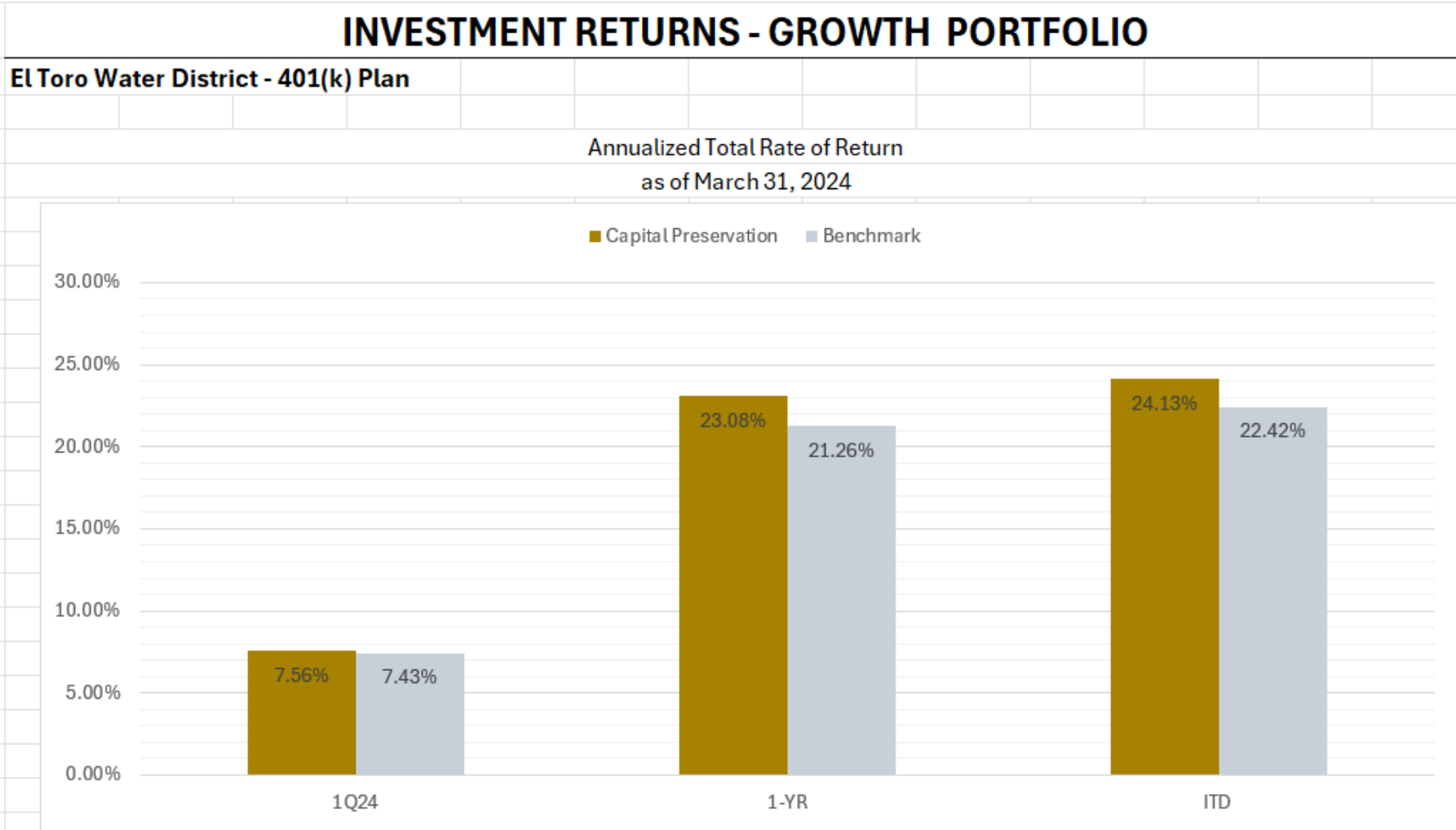












## Fund Performance &amp; Lipper Ranking

	Allocation	Performance(%)				
	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception
<b>Domestic Equity</b>						
<i>Russell 3000 Index</i>	10.02	29.29	9.78	14.34	12.33	8.81
Dodge & Cox Stock	8.50 (64)	25.59 (25)	10.37 (27)	13.57 (13)	11.08 (7)	8.38 (69)
PIMCO RAE US Instl	12.46 (8)	28.47 (12)	12.51 (6)	13.62 (13)	N/A	11.54 (10)
Columbia Contrarian Core Inst3	10.50 (54)	34.37 (13)	11.44 (28)	16.16 (8)	12.94 (14)	8.52 (64)
Vanguard Growth & Income Adm	12.44 (14)	31.75 (28)	11.98 (18)	15.21 (21)	13.03 (13)	9.70 (25)
Harbor Capital Appreciation Ret	13.75 (32)	47.91 (5)			N/A	9.12 (47)
Vanguard Growth Index Admiral	10.90 (74)	38.82 (60)	10.91 (29)	17.91 (13)	15.06 (19)	8.45 (66)
<i>S&amp;P 500</i>	10.56	29.88	11.49	15.05	12.96	8.73
Vanguard Mid Cap Index Admiral	7.86 (70)	20.44 (73)	5.71 (16)	10.93 (54)	9.88 (67)	9.50 (52)
<i>Russell Midcap Index</i>	8.60	22.35	6.07	11.10	9.95	10.17
Undisc Managers Behavioral Val R6	6.39 (50)	21.25 (28)	9.73 (26)	12.70 (15)	9.96 (11)	8.69 (35)
Delaware Small Cap Core R6	2.12 (94)	13.70 (84)	2.30 (64)	8.98 ( )	N/A	6.55 (88)
Emerald Growth Institutional	5.83 (77)	21.02 (37)				9.53 (55)
<i>Russell 2000 Index</i>	5.18	19.71	-0.10	8.10	7.58	9.44
<b>International Equity</b>						
<i>MSCI AC World ex USA (Net)</i>	4.69	13.26	1.94	5.97	4.25	5.74
Dodge & Cox International Stock	3.13 (94)	13.38 (73)	5.14 (52)	7.30 (36)	4.02 (40)	6.22 (56)
MFS International Growth R6	4.85 (77)	10.36 (68)	3.70 (14)	8.02 (36)	7.08 (12)	5.66 (76)
DFA Large Cap International I	5.73 (40)	15.46 (29)	5.34 (17)	7.86 (12)	5.04 (21)	6.49 (36)
<i>MSCI AC World ex USA (Net)</i>	4.69	13.26	1.94	5.97	4.25	5.74
Vanguard Emerging Mkts Stock Idx Adm	1.89 (74)	7.40 (62)	-3.77 (36)			5.63 (82)
<i>MSCI EM (net)</i>	2.37	8.15	-5.05	2.22	2.95	7.35
<b>Other Growth</b>						
<i>Nuveen Real Estate Securities R6</i>	-1.77 (75)	6.64 (73)		3.49 (60)	6.22 (46)	2.69 (82)
<i>MSCI US REIT Index</i>	-0.32	10.37	4.03	4.14	6.54	3.99
American Beacon AHL Managed Futures R5	8.12 (48)	7.58 (53)	6.17 (67)	7.27 (42)	N/A	9.47 (27)
The Merger Fund I	0.59 (78)	5.00 (69)	1.74 (42)	3.07 (62)	3.16 (38)	0.65 (80)
<i>ICE BofA 3 Month U.S. T-Bill</i>	1.29	5.24	2.58	2.02	1.38	.86

Returns are gross of investment advisory fees and net of mutual fund fees. Returns are expressed as percentages and for periods over one year are annualized. Asset class level returns may vary from individual underlying manager returns due to cash flows. Total Portfolio returns prior to 1/1/2024 were provided by previous Advisor and believed to be accurate and reliable. Returns for January 2024 were calculated by the legacy performance system of previous Advisor and believed to be accurate and reliable.

# Fund Performance & Lipper Ranking

	Performance(%)					
	1 Quarter	1 Year	3 Years	5 Years	10 Years	Since Inception
<b>Fixed Income</b>						
<i>Blmbg. U.S. Aggregate</i>	-0.78	1.70	-2.46	0.36	1.54	-0.50
Dodge & Cox Income	-.32 (32)	4.09 (8)	-0.92 (4)	1.89 (2)	2.52 (1)	-0.24 (24)
DoubleLine Core Fixed Income I	-.16 (38)	2.74 (50)	-1.89 (27)	N/A	N/A	-0.36 (55)
PGIM Total Return Bond R6	0.14 (19)	4.61 (8)	-1.68 (18)	0.96 (41)	2.43 (9)	-0.11 (28)
PIMCO Income Instl	1.38 (35)	8.05 (27)	1.64 (10)	3.07 (18)	4.27 (2)	0.76 (3)
Vanguard Long-Term Investment-Grade Adm	-1.64 (92)	1.80 (85)	-4.77 (91)	.035 (81)	3.05 (9)	-0.81 (90)
<i>Blmbg. U.S. Aggregate</i>	-0.78	1.70	-2.46	0.36	1.54	- 0.50
<b>Other Income</b>						
<i>N/A</i>	<i>N/A</i>					
Blackrock Tactical Opportunities K	7.07 (16)	11.96 (34)	6.14 (10)	4.87 (42)	N/A	3.72 (5)
<i>ICE BofA 3 Month U.S. T-Bill</i>	1.29	5.24	2.58	2.02	1.38	0.86
<b>Cash Equivalent</b>						
<i>N/A</i>	<i>N/A</i>					
<i>ICE BofA 3 Month U.S. T-Bill</i>	1.29	5.24	2.58	2.02	1.38	0.86
Cash Fund	N/A	N/A	N/A	N/A	N/A	N/A
<i>ICE BofA 3 Month U.S. T-Bill</i>	1.29	5.24	2.58	2.02	1.38	0.86

Returns are gross of investment advisory fees and net of mutual fund fees. Returns are expressed as percentages and for periods over one year are annualized. Asset class level returns may vary from individual underlying manager returns due to cash flows. Total Portfolio returns prior to 1/1/2024 were provided by previous Advisor and believed to be accurate and reliable. Returns for January 2024 were calculated by the legacy performance system of previous Advisor and believed to be accurate and reliable.

# GoalMaker Performance Report – Actuals

El Toro Water District

# GoalMaker Performance Report - Actuals

*Performance as of March 31, 2024*

Risk Level	Target Date	Weighted Net Expense	QTD	Weighted Average Annual Return				
				1 Year	3 Year	5 Year	10 Year	Since Inception
Conservative	2070	0.45%	7.56	23.08	--	--	--	24.13
	2065	0.45%	7.56	23.08	--	--	--	24.13
	2060	0.45%	7.56	23.08	--	--	--	24.13
	2055	0.45%	7.56	23.08	--	--	--	24.13
	2050	0.45%	7.56	23.08	--	--	--	24.13
	2045	0.45%	7.04	21.70	--	--	--	22.78
	2040	0.46%	6.22	19.40	--	--	--	20.50
	2035	0.48%	5.35	16.99	--	--	--	18.05
	2030	0.47%	4.52	14.85	--	--	--	15.93
	2025	0.48%	3.23	11.54	--	--	--	12.79
	2020	0.48%	1.90	8.42	--	--	--	9.80
	2015	0.48%	1.90	8.42	--	--	--	9.80
	2010	0.48%	1.90	8.42	--	--	--	9.80
	2005	0.48%	1.90	8.42	--	--	--	9.80

# GoalMaker Performance Report - Actuals

*Performance as of March 31, 2024*

Risk Level	Target Date	Weighted Net Expense	QTD	Weighted Average Annual Return				
				1 Year	3 Year	5 Year	10 Year	Since Inception
Moderate	2070	0.45%	7.56	23.08	--	--	--	24.13
	2065	0.45%	7.56	23.08	--	--	--	24.13
	2060	0.45%	7.56	23.08	--	--	--	24.13
	2055	0.45%	7.56	23.08	--	--	--	24.13
	2050	0.45%	7.56	23.08	--	--	--	24.13
	2045	0.45%	7.04	21.70	--	--	--	22.78
	2040	0.46%	6.22	19.40	--	--	--	20.50
	2035	0.48%	5.35	16.99	--	--	--	18.05
	2030	0.46%	4.52	14.85	--	--	--	15.93
	2025	0.48%	3.23	11.53	--	--	--	12.79
	2020	0.48%	1.92	8.52	--	--	--	9.86
	2015	0.48%	1.92	8.52	--	--	--	9.86
	2010	0.48%	1.92	8.52	--	--	--	9.86
	2005	0.48%	1.92	8.52	--	--	--	9.86

# GoalMaker Performance Report - Actuals

*Performance as of March 31, 2024*

Risk Level	Target Date	Weighted Net Expense	QTD	Weighted Average Annual Return				
				1 Year	3 Year	5 Year	10 Year	Since Inception
Aggressive	2070	0.45%	7.56	23.08	--	--	--	24.13
	2065	0.45%	7.56	23.08	--	--	--	24.13
	2060	0.45%	7.56	23.08	--	--	--	24.13
	2055	0.45%	7.56	23.08	--	--	--	24.13
	2050	0.45%	7.56	23.08	--	--	--	24.13
	2045	0.45%	7.04	21.70	--	--	--	22.78
	2040	0.46%	6.22	19.40	--	--	--	20.50
	2035	0.48%	5.35	16.99	--	--	--	18.05
	2030	0.46%	4.52	14.85	--	--	--	15.93
	2025	0.48%	3.23	11.53	--	--	--	12.79
	2020	0.48%	1.92	8.52	--	--	--	9.86
	2015	0.48%	1.92	8.52	--	--	--	9.86
	2010	0.48%	1.92	8.52	--	--	--	9.86
	2005	0.48%	1.92	8.52	--	--	--	9.86

# GoalMaker Performance Report – Actuals

El Toro Water District

*Performance as of March 31, 2024*

Group/Investment	Weighted Net Expense	Weighted Average Annual Return					Since Inception
		QTD	1 Year	3 Year	5 Year	10 Year	
Target Date 2005							
Empower GoalMaker Conservative 2005	0.48%	1.90	8.42	--	--	--	9.80
Empower GoalMaker Moderate 2005	0.48%	1.92	8.52	--	--	--	9.86
Empower GoalMaker Aggressive 2005	0.48%	1.92	8.52	--	--	--	9.86
US Fund Target-Date 2000-2010	--	2.44	8.54	1.18	4.37	4.36	--
Target Date 2010							
Empower GoalMaker Conservative 2010	0.48%	1.90	8.42	--	--	--	9.80
Empower GoalMaker Moderate 2010	0.48%	1.92	8.52	--	--	--	9.86
Empower GoalMaker Aggressive 2010	0.48%	1.92	8.52	--	--	--	9.86
US Fund Target-Date 2000-2010	--	2.44	8.54	1.18	4.37	4.36	--
Target Date 2015							
Empower GoalMaker Conservative 2015	0.48%	1.90	8.42	--	--	--	9.80
Empower GoalMaker Moderate 2015	0.48%	1.92	8.52	--	--	--	9.86
Empower GoalMaker Aggressive 2015	0.48%	1.92	8.52	--	--	--	9.86
US Fund Target-Date 2015	--	2.95	9.72	1.67	5.07	4.89	--
Target Date 2020							
Empower GoalMaker Conservative 2020	0.48%	1.90	8.42	--	--	--	9.80
Empower GoalMaker Moderate 2020	0.48%	1.92	8.52	--	--	--	9.86
Empower GoalMaker Aggressive 2020	0.48%	1.92	8.52	--	--	--	9.86
US Fund Target-Date 2020	--	3.36	10.66	1.94	5.41	5.24	--
Target Date 2025							
Empower GoalMaker Conservative 2025	0.48%	3.23	11.54	--	--	--	12.79
Empower GoalMaker Moderate 2025	0.48%	3.23	11.53	--	--	--	12.79
Empower GoalMaker Aggressive 2025	0.48%	3.23	11.53	--	--	--	12.79
US Fund Target-Date 2025	--	3.70	11.61	2.20	5.92	5.63	--
Target Date 2030							
Empower GoalMaker Conservative 2030	0.47%	4.52	14.85	--	--	--	15.93
Empower GoalMaker Moderate 2030	0.46%	4.52	14.85	--	--	--	15.93
Empower GoalMaker Aggressive 2030	0.46%	4.52	14.85	--	--	--	15.93
US Fund Target-Date 2030	--	4.53	13.69	2.95	6.99	6.40	--
Target Date 2035							

# GoalMaker Performance Report – Actuals

El Toro Water District

*Performance as of March 31, 2024*

Group/Investment	Weighted Net Expense	Weighted Average Annual Return					
		QTD	1 Year	3 Year	5 Year	10 Year	Since Inception
Empower GoalMaker Conservative 2035	0.48%	5.35	16.99	--	--	--	18.05
Empower GoalMaker Moderate 2035	0.48%	5.35	16.99	--	--	--	18.05
Empower GoalMaker Aggressive 2035	0.48%	5.35	16.99	--	--	--	18.05
US Fund Target-Date 2035	--	5.53	16.14	3.87	8.04	7.09	--
Target Date 2040							
Empower GoalMaker Conservative 2040	0.46%	6.22	19.40	--	--	--	20.50
Empower GoalMaker Moderate 2040	0.46%	6.22	19.40	--	--	--	20.50
Empower GoalMaker Aggressive 2040	0.46%	6.22	19.40	--	--	--	20.50
US Fund Target-Date 2040	--	6.43	18.35	4.66	8.94	7.68	--
Target Date 2045							
Empower GoalMaker Conservative 2045	0.45%	7.04	21.70	--	--	--	22.78
Empower GoalMaker Moderate 2045	0.45%	7.04	21.70	--	--	--	22.78
Empower GoalMaker Aggressive 2045	0.45%	7.04	21.70	--	--	--	22.78
US Fund Target-Date 2045	--	7.14	20.00	5.27	9.55	8.01	--
Target Date 2050							
Empower GoalMaker Conservative 2050	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Moderate 2050	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Aggressive 2050	0.45%	7.56	23.08	--	--	--	24.13
US Fund Target-Date 2050	--	7.51	20.84	5.53	9.77	8.17	--
Target Date 2055							
Empower GoalMaker Conservative 2055	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Moderate 2055	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Aggressive 2055	0.45%	7.56	23.08	--	--	--	24.13
US Fund Target-Date 2055	--	7.63	21.11	5.62	9.88	8.21	--
Target Date 2060							
Empower GoalMaker Conservative 2060	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Moderate 2060	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Aggressive 2060	0.45%	7.56	23.08	--	--	--	24.13
US Fund Target-Date 2060	--	7.72	21.40	5.70	10.01	7.84	--
Target Date 2065							
Empower GoalMaker Conservative 2065	0.45%	7.56	23.08	--	--	--	24.13

# GoalMaker Performance Report – Actuals

El Toro Water District

*Performance as of March 31, 2024*

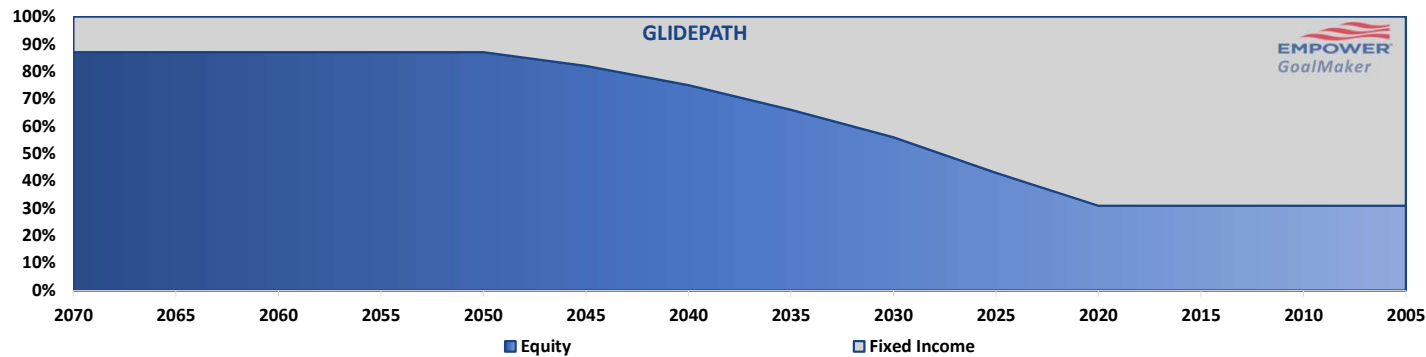
Group/Investment	Weighted Net Expense	Weighted Average Annual Return					Since Inception
		QTD	1 Year	3 Year	5 Year	10 Year	
Empower GoalMaker Moderate 2065	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Aggressive 2065	0.45%	7.56	23.08	--	--	--	24.13
US Fund Target-Date 2065+	--	7.75	21.54	5.80	10.34	-	--
<b>Target Date 2070</b>							
Empower GoalMaker Conservative 2070	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Moderate 2070	0.45%	7.56	23.08	--	--	--	24.13
Empower GoalMaker Aggressive 2070	0.45%	7.56	23.08	--	--	--	24.13
US Fund Target-Date 2065+	--	7.75	21.54	5.80	10.34	-	--

# GoalMaker Performance Report – Actuals

Allocation Summary as of March 31, 2024

## Conservative Portfolio

Asset Class	Investment Options	2070	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Stable Value	Guaranteed Income Fund	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	4%	4%	4%	4%
Fixed Income	Dodge & Cox Income - I	4%	4%	4%	4%	4%	5%	7%	10%	13%	16%	23%	23%	23%	23%
Fixed Income	PGIM Total Return Bond R6	2%	2%	2%	2%	2%	5%	6%	7%	10%	15%	11%	11%	11%	11%
Fixed Income	DoubleLine Core Fixed Income R6	4%	4%	4%	4%	4%	5%	7%	10%	12%	16%	23%	23%	23%	23%
Fixed Income	PIMCO Income Instl	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Fixed Income	Vanguard Long-Term Investment-Grade Adm	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	6%	6%	6%	6%
Large Cap Stock - Value	Dodge & Cox Stock - I	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Value	PIMCO RAE US Instl	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Blend	Columbia Contrarian Core Instl 3	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Blend	Vanguard Growth & Income Adm	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Growth	Harbor Capital Appreciation Retirement	7%	7%	7%	7%	7%	6%	5%	4%	3%	3%	2%	2%	2%	2%
Large Cap Stock - Growth	Vanguard Growth Index Adm	6%	6%	6%	6%	6%	6%	5%	4%	3%	2%	1%	1%	1%	1%
Mid Cap Stock	Vanguard Mid Cap Index Fund - Admiral	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Small / Mid Cap Stock - Value	Undiscovered Mgrs Behavioral Value R6	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
Small Cap Stock	Delaware Small Cap Core R6	3%	3%	3%	3%	3%	4%	4%	4%	3%	2%	2%	2%	2%	2%
Small / Mid Cap Stock - Growth	Emerald Growth Institutional	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
International Stock	Dodge & Cox International Stock - I	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
International Stock	DFA Large Cap International I	9%	9%	9%	9%	9%	8%	7%	5%	5%	4%	2%	2%	2%	2%
International Stock	MFS International Growth R6	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
Diversified Emerging Markets	Vanguard Emerging Mkts Stock Idx Adm	4%	4%	4%	4%	4%	4%	4%	3%	2%	1%	1%	1%	1%	1%
Other	Nuveen Real Estate Securities R6	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	6%	6%	6%	6%
Other	American Beacon AHL Mgd Futs Strat A	1%	1%	1%	1%	1%	1%	2%	3%	3%	4%	4%	4%	4%	4%
Other	The Merger Fund I	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	BlackRock Tactical Opportunities K	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

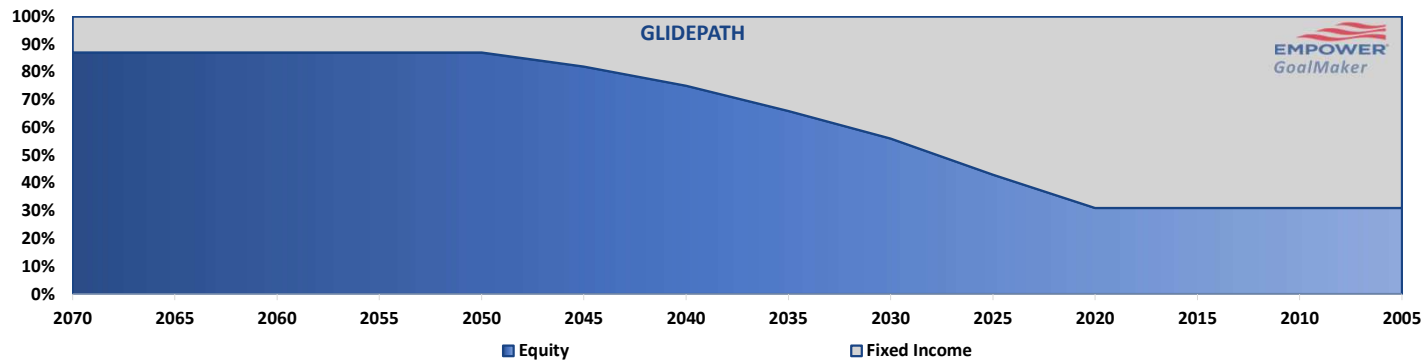


# GoalMaker Performance Report – Actuals

Allocation Summary as of March 31, 2024

## Moderate Portfolio

Asset Class	Investment Options	2070	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Stable Value	Guaranteed Income Fund	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	4%	4%	4%	4%
Fixed Income	Dodge & Cox Income - I	4%	4%	4%	4%	4%	5%	7%	10%	13%	17%	20%	20%	20%	20%
Fixed Income	PGIM Total Return Bond R6	2%	2%	2%	2%	2%	5%	6%	7%	10%	14%	18%	18%	18%	18%
Fixed Income	DoubleLine Core Fixed Income R6	4%	4%	4%	4%	4%	5%	7%	10%	12%	16%	19%	19%	19%	19%
Fixed Income	PIMCO Income Instl	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Fixed Income	Vanguard Long-Term Investment-Grade Adm	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	6%	6%	6%	6%
Large Cap Stock - Value	Dodge & Cox Stock - I	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Value	PIMCO RAE US Instl	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Blend	Columbia Contrarian Core Instl 3	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Blend	Vanguard Growth & Income Adm	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Growth	Harbor Capital Appreciation Retirement	7%	7%	7%	7%	7%	6%	5%	4%	3%	3%	2%	2%	2%	2%
Large Cap Stock - Growth	Vanguard Growth Index Adm	6%	6%	6%	6%	6%	6%	5%	4%	3%	2%	1%	1%	1%	1%
Mid Cap Stock	Vanguard Mid Cap Index Fund - Admiral	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Small / Mid Cap Stock - Value	Undiscovered Mgrs Behavioral Value R6	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
Small Cap Stock	Delaware Small Cap Core R6	3%	3%	3%	3%	3%	4%	4%	4%	3%	2%	2%	2%	2%	2%
Small / Mid Cap Stock - Growth	Emerald Growth Institutional	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
International Stock	Dodge & Cox International Stock - I	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
International Stock	DFA Large Cap International I	9%	9%	9%	9%	9%	8%	7%	5%	5%	4%	2%	2%	2%	2%
International Stock	MFS International Growth R6	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
Diversified Emerging Markets	Vanguard Emerging Mkts Stock Idx Adm	4%	4%	4%	4%	4%	4%	4%	3%	2%	1%	1%	1%	1%	1%
Other	Nuveen Real Estate Securities R6	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	6%	6%	6%	6%
Other	American Beacon AHL Mgd Futs Strat A	1%	1%	1%	1%	1%	1%	2%	3%	3%	4%	4%	4%	4%	4%
Other	The Merger Fund I	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	BlackRock Tactical Opportunities K	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

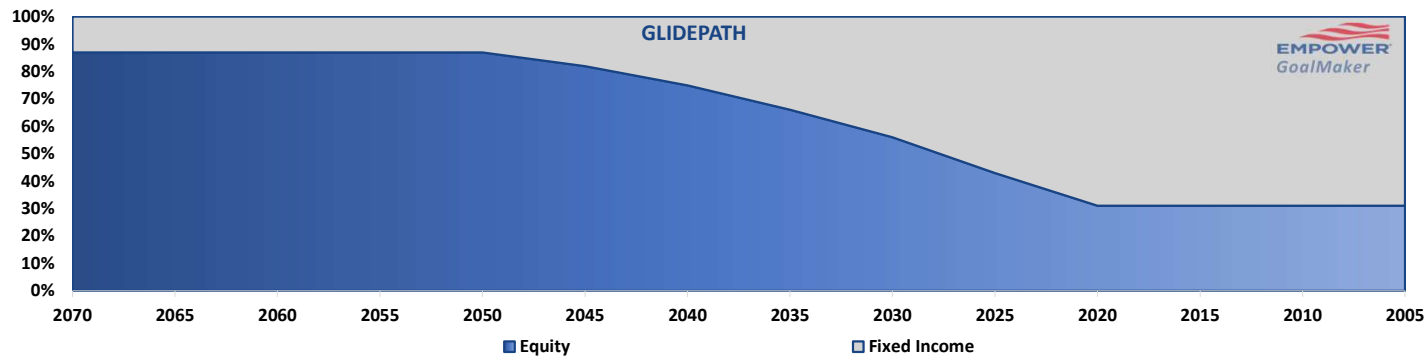


# GoalMaker Performance Report – Actuals

Allocation Summary as of March 31, 2024

## Aggressive Portfolio

Asset Class	Investment Options	2070	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Stable Value	Guaranteed Income Fund	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	4%	4%	4%	4%
Fixed Income	Dodge & Cox Income - I	4%	4%	4%	4%	4%	5%	7%	10%	13%	17%	20%	20%	20%	20%
Fixed Income	PGIM Total Return Bond R6	2%	2%	2%	2%	2%	5%	6%	7%	10%	14%	18%	18%	18%	18%
Fixed Income	DoubleLine Core Fixed Income R6	4%	4%	4%	4%	4%	5%	7%	10%	12%	16%	19%	19%	19%	19%
Fixed Income	PIMCO Income Instl	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Fixed Income	Vanguard Long-Term Investment-Grade Adm	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	6%	6%	6%	6%
Large Cap Stock - Value	Dodge & Cox Stock - I	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Value	PIMCO RAE US Instl	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Blend	Columbia Contrarian Core Instl 3	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Blend	Vanguard Growth & Income Adm	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Growth	Harbor Capital Appreciation Retirement	7%	7%	7%	7%	7%	6%	5%	4%	3%	3%	2%	2%	2%	2%
Large Cap Stock - Growth	Vanguard Growth Index Adm	6%	6%	6%	6%	6%	6%	5%	4%	3%	2%	1%	1%	1%	1%
Mid Cap Stock	Vanguard Mid Cap Index Fund - Admiral	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Small / Mid Cap Stock - Value	Undiscovered Mgrs Behavioral Value R6	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
Small Cap Stock	Delaware Small Cap Core R6	3%	3%	3%	3%	3%	4%	4%	4%	3%	2%	2%	2%	2%	2%
Small / Mid Cap Stock - Growth	Emerald Growth Institutional	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
International Stock	Dodge & Cox International Stock - I	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
International Stock	DFA Large Cap International I	9%	9%	9%	9%	9%	8%	7%	5%	5%	4%	2%	2%	2%	2%
International Stock	MFS International Growth R6	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
Diversified Emerging Markets	Vanguard Emerging Mkts Stock Idx Adm	4%	4%	4%	4%	4%	4%	4%	3%	2%	1%	1%	1%	1%	1%
Other	Nuveen Real Estate Securities R6	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	6%	6%	6%	6%
Other	American Beacon AHL Mgd Futs Strat A	1%	1%	1%	1%	1%	1%	2%	3%	3%	4%	4%	4%	4%	4%
Other	The Merger Fund I	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	BlackRock Tactical Opportunities K	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%



## GoalMaker Disclosures

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The calculated returns shown are the weighted average returns of the underlying funds for the GoalMaker models based on allocations prior to 03/31/2024.

Returns are net of product expenses and fees and before any contract charges, with the exception of any fees the sponsor may have directed to be deducted from participant accounts. The performance shown for the GoalMaker models is for illustrative purposes only and does not reflect the actual experience of any individual participant in the program. This performance was calculated with the retroactive application of a model with the benefit of hindsight. The performance shown 1) was rebalanced on a periodic basis as per your plan 2) assumes no changes to the asset allocation percentages or to the investment options for the relevant periods 3) assumes that an individual was enrolled in GoalMaker for the entire relevant time period and 4) assumes an initial investment but does not include the effect of periodic contributions or withdrawals.

The performance quoted represents past performance. The investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Past performance does not guarantee future results. Current performance may be lower or higher than the performance data quoted.

Three types of performance information may be provided. "Fund" Performance represents the actual performance of the Fund for all periods since the inception date of the Fund. "Composite" represents the composite return of multiple models advised by the current Manager having a similar investment style as this Fund. "Blended" represents a combination of the Actual Fund performance and the current Manager Composite performance. Actual Fund performance is used for periods after the Fund was managed by the current Manager. For periods before the current Manager's assumption of Fund management, the Manager Composite return is used. The inception date associated with this line is the inception date of the Manager Composite. "Since Inception" returns are only provided when the inception date is less than 10 years ago.

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## GoalMaker Disclosures

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An Asset Allocation Model provides targeted asset allocation and allocates your account across the model's underlying investments. The plan may include Asset Allocation Models designed according to certain risk levels (e.g. Aggressive, Moderate or Conservative), Asset Allocation Models that follow a glide path based on a target date (2025, 2030, 2035 etc.), or both model types depending upon the models selected by the plan. Neither of which is without risk or guarantee of positive returns. The date in the name of a target date model is an assumed date in which an investor will retire. The asset allocation becomes more conservative as the target retirement date nears, and depending on the model's design, can remain static at the target date or adjust further through retirement. There is no guarantee the investment will provide adequate retirement income.

Asset Allocation Models are subject to change at the plan's (or an authorized representative thereof) discretion.

Investors should review the prospectus, summary prospectus for SEC-registered products, or disclosure document for unregistered products, if available, for underlying fund objectives, risks, fees and expenses. Investors should also periodically reassess their investments to make sure their model continues to correspond to their changing risk tolerance and retirement time horizon.

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**El Toro Water District 401(k) Plan**  
**First Quarter 2024**



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# GoalMaker Performance Report – Actuals

El Toro Water District

# GoalMaker Performance Report - Actuals

*Performance as of March 31, 2024*

Risk Level	Target Date	Weighted Net Expense	QTD	Weighted Average Annual Return				
				1 Year	3 Year	5 Year	10 Year	Since Inception
Conservative	2070	0.45%	7.56	23.08	--	--	--	22.47
	2065	0.45%	7.56	23.08	--	--	--	22.47
	2060	0.45%	7.56	23.08	--	--	--	22.47
	2055	0.45%	7.56	23.08	--	--	--	22.47
	2050	0.45%	7.56	23.08	--	--	--	22.47
	2045	0.45%	7.04	21.70	--	--	--	21.21
	2040	0.46%	6.22	19.40	--	--	--	19.10
	2035	0.48%	5.35	16.99	--	--	--	16.83
	2030	0.47%	4.52	14.85	--	--	--	14.86
	2025	0.48%	3.23	11.54	--	--	--	11.95
	2020	0.48%	1.90	8.42	--	--	--	9.16
	2015	0.48%	1.90	8.42	--	--	--	9.16
	2010	0.48%	1.90	8.42	--	--	--	9.16
	2005	0.48%	1.90	8.42	--	--	--	9.16

# GoalMaker Performance Report - Actuals

*Performance as of March 31, 2024*

Risk Level	Target Date	Weighted Net Expense	QTD	Weighted Average Annual Return				
				1 Year	3 Year	5 Year	10 Year	Since Inception
Moderate	2070	0.45%	7.56	23.08	--	--	--	22.47
	2065	0.45%	7.56	23.08	--	--	--	22.47
	2060	0.45%	7.56	23.08	--	--	--	22.47
	2055	0.45%	7.56	23.08	--	--	--	22.47
	2050	0.45%	7.56	23.08	--	--	--	22.47
	2045	0.45%	7.04	21.70	--	--	--	21.21
	2040	0.46%	6.22	19.40	--	--	--	19.10
	2035	0.48%	5.35	16.99	--	--	--	16.83
	2030	0.46%	4.52	14.85	--	--	--	14.87
	2025	0.48%	3.23	11.53	--	--	--	11.94
	2020	0.48%	1.92	8.52	--	--	--	9.22
	2015	0.48%	1.92	8.52	--	--	--	9.22
	2010	0.48%	1.92	8.52	--	--	--	9.22
	2005	0.48%	1.92	8.52	--	--	--	9.22

# GoalMaker Performance Report - Actuals

*Performance as of March 31, 2024*

Risk Level	Target Date	Weighted Net Expense	QTD	Weighted Average Annual Return				
				1 Year	3 Year	5 Year	10 Year	Since Inception
Aggressive	2070	0.45%	7.56	23.08	--	--	--	22.47
	2065	0.45%	7.56	23.08	--	--	--	22.47
	2060	0.45%	7.56	23.08	--	--	--	22.47
	2055	0.45%	7.56	23.08	--	--	--	22.47
	2050	0.45%	7.56	23.08	--	--	--	22.47
	2045	0.45%	7.04	21.70	--	--	--	21.21
	2040	0.46%	6.22	19.40	--	--	--	19.10
	2035	0.48%	5.35	16.99	--	--	--	16.83
	2030	0.46%	4.52	14.85	--	--	--	14.87
	2025	0.48%	3.23	11.53	--	--	--	11.94
	2020	0.48%	1.92	8.52	--	--	--	9.22
	2015	0.48%	1.92	8.52	--	--	--	9.22
	2010	0.48%	1.92	8.52	--	--	--	9.22
	2005	0.48%	1.92	8.52	--	--	--	9.22

# GoalMaker Performance Report – Actuals

El Toro Water District

*Performance as of March 31, 2024*

Group/Investment	Weighted Net Expense	Weighted Average Annual Return					
		QTD	1 Year	3 Year	5 Year	10 Year	Since Inception
Target Date 2005							
Empower GoalMaker Conservative 2005	0.48%	1.90	8.42	--	--	--	9.16
Empower GoalMaker Moderate 2005	0.48%	1.92	8.52	--	--	--	9.22
Empower GoalMaker Aggressive 2005	0.48%	1.92	8.52	--	--	--	9.22
US Fund Target-Date 2000-2010	--	2.44	8.54	1.18	4.37	4.36	--
Target Date 2010							
Empower GoalMaker Conservative 2010	0.48%	1.90	8.42	--	--	--	9.16
Empower GoalMaker Moderate 2010	0.48%	1.92	8.52	--	--	--	9.22
Empower GoalMaker Aggressive 2010	0.48%	1.92	8.52	--	--	--	9.22
US Fund Target-Date 2000-2010	--	2.44	8.54	1.18	4.37	4.36	--
Target Date 2015							
Empower GoalMaker Conservative 2015	0.48%	1.90	8.42	--	--	--	9.16
Empower GoalMaker Moderate 2015	0.48%	1.92	8.52	--	--	--	9.22
Empower GoalMaker Aggressive 2015	0.48%	1.92	8.52	--	--	--	9.22
US Fund Target-Date 2015	--	2.95	9.72	1.67	5.07	4.89	--
Target Date 2020							
Empower GoalMaker Conservative 2020	0.48%	1.90	8.42	--	--	--	9.16
Empower GoalMaker Moderate 2020	0.48%	1.92	8.52	--	--	--	9.22
Empower GoalMaker Aggressive 2020	0.48%	1.92	8.52	--	--	--	9.22
US Fund Target-Date 2020	--	3.36	10.66	1.94	5.41	5.24	--
Target Date 2025							
Empower GoalMaker Conservative 2025	0.48%	3.23	11.54	--	--	--	11.95
Empower GoalMaker Moderate 2025	0.48%	3.23	11.53	--	--	--	11.94
Empower GoalMaker Aggressive 2025	0.48%	3.23	11.53	--	--	--	11.94
US Fund Target-Date 2025	--	3.70	11.61	2.20	5.92	5.63	--
Target Date 2030							
Empower GoalMaker Conservative 2030	0.47%	4.52	14.85	--	--	--	14.86
Empower GoalMaker Moderate 2030	0.46%	4.52	14.85	--	--	--	14.87
Empower GoalMaker Aggressive 2030	0.46%	4.52	14.85	--	--	--	14.87
US Fund Target-Date 2030	--	4.53	13.69	2.95	6.99	6.40	--
Target Date 2035							

# GoalMaker Performance Report – Actuals

El Toro Water District

*Performance as of March 31, 2024*

Group/Investment	Weighted Net Expense	Weighted Average Annual Return					
		QTD	1 Year	3 Year	5 Year	10 Year	Since Inception
Empower GoalMaker Conservative 2035	0.48%	5.35	16.99	--	--	--	16.83
Empower GoalMaker Moderate 2035	0.48%	5.35	16.99	--	--	--	16.83
Empower GoalMaker Aggressive 2035	0.48%	5.35	16.99	--	--	--	16.83
US Fund Target-Date 2035	--	5.53	16.14	3.87	8.04	7.09	--
Target Date 2040							
Empower GoalMaker Conservative 2040	0.46%	6.22	19.40	--	--	--	19.10
Empower GoalMaker Moderate 2040	0.46%	6.22	19.40	--	--	--	19.10
Empower GoalMaker Aggressive 2040	0.46%	6.22	19.40	--	--	--	19.10
US Fund Target-Date 2040	--	6.43	18.35	4.66	8.94	7.68	--
Target Date 2045							
Empower GoalMaker Conservative 2045	0.45%	7.04	21.70	--	--	--	21.21
Empower GoalMaker Moderate 2045	0.45%	7.04	21.70	--	--	--	21.21
Empower GoalMaker Aggressive 2045	0.45%	7.04	21.70	--	--	--	21.21
US Fund Target-Date 2045	--	7.14	20.00	5.27	9.55	8.01	--
Target Date 2050							
Empower GoalMaker Conservative 2050	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Moderate 2050	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Aggressive 2050	0.45%	7.56	23.08	--	--	--	22.47
US Fund Target-Date 2050	--	7.51	20.84	5.53	9.77	8.17	--
Target Date 2055							
Empower GoalMaker Conservative 2055	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Moderate 2055	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Aggressive 2055	0.45%	7.56	23.08	--	--	--	22.47
US Fund Target-Date 2055	--	7.63	21.11	5.62	9.88	8.21	--
Target Date 2060							
Empower GoalMaker Conservative 2060	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Moderate 2060	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Aggressive 2060	0.45%	7.56	23.08	--	--	--	22.47
US Fund Target-Date 2060	--	7.72	21.40	5.70	10.01	7.84	--
Target Date 2065							
Empower GoalMaker Conservative 2065	0.45%	7.56	23.08	--	--	--	22.47

# GoalMaker Performance Report – Actuals

El Toro Water District

*Performance as of March 31, 2024*

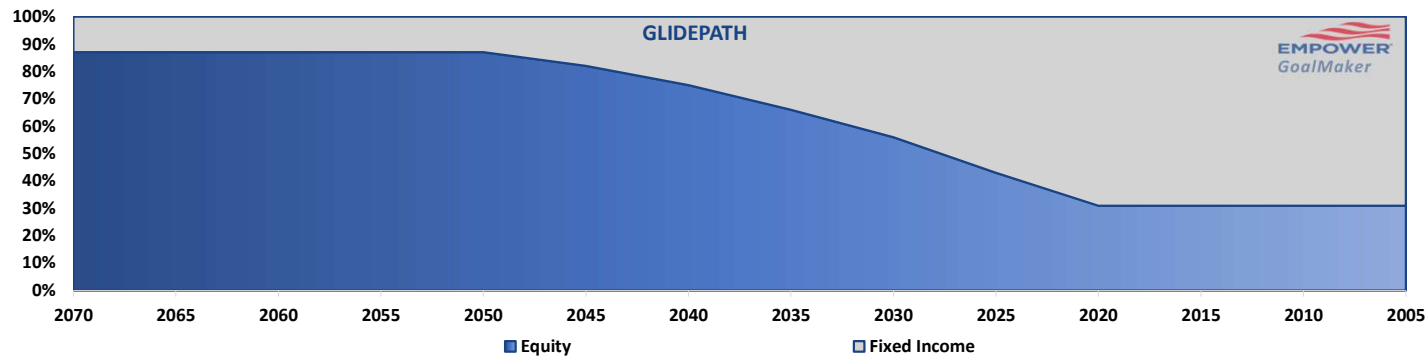
Group/Investment	Weighted Net Expense	Weighted Average Annual Return					
		QTD	1 Year	3 Year	5 Year	10 Year	Since Inception
Empower GoalMaker Moderate 2065	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Aggressive 2065	0.45%	7.56	23.08	--	--	--	22.47
US Fund Target-Date 2065+	--	7.75	21.54	5.80	10.34	-	--
Target Date 2070							
Empower GoalMaker Conservative 2070	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Moderate 2070	0.45%	7.56	23.08	--	--	--	22.47
Empower GoalMaker Aggressive 2070	0.45%	7.56	23.08	--	--	--	22.47
US Fund Target-Date 2065+	--	7.75	21.54	5.80	10.34	-	--

# GoalMaker Performance Report – Actuals

Allocation Summary as of March 31, 2024

## Conservative Portfolio

Asset Class	Investment Options	2070	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Stable Value	Guaranteed Income Fund	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	4%	4%	4%	4%
Fixed Income	Dodge & Cox Income - I	4%	4%	4%	4%	4%	5%	7%	10%	13%	16%	23%	23%	23%	23%
Fixed Income	PGIM Total Return Bond R6	2%	2%	2%	2%	2%	5%	6%	7%	10%	15%	11%	11%	11%	11%
Fixed Income	DoubleLine Core Fixed Income R6	4%	4%	4%	4%	4%	5%	7%	10%	12%	16%	23%	23%	23%	23%
Fixed Income	PIMCO Income Instl	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Fixed Income	Vanguard Long-Term Investment-Grade Adm	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	6%	6%	6%	6%
Large Cap Stock - Value	Dodge & Cox Stock - I	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Value	PIMCO RAE US Instl	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Blend	Columbia Contrarian Core Instl 3	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Blend	Vanguard Growth & Income Adm	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Growth	Harbor Capital Appreciation Retirement	7%	7%	7%	7%	7%	6%	5%	4%	3%	3%	2%	2%	2%	2%
Large Cap Stock - Growth	Vanguard Growth Index Adm	6%	6%	6%	6%	6%	6%	5%	4%	3%	2%	1%	1%	1%	1%
Mid Cap Stock	Vanguard Mid Cap Index Fund - Admiral	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Small / Mid Cap Stock - Value	Undiscovered Mgrs Behavioral Value R6	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
Small Cap Stock	Delaware Small Cap Core R6	3%	3%	3%	3%	3%	4%	4%	4%	3%	2%	2%	2%	2%	2%
Small / Mid Cap Stock - Growth	Emerald Growth Institutional	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
International Stock	Dodge & Cox International Stock - I	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
International Stock	DFA Large Cap International I	9%	9%	9%	9%	9%	8%	7%	5%	5%	4%	2%	2%	2%	2%
International Stock	MFS International Growth R6	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
Diversified Emerging Markets	Vanguard Emerging Mkts Stock Idx Adm	4%	4%	4%	4%	4%	4%	4%	3%	2%	1%	1%	1%	1%	1%
Other	Nuveen Real Estate Securities R6	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	6%	6%	6%	6%
Other	American Beacon AHL Mgd Futs Strat A	1%	1%	1%	1%	1%	1%	2%	3%	3%	4%	4%	4%	4%	4%
Other	The Merger Fund I	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	BlackRock Tactical Opportunities K	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

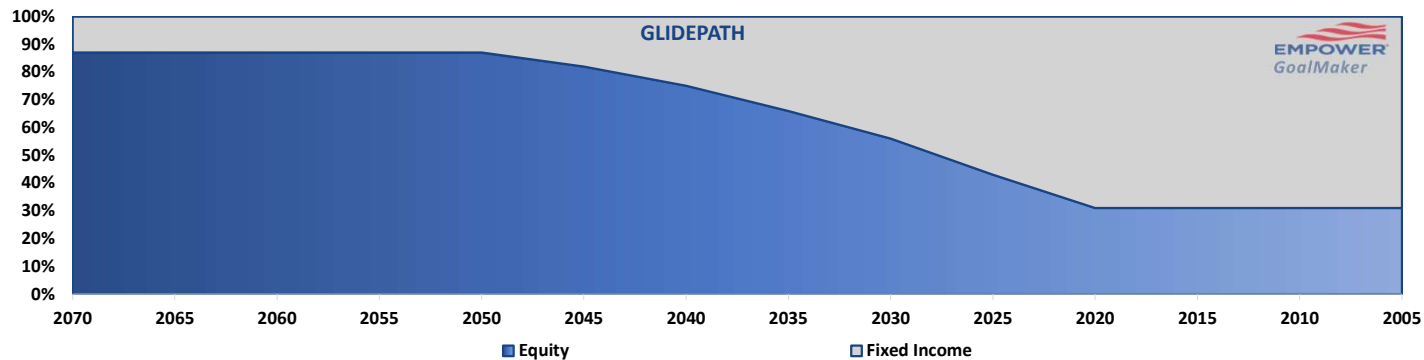


# GoalMaker Performance Report – Actuals

Allocation Summary as of March 31, 2024

## Moderate Portfolio

Asset Class	Investment Options	2070	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Stable Value	Guaranteed Income Fund	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	4%	4%	4%	4%
Fixed Income	Dodge & Cox Income - I	4%	4%	4%	4%	4%	5%	7%	10%	13%	17%	20%	20%	20%	20%
Fixed Income	PGIM Total Return Bond R6	2%	2%	2%	2%	2%	5%	6%	7%	10%	14%	18%	18%	18%	18%
Fixed Income	DoubleLine Core Fixed Income R6	4%	4%	4%	4%	4%	5%	7%	10%	12%	16%	19%	19%	19%	19%
Fixed Income	PIMCO Income Instl	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Fixed Income	Vanguard Long-Term Investment-Grade Adm	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	6%	6%	6%	6%
Large Cap Stock - Value	Dodge & Cox Stock - I	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Value	PIMCO RAE US Instl	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Blend	Columbia Contrarian Core Instl 3	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Blend	Vanguard Growth & Income Adm	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Growth	Harbor Capital Appreciation Retirement	7%	7%	7%	7%	7%	6%	5%	4%	3%	3%	2%	2%	2%	2%
Large Cap Stock - Growth	Vanguard Growth Index Adm	6%	6%	6%	6%	6%	6%	5%	4%	3%	2%	1%	1%	1%	1%
Mid Cap Stock	Vanguard Mid Cap Index Fund - Admiral	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Small / Mid Cap Stock - Value	Undiscovered Mgrs Behavioral Value R6	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
Small Cap Stock	Delaware Small Cap Core R6	3%	3%	3%	3%	3%	4%	4%	4%	3%	2%	2%	2%	2%	2%
Small / Mid Cap Stock - Growth	Emerald Growth Institutional	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
International Stock	Dodge & Cox International Stock - I	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
International Stock	DFA Large Cap International I	9%	9%	9%	9%	9%	8%	7%	5%	5%	4%	2%	2%	2%	2%
International Stock	MFS International Growth R6	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
Diversified Emerging Markets	Vanguard Emerging Mkts Stock Idx Adm	4%	4%	4%	4%	4%	4%	4%	3%	2%	1%	1%	1%	1%	1%
Other	Nuveen Real Estate Securities R6	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	6%	6%	6%	6%
Other	American Beacon AHL Mgd Futs Strat A	1%	1%	1%	1%	1%	1%	2%	3%	3%	4%	4%	4%	4%	4%
Other	The Merger Fund I	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	BlackRock Tactical Opportunities K	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

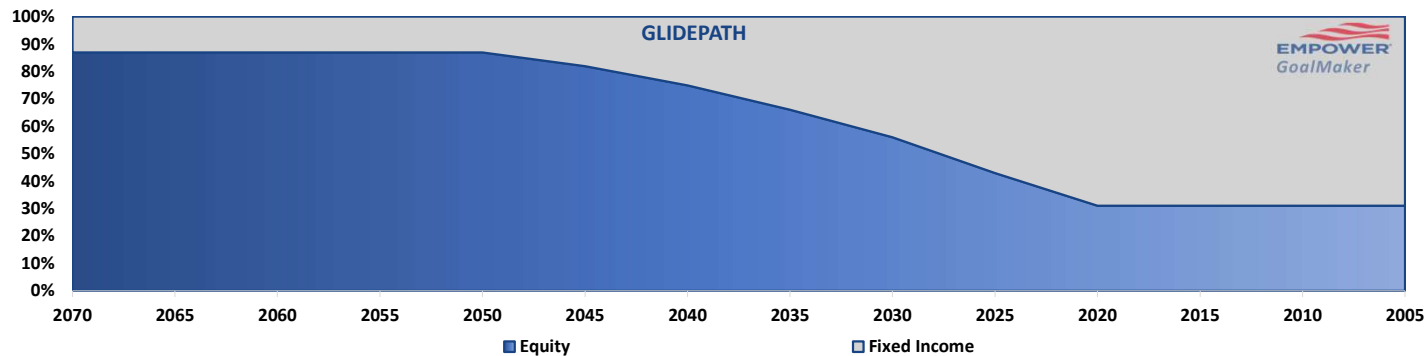


# GoalMaker Performance Report – Actuals

Allocation Summary as of March 31, 2024

## Aggressive Portfolio

Asset Class	Investment Options	2070	2065	2060	2055	2050	2045	2040	2035	2030	2025	2020	2015	2010	2005
Stable Value	Guaranteed Income Fund	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	4%	4%	4%	4%
Fixed Income	Dodge & Cox Income - I	4%	4%	4%	4%	4%	5%	7%	10%	13%	17%	20%	20%	20%	20%
Fixed Income	PGIM Total Return Bond R6	2%	2%	2%	2%	2%	5%	6%	7%	10%	14%	18%	18%	18%	18%
Fixed Income	DoubleLine Core Fixed Income R6	4%	4%	4%	4%	4%	5%	7%	10%	12%	16%	19%	19%	19%	19%
Fixed Income	PIMCO Income Instl	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%
Fixed Income	Vanguard Long-Term Investment-Grade Adm	1%	1%	1%	1%	1%	1%	2%	3%	4%	4%	6%	6%	6%	6%
Large Cap Stock - Value	Dodge & Cox Stock - I	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Value	PIMCO RAE US Instl	7%	7%	7%	7%	7%	7%	6%	5%	4%	3%	2%	2%	2%	2%
Large Cap Stock - Blend	Columbia Contrarian Core Instl 3	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Blend	Vanguard Growth & Income Adm	13%	13%	13%	13%	13%	12%	11%	10%	9%	5%	3%	3%	3%	3%
Large Cap Stock - Growth	Harbor Capital Appreciation Retirement	7%	7%	7%	7%	7%	6%	5%	4%	3%	3%	2%	2%	2%	2%
Large Cap Stock - Growth	Vanguard Growth Index Adm	6%	6%	6%	6%	6%	6%	5%	4%	3%	2%	1%	1%	1%	1%
Mid Cap Stock	Vanguard Mid Cap Index Fund - Admiral	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Small / Mid Cap Stock - Value	Undiscovered Mgrs Behavioral Value R6	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
Small Cap Stock	Delaware Small Cap Core R6	3%	3%	3%	3%	3%	4%	4%	4%	3%	2%	2%	2%	2%	2%
Small / Mid Cap Stock - Growth	Emerald Growth Institutional	4%	4%	4%	4%	4%	3%	2%	2%	2%	1%	0%	0%	0%	0%
International Stock	Dodge & Cox International Stock - I	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
International Stock	DFA Large Cap International I	9%	9%	9%	9%	9%	8%	7%	5%	5%	4%	2%	2%	2%	2%
International Stock	MFS International Growth R6	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	0%	0%	0%	0%
Diversified Emerging Markets	Vanguard Emerging Mkts Stock Idx Adm	4%	4%	4%	4%	4%	4%	4%	3%	2%	1%	1%	1%	1%	1%
Other	Nuveen Real Estate Securities R6	2%	2%	2%	2%	2%	2%	3%	3%	3%	4%	6%	6%	6%	6%
Other	American Beacon AHL Mgd Futs Strat A	1%	1%	1%	1%	1%	1%	2%	3%	3%	4%	4%	4%	4%	4%
Other	The Merger Fund I	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	BlackRock Tactical Opportunities K	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%



## GoalMaker Disclosures

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The calculated returns shown are the weighted average returns of the underlying funds for the GoalMaker models based on allocations prior to 03/31/2024.

Returns are net of product expenses and fees and before any contract charges, with the exception of any fees the sponsor may have directed to be deducted from participant accounts. The performance shown for the GoalMaker models is for illustrative purposes only and does not reflect the actual experience of any individual participant in the program. This performance was calculated with the retroactive application of a model with the benefit of hindsight. The performance shown 1) was rebalanced on a periodic basis as per your plan 2) assumes no changes to the asset allocation percentages or to the investment options for the relevant periods 3) assumes that an individual was enrolled in GoalMaker for the entire relevant time period and 4) assumes an initial investment but does not include the effect of periodic contributions or withdrawals.

The performance quoted represents past performance. The investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. Past performance does not guarantee future results. Current performance may be lower or higher than the performance data quoted.

Three types of performance information may be provided. "Fund" Performance represents the actual performance of the Fund for all periods since the inception date of the Fund. "Composite" represents the composite return of multiple models advised by the current Manager having a similar investment style as this Fund. "Blended" represents a combination of the Actual Fund performance and the current Manager Composite performance. Actual Fund performance is used for periods after the Fund was managed by the current Manager. For periods before the current Manager's assumption of Fund management, the Manager Composite return is used. The inception date associated with this line is the inception date of the Manager Composite. "Since Inception" returns are only provided when the inception date is less than 10 years ago.

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## GoalMaker Disclosures

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Asset Allocation Models are pre-established asset allocation strategies comprised of the plan's core investment options. The models are not securities. Allocations to a model will be invested in various underlying investment options comprising each model, as made available by the plan and according to the model's allocation methodology.

An Asset Allocation Model provides targeted asset allocation and allocates your account across the model's underlying investments. The plan may include Asset Allocation Models designed according to certain risk levels (e.g. Aggressive, Moderate or Conservative), Asset Allocation Models that follow a glide path based on a target date (2025, 2030, 2035 etc.), or both model types depending upon the models selected by the plan. Neither of which is without risk or guarantee of positive returns. The date in the name of a target date model is an assumed date in which an investor will retire. The asset allocation becomes more conservative as the target retirement date nears, and depending on the model's design, can remain static at the target date or adjust further through retirement. There is no guarantee the investment will provide adequate retirement income.

Asset Allocation Models are subject to change at the plan's (or an authorized representative thereof) discretion.

Investors should review the prospectus, summary prospectus for SEC-registered products, or disclosure document for unregistered products, if available, for underlying fund objectives, risks, fees and expenses. Investors should also periodically reassess their investments to make sure their model continues to correspond to their changing risk tolerance and retirement time horizon.

Empower is not undertaking to provide investment advice with respect to the presentation of any particular investment option or asset allocation model described herein.

Data presented is as of the period specified for this report, unless otherwise specified within a table heading. Data and expense ratios presented are the most current made available at the time of production. For mutual funds, the fund company may have more recent data available on its website. Price corrections that impact performance data may occur after production of this material. Empower refers to the products and services offered by Empower Annuity Insurance Company of America (EAICA) and its subsidiaries. Empower Investments is a marketing name of EAICA and certain subsidiaries. This material is for informational purposes only and is not intended to provide investment, legal, or tax recommendations or advice. "EMPOWER" and "EMPOWER INVESTMENTS" and all associated logos and product names are trademarks of EAICA. ©2024 Empower Retirement, LLC. All rights reserved RO3358842-0224

# EL TORO WATER DISTRICT DEFERRED COMPENSATION PLAN - 524723-02

Investment Performance as of 05/31/2024



Carefully consider the investment option's objectives, risks, fees and expenses. Contact us for a prospectus, summary prospectus for SEC registered products or disclosure document for unregistered products, if available, containing this information. Read each carefully before investing.

The performance data quoted represents past performance of the Sub-account. The investment return and principal value will fluctuate so that an investor's shares, when redeemed, may be worth more or less than original cost. For performance information current to the most recent month end, please call 1-800-345-2345 or visit our website at [www.empower.com](http://www.empower.com). Past performance does not guarantee future results. Current performance may be lower or higher than the performance data quoted.

The prospectus contains information related to investment objectives, risks, charges, and expenses as well as other important information. Investors should read the prospectuses carefully before investing and consider such objectives, risks, charges, expenses, and important information. Please call 1-800-345-2345 for a free prospectus.

For additional fund information, please refer to the Fund or Portfolio Fact Sheet.

INVESTMENT OPTION	Ticker	Gross/Net Expense Ratio	Inception Date	Returns as of Month Ending 05/31/2024						Returns as of Quarter Ending 03/28/2024					Calendar Year Returns		
				1 Month	YTD	1 Year	3 Year	5 Year	10 Year/Since Inception	3 Month	1 Year	3 Year	5 Year	10 Year/Since Inception	2023	2022	2021
Asset Allocation Model																	
Empower GoalMaker AGGRESSIVE 2005 <sup>11,12</sup>	N/A	0.34 / 0.34	03-04-2024	2.02	N/A	N/A	N/A	N/A	1.41	N/A	N/A	N/A	N/A	1.29	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2010 <sup>11,12</sup>	N/A	0.35 / 0.35	03-04-2024	2.09	N/A	N/A	N/A	N/A	1.48	N/A	N/A	N/A	N/A	1.34	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2015 <sup>11,12</sup>	N/A	0.37 / 0.37	03-04-2024	2.23	N/A	N/A	N/A	N/A	1.61	N/A	N/A	N/A	N/A	1.44	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2020 <sup>11,12</sup>	N/A	0.40 / 0.40	03-04-2024	2.39	N/A	N/A	N/A	N/A	1.77	N/A	N/A	N/A	N/A	1.55	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2025 <sup>11,12</sup>	N/A	0.44 / 0.44	03-04-2024	2.63	N/A	N/A	N/A	N/A	1.99	N/A	N/A	N/A	N/A	1.72	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2030 <sup>11,12</sup>	N/A	0.50 / 0.50	03-04-2024	2.99	N/A	N/A	N/A	N/A	2.33	N/A	N/A	N/A	N/A	1.97	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2035 <sup>11,12</sup>	N/A	0.57 / 0.57	03-04-2024	3.39	N/A	N/A	N/A	N/A	2.71	N/A	N/A	N/A	N/A	2.26	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2040 <sup>11,12</sup>	N/A	0.63 / 0.63	03-04-2024	3.74	N/A	N/A	N/A	N/A	3.06	N/A	N/A	N/A	N/A	2.51	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2045 <sup>11,12</sup>	N/A	0.67 / 0.67	03-04-2024	3.98	N/A	N/A	N/A	N/A	3.29	N/A	N/A	N/A	N/A	2.66	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2050 <sup>11,12</sup>	N/A	0.68 / 0.68	03-04-2024	4.05	N/A	N/A	N/A	N/A	3.38	N/A	N/A	N/A	N/A	2.71	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2055 <sup>11,12</sup>	N/A	0.69 / 0.69	03-04-2024	4.07	N/A	N/A	N/A	N/A	3.43	N/A	N/A	N/A	N/A	2.72	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2060 <sup>11,12</sup>	N/A	0.69 / 0.69	03-04-2024	4.08	N/A	N/A	N/A	N/A	3.48	N/A	N/A	N/A	N/A	2.72	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2065 <sup>11,12</sup>	N/A	0.70 / 0.70	03-04-2024	4.09	N/A	N/A	N/A	N/A	3.53	N/A	N/A	N/A	N/A	2.73	N/A	N/A	N/A
Empower GoalMaker AGGRESSIVE 2070 <sup>11,12</sup>	N/A	0.70 / 0.70	03-04-2024	4.09	N/A	N/A	N/A	N/A	3.53	N/A	N/A	N/A	N/A	2.73	N/A	N/A	N/A
Empower GoalMaker CONS 2005 <sup>11,12</sup>	N/A	0.26 / 0.26	03-04-2024	1.56	N/A	N/A	N/A	N/A	1.02	N/A	N/A	N/A	N/A	0.96	N/A	N/A	N/A
Empower GoalMaker CONS 2010 <sup>11,12</sup>	N/A	0.27 / 0.27	03-04-2024	1.59	N/A	N/A	N/A	N/A	1.05	N/A	N/A	N/A	N/A	0.99	N/A	N/A	N/A
Empower GoalMaker CONS 2015 <sup>11,12</sup>	N/A	0.28 / 0.28	03-04-2024	1.66	N/A	N/A	N/A	N/A	1.12	N/A	N/A	N/A	N/A	1.04	N/A	N/A	N/A
Empower GoalMaker CONS 2020 <sup>11,12</sup>	N/A	0.30 / 0.30	03-04-2024	1.80	N/A	N/A	N/A	N/A	1.25	N/A	N/A	N/A	N/A	1.13	N/A	N/A	N/A
Empower GoalMaker CONS 2025 <sup>11,12</sup>	N/A	0.33 / 0.33	03-04-2024	1.96	N/A	N/A	N/A	N/A	1.40	N/A	N/A	N/A	N/A	1.25	N/A	N/A	N/A

EL TORO WATER DISTRICT DEFERRED COMPENSATION PLAN - 524723-02 (Continued)

INVESTMENT OPTION	Ticker	Gross/Net Expense Ratio	Inception Date	Returns as of Month Ending 05/31/2024						Returns as of Quarter Ending 03/28/2024					Calendar Year Returns		
				1 Month	YTD	1 Year	3 Year	5 Year	10 Year/Since Inception	3 Month	1 Year	3 Year	5 Year	10 Year/Since Inception	2023	2022	2021
Empower GoalMaker CONS 2030 <sup>11,12</sup>	N/A	0.36 / 0.36	03-04-2024	2.17	N/A	N/A	N/A	N/A	1.59	N/A	N/A	N/A	N/A	1.39	N/A	N/A	N/A
Empower GoalMaker CONS 2035 <sup>11,12</sup>	N/A	0.41 / 0.41	03-04-2024	2.43	N/A	N/A	N/A	N/A	1.84	N/A	N/A	N/A	N/A	1.58	N/A	N/A	N/A
Empower GoalMaker CONS 2040 <sup>11,12</sup>	N/A	0.47 / 0.47	03-04-2024	2.80	N/A	N/A	N/A	N/A	2.19	N/A	N/A	N/A	N/A	1.84	N/A	N/A	N/A
Empower GoalMaker CONS 2045 <sup>11,12</sup>	N/A	0.56 / 0.56	03-04-2024	3.28	N/A	N/A	N/A	N/A	2.54	N/A	N/A	N/A	N/A	2.15	N/A	N/A	N/A
Empower GoalMaker CONS 2050 <sup>11,12</sup>	N/A	0.60 / 0.60	03-04-2024	3.55	N/A	N/A	N/A	N/A	2.85	N/A	N/A	N/A	N/A	2.35	N/A	N/A	N/A
Empower GoalMaker CONS 2055 <sup>11,12</sup>	N/A	0.63 / 0.63	03-04-2024	3.71	N/A	N/A	N/A	N/A	3.01	N/A	N/A	N/A	N/A	2.46	N/A	N/A	N/A
Empower GoalMaker CONS 2060 <sup>11,12</sup>	N/A	0.64 / 0.64	03-04-2024	3.77	N/A	N/A	N/A	N/A	3.10	N/A	N/A	N/A	N/A	2.50	N/A	N/A	N/A
Empower GoalMaker CONS 2065 <sup>11,12</sup>	N/A	0.65 / 0.65	03-04-2024	3.79	N/A	N/A	N/A	N/A	3.15	N/A	N/A	N/A	N/A	2.51	N/A	N/A	N/A
Empower GoalMaker CONS 2070 <sup>11,12</sup>	N/A	0.65 / 0.65	03-04-2024	3.79	N/A	N/A	N/A	N/A	3.15	N/A	N/A	N/A	N/A	2.51	N/A	N/A	N/A
Empower GoalMaker MODERATE 2005 <sup>11,12</sup>	N/A	0.30 / 0.30	03-04-2024	1.79	N/A	N/A	N/A	N/A	1.21	N/A	N/A	N/A	N/A	1.12	N/A	N/A	N/A
Empower GoalMaker MODERATE 2010 <sup>11,12</sup>	N/A	0.31 / 0.31	03-04-2024	1.85	N/A	N/A	N/A	N/A	1.27	N/A	N/A	N/A	N/A	1.17	N/A	N/A	N/A
Empower GoalMaker MODERATE 2015 <sup>11,12</sup>	N/A	0.33 / 0.33	03-04-2024	1.97	N/A	N/A	N/A	N/A	1.38	N/A	N/A	N/A	N/A	1.25	N/A	N/A	N/A
Empower GoalMaker MODERATE 2020 <sup>11,12</sup>	N/A	0.35 / 0.35	03-04-2024	2.11	N/A	N/A	N/A	N/A	1.52	N/A	N/A	N/A	N/A	1.35	N/A	N/A	N/A
Empower GoalMaker MODERATE 2025 <sup>11,12</sup>	N/A	0.39 / 0.39	03-04-2024	2.31	N/A	N/A	N/A	N/A	1.70	N/A	N/A	N/A	N/A	1.49	N/A	N/A	N/A
Empower GoalMaker MODERATE 2030 <sup>11,12</sup>	N/A	0.43 / 0.43	03-04-2024	2.56	N/A	N/A	N/A	N/A	1.95	N/A	N/A	N/A	N/A	1.67	N/A	N/A	N/A
Empower GoalMaker MODERATE 2035 <sup>11,12</sup>	N/A	0.49 / 0.49	03-04-2024	2.93	N/A	N/A	N/A	N/A	2.30	N/A	N/A	N/A	N/A	1.93	N/A	N/A	N/A
Empower GoalMaker MODERATE 2040 <sup>11,12</sup>	N/A	0.56 / 0.56	03-04-2024	3.34	N/A	N/A	N/A	N/A	2.68	N/A	N/A	N/A	N/A	2.22	N/A	N/A	N/A
Empower GoalMaker MODERATE 2045 <sup>11,12</sup>	N/A	0.63 / 0.63	03-04-2024	3.72	N/A	N/A	N/A	N/A	3.02	N/A	N/A	N/A	N/A	2.47	N/A	N/A	N/A
Empower GoalMaker MODERATE 2050 <sup>11,12</sup>	N/A	0.66 / 0.66	03-04-2024	3.89	N/A	N/A	N/A	N/A	3.22	N/A	N/A	N/A	N/A	2.60	N/A	N/A	N/A
Empower GoalMaker MODERATE 2055 <sup>11,12</sup>	N/A	0.67 / 0.67	03-04-2024	3.96	N/A	N/A	N/A	N/A	3.31	N/A	N/A	N/A	N/A	2.64	N/A	N/A	N/A
Empower GoalMaker MODERATE 2060 <sup>11,12</sup>	N/A	0.68 / 0.68	03-04-2024	3.99	N/A	N/A	N/A	N/A	3.37	N/A	N/A	N/A	N/A	2.66	N/A	N/A	N/A
Empower GoalMaker MODERATE 2065 <sup>11,12</sup>	N/A	0.68 / 0.68	03-04-2024	4.00	N/A	N/A	N/A	N/A	3.42	N/A	N/A	N/A	N/A	2.66	N/A	N/A	N/A
Empower GoalMaker MODERATE 2070 <sup>11,12</sup>	N/A	0.68 / 0.68	03-04-2024	4.00	N/A	N/A	N/A	N/A	3.42	N/A	N/A	N/A	N/A	2.66	N/A	N/A	N/A
Asset Allocation																	
Day One IncomeFlex Target Balanced Fund <sup>1,14,15,16</sup>	N/A	1.34 / 1.34	06-30-2009	2.88	4.54	12.72	2.27	6.65	5.08	4.51	11.91	3.67	6.37	5.34	11.23	-12.87	13.44
International Funds																	
Vanguard Total Intl Stock Index Admiral <sup>3</sup>	VTIAX	0.12 / 0.12	11-29-2010	4.02	6.04	16.85	0.47	7.14	4.29	4.30	12.96	1.88	6.16	4.45	15.52	-16.01	8.62
Intl Blend (sub-adv by Wellington Mgmt) <sup>1,3</sup>	N/A	0.79 / 0.79	02-24-2003	4.39	8.90	18.20	0.08	7.75	4.68	5.67	12.03	0.84	6.46	4.66	12.10	-18.68	7.34
MSCI EAFE Index <sup>2</sup>	N/A	- / -		3.87	7.07	18.53	3.06	8.05	4.60	5.78	15.32	4.78	7.33	4.80	18.24	-14.45	11.26
Specialty																	
Real Estate / American Century Fund <sup>1,6</sup>	N/A	0.78 / 0.78	05-17-2007	5.32	-3.71	10.35	-0.53	3.42	5.59	-1.34	8.75	3.14	4.21	6.44	11.58	-24.30	41.50

## EL TORO WATER DISTRICT DEFERRED COMPENSATION PLAN - 524723-02 (Continued)

INVESTMENT OPTION	Ticker	Gross/Net Expense Ratio	Inception Date	Returns as of Month Ending 05/31/2024						Returns as of Quarter Ending 03/28/2024					Calendar Year Returns		
				1 Month	YTD	1 Year	3 Year	5 Year	10 Year/Since Inception	3 Month	1 Year	3 Year	5 Year	10 Year/Since Inception	2023	2022	2021
Small Cap Funds																	
Vanguard Small Cap Index Adm <sup>4</sup>	VSMAX	0.05 / 0.05	11-13-2000	3.96	4.46	22.87	1.44	10.23	8.76	7.52	22.50	3.80	9.99	8.94	18.20	-17.61	17.73
Small Cap Value / Kennedy Capital Fund <sup>1,4</sup>	N/A	0.86 / 0.86	01-29-2001	5.40	3.12	21.54	0.99	9.79	6.72	4.89	18.50	3.68	9.17	6.95	12.21	-18.03	38.73
Small Cp Grwth I (mgd by Brown Advisory) <sup>1,4</sup>	N/A	0.91 / 0.91	11-21-2008	2.19	0.38	10.72	-2.78	7.52	7.60	5.54	14.27	0.26	8.83	7.34	13.43	-20.39	8.12
Russell 2000 Index <sup>2,9</sup>	N/A	- / -		5.02	2.68	20.11	-1.65	8.61	7.66	5.18	19.71	-0.10	8.11	7.58	16.93	-20.44	14.82
Mid Cap Funds																	
Mid Cap Growth I Fund (managed by Ivy) <sup>1,4</sup>	N/A	0.76 / 0.76	06-30-2004	1.80	1.96	12.99	-1.96	12.19	11.32	6.79	15.35	0.89	12.44	11.72	20.16	-30.14	16.74
Mid Cap Value / Integrity Fund <sup>1,4</sup>	N/A	0.71 / 0.71	05-23-2005	4.40	9.57	25.39	6.06	12.54	8.94	10.03	21.24	8.88	11.97	9.10	12.65	-6.67	28.84
PGIM Quant Sol MidCap Indx (IS Pltfrm) <sup>1,4</sup>	N/A	0.08 / 0.08	09-29-2016	4.40	7.79	25.78	4.56	12.18	10.66	9.92	23.18	6.87	11.65	11.21	16.30	-13.10	24.60
S & P MidCap 400 Index <sup>2,8</sup>	N/A	- / -		4.39	7.87	25.97	4.67	12.26	9.76	9.95	23.33	6.96	11.71	9.99	16.44	-13.06	24.76
Large Cap Funds																	
Vanguard 500 Index Admiral <sup>13</sup>	VFIAX	0.04 / 0.04	11-13-2000	4.95	11.28	28.14	9.52	15.76	12.65	10.54	29.83	11.45	15.01	12.92	26.24	-18.15	28.66
Large Cap Value (sub-adv by Wellington) <sup>1,13</sup>	N/A	0.51 / 0.51	09-30-1999	3.67	6.94	18.90	5.59	10.91	8.93	6.62	16.23	7.53	10.25	9.14	7.14	-5.12	27.65
Large Cap Growth / American Century Fund <sup>1,13</sup>	N/A	0.56 / 0.56	01-28-2001	5.27	12.76	32.59	10.06	17.94	14.80	12.02	39.78	11.67	17.54	15.04	43.63	-31.21	27.83
S & P 500 Index <sup>2,7,13</sup>	N/A	- / -		4.96	11.30	28.19	9.57	15.80	12.69	10.56	29.88	11.49	15.05	12.96	26.29	-18.11	28.71
Bond Funds																	
Vanguard Interm-Term Bond Index Adm <sup>5</sup>	VBILX	0.07 / 0.07	11-12-2001	1.74	-1.51	1.23	-3.15	0.18	1.64	-0.76	1.61	-2.37	0.76	1.96	6.07	-13.27	-2.36
Core Plus Bond / PGIM Fund <sup>1,5</sup>	N/A	0.37 / 0.37	07-19-2002	1.79	-0.56	4.16	-2.43	0.58	2.19	0.10	4.60	-1.61	1.13	2.46	7.71	-14.73	-1.12
Bloomberg Barclays Cap US Agg Bond Idx <sup>2,10</sup>	N/A	- / -		1.70	-1.64	1.31	-3.10	-0.17	1.26	-0.78	1.70	-2.46	0.36	1.54	5.53	-13.01	-1.54
Stable Value Fund																	
Guaranteed Income Fund	N/A	- / -	07-12-2012	0.17	0.86	1.99	1.58	1.53	1.54	0.50	1.95	1.53	1.52	1.54	1.86	1.30	1.23

For information related to investments in your Self-Directed Brokerage (SDB) account, contact Charles Schwab at [www.schwab.com](http://www.schwab.com) or 1-888-393-7272.

Securities available through Schwab Personal Choice Retirement Account« (PCRA) are offered through Charles Schwab & Co., Inc. (Member SIPC), a registered broker-dealer. Additional information can be obtained by calling 888-393-7272.

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Fees if applicable to the separate account units, compensate Empower for selling the units and servicing your retirement plan. The Group Variable Annuity expense ratio includes these fees. Other investment options may generate more or less revenue than the fees associated with these separate accounts. If the aggregate revenue from your plan exceeds our associated costs, we earn a profit. Otherwise, we incur a loss.

The net expense ratio is less applicable fee waivers or expense reimbursements the investment adviser and/or administrator may have agreed upon, either voluntary or by contractual agreement; the gross expense ratio is not. Voluntary fee waivers and reimbursements may be modified or terminated at any time. Additional information can be found in the Fund's prospectus and/or other disclosure documents regarding effective dates and/or if waivers or reimbursements are voluntary or by contractual agreement. Absent waivers or reimbursements, the performance would have been lower.

## EL TORO WATER DISTRICT DEFERRED COMPENSATION PLAN - 524723-02 (Continued)

- <sup>1</sup> Performance returns reflect a deduction for fund operating expenses. For variable annuity options, returns also reflect a Variable Asset Charge or a Mortality and Expense Risk Charge, depending on the version of the group annuity contract, of up to 1.32%. Additionally, your Plan may assess a plan administrative fee that was not deducted in the returns shown. Returns for variable annuity options are shown based on the inception date of the separate account or the investment option's addition to the separate account, if later.
- <sup>2</sup> Benchmark index returns are supplied by Morningstar, Inc. There may be another benchmark that is more specific to each of the funds listed under the broad asset class. Please refer to the fund's prospectus for more specific information as to the fund's actual benchmark index.
- <sup>3</sup> Foreign securities involve risks, such as currency fluctuations, economic changes and political developments. These risks may be heightened in emerging markets, which may also experience liquidity risk.
- <sup>4</sup> Securities of small and mid-size companies may be more volatile than those of larger, more established companies.
- <sup>5</sup> Bond prices generally fall when interest rates rise (and vice versa) and are subject to risks including changes in credit quality, market valuations, inflation, liquidity, and default. High-yield bonds have a greater risk of default.
- <sup>6</sup> Specialty funds invest in a limited number of companies and may be more volatile than a more diversified fund.
- <sup>7</sup> The S&P 500 Index is a registered trademark of Standard & Poor's Financial Services LLC. It is an unmanaged index considered indicative of the domestic large-cap equity market and is used as a proxy for the stock market in general.
- <sup>8</sup> The S&P MidCap 400 Index is a registered trademark of Standard & Poor's Financial Services LLC and an unmanaged index considered indicative of the domestic mid-cap equity market.
- <sup>9</sup> Russell 2000® Index is a trademark of Russell Investments and is an unmanaged index considered indicative of the domestic Small-Cap equity market.
- <sup>10</sup> Bloomberg Barclays Capital U.S. Aggregate Bond Index is an unmanaged index representative of the broad bond market and is composed of government and corporate bonds, mortgage-backed bonds and asset-backed bonds.
- <sup>11</sup> Asset Allocation Models - If you select an Asset Allocation Model, your funds will be invested among the investment options as indicated within the plan. In applying models to your particular situation, you should consider all of your assets and all other assets owned within your household, including IRAs, mutual funds and other qualified plans. The Asset Allocation Models are subject to change, and your contributions will be invested upon receipt into the most current matching model that the Plan offers.
- <sup>12</sup> If your ongoing allocations are being directed to an Asset Allocation Model, your Asset Allocation Model assets may be rebalanced, including applicable rollover funds, at the next scheduled frequency. To make a change to your account or for more information on rebalancing and the underlying funds, please access the Plan Web site.
- <sup>13</sup> Securities that invest in stocks may decline in value.
- <sup>14</sup> The Day One® IncomeFlex Target® Funds are designed for use with IncomeFlex Target®, an in-plan guaranteed retirement income product, and are available as insurance company separate accounts under group variable annuity contracts issued by Empower Annuity Insurance Company (EAIC), Hartford, CT. EAIC does not guarantee the investment performance or return on contributions to those separate accounts. EAIC is solely responsible for its financial condition and contractual obligations. Availability and terms may vary by jurisdiction, subject to regulatory approvals. Guarantees are based on the claims-paying ability of the insurance company and are subject to certain limitations, terms and conditions. Annuity contracts contain exclusions, limitations, reductions of benefits and terms for keeping them in force. Policy forms currently available include GA-2020-IA-0805, GA-2020-IA, GA-2005-A, GA-2020-TGWB4-0805, GA-2020-TGWB5-0805, GA-2020-SAF, GA-2020-SAE-0805, SAE-REV1, GA-2020-SAEREV1 or state variation. Policy addendums for investments in the separate accounts or to add certain Income Flex Riders may have been selected by your Plan. For more information, participants should contact the Participant Service Center at 877-778-2100 and request a copy of the IncomeFlex Target Important Considerations before investing.
- <sup>15</sup> To maintain the IncomeFlex Target benefit, you must invest in one or more of the Day One IncomeFlex Target Funds. Like all variable investment options, these Funds may lose value. Withdrawals in excess of the annual guaranteed withdrawal amount will reduce future guaranteed withdrawals proportionately. Guarantees are based upon the claims-paying ability of EAIC. EAIC does not make any guarantee of investment performance or return of contributions to the Funds. Before purchasing this product, you should consider the objectives, risks, charges and expenses of the Funds and guarantee features, and you should carefully review the IncomeFlex Target Important Considerations. Product availability and terms may vary by jurisdiction. Subject to regulatory approvals. Annuity contracts contain exclusions, limitations, reductions of benefits and terms for keeping them in force. Policy forms currently available include GA-2020-IA-0805, GA-2020-IA, GA-2005-A, GA-2020-TGWB4-0805, GA-2020-TGWB5-0805, GA-2020-SAF, GA-2020-SAE-0805, SAE-REV1, GA-2020-SAE-REV1 or state variation. Policy addendums for investments in the separate accounts or to add certain Income Flex Riders may have been selected by your Plan.
- <sup>16</sup> IncomeFlex Funds are separate accounts available under group variable annuity contracts issued by Empower Annuity Insurance Company (EAIC), Hartford, CT. EAIC does not provide any guarantee of the investment performance or return of contributions to those separate accounts. EAIC's guarantee of certain withdrawals is supported by general account and is contingent on its claims paying ability. You should consider the objectives, risks, charges, and expenses of the funds and guarantee features before purchasing this product. You should carefully review the IncomeFlex Important Considerations before purchasing this product. Product availability and terms may vary by jurisdiction. Subject to regulatory approvals. Annuity contracts contain exclusions, limitations, reductions of benefits and terms for keeping them in force. Policy forms currently available include GA-2020-IA-0805, GA-2020-IA, GA-2005-A, GA-2020-IFGW2-0805, GA-2020-SAE-0805, SAE-REV1, GA-2020-SAE-REV1 or state variations thereof.



## STAFF REPORT

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**To: BOARD OF DIRECTORS**

**Meeting Date: June 24, 2024**

**From: Vishav Sharma, Chief Financial Officer**

**Subject: Springbrook Implementation – Progress Update**

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Presented below are the activities, challenges, and opportunities of the ongoing Springbrook implementation process:

- The District has successfully implemented Springbrook's General Ledger, Bank Reconciliation, Project Management, Accounts Payable, Payroll, Cash Receipting, Accounts Receivable and Human Resources modules. Staff is utilizing these modules on daily basis and getting a better comfort level with the functionality of Springbrook.
- As discussed in the last month's meeting, the District has successfully migrated its payroll and time & attendance system back to ADP. The staff has finalized the payroll journal entries download file that can be up loaded into the Springbrook General ledger module.
- The modules that still need to be implemented: Fixed Assets and Purchase order.
- I am pleased to report that the implementation of the Springbrook utility billing module is progressing well. As of June 19, 2024, District staff have begun using the new module, and key functionalities such as meter reads, payments, and billing are operating as expected. I would like to extend special recognition to Mr. Abel Estrada and our customer service team. His diligent efforts in testing all aspects of the new billing software have contributed significantly to its deployment.

While there are many moving parts in this software implementation that still needs to be iron out, we are actively notifying our customers of this change and working to minimize any inconvenience during the transition. Additionally, the Xpressbillpay portion of the implementation is being tested and staff received the training on June 20<sup>th</sup>. We anticipate that we will open this module to our customers on June 24.



## STAFF REPORT

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**To: BOARD OF DIRECTORS**

**Meeting Date: June 24, 2024**

**From: Dennis Cafferty, General Manager**

**Subject: Resolution 24-6-1  
California Office of Emergency Services Authorized Agents**

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The District applied for FEMA funding to reimburse certain costs associated with the response to the COVID-19 pandemic. The application is being processed through California Governors Office of Emergency Services (Cal OES). Cal OES requires the District Board designate, by resolution, Authorized Agents to process the application.

Resolution 24-6-1 designates the General Manager and Chief Financial Officer as Authorized Agents for the purpose processing the current application as well as to submit any future applications for a period of three years.

Staff anticipates receiving approximately \$43,000 in FEMA funding to offset investments in COVID-19 related mitigation measures.

**Recommended Action:** Staff recommends approval of Resolution No. 24-6-1 identifying Authorized Agents to submit applications for federal financial assistance with Cal OES.

### RESOLUTION NO. 24-6-1

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE EL TORO WATER DISTRICT  
AUTHORIZING THE GENERAL MANAGER AND CHIEF FINANCIAL OFFICER TO  
SUBMIT APPLICATIONS FOR FEDERAL FINANCIAL ASSISTANCE WITH THE  
CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES

## **RESOLUTION NO. 24-6-1**

### **RESOLUTION OF THE BOARD OF DIRECTORS OF THE EL TORO WATER DISTRICT AUTHORIZING THE GENERAL MANAGER AND CHIEF FINANCIAL OFFICER TO SUBMIT APPLICATIONS FOR FEDERAL FINANCIAL ASSISTANCE WITH THE CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES**

**WHEREAS**, the El Toro Water District incurred cost to manage and accommodate response to the COVID-19 pandemic; and

**WHEREAS**, the COVID-19 pandemic was a declared disaster with a designated Disaster No. DR 4482; and

**WHEREAS**, the State of California Governor's Office of Emergency Services requires the District designate authorized agents for the purpose of applying for federal financial assistance; and

**WHEREAS**, the potential exists for future applications for federal financial assistance.

**NOW THEREFORE BE IT RESOLVED** by the El Toro Water District Board of Directors that the District General Manager and the District Chief Financial Officer are hereby authorized to execute for and on behalf of the El Toro Water District, a public entity established under the laws of the State of California, applications for federal funding assistance and to file such applications with the California Governor's Office of Emergency Services for any existing or future grant program, including, but not limited to any of the following:

- Federally declared Disaster (DR), Fire Mitigation Assistance Grant (FMAG), California State Only Disaster (CDAA), Immediate Services Program (ISP), Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Legislative Pre-Disaster Mitigation Program (LPDM), under Public Law 93-288 as amended by the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, and/or state financial assistance under the California Disaster Assistance Act.
- Flood Mitigation Assistance Program (FMA), under Section 1366 of the National Flood Insurance Act of 1968.
- National Earthquake Hazards Reduction Program (NEHRP) 42 U.S. Code 7704 (b)((2) (A) (ix) and 42 U.S. Code 7704 (b) (2) (B) National Earthquake Hazards Reduction Program, and also The Consolidated Appropriations Act, 2018, Div. F, Department of Homeland Security Appropriations Act, 2018, Pub. L. No. 115-141
- California Early Earthquake Warning (CEEW) under CA Gov Code – Gov, Title 2, Div. 1, Chapter 7, Article 5, Sections 8587.8, 8587.11, 8587.12

**BE IT FURTHER RESOLVED**, that the El Toro Water District, a public entity established under the laws of the State of California, hereby authorizes its agent(s) to provide to the Governor's Office of Emergency Services for all matters pertaining to such state disaster assistance the assurances and agreements required; and

**BE IT FURTHER RESOLVED**, that this is a universal resolution and is effective for all open and future disasters/grants declared up to three (3) years following the date of approval.

**ADOPTED, SIGNED, AND APPROVED** this 24<sup>th</sup> day of June, 2024.

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Mark Monin, President  
El Toro Water District and the  
Board of Directors thereof

ATTEST:

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DENNIS CAFFERTY, Secretary  
El Toro Water District  
and the Board of Directors thereof

## **CERTIFICATION**

I, Dennis Cafferty, duly appointed Secretary of El Toro Water District do hereby certify that the above is a true and correct copy of a resolution passed and approved by the Board of Directors of the El Toro Water District on the 24<sup>th</sup> day of June, 2024.

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DENNIS CAFFERTY, Secretary  
El Toro Water District  
and the Board of Directors thereof



## STAFF REPORT

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**To: Board of Directors**

**Meeting Date: June 24, 2024**

**From: Vishav Sharma, Chief Financial Officer**

**Subject: May 2024 bills for Approval and Monthly Financial Report**

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Attached for Board approval is the payment summary report for the month of May, 2024 which presents checks that were paid during the month that exceeded \$50,000 in value. Also attached is the monthly financial report for period ending May 31, 2024.

Presented below for your consideration are some notes about the financial report:

- The Statement of Net Position decreased in May compared to April as decreases in Liabilities in May were less than decreases in Assets. The District collected more on the receivables. The District also incurred debt service, construction and water purchase expenses during the month of May. These activities affected the assets and liabilities of the District. Please note that this report contains preliminary numbers.
- The Statement of Revenues, Expenses, and Changes in Net Position indicates the District currently has a year to date positive Change in Net Position of \$4,047,293 at the end of March.
- The Cash and Investments report shows a total of \$22,440,389 in Operating Cash (LAIF, CAMP, and Checking accounts) at the end of the month. Operating cash and investments are available to meet the operational needs of the District. The restricted investments equaled \$107,685. These are the funds available for certain capital projects.
- The total disbursement including payroll expense for the month of May 2024 is \$5,815,943.50. These disbursements include seven checks greater than \$50,000, with the total equal to \$4,314,228.17. These expenses exceed the General Manager's purchase authority and Staff recommends the Board approve these checks. Payroll expenses of \$925,319.18 occurred during the month of May 2024. District employees were reimbursed \$2,522.74 for travel, education, meals, supplies and certification related expenses; and Directors were reimbursed \$423.37 in travel expenses.

Attachment 1

Payment Summary for the Month ending May 31, 2024

**EL TORO WATER DISTRICT**  
**Payment Summary**  
**For the month ending May 31, 2024**

CHECK NUMBER	PAYMENT DATE	VENDOR NAME	PAYMENT AMOUNT
11388	05/16/2024	US Bank Trust Company, National Association	2,342,159.68
11313	05/13/2024	Municipal Water District of Orange County	1,095,268.39
11317	05/13/2024	South Orange County Wastewater Authority	406,752.09
11397	05/30/2024	Dumarc Corporation	151,516.38
11353	05/24/2024	ACWA JPIA	142,156.49
11348	05/15/2024	Southern California Edison Company	112,125.14
11387	05/24/2024	Western Switches & Controls, Inc.	64,250.00
<b>TOTAL CHECKS OVER \$50,000</b>			<b>\$ 4,314,228.17</b>
<b>TOTAL CHECKS IN REGISTER</b>			<b>\$ 4,890,624.32</b>

**DEBIT TRANSFERS**

05/03/2024	PAYROLL DIRECT DEPOSIT	164,864.09
05/03/2024	FEDERAL DEPOSIT LIABILITY	32,991.85
05/03/2024	SDI & STATE TAX	14,316.47
05/03/2024	WAGE GARNISHMENTS	190.00
05/03/2024	EMPOWER (401K)	65,703.45
05/03/2024	EMPOWER (457)	19,041.01
05/03/2024	HEALTH SAVINGS ACCOUNT	71.15
05/15/2024	PAYROLL BOARD OF DIRECTOR	7,143.22
05/15/2024	SS, MEDICARE, SDI & STATE TAX	1,230.06
05/15/2024	EMPOWER (457)	2,572.15
05/15/2024	HEALTH SAVINGS ACCOUNT	404.00
05/17/2024	PAYROLL DIRECT DEPOSIT	165,112.07
05/17/2024	FEDERAL DEPOSIT LIABILITY	33,339.36
05/17/2024	SDI & STATE TAX	14,549.56
05/17/2024	WAGE GARNISHMENTS	190.00
05/17/2024	EMPOWER (401K)	70,573.98
05/17/2024	EMPOWER (457)	19,323.98
05/17/2024	HEALTH SAVINGS ACCOUNT	71.15
05/31/2024	PAYROLL DIRECT DEPOSIT	170,076.40
05/31/2024	FEDERAL DEPOSIT LIABILITY	34,101.28
05/31/2024	SDI & STATE TAX	14,848.27
05/31/2024	EMPOWER (401K)	71,295.54
05/31/2024	EMPOWER (457)	19,427.87
05/31/2024	HEALTH SAVINGS ACCOUNT	71.15
05/31/2024	BANK FEES	3,811.12
<b>TOTAL INTERBANK WIRES / DEBIT TRANSFERS</b>		<b>\$ 925,319.18</b>
<b>TOTAL DISBURSEMENTS</b>		<b>\$ 5,815,943.50</b>

**REIMBURSEMENTS TO ETWD EMPLOYEES**

CHECK NUMBER	PAYMENT DATE	PAYEE (DESCRIPTION)	PAYMENT AMOUNT
11413	05/30/2024	Sherri Seitz (Travel Expenses)	417.15
11266	05/07/2024	Eric Wilson (Safety Glasses)	351.00
11281	05/07/2024	Roman Kociban (Safety Glasses)	344.80
11331	05/15/2024	David Hayden (Safety Glasses)	333.48
11294	05/07/2024	William Wesson (Safety Glasses)	313.70
11284	05/07/2024	Steve Hancock (Workboots)	278.00
11379	05/24/2024	Steve Sanchez (Seminar)	195.00
11411	05/30/2024	Robert Mckern (Travel Expenses)	109.88
11356	05/24/2024	Cesar Cassani (Certification)	103.00
11311	05/13/2024	Michael Snow (Spencer Blower Adapter)	76.73
<b>TOTAL CHECKS TO EMPLOYEES</b>			<b>\$ 2,522.74</b>

**REINBURSEMENTS TO ETWD DIRECTORS**

CHECK NUMBER	PAYMENT DATE	PAYEE (DESCRIPTION)	PAYMENT AMOUNT
11334	05/15/2024	Fred Adjarian (Travel Expenses)	201.00
11339	05/15/2024	Mark Monin (Travel Expenses)	90.92
11340	05/15/2024	Michael Gaskins (Travel Expenses)	67.13
11338	05/15/2024	Kathryn Freshley (Travel Expenses)	64.32
<b>TOTAL CHECKS TO DIRECTORS</b>			<b>\$ 423.37</b>

Attachment 2  
Statement of Net Position for the May 31, 2024

**El Toro Water District**  
**Interim Statement of Net Position for the Month of May, 2024**

	6/30/2023 Ending	4/30/2024 Interim	5/31/2024 Interim	Change
<b>Assets</b>				
Current Assets				
Cash & Cash Equivalents	10,138,838	18,281,196	17,093,002	(1,188,194)
Investments	16,688,703	5,970,850	5,437,975	(532,876)
Accounts Receivable	6,342,616	5,784,027	3,944,170	(1,839,857)
Materials & Supply Inventory	260,700	678,172	781,590	103,418
Prepaid Expenses	200,587	283,878	259,358	(24,520)
Restricted - Cash & Cash Equivalents	4,386,674	144,871	17,098	(127,773)
Current Assets - Sub-total	38,018,118	31,142,994	27,533,193	(3,609,801)
Non-Current Assets				
Lease Receivable	361,011	361,011	361,011	-
Land & Easements	7,451,585	7,451,585	7,451,585	-
Capacity Rights	342,382	342,382	342,382	-
Capital Assets				
Water System	37,781,450	37,781,450	37,781,450	-
Wastewater System	57,334,500	57,334,500	57,334,500	-
Recycled System	55,454,389	55,454,389	55,454,389	-
Combined Assets	15,919,853	15,919,853	15,798,380	(121,473)
Construction in Progress	24,581,587	34,772,047	35,478,715	706,668
Accumulated Depreciation	(92,651,512)	(95,789,537)	(96,365,401)	(575,864)
Non-Current Assets - Sub-total	106,575,244	113,627,679	113,637,010	9,331
<b>Total Assets</b>	<b>144,593,362</b>	<b>144,770,673</b>	<b>141,170,204</b>	<b>(3,600,470)</b>
<b>Deferred Outflows of Resources</b>				
OPEB Deferred Outflow of Resources	3,493,769	3,493,769	3,493,769	-
<b>Liabilities</b>				
Current Liabilities				
Accounts Payable & Accrued Expenses	6,365,798	1,622,663	614,743	(1,007,920)
Accrued Salaries & Related Payables	150,618	2,997	20,780	17,783
Customer Deposits	49,231	12,350	11,450	(900)
Accrued Interest Payable	162,721	1,071,653	457,170	(614,483)
Long Term Liabilities - Due in One Year				
Compensated Absences	182,171	182,171	182,171	-
Loans Payable	1,846,288	1,846,288	460,108	(1,386,180)
Current Liabilities - Sub-total	8,756,827	4,738,121	1,746,423	(2,991,699)
Non-Current Liabilities				
Compensated Absences	1,431,790	1,431,791	1,431,791	-
Other Post-Employment Benefits Liability	11,050,192	11,050,192	11,050,192	-
Loans Payable	53,316,865	52,948,825	52,856,815	(92,010)
Non-Current Liabilities - Sub-total	65,798,847	65,430,807	65,338,797	(92,010)
<b>Total Liabilities</b>	<b>74,555,674</b>	<b>70,168,929</b>	<b>67,085,220</b>	<b>(3,083,709)</b>
<b>Deferred Inflows of Resources</b>				
Deferred Amounts from Leases	583,336	583,336	583,336	-
Deferred Amounts from OPEB	9,124,466	9,124,468	9,124,468	-
Total Deferred Inflows of Resources	9,707,802	9,707,804	9,707,804	-
<b>Net Position</b>				
Net Investment in Capital Assets	54,965,376	58,832,566	60,320,088	1,487,521
Restricted - Capital Projects	2,895	2,895	2,895	-
Restricted - Debt Service	-	42,503	14,165	(28,338)
Unrestricted	8,855,384	9,509,745	7,533,800	(1,975,945)
<b>Total Net Position</b>	<b>63,823,655</b>	<b>68,387,709</b>	<b>67,870,948</b>	<b>(516,761)</b>

Attachment 3

Statement of Revenues, Expenses, and Changes in Net Position  
for May 31, 2024

Statement of Revenues, Expenses, and Changes in Net Position for the Month of May, 2024										
	District		Water System		Wastewater System		Recycled System		Capital Improvments	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
<b>Operating Revenues</b>										
Commodity Supply Charges	\$ 11,989,100	\$ 8,776,327	\$ 10,027,100	\$ 7,568,661	\$ -	\$ -	\$ 1,962,000	\$ 1,207,666	\$ -	\$ -
Service Provision Charges	14,490,200	13,023,145	4,691,400	4,262,308	9,350,200	8,368,771	448,600	392,066	-	-
Capital Facilities Charge	4,093,900	3,603,105	-	-	-	-	-	-	4,093,900	3,603,105
Charges for Services	125,000	188,692	125,000	188,692	-	-	-	-	-	-
Miscellaneous Operating Income	42,100	66,806	31,000	41,311	10,100	25,173	1,000	322	-	-
Grants, Rebates, Reimbursements	4,101,300	5,002,915	-	4,871	5,300	6,287	96,000	167,875	4,000,000	4,823,881
Total Operating Revenues	34,841,600	30,660,990	14,874,500	12,065,843	9,365,600	8,400,231	2,507,600	1,767,929	8,093,900	8,426,986
<b>Operating Expenses</b>										
General & Administrative	5,262,060	4,572,106	2,110,500	1,950,700	2,729,480	2,262,969	422,080	358,437	-	-
Operations & Maintenance	21,461,400	18,438,626	12,797,500	10,164,248	7,208,600	6,941,658	1,455,300	1,332,720	-	-
Operating Capital Expenses	1,068,150	3,226	-	-	-	-	-	-	1,068,150	3,226
Other Operating Expenses	300,000	275,197	120,000	110,079	156,000	143,103	24,000	22,016	-	-
Depreciation & Amortization	4,906,900	3,835,367	-	-	-	-	-	-	4,906,900	3,835,367
Total Operating Expenses	32,998,510	27,124,521	15,028,000	12,225,027	10,094,080	9,347,729	1,901,380	1,713,172	5,975,050	3,838,593
<b>Operating Income/(Loss)</b>	1,843,090	3,536,469	(153,500)	(159,184)	(728,480)	(947,498)	606,220	54,757	2,118,850	4,588,393
<b>Non-operating Revenues</b>										
Property Taxes	1,155,000	1,055,837	460,000	422,337	600,000	549,037	95,000	84,463	-	-
Investment Earnings	250,000	1,030,435	100,000	383,594	130,000	490,268	20,000	3,526	-	153,048
Miscellaneous Revenue	249,400	233,092	238,000	231,865	10,400	1,148	1,000	79	-	-
Interest Expense	(1,928,200)	(1,899,126)	-	-	-	-	-	-	(1,928,200)	(1,899,126)
Net Non-Operating Revenues	(273,800)	420,238	798,000	1,037,796	740,400	1,040,452	116,000	88,068	(1,928,200)	(1,746,078)
<b>Income/(Loss) before Contributions &amp; Transfers</b>	1,569,290	3,956,707	644,500	878,613	11,920	92,954	722,220	142,825	190,650	2,842,315
<b>Transfers</b>										
Transfers In	1,809,100	1,722,508	-	-	-	-	-	-	1,809,100	1,722,508
Transfers Out	(1,809,100)	(1,722,509)	(881,880)	(808,390)	-	-	(927,220)	(914,119)	-	-
Net Transfers	-	(0)	(881,880)	(808,390)	-	-	(927,220)	(914,119)	1,809,100	1,722,508
<b>Capital Contributions</b>										
Donations & Contributions	-	90,587	-	-	-	-	-	-	-	90,587
Total Capital Contributions	-	90,587	-	-	-	-	-	-	-	90,587
<b>Change in Net Position</b>	1,569,290	4,047,293	(237,380)	70,223	11,920	92,954	(205,000)	(771,294)	1,999,750	4,655,410
<b>Beginning Net Position</b>	63,823,655	63,823,655								
<b>Ending Net Position</b>	\$ 65,392,945	\$ 67,870,948								

Attachment 4

Summary of Revenues and Expenses for the May 31, 2024

Summary of Revenues and Expenses for the Month of May, 2024

Account - Description	Month Actual	YTD Actual	2023-2024 Budgeted	Budget Remaining	% of Budget Remaining
Summary of Total District Revenues					
District Totals					
Commodity Supply Charges	510,022	8,776,327	11,994,600	3,218,273	26.8%
Service Charges	1,183,414	13,023,145	14,490,200	1,467,055	10.1%
Capital Facility Charges	333,558	3,603,105	4,093,900	490,795	12.0%
Charges for Services	-	188,692	125,000	(63,692)	-51.0%
Miscellaneous Revenue	30,117	299,898	301,600	1,702	0.6%
Grants, Rebates, Reimbursements	20,530	5,002,915	4,096,000	(906,915)	-22.1%
Property Taxes	96,250	1,055,837	1,155,000	99,163	8.6%
Investment Income	35,590	1,030,435	250,000	(780,435)	-312.2%
Donations & Capital Contributions	-	90,587	-	(90,587)	N/A
Total Revenue	2,209,481	33,070,941	36,506,300	3,435,359	9.4%
Summary of Total District Expenses					
Salary Expenses					
Directors Fees	9,855	101,616	131,400	29,784	22.7%
Exempt Salaries	120,322	1,456,819	1,407,000	(49,819)	-3.5%
Non-exempt Salaries	414,195	5,026,631	5,513,800	487,169	8.8%
Other Salary Payments	-	297	188,400	188,103	99.8%
Overtime	33,288	231,818	230,000	(1,818)	-0.8%
Overtime - On-call	6,720	81,420	72,700	(8,720)	-12.0%
Stipends/Allowances	4,847	54,551	74,800	20,249	27.1%
Employee Service Awards	-	3,250	5,000	1,750	35.0%
Salary Expenses Sub-total	589,228	6,956,403	7,623,100	666,697	8.7%
Benefit Expenses					
Medical Insurance	92,107	1,074,037	1,138,900	64,863	5.7%
HSA Contributions	-	16,000	4,500	(11,500)	-255.6%
Dental Insurance	7,927	71,560	60,300	(11,260)	-18.7%
Vision Insurance	1,517	14,978	13,100	(1,878)	-14.3%
Life Insurance	19,321	42,528	36,600	(5,928)	-16.2%
Disability Insurance	22,813	38,911	33,300	(5,611)	-16.9%
Long-term Care Insurance	-	13,908	17,900	3,992	22.3%
Workers Compensation Insurance	13,546	97,550	129,100	31,550	24.4%
State Unemployment Insurance	2,252	3,225	3,060	(165)	-5.4%
401k Retirement Contributions	52,225	615,499	622,600	7,101	1.1%
401k Matching Contributions	35,120	359,921	235,900	(124,021)	-52.6%
457b Matching Contributions	6,464	120,700	235,900	115,200	48.8%
Medicare Insurance	8,061	95,741	104,800	9,059	8.6%
FICA	179	1,953	-	(1,953)	N/A
Benefit Expenses Sub-total	261,531	2,566,510	2,635,960	69,450	2.6%
Commodity Purchased for Resale					
Water Purchases - MWDOC	(60,679)	3,087,243	4,228,600	1,141,357	27.0%
Water Purchases - MWDOC Fixed	68,474	713,507	784,200	70,693	9.0%
Water Purchases - AMP/SAC	2,658	28,462	-	(28,462)	N/A
Regional Water Supply Expenses	449	4,039	8,000	3,961	49.5%
Water Purchases - Baker WTP	259,992	2,086,884	3,120,500	1,033,616	33.1%
Water Purchases - Baker O&M	-	347,540	830,500	482,960	58.2%
Water Purch - Other Agencies	-	296,334	-	(296,334)	N/A
MWDOC Service Connect Charge	-	128,481	125,000	(3,481)	-2.8%
Commodity Purchased for Resale Sub-total	270,893	6,692,490	9,096,800	2,404,310	26.4%

Summary of Revenues and Expenses for the Month of May, 2024

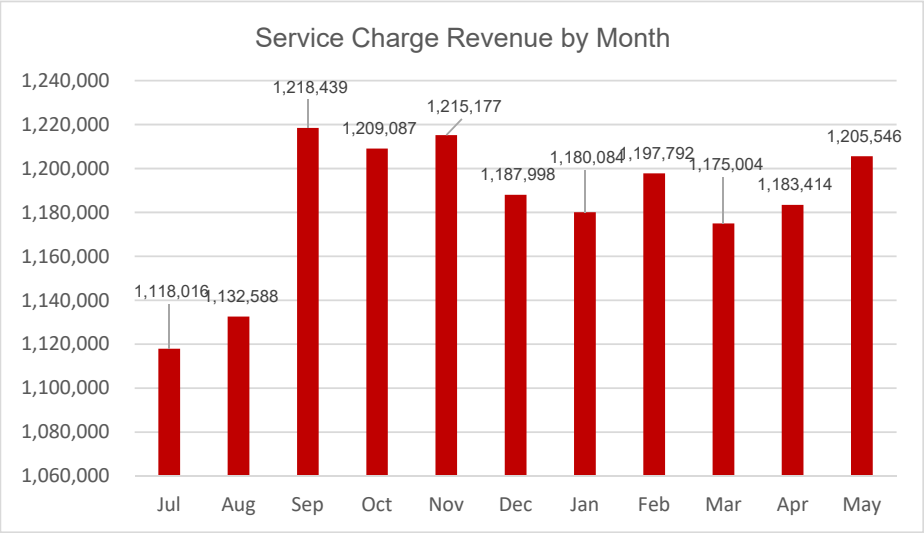
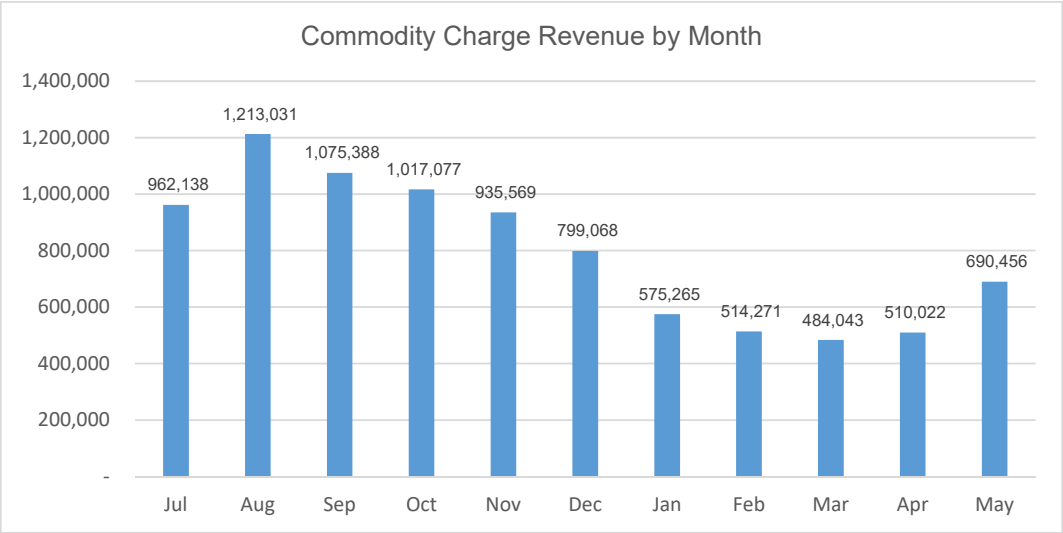
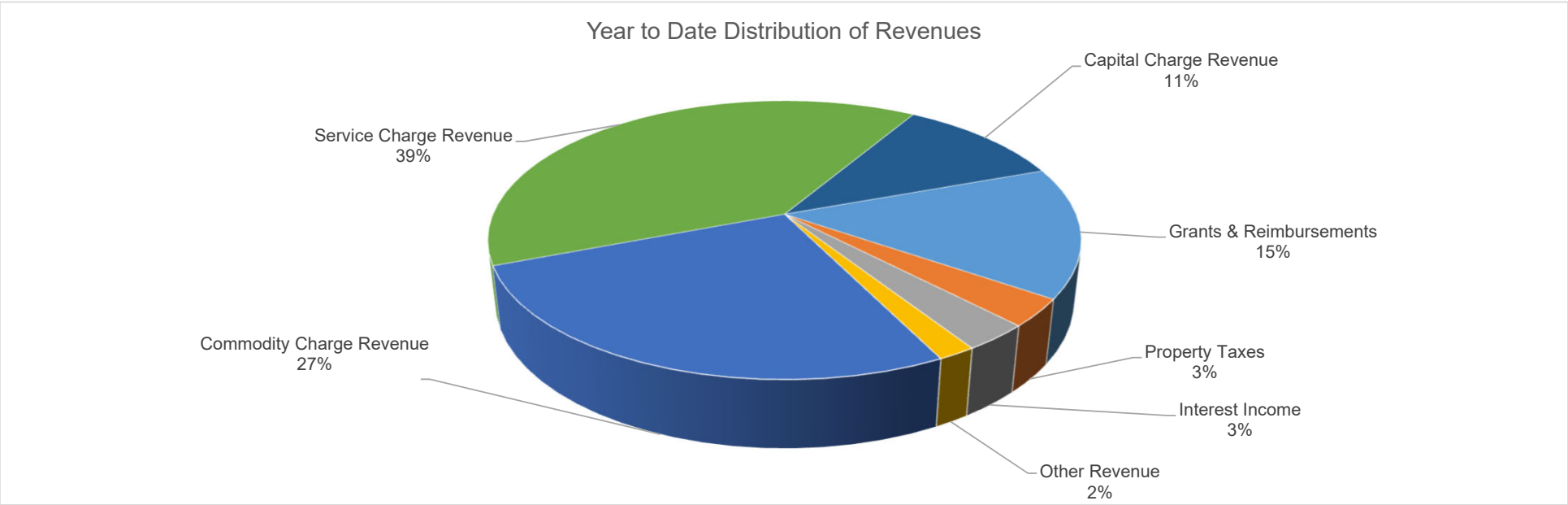
Account - Description	Month Actual	YTD Actual	2023-2024 Budgeted	Budget Remaining	% of Budget Remaining
Contracted/Purchased Services					
Consultants	1,336	15,311	61,500	46,189	75.1%
Engineering Services	18,891	84,142	48,000	(36,142)	-75.3%
Audit & Accounting Services	480	40,420	45,600	5,180	11.4%
Technology Consultants	13,995	61,574	60,000	(1,574)	-2.6%
SOCWA Contract	-	1,279,589	1,100,000	(179,589)	-16.3%
Contractors	42,871	209,691	271,500	61,809	22.8%
Contracted Employees	-	38,841	-	(38,841)	N/A
Legal Svcs - General Counsel	7,172	73,731	90,000	16,269	18.1%
Legal Svcs - Specialty Counsel	-	13,324	25,000	11,676	46.7%
Other Legal Services	2,289	6,588	-	(6,588)	N/A
Employee Recruitmnt/Compliance	-	12,702	5,000	(7,702)	-154.0%
Employee Health & Wellness	1,141	25,957	6,000	(19,957)	-332.6%
Employee Relations Expenses	394	9,075	1,960	(7,115)	-363.0%
Professional Services	-	1,817	-	(1,817)	N/A
Landscaping Services	12,668	124,357	150,000	25,643	17.1%
Janitorial Contracts	2,644	27,188	45,000	17,812	39.6%
Equipment Rental	887	9,635	15,000	5,365	35.8%
Uniform Rental	1,183	6,843	15,000	8,157	54.4%
Laboratory Services	715	26,639	31,800	5,161	16.2%
Disposal Services	7,013	86,798	59,000	(27,798)	-47.1%
Security Services	968	24,643	29,500	4,857	16.5%
Insurance	34,427	339,446	378,000	38,554	10.2%
Financial Service Fees	8,502	39,870	55,000	15,130	27.5%
Printing & Reproduction	-	20,154	8,020	(12,134)	-151.3%
Advertising & Publicity Svcs	399	1,950	8,100	6,150	75.9%
Postage	37	9,778	11,620	1,842	15.8%
Public Relations/Education	2,199	62,437	49,000	(13,437)	-27.4%
Water Efficiency Services	1,344	11,797	100,000	88,203	88.2%
Licenses & Permits	5,008	136,746	200,500	63,754	31.8%
Software Maintenance/Licenses	11,752	147,347	240,900	93,553	38.8%
Electrical Power	115,305	1,684,872	1,786,000	101,128	5.7%
Natural Gas	343	3,586	4,500	914	20.3%
Cable Service	2,314	9,244	9,000	(244)	-2.7%
Telecommunications	2,872	26,746	20,000	(6,746)	-33.7%
Mobile Telecommunications	3,583	38,982	38,100	(882)	-2.3%
Data Access	7,340	54,192	60,000	5,808	9.7%
Equipment Maintenance & Repair	46,183	157,093	139,000	(18,093)	-13.0%
Pump Maintenance & Repair	16,919	141,975	142,000	25	0.0%
Motor Maintenance & Repair	4,561	37,998	91,000	53,002	58.2%
Electrical Maintenance/Repair	10,988	114,362	157,000	42,638	27.2%
Meter Maintenance & Repair	21,899	33,925	30,900	(3,025)	-9.8%
Structure Maintenance & Repair	14,611	108,670	22,000	(86,670)	-394.0%
Asphalt Maintenance & Repair	1,303	114,842	110,600	(4,242)	-3.8%
Contracted/Purchased Services Sub-total	426,534	5,474,878	5,721,100	246,222	4.3%
Commodities					
Repair Parts & Materials	41,992	363,482	437,810	74,328	17.0%
Tools & Small Equipment	2,865	37,594	78,510	40,916	52.1%
Safety Equipment	2,561	11,164	25,010	13,846	55.4%
Employee Tools/Safety Equip	838	17,277	23,800	6,523	27.4%
Laboratory Tools & Small Equip	909	18,428	6,000	(12,428)	-207.1%
Technology Tools/Small Equip	5,628	17,838	46,000	28,162	61.2%
Chemicals	32,418	308,938	322,000	13,062	4.1%
Laboratory Chemicals	208	22,987	53,000	30,013	56.6%
Gasoline & Oil	32,084	141,055	140,000	(1,055)	-0.8%
Operating Supplies/Accessories	2,917	59,638	34,760	(24,878)	-71.6%
Office Supplies & Accessories	732	14,133	21,170	7,037	33.2%
Technology Supplies/Components	8,186	25,559	36,000	10,441	29.0%
Lab Supplies & Accessories	553	15,651	22,000	6,349	28.9%
Meeting/Event Supplies & Food	1,287	24,228	46,540	22,312	47.9%
Water Use Efficiency Supplies	-	638	18,000	17,362	96.5%
Commodities Sub-total	133,177	1,078,610	1,310,600	231,990	17.7%

Summary of Revenues and Expenses for the Month of May, 2024

Account - Description	Month Actual	YTD Actual	2023-2024 Budgeted	Budget Remaining	% of Budget Remaining
Professional Development					
Education & Training	17,656	54,238	43,550	(10,688)	-24.5%
Education/Training - Directors	-	-	1	1	100.0%
Licenses & Certifications	-	1,304	7,202	5,898	81.9%
Dues & Memberships	3,142	95,736	101,403	5,667	5.6%
Dues & Memberships - Directors	-	-	4	4	100.0%
Meetings & Conferences	870	8,225	36,705	28,480	77.6%
Meetings/Conferences-Directors	3,820	14,065	9,006	(5,059)	-56.2%
Travel Reimbursement	-	17,250	38,757	21,507	55.5%
Travel Reimbursement-Directors	150	11,175	35,008	23,833	68.1%
Publications & Subscriptions	20	1,461	2,009	548	27.3%
Professional Development Sub-total	25,658	203,454	273,645	70,191	25.7%
Miscellaneous Expenses					
Employee Appreciation Expenses	-	283	5,000	4,717	94.3%
Internal/External Event Expenses	33	10,644	8,000	(2,644)	-33.0%
Election Expense	-	-	-	-	N/A
Reimbursable Repair Expense	-	-	-	-	N/A
Property Taxes	-	2,499	10,000	7,501	75.0%
Uncollectible Accounts	-	(493)	17,000	17,493	102.9%
NSFs & Miscellaneous Fees	467	6,421	18,000	11,579	64.3%
Refund Overcharges	469	6,338	2,800	(3,538)	-126.3%
Damage/Repair Reimbursements	-	-	-	-	N/A
Miscellaneous Sub-total	969	25,692	60,800	35,108	57.7%
Sub Total - General and O&M Expanses	1,707,989	22,998,037	26,722,005	3,723,968	13.9%
Capital Improvement Expenses					
Water System Projects					
Supply/Storage Projects	153	3,016,517	2,969,314	(47,203)	N/A
Pumping Projects	-	2,128	39,000	36,872	94.5%
Main/Service Line Projects	-	-	-	-	N/A
Wastewater System Projects	-	-	-	-	N/A
Pumping Projects	-	-	39,000	39,000	100.0%
Wastewater Treatment Projects	-	358,999	414,836	55,837	13.5%
Main/Service Line Projects	-	-	-	-	N/A
Recycled System Projects	-	-	-	-	N/A
Pumping Projects	-	-	-	-	N/A
Tertiary Treatment Projects	-	-	-	-	N/A
Main/Service Line Projects	-	-	-	3	N/A
General Projects	-	-	-	-	N/A
Operating Equipment Purchases	-	-	-	-	N/A
Vehicle & Related Equipment Purchases	-	27,762	-	(27,762)	N/A
Technoloy Projects & Purchases	-	-	64,000	64,000	100.0%
Building & Structure Improvements	-	39,892	40,000	108	0.3%
General Capital Projects	31,988	232,357	442,000	209,643	47.4%
Construction in Progress	-	(3,661,740)	(3,601,229)	(60,511)	1.7%
Capital Improvement Expenses Sub-total	32,141	15,915	406,921	269,986	66.3%
Other Expenses					
Retiree Health Insurance	26,102	275,203	300,000	24,797	8.3%
Depreciation	348,670	3,835,367	4,906,900	1,071,533	21.8%
Debt Interest Expense	134,916	1,899,126	1,928,200	29,074	1.5%
Other Expenses Sub-total	509,689	6,009,696	7,135,100	1,125,404	15.8%
Total Expenses	2,249,819	29,023,648	34,264,026	5,119,359	14.9%
Change in Net Position	(40,338)	4,047,293	2,242,274		

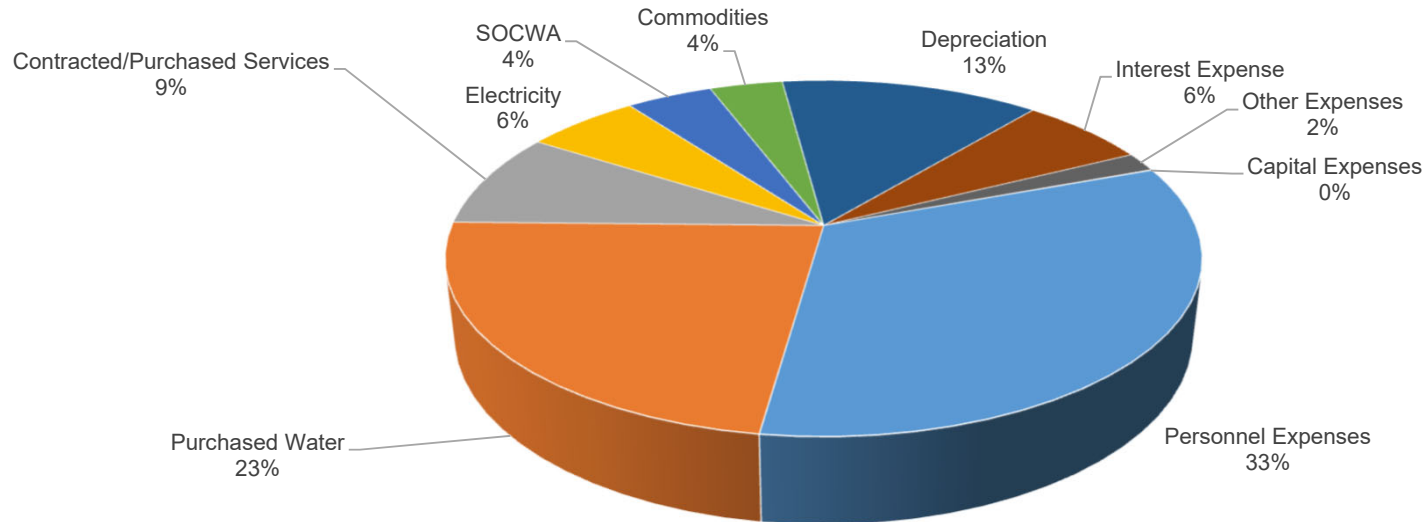
Attachment 5  
Revenue and Expense Charts for May 31, 2024

Revenue Charts -May 2024 Financial Report

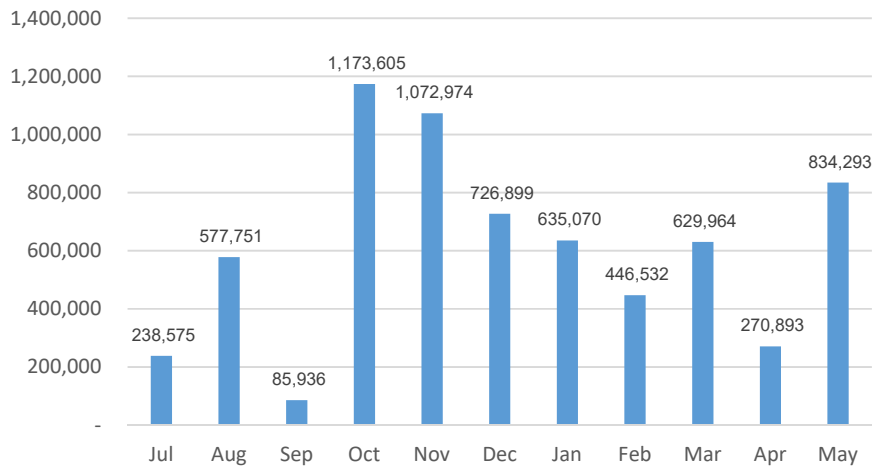


## Expense Chart - May 2024 Financial Report

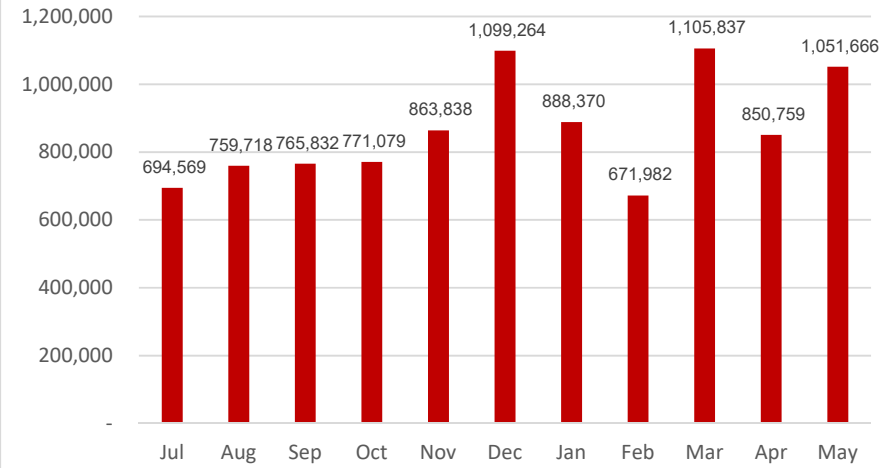
Year to Date Distribution of Expenses



Purchased Water Expenses by Month



Personnel Costs by Month



Attachment 6

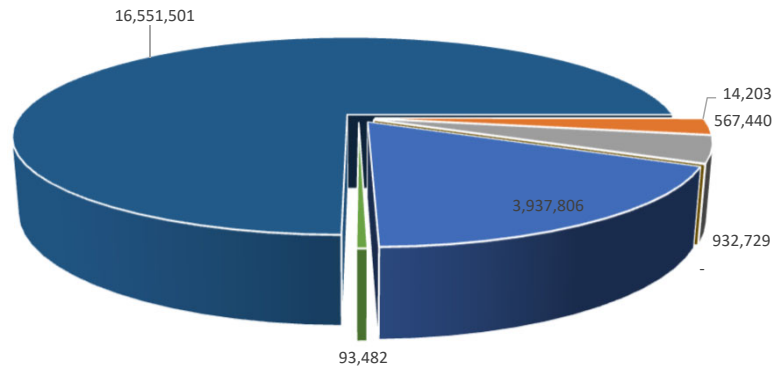
Summary of Cash & Investments at the end of May 31, 2024

Summary of Cash & Investments  
as of May 31, 2024

Summary of Cash & Investments

Cash & Equivalents	
Unrestricted - Cash & Equivalents	16,551,501
Unrestricted - Cash & Equivalents USB	450,914
Restricted - Cash & Equivalents	93,482
Investments	
Government Securities	3,937,806
Certificates of Deposit	-
Corporates Bonds/Notes	932,729
Asset Backed Securities	567,440
2022 Bond Money Market	14,203
Total Cash & Investments	22,548,074
Operating Cash & Investments	22,440,389.10
2022 Bond Proceeds Cash & Investments	14,203.17
Restricted - Cash & Equivalents	93,482.00

Summary of Cash & Investments



Cash & Equivalents

	Account Balance	Current Yield
Cash & Equivalents		
Demand Deposit Accounts		
US Bank - Checking Account	450,914	
US - Capital Facilities Checking	2,895	
US - Capital Facilities - in main Checking	90,587	
US Bank - 2022 Bond Proceeds/Interest/Principal	14,203	
Petty Cash	700	
Money Market Accounts		
US Bank - Money Market Account	-	
CAMP Money Market	11,695,346	
LAIF Money Market	4,855,455	
Total Cash & Equivalents	17,110,100	

Investments

	Purchase Cost	Par Amount	Premium/ (Discount)	Market Value	Unrealized Gain/(Loss)	Coupon Rate	Yield to Maturity	Purchase Date	Maturity Date
Governmental Securities									
United States Treasury Bond									
US Treasury N/B - AA+	164,807	165,000	(193)	163,376	(1,431)	0.375%	0.42%	9/3/2021	8/15/2024
US Treasury N/B - AA+	34,854	35,000	(146)	34,513	(340)	0.375%	0.52%	10/7/2021	9/15/2024
US Treasury N/B - AA+	347,047	350,000	(2,953)	341,250	(5,797)	1.125%	1.42%	2/4/2022	1/15/2025
US Treasury N/B - AA+	149,566	150,000	(434)	146,602	(2,965)	2.750%	2.85%	6/1/2022	5/15/2025
US Treasury N/B - AA+	466,543	500,000	(33,457)	474,141	7,598	2.125%	4.20%	11/30/2022	5/31/2026
US Treasury N/B - AA+	464,531	500,000	(35,469)	469,063	4,531	2.250%	4.10%	11/30/2022	2/15/2027
US Treasury N/B - AA+	480,273	500,000	(19,727)	480,156	(117)	3.250%	4.25%	2/22/2023	6/30/2027
US Treasury N/B - AA+	502,500	500,000	2,500	492,266	(10,234)	4.125%	4.01%	11/30/2022	9/30/2027
US Treasury N/B - AA+	497,930	500,000	(2,070)	492,266	(5,664)	4.125%	4.22%	2/22/2023	9/30/2027
US Treasury N/B - AA+	485,332	500,000	(14,668)	481,563	(3,770)	3.500%	4.16%	2/22/2023	1/3/2028
United States Treasury Bond - Totals	3,593,383	3,700,000	(106,617)	3,575,194	(18,189)				

Investments (Continue)									
	Purchase Cost	Par Amount	Premium/ (Discount)	Market Value	Unrealized Gain/(Loss)	Coupon Rate	Yield to Maturity	Purchase Date	Maturity Date
Supra-National Agency Bond / Note									
Inter-American Devel BK Note - AAA	184,863	185,000	(137)	182,216	(2,647)	0.500%	0.52%	9/15/2021	9/23/2024
Supra-National Agency Bond / Note Totals	184,863	185,000	(137)	182,216	(2,647)				
Municipal Bond / Note									
NJ TPK Authority TXBL Revenue Bonds - AA-	20,000	20,000	-	19,507	(493)	0.897%	0.90%	1/22/2021	1/1/2025
Municipal Bond / Note Totals	20,000	20,000	-	19,507	(493)				
Federal Agency Commercial Mortgage-Backed Security									
FHLMC Multifamily Structured Pool - AA+	80,147	80,041	106	72,888	(7,259)	3.064%	3.00%	5/25/2022	8/1/2024
FHMS K047 - AA+	90,521	89,945	576	88,001	(2,520)	3.329%	3.10%	5/19/2022	5/1/2025
Federal Mortgage-Backed Security Totals	170,668	169,986	683	160,889	(9,780)				
Governmental Securities - Total Balances	3,968,914	4,074,986	(106,071)	3,937,806	(31,109)				
Corporate Notes									
JPMorgan Chase & Co Corp Note	25,000	25,000	-	24,999	(1)	0.824%	0.82%	5/24/2021	6/1/2025
John Deere Capital Corp Notes	9,988	10,000	(13)	9,994	6	0.450%	0.49%	6/7/2021	6/7/2024
Target Corp Notes	31,879	30,000	1,879	29,952	(1,927)	3.500%	1.04%	11/23/2021	7/1/2024
American Express Co Corp Notes	36,253	35,000	1,253	34,908	(1,345)	2.500%	1.14%	11/19/2021	7/30/2024
American Honda Finance Corp Notes	29,980	30,000	(20)	29,719	(261)	0.750%	0.77%	9/7/2021	8/9/2024
American Honda Finance Corp Notes	35,025	35,000	25	34,672	(353)	0.750%	0.72%	9/13/2021	8/9/2024
Caterpillar Finl Service Corp Notes	19,973	20,000	(27)	19,722	(251)	0.600%	0.65%	9/7/2021	9/13/2024
Bank of NY Mellon Corp Note	24,984	25,000	(16)	24,533	(451)	0.850%	0.87%	10/20/2021	10/25/2024
Apple Inc Corp Note - AA+	42,786	40,000	2,786	39,328	(3,459)	2.750%	0.89%	3/11/2021	1/13/2025
Merck & Co Inc Corp Notes	21,389	20,000	1,389	19,627	(1,762)	2.750%	0.94%	3/9/2021	2/10/2025
3M Company Corp Note	69,744	70,000	(256)	68,161	(1,583)	2.000%	2.13%	3/3/2022	2/14/2025
Exon Mobil Corp Note	29,874	30,000	(126)	29,389	(485)	2.709%	2.86%	4/1/2022	3/6/2025
Intel Corp Notes	30,873	30,000	873	29,488	(1,384)	3.400%	2.40%	3/8/2022	3/25/2025
Burlington North Santa Fe Corp Note Call	21,533	20,000	1,533	19,605	(1,927)	3.000%	1.07%	3/5/2021	4/1/2025
Amazon.com Inc Corp Notes	74,881	75,000	(119)	73,476	(1,404)	3.000%	3.06%	4/11/2022	4/13/2025
Home Depot Inc Corp Note	4,991	5,000	(9)	4,886	(105)	2.700%	2.76%	3/24/2022	4/15/2025
Target Corp Note	30,015	30,000	15	29,229	(786)	2.250%	2.23%	3/8/2022	4/15/2025
Bank of NY Mellon Corp Note	46,148	45,000	1,148	43,503	(2,644)	1.600%	0.97%	3/10/2021	4/24/2025
Bank of NY Mellon Corp Note	19,997	20,000	(3)	19,614	(383)	3.350%	3.36%	4/19/2022	4/25/2025
Pepsico Inc Corp Note Call	21,400	20,000	1,400	19,552	(1,848)	2.750%	1.02%	3/5/2021	4/30/2025
Suntrust Banks Inc Corp Notes	36,373	35,000	1,373	34,476	(1,896)	4.000%	2.69%	3/8/2022	5/1/2025
Charles Schwab Corp Note	40,616	40,000	616	39,378	(1,237)	3.850%	3.30%	6/1/2022	5/21/2025
Honeywell Intl Corp Note	20,360	20,000	360	19,227	(1,134)	1.350%	0.91%	3/5/2021	6/1/2025
National Rural Util Coop Corp Note	9,997	10,000	(3)	9,784	(214)	3.450%	3.46%	5/4/2022	6/15/2025
Intel Corp Notes	35,821	35,000	821	34,273	(1,548)	3.700%	2.95%	4/4/2022	7/29/2025
Citigroup Inc Corp Notes	20,000	20,000	-	19,576	(424)	1.281%	1.28%	10/27/2021	11/3/2025
State Street Corp Note	20,000	20,000	-	19,463	(537)	1.746%	1.75%	2/2/2022	2/6/2026
Citigroup Inc Corp Notes	15,000	15,000	-	14,706	(294)	3.290%	3.29%	3/10/2022	3/17/2022
State Street Corp Note	61,208	60,000	1,208	58,642	(2,566)	2.901%	2.38%	2/17/2022	3/30/2026
JPMorgan Chase & Co (Callable)	80,000	80,000	-	78,846	(1,154)	4.080%	4.08%	4/19/2022	4/26/2026
Corporate Bonds - Total Balances	966,087	950,000	16,087	932,729	(33,358)				

Investments (continued)

	Purchase Cost	Par Amount	Premium/ (Discount)	Market Value	Unrealized Gain/(Loss)	Coupon Rate	Yield to Maturity	Purchase Date	Maturity Date
Asset Backed Securities									
Harot 2021 - Aaa	50	50	-	50	(0)	0.270%	0.27%	2/17/2021	4/21/2025
FordO 2021 - AAA	1,821	1,821	(0)	1,813	(8)	0.300%	0.30%	2/17/2021	8/15/2025
Harot 2021 - Aaa	5,512	5,512	(0)	5,464	(48)	0.330%	0.33%	5/18/2021	8/15/2025
GMCar 2021 - AAA	626	626	(0)	624	(2)	0.350%	0.35%	1/12/2021	10/16/2025
Harot 2021 - AAA	11,580	11,580	(0)	11,385	(195)	0.410%	0.41%	8/17/2021	11/18/2025
Carmx 2021 - AAA	1,636	1,636	(0)	1,622	(14)	0.340%	0.34%	1/20/2021	12/15/2025
Harot 2021 - Aaa	11,158	11,160	(2)	10,918	(240)	0.880%	0.89%	11/16/2021	1/21/2026
TAOT 2021 - AAA	13,866	13,866	(0)	13,567	(299)	0.710%	0.71%	11/9/2021	4/15/2026
Hart 2021 - AAA	8,554	8,556	(2)	8,374	(180)	0.740%	0.75%	11/9/2021	5/15/2026
Harot 2022 - AAA	30,420	30,424	(5)	29,797	(622)	1.880%	1.88%	2/15/2022	5/15/2026
FordO 2022 - AAA	12,471	12,472	(1)	12,201	(270)	1.290%	1.29%	1/19/2022	6/15/2026
BMWOT 2021 - AAA	16,980	16,980	(1)	16,721	(258)	3.210%	3.21%	5/10/2022	8/25/2026
COPAR 2021 - AAA	12,378	12,378	(0)	12,059	(319)	0.770%	0.77%	10/19/2021	9/15/2026
FordO 2022 - Aaa	19,136	19,137	(1)	18,931	(205)	3.740%	3.74%	6/22/2022	9/15/2026
TAOT 2022 - AAA	22,645	22,645	(1)	22,267	(378)	2.930%	2.93%	4/7/2022	9/15/2026
DCENT 2021 - AAA	54,988	55,000	(12)	54,199	(789)	0.580%	0.58%	9/20/2021	9/15/2026
GMCar 2021 - AAA	12,307	12,307	(0)	11,996	(310)	0.680%	0.68%	10/13/2021	9/16/2026
Hart 2022 - AAA	37,685	37,686	(1)	36,962	(723)	2.220%	2.22%	3/9/2022	10/15/2026
Ally 2022 - AAA	40,511	40,519	(8)	40,006	(505)	3.310%	3.31%	5/10/2022	11/15/2026
Comet 2021 - AAA	49,993	50,000	(7)	48,986	(1,007)	1.040%	1.04%	11/18/2021	11/15/2026
GMCar 2022 - AAA	11,730	11,731	(1)	11,450	(280)	1.260%	1.26%	1/11/2022	11/16/2026
HDMOT 2022 - AAA	21,175	21,179	(4)	20,864	(311)	3.060%	3.06%	4/12/2022	2/15/2027
GMCar 2022 - AAA	20,064	20,068	(4)	19,732	(333)	3.100%	3.10%	4/5/2022	2/16/2027
Carmx 2022 - AAA	25,549	25,553	(4)	25,171	(378)	3.490%	3.49%	4/21/2028	2/16/2027
Comet 2022 - AAA	69,995	70,000	(5)	68,523	(1,472)	2.800%	2.80%	3/23/2022	3/15/2027
Comet 2022 - AAA	64,990	65,000	(10)	63,759	(1,231)	3.490%	3.49%	6/6/2022	5/15/2027
Corporate Bonds - Total Balances	577,817	577,888	(71)	567,440	(10,377)				

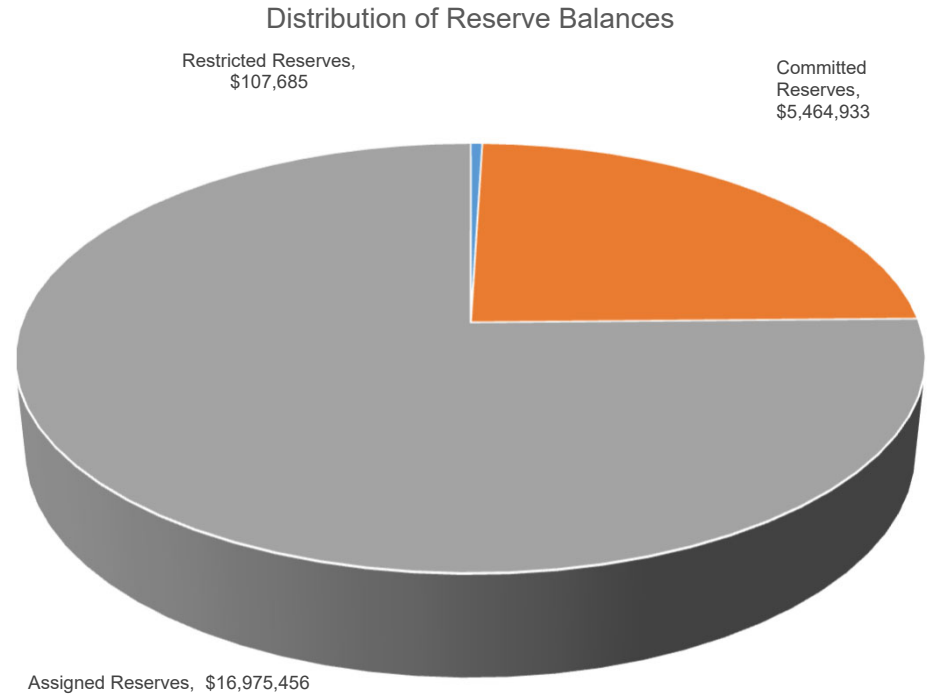
Attachment 7  
Cash Reserve Balances for May 31, 2024

**El Toro Water District  
Cash Reserve Status Report  
as of May 31, 2024**

	Cash Reserve Balances	Reserve Targets
<b>Reconciled Cash Balance</b>	<b>\$ 22,548,074</b>	
<b>Restricted Reserves</b>		
2022 Revenue Bonds Fund	14,203	-
Capital Facilities Charge Reserve	93,482	-
<b>Sub Total Restricted Reserve</b>	<b>107,685</b>	<b>-</b>
<b>Committed Reserves</b>		
Capital Construction Reserve	1,975,455	3,000,000
Rate Stabilization Reserve	1,835,600	2,100,000
Operational Continuity Reserve	2,100,000	2,100,000
Working Capital Reserve	(446,122)	2,100,000
<b>Sub Total Committed Reserves</b>	<b>5,464,933</b>	<b>9,300,000</b>
<b>Assigned Reserves</b>		
<b>CIP Reserves</b>		
Capital Carryover	3,242,919	-
Accumulated Capital Reserve	1,196,380	-
CIP - Revenue Bond Unrestricted Reserve	8,414,167	-
SOCWA Capital Projects	3,593,124	-
Recycled Water Capital / Debt Service	(1,482,633)	-
Capital Plan Working Capital Reserve(1)	731,389	-
<b>Water Supply Program Reserves</b>		
Tiered Conservation Fund	672,470	-
<b>Debt Service Reserves</b>		
Baker Debt Service	607,640	-
<b>Sub Total Assigned Reserves</b>	<b>16,975,456</b>	<b>-</b>
<b>Total Cash Reserves</b>	<b>22,548,074</b>	
<b>Adjusted Cash Reserves<sup>(2)</sup></b>	<b>22,440,389</b>	<b>9,300,000</b>

(1) Working Capital reserve has 23-24 Capital Plan - Working Capital

(2) The Adjusted Cash Reserves excludes the 2022 Bond Proceeds which are obligated to the projects identified in the 2022 Bond Official Statement and are therefore not available for Operations & Maintenance activities or the annual Capital Improvement Program.



Attachment 8

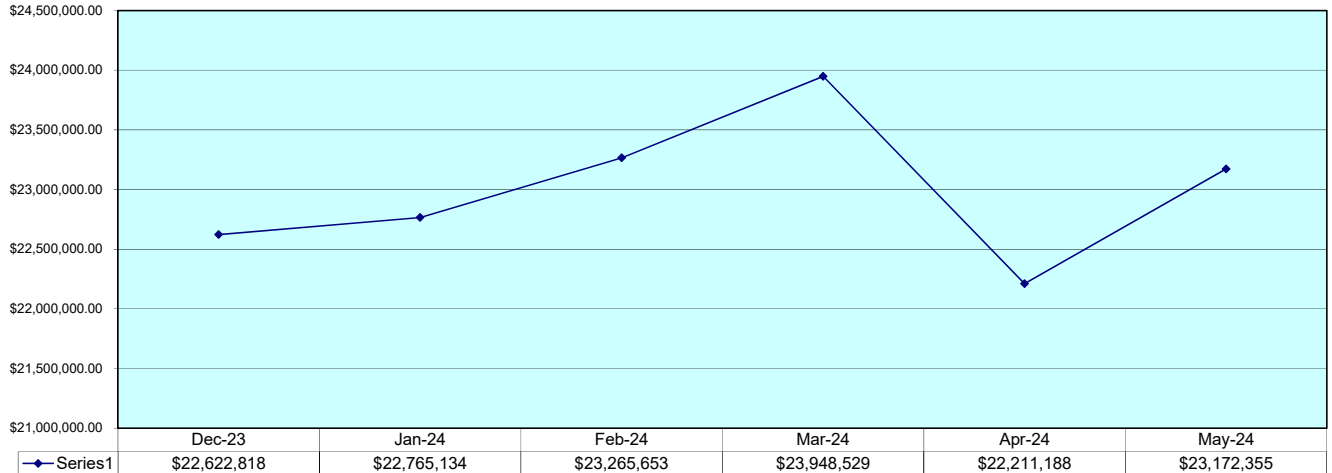
Capital Project Expense Report through May 31, 2024

2023-2024 Capital Program Budget Information															
Project Description	Total Budget	2023 - 2024 Expenses												YTD Total	Remaining
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
R-6 Reservoir Cover (CIP23)	3,705,133.31	-	98,183.63	3,937,815.93	1,148,619.15	318,765.89	122,974.42	220,157.00	34,754.94	46,813.84	576.94	202.50	-	5,928,864.24	(2,223,730.93)
R-6 Reservoir Cover Paving Project	1,000,000.00	-	-	4,435.00	1,950.00	-	-	944,384.77	81,365.24	-	-	-	-	1,032,135.01	(32,135.01)
JTM Pump Station 32-093	1,035,516.35	-	96,746.45	858.64	-	-	-	-	-	-	-	10,423.89	-	108,028.98	927,487.37
P-1 Fence Alarm Replacement	20,921.60	-	2,128.18	-	18,793.42	-	-	-	-	-	-	-	-	20,921.60	-
Hach WIMS Implementation Project	72,815.02	-	-	19,800.00	-	-	-	-	-	-	-	-	-	19,800.00	53,015.02
Water and Sewer Master 31-049	11,563.44	-	-	-	11,563.44	-	-	-	-	-	-	-	-	11,563.44	-
Scada Server upgrade	32,500.00	-	-	-	18,941.39	-	-	-	-	-	-	-	-	18,941.39	13,558.61
New Warehouse	2,624,495.00	-	-	21,066.41	341,529.54	-	536,011.48	386,722.30	284,185.30	214,924.67	24,127.73	159,506.53	-	1,968,073.96	656,421.04
Field Ops - Floor Covering	15,000.00	-	-	-	-	-	-	-	17,966.94	-	-	-	-	17,966.94	(2,966.94)
23-24 Vehicle Purchases	125,000.00	-	-	-	-	-	-	-	-	39,048.20	-	-	-	39,048.20	85,951.80
Boom Truck Purchase	25,000.00	-	25,000.00	-	-	-	-	-	-	-	-	-	-	25,000.00	-
Boom Truck Purchase	41,810.20	-	2,762.00	-	-	-	-	-	-	-	-	-	-	2,762.00	39,048.20
Asset Management Study 31-050	120,000.00	-	15,527.50	-	-	42,332.50	-	35,634.03	-	20,107.03	8,017.50	6,430.00	-	128,048.56	(8,048.56)
System Arc Flash Coord Study	180,000.00	-	-	-	-	-	7,013.86	27,555.00	16,449.42	14,260.00	23,970.00	19,104.30	-	108,352.58	71,647.42
23-24 ATS Replacements	32,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	32,000.00
23-24 ATS Replacements	30,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	30,000.00
23-24 Sewer PLC Upgrade	118,294.65	-	-	-	-	-	-	-	-	-	-	-	-	-	118,294.65
Sewer Station HMI Rplmnt	14,000.00	-	-	-	-	-	-	-	-	-	-	15,351.33	-	15,351.33	(1,351.33)
23-24 JRWSS Capital Budget	13,114.00	-	-	-	235.42	-	321.78	-	335.15	-	153.42	144.23	-	1,190.00	11,924.00
23-24 Baker WTP Capital Fund	56,200.00	-	-	-	-	-	14,040.25	-	-	14,040.25	-	-	-	28,080.50	28,119.50
Core Switch Replacement	63,000.00	20,389.40	-	20,389.40	-	-	-	-	-	-	-	-	-	40,778.80	22,221.20
23-24 Security System Imprmnts	50,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	50,000.00
EOC Technology Upgrade	16,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000.00
IT Master Plan	80,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	80,000.00
23-24 SOCWA Capital Expenses	414,836.00	103,898.00	-	-	-	131,789.00	-	-	1,786.25	701.25	4,745.95	2,552.50	-	9,785.95	70,214.05
DAF Unit #2 Rehab 933-136	18,641.00	-	-	-	-	-	-	-	34,126.00	-	-	30,866.00	-	300,679.00	114,157.00
DAF Unit #2 Rehab 933-136	139,558.08	-	-	-	-	-	-	-	-	-	-	-	-	-	18,641.00
Mathis LS Influent Drop Piping	58,349.66	-	-	14,553.00	-	6,481.25	-	98,321.88	37,715.00	-	-	-	-	136,036.88	3,521.20
Surcharge CAP Repair - Goudy	52,000.00	-	-	-	-	-	-	2,867.77	425.89	-	-	34,021.75	-	58,349.66	-
Northline Coating Impr Project	91,000.00	-	-	-	-	-	-	-	-	862.50	7,214.09	47,376.00	-	55,452.59	35,547.41
Freeway Electrical Equip Repl	110,000.00	-	-	-	-	-	-	-	-	-	7,516.64	64,250.00	-	71,766.64	38,233.36
Grit Chamber Rehab 933-131	65,683.02	-	49,756.88	-	13,678.99	-	486.60	-	-	1,187.92	-	572.63	-	65,683.02	-
New MCC S-D Electrical Cabinet & Breake	30,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	30,000.00
WRP Main Electrical Power Breaker Upgra	23,922.68	-	-	-	-	-	-	-	-	-	-	-	-	-	23,922.68
WRP Effluent Pump Station Rehab	112,431.37	-	-	-	-	98,314.37	9,117.00	-	-	5,000.00	-	-	-	112,431.37	-
Tertiary Disinfection Optimization	33,911.77	-	-	4,346.11	-	6,693.75	-	-	12,611.91	8,890.00	392.50	977.50	-	33,911.77	-
Headworks and Secondary Clarifier No. 1 F	2,351,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	2,351,000.00
Headworks and Secondary Clarifier No. 1 F	694,014.20	-	-	-	-	-	-	-	19,473.63	81,503.81	31,655.21	29,382.75	-	162,015.40	531,998.80
R-4 Exterior Recoating	35,100.00	-	-	-	-	-	-	-	-	3,150.00	-	-	-	3,150.00	31,950.00
P-4 Pump Replacement	59,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	59,000.00
Moulton/El Toro Cathodic Protection Repair	100,000.00	-	-	-	-	3,875.00	-	-	-	-	-	-	-	3,875.00	96,125.00
SRV-2 Lid Repair	33,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	33,000.00
R-6 Security Improvements	84,000.00	-	-	-	-	-	-	-	32,064.23	-	-	41,517.72	-	73,581.95	10,418.05
P-3 Pump Station Rehab	200,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	200,000.00
Aliso Creek Pump Rehab 932-115	468,901.00	-	-	-	-	-	-	-	-	-	-	-	-	-	468,901.00
Aliso Creek Pump Rehab 932-115	602,953.14	-	-	-	-	-	-	-	18,466.50	51,184.50	60,885.00	33,850.00	-	164,386.00	438,567.14
23-24 Water PLC Upgrade	76,733.68	-	-	-	-	-	-	-	-	-	-	20,120.64	-	20,120.64	56,613.04
Water Station HMI Rplmnt	14,000.00	-	-	-	-	-	-	-	-	-	-	-	-	-	14,000.00
ETM Backflow Prevention Project	205,018.50	-	-	167,959.50	21,283.00	8,473.00	7,303.00	-	-	-	-	-	-	205,018.50	-
Lab HVAC Unit	13,668.00	-	13,668.00	-	-	-	-	-	-	-	-	-	-	13,668.00	-
RWST Center Vent Replacement	1,105.55	-	-	-	-	-	-	1,105.55	-	-	-	-	-	1,105.55	-
4920 Siphon Project	2,126.00	-	-	-	-	-	-	2,126.00	-	-	-	-	-	2,126.00	-
Lead Copper Rule Revision	43,699.00	-	-	-	-	-	-	43,699.00	-	-	-	-	-	43,699.00	-
New Turbo Blower	9,100.00	-	-	-	-	-	-	-	-	-	-	9,100.00	-	9,100.00	-
Recycled Station HMI Rplmnt	7,199.73	-	-	-	-	-	-	-	-	-	-	7,199.73	-	7,199.73	-
CalTrans I-5 Widening	42,825.00	-	-	-	-	-	-	-	-	38,400.00	4,425.00	-	-	42,825.00	-
	15,676,140.95	124,287.40	303,772.64	4,191,223.99	1,576,594.35	616,724.76	697,268.39	1,762,573.30	591,726.40	540,073.97	173,679.98	532,950.00	0.00	11,110,875.18	4,565,265.77
R-6 Reservoir Cover (CIP23)/Cost Covered	5,750,718.49	-	54,001.00	2,165,798.76	631,740.53	175,321.24	67,635.93	121,086.35	19,115.22	25,747.61	317.32	111.38	-	3,260,875.33	2,489,843.16
	21,426,859.44	124,287.40	357,773.64	6,357,022.75	2,208,334.88	792,046.00	764,904.32	1,883,659.65	610,841.62	565,821.58	173,997.30	533,061.38	-	14,371,750.51	7,055,108.93
Bond 2022 Restricted Funds	4,705,133.31	-	98,183.63	3,942,250.93	1,150,569.15	318,765.89	122,974.42	1,164,541.77	116,120.18	46,813.84	576.94	202.50	-	6,960,999.25	(2,255,865.94)
Bond CIP Unrestricted Funds	6,011,011.35	-	96,746.45	21,925.05	341,529.54	-	536,011.48	386,722.30	284,185.30	214,924.67	24,127.73	169,930.42	-	2,076,102.94	3,934,908.41
2023-24 CIP Budget	1,575,956.00	20,389.40	15,527.50	20,389.40	235.42	42,332.50	21,375.89	63,189.03	48,848.80	91,467.98	46,871.65	194,173.58	-	564,801.15	1,011,154.85
SOCWA	414,836.00	103,898.00	-	-	-	131,789.00	-	-	34,126.00	-	-	30,866.00	-	300,679.00	114,157.00
Carryover Project Fund	2,408,299.47	-	74,756.88	19,800.00	32,620.38	3,875.00	486.60	98,321.88	95,408.32	172,977.48	101,711.16	86,478.52	-	686,436.22	1,721,863.25
Accumulated Capital Funds	313,669.27	-	18,558.18	14,553.00	30,356.86	104,795.62	9,117.00	48,692.77	425.89	5,000.00	-	43,121.75	-	274,621.07	39,048.20
Recycle Capital Projects	247,235.55	-	-	172,305.61	21,283.00	15,166.75	7,303.00	1,105.55	12,611.91	8,890.00	392.50	8,177.23	-	247,235.55	-
	15,676,140.95	124,287.40	303,772.64	4,191,223.99	1,576,594.35	616,724.76	697,268.39	1,762,573.30	591,726.40	540,073.97	173,679.98	532,950.00	-	11,110,875.18	4,565,265.77

Attachment 9  
Interim Report on 401k Plan Holdings  
As of May 31, 2024

## EL TORO WATER DISTRICT 401K PLAN SUMMARY

### 401K PLAN MARKET VALUE



MARKET VALUE SUMMARY							
	Under 40 yrs. Old	40 to 44 yrs. Old	45 to 49 yrs. Old	50 to 54 yrs. Old	55 to 59 yrs. Old	60 to 64 yrs. Old	Over 65 yrs. Old
Balance at June 30, 2023	\$1,453,468.56	\$2,095,353.59	\$1,103,519.44	\$2,887,912.79	\$7,733,640.95	\$3,735,784.96	\$2,508,682.94
	Under 41 yrs. Old	41 to 48 yrs. Old	49 to 55 yrs. Old	56 to 58 yrs. Old	59 to 62 yrs. Old	63 to 65 yrs. Old	Over 65 yrs. Old
Balance at May 31, 2024	\$1,986,441.60	\$3,121,484.02	\$3,901,008.77	\$4,912,018.13	\$3,954,986.02	\$2,492,318.92	\$2,804,097.16

District Staff is working with Highmark and Empower to design a new 401k report. Once the data for the portfolios is being generated by Empower, the District portfolio information by age group will be updated.

Investments	Beginning Balance	Contributions	Withdrawals	Interest, Dividends and Appreciation Net of Fees & Charges	Ending Balance
American Beacon AHL Mgd Futs Strat A	874,837.66	4,824.16	0.00	(47,320.21)	832,141.61
BlackRock Tactical Opportunities K	227,593.94	1,982.76	0.00	(510.73)	229,065.97
Columbia Contrarian Core Instl 3	1,910,387.79	18,757.61	0.00	147,923.82	2,077,069.22
Delaware Small Cap Core R6	866,404.10	6,066.79	0.00	62,021.63	734,492.52
DFA Large Cap International I	1,187,845.66	12,208.76	0.00	101,646.97	1,301,701.39
Dodge & Cox Income - I	2,574,203.60	19,791.65	0.00	(29,693.17)	2,564,302.08
Dodge & Cox International Stock -	310,844.46	3,027.51	0.00	28,884.32	342,756.29
Dodge & Cox Stock - I	1,021,943.45	10,102.59	0.00	64,198.22	1,096,244.26
DoubleLine Core Fixed Income R6	2,465,577.93	19,001.34	0.00	(39,220.90)	2,445,358.37
Emerald Growth Institutional	422,171.46	4,704.49	0.00	60,869.67	487,745.62
Guaranteed Income Fund	692,372.57	5,149.81	0.00	(6,131.33)	691,391.05
Harbor Capital Appreciation Retirement	858,240.99	9,321.75	0.00	96,760.24	964,322.98
MFS International Growth R6	305,266.31	3,027.51	0.00	27,413.91	335,707.73
Nuveen Real Estate Securities R6	693,413.06	5,966.76	0.00	25,305.10	724,684.92
PGM Total Return Bond R6	2,065,792.55	15,384.61	0.00	(51,373.07)	2,029,804.09
PIMCO Income Instl	285,000.88	2,444.83	0.00	(4,109.20)	283,336.51
PIMCO RAE US Instl	1,000,942.42	10,102.59	0.00	73,224.82	1,084,269.83
The Merger Fund I	221,576.24	1,982.76	0.00	4,726.07	228,287.07
Undiscovered Mgrs Behavioral Value R6	425,045.09	4,704.49	0.00	49,626.44	479,376.02
Vanguard Emerging Mkts Stock Idx Adm	556,623.92	5,546.59	0.00	25,273.93	589,444.44
Vanguard Growth & Income Adm	1,807,526.18	18,758.99	0.00	135,321.52	2,061,606.69
Vanguard Growth Index Adm	809,509.27	7,990.51	0.00	25,906.71	843,406.49
Vanguard Long-Term Investment-Grade Adm	703,077.70	5,444.25	0.00	7,487.34	716,009.29
Vanguard Mid Cap Index Fund - Admiral	223,190.46	1,982.76	0.00	4,656.96	229,830.18
<b>Grand Total</b>	<b>22,211,187.69</b>	<b>198,275.87</b>	<b>0.00</b>	<b>762,891.06</b>	<b>23,172,354.62</b>

MINUTES OF THE REGULAR MEETING  
& OF THE  
ENGINEERING COMMITTEE MEETING

May 20, 2024

At approximately 8:00 a.m. Director Freshley called the Engineering Committee meeting to order.

Committee Members MARK MONIN, MIKE GASKINS, KAY HAVENS, KATHRYN FRESHLEY, and FRED ADJARIAN participated.

Also participating were DENNIS P. CAFFERTY, General Manager, VISHAV SHARMA, CFO, HANNAH FORD, Director of Engineering, RORY HARNISCH, Senior Engineer, SCOTT HOPKINS, Operations Superintendent, GILBERT J. GRANITO, General Counsel, MIKE MIAZGA, IT Manager (Zoom), SHERRI SEITZ, Public Affairs Manager, VU CHU, Water Use Efficiency Analyst (Zoom), VICKI TANIOUS, Senior Accountant/Payroll (Zoom), MICHAEL SNOW, Chief Plant Operator, RORY HARNISCH, Senior Engineer, POLLY WELSCH, Recording Secretary, and MARISOL MELENDEZ, Recording Secretary.

Consent Calendar

Director Freshley asked for a Motion.

Motion: Director Adjarian made a Motion, seconded by Director Havens to approve the Consent Calendar.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

### Introduction of New Employee

Mr. Cafferty introduced the District's recently hired Chief Plant Operator, Michael Snow, to the Board of Directors.

### Engineering Action Items

#### Resolution No. 24-5-1 P-3 Pump Station Generator Project FEMA Hazard Mitigation

#### Grant Program Application Match Commitment Documentation

Ms. Ford stated that it can be challenging to find grant opportunities that are suitable for the District's capital projects. Ms. Ford stated the FEMA Hazard Mitigation Grant Program (HMGP) funds up to 75% of the total project costs and that the remaining 25% would be funded by the District's carryover capital reserve. Ms. Ford explained that a stationary generator is needed at the P-3 Pump Station noting that if power to the P-3 Pump Station were to go offline, a portable generator would need to be used, which is not ideal during an emergency situation. Ms. Ford noted that upon submission of the grant application in June 2024, FEMA will notify the District whether the project has been successfully awarded in early 2025. She further stated that notice to proceed may lag another year following notice of award but the District will have four years to complete the project after notice to proceed.

Ms. Ford explained that P-3 is located near a high fire and medium earthquake susceptibility zone, which makes it eligible for FEMA HMGP funding. Director Adjarian asked for the approximate generator size that would be needed for this project. Ms. Ford stated that the project would require approximately a 350-kilowatt generator but this information will be confirmed during the formal design process.

Director Freshley asked if P-3 pumps wastewater. Mr. Cafferty explained that P-3 is a water pump station that pumps water out of the R-3 reservoir to the same hydraulic grade as the rest of the pressure zone.

Director Havens stated that P-3 is surrounded by eucalyptus trees and a house burned down in that area in the last fire.

Mr. Cafferty stated that the backup power at this facility was previously a propane fueled Oldsmobile engine that is no longer in use. He further stated the current back up is the portable generator but it would be preferable to utilize a stationary generator.

Director Freshley asked if the generator is going to be diesel powered and further mentioned that there is natural gas availability in the area. Mr. Cafferty explained that the generator would likely be diesel powered but natural gas would be considered during the design process noting that both reliability and cost factors would be considered during decision making.

Director Havens commented that the Oldsmobile engine still has a propane tank. Mr. Cafferty stated that the propane tank is still there, but the engine is no longer functioning.

Director Freshley asked for clarification on kilowatt sizing. Ms. Ford explained that the generator size is 350 kilowatts but the draw is typically lower. Ms. Ford further explained that the main reason for a need of a backup generator at P-3 is because if there were a fire in the nearby large open space, we would need to meet the demand immediately. Mr. Cafferty stated that when the master plan was revisited years ago, the need for P-3 was reviewed and that during this review, it was determined that the potential fire risk required the pump station capacity.

Vice President Gaskins commented that Laguna Beach County Water District has a pump station next to Barbara's Lake.

Director Adjarian asked for the reservoir's volume in terms of storage. Mr. Cafferty stated that the volume is two-million gallons. Director Adjarian asked if any thought was given to double the reservoirs storage size given the potential for fire. Mr. Cafferty explained that there is not enough land to increase the reservoir's diameter but there is a combined 10 million gallons of storage in the District's nearby reservoirs.

President Monin applauded the District's efforts in pursuing grants for projects.

Director Freshley asked for a Motion.

Motion: Director Adjarian made a Motion, seconded by Director Havens to approve Resolution No. 24-5-1 P-3 Pump Station Generator Project FEMA Hazard Mitigation Grant Program Application Match Commitment Documentation.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

New Turbo Blower

Ms. Ford stated that in 1995, three centrifugal blowers were installed. She further stated in 2014, one of the blowers was replaced with a more efficient turbo blower which became the workhorse. Ms. Ford added that about 25% of the time, one of the centrifugal blowers has to be used to provide additional air. Ms. Ford stated one of the centrifugal blowers failed catastrophically, resulting in a lack of a true back up for the 25% of the time when one of these two centrifugal blowers was needed. Ms. Ford noted a cost-effective temporary solution was found by purchasing a used blower from

Municibids but added that this used blower is a temporary fix. Ms. Ford recommended purchasing a new turbo blower that will improve efficiency and provide the necessary back up for this critical process. Ms. Ford stated purchasing a new turbo blower is budgeted for the next fiscal year but staff recommends purchasing now due to the long lead time. Ms. Ford added after submittals are approved, it will take seven months to receive the blower. Ms. Ford stated the total project costs include installation, equipment, and a harmonic filter which will total approximately \$0.5 million dollars. President Monin commended staff for purchasing the used blower off of Municibid for \$5,000.

Director Freshley asked for clarification on the need for a harmonic filter. Ms. Ford stated that due to a very high horsepower drive the added protection will extend the longevity of the equipment. Director Freshley asked what exactly was meant by “harmonics”. Ms. Ford stated that harmonics is referring to the electrical system. Mr. Cafferty stated that alternatives for the harmonic filter was analyzed by a consultant. Directly Freshley asked how much extra the harmonic filter will cost. Ms. Ford stated that the harmonic filter will cost approximately \$22,000.

Director Adjarian asked if there are noise panels in the facility. Mr. Cafferty explained that the facility was originally designed with the noise panels when it was built.

Director Freshley asked for a Motion.

Motion: President Monin made a Motion, seconded by Director Adjarian to approve the new turbo blower.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

Caltrans Construction Contract Change Order No.3

Mr. Harnisch stated that we are currently in phase three of the project. He further stated that back in December, Caltrans, their contractor, and the mall site developer added a street behind Trader Joe's leading from Avenida De Carlotta to Calle De La Louisa. Mr. Harnisch stated the street added an ADA ramp, which in turn conflicted with two of ETWD's manholes. He further stated the conflict results in a change order; and the District will be reimbursed by Caltrans for the cost of the work.

Director Adjarian asked for the specific location on the map. Mr. Cafferty pointed to the map to show where the construction is located.

Director Havens asked for clarification of the pink line in figure two of the reference materials. Mr. Harnisch stated that the pink line is the curb face.

Director Freshley asked for a Motion.

Motion: President Monin made a Motion, seconded by Director Freshley to approve the Caltrans Construction Contract Change Order No.3.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

WEROC Multijurisdiction Hazard Mitigation Plan and America's Water Infrastructure Act  
of 2018 Components Risk/Resiliency Assessments and Emergency Response Plans  
Project

Ms. Seitz provided a summary of the Act. Ms. Seitz stated that the District has partnered with WEROC to update the regional hazard mitigation plan every five years and the existing plan which was last adopted in 2019 expires in March 2025. Ms. Seitz stated that AWIA requires drinking water systems serving more than thirty-three hundred people to develop or update their risk and resilience assessments every five years. She further stated the District's population has increased since the last plan update, making the next due dates December 31, 2025 and June 30, 2026.

Director Freshley asked when more people were added to the District's population. Mr. Cafferty stated that the population increase is due to census updates.

Ms. Seitz stated that WEROC took on the task of creating the shared services project which combines the plan into a single contract and ultimately saves cost for the District. Ms. Seitz stated the District's estimated total cost is \$58,750. Director Havens asked if the total cost would cover the District for five years for all three programs. Ms. Seitz stated that the last time these plans were done, the total cost amount did not exceed the estimate. Director Havens asked if the payment would be done at once or on three occasions. Ms. Seitz stated that, since they are all due at separate times, it would be three payments.

Director Adjarian, asked if the ERP amounts located on page two of the reference materials was referring to the District's ERP. Ms. Seitz stated that was correct.

Director Freshley asked for a Motion.

Motion: Director Adjarian made a Motion, seconded by President Monin to approve the WEROC Multijurisdiction Hazard Mitigation Plan and America's Water Infrastructure Act of 2018 Components Risk/Resiliency Assessments and Emergency Response Plans Project.

Roll Call Vote:

Director Adjarian	aye
Director Freshley	aye
Director Havens	aye
Vice President Gaskins	aye
President Monin	aye

Engineering Information Items

ETWD Operations Report

Mr. Cafferty stated the Operations Report is in the package and asked if anyone had questions. Director Havens asked for clarification on what was meant by "trucked by others" on page 157. Mr. Cafferty stated that maintenance or testing has to be done periodically and that, during this period, the District sludge tanker was out of service for inspection and repairs, during which time an outside contractor was used to haul solids to SOCWA. President Monin asked if we are able to rent a tanker for this purpose. Mr. Hopkins stated that this option has been considered, but most of the tanks are located in South or North Dakota, and cost to transport is very expensive.

Director Freshley expressed disappointment in the battery storage systems and asked if there was a change in the provider. Mr. Cafferty stated that the last three months have not been great, however the previous five months were very efficient and has saved the District approximately \$23,000. Mr. Cafferty further stated that there was a change in the provider due to a company buy out, and there have been overall savings. Mr. Cafferty also stated that system productivity is being closely monitored and

the District is in constant communication with the storage system company.

President Monin stated that battery systems seem to be the future of energy efficiency and that he hopes the software system will learn and adapt. Director Havens agreed with President Monin.

#### El Toro Water District Capital Project Status Report

##### New Warehouse

Mr. Harnisch stated that the contractor is wrapping up the Warehouse project. He further stated the internal components such as roll up doors, signage, storage racks, and fire extinguisher have just been completed. Mr. Harnisch added the District is continuing coordination with AQMD and MET. Mr. Cafferty stated that the appropriate security system will need to be installed at the Warehouse and more information will be brought to the Board next month.

##### Aliso Creek Lift Station Improvement Project

Mr. Harnisch stated that a RFP for the design of the Aliso Creek Lift-Station Rehabilitation will be reviewed in a few weeks. Director Freshley commended staff on the work done on the lift-station.

##### Grit Chamber Rehabilitation

Mr. Harnisch stated that the pre-construction meeting with Kingmen Construction, Inc. will be occurring within the next month.

##### Lead and Copper Rule Revisions Compliance

Ms. Ford stated that District staff is currently conducting the Lead and Copper Rule Revisions field investigations. She explained that a notice was placed at the homes of affected customers. Ms. Ford stated Staff from Operations, Customer Service Field, and Engineering is doing a great job and has found no lead thus far.

### Headworks and Secondary Clarifier No. 1 Rehabilitation Project

Ms. Ford stated that the basis of design report for Headworks and Secondary Clarifier No. 1 has been finalized. Ms. Ford further stated the 60% final design will be worked on next. Ms. Ford, added that a polymer pilot is underway.

### Tertiary Disinfection Optimization Project

Ms. Ford stated that DDW approved the tracer study, and the District submitted the final report recommending operation with a lower concentration times contact time immediately after tracer study approval. Ms. Ford noted a response from DDW is anticipated in June or July.

### Asset Management Program

Ms. Ford stated that the WRP results for the asset management program have been presented and focus has been shifted to CMMS. Ms. Ford further stated that software recommendations would be presented soon. Director Freshley asked what CMMS entails and what the cost is. Ms. Ford explained that CMMS tracks inventory of assets by condition scores and ideally CMMS and asset management systems are integrated so that updates occur as work is being completed. Ms. Ford further stated that the cost will vary and we are still in the process of evaluating operating systems.

### WRP Main Electrical Power Breaker

Ms. Ford stated the second shut down for the ATS installation is scheduled for the end of June, assuming the pre-install meeting at the end of May goes well.

### System Wide Arc Flash and Coordination Study

Ms. Ford stated that we are still waiting for data request from SCE. Director Freshley asked if any walls had to be moved for this project. Ms. Ford stated that initial recommendations did not include walls to be taken down.

#### R-6 Reservoir and Main Office Security System

Ms. Ford stated cameras have been installed at the Main Office and R-6 chemical storage area. The radar system perimeter camera should be installed by the end of the month.

#### Engineering Items Discussed at Various Conferences and Meetings

There were no comments.

#### Comments Regarding Non-Agenda Engineering Committee Items

There were no comments.

#### Adjournment

There being no further business, the Engineering Committee meeting was adjourned at approximately 9:20 a.m.

#### Regular Session

#### Attorney Report

Mr. Granito report that there is no need for a Closed Session today, and as such Regular Session continued.

#### Adjournment

There being no further business to come before the Board, the meeting was adjourned at 9:20 a.m.

Respectfully submitted,

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MARISOL MELENDEZ  
Recording Secretary

APPROVED:

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MARK MONIN, President  
of the El Toro Water District and the  
Board of Directors thereof

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DENNIS P. CAFFERTY, Secretary  
of the El Toro Water District and the  
Board of Directors thereof



## STAFF REPORT

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<b>To:</b>	<b>Board of Directors</b>	<b>Meeting Date: June 24, 2024</b>
<b>From:</b>	<b>Rory Harnisch, Senior Engineer</b>	
<b>Subject:</b>	<b>Aliso Creek Lift Station Improvements Project – Final Design</b>	

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### BACKGROUND

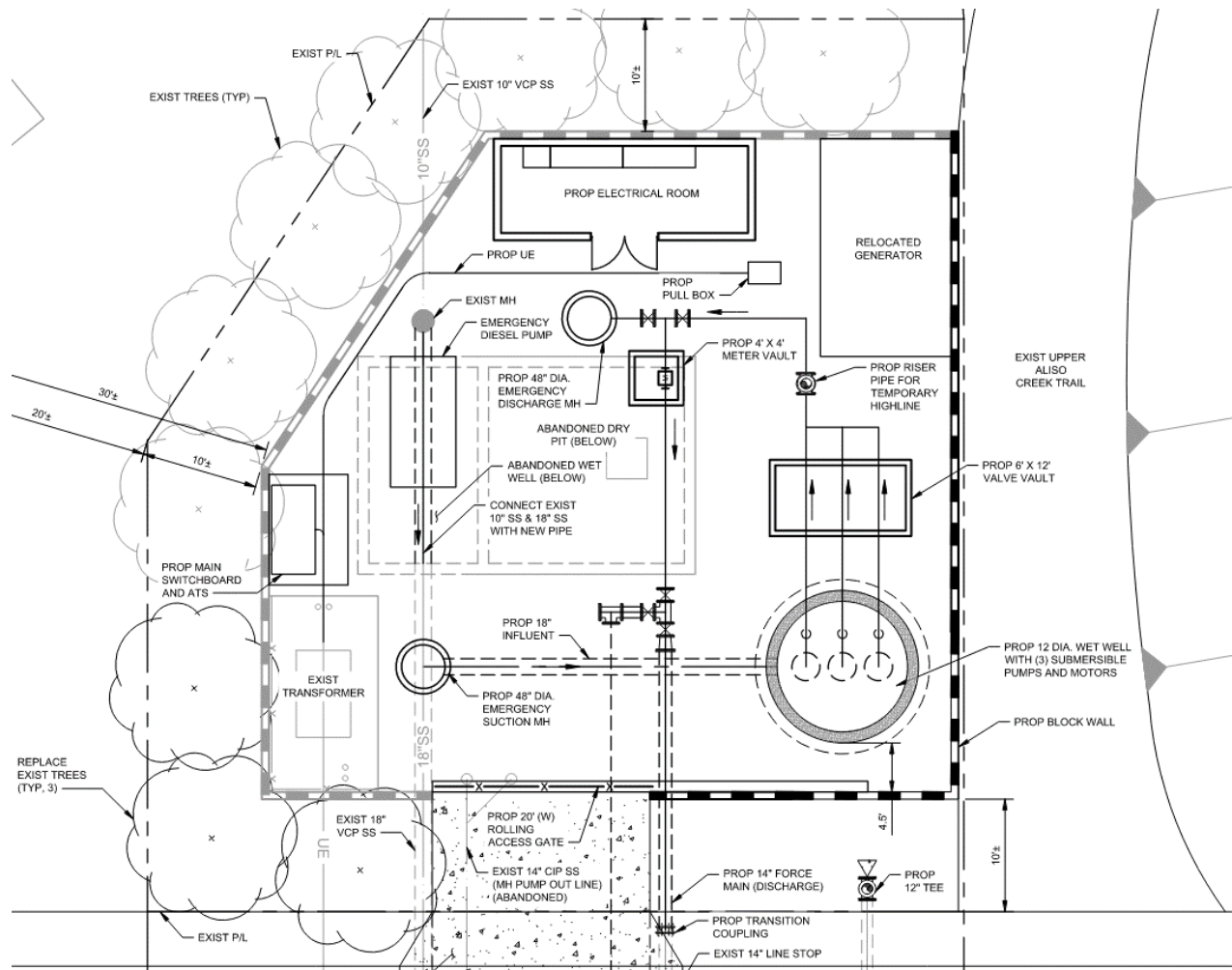
Constructed in 1965, the Aliso Creek Lift Station (ACLS) collects sewage from portions of Laguna Hills, Laguna Woods, and Lake Forest including that from 4920 Lift Station and Mathis Lift Station. ACLS pumps sewage through Laguna Woods Village to the WRP. The District has several challenges maintaining ACLS including lack of adequate vector truck access to clean the wet well and continued degraded pump efficiency despite yearly impeller and volute replacements. As shown in Figure 1, the District 2013 installed an above grade portable pump to serve as a backup in the event of a failure of one of the duty pumps.



**Figure 1 – Aliso Creek Lift Station Above Ground Appurtenances**

Sewer modeling efforts as part of the Master Plan project indicate that the ACLS lift station needs a total capacity of 4,000 gpm. District Operations staff performed pump tests and determined that the ACLS is underperforming. Pump 1 achieves approximately 80% of its rated capacity while Pump 2 achieves approximately 50% of its rated capacity, equating to total lift station capacity of approximately 3,100 gpm. In addition, the Village at Laguna Hills development expects to produce approximately 200 gpm of flow that will route to ACLS thereby increasing its required capacity to 4,200 gpm.

In September 2023, District staff awarded Tetra Tech Inc. (Tetra Tech) a contract for the ACLS Alternatives Analysis Study (Study). The main objective of the Study was to develop the most cost-effective solution to achieving the required capacity while improving operation, maintenance, and reliability. Upon completion in April 2024, Tetra Tech ultimately recommended Alternative 1C, as shown in Figure 2 below. Alternative 1C provides a new 12-foot diameter wet well with three submersible pumps, a valve vault, a discharge flow meter vault, a relocated entrance gate for improved site accessibility, and an additional 20,000-gallons of emergency storage by converting the existing dry well.

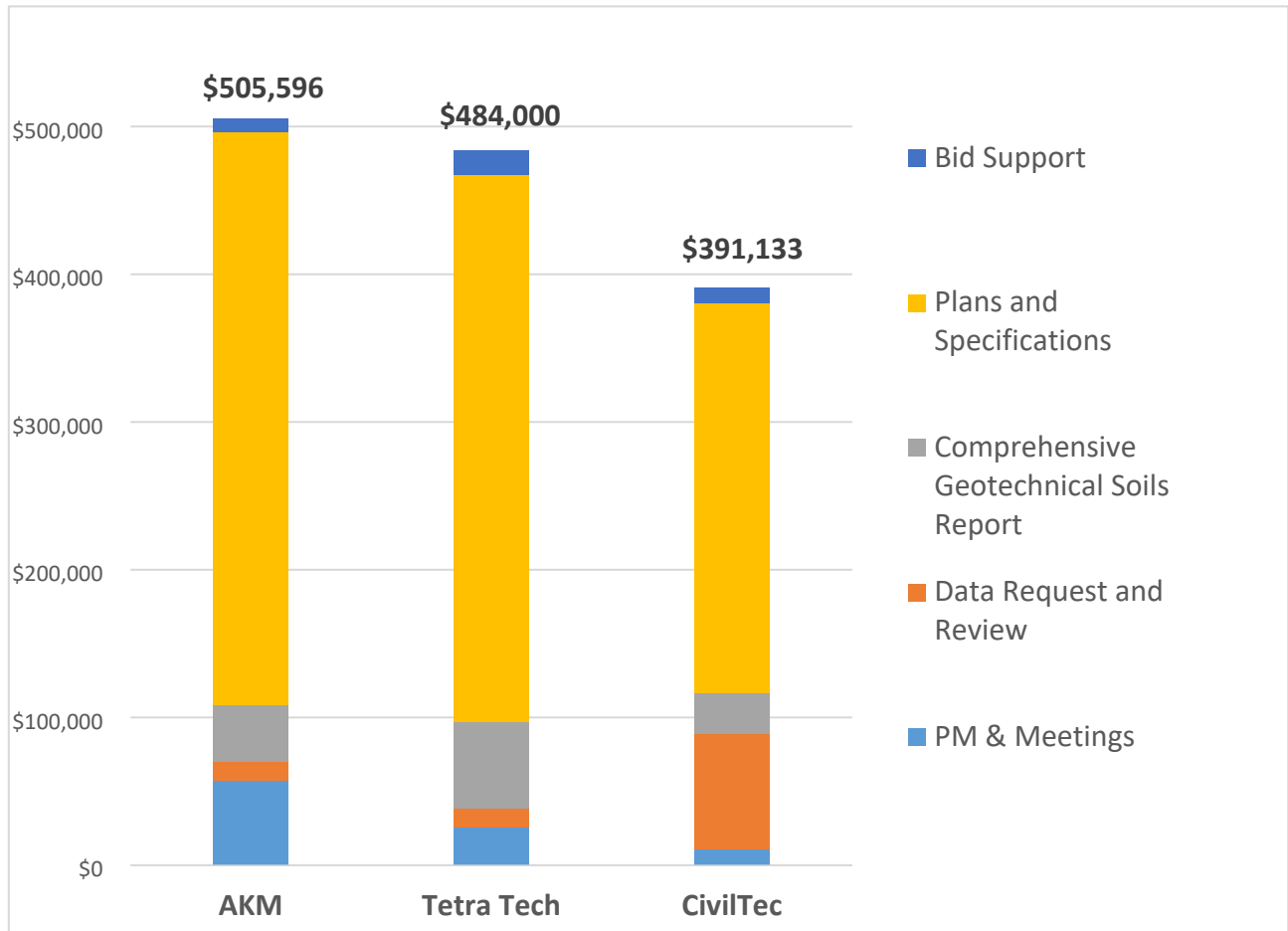


**Figure 2 – Alternative 1C Plan View.**

Immediately following the Study submission, District staff issued a Request for Proposals (RFP) to develop the final design and bid documents for Alternative 1C. Intending to pursue Federal grant funding to offset construction costs, the District publicly published the RFP to any interested consulting firm via PlanetBids. Five consultants attended the non-mandatory pre-proposal meeting in late April. The following describes the proposal evaluation and ultimate recommendation.

## PROPOSAL EVALUATION

On Tuesday, June 4<sup>th</sup>, the District received three proposals for the final design effort from AKM Consulting Engineers (AKM), Civiltec Engineering, Inc. (Civiltec), and Tetra Tech Inc. (Tetra Tech). Attachment A contains a copy of each proposal, and Figure 3 summarizes the proposed fee.



**Figure 3 – Final Design Fee Summary**

The spread between the low and high fee is approximately 29 percent. District staff performed a detailed evaluation of the qualifications and scope of work described in each proposal, held interviews with all three consultants, and contacted several references in early June. While Tetra Tech's proposal isn't the lowest cost, after careful review and consideration of each proposal, District staff recommends Tetra Tech due to the following advantages:

- Clear ability to deliver the requested scope of work,
- Relevant, recent experience on similar projects for both the District and neighboring Water Districts,
- Technical project manager who has recently delivered similar designs,
- Value-added scope for dewatering and shoring,
- Inclusion of a building to house the electrical equipment,
- Extensive experience with FEMA grant-funded projects, and
- Included coordination with the Laguna Woods Village, The Orange County Flood Control District, and the District's environmental consultant

Appendix A contains the proposal from Tetra Tech for further information. In addition, Tetra Tech is a reputable consulting firm for whom the District has successfully worked with on the ACLS Improvements Alternatives Analysis Study, Initial Study for the Joint Transmission Main, Initial Study for the Recycled Water Phase 3 Expansion, Phase 2 Recycled Water Expansion Project, Original Recycled Water Project, and Oso Lift Station Improvement Project.

## **BUDGET**

The Fiscal Year (FY) 2024-2025 capital budget for the ACLS Rehabilitation Final Design is \$600,000, so the recommended final design contract is well within budget. Tetra Tech's original proposed fee was \$520,000, but District staff negotiated the fee down by \$36,0000 such that the agreed upon scope of work will amount to \$484,000. Table 1 compares the negotiated fee with budget, indicating a remainder of \$116,000.

**Table 1 – ACLS Rehabilitation Final Design Budget**

<b>Organization</b>	<b>Description</b>	<b>Total Cost</b>
Tetra Tech, Inc.	Final Design	\$484,000.00
	<b>FY 24-25 Budget</b>	<b>\$600,000.00</b>
	<b>Difference</b>	<b>\$116,000.00</b>

## **RECOMMENDATION**

### **Recommended Action:**

Staff recommends that the Board of Directors authorize the District's General Manager to enter into a contract with Tetra Tech, Inc. in the amount of \$484,000.00 for the final design of the Aliso Creek Lift Station Rehabilitation Project. Staff also recommends that the Board authorize the General Manager to fund the project costs from the District's Capital Reserves in accordance with the District's adopted Capital Reserve Policy.

# APPENDIX A



*PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE*

## Aliso Creek Lift Station Improvements Final Design Project

MAY 2024



**TETRA TECH**



June 4, 2024

Rory Harnisch, PE  
El Toro Water District  
24251 Los Alisos Blvd  
Lake Forest, California 92630

**Reference: Proposal to Provide Engineering Design Services for the  
Aliso Creek Lift Station Improvements Final Design**

Dear Mr. Harnisch,

Tetra Tech is pleased to submit our proposal to provide engineering design services for the Aliso Creek Lift Station Improvements Final Design project. We value the relationship we have built during our past projects with the El Toro Water District (ETWD/ District) and look forward to continuing and expanding this association in the future. Our proposed team has the experience, depth, and understanding needed for the successful delivery of this project. The following are the team's distinct advantages we will bring to the District and this project:

- ▶ **Extensive Sewer Lift Station Design Experience.** During the last 20 years, members of our project team have been involved in the **design and/or construction of more than 20 sewer lift station projects** for various Southern California agencies including Oso Lift Station for ETWD.
- ▶ **Best Understanding of the Project Objectives.** Our team recently completed the District's Aliso Creek Lift Station Alternative Analysis Study in April 2024, therefore we believe we have a thorough understanding of the project objectives.
- ▶ **Understanding the Importance of Operator Friendly Facility Design.** With repeat lift station upgrades for ETWD, Moulton Niguel Water District (MNWD), City of Santa Ana, and our Design-Build work for the Navy, Tetra Tech understands the importance of an "operator friendly facility" design.
- ▶ **Experience with FEMA HMGP Funding.** Tetra Tech recently completed the design and is currently bidding a project for MNWD which includes FEMA HMGP Funding (Regional Lift Station Force Main Replacement); consequently we have knowledgeable experience with the requirements of this funding and its impacts on design and construction.
- ▶ **Local In-House, Structural, Electrical and Instrumentation Control Capabilities.** Tetra Tech has in-house local, registered structural, electrical and instrumentation control engineers with vast lift station design experience and have worked together as a team on all our projects.

Our project team is committed to the success of this project, and we strive to exceed your expectations in delivering the services outlined in our proposal. Per RFP requirements, Tetra Tech agrees to the terms of the District's agreement and can provide the requested insurance. Additionally, we acknowledge receipt of Addendum No. 1 dated May 2, 2024.

Should you have any questions regarding our proposal, please feel free to contact me at 949/809-5156 or via email at [tom.epperson@tetrattech.com](mailto:tom.epperson@tetrattech.com). We look forward to the opportunity to work with you and the District.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tom Epperson', written over a horizontal line.

Tom Epperson, PE  
Vice President



## TABLE OF CONTENTS

FIRM OVERVIEW .....	1
WHY TETRA TECH .....	1
UNDERSTANDING OF THE PROJECT .....	1
PROJECT APPROACH .....	2
PROJECT MANAGEMENT .....	3
QUALITY CONTROL .....	3
SEWER LIFT STATION EXPERIENCE .....	3
ETWD Projects .....	3
New Lift Stations .....	4
Upgrade Existing Lift Stations .....	4
PROJECTS WITH SIMILAR DESIGN ISSUES .....	5
LIFT STATION DESIGN EXPERIENCE .....	6
KEY ISSUES .....	7
Conceptual Shoring Design .....	7
Groundwater Pump Testing .....	7
Bypass Pumping .....	7
SCOPE OF WORK .....	8
Task 1. Project Management and Meetings .....	8
Task 2. Data Request and Site Visit .....	8
Task 3. Comprehensive Geotechnical Soils Report .....	9
Task 4. Plans and Specifications .....	9
Task 4a. 30% Design .....	9
Task 4b. 60% Design .....	11
Task 4c. 90% Design .....	12
Task 4d. Final Design .....	13
Task 5. Bid Support .....	14
ESTIMATED MANHOURS .....	15
PROJECT TEAM .....	16
REFERENCES .....	17
SATISFIED CLIENTS .....	17
PROPOSED SCHEDULE .....	17



## FIRM OVERVIEW

Founded in 1966, Tetra Tech is a nationally recognized engineering and resource management firm of more than 28,000 engineers, scientists, construction specialists, and technical support personnel in 550 offices worldwide. Listed on the NASDAQ Exchange (TTEK), Tetra Tech's annual revenues now exceed \$5 billion (2024). Thus, we are in an excellent financial position and can provide the necessary resources to rapidly deploy and meet aggressive project schedules.

Tetra Tech's goal is to provide the necessary expertise and resources to deliver projects on time, within budget, and in compliance with the design and construction standards of our clients and approval agencies. Leveraging our national presence, multi-disciplinary team, and client focused service, we apply lessons learned from our vast experience to each and every challenge. Clients benefit from this approach with consistently high-quality service, innovative designs, and functional solutions that are responsive to their needs and often exceed their expectations. A cornerstone of our success is our client-focused service, staff qualifications, firm commitment, and desire to successfully complete each assignment to the satisfaction of our clients.

Tetra Tech is a leader in water/wastewater/recycled water facility design and consistently ranks among the top engineering firms annually according to the *Engineering News-Record*, a highly regarded news magazine. In 2024, ENR rated Tetra Tech 1st in the "Water Treatment & Desalination" category, 2nd in the "Sewer & Waste" category, and 3rd among the "Top 500 Design Firms" nationwide!



## WHY TETRA TECH

Our extensive experience with similar projects will ensure that the El Toro Water District (ETWD/District) will receive the highest level of service. This is a challenging project, and it should be managed by a well tenured team of professionals who have a history of successfully completing similar projects within schedule and under budget. We have that team with **Tom Epperson, PE, as Project Manager, Neha Gajjar, PE, as Assistant Project Manager, and Matt Vera, PE, as Task Leader.** Tom and Neha are working together on Moulton Niguel Water District's (MNWD) Regional Lift Station Force Main Replacement project and Tom and Matt are working together on MNWD's Regional Lift Station Enhancements and North Aliso Lift Station Reconstruction.

No two projects are the same, although many are similar. The key is to utilize elements of work that have been successful and can be appropriately applied to this project, continue to improve construction efficiencies without lowering quality based on contractor feedback, and maximize the overall operational flexibility.

**We feel our previous work on the District's Oso Lift Station Improvement Project and the Aliso Creek Lift Station Improvements Alternatives Analysis Study are examples of our quality product and attention to detail which has resulted in a lower overall cost for the District.** We want to utilize the experience gained from working on previous projects, and to continue providing the District with exceptional services to assure that another project is successfully completed to the satisfaction of the ETWD.

## UNDERSTANDING OF THE PROJECT

The Aliso Creek Lift Station (ACLS) was built in 1965 and is located on Avenida Sevilla in the City of Laguna Woods. Its original construction included a total of four pumps, configured as two pumps in series on each of the two wet well outlets. At that time, sewage was collected from the adjacent surroundings including what is now part of Laguna Woods Village. Later, two additional sewage lift stations, 4920 and Mathis, were built upstream, adding to its influent flow. Since then, several modifications were performed at ACLS, including



converting the existing four pump system into three, parallel pumps then later two, parallel dry pit submersible pumps and adding a grinder upstream of each pump.

In mid-2010, ETWD also installed a trailer mounted portable pump above grade for emergency backup. The ACLS was originally designed to pump 4,000 gpm at a total dynamic head (TDH) of 170-ft with two pumps in operation.

However, recent testing at the lift station has identified significant deficiencies in pump performance, especially on Pump No. 2, despite annual changeout of each pump's impeller and volute, and a leak in the primary discharge pipeline. At this time, ACLS cannot handle a 25-year storm event. A new development in the area will discharge an average of 200 gpm and peak of 450 gpm in addition to current flows, further compounding the need to increase ACLS's capacity.

ACLS also suffers from the site's inability to accommodate a vactor truck, limiting ETWD's ability to properly maintain the wet well. In addition, the stationary generator at ACLS has reached the end of its useful life and requires replacement. In early 2022, ETWD received bids for the Aliso Creek Generator Replacement Project, which included the generator and ATS replacement, ancillary electrical work, and the construction of a secondary lift station access gate to support vactor truck wet well maintenance. While the improvements remain necessary, this project was not constructed because ETWD realized the need for additional modifications to improve the aforementioned lift station deficiencies.

ETWD conducted an ACLS Alternatives Analysis (Study) in early 2024. Of the alternatives evaluated, ETWD selected Alternative 1C as the necessary solution, which involves constructing a new wet well and reconfiguring electrical equipment, converting the existing dry pit into emergency storage, yard piping, and access to the facility. In addition, the Study conducted flow monitoring and determined the need for a station design capacity of 4,000 gpm at 230 feet TDH in order to accommodate a 25-year

storm plus additional flow by the proposed Village at Laguna Hills development.

The overall goal of this Project is to develop bid documents that will support construction of a cost-effective, reliable solution for the ACLS.

## PROJECT APPROACH

Tetra Tech fully understands the importance of your project. We are offering an outstanding team, which combines the experience, depth, and understanding needed for the successful delivery of this project. Our core principles establish how we plan to work together with the District to successfully complete this project:



**Service:** Tetra Tech puts its clients first. We listen to and better understand our clients' needs and deliver smart, cost-effective solutions that meet those needs. Our philosophy is to "Do it Right."



**Value:** Tetra Tech takes on our clients' problems as if they were our own. We develop and implement real-world solutions that are cost-effective, efficient, and practical.



**Excellence:** Tetra Tech brings superior technical capability, disciplined project management, and excellence in safety and quality to all of our work.



**Opportunity:** Our people are our number one asset. Our workforce is diverse and includes leading experts in our fields. Our entrepreneurial nature and commitment to success provides challenges and opportunities.

We value the relationship that has been established with ETWD, and look forward to continuing and further developing this association in the future. We are committed to providing ETWD with the same high-quality service you expect and deserve. **Our strength lies in our proven track record that has led to successful completion of more than 20 projects for ETWD, as well as other nearby agencies, since 2010.**



## PROJECT MANAGEMENT

Over the years, Tetra Tech has established well defined, rigorous procedures for project management. These techniques have been developed and refined and have contributed to our success and reputation. The keys to our project management system are communications, project planning, monitoring, and quality assurance.

The Tetra Tech team's goal is to keep District staff "in the loop" from day one of the project. Communication tools include the formal progress reports afforded through our project management system and an informal give and take approach starting with **Tom Epperson, our Project Manager**, and extending to every member of the Tetra Tech team.

At the project's outset, the chain of command and appropriate communication methods will be agreed upon and can be as formal or as informal as the District desires. We will use the entire communication spectrum. We will conduct formal meetings with agenda and typewritten notes, and we will use informal meetings with notes to file. We will also have documentation of telephone communications, with notes to file or letters of understanding as appropriate follow-up.

We are proposing weekly virtual progress meetings to keep the District aware of the status of the project. Every month Tetra Tech will prepare and submit a concise monthly status report with the monthly invoice statement which will include:

- ETWD's standard form which includes a summary of expenditures by task showing total budget, billing to date, current billing and remaining amount.
- A summary of work progress/items complete for all work tasks.
- Description of key issues/concerns which have surfaced along with proposed options and solutions.
- An estimate of actual percent complete based on progress compared to percent complete based on budget expended.
- An updated progress schedule using a Gantt-type format.

## QUALITY CONTROL

Tetra Tech will administer a program of Quality Assurance procedures for producing a quality product. Specific procedures shall cover, but not be limited to planning; checking; reviewing; and scheduling of the work. All documents prepared will be subject to Tetra Tech's in-house procedures prior to submittal to ETWD for review. Discipline checks will be made of all design calculations, drawings, sketches, memorandums, construction costs, and reports. Checking will be performed by qualified individuals who are not directly involved in the design or supervision of the work. Tetra Tech has identified **Mark Bush, PE**, to be responsible for the quality assurance and quality control reviews.

## SEWER LIFT STATION EXPERIENCE

The following is a summary of various lift station projects members of our Project Team have designed during the last 20 years.

### ETWD Projects

#### ***ACLS Improvements Alternatives Analysis Study:***

Tetra Tech completed the ACLS Improvements Alternative Analysis Study (Study) in April 2024. Of the alternatives evaluated, ETWD selected Alternative 1C as the desired solution, which involves constructing a new wet well and reconfiguring electrical equipment, converting the existing dry pit into emergency storage, yard piping, and new access to the facility. In addition, the Study conducted flow monitoring and determined the need for a station design capacity of 4,000 gpm at 230 feet TDH in order to accommodate a 25-year storm plus additional flow from the proposed Village at Laguna Hills development.

***Oso Lift Station Improvements:*** Preliminary design included evaluation of on-site storage, pump selection, and site alternatives evaluation; with final design resulting in the construction new 10-foot diameter wet well containing two submersible pumps, valve vault with check valves and meter, structural retrofit to repurpose the existing wet well for emergency storage, relocation and replacement of an existing generator, and new electrical and control equipment. These improvements were all completed while maintaining the existing lift station



in service. In addition, the existing dry pit was backfilled with slurry and the new emergency generator was located on top of the structure. The project also included the construction of an emergency overflow connection to MNWD sewer within El Toro Road.

### New Lift Stations

**City of Santa Ana San Lorenzo Lift Station:** Replace an existing submersible lift station with a masonry building containing a separate electrical/control room, dry pit housing the pumps/motors, odor control facilities, emergency bypass facility, meter, grinders, and emergency generator.

#### **NAVFAC Package 2 (Camp Pendleton) Replacement Lift**

**Station:** Consists of a new wet well, submersible pumps, valve vault, and emergency generator. The existing lift station must remain in operation, without interruption, throughout the construction of the new lift station.

#### **NAVFAC Coronado Sewer Pump Station Replacement (Coronado):**

Replaced three (3) existing submersible pumps with new above ground packaged pumping station, including adding a backup natural gas emergency pump, bypass pumping facilities, and re-coating of the existing wet well.

#### **IRWD's Peters Canyon Channel Water Capture:**

Three (3) diversion structures, each with 6-foot ID precast concrete wet well (20 to 25 feet deep); dual submersible pumps with slide rail disconnect assemblies; valve vault (check and gate valves); meter vault; and electrical and control equipment.

### Upgrade Existing Lift Stations

#### **MNWD North Aliso Lift Station Reconstruction:**

While maintaining existing lift station in service, expand existing lift station site with permanent soldier pile shoring, construct a new 12-foot diameter wet well containing three submersible pumps, separate valve building with check valves and meter, installation of two emergency bypass connections, separate building with

electrical/control equipment and restroom, modification of dry pit to serve as additional storage.

**MNWD Regional Lift Station Enhancements:** While maintaining existing lift station in service, replaced one of the pumps with a smaller pump to handle low flows, performed wet well rehabilitation with polyurethane coating and piping modifications, constructed additional overflow wet well with 12-foot diameter manhole to increase the station's response time to more than three minutes and added an on-site standby pump with approximate 12,000 gpm capacity which operates independently of the station's electrical equipment.

#### **NAVFAC Package 1 (Camp Pendleton)**

**Upgrades:** Upgrade nine (9) existing lift stations including addition of emergency generators, adding new grinders, improve SCADA capabilities, and site safety improvements.

#### **NAVFAC Package 2 (Camp Pendleton)**

**Upgrades:** Upgrade two (2) existing lift stations including addition of emergency generators, improve SCADA capabilities, and site safety improvements.

**Odor Control Upgrades:** Added oxygenation odor control facilities at Lower Salada and Upper Salada Lift Stations for MNWD.

**Pump/Motor/Valves Upgrades:** Replaced Fairbanks Morse pumps/motors with Cornell pumps/motors, replaced existing check valves and gate valves, and added a meter at Lower Salada, Upper Salada, Del Avion, Regional and Aliso Creek Lift Stations for MNWD.

**Expand Wet Well Capacity:** Expanded the wet well capacity for MNWD at Upper Salada by adding an additional wet well concrete structure and at Upper Boundary Oak and Aliso Creek Lift Stations by constructing new buried RFP tanks.

As you can see, the design experience of our project team covers all aspects of your project objectives. With our repeat work for MNWD, previous work on Oso Lift Station, and the design-build experience with the Navy, we have a great understanding of the importance of an "operator friendly facility" design which will provide the necessary reliability required for this project.



## PROJECTS WITH SIMILAR DESIGN ISSUES

The following lists recent Tetra Tech projects with similar design issues:

**ETWD Oso Lift Station Improvements:** Project included constructing new lift station replacement within District's property while maintaining the existing lift station in service; working with maintenance staff to be comfortable with submersible pumps within wet well (existing lift station dry well facility); new wet well with submersible pumps; valve vault; converting existing wet well into an emergency storage basin; construction new electrical building on top of existing dry pit; and constructed emergency overflow to adjacent agency. A brief project description has been included within the Appendix of the proposal.

**MNWD Regional Lift Station Enhancements:** To improve the reliability of the station, the design included: adding an on-site standby pump that operates independently from the lift station power facilities; expanding the wet well capacity; replacing several valves; and downsizing of one pump to handle low flows to improve operational and clogging concerns. Extensive bypass pumping was required during construction which Tetra Tech coordinated with District staff, Construction Manager and Contractor. A brief project description has been included within the Appendix of the proposal.

**MNWD North Aliso Lift Station Reconstruction:** Project included constructing new lift station replacement while expanding the District's existing property and maintaining the existing lift station in service; working with the District for site alternative analysis due to the space constraints of the site; constructability assessment due to deep excavations near existing structures and close neighboring properties including a conceptual shoring design by Brierley Associates; new wet well with submersible pumps; construction of new valve building; conversion of existing dry pit into an overflow storage basin; construction of new electrical building. A brief project description has been included within the Appendix of the proposal.

**City of Santa Ana San Lorenzo Lift Station:** Project included constructing a new wet/dry well configuration lift station adjacent to an existing hotel and apartments. The challenges included: a deep excavation (approximately 35 feet deep) in high ground water; tight site requiring vertical shoring; adjacent to a heavily traveled arterial street; adjacent hotel, apartments and businesses; and maintaining flow within the sewer collection system. To minimize the potential change order for dewatering the deep excavation, Tetra Tech had monitoring wells constructed during design to estimate the potential dewatering rate that could be expected during construction. A brief project description has been included within the Appendix of the proposal.

**MNWD Regional Lift Station Force Main Replacement:** Project included the replacement of parallel force mains within Laguna Niguel Regional Park that required five very deep trenchless creek crossings. The similar challenges included: very deep launch and receiving pits requiring vertical shoring in high groundwater; County of Orange Flood Control Permits; and meeting FEMA HMGP Funding requirements.

Within each of the brief project descriptions of the above similar design projects included within the Appendix of the proposal, we have included the construction cost, project schedule, Tetra Tech's key team members and the client's reference information.





## LIFT STATION DESIGN EXPERIENCE

During the last 20 years, members of our project team have been involved in the design and/or construction of more than 20 sewer lift station

projects for various Southern California agencies. The following is a summary of our project team's completed lift station projects:

LIFT STATION FACILITIES COMPLETED BY PROJECT TEAM		
Client	Project Name	Completed
Moulton Niguel Water District	North Aliso Lift Station Reconstruction	Bidding
Moulton Niguel Water District	Regional Lift Station Force Main Replacement	Bidding
City of Santa Ana	San Lorenzo Lift Station	2023
Moulton Niguel Water District	Regional Lift Station Enhancements	2022
El Toro Water District	Oso Lift Station Improvements	2021
Orange County Water District	Burriss Pump Station including Packaged Lift Station	2017
Moulton Niguel Water District	North Aliso and Camino Capistrano Lift Station Preliminary Evaluation	2017
NAVFAC Southwest	Camp Pendleton Sewer Lift Station Package #1	2014
NAVFAC Southwest	Camp Pendleton Sewer Lift Station Package #2	2014
NAVFAC Southwest	Naval Base Coronado Sewer Lift Station	2013
Moulton Niguel Water District	Lower Salada Lift Station Oxygenation Upgrades	2008/2006/2000
Moulton Niguel Water District	Upper Salada Lift Station Oxygenation Upgrades	2007/2006
South Coast Water District	Sewer Lift Station Evaluation	2007
Moulton Niguel Water District	Del Avion Lift Station Pump/Motor Replacement	2006
South Coast Water District	Blue Lagoon Lift Station	2006
Moulton Niguel Water District	Regional Lift Station Pump/Motor Replacement	2004/2000
Moulton Niguel Water District	Upper Boundary Oak Lift Station Expansion	2006
Moulton Niguel Water District	Aliso Creek Lift Station Upgrades	2005
Irvine Ranch Water District	Coastal Ridge Lift Station	2004

In addition, the project team completed the design of the Peters Canyon Channel Water Capture and Reuse Pipeline for Irvine Ranch Water District. This project included three (3) separate diversion

structures, with each diversion facility including a wet well, submersible pumps, valve vault and meter vaults. The construction was completed in 2018.



## KEY ISSUES

We believe Tetra Tech has an unparalleled grasp of the key issues due to our preparation of the ACLS Improvements Alternative Analysis Study (Study) finalized in April 2024; previous experience with the District's Oso Lift Station Improvement project; experience with the similar North Aliso Lift Station for MNWD; and our overall lift station experience of other similar lift station projects.

Our understanding of the key issues is summarized in the Study and will not be restated in this proposal. However, within this section of our proposal, we would like to focus on several key scope items that we have learned from our previous experience which will be important to implement in order to minimize potential change orders during the construction of the project.

### Conceptual Shoring Design

As a result of our previous projects (San Lorenzo Lift Station and North Aliso Lift Station), Tetra Tech has determined the importance of adding to our team Brierley Associates, as a subconsultant, to prepare a conceptual design of the proposed shoring required for the project. Both the San Lorenzo and North Aliso projects had very deep excavations in high groundwater which were adjacent to existing buildings and/or streets; and Tetra Tech needed to make sure of the following:

- Confirm a feasible shoring design for the project.
- Confirm necessary geotechnical information is provided in the geotechnical report to design the shoring system.
- Confirm a reasonable construction cost estimate of the feasible shoring system was established.

Therefore, we have added Brierley Associates to our team on this project. The proposed wet well will be about 31-feet deep and will be less than 20 feet from Avenida Sevilla ROW and from the bank of the existing Aliso Creek. The deep excavation for the wet well will require a shoring system with a minimum of one level of bracing. The excavation will also encounter groundwater.

### Brierley will perform the following scope of work:

Provide guidance outlining the geotechnical information required to be included in the geotechnical report for the design of the shoring system; prepare conceptual level sketches and construction sequence as part of the 60% submittal development; provide recommendations for the dewatering specifications; and provide an opinion of probable cost for the excavation support.

### Groundwater Pump Testing

The proposed deep excavation for the wet well will be performed less than 20 feet from the bank of the existing Aliso Creek, and we predict groundwater will be encountered. To provide the bidders with an understanding of the potential dewatering that may be required, Tetra Tech has asked Leighton Consulting to perform the groundwater pump testing as part of the design for the project. Tetra Tech previously performed groundwater pump testing for the San Lorenzo Lift Station project as well as the Regional Lift Station Force Main Replacement project. By having this information available during the bidding process, the City of Santa Ana did not have any change orders during the dewatering effort required for the deep excavation of the wet well facility.

**Leighton's scope of work will include:** Convert the boring to a groundwater monitoring well; develop the monitoring well; use a portable pump to draw down the water level within the well and measure the static water level along with the recharge rate of the groundwater. Leighton will prepare a report summarizing the results of the pump testing, including hydrographs, and a discussion regarding temporary dewatering during construction of the proposed wet well.

### Bypass Pumping

The construction of the Regional Lift Station Enhancement Project as well as North Aliso Lift Station Reconstruction Project required bypass pumping as part of the construction of the project. Due to the criticalness of the bypass pumping, MNWD chose to pre-negotiate the bypass scope and budget with their preferred contractor prior to bidding and included this pre-negotiated contractor into the bid documents. This ensured that the performance and quality of the bypass operation was what MNWD wanted.



## SCOPE OF WORK

The scope of work for this project consists of the following tasks. Any changes, additions, clarifications, deletions have been italicized and bold to make sure they are apparent.

### Task 1. Project Management and Meetings

#### Subtask 1a Project Management

**Tetra Tech** shall communicate and coordinate as needed with ETWD staff to provide updates, follow up on action items, and manage the project on budget and on schedule. **Tetra Tech** shall prepare and submit a concise monthly status report with the monthly invoice statement that includes the following:

- ETWD's standard form that includes a summary of expenditures by task showing total budget, billing to date, current billing, remaining amount.
- A summary of work progress/items complete for all work tasks.
- An estimate of actual percent complete based on progress compared to percent complete based on budget expended.
- An updated progress schedule using a Gantt-type format.

Deliverables will include monthly status report and monthly invoices.

#### Subtask 1b Meetings

**Tetra Tech** shall administer and lead the following meetings at a minimum for this project:

- Project Kick-Off Meeting: **Tetra Tech** shall arrange and conduct a project kick-off meeting at the start of the project. The purpose will be to introduce project participants, establish lines of communications, review the accepted scope of work and the project approach, and discuss all other related information pertaining to ETWD's system.
- Weekly Progress Meetings: **Tetra Tech's** Project Manager shall conduct weekly coordination and consultation meetings with the ETWD Project Manager during the course of the project. Assume these meetings are virtual.

- **Tetra Tech recommends additional meeting: Design Confirmation Meeting. Meeting will focus on confirming the Basis of Design for the project based on evaluating any new design alternatives or ideas that were conceptually brought up during proposal process by the District or other consultants.**
- Submittal Review Meetings: **Tetra Tech** shall conduct a design review meeting after the 30%, 60%, and 90% submittals to walk ETWD staff through the submittal prior to receiving ETWD comments. Assume these meetings are in person.

For all meetings, **Tetra Tech** shall prepare and submit a meeting agenda to ETWD staff at least one business day in advance of the meeting and shall document and submit meeting minutes, highlighting action items and decisions, to ETWD staff within five days of the meeting. At each meeting, **Tetra Tech** shall present and discuss an updated project schedule, project milestones, and planned activities.

Deliverables will include meeting agenda and meeting minutes with action/decision log.

### Task 2. Data Request and Site Visit

#### Subtask 2a Data Request and Review

This task includes detailed review of the information available on the Planet Bids Project Portal After award, **Tetra Tech** shall develop an additional data request log. ETWD will attempt to locate additional data as requested by the **Tetra Tech**. **Tetra Tech will also request any new concepts or ideas the District may have or consultants identified during the proposal process.**

Deliverable will include data request log.

#### Subtask 2b Site Investigations

This task includes at least one site visit by the design team. District staff will accompany the design team and answer any questions during the visit. The focus of the visit will be to understand how the site functions, its surrounding environment with respect to the creek and nearby residents, and other constraints.

Deliverables will include field notes and supporting photographs from site investigations.



### Task 3. Comprehensive Geotechnical Soils Report

**Leighton Consulting, a subconsultant to Tetra Tech**, shall conduct site investigations and prepare a comprehensive geotechnical soils report for the site based upon the latest California Building Code requirements, addressing (at a minimum) geotechnical information required by code and as necessary to construct this Project. Prior to site investigations, **Tetra Tech** shall submit a plan of proposed boring locations for ETWD review and comment. As part of this effort, **Leighton** shall confirm groundwater level to inform whether any provisions are necessary to avoid damage when draining the existing wet well during construction (**buoyance confirmation**). **Leighton** shall further obtain adequate geotechnical information to support any necessary seismic improvements to the existing structures. ETWD will review and comment on the draft geotechnical report, and **Leighton** shall respond to ETWD's comments in a consolidated log and incorporate into a final geotechnical report. **Leighton is proposing to drill, sample and log one hollow-stem auger boring to a depth of 50 feet below existing grade or auger refusal, whichever is shallower.**

**If groundwater is encountered in the boring within the expected excavation depth of 30 feet, Leighton will convert the boring to a groundwater monitoring well. Upon completion of drilling and well installation, the well will be developed using swabbing and purging techniques to ensure representative groundwater flow can be documents. After the well has been sufficiently developed, a portable pump will be used to draw down the water level within the wells. The static water level in the well will be measured with a water level meter along with the recharge rate of the groundwater. Results of pump testing, including hydrographs, and a discuss regrading temporary dewatering during construction of the proposed wet well will be incorporated in the geotechnical exploration report.**

**Leighton's scope and fee are based on the following assumptions: does not include well deconstruction; pump testing will be performed at a flow rate no greater than 10 gpm (greater flows result in issues for storage and disposal of discharge water); and identification, handling and**

**treatment of materials that need to be environmentally addressed.**

Deliverables:

1. Proposed boring location plan
2. Draft geotechnical report
3. Consolidated comment log with ETWD comments and **Leighton's** response
4. Final geotechnical report

### Task 4. Plans and Specifications

**Tetra Tech shall** prepare Technical Specifications, Drawings, and Typical Details for construction of the project elements identified in the 2024 ACLS Improvements Alternatives Analysis Study for Alternative 1C with dry pit emergency storage conversion. ETWD will provide the front-end documents, which the **Tetra Tech** shall review and provide edits in tracked changes. If pre-purchasing is recommended, cost to develop pre-purchased packages shall be included in this task. **Tetra Tech** shall electronically submit via e-mail the following design submittals to ETWD at the following completion levels:

- **Design Confirmation**
- 30% Design
- 60% Design
- 90% Design
- Final Signed Bid Documents

**Tetra Tech** shall prepare technical specifications for all components of the project. After the 30%, 60% and 90% design submittal, ETWD will provide comments for **Tetra Tech** to incorporate as part of the subsequent design submittal. Assume ETWD does not have a site survey, and **Tetra Tech** shall be responsible for obtaining one. **Metz Surveying, as a subconsultant to Tetra Tech, will perform a topographic survey of the station, which will include all topographic site features, existing structures, and surface utilities, within the project limits.**

#### Task 4a. 30% Design

**Prior to performing the 30% Design, Tetra Tech recommends a Design Confirmation Memo be prepared by Tetra Tech. Within this memo, Tetra Tech will include summaries of any additional alternatives or ideas that the District has or concepts developed by other consultants during**



*the bidding process of the project. For this proposal, we have assumed a maximum of three alternatives will be evaluated and three additional ideas will be investigated. Based on questions during bidding, some of these alternatives/additional ideas may include: relocating infrastructure into the street; using the existing wet well for emergency storage; any suggestions for construction sequencing and temporary bypass installation; install grinders; need for emergency pump; etc. The intent of this Design Confirmation Memo is to make sure the design is the most cost-effective, reliable solution for the ACLS. After the Design Confirmation Memo is submitted for review by ETWD, a meeting will be held in person to determine the final basis of design for the facility.*

Based upon Alternative 1C with conversion of the existing dry pit to emergency storage in the ACLS Improvements Alternatives Analysis Study **or as revised by the Design Confirmation Memo, Tetra Tech** shall prepare bid documents to a point of 30% completion. The 30% design drawings shall be developed to the following approximate levels of completion:

1. A title sheet or sheets with ETWD's approval signature block, a location map, the Project name and number, issue block with dates and revision number, summary of applicable codes and standards, drawing index, sheet number block, space for professional stamp, name, street address, phone, and email address of the Design Engineer and all Subconsultants (90% complete).
2. General Drawings:
  - a. List of drawings (60% complete)
  - b. Site plan (90% complete)
  - c. Drawing symbols, numbering and tagging conventions, symbols, and abbreviations (90% complete)
  - d. Hydraulic profile (90% complete)
  - e. Design criteria **including buoyancy calculations for existing wet well** (90% complete)
  - f. Process flow diagram (90% complete)

- g. Pipe material schedule (60% complete)
3. Civil Drawings:
  - a. General Notes (90% complete)
  - b. Demolition plan and section (30% complete)
  - c. **Construction Phasing (30% complete)**
  - d. **Interim Site Plan (30% complete)**
  - e. Yard piping, paving, and grading drawings (30% complete)
4. Structural Drawings:
  - a. General notes and structural sections (90% complete)
  - b. Plans and sections (30% complete)
5. Mechanical Drawings:
  - a. General notes and structural sections (90% complete)
  - b. Plans, sections, and details (30% complete)
6. Electrical Drawings:
  - a. General notes, symbols, abbreviations (90% complete)
  - b. Single line diagram (90% complete)
7. Instrumentation:
  - a. Legends and symbols (90% complete)
  - b. Control system block diagrams/network architecture (90% complete)
  - c. Process and instrumentation diagrams, using the District's tagging system (P&IDs) (90% complete)

The 30% design specifications shall be developed according to the following:

1. Table of Contents (100%)
2. Identifications of **Tetra Tech** standard specifications intended for use
3. Major equipment specifications (90% complete)
4. Control narratives (30% complete)

**Tetra Tech** shall submit hydraulic calculations showing, at a minimum, pump and system curves that indicate efficiency and required horsepower.



**Tetra Tech will submit buoyance calculations for the existing wet well. Tetra Tech** shall also submit an electrical load list and generator sizing calculations. **Tetra Tech** shall submit a 30% construction cost estimate based on manufacturer provided information and recent construction bid tab data. **Tetra Tech** shall submit a construction sequencing plan and schedule. As part of this milestone, **Tetra Tech** shall evaluate the feasibility of construction within the existing site footprint and recommend whether adjusting the fenceline is necessary to accommodate the recommended improvements. If adjusting the fenceline is necessary **Tetra Tech** shall incorporate these modifications as part of the bid documents, construction schedule, and construction sequencing plan.

**Deliverables:**

1. 30% drawings and specifications
2. 30% calculations
3. 30% cost estimate
4. Construction schedule and sequencing plan
5. Consolidated comment log with ETWD comments and **Tetra Tech** responses

#### **Task 4b. 60% Design**

Based upon comments received from ETWD on the 30% design and further design progress, **Tetra Tech** shall prepare bid documents to a point of 60% completion. The 60% design drawings shall be developed to the following approximate levels of completion:

1. A title sheet or sheets with ETWD's approval signature block, a location map, the Project name and number, issue block with dates and revision number, summary of applicable codes and standards, drawing index, sheet number block, space for professional stamp, name, street address, phone, and email address of the Design Engineer and all Subconsultants (100% complete).
2. General Drawings:
  - a. List of drawings (90% complete)
  - b. Site plan (100% complete)
  - c. Drawing symbols, numbering and tagging conventions, symbols, and abbreviations (100% complete)

- d. Hydraulic profile (100% complete)
  - e. Design criteria (100% complete)
  - f. Process flow diagram (100% complete)
  - g. Pipe material schedule (90% complete)
3. Civil Drawings:
    - a. General Notes (90% complete)
    - b. Details (60% complete)
    - c. Demolition plan and section (60% complete)
    - d. **Construction Phasing (60% complete)**
    - e. **Interim Plan (60% complete)**
    - f. Yard piping, paving, grading, and stormwater drawings (60% complete)
    - g. Yard piping/utility profiles (60% complete)
  4. Structural Drawings:
    - a. General notes and structural sections (100% complete)
    - b. Plans and sections (60% complete)
  5. Mechanical Drawings:
    - a. General notes and structural sections (100% complete)
    - b. Plans, sections, and details (60% complete)
  6. Electrical Drawings:
    - a. General notes, symbols, abbreviations (90% complete)
    - b. Single line diagram (90% complete)
    - c. Load schedules (60% complete)
    - d. Panel schedules (60% complete)
    - e. Electrical distribution site plan (60% complete)
    - f. Conduit plan (30% complete)
    - g. Ground plan (30% complete)
    - h. Lighting and receptacle plan (30% complete)
  7. Instrumentation:
    - a. Legends and symbols (90% complete)
    - b. Control system block diagrams/network architecture (90% complete)
    - c. Process and instrumentation diagrams, using the District's tagging system (P&IDs) (90% complete)



The 60% design specifications shall be developed according to the following:

1. Table of Contents (100%)
2. Identifications of **Tetra Tech** standard specifications intended for use
3. Major equipment specifications (90% complete)
4. Earthwork specifications (60% complete)
5. Dewatering specifications (60% complete)
6. Bypass specifications (60% complete)
7. Concrete specifications (90% complete)
8. Piping and valve specifications (90% complete)
9. Control narratives (90% complete)
10. Balance of specifications (60% complete)

***Tetra Tech will determine the odor control requirements for the project. In addition, Tetra Tech will provide a summary of the potential pre-purchase packages the District may want to consider based on the long-lead items and their anticipated delivery schedules based on manufacturer's responses to Tetra Tech.***

***Brierley Associates, as a subconsultant to Tetra Tech, will perform conceptual temporary support of excavation (SOE) engineering efforts associated with the project. Brierley will provide guidance outlining their input to the geotechnical site investigation requirements relative to excavation support design considerations. It is assumed the excavation for the construction of the wet well will require a shoring system with a minimum of one level of bracing. Brierley's scope will include conceptual level sketches and SOE construction sequence. Brierley will also review the earthwork and dewatering specifications related to the SOE design and construction. Brierley will also provide an engineer's opinion of probable cost for the excavation support.***

***Tetra Tech*** shall submit all design calculations, including updated hydraulics, electrical load list, and generator sizing. ***Tetra Tech*** shall submit a 60% construction cost estimate based on manufacturer provided information and recent construction bid tab data. ***Tetra Tech*** shall update the construction sequencing plan and schedule.

Deliverables:

1. 60% drawings and specifications

2. 60% calculations
3. 60% cost estimate
4. Updated construction schedule and sequencing plan
5. Consolidated comment log with ETWD comments and ***Tetra Tech*** responses

#### Task 4c. 90% Design

Based upon comments received from ETWD on the 60% design and further design progress, ***Tetra Tech*** shall prepare the bid documents to a point of 90% completion. The 90% design shall incorporate the results of final site investigations, final project layout and features, detailed design of project features, detailed drawings and specifications, design calculations (civil, electrical, mechanical, structural), and quality management reviews. All drawings and specifications should be completed to a 90% level at a minimum. ***Tetra Tech*** shall submit a 90% construction cost estimate based on manufacturer provided information and recent construction bid tab data. ***Tetra Tech*** shall update the construction sequencing plan and schedule.

***Tetra Tech will prepare draft pre-purchasing packages for any equipment ETWD decides to prepurchase. Tetra Tech will also contact a bypass contractor and obtain a preliminary proposal for bypassing to submit to ETWD for their consideration to include within the final bid documents.***

***Tetra Tech will provide recommended modifications to the District's General Provisions and Special Provisions to include the FEMA HMGP Funding requirements as well as additional sections to the Summary of Work Section of the Technical Specifications. Any sole source equipment typically specified will not be reimbursed by the FEMA funding.***

Deliverables:

1. 90% drawings and specifications
2. 90% all discipline calculations, including hydraulics
3. 90% cost estimate
4. Updated construction schedule and sequencing plan
5. Consolidated comment log with ETWD comments and ***Tetra Tech*** responses

**Task 4d. Final Design**

Based upon comments received from ETWD on the 100% design, **Tetra Tech** shall prepare the bid documents to a point of 100% completion. A Professional Engineer licensed to practice in the State of California shall stamp each drawing. **Tetra Tech** shall update the calculations or cost estimate if necessary based on the 100% design review.

**Deliverables:**

1. Final drawings and specifications
2. Final calculations, cost estimate, construction schedule, and sequencing plan – if updated since 90% design
3. Consolidated comment log with ETWD comments and **Tetra Tech** responses

**Tetra Tech envisions the final design plan set will include the following:**

<b>Sheet No.</b>	<b>Sheet Title</b>
<b>1</b>	<b><i>Title Sheet and Location Map</i></b>
<b>2</b>	<b><i>Abbreviations, Vicinity Map, Sheet Index and Symbols</i></b>
<b>3</b>	<b><i>General and Demolition Notes, Contacts and Utility Companies</i></b>
<b>4</b>	<b><i>Hydraulic Profile, Process Flow Diagram, Design Criteria, and Pipe Material Schedule</i></b>
<b>5</b>	<b><i>Horizontal Control Plan, Bench Mark, Basis of Bearing</i></b>
<b>6</b>	<b><i>Overall Existing Site Plan and Site Access Plan</i></b>
<b>7</b>	<b><i>Demolition Site Plan</i></b>
<b>8</b>	<b><i>Existing Dry Pit and Stairway Demolition (below grade and at grade)</i></b>
<b>9</b>	<b><i>Miscellaneous Demolition Sections</i></b>
<b>10</b>	<b><i>Conceptual Phasing Plan</i></b>
<b>11</b>	<b><i>Interim Site Plan</i></b>
<b>12</b>	<b><i>Lift Station Site Plan</i></b>
<b>13</b>	<b><i>Lift Station Piping Plan</i></b>
<b>14</b>	<b><i>Wall Plan, Profile and Details</i></b>
<b>15</b>	<b><i>Conceptual Shoring Plan/Section and Conceptual Bypass Plans</i></b>
<b>16</b>	<b><i>Piping Profiles</i></b>
<b>17</b>	<b><i>Existing Wet Well Modifications</i></b>
<b>18-21</b>	<b><i>Site/Civil Details</i></b>
<b>22</b>	<b><i>Site Sections and Hydraulic Schematic</i></b>
<b>23</b>	<b><i>Wet Well and Valve Vault Mechanical Plan</i></b>
<b>24</b>	<b><i>Wet Well and Valve Vault Mechanical Sections</i></b>
<b>25</b>	<b><i>Plumbing and HVAC/Vent Plan</i></b>
<b>26</b>	<b><i>Meter Vault Plan, Section and Odor Details</i></b>
<b>27, 28</b>	<b><i>Mechanical Details</i></b>
<b>29</b>	<b><i>General Structural Notes and Design Criteria</i></b>
<b>30</b>	<b><i>Special Inspections and Observations</i></b>
<b>31</b>	<b><i>Wet Well Foundation Plan and Section</i></b>
<b>32</b>	<b><i>Electrical Building Foundation Plan</i></b>
<b>33</b>	<b><i>Electrical Building Roof Plan</i></b>
<b>34</b>	<b><i>Electrical Building Section</i></b>
<b>35</b>	<b><i>Electrical Building Elevations</i></b>
<b>36</b>	<b><i>Existing Dry Pit Modifications Plan and Section</i></b>



Sheet No.	Sheet Title
37	Standard Structural Details
38-40	Electrical Building Details
41-43	Miscellaneous Structural Details
44	Electrical Symbols and Abbreviations
45	Electrical Demolition Plan and Interim Electrical Plan
46	Electrical Site Plan
47	Site Power Plan
48	Site Control Plan
49	Electrical Building Plan
50	Electrical Building Ground and HVAC Plan
51	Light Site Plan
52, 53	Single Line Demolition and Diagram
54	Conduit and Panel Schedule
55	MSB and MCC Elevation
56	Pump Control Schematic Diagram
57	Lighting and Receptacle Plan
58	Electrical Details
59	P&ID Symbols and Abbreviations
60	P&ID
61	Control Panel
62	Control System Block Diagrams/ Network Architecture

***Tetra Tech will coordinate the work with the City of Laguna Woods, Laguna Woods Village and the Orange County Flood Control District (OCFCD). We have assumed two (2) meetings with the City/Village and one meeting with OCFCD to discuss requirements and any specific concerns and construction phasing. Tetra Tech will obtain allowable work hours, pavement replacement requirements, and typical specifications/requirements for the preparation of traffic control plans and trail detours/closure.***

***In addition, Tetra Tech has budgeted a minor amount of time to work with the District's Environmental Consultant for the preparation of any environmental support documentation.***

### Task 5. Bid Support

***Tetra Tech*** shall support ETWD during project bidding by attending the mandatory pre-bid meeting and reviewing and responding to questions from the prospective Contractors. ***Tetra Tech*** shall respond to bidder questions by preparing written responses and revised drawings as-needed to address questions during bidding. Assume three addenda will be prepared in response to contractor questions. ***Tetra Tech*** shall prepare and submit a set of conformed drawings and specifications that incorporate the edits made via addenda during bid phase.

Deliverables:

1. Mandatory pre-bid meeting attendance
2. Written responses to bidder questions and as-needed drawing revisions
3. Conformed drawings and specifications



## ESTIMATED MANHOURS

The estimated manhours for the individual tasks and subtasks for this project are depicted below. Tetra Tech's proposed fee and schedule of hourly rates will be provided in a separate file as requested within the RFP.

Project Phases / Tasks	Total Labor Hours	QA/QC Manager (Mark Bush)	Project Manager (Tom Esperson)	Assist. Project Mgr. (Neha Gajjar)	Lead Project Engineer (Matt Vera)	Lead Design Engineer (Michael Mojica)	Design Engineer (Patrick Koll)	Engineer/CADD (Miranda Lebig)	Sr. Proj Admin (Deena Escamilla)	Structural Manager (Eric Yuen)	Structural Engineer (Jose Quincez)	Structural Design (Miguel Magpantay)	Structural CADD (Eric Hutchins)	Electrical Manager (Mazen Kasar)	Electrical Engineer (Doug Saman)	Electrical Designer (James Roberts)	Electrical Designer (Johnson Le)
		2,541	24	80	72	312	332	210	37	50	174	84	132	106	202	196	194
<b>Task 1. Project Management and Meetings</b>	102		18	30	48	6											
Management (10 mths)	20			10	10												
Monthly Status (10 mths)	30		8	10	6	6											
Virtual Meetings (24)	24				24												
In Person Meetings (5)	28		10	10	8												
<b>Task 2. Data Request and Site Visit</b>	64		2	4	14	6	6		2	6	6			6	6	6	
Data Request	16		2	4	8				2								
Site Visit	48				6	6	6			6	6			6	6	6	
<b>Task 3. Comprehensive Geotechnical Soils Report</b>	13			4	8				1								
Geotechnical Report	7			2	4				1								
Groundwater Pump Testing	6			2	4												
<b>Task 4. Plans and Specifications</b>	2,282	24	50	34	228	312	318	202	30	38	162	84	132	94	190	190	194
<b>A. Topographic Survey</b>	9			2		2	4		1								
Topographic Survey	9			2		2	4		1								
<b>B. Design Confirmation Memo</b>	137	1	8		28	38	50		2		4			2	4		
Alternatives (3)	66		2		12	18	24				4			2	4		
Additional Ideas (3)	40				8	12	18										
Memo	31	1	4		8	8	8		2								
<b>C. 30% Design</b>	583	4	4	6	42	71	68	48	2	6	48	64	44	24	42	60	50
General Sheets	59				6	13	20	20									
Civil Drawings	68				8	20	20	20									
Structural Drawings	56										18		38				
Mechanical Drawings	36				6	12	10	8									
Electrical and Instrumentation	124													8	26	44	46
Specifications	19	1		4	4				2					4	4		
Hydraulic Calculations	10	1	1		4	4											
Calculations (civil/mech/structural/electrical)	153	1	2		8	16	12			4	28	60		8	6	8	
Cost Estimate/Schedule/Sequence	24	1	1		4	4	4							2	4	4	
Comment Log and Responses	34			2	2	2	2			2	2	4	6	2	2	4	4
<b>D. 60% Design</b>	668	7	10	6	65	89	82	72	5	10	42	8	40	24	70	66	72
General Sheets	16				3	5	4	4									
Civil Drawings	184	2	2		28	54	50	48									
Structural Drawings	66									2	30		34				
Mechanical Drawings	80	2	2		14	22	20	20									
Electrical and Instrumentation	190													14	52	52	72
Specifications	42	1	1	4	4				4	6	6			4	8	4	
Odor Control/Pre-Purchase	33	1	2		8	4	4							2	6	6	
Conceptual Shoring	7		2		4				1								
Cost Estimate/Schedule/Sequence	20	1	1		2	2	2				2	4	6	2	2	2	
Comment Log and Responses	30			2	2	2	2			2	4	4	6	2	2	2	
<b>E. 90% Design</b>	667	12	18	10	63	70	74	68	10	16	56	4	38	38	66	56	68
General Sheets	14	1	2		1	2	4	4									
Civil Drawings	189	7	6		30	48	50	48									
Structural Drawings	88									10	46		32				
Mechanical Drawings	74	4	4		16	16	18	16									
Electrical and Instrumentation	186													24	50	44	68
Specifications	28		2	4	2				4	2	2			4	6	2	
Pre-Purchasing Packages	29		3	2	4				4					4	6	6	
Bypass Contractor	3		1		2												
FEMA Funding Modifications	8			2	4				2								
Cost Estimate/Schedule/Sequence	16				2	2				2	4			2	2	2	
Comment Log and Responses	32			2	2	2	2			2	4	4	6	4	2	2	
<b>F. Final Design</b>	298		20	10	44	54	48	22	14	12	18	8	10	12	14	8	4
Drawings	90		8		6	10	10	10		4	8	6	8	4	6	6	4
Specifications	6		2	2					2								
Permit Coordination (City/Village/OCFCD)	74			4	16	24	24		6								
Support CEQA	20			2	4	4	4	4	2								
Cost Estimate/Schedule/Sequence	10				2	2				2	4						
Comment Log and Responses	18			2	2	2	2					2	2	2	2	2	
<b>Task 5. Bid Support</b>	80		10		14	12	8	8	4	6	6			6	6		
Attend Pre-Bid Meeting	6		2		4												
Prepare 3 Addenda	48		8		8	8				6	6			6	6		
Conformed Drawings and Specifications	26				2	4	8	8	4								



PROJECT TEAM

Tetra Tech has the depth of resources for staffing this project with experienced and qualified personnel. Our Project Team Chart defines the project role of each key team member and delineates the communication and reporting relationships among key project staff. Brief resumes are included within the Appendix.





## REFERENCES

Based on our successfully completed ETWD projects, specifically the Oso Lift Station Improvements, we believe the District is one of our best references. Our goal for this project is to continue to provide the same high quality service the District expects and deserves.

## SATISFIED CLIENTS

**Client satisfaction is a major objective for Tetra Tech.** This commitment to our clients has earned us the privilege of providing continuous service to several of our below listed references. We believe our clients will attest to our technical experience and responsive staff, and we encourage you to contact our references to verify our past performance firsthand.

<b>City of Santa Ana</b> <b>Armando Fernandez, PE</b> 714/647-3316 afernandez@santa-ana.org  2 Lift Stations	<b>Moulton Niguel Water District</b> <b>Rodney Woods, PE</b> 949/425-3547 rwoods@mnwd.com  10 Lift Stations	<b>Orange County Water District</b> <b>Chris Olsen, PE</b> 714/378-3232 colsen@ocwd.com  2 Pump Stations and Well Injection	<b>Irvine Ranch Water District</b> <b>Richard Mori, PE</b> 949/453-5571 Mori@irwd.com  2 Lift Stations and 4 Diversion Structures	<b>NAVFAC Southwest</b> <b>Allan Tomayo</b> 619/545-8020  3 Lift Stations
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## PROPOSED SCHEDULE

Tetra Tech has reviewed current and planned workload schedules for our project team, and are available to immediately begin work on this project. The following presents our proposed project schedule.

Milestone	Key Milestone Dates
Notice of Award	June 24, 2024
Kick-off Meeting	June 27, 2024
Design Confirmation Memo	July 17, 2024
<i>ETWD Review/Comment Return</i>	July 24, 2024
30% Design Submittal	August 21, 2024
<i>ETWD Review/Comment Return</i>	September 4, 2024
60% Design Submittal	October 2, 2024
<i>ETWD Review/Comment Return</i>	October 16, 2024
90% Design Submittal	November 20, 2024
<i>ETWD Review/Comment Return</i>	December 4, 2024
Final Design Submittal	December 18, 2024
Consolidated ETWD and Tetra Tech comment/response log	January 8, 2025
Bid Documents Submittal	January 15, 2025



*PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE*

## Aliso Creek Lift Station Improvements Final Design Project

# APPENDIX: Resumes

**Education**

BS, Environmental Engineering, University of California, Irvine, 1978

**Registration**

Professional Civil Engineer, California, No. 36399, 1983

**Years of Experience**

43

**Years with Tetra Tech**

32

## Tom Epperson, PE

### Project Manager

Mr. Epperson has more than 43 years of professional experience in water, wastewater, and reclaimed water engineering. Tom has been responsible for the preparation of water, wastewater, and reclaimed water master plans; project design reports for various water, wastewater, and reclaimed water facilities; and the planning and design of water, wastewater, and reclaimed water pipelines, along with, lift stations, pump stations and reservoirs. Mr. Epperson's experience includes completing the design, bidding, and construction management of over 300 miles of water/reclaimed water/sewer mains, 40 water/reclaimed water pump stations, 20 wellhead facilities, 20 sewer lift stations, and 28 water and

reclaimed water storage reservoirs throughout Southern California.

### PROJECT EXPERIENCE

**Aliso Creek Lift Station Improvements Alternatives Analysis Study, El Toro Water District.** Project Manager. Provided evaluation to determine the most cost-effective approach to achieve the required capacity at the Aliso Creek Lift Station while also improving operations and maintenance, maintaining service, and protecting neighboring environmentally sensitive areas.

**Oso Lift Station Improvements, El Toro Water District.** Project Manager. Provided engineering services for the relocation of the existing lift station to a new property within Laguna Woods. The work includes a preliminary analysis of sewer flows for the basis of design, evaluating pumps to select the most efficient for the lift station demands, configuring the site to accommodate new construction while the existing remains in service, evaluating on-site storage and response times, considering odor control alternatives and converting the existing wet well into an emergency storage basin.

**North Aliso Lift Station Reconstruction, Moulton Niguel Water District.** Project Manager. The North Aliso Lift Station is located in Mission Viejo, CA and conveys raw wastewater from the MNWD's SubBasin 8 (North Aliso) to SubBasin 9 (3A) whereafter it flows by gravity to the MNWD's 3A Wastewater Treatment Plant. The existing lift station site includes a pump building with electrical equipment on the ground floor and two 1,400 gpm pumps located in a concrete dry pit directly below. The site also has a wet well, overflow basin, backup generator, diesel storage tank, and bypass pumping connection. Tetra Tech was tasked to provide engineering design services to reconstruct the North Aliso Lift Station in its entirety and to replace the existing facilities that have reached the end of their useful lives. Services include preliminary and final design; preparation of construction documents and construction cost estimates; permit acquisition support; bid phase support; and construction phase services.

**Regional Lift Station Force Main Replacement, Moulton Niguel Water District.** Project Manager. Provided engineering services for the replacement of approximately 15,000 linear feet of 20-inch and 24-inch Techite sewer force main within Laguna Niguel Regional Park. Regional Lift Station and Force Mains are critical wastewater facilities that pump flow from MNWD sewer collection system to South Orange County Wastewater Authority Regional Treatment Plant. The replacement force main consists of dual 24-inch pipeline approximately 8,000 feet in length and will be constructed within Laguna Niguel Regional Park. Scope of services include preliminary design, final design and construction phase services.

**San Lorenzo Sewage Lift Station, City of Santa Ana.** Project Manager. Prepared plans, specifications, and cost estimates to construct a new sewer lift station on San Lorenzo Avenue within the City of Santa Ana. The improvements included a wet well, dry well, three variable frequency drive pumps, aboveground CMU block control room, emergency generator, hardscape/landscape improvements and approximately 1,300 linear feet of new sewer main.

### TETRA TECH

**Education**

BS, Civil Engineering,  
University of California at  
Berkeley, 1991

**Registration**

Professional Civil Engineer,  
California, No. 55574, 1996

**Years of Experience**

32

**Years with Tetra Tech**

6

## Neha Gajjar, PE

### Assistant Project Manager

Ms. Gajjar has more than 32 years of professional experience providing project management, planning, and design of water transmission, distribution, and storage facilities projects. Neha has extensive experience preparing plans and specifications for water/sewer mains, storm drains, pipelines, and has an intimate understanding of these requirements for various municipalities. Ms. Gajjar's experience includes design, bidding, and construction management of over 100 miles of water/reclaimed water/sewer mains throughout Southern California. Her responsibilities as engineering lead include establishing design parameters, planning activities to meet client needs and project schedules, and managing

required appropriate technical resources required for each project.

### PROJECT EXPERIENCE

**Aliso Creek Lift Station Improvements Alternatives Analysis Study, El Toro Water District.** Assistant Project Manager. Provided evaluation to determine the most cost-effective approach to achieve the required capacity at the Aliso Creek Lift Station while also improving operations and maintenance, maintaining service, and protecting neighboring environmentally sensitive areas.

**Regional Lift Station Force Main Replacement, Moulton Niguel Water District.** Assistant Project Manager. Provided engineering services for the replacement of approximately 15,000 linear feet of 20-inch and 24-inch Techite sewer force main within Laguna Niguel Regional Park. Regional Lift Station and Force Mains are critical wastewater facilities that pump flow from MNWD sewer collection system to South Orange County Wastewater Authority Regional Treatment Plant. The replacement force main consists of dual 24-inch pipeline approximately 8,000 feet in length and will be constructed within Laguna Niguel Regional Park. Scope of services include preliminary design, final design and construction phase services.

**San Lorenzo Sewage Lift Station, City of Santa Ana.** Assistant Project Manager. Prepared plans, specifications, and cost estimates to construct a new sewer lift station on San Lorenzo Avenue within the City of Santa Ana. The improvements included a wet well, dry well, three variable frequency drive pumps, aboveground CMU block control room, emergency generator, hardscape/landscape improvements and approximately 1,300 linear feet of new sewer main.

**Upper Salada Sewer Lift Station Auxiliary Generator Replacement, Moulton Niguel Water District.** Project Manager. After a preliminary design report was completed, coordinate with MNWD to assess a new scope for the project based on current needs. Duties included preparation of plans and specifications to install a permanent generator on site, with documentation (plats and legal descriptions) for MNWD to use in acquiring portions of adjacent property; coordination and research at Orange County Fire Authority to determine the latest setback requirements; and establishing the optimal location for the facilities to meet state and federal guidelines.

**La Salina Wastewater Treatment Plant Decommissioning and Lift Station, Oceanside, CA.** Assistant Project Manager. Responsible for preparing plans and specifications for the decommissioning of an existing WWTP after the incoming flows are diverted via a new lift station to the San Luis Rey Water Reclamation Facility. Design considerations included asbestos/lead/hazardous materials abatement, removal of existing wastewater from various facilities, demolition of the aboveground facilities and piping up to five feet below grade, and rough grading for future site usage.

**Education**

BS, Civil and Environmental Engineering, University of California, Irvine, 1997

**Registration**

Professional Civil Engineer, California, No. 60477, 2000

**Years of Experience**

29

**Years with Tetra Tech**

29

## Mark Bush, PE

### QA/QC Manager

Mr. Bush has more than 29 years of professional experience in water, wastewater, and recycled water engineering. He has been responsible for the completion of more than 200 miles of potable water, recycled water, and sewer mains, 30 potable water, recycled water and sewer pump stations and well projects, 15 potable and recycled water reservoirs, and 10 sewer lift station projects. Mr. Bush's experience includes new design and rehabilitation of existing facilities, and he understands the challenges of modifying existing facilities. Mark is an integral part of the Water/Wastewater Team and brings leadership, technical knowledge, and dedication to overall client satisfaction on every project.

## PROJECT EXPERIENCE

**Aliso Creek Lift Station Improvements Alternatives Analysis Study, El Toro Water District.** QA/QC. Provided evaluation to determine the most cost-effective approach to achieve the required capacity at the Aliso Creek Lift Station while also improving operations and maintenance, maintaining service, and protecting neighboring environmentally sensitive areas.

**Oso Lift Station Improvements, El Toro Water District.** QA/QC. Provided engineering services for the relocation of the existing lift station to a new property within Laguna Woods. The work includes a preliminary analysis of sewer flows for the basis of design, evaluating pumps to select the most efficient for the lift station demands, configuring the site to accommodate new construction while the existing remains in service, evaluating on-site storage and response times, considering odor control alternatives and converting the existing wet well into an emergency storage basin.

**San Lorenzo Sewage Lift Station, City of Santa Ana.** QA/QC. Project included plans, specifications, and cost estimates to construct a new sewer lift station on San Lorenzo Avenue within the City of Santa Ana. The improvements included a wet well, dry well, three variable frequency drive pumps, aboveground CMU block control room, emergency generator, hardscape/landscape improvements and approximately 1,300 linear feet of new sewer main.

**La Salina Wastewater Treatment Plant Decommissioning and Lift Station, City of Oceanside.** Project Manager. The La Salina Wastewater Treatment Plant (LSWWTP), originally constructed in 1948, has been expanded and rehabilitated over the years. The LSWWTP served as the connection point for multiple regional discharge pipelines including treated effluent from Fallbrook, Camp Pendleton, and the San Luis Rey Water Reclamation Facility (SLRWRF). This project consists of demolishing the LSWWTP and replacing it with a new 5 MGD raw wastewater lift station to convey wastewater from the LSWWTP collection area to SLRWRF. The scope of work also includes the relocation of an existing 1 MGD UV storm water treatment facility and preliminary design of a new 24-inch HDPE force main that will be used to convey the raw wastewater to the SLRWRF. The additional flows to the SLRWRF will also benefit future reclaimed water treatment expansion and indirect or direct potable reuse near the Mission Basin Desalting Facility.

**Magnolia Trunk Sewer and S-25 Sewer Lift Station Modifications, Long Beach Water Department.** Project Engineer. Provided design for approximately 800 feet of 21-inch VCP in downtown Long Beach on Magnolia Ave. and Ocean Blvd. The project included modifications to the existing S-25 sewer lift station that removed a smaller pump and replaced it with a large sewage pump, reconfigured the pump discharge piping, and added an MOV consequently the City could abandon an aging 8-inch force main and use the new 12-inch force main that ultimately discharges into the new 21-inch Magnolia Trunk Sewer.

**Education**

BS, Civil Engineering,  
University of California,  
Irvine, 2013

**Registration**

Professional Civil Engineer,  
California, No. 86663, 2016

**Years of Experience**

11

**Years with Tetra Tech**

6

## Matt Vera, PE

### Project Engineer

Mr. Vera has provided design engineering in various water and wastewater projects including domestic and reclaimed water pipelines, gravity sewer mains, sewer main rehabilitations, pump stations, lift stations, wells, flow control facilities, and pressure reducing valve vaults. Matt's responsibilities include preparation of construction plans, specifications, design calculations and preparing project reports and technical memorandums.

### PROJECT EXPERIENCE

**Aliso Creek Lift Station Improvements Alternatives Analysis Study, El Toro Water District.** Project Engineer. Provided evaluation to determine the most cost-effective approach to achieve the required capacity at the Aliso Creek Lift Station while also improving operations and maintenance, maintaining service, and protecting neighboring environmentally sensitive areas.

**Oso Lift Station Improvements, El Toro Water District.** Project Engineer. Provided engineering services for the relocation of the existing lift station to a new property within Laguna Woods. The work includes a preliminary analysis of sewer flows for the basis of design, evaluating pumps to select the most efficient for the lift station demands, configuring the site to accommodate new construction while the existing remains in service, evaluating on-site storage and response times, considering odor control alternatives and converting the existing wet well into an emergency storage basin.

**Regional Lift Station Force Main Replacement, Moulton Niguel Water District.** Project Engineer. Provided engineering services for the replacement of approximately 15,000 linear feet of 20-inch and 24-inch Techite sewer force main with Laguna Niguel Regional Park. Regional Lift Station and Force Mains are critical wastewater facilities that pump flow from MNWD sewer collection system to South Orange County Wastewater Authority Regional Treatment Plant. The replacement force main consists of dual 24-inch pipeline approximately 8,000 feet in length and will be constructed within Laguna Niguel Regional Park. Scope of services include preliminary design, final design and construction phase services.

**North Aliso Lift Station Reconstruction, Moulton Niguel Water District.** Project Engineer. The North Aliso Lift Station is located in Mission Viejo, CA and conveys raw wastewater from the MNWD's SubBasin 8 (North Aliso) to SubBasin 9 (3A) whereafter it flows by gravity to the MNWD's 3A Wastewater Treatment Plant. The existing lift station site includes a pump building with electrical equipment on the ground floor and two 1,400 gpm pumps located in a concrete dry pit directly below. The site also has a wet well, overflow basin, backup generator, diesel storage tank, and bypass pumping connection. Tetra Tech was tasked to provide engineering design services to reconstruct the North Aliso Lift Station in its entirety and to replace the existing facilities that have reached the end of their useful lives. Services include preliminary and final design; preparation of construction documents and construction cost estimates; permit acquisition support; bid phase support; and construction phase services.

**Regional Lift Station Enhancements, Moulton Niguel Water District.** Project Engineer. Provided engineering services to provide a new back-up system to the existing lift station. The design included evaluating various pump capacities and performance curves with the system head curve with the intent to have an independently powered backup pumping system that will engage during scheduled maintenance or emergency conditions. Also, the design provided additional emergency wet well storage in the form of a pre-cast concrete structure adjacent to the existing sewer manhole.

**Education**

BS, Civil Engineering,  
California State Polytechnic  
University, Pomona, 2007

MS, Structural Engineering,  
California State Polytechnic  
University Pomona, 2016

**Registrations**

Professional Civil Engineer,  
California, No. 75983, 2009

Professional Structural  
Engineer, California,  
No. 6177, 2014

**Years of Experience**

17

**Years with Tetra Tech**

17

## Eric Yuen, PE, SE

### Structural Design

Mr. Yuen has more than 17 years of professional experience in design, analysis, and detailing in structural engineering. Eric is knowledgeable in reinforced concrete, masonry, structural steel and wood frame design, and construction for a variety of building and infrastructure projects including reservoirs, water/wastewater treatment facilities, as well as seismic retrofit of existing structures.

### PROJECT EXPERIENCE

**Aliso Creek Lift Station Improvements Alternatives Analysis Study, El Toro Water District.** Structural Manager. Provided evaluation to determine the most cost-effective approach to achieve the required capacity at the Aliso Creek Lift Station while also improving operations and maintenance, maintaining service, and protecting neighboring environmentally sensitive areas.

**Oso Lift Station Improvements, El Toro Water District.** Structural Engineer. Provided engineering services for the relocation of the existing lift station to a

new property within Laguna Woods. The work includes a preliminary analysis of sewer flows for the basis of design, evaluating pumps to select the most efficient for the lift station demands, configuring the site to accommodate new construction while the existing remains in service, evaluating on-site storage and response times, considering odor control alternatives and converting the existing wet well into an emergency storage basin.

**North Aliso Lift Station Reconstruction, Moulton Niguel Water District.** Structural Manager. The North Aliso Lift Station is located in Mission Viejo, CA and conveys raw wastewater from the MNWD's SubBasin 8 (North Aliso) to SubBasin 9 (3A) whereafter it flows by gravity to the MNWD's 3A Wastewater Treatment Plant. The existing lift station site includes a pump building with electrical equipment on the ground floor and two 1,400 gpm pumps located in a concrete dry pit directly below. The site also has a wet well, overflow basin, backup generator, diesel storage tank, and bypass pumping connection. Tetra Tech was tasked to provide engineering design services to reconstruct the North Aliso Lift Station in its entirety and to replace the existing facilities that have reached the end of their useful lives. Services include preliminary and final design; preparation of construction documents and construction cost estimates; permit acquisition support; bid phase support; and construction phase services.

**Regional Lift Station Force Main Replacement, Moulton Niguel Water District.** Structural Manager. Providing engineering services for the replacement of approximately 15,000 linear feet of 20-inch and 24-inch Techite sewer force main with Laguna Niguel Regional Park. Regional Lift Station and Force Mains are critical wastewater facilities that pump flow from MNWD sewer collection system to South Orange County Wastewater Authority Regional Treatment Plant. The replacement force main consists of dual 24-inch pipeline approximately 8,000 feet in length and will be constructed within Laguna Niguel Regional Park. Scope of services include preliminary design, final design and construction phase services.

**Regional Lift Station Enhancements, Moulton Niguel Water District.** Structural Engineer. Provided engineering services to provide a new back-up system to the existing lift station. The design included evaluating various pump capacities and performance curves with the system head curve with the intent to have an independently powered backup pumping system that will engage during scheduled maintenance or emergency conditions. Also, the design provided additional emergency wet well storage in the form of a pre-cast concrete structure adjacent to the existing sewer manhole.

**Education**

BS, Electrical Engineering,  
California State University,  
Long Beach, 1990

**Registrations**

Professional Electrical  
Engineer, California,  
No. 15809, 1998

General Construction,  
Class B, California,  
No. 777845, 2008

**Years of Experience**

32

**Years with Tetra Tech**

15

## Mazen Kassar, PE

### Electrical/Controls

Mr. Kassar has more than 32 years of professional experience in electrical engineering and industry standards that include electrical engineering staff management, project management, construction management and supervision, water and wastewater treatment, petro-chemical design, and environmental soil and groundwater treatment. Mazen's background includes designing medium and low voltage power distribution, instrumentation design, control systems and SCADA systems for a wide variety of water/wastewater projects, and the installation of electrical systems for remediation projects, including soil vapor extraction systems, and groundwater pump and-treat systems.

### PROJECT EXPERIENCE

**Aliso Creek Lift Station Improvements Alternatives Analysis Study, El Toro Water District.** Electrical/Controls Manager. Provided evaluation to determine

the most cost-effective approach to achieve the required capacity at the Aliso Creek Lift Station while also improving operations and maintenance, maintaining service, and protecting neighboring environmentally sensitive areas.

**Oso Lift Station Improvements, El Toro Water District.** Electrical/Controls Manager. Provided engineering services for the relocation of the existing lift station to a new property within Laguna Woods. The work includes a preliminary analysis of sewer flows for the basis of design, evaluating pumps to select the most efficient for the lift station demands, configuring the site to accommodate new construction while the existing remains in service, evaluating on-site storage and response times, considering odor control alternatives and converting the existing wet well into an emergency storage basin.

**North Aliso Lift Station Reconstruction, Moulton Niguel Water District.** Electrical/Controls Manager. The North Aliso Lift Station is located in Mission Viejo, CA and conveys raw wastewater from the MNWD's SubBasin 8 (North Aliso) to SubBasin 9 (3A) whereafter it flows by gravity to the MNWD's 3A Wastewater Treatment Plant. The existing lift station site includes a pump building with electrical equipment on the ground floor and two 1,400 gpm pumps located in a concrete dry pit directly below. The site also has a wet well, overflow basin, backup generator, diesel storage tank, and bypass pumping connection. Tetra Tech was tasked to provide engineering design services to reconstruct the North Aliso Lift Station in its entirety and to replace the existing facilities that have reached the end of their useful lives. Services include preliminary and final design; preparation of construction documents and construction cost estimates; permit acquisition support; bid phase support; and construction phase services.

**Regional Lift Station Enhancements, Moulton Niguel Water District.** Electrical/Controls Manager. Provided engineering services to provide a new back-up system to the existing lift station. The design included evaluating various pump capacities and performance curves with the system head curve with the intent to have an independently powered backup pumping system that will engage during scheduled maintenance or emergency conditions. Also, the design provided additional emergency wet well storage in the form of a pre-cast concrete structure adjacent to the existing sewer manhole.

**San Lorenzo Sewage Lift Station, City of Santa Ana.** Electrical Project Manager. Prepared plans, specifications, and cost estimates to construct a new sewer lift station on San Lorenzo Ave. in Santa Ana, CA. The improvements included a wet well, dry well, three variable frequency drive pumps, aboveground CMU block control room, emergency generator, hardscape/landscape improvements and approximately 1,300 linear feet of new sewer main.



*PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE*

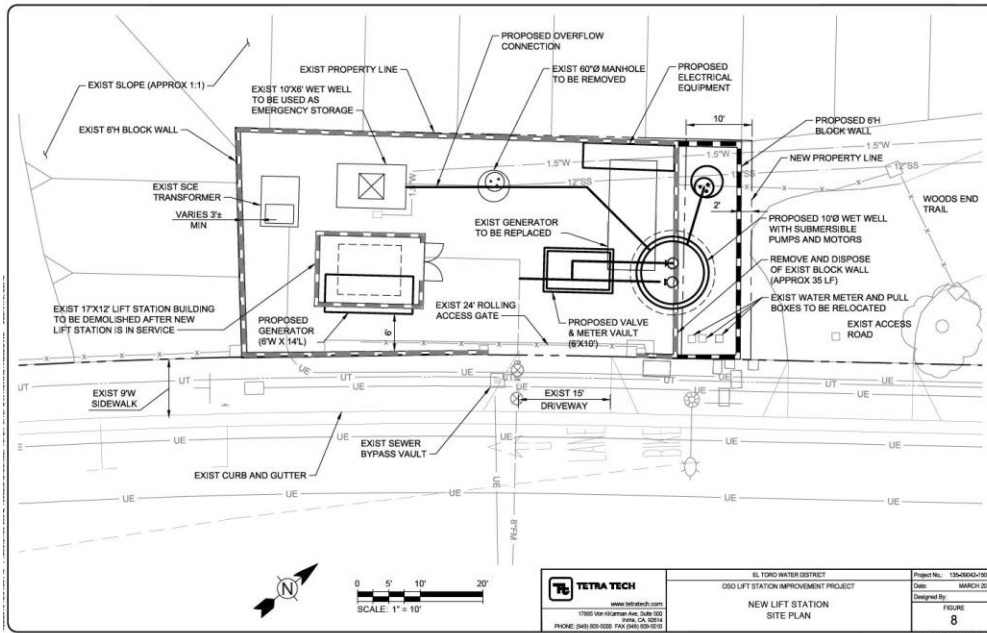
## Aliso Creek Lift Station Improvements Final Design Project

# APPENDIX: Project Descriptions



## Oso Lift Station Improvements

Laguna Woods, CA



### Construction Cost

\$2,000,000

### Schedule

2017 - 2021

### Key Team Members

Tom Epperson, PE  
*Project Manager*

Mark Bush, PE  
*QA/QC*

Matt Vera, PE  
*Design Engineer*

Mazen Kassar, PE  
*Electrical Engineer*

Eric Yuen, PE, SE  
*Structural Engineer*

Leighton Consulting  
*Geotechnical Investigation*

### Reference

El Toro Water District  
Dennis Cafferty, PE  
949/837-7050, ext. 223  
dcafferty@etwd.com

El Toro Water District (ETWD) owns and operates the Oso Sewer Lift Station which conveys raw wastewater from the southwest portion of the ETWD's service area to the gravity sewer collection system terminating at the ETWD Water Recycling Plant. The original facility was constructed in approximately 1972. Oso Lift Station receives influent from a gravity sewage collection system serving a residential community within Laguna Woods Village.

The main project objective was to improve the reliability and serviceability of the Oso Lift Station and associated equipment and infrastructure. A preliminary evaluation of the project alternatives was completed by Tetra Tech in April 2015. The information and recommendations presented in the Evaluation Memorandum was used to reach consensus to proceed with final design. ETWD decided to construct a New Lift Station as shown in the Evaluation Memorandum. This alternative required additional property from the City of Laguna Woods.

The overall objectives of the final project included, but were not limited to:

- Performing sewer monitoring to get more reliable flow data for a Basis of Design.
- Selecting pumps with the most efficiency to meet the specific demands of the Oso facility.
- Configuring the site to accommodate new construction while the existing pump station remains in service.
- Evaluating on-site storage and associated response times.
- Evaluating odor control options and measures.
- Evaluating potential emergency overflow to the Mouton Niguel Water District collection system.
- Replacing the standby generator.
- Relocating the bypass vault to within the ETWD's property.

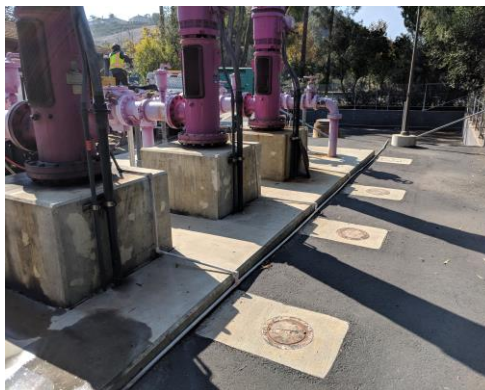
The drawing shows the proposed improvements to the existing site and includes the following:

- Constructing a new wet well with submersibles pumps and motors.
- Relocating and replacing the existing generator.
- Converting the existing wet well into an emergency storage basin and constructing the associated overflow piping.
- Constructing a new valve and meter vault.
- Demolishing the existing lift station.



## Regional Lift Station Enhancements

Laguna Niguel, CA



Moulton Niguel Water District (MNWD) wished to improve the reliability of the Regional Lift Station by adding an on-site standby pump. The Backup System, Godwin Dri-Prime Backup System, provides independently-powered backup pumping in one dependable package unit and will engage during loss of power (whether scheduled or emergency), routine pump maintenance, or when the existing pumps cannot handle extreme flow events. In addition, MNWD desired downsizing and modification of Pump No. 5 to handle low flows and evaluate adding additional wet well capacity.

After analyzing the existing flows and evaluating three Godwin pump models (CD400M, CD500M and NC350M), it was determined the CD500M pump can meet the flow capacities of the lift station without overflowing the storage provided by the existing wet well and the proposed overflow wet well, except for during extreme wet weather events. The downside of the higher capacity of the CD500M is the pump will require multiple on/off cycles per hour during lower flows and results in a longer duration before the pump is primed. To address those concerns, the suction piping and operating levels were designed to self-prime a majority of the suction line and minimize the need to cycle on and off throughout normal flows. The CD400M meets the flow capacity for the majority of the typical day but is expected to have short periods of overflow during typical daily flows in amounts not exceeding the capacity of the overflow basin, with the exception of extreme wet weather events.

The existing wet well provides approximately 10 minutes of storage under average daily flows and approximately 5 minutes of storage during typical daily peak flows. A second wet well facility for additional storage capacity was desired. The proposed facilities would be located within an existing overflow detention area on site with the reconfiguration of the adjacent gravity sewer pipelines, as required.

The additional wet well facility would need to be constructed while the lift station is operational. The following four alternatives were evaluated:

- Replacement of the existing manhole with a larger diameter precast manhole.
- Constructing a cast-in-place maximizing the capacity within the detention basin footprint.
- Constructing a cast-in-place or pre-cast concrete structure.
- Construction a fiberglass reinforced plastic tank structure.

It was determined a 12-foot diameter pre-cast concrete manhole connecting to the existing manhole would be the most cost-effective option. The installation of the new pre-cast manhole adjacent to the existing offers a shorter installation time compared to the other options, while still providing the required storage capacity to prevent spillage into the overflow detention area.

### Construction Cost

\$5,000,000

### Schedule

2018 - 2022

### Key Team Members

Tom Epperson, PE  
*Project Manager*

Matt Vera, PE  
*Project Engineer*

Mazen Kassar, PE  
*Electrical Engineer*

Eric Yuen, PE, SE  
*Structural Engineer*

Leighton Consulting  
*Geotechnical Investigation*

### Reference

Moulton Niguel Water District  
David Larsen, PE  
949/425-3578  
dlarsen@mnwd.com



## North Aliso Lift Station Reconstruction

Mission Viejo, CA

### Construction Cost

\$9,500,000

### Schedule

2022 - Ongoing

### Key Team Members

Tom Epperson, PE  
*Project Manager*

Matt Vera, PE  
*Project Engineer*

Mazen Kassar, PE  
*Electrical Engineer*

Eric Yuen, PE, SE  
*Structural Engineer*

Brierley Associates  
*Shoring Specialist*

Leighton Consulting  
*Geotechnical Investigation*

### Reference

Moulton Niguel Water District  
Bryan Hong, PE  
949/425-3554  
bhong@mnwd.com



The North Aliso Lift Station is located at 23492 Los Alisos Blvd., near the intersection of Los Alisos Blvd. and Jeronimo Rd. in Mission Viejo, CA and conveys raw wastewater from the Moulton Niguel Water District's (MNWD) SubBasin 8 (North Aliso) to SubBasin 9 (3A) whereafter it flows by gravity to the MNWD's 3A Wastewater Treatment Plant. The facility was constructed in 1969 and has had periodic improvements, including the addition of a wet well in 1991 and the addition of an overflow basin in 1996. The existing lift station site includes a pump building with electrical equipment on the ground floor and two 1,400 gpm pumps located in a concrete dry pit directly below. The site also has a wet well, overflow basin, backup generator, diesel storage tank, and bypass pumping connection.

Tetra Tech will provide engineering design services to reconstruct the North Aliso Lift Station in its entirety and to replace the existing facilities that have reached the end of their useful lives. The new lift station design will include:

- The new lift station is sized to receive an average of approximately 0.67 MGD (peak flow of 960 gpm) of additional wastewater flow from Santa Margarita Water District's (SMWD) existing manhole located at the intersection of Los Alisos Blvd. and Second St. The total peak flow to the station will be 1,530 gpm.
- New sewer manhole connection and piping are designed to transfer flows from SMWD, including replacement of MNWD's existing 12-inch gravity main in Los Alisos Blvd. between Second St. and the lift station with a larger sized pipe in a new parallel alignment (approximately 1,300 linear feet).
- Site improvements include, but not limited to, new perimeter retaining walls (south and east side of the site), replacement of fencing around the full perimeter of the site, repaving the entire site, as-needed drainage improvements, relandscaping of adjacent sloped areas, and relocation of existing utilities and equipment in conflict.
- Repurposing of the existing dry well and wet well for overflow.
- New electrical building (split-face block building with tile roof and fire-resistant materials) on top of the existing overflow basin with attached restroom and abandonment of the existing overflow basin.
- New wet well with three submersible pumps in lead, lag, and spare configuration.
- New backup stationary diesel-fueled generator sized to operate the lead and lag pumps.
- New emergency bypass pumping connection.
- New LED lighting to cover entire site.
- New MCC, VFDs, automatic transfer switch, electrical panels, PLCs, level control panels, including control logic and I/O integration as necessary to provide a complete and operable SCADA system.
- New HVAC system including ducts, louvers, fans, and AC units for new electrical building.



## San Lorenzo Sewer Lift Station

Santa Ana, CA

### Construction Cost

\$10,000,000

### Schedule

2014 - 2023

### Key Team Members

Tom Epperson, PE  
*Project Manager*

Mark Bush, PE  
*QA/QC*

Neha Gajjar, PE  
*Asst. Project Manager*

Mazen Kassar, PE  
*Electrical Engineer*

Eric Yuen, PE, SE  
*Electrical Engineer*

Leighton Consulting  
*Geotechnical  
Investigation*

### Reference

City of Santa Ana  
Armando Fernandez, PE  
714/647-3316  
afernandez@santa-ana.org



Tetra Tech provided design engineering services for the preparation of plans, specifications and cost estimates to construct a new sewer lift station on



San Lorenzo Ave. within the City of Santa Ana. The new San Lorenzo Lift Station replaces an existing smaller submersible lift station located within Bristol St., a heavily traveled arterial. This project

included preliminary and final design including pump selection, hydraulic analysis, pipeline alignment and site and building layout studies. An Environmental Impact Report was prepared for the project and mitigation measures incorporated into the final design. The challenges on this project included deep excavation (approximately 35 feet), a tight site requiring vertical shoring, heavily traveled streets, adjacent residences and businesses and maintaining flow within the sewer system. The final design of the project included:

- A temporary bypass to maintain sewer flow during construction of the new lift station.
- Three 20 horsepower, 1,200 gpm variable frequency drive pumps, protected from clogging by in-line grinders.
- Cast-in-place concrete wet well and dry well.
- Above ground CMU building for electrical equipment and odor control.
- Gravity scrubber utilizing activated carbon scrubber for odor control.
- Mechanical piping including epoxy lined ductile iron piping, plug valves and a magnetic flow meter.
- Forced air ventilation in the wet well (exhaust and intake).
- HVAC design for the electrical control room.
- Connect an existing emergency diesel fueled generator to the new lift station.
- Electrical conduit installed by horizontal direction drilling.
- 600 linear feet of two 10-inch diameter parallel PVC sewer force main.
- 950 linear feet of 12 and 15-inch diameter PVC gravity sewer design.



## Regional Lift Station Force Main Replacement

Laguna Niguel, CA

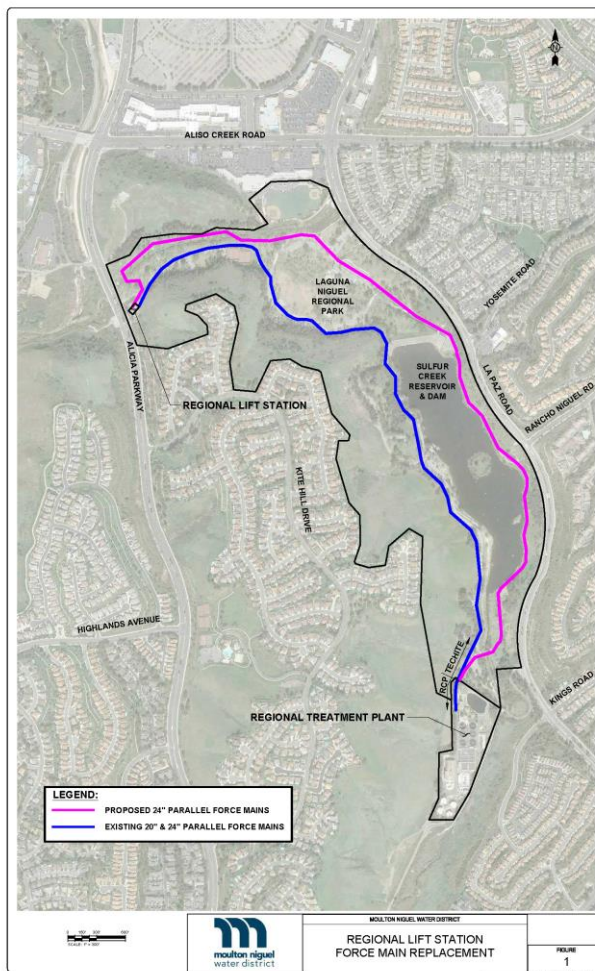
The Regional Lift Station and force mains are critical wastewater facilities that pump flow from the Moulton Niguel Water District (MNWD) sewer collection system to the South Orange County Wastewater Authority Regional Treatment Plant. The typical minimum daily peak flow-rate of the lift station is 5,800 gpm, and typical maximum peak daily flow-rate is 7,200 gpm. However, during periods of heavy rains, the lift station has historically discharged a maximum peak flow-rate of 15,500 gpm.

The lift station currently pumps flow into parallel 20-inch and 24-inch Techite pipe force mains. Originally designed to use only one force main at a

time for typical flows, the MNWD now typically operates both force mains simultaneously to reduce the internal pressures within the Techite pipes.

The existing force mains were originally constructed in 1980 and are located in service roads within Laguna Niguel Regional Park. Five parallel pipelines are located along this alignment within the park service roads: the 20-inch and 24-inch sewage force mains; two 4-inch sludge force mains; and an 8-inch gravity sewer line. The length of the existing force mains is approximately 7,325 feet (each), plus an additional 400 feet of reinforced concrete pipe force main located within the Regional Treatment Plant site. Due to the brittle nature of Techite pipe and the industry reputation of failure, the replacement of the existing force mains is necessary. After determining that rehabilitation of the pipelines in place was not feasible, the MNWD conducted a preliminary study of possible replacement alignment alternatives, which was prepared by Tetra Tech in 2014.

The selected replacement force main alignment is proposed within Laguna Niguel Regional Park and consists of dual 24-inch parallel force mains, each approximately 8,500 feet in length. The proposed force mains will cross Narco Creek and Sulphur Creek at five locations requiring approximately 1,100 feet of trenchless construction.



### Construction Cost

\$3,000,000

### Schedule

2017 - Ongoing

### Key Team Members

Tom Epperson, PE  
*Project Manager*

Neha Gajjar, PE  
*Asst. Project Manager*

Matt Vera, PE  
*Project Engineer*

Mazen Kassab, PE  
*Electrical Engineer*

Eric Yuen, PE, SE  
*Structural Engineer*

Leighton Consulting  
*Geotechnical Investigation*

Metz Survey  
*Design Survey*

### Reference

Moulton Niguel Water District  
Todd Dmytryshyn, PE  
949/425-3549  
tdmytryshyn@mnwd.com



*PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE*

## Aliso Creek Lift Station Improvements Final Design Project

# Signed Addendum



#### Board of Directors

Mark L. Monin  
*President*

Mike Gaskins  
*Vice President*

Kathryn Freshley  
*Director*

Kay Havens  
*Director*

Fred Adjarian  
*Director*

**General Manager**  
Dennis P. Cafferty

# El Toro Water District

*"A District of Distinction"*

Serving the Public – Respecting the Environment

## ADDENDUM No. 1

### TO REQUEST FOR PROPOSALS FOR THE ALISO CREEK LIFT STATION IMPROVEMENTS FINAL DESIGN

---

#### THE CONTRACT DOCUMENTS ARE HEREBY MODIFIED AS FOLLOWS:

##### **Proposer Clarifications**

Attached as Exhibit No. 1 is the Pre-proposal meeting sign-in sheet.

##### **Proposer Questions**

Question 1: What is the current capacity of the lift station?

The District performed discharge flow testing performed in December of 2022 and June and 2023. Results are as follows, from the 2023 Pump Field Testing Results From Carollo document in the RFP appendix:

- Pump 1 only @ 100% speed: 2,100-gpm
- Pump 2 only @ 100% speed: 2,300-gpm
- Pumps 1 and 2 together @ 100% speed: 3150-gpm

The District also performed influent flow monitoring in February 2024 resulting in a lift station peak influent flow rate of 3,400-gpm, as stated in the Aliso Creek Lift Station Alternatives Analysis Study Final Report.

Question 2: Will the District consider relocating infrastructure into the street?

The District is open to suggestions that reduce cost and improve operations of the future lift station.

Question 3: Will the lift station be in service during construction?

Yes, the lift station needs to remain in service to the greatest extent possible.

---

P.O. Box 4000 | Laguna Hills, CA 92654-4000 | Phone 949.837.7050 | Fax 949.837.7092

[www.etwd.com](http://www.etwd.com)

Question 4: Was there a reason why the existing wet well was not being used for emergency storage?

The existing wet well was not recommended in the Aliso Creek Lift Station Alternatives Study Final Report due to its capacity of only 6,000 gallons. However, the District will consider if the Consultant selected for final design has an alternative recommendation.

Question 5: Can you provide raw flow study data in excel format?

Yes, the results report and CSV files were uploaded to the Planet Bids Portal.

Question 6: What is the intended construction sequencing and temporary bypass installation?

Refer to Aliso Creek Lift Station Alternatives Study Final Report, “Lift Station Alternative Improvements Alternative 1 – Construct New Submersible Lift Station” for an initial proposed construction sequence. The Consultant selected for final design shall review and further refine final sequencing.

Question 7: Will the contractor need to provide temporary power during construction?

The District can provide a three-phase 480V circuit breaker with maximum 50 amps for construction.

Question 8: Will the final design include the odor control units?

Yes.

Question 9: Does the final design include installing grinders?

No, refer to Page 7 of the Aliso Creek Alternatives Analysis Study Final Report. However, the District will consider if the Consultant selected for final design has an alternative recommendation.

Question 10: Does the final design include the emergency pump?

The emergency diesel pump is shown in Figure 8 on Sheet 22 of the Aliso Creek Lift Station Alternatives Study Final Report. However, the District does not intend to use the emergency pump on a regular basis and may move to an alternative site in the future.

Question 11: Are there as-builts for the existing electrical equipment?

Yes, the files were uploaded to the Planet Bids Portal

**END OF ADDENDUM No. 1**

The contract documents require that this Addendum No. 1 be executed and submitted with the bid.

5/2/24

Date: \_\_\_\_\_

Hannah Ford

Digitally signed by Hannah Ford  
Reason: I am approving this document  
Date: 2024.05.02  
14:17:16-07'00'

\_\_\_\_\_  
Hannah T. Ford, P.E.  
Director of Engineering / District Engineer

**PROPOSER'S CERTIFICATION**

I acknowledge receipt of the foregoing Addendum No. 1 and accept all conditions contained herein.

Dated: 06/04/2024 \_\_\_\_\_

PROPOSER: Tetra Tech, Inc. \_\_\_\_\_

BY: Tom Epperson, PE \_\_\_\_\_  
Digitally signed by Tom Epperson,  
PE  
Date: 2024.05.30 09:00:13 -07'00'

**EL TORO WATER DISTRICT  
ALISO CREEK LIFT STATION IMPROVEMENT FINAL DESIGN  
Pre-Proposal Meeting  
April 17, 2024**

# SIGN-IN SHEET

[illegible]



PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE

## Aliso Creek Lift Station Improvements Final Design Project

# Proposed Fee



June 4, 2024

Rory Harnisch, PE  
El Toro Water District  
24251 Los Alisos Blvd  
Lake Forest, California 92630

**Reference: Fee Proposal to Provide Engineering Design Services for the  
Aliso Creek Lift Station Improvements Final Design**

Dear Mr. Harnisch,

For your consideration, attached is our Fee Proposal in response to El Toro Water District's (District) Request for Proposal (RFP) to provide engineering design services for the Aliso Creek Lift Station Improvements Final Design project. Pursuant to the RFP, we are providing this Fee Proposal in a separate email.

Our technical proposal, project understanding, scope of work, and schedule form the basis of our Fee Proposal. Attached is a detailed spreadsheet showing staff-hour breakdown consistent with the requirements of the RFP.

Our proposed total not-to-exceed labor and other direct cost for Tetra Tech and subconsultants is **\$520,000**. Also included herewith is our 2024/2025 Hourly Charge Rate and Expense Reimbursement Schedule.

Our proposed profit goal for the Final Design is 12%.

The District is counted among Tetra Tech's most valued clients, and we are excited about the opportunity to continue to grow our relationship by delivering a project that exceeds your expectations.

Thank you for the opportunity to submit our fee proposal, we look forward to your positive response. Should you have any questions or wish to discuss the information presented in our proposal, please feel free to contact me at 949/809-5156 or via email at [tom.epperson@tetrattech.com](mailto:tom.epperson@tetrattech.com).

Respectfully,

A handwritten signature in blue ink, appearing to read 'Tom Epperson', written over a blue horizontal line.

Tom Epperson, PE  
Vice President

Attachments

M:\Marketing\Proposals\FY 2024\ETWD\_Aliso Creek Lift Station Improvements

<div><div><div>Tt</div></div><div>Price Proposal</div></div>																	Price Summary / Totals					
																	Task Pricing Totals			520,000		
Aliso Creek Lift Station Improvements Final Design		360.00	360.00	310.00	180.00	150.00	135.00	125.00	135.00	260.00	165.00	135.00	148.00	310.00	165.00	135.00	125.00	Specify Add'l Fees on Setup		0		
																		Technology Use Fee				
		QA/QC	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Structural	Structural	Structural	Structural	Electrical	Electrical	Electrical	Electrical	Total Price		520,000	
Submitted to: El Toro Water District (Attn: Rory Harnisch, PE)		QA/QC Manager (Mark Bush)	Project Manager (Tom Epperson)	Assistant Project Manager (Neha Gajjar)	Lead Project Engineer (Matt Vera)	Lead Design Engineer (Michael Mojica)	Design Engineer (Patrick Kol)	Engineer/CADD (Miranda Leibig)	Sr. Project Administrator (Deana Escamilla)	Structural Manager (Eric Yuen)	Structural Engineer (Jose Quiroz)	Structural Design (Miguel Magpantay)	Structural CADD (Eric Hutchins)	Electrical Manager (Mazen Kassar)	Electrical Engineer (Doug Seaman)	Electrical Designer (James Roberts)	Electrical Designer (Johnson Le)	Pricing by Resource				
Contract Type: T&M																		Labor	Subs	ODCs	Task Pricing Totals	
Project Phases / Tasks		2,541	24	80	72	312	336	332	210	37	50	174	84	132	106	202	196	194	431,871	85,825	2,304	520,000
Task 1. Project Management and Meetings		102		18	30	48	6												25,320		280	25,600
Management (10 mths)		20			10	10													4,900			4,900
Monthly Status (10 mths)		30		8	10	6	6												7,960			7,960
Virtual Meetings (24)		24				24													4,320			4,320
In Person Meetings (5)		28		10	10	8													8,140		280	8,420
Task 2. Data Request and Site Visit		64		2	4	14	6	6		2	6	6			6	6	6		12,670		130	12,800
Data Request		16		2	4	8				2									3,670			3,670
Site Visit		48				6	6	6			6	6			6	6	6		9,000		130	9,130
Task 3. Comprehensive Geotechnical Soils Report		13			4	8				1									2,815	55,775	10	58,600
Geotechnical Report		7			2	4				1									1,475	25,300		26,775
Groundwater Pump Testing		6			2	4													1,340	30,475	10	31,825
Task 4. Plans and Specifications		2,282	24	50	34	228	312	318	202	30	38	162	84	132	94	190	190	194	375,126	30,050	1,524	406,700
A. Topographic Survey		9			2		2	4		1									1,595	3,830	75	5,500
Topographic Survey		9			2		2	4		1									1,595	3,830	75	5,500
B. Design Confirmation Memo		137	1	8		28	38	50		2		4			2	4			22,940		60	23,000
Alternatives (3)		66		2		12	18	24				4			2	4			10,760			10,760
Additional Ideas (3)		40		2		8	12	18											6,390			6,390
Memo		31	1	4		8	8	8		2									5,790		60	5,850
C. 30% Design		583	4	4	6	42	71	68	48	2	6	48	64	44	24	42	60	50	91,752		248	92,000
General Sheets		59				6	13	20	20										8,230			8,230
Civil Drawings		68				8	20	20	20										9,640			9,640
Structural Drawings		56										18		38					8,594			8,594
Mechanical Drawings		36				6	12	10	8										5,230			5,230
Electrical and Instrumentation		124													8	26	44	46	18,460			18,460
Specifications		19	1		4	4				2					4	4			4,490			4,490
Hydraulic Calculations		10	1	1		4	4												2,040			2,040
Calculations (civil/mech/structural/electrical)		153	1	2		8	16	12			4	28	60		8	6	8		24,850			24,850
Cost Estimate/Schedule/Sequence		24	1	1		4	4	4							2	4	4		4,400			4,400
Comment Log and Responses		34			2	2	2	2			2	2	4	6	2	2	4	4	5,818		248	6,066
D. 60% Design		668	7	10	6	65	89	82	72	5	10	42	8	40	24	70	66	72	107,205	26,220	275	133,700
General Sheets		16				3	5	4	4										2,330			2,330
Civil Drawings		184	2	2		28	54	50	48										27,330			27,330
Structural Drawings		66									2	30		34					10,502			10,502
Mechanical Drawings		80	2	2		14	22	20	20										12,460			12,460
Electrical and Instrumentation		190													14	52	52	72	28,940			28,940
Specifications		42	1	1	4	4				4	6	6			4	8	4		8,870			8,870
Odor Control/Pre-Purchase		33	1	2		8	4	4							2	6	6		6,080			6,080
Conceptual Shoring		7		2		4				1									1,575	26,220		27,795
Cost Estimate/Schedule/Sequence		20	1	1		2	2	2				2	4		2	2	2		3,740			3,740
Comment Log and Responses		30			2	2	2	2			2	4	4	6	2	2	2		5,378		275	5,653

<div><div>Tt</div><div>Price Proposal</div></div>																		Price Summary / Totals				
																		Task Pricing Totals			520,000	
Aliso Creek Lift Station Improvements Final Design		360.00	360.00	310.00	180.00	150.00	135.00	125.00	135.00	260.00	165.00	135.00	148.00	310.00	165.00	135.00	125.00	Specify Add'l Fees on Setup		0		
																		Technology Use Fee				
		QA/QC	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Civil/Mechanical	Structural	Structural	Structural	Structural	Electrical	Electrical	Electrical	Electrical	Total Price		520,000	
Submitted to: El Toro Water District (Attn: Rory Harnisch, PE)		QA/QC Manager (Mark Bush)	Project Manager (Tom Epperson)	Assistant Project Manager (Neha Gajjar)	Lead Project Engineer (Matt Vera)	Lead Design Engineer (Michael Mojica)	Design Engineer (Patrick Koi)	Engineer/CADD (Miranda Leibig)	Sr. Project Administrator (Deana Escamilla)	Structural Manager (Eric Yuen)	Structural Engineer (Jose Quiroz)	Structural Design (Miguel Magpantay)	Structural CADD (Eric Hutchins)	Electrical Manager (Mazen Kassar)	Electrical Engineer (Doug Seaman)	Electrical Designer (James Roberts)	Electrical Designer (Johnson Le)	Pricing by Resource				
																		Labor	Subs	ODCs	Task Pricing Totals	
Contract Type: T&M																						
Project Phases / Tasks		Total Labor Hours	24	80	72	312	336	332	210	37	50	174	84	132	106	202	196	194	431,871	85,825	2,304	520,000
E. 90% Design		667	12	18	10	63	70	74	68	10	16	56	4	38	38	66	56	68	113,874		326	114,200
General Sheets		14	1	2		1	2	4	4										2,600			2,600
Civil Drawings		189	7	6		30	48	50	48										30,030			30,030
Structural Drawings		88								10	46			32					14,926			14,926
Mechanical Drawings		74	4	4		16	16	18	16										12,590			12,590
Electrical and Instrumentation		186													24	50	44	68	30,130			30,130
Specifications		28		2	4	2				4	2	2			4	6	2		6,210			6,210
Pre-Purchasing Packages		29		3	2	4				4					4	6	6		6,000			6,000
Bypass Contractor		3		1		2													720			720
FEMA Funding Modifications		8			2	4				2									1,610			1,610
Cost Estimate/Schedule/Sequence		16				2	2				2	4			2	2	2		3,060			3,060
Comment Log and Responses		32			2	2	2	2			2	4	4	6	4	2	2		5,998		326	6,324
F. Final Design		298		20	10	44	54	48	22	14	12	18	8	10	12	14	8	4	53,700		900	54,600
Drawings		90		8		6	10	10	10		4	8	6	8	4	6	6	4	15,954			15,954
Specifications		6		2	2					2									1,610			1,610
Permit Coordination (City/Village/OCFCD)		74			4	16	24	24		6									11,770			11,770
Support CEQA		20			2	4	4	4	4	2									3,250			3,250
Cost Estimate/Schedule/Sequence		10				2	2				2	4							1,840			1,840
Comment Log and Responses		18			2	2	2	2					2	2	2	2	2		3,336		540	3,876
Task 5. Bid Support		80		10		14	12	8	8	4	6	6			6	6			15,940		360	16,300
Attend Pre-bid Meeting		6		2		4													1,440		80	1,520
Prepare 3 Addenda		48		8		8	8				6	6			6	6			10,920		50	10,970
Conformed Drawings and Specifications		26				2	4	8	8	4									3,580		230	3,810
Totals		2,541	24	80	72	312	336	332	210	37	50	174	84	132	106	202	196	194	431,871	85,825	2,304	520,000



**2024/2025**

**HOURLY CHARGE RATE AND EXPENSE REIMBURSEMENT SCHEDULE**

**Project Management**

Project Manager 1	\$225.00
Project Manager 2	\$260.00
Sr Project Manager	\$310.00
Program Manager	\$360.00
Principal in Charge	\$360.00

**Construction**

Construction Project Rep 1	\$80.00
Construction Project Rep 2	\$87.00
Sr Constr Project Rep 1	\$103.00
Sr Constr Project Rep 2	\$118.00
Construction Manager 1	\$168.00
Construction Manager 2	\$190.00
Construction Director	\$238.00

**Engineers**

Engineering Technician	\$90.00
Engineer 1	\$125.00
Engineer 2	\$135.00
Engineer 3	\$150.00
Project Engineer 1	\$165.00
Project Engineer 2	\$180.00
Sr Engineer 1	\$185.00
Sr Engineer 2	\$195.00
Sr Engineer 3	\$225.00
Principal Engineer	\$305.00

**General & Administrative**

Project Assistant 1	\$68.00
Project Assistant 2	\$77.00
Project Administrator	\$97.00
Sr Project Administrator	\$135.00
Sr Graphic Artist	\$154.00
Technical Writer 1	\$100.00
Technical Writer 2	\$126.00
Sr Technical Writer	\$158.00

**Planners**

Planner 1	\$106.00
Planner 2	\$118.00
Sr Planner 1	\$128.00
Sr Planner 2	\$154.00
Sr Planner 3	\$178.00

**Information Technology**

Systems Analyst / Programmer 1	\$78.00
Systems Analyst / Programmer 2	\$118.00
Sr Sys Analyst / Programmer 1	\$132.00
Sr Systems Analyst / Programmer 2	\$200.00

**Designers & Technicians**

CAD Technician 1	\$66.00
CAD Technician 2	\$77.00
CAD Technician 3	\$92.00
CAD Designer	\$102.00
Sr CAD Designer 1	\$128.00
Sr CAD Designer 2	\$148.00
CAD Director	\$153.00
Survey Tech 1	\$51.00

**Project Accounting**

Project Analyst 1	\$92.00
Project Analyst 2	\$118.00
Sr Project Analyst	\$158.00

**Reimbursable In-House Costs**

Photo Copies (B&W 8.5"x11")
Photo Copies (B&W 11"x17")
Color Copies (up to 8.5"x11")
Color Copies (to 11"x17")
Compact Discs
Large format copies

**Health & Safety**

H&S Administrator	\$97.00
Sr H&S Administrator	\$118.00
H&S Manager	\$148.00

Mileage-Company Vehicle
Mileage-POV*

\*current GSA POV mileage rate subject to change

All other direct costs, such as production, special photography, postage, delivery services, overnight mail, printing and any other services performed by subconsultant will be billed at cost plus 15%.

NOTE: Rates subject to change annually.



PROPOSAL TO PROVIDE ENGINEERING DESIGN SERVICES FOR THE

# Aliso Creek Lift Station Improvements Final Design Project



**TETRA TECH**



## STAFF REPORT

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**To:** Board of Directors **Meeting Date:** June 24, 2024

**From:** Rory Harnisch, Senior Engineer  
Mike Miazga, IT Manager

**Subject:** New Warehouse Project Security System

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### INTRODUCTION / BACKGROUND

With the New Warehouse construction nearing completion, District staff have evaluated proposals for installing a security system by a third-party vendor for fire alarm, intrusion detection, access control and a security camera. The New Warehouse design includes electrical connections to integrate with a third-party security system vendor. In March 2024, staff solicited proposals from two security companies, Convergent Inc. (Convergent) and Johnson Controls Inc. (JCI). The District recently hired Convergent to install security services at the R-6 Reservoir and Main Office. The District currently uses JCI's services at all other properties.

### PROPOSAL EVALUATION

The District received and evaluated both proposals considering both initial install and annual costs. Costs are broken down by security system sub-type: fire alarm, access control, and intrusion detection. In addition, Table 1 summarizes the installation and annual costs for JCI and Convergent.

**Table 1 – New Warehouse Project Security System Costs**

Security Sub-type	Convergent	JCI
Access Control	\$15,846.37	\$15,133.53
Intrusion Detection	\$15,045.91	\$15,396.20
Fire Alarm	\$22,246.89	\$20,079.96
Subtotal Cost	\$53,139.17	\$50,609.69
Difference		\$2,529.48
Annual Cost	\$4,286.96	\$5,086.73
Difference		(\$912.16)

While Table 1 shows a higher initial cost using Convergent, the District will recover this difference by the third year due to their lower annual costs. Over the course of ten years,

the Convergent solution will save the District over \$6,500. In addition, the Board of Directors suggested adding a camera to the site for added security at the May 2024 Engineering Committee Meeting. Table 2 summarizes the installation and annual cost for the camera by Convergent as an option. Table 3 summarizes the total Convergent costs of Tables 1 and 2.

**Table 2 – New Warehouse Project Convergent Camera System Costs**

<b>Cost Type</b>	<b>Value</b>
<b>Installation Cost</b>	<b>\$8,373.13</b>
<b>Annual Cost<sup>1</sup></b>	<b>\$1,486.38</b>

<sup>1</sup>The annual cost is an average over a 5-year period.

**Table 3 – New Warehouse Project Overall Convergent Costs**

<b>Cost Type</b>	<b>Value</b>
<b>Installation Costs</b>	
Fire, Access, and Intrusion	\$53,139.17
Camera	\$8,373.13
<b>Total Installation Cost</b>	<b>\$61,512.30</b>
<b>Annual Cost</b>	
Fire, Access, and Intrusion	\$4,286.96
Camera <sup>1</sup>	\$1,486.38
<b>Total Annual Cost</b>	<b>\$5,660.95</b>

<sup>1</sup>The annual cost is an average over a 5-year period.

District staff recommend Convergent for the quality of its technical proposal, responsiveness of its staff during proposal development, and enhanced customer service.

## **BUDGET ANALYSIS**

The District will fund the costs for the security system from the revenue bond. In addition to the cost from Convergent, the security systems require conduit at each roll up door, ceiling mounted and exterior junction boxes in several locations for devices, and conduit at each panel type to facilitate the security system installation. Staff is finalizing a change order, in the amount of \$16,006.80, to the Warehouse contractor, Dumarc Inc (Dumarc) to include this additional scope. This additional cost includes scope for the Fire, Access, and Intrusion systems and the Camera system.

**Table 4 – New Warehouse Project Overall Security System Costs**

<b>Cost Type</b>	<b>Company</b>	<b>Value</b>
<b>Installation Costs</b>		
Fire, Access, and Intrusion	Convergint	\$53,139.17
Camera	Convergint	\$8,373.13
Additional Scope <sup>2</sup>	Dumarc	\$16,006.80
<b>Total Installation Cost</b>		<b>\$77,519.10</b>
<b>Annual Cost</b>		
Fire, Access, and Intrusion		\$4,286.96
Camera <sup>1</sup>		\$1,486.38
<b>Total Annual Cost</b>		<b>\$5,660.95</b>

<sup>1</sup>The annual cost is an average over a 5-year period.

<sup>2</sup>The additional scope will be issued through a change order to Dumarc's existing contract to construction the Warehouse.

## **RECOMMENDATION**

### **Recommended Action:**

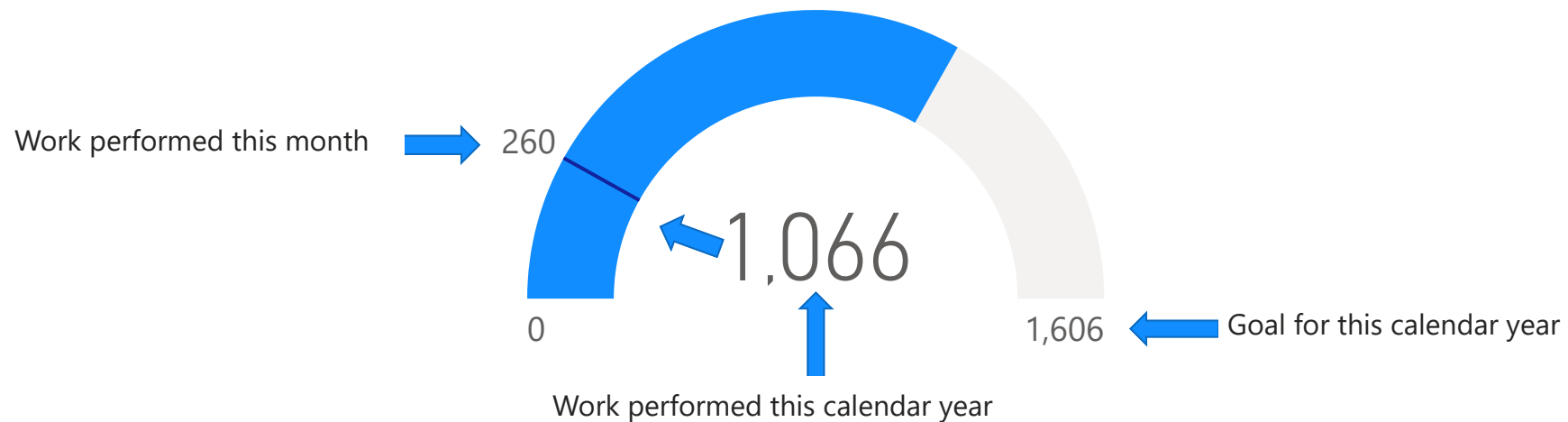
Staff recommends that the Board of Directors authorize the District's General Manager to issue a contract to Convergint in the amount of \$61,512.30 for the installation of an access control, fire alarm, intrusion detection, and camera system at the New Warehouse. Staff further recommends that the Board authorize the General Manager to fund the project costs from the District's Capital Reserves in accordance with the District's adopted Capital Reserve Policy



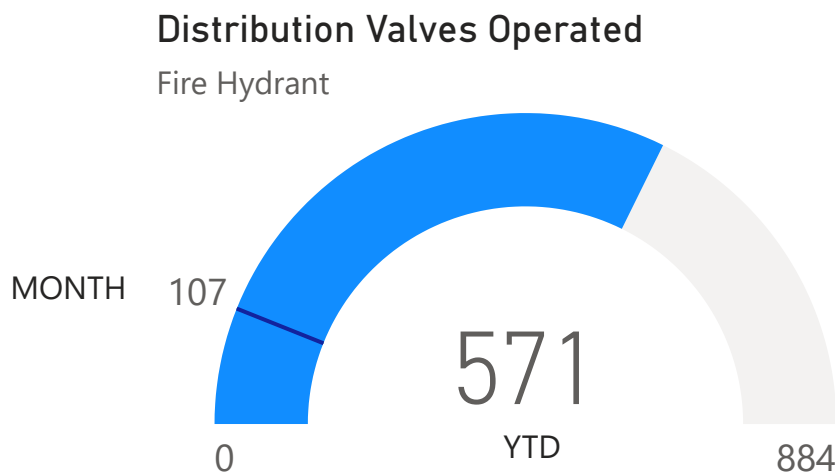
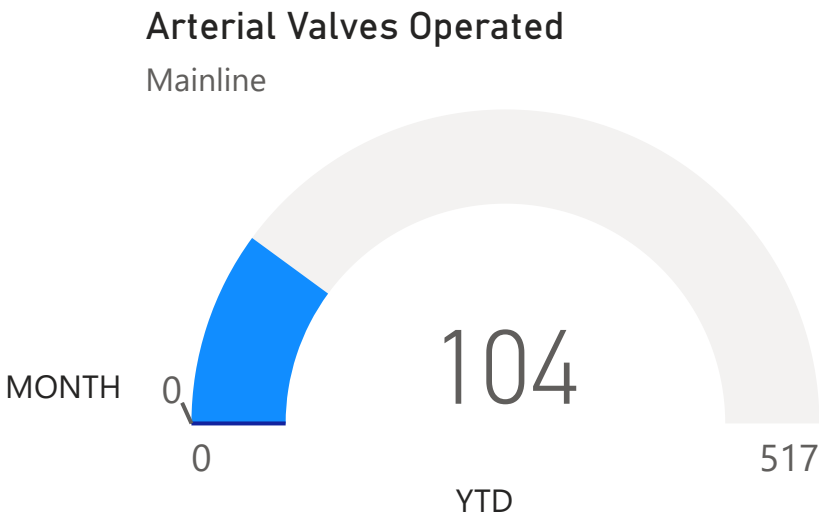
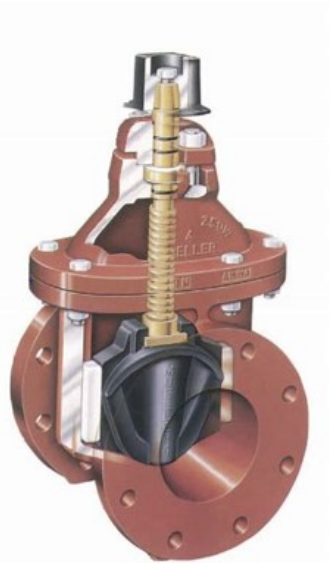
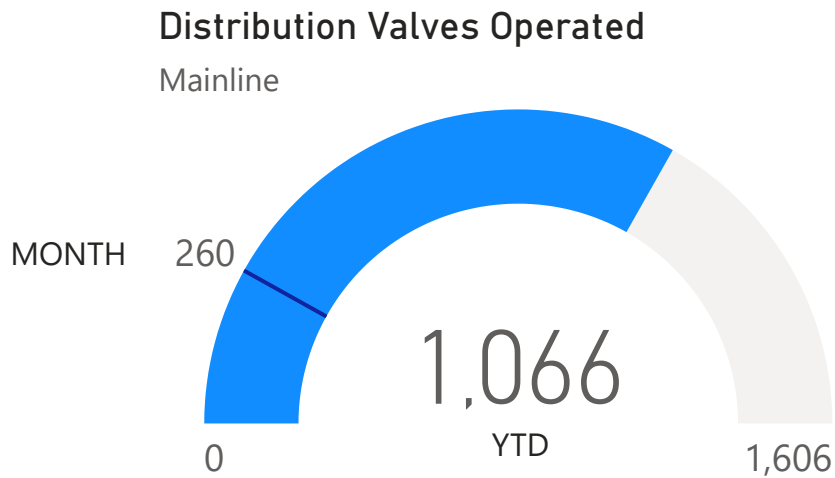
# Operations Report

May 2024

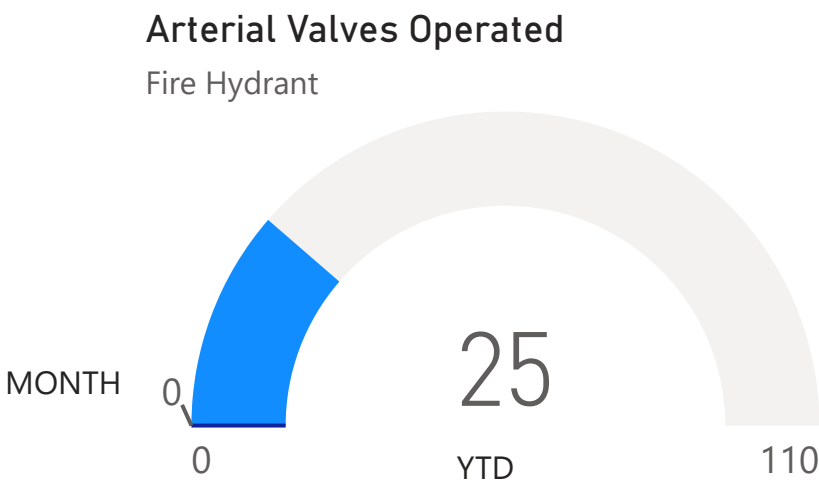
How to read the graphics in this report:



# Valves



Asset	Month	YTD
Potable Valves Repaired	2	6
Potable Valves Replaced	2	6
Valve Cans Adjusted/Replaced	4	15
Valve Cans Cleaned	0	0
Total	8	27

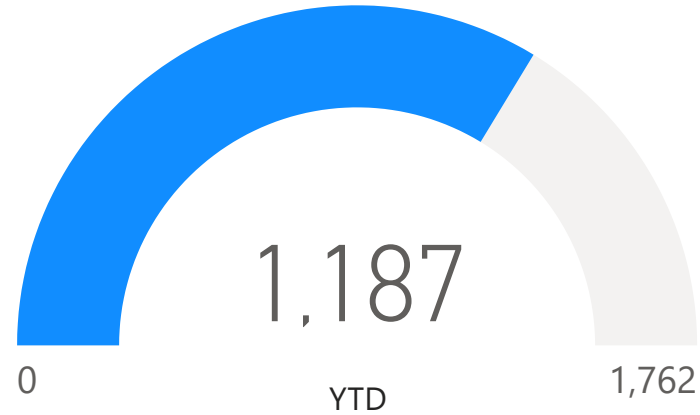


Note:

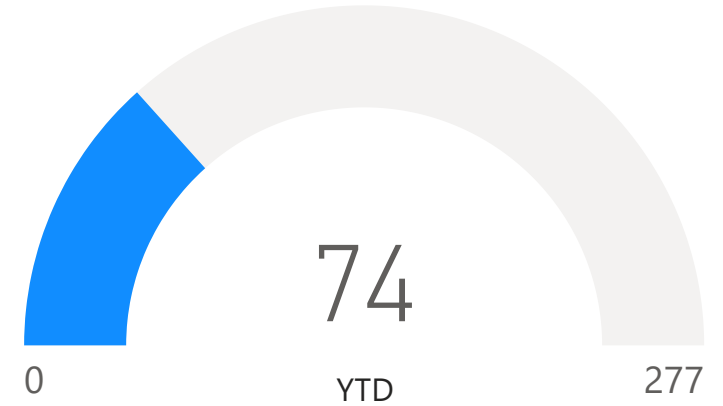
- 1. The distribution valve operation program strives to operate all distribution valves (mainline and fire) every two years. Goals shown on this page represent that for the calendar year (i.e., total number of distribution valves divided by two).
- 2. The arterial valve operation program strives to operate all arterial valves (mainline and fire) every year.

# Cross Connection Program

Backflow Assemblies Tested

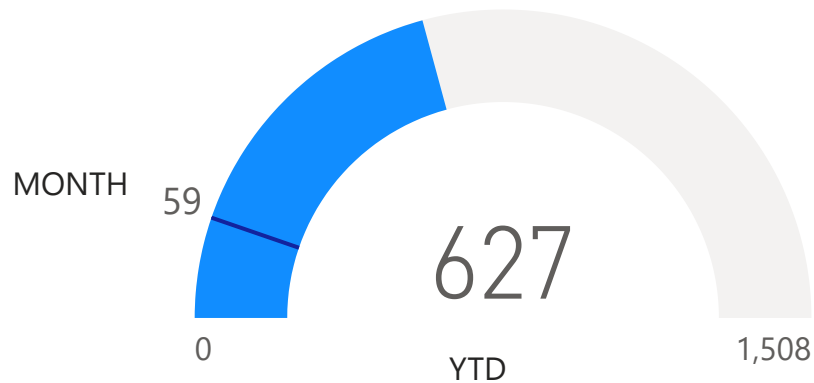


Recycled Water Inspections



# Other Facility Maintenance

Generator Inspections



Underground Service Alerts Marked

207  
Month

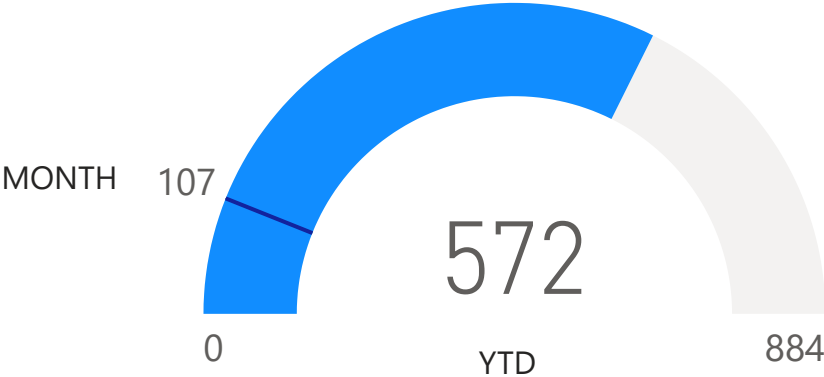
Underground Service Alerts Marked

1,016  
YTD

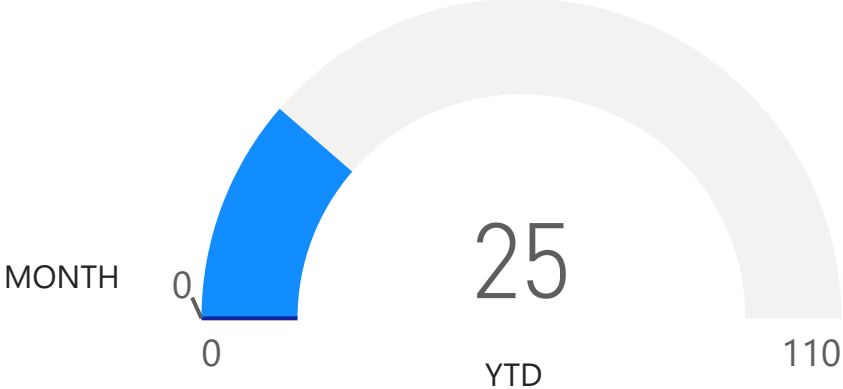
# Fire Hydrants



Distribution Hydrants Maintained



Arterial Hydrants Maintained



Distribution Hydrants Painted



Arterial Hydrants Painted



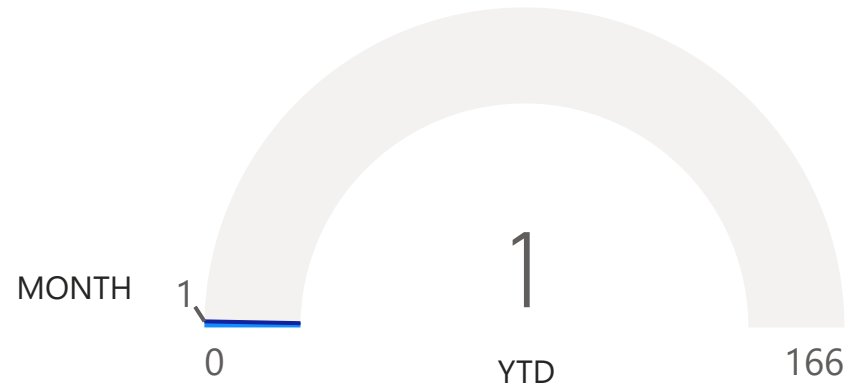
Asset	Month	YTD
Hydrants Repaired	2	8
Hydrants Replaced	0	9
<b>Total</b>	<b>2</b>	<b>17</b>

Note:

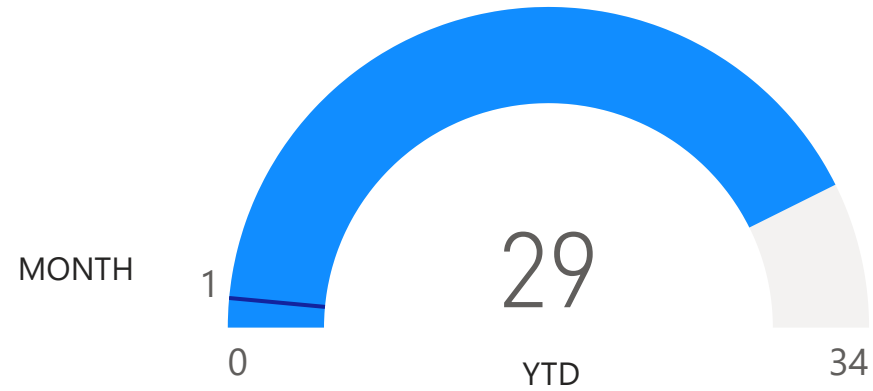
- 1. The hydrant program strives to maintain all distribution hydrants every two years and arterial hydrants every year. Goals shown on this page represent that for the calendar year (i.e., total number of distribution hydrants divided by two).
- 2. The hydrant program strives to paint all hydrants every five years. Goals shown on this page represent that for the calendar year (i.e., total number of hydrants divided by five).

# Water Appurtenances

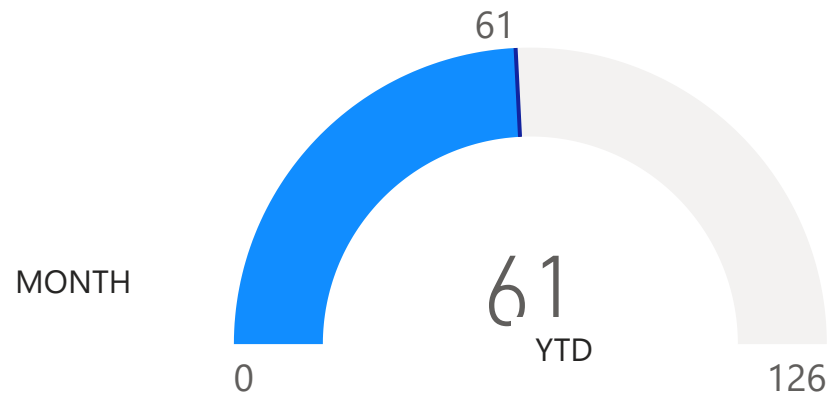
Air Vacs Maintained



PRVs Maintained



Blow Offs Flushed



# Water Distribution System

Leak Detection Survey



**Asset**

**Month YTD**

Main Line Repairs	0	1
Service Line Repairs	0	4
Service Line Replacement	3	13
Water Pump Motor Services	1	6
Water Pump Services	1	2
Water Reservoir and Pump Station Inspections	104	525



System Flushing

gallons

29K

Month



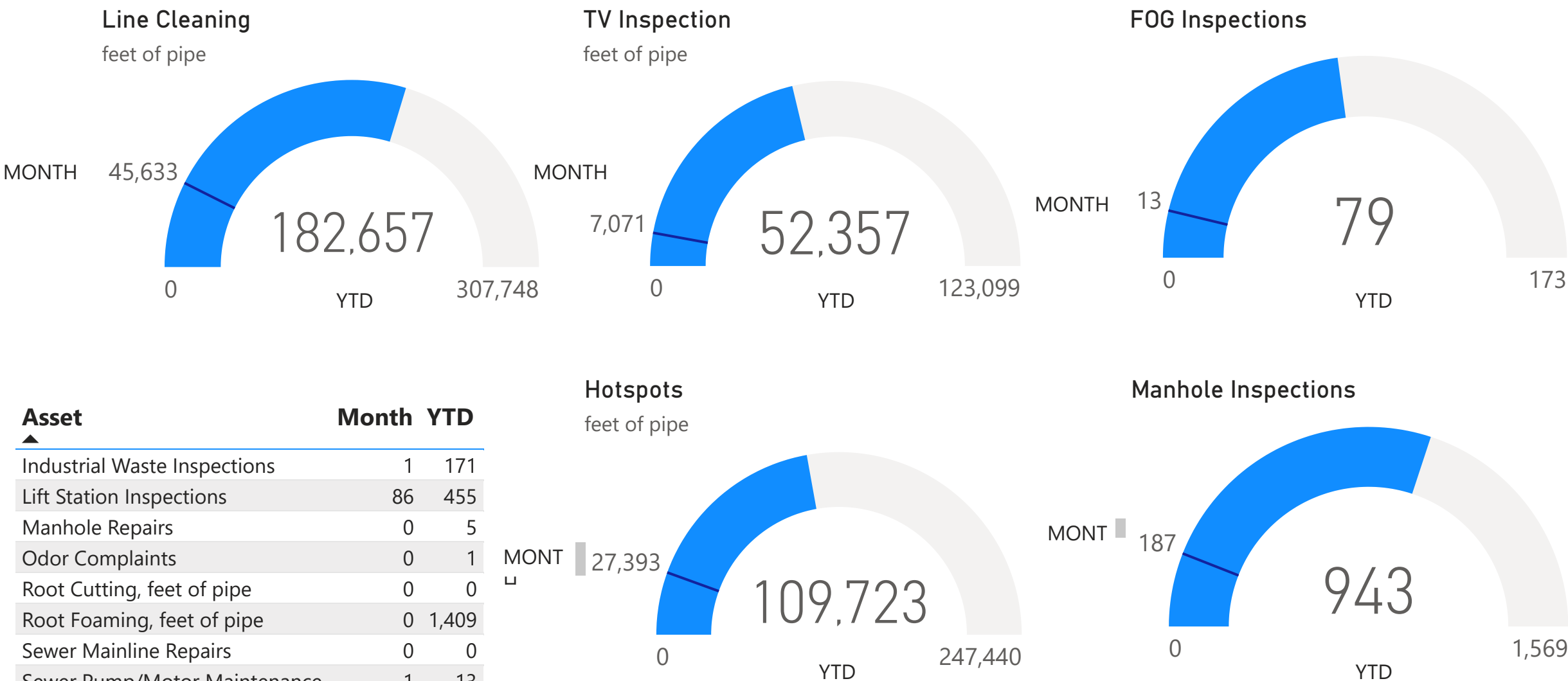
System Flushing

gallons

440K

YTD

# Collection System



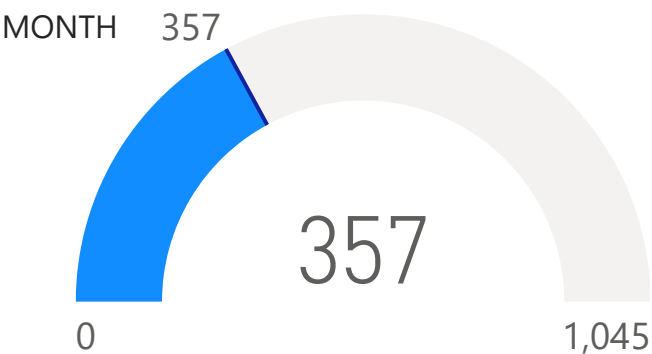
Note:

1. The line cleaning objective is a two year cycle to clean the entire system. The current cycle began on 7/1/2022.
2. The TV inspection objective is a five year cycle to inspect the entire system. The current cycle began on 1/25/2021.

# Lead and Copper Rule Revisions (LCRR) Compliance

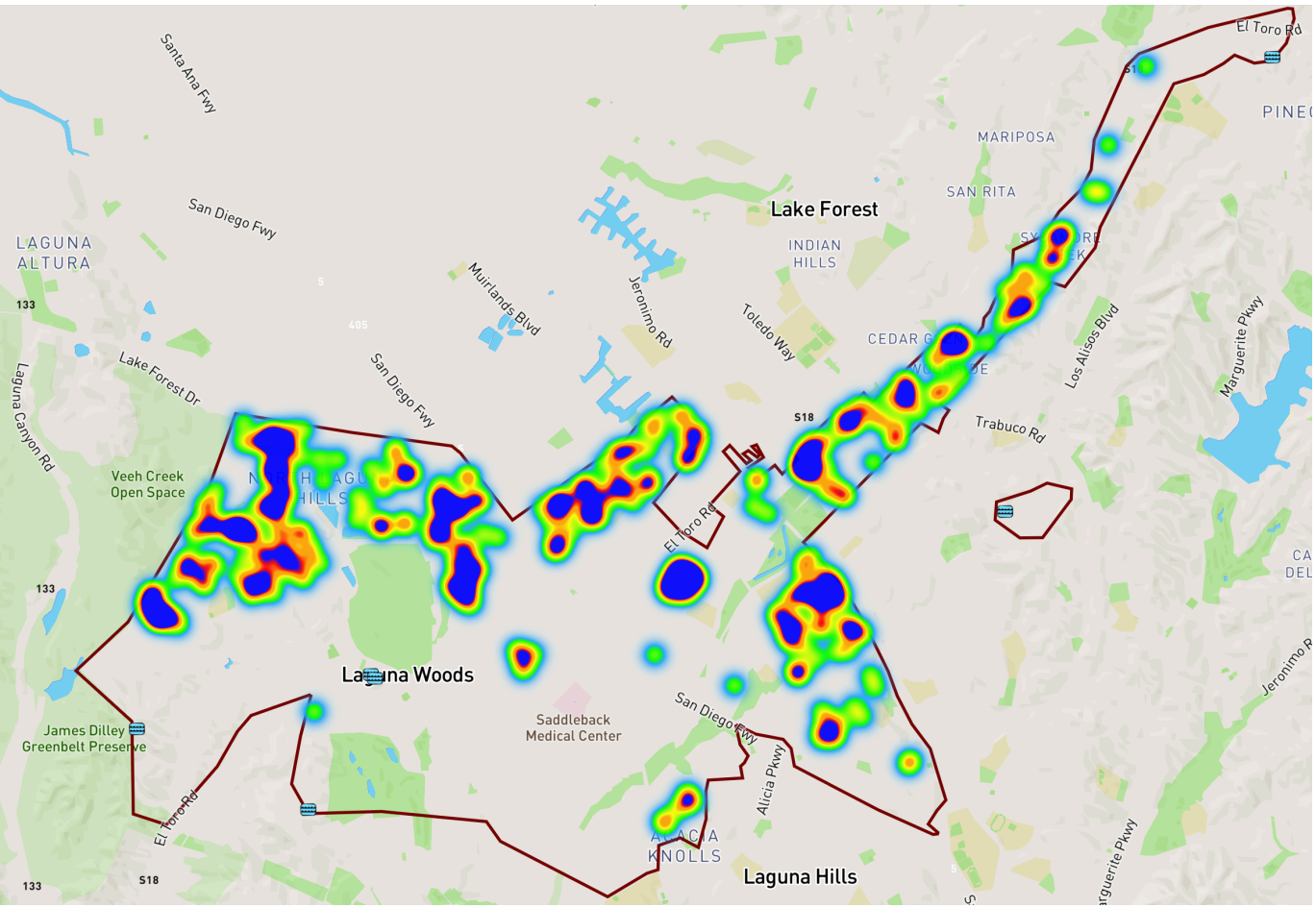
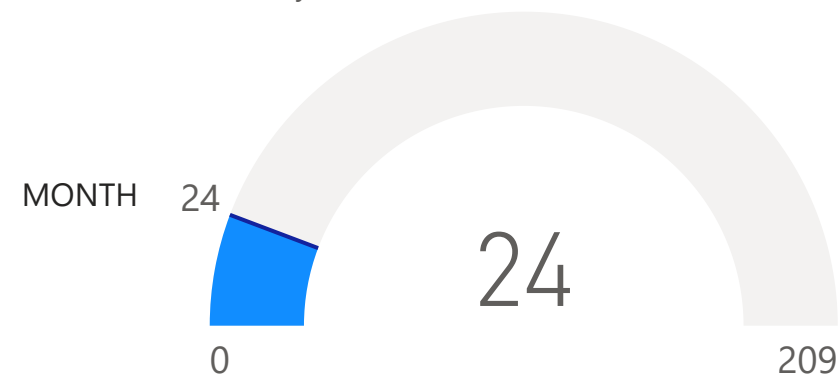
Field Surveys Completed

Primary Verification Site



Field Surveys Completed

Secondary Verification Site



**EL TORO WATER DISTRICT  
UNAUTHORIZED DISCHARGE SUMMARY**

DATE	PUBLIC / PRIVATE	SPILL TYPE	LOCATION	REASON	IMMEDIATE CORRECTIVE MEASURES	POST-INCIDENT PREVENTIVE MEASURES	RWQCB	DISCHARGED TO	SPILL VOLUME (PUBLIC) Gallons		SPILL VOLUME (PRIVATE) Gallons		REGULATORY NOTIFICATION AND RESPONSE
									CONTAINED	SPILLED	CONTAINED	SPILLED	
January	No Spill												
February	No Spill												
March	No Spill												
April	No Spill												
May	No Spill												
LEGEND									0	0	0	0	
S.D.C = San Diego Creek		RES. = Residential		R.S. = Rocks									
S.D. = Storm Drain		C. = Commercial		C.W.D. = Calcium Water Deposits									
A.C. = Aliso Creek		S.B. = Siphon		B.P. = Broken Pipe									
G.B. = Grease Blockage		P.F. = Power Failure		U.W. = Untreated Water									
S. = Sticks		P. = Paper		R. = Roots									

**EL TORO WATER DISTRICT  
MONTHLY POTABLE WATER QUALITY REPORT**

The quality and safety of drinking water in the U.S. is regulated by the federal government through the U.S. Environmental Protection agency (USEPA). In California, those standards are enforced by the California Department of Public Health (CDPH). Water Quality parameters must meet both primary and secondary water quality standards as established by the CDPH.

**PRIMARY STANDARDS** - are intended to protect public health against substances in the water that may be harmful to humans if consumed for long periods of time.

**SECONDARY STANDARDS** - are to ensure esthetic qualities of water such as taste, odor or clarity. Rather than its healthfulness, these standards govern substances that may influence consumer acceptance of water.

Given that 100% of ETWD's potable water resource is fully treated and delivered by Metropolitan Water District of southern California (MWDSC) through an enclosed and protected conveyance system, the majority of the State and federal primary and secondary source water quality monitoring requirements are performed by MWDSC. The District's physical responsibility for water quality monitoring is associated with the distribution system. To monitor the distribution system water quality the District utilizes both in house and outside lab services. Routine distribution analysis conforming to CDPH requirements is conducted for the following constituents:

- 1) **Microbiological** - The number of microbiological samples and the frequency of analysis during the month is based on the population and/or service connections served. Utilizing a population of 50,000, the CDPH requires that 20 "representative" samples be collected and analyzed for coliform bacteria. The objective is to maintain water quality that is absent of coliform bacteria which is a general indicator for the existence of fecal coliform.
- 2) **Chlorine Residual** - The chlorine residual monitoring is performed in conjunction with the microbiological monitoring. The CDPH requirement for treated surface water mandates that the distribution system maintain a "detectable" residual. The number of and frequency of sampling is determined utilizing the same formula applied to microbiological requirements. At a minimum, we are obligated to collect and analyze for chlorine residual each time we collect the representative microbiological samples. Per EPA Disinfectants & Disinfection Byproduct Rule (D/DBP), which was effective January 2002, requires quarterly reporting for all sampling.
- 3) **TTHM & HAA5 Stage 2 DBPR Compliance** The U.S. Environmental Protection Agency (EPA) published the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR) on January 4, 2006. The Stage 2 DBPR builds on existing regulations by requiring water systems to meet disinfection byproduct (DBP)\* maximum contaminant levels (MCLs) at each monitoring site in the distribution system to better protect public health. The Stage 2 DBP rule is intended to reduce potential cancer and reproductive and developmental health risks from disinfection byproducts (DBPs) in drinking water, which form when disinfectants are used to control microbial pathogens. This final rule strengthens public health protection for customers of systems that deliver disinfected water by requiring such systems to meet maximum contaminant levels as an average at each compliance monitoring location (instead of as a system-wide average as in previous rules) for two groups of DBPs, trihalomethanes (TTHM) and five haloacetic acids (HAA5). The rule targets systems with the greatest risk and builds incrementally on existing rules. This regulation will reduce DBP exposure and related potential health risks and provide more equitable public health protection. The Stage 2 DBPR is being released simultaneously with the Long Term 2 Enhanced Surface Water Treatment Rule to address concerns about risk tradeoffs between pathogens and DBPs.

The mandatory requirement under the Stage 2 DBP rule, known as an Initial Distribution System Evaluation (IDSE) was completed by ETWD in 2008 and a Stage 2 monitoring plan has been approved by CDPH. Full Stage 2 compliance begins in 2012. The IDSE identified the locations with high disinfection byproduct concentrations. These locations will then be used by the District as the 8 sampling sites for Stage 2 DBP rule compliance monitoring. Compliance with the maximum contaminant levels for two groups of disinfection byproducts (TTHM and HAA5) will be calculated for each monitoring location in the distribution system. This approach, referred to as the locational running annual average (LRAA), differs from current requirements, which determine compliance by calculating the running annual average of samples from all monitoring locations across the system. The Stage 2 DBP rule also requires each system to determine if they have exceeded an operational evaluation level, which is identified using their compliance monitoring results. The operational evaluation level provides an early warning of possible future MCL violations, which allows the system to take proactive steps to remain in compliance. A system that exceeds an operational evaluation level is required to review their operational practices and submit a report to the state that identifies actions that may be taken to mitigate future high DBP levels, particularly those that may jeopardize their compliance with the DBP MCLs.

- 4) **Physical Quality** - Physical Quality analysis is associated with the esthetic qualities of the finished water. Primarily, we are performing analysis for taste, odor and Turbidity (Clarity). In accordance with CDPH requirements, the District collects a minimum of 15 samples per month.
- 5) **Nitrites** - Although the chloramine disinfection process has been effective in controlling TTHM levels, it requires increased monitoring and adjustment as a result of its susceptibility to the Nitrification process. Nitrification is a biological process caused by naturally occurring ammonia oxidizing bacteria. Nitrification in chloraminated drinking water can have various adverse impacts on water quality, the most serious of which is the loss of total chlorine residual which is required by the CDPH and the subsequent potential to increase bacteria-logical activity within the finished or treated water system. MWD has developed an effective nitrification monitoring and prevention program which ETWD staff have adopted and incorporated into the District's daily water quality monitoring and action plan. The number and frequency of this type of monitoring is not currently regulated by CDPH. Staff monitor the level of nitrites in source water, reservoirs and the distribution system daily and weekly in conjunction with the microbiological and chlorine sampling program. A nitrite level of between 0.015 and 0.030 would signal an alert. > 0.030 would require action such as the addition of chlorine to produce a chloramine residual.

EL TORO WATER DISTRICT MONTHLY POTABLE WATER QUALITY ANALYSIS					
MONTH:		April		YEAR : 2024	
CONSTITUENT ANALYSIS		INSIDE LAB		OUTSIDE LAB	
	MCL	NO.	RESULTS	NO.	RESULTS
1 Microbiological	Pres/Absence	101	Absence		Average
2 Chlorine (ppm) In Field	Detectable Resid	231	Average = 1.43 ppm		
3 TTHM (ppb) (Stage 2)	80 ppb				
3 HAA5 (ppb) (Stage 2)	60 ppb				
4 Physical Quality:			RANGE		
Turbidity (ppm)	5 NTU	20	0.02 to 0.07 Res.		
Odor	3 Units	20	ND<1		
Color	15 Units	20	ND<5		
Temperature	No standard	20	64°F To 73°F		
5 Nitrite (Alert/Action level) ppm	0.002 to 0.179 ppm	99	0.001 to 0.251		

To ensure water quality compliance, the District annually performs approximately 8,750 water quality analytical evaluations of the samples collected from the distribution system.

**Abbreviations:**

<b>RES</b>	<b>Indicates that the nitrification was isolated to a reservoir and treated</b>
<b>ND</b>	<b>None detected</b>
<b>Pres/Absence</b>	<b>Presence (P) or Absence (A) related to a positive or negative bacteriological result</b>
<b>MCL</b>	<b>Maximum Contaminant Level</b>
<b>NTU</b>	<b>Nephelometric Turbidity Units, a measure of the suspended material in the water</b>
<b>ppm</b>	<b>Parts per million</b>
<b>ppb</b>	<b>Parts per billion</b>
<b>Total Coliform</b>	<b>No more than 5% of the monthly samples may be total coliform-positive</b>
<b>N/A</b>	<b>Not available</b>

2nd Quarter Compliance Reports		
<b><u>May Monthly Reports</u></b>		
<b>April's Surface Water Treatment (Bactis)</b>	Due May 10th Submitted May 6th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>April's Revised Total Coliform Monitoring (Bactis)</b>	Due May 10th Submitted May 10th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>April's Self-Monitoring Report for Recycled Water</b>	Due May 30th Submitted May 28th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>April's Self-Monitoring Report for Planned Discharges</b>	Due May 30th Submitted May 6th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b><u>June Monthly Reports</u></b>		
<b>Annual Self Monitoring Recycled Water Report</b>	Due by June 1st Submitted June 6th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>May's Revised Total Coliform Monitoring (Bactis)</b>	Due by June 10th Submitted June 4th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>May Surface Water Treatment (Bactis)</b>	Due by June 10th Submitted June 4th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>May's Self-Monitoring Report for Recycled Water</b>	Due by June 30th	Sent to Region 8, Dennis Cafferty and Scott Hopkins
<b>May's Self-Monitoring Report for Planned Discharges</b>	Due by June 30th Submitted June 4th	Sent to Region 8, Dennis Cafferty and Scott Hopkins

## Staff Training Log 2024



### First Quarter

Training Topic	Duration	Frequency	Modality	Participants
Safety Tailgate Meeting	30 Minutes	Weekly	In Person	Field Staff/Completed
Bloodborne Pathogens	1 Hour	Annual	Online	All Employees/Completed
Hearing	1 Hour	Annual	Online	All Employees/Completed
811 Dig Alert	2 Hours	As Needed	In Person Consultant	Field Staff/Need to Schedule
Spill Reporting	1 Hour	As Needed	In Person	Field Staff
Fit Testing	30 Mins	Annual	In Person	Field Staff/Completed
Class A	80 Hours	As Needed	In Person Consultant	2 Employees/Completed

**Quarterly Total Hrs- 12**

**Total Hrs Completed- 9**

**2 Employees Hrs- 89 (Class A)**

### Second Quarter

Training Topic	Duration	Frequency	Modality	Participants
Safety Tailgate Meeting	30 Mins	Weekly	In Person	Field Staff
Fire Prevention	1 Hour	Annual	Online	All Staff/Assigned
Fire Extinguisher	1 Hour	Annual	Online	All Staff/Assigned
Silica	1 Hour	Annual	In Person Consultant	Field Staff/Completed
Asbestos AC Pipe	3 Hours	Annual	In Person Consultant	Field Staff/Completed
Line Locator	4 Hours	Annual	In Person Consultant	Field Staff/Need to Schedule
Sodium Hypochlorite	1 Hour	Annual	In Person	Field Staff/Need to Schedule
CPR/AED/First Aide	4 Hours	Every 2 Years	In Person Consultant	All Staff/Completed

**Quarterly Total Hrs- 21.5**

**Total Hrs Completed- 15.5**

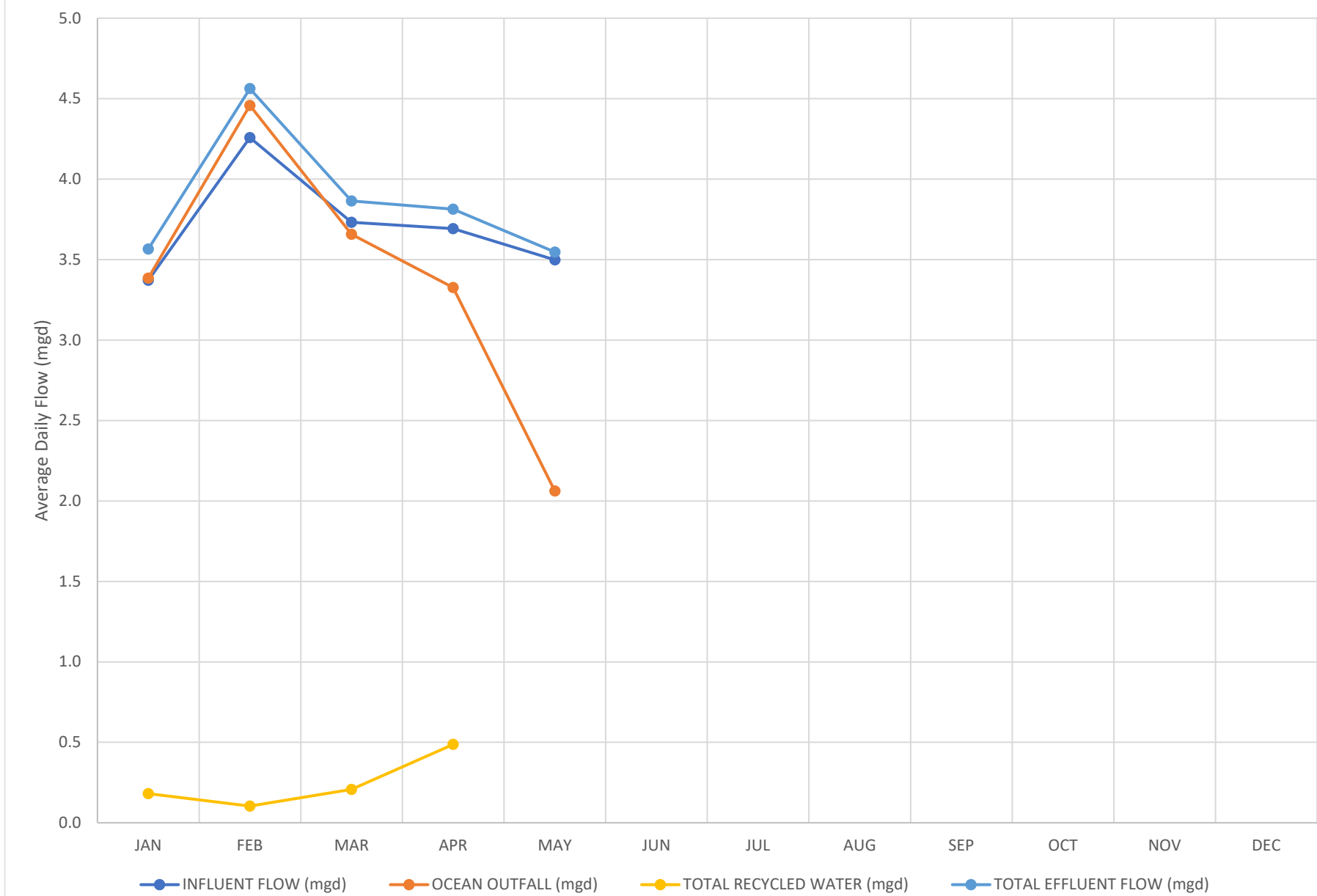


# EL TORO WATER DISTRICT

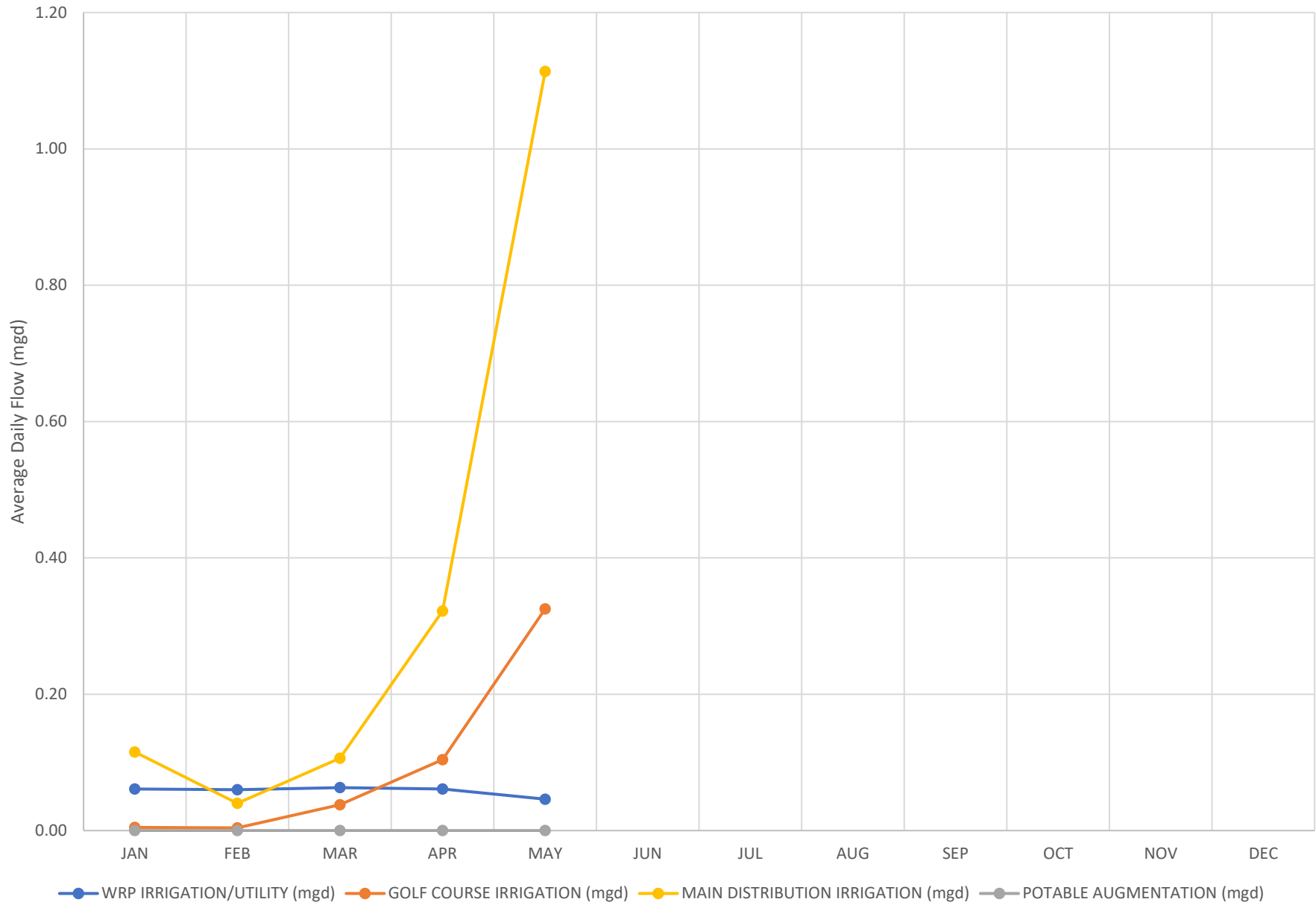
## OPERATIONAL DATA FROM WATER RECYCLING PLANT

2024	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
INF. FLOW (mgd)	3.371	4.258	3.731	3.692	3.499							
OCEAN OUTFALL (mgd)	3.384	4.458	3.657	3.327	2.062							
WRP IRRIGATION/UTILITY (mgd)	0.061	0.060	0.063	0.061	0.046							
GOLF COURSE IRRIGATION (mgd)	0.005	0.004	0.038	0.104	0.325							
MAIN DISTRIB. IRRIGATION (mgd)	0.115	0.040	0.106	0.322	1.114							
TOT. METERED EFF. (mgd)	3.565	4.562	3.865	3.814	3.547							
INF. S.S. (mg/L)	411	323	411	367	356							
EFF. S.S. (mg/L)	21	15	18	14	17							
PERCENT REMOVAL	95	95	96	96	95							
INF. B.O.D. (mg/L)	409	278	394	363	310							
EFF. B.O.D. (mg/L)	9	10	10	6	7							
PERCENT REMOVAL	98	96	97	98	98							
SLUDGE TO SOCWA (gals.)	432,101	372,379	432,101	449,188	456,108							
DRY SOLIDS (#s/day)	4,541	5,058	5436	5,371	5,289							
PERCENT TOTAL SOLIDS	3.9	4.3	4.2	4.2	4.3							
SLUDGE TO SOCWA (loads)	80	71	80	83	84							
TRUCKED BY ETWD (loads)	80	71	80	44	84							
TRUCKED BY OTHERS (loads)	0	0	0	39	0							
TOTAL RAIN FALL (inches)	2.77	9.79	6.720	1.77	0.13							

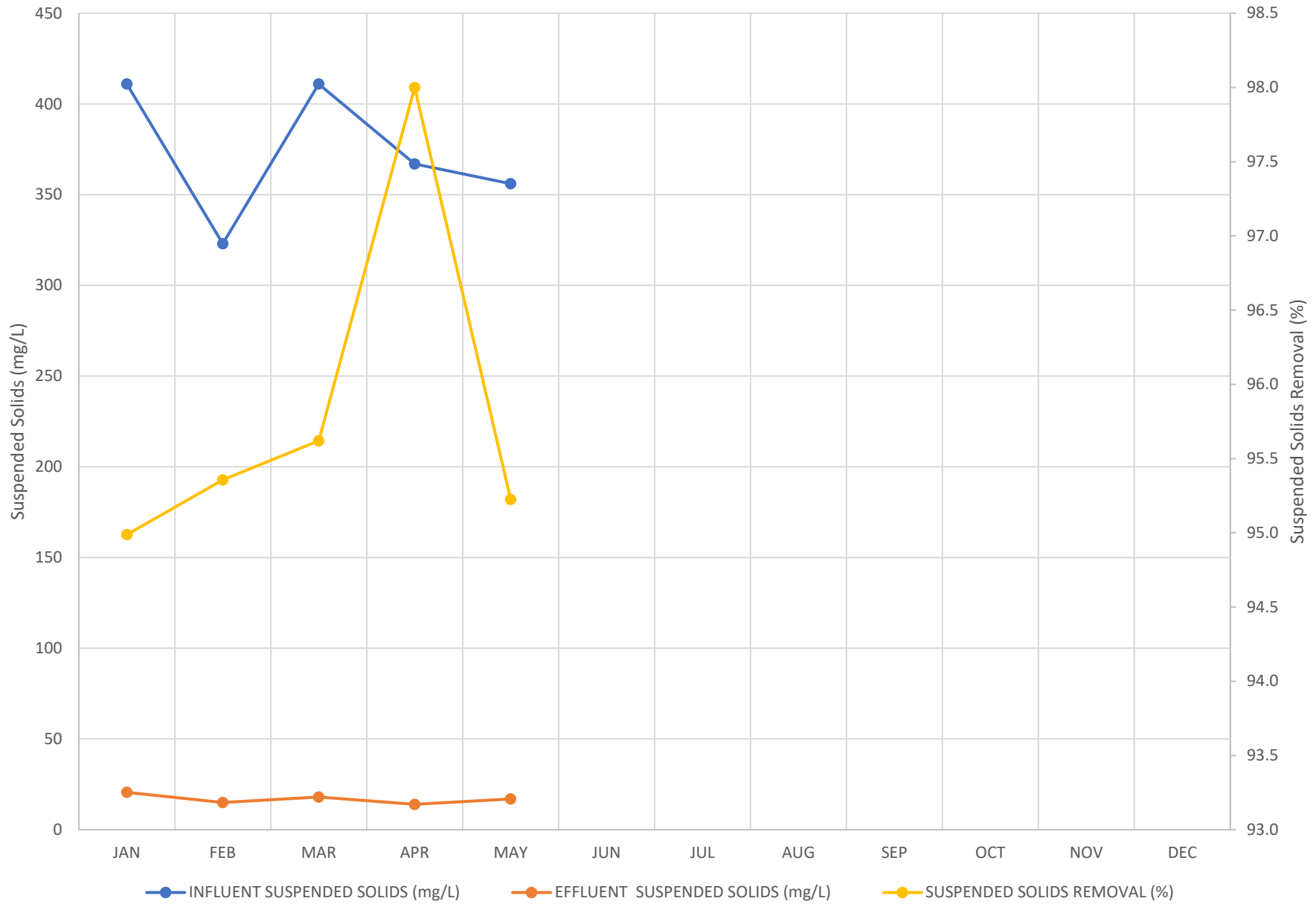
WRP Flow Trends



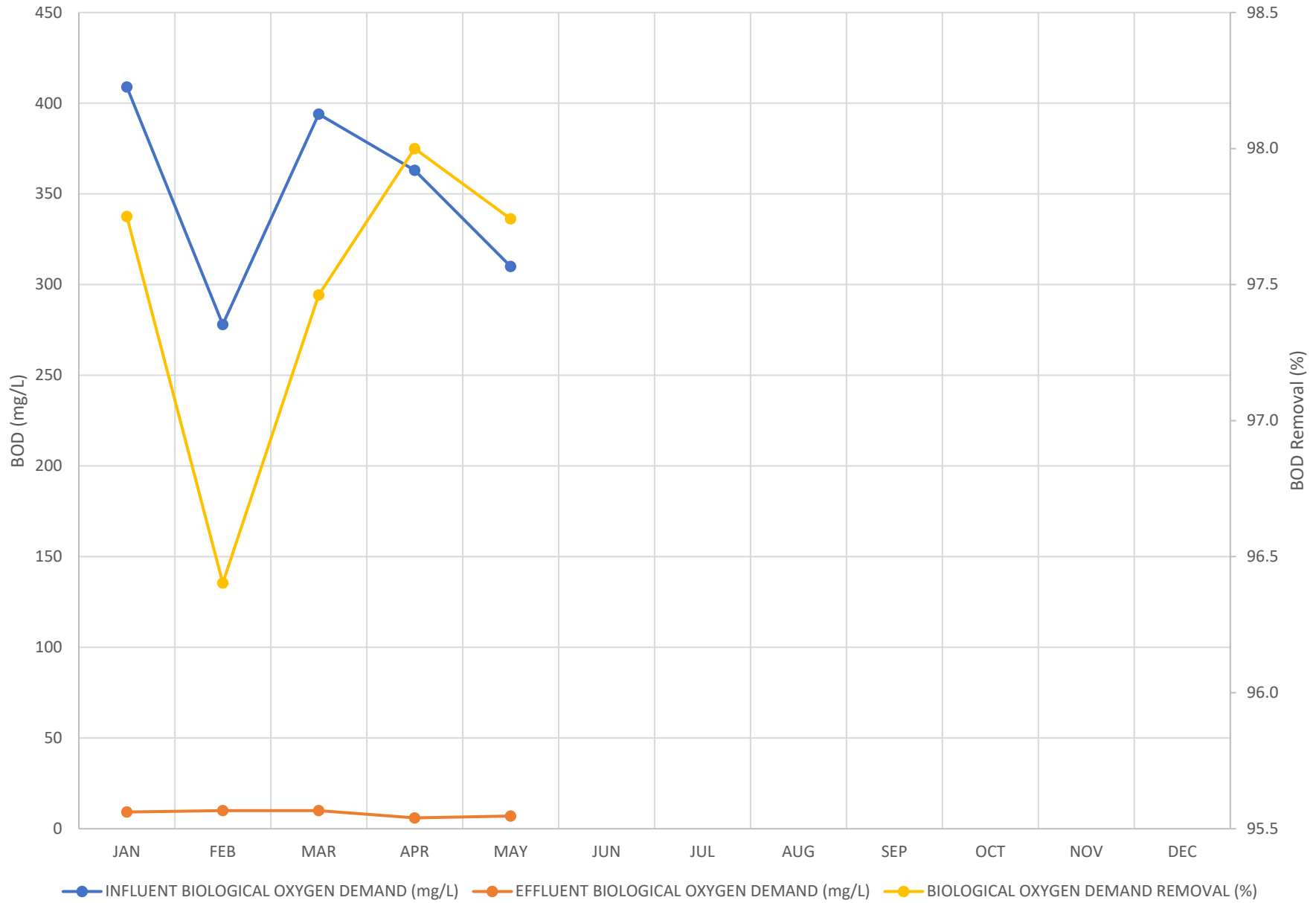
Recycled Water Flow Trends



### Suspended Solids Trends



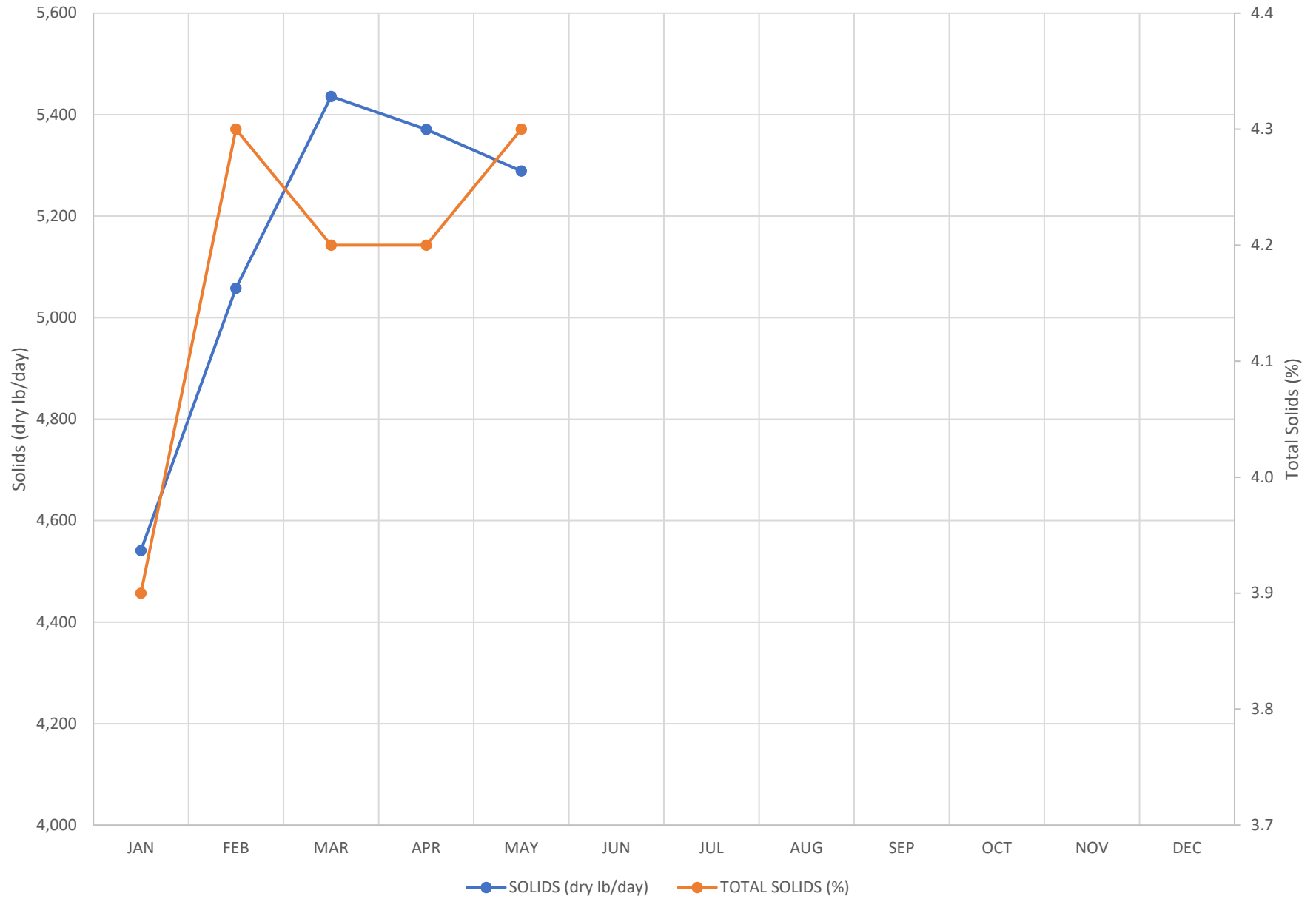
Biological Oxygen Demand (BOD) Trends



SOCWA Hauling Trends



Solids Trends



# WRP BATTERY STORAGE SYSTEM

## MONTHLY REPORT

May 2024

Year 4



YEAR	BILLING PERIOD	BILL SAVINGS	NET SAVINGS	YEAR TOTAL
1	08/13/20 - 09/14/20	\$ 1,727.18	\$ 137.18	
	09/14/20 - 10/14/20	\$ 1,142.91	\$ (447.09)	
	10/14/20 - 11/13/20	\$ 993.16	\$ (596.84)	
	11/13/20 - 12/15/21	\$ 1,814.40	\$ 224.40	
	12/15/20 - 01/14/21	\$ 252.77	\$ (1,337.23)	
	01/14/21 - 02/12/21	\$ 2,598.74	\$ 1,008.74	
	02/12/21 - 03/16/21	\$ 2,545.66	\$ 955.66	
	03/16/21 - 04/14/21	\$ 442.16	\$ (1,147.84)	
	04/14/21 - 05/13/21	\$ 4,658.68	\$ 3,068.68	
	05/13/21 - 06/14/21	\$ 5,828.63	\$ 4,238.63	
	06/14/21 - 07/14/21	\$ 7,090.27	\$ 5,500.27	
	07/14/21 - 08/12/21	\$ 11,656.05	\$ 10,066.05	
				\$ 21,670.61
2	08/12/21 - 09/13/21	\$ 3,251.24	\$ 1,661.24	
	09/13/21 - 10/13/22	\$ 4,854.74	\$ 3,264.74	
	10/13/21 - 11/12/21	\$ 1,835.55	\$ 245.55	
	11/12/21 - 12/14/21	\$ 1,953.12	\$ 363.12	
	12/14/21 - 01/13/22	\$ (624.65)	\$ (2,214.65)	
	01/13/22 - 02/11/22	\$ 40.42	\$ (1,549.58)	
	02/11/22 - 03/15/22	\$ 647.37	\$ (942.63)	
	03/15/22 - 04/13/22	\$ 2,556.61	\$ 966.61	
	04/13/22 - 05/13/22	\$ 92.84	\$ (1,497.16)	
	05/13/22 - 06/14/22	\$ 8,377.93	\$ 6,787.93	
	06/14/22 - 07/14/22	\$ 20,486.96	\$ 18,896.96	
	07/14/22 - 08/12/22	\$ 6,915.19	\$ 5,325.19	
				\$ 31,307.32
3	08/12/22 - 09/13/22	\$ 8,171.50	\$ 6,581.50	
	09/13/22 - 10/13/22	\$ 2,943.86	\$ 1,353.86	
	10/13/22 - 11/14/22	\$ 2,083.92	\$ 493.92	
	11/14/22 - 12/14/22	\$ 1,960.66	\$ 370.66	
	12/14/22 - 01/12/23	\$ (3,571.97)	\$ (5,161.97)	
	01/12/23 - 02/11/23	\$ 311.28	\$ (1,278.72)	
	02/11/23 - 03/14/23	\$ 2,755.08	\$ 1,165.08	
	03/14/23 - 04/12/23	\$ 1,994.90	\$ 404.90	
	04/12/23 - 05/11/23	\$ (558.88)	\$ (2,148.88)	
	05/11/23 - 06/12/23	\$ (487.47)	\$ (2,077.47)	
	06/12/23 - 07/13/23	\$ 21,318.66	\$ 19,728.66	
	07/13/23 - 08/11/23	\$ 3,262.26	\$ 1,672.26	
				\$ 21,103.80

# WRP BATTERY STORAGE SYSTEM

## MONTHLY REPORT

May 2024

Year 4

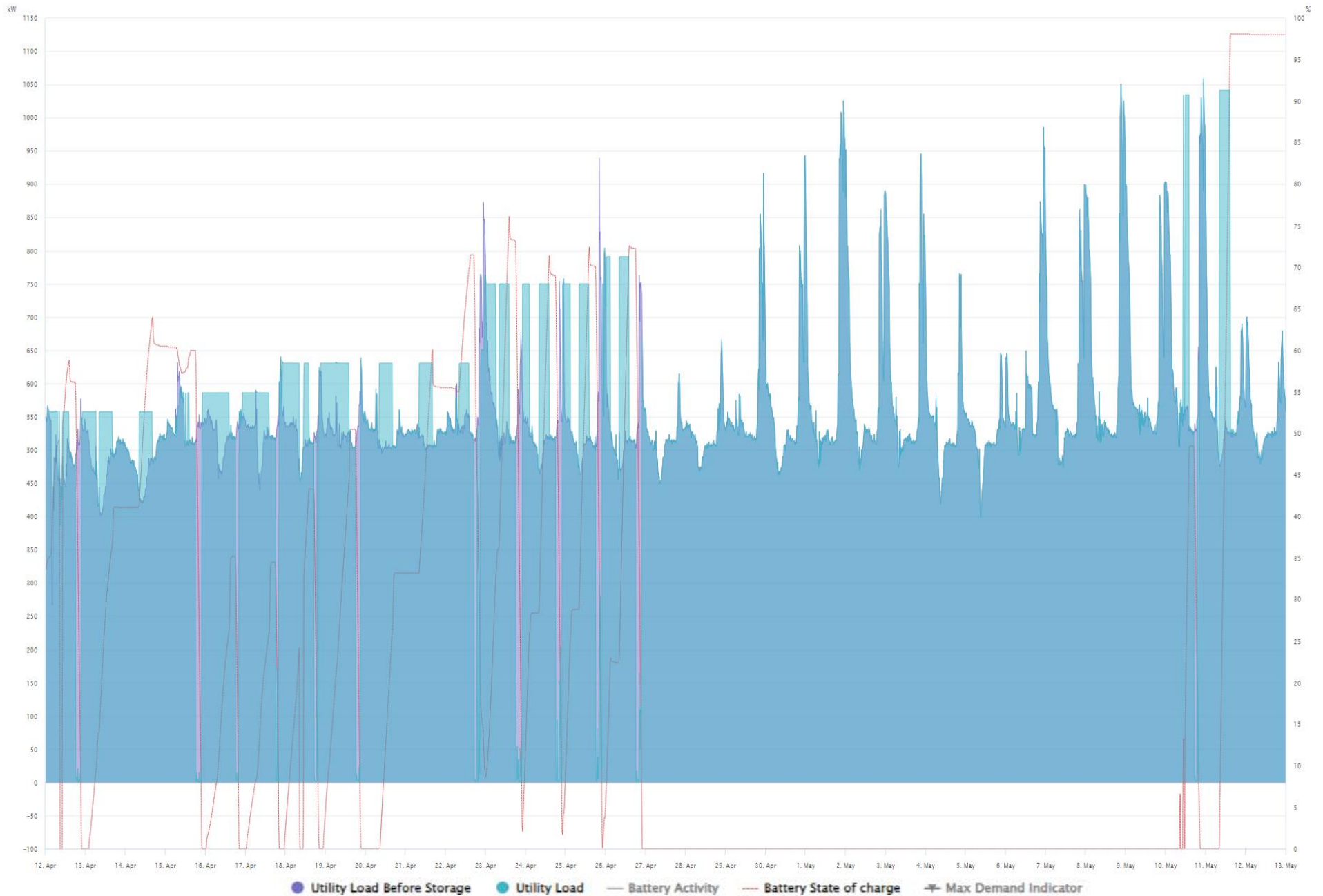


YEAR	BILLING PERIOD	BILL SAVINGS	NET SAVINGS	YEAR TOTAL
4	08/11/23 - 09/12/23	\$ 1,749.86	\$ 159.86	
	09/12/23 - 10/11/23	\$ 16,350.56	\$ 14,760.56	
	10/11/23 - 11/09/23	\$ 4,659.23	\$ 3,069.23	
	11/09/23 - 12/12/23	\$ 9,302.30	\$ 7,712.30	
	12/12/23 - 01/11/24	\$ 5,204.44	\$ 3,614.44	
	01/11/24 - 02/12/24	\$ (828.52)	\$ (2,418.52)	
	02/14/24 - 03/13/24	\$ (2,433.90)	\$ (4,023.90)	
	03/13/24 - 04/12/24	\$ 2,204.14	\$ 614.14	
	04/12/24 - 05/13/24	\$ (37.79)	\$ (1,627.79)	
TOTAL		\$ 167,492.05	\$	95,942.05

# WRP BATTERY STORAGE SYSTEM

## MONTHLY REPORT

04/12/24 - 05/13/24



## Sewerage Treatment Plant



23542 Moulton Pkwy, Laguna Woods, CA 92637

### Savings Report - 2024-05

Apr 12, 2024 - May 13, 2024

SCE TOU 8 Option D (< 2kV)

Demand Charges	Before Storage		After Storage		Savings	
Facilities Related - Distribution	1,061kW	\$20,491.16	1,066kW	\$20,576.74	(4)kW	\$(85.57)
Facilities Related - Transmission	1,061kW	\$4,669.14	1,066kW	\$4,688.64	(4)kW	\$(19.50)
Time Related - Distribution - Winter Mid-Peak	1,027kW	\$3,441.12	1,027kW	\$3,441.12	0kW	\$ -
Time Related - Utility Retained Generation - Winter Mid-Peak	1,027kW	\$7,252.03	1,027kW	\$7,252.03	0kW	\$ -
Sub-total		\$35,853.45		\$35,958.53		\$(105.07)

Energy Charges	Before Storage		After Storage		Savings	
Competition Transition Charge	414,881kWh	\$(116.17)	420,317kWh	\$(117.69)	(5,436)kWh	\$1.52
Competition Transition Charge (URG Component)	414,881kWh	\$116.17	420,317kWh	\$117.69	(5,436)kWh	\$(1.52)
Distribution - Winter Mid-Peak	86,928kWh	\$1,289.14	69,704kWh	\$1,033.70	17,225kWh	\$255.44
Distribution - Winter Off-Peak	200,881kWh	\$2,705.86	205,538kWh	\$2,768.60	(4,657)kWh	\$(62.74)
Distribution - Winter Super Off-Peak	127,072kWh	\$1,612.55	145,076kWh	\$1,841.01	(18,004)kWh	\$(228.47)
Fixed Recovery Charge	414,881kWh	\$477.11	420,317kWh	\$483.36	(5,436)kWh	\$(6.25)
MCAM Charge	414,881kWh	\$215.74	420,317kWh	\$218.57	(5,436)kWh	\$(2.83)
New System Generation Charge	414,881kWh	\$3,036.93	420,317kWh	\$3,076.72	(5,436)kWh	\$(39.79)
Nuclear Decommissioning Charge	414,881kWh	\$37.34	420,317kWh	\$37.83	(5,436)kWh	\$(0.49)
Public Purpose Programs Charge	414,881kWh	\$7,438.81	420,317kWh	\$7,536.29	(5,436)kWh	\$(97.48)
PUC Reimbursement Fee	414,881kWh	\$414.88	420,317kWh	\$420.32	(5,436)kWh	\$(5.44)
State Tax	414,881kWh	\$124.46	420,317kWh	\$126.10	(5,436)kWh	\$(1.63)
Transmission	414,881kWh	\$(983.27)	420,317kWh	\$(996.15)	(5,436)kWh	\$12.88
Utility Retained Generation - Winter Mid-Peak	86,928kWh	\$7,874.82	69,704kWh	\$6,314.44	17,225kWh	\$1,560.38
Utility Retained Generation - Winter Off-Peak	200,881kWh	\$18,310.27	205,538kWh	\$18,734.79	(4,657)kWh	\$(424.52)
Utility Retained Generation - Winter Super-Off-Peak	127,072kWh	\$6,079.13	145,076kWh	\$6,940.43	(18,004)kWh	\$(861.30)
Wildfire Fund Non-Bypassable Charge	414,881kWh	\$2,327.48	420,317kWh	\$2,357.98	(5,436)kWh	\$(30.50)
Sub-total		\$50,961.27		\$50,893.99		\$67.28

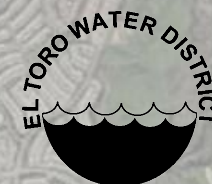
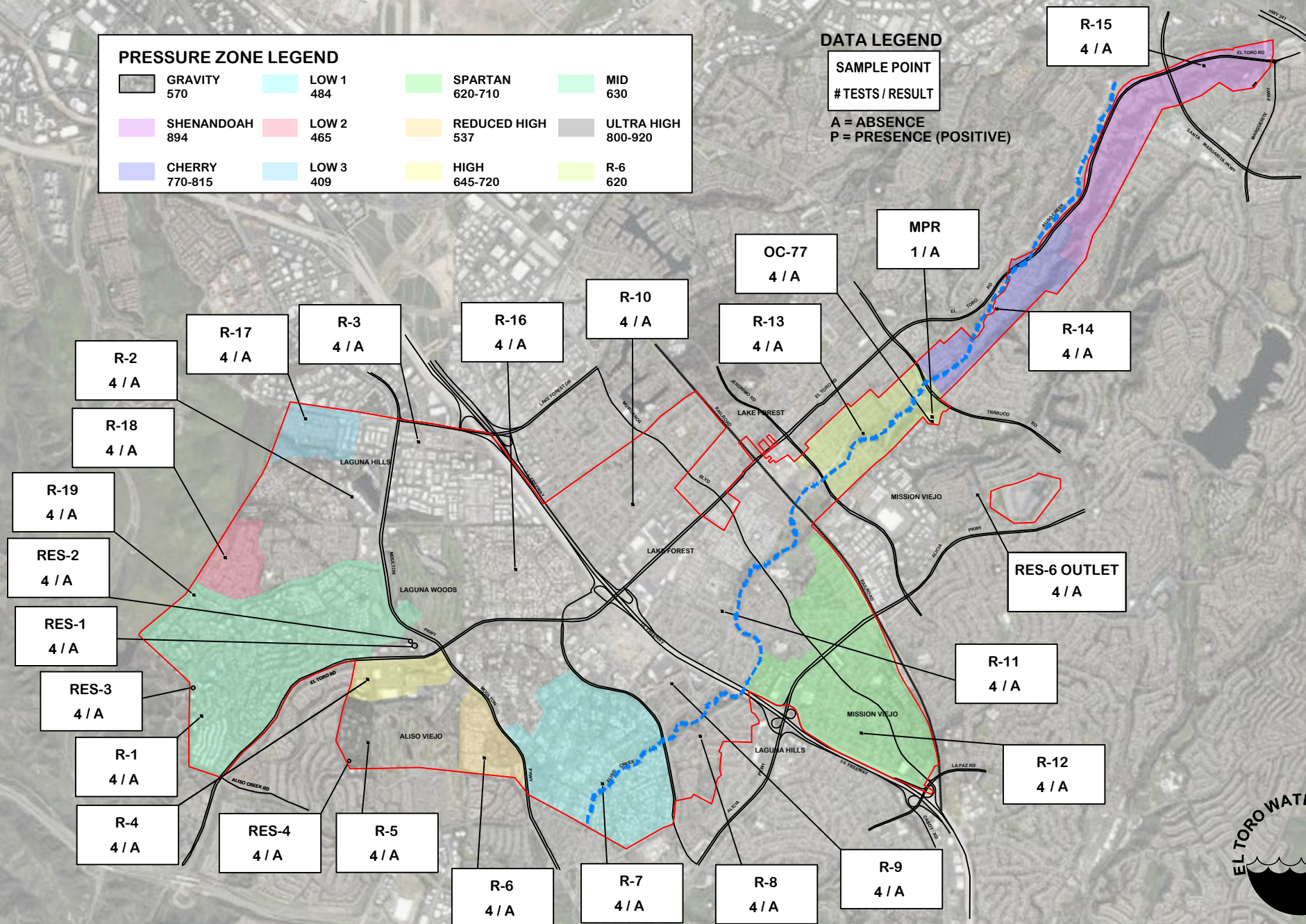
Other Monthly Charges	Before Storage		After Storage		Savings	
Customer Charge		\$429.59		\$429.59		\$ -
Sub-total		\$429.59		\$429.59		\$ -

Total	Before Storage		After Storage		Savings	
		\$87,244.31		\$87,282.10		\$(37.79)

Note: The above data is calculated by Genability using utility meter data. If there were any gaps in the utility data, they were filled with Stem meter data. Your actual utility bill may look different from the data displayed above due to either issues in the utility data we were provided or in the Stem meter data collected. Some discrepancies are normal and to be expected. For this reason, Stem completes a thorough review of all data and reconciles discrepancies by comparing the Genability calculations of the energy storage system cost savings and total bill values with your utility bills. If you have an outstanding performance guarantee term, any discrepancies identified are adjusted for differences and reflected in your true up term statement.

# MICROBIOLOGICAL MONITORING

MAY 2024



# CHLORINE RESIDUAL MONITORING

## MAY 2024

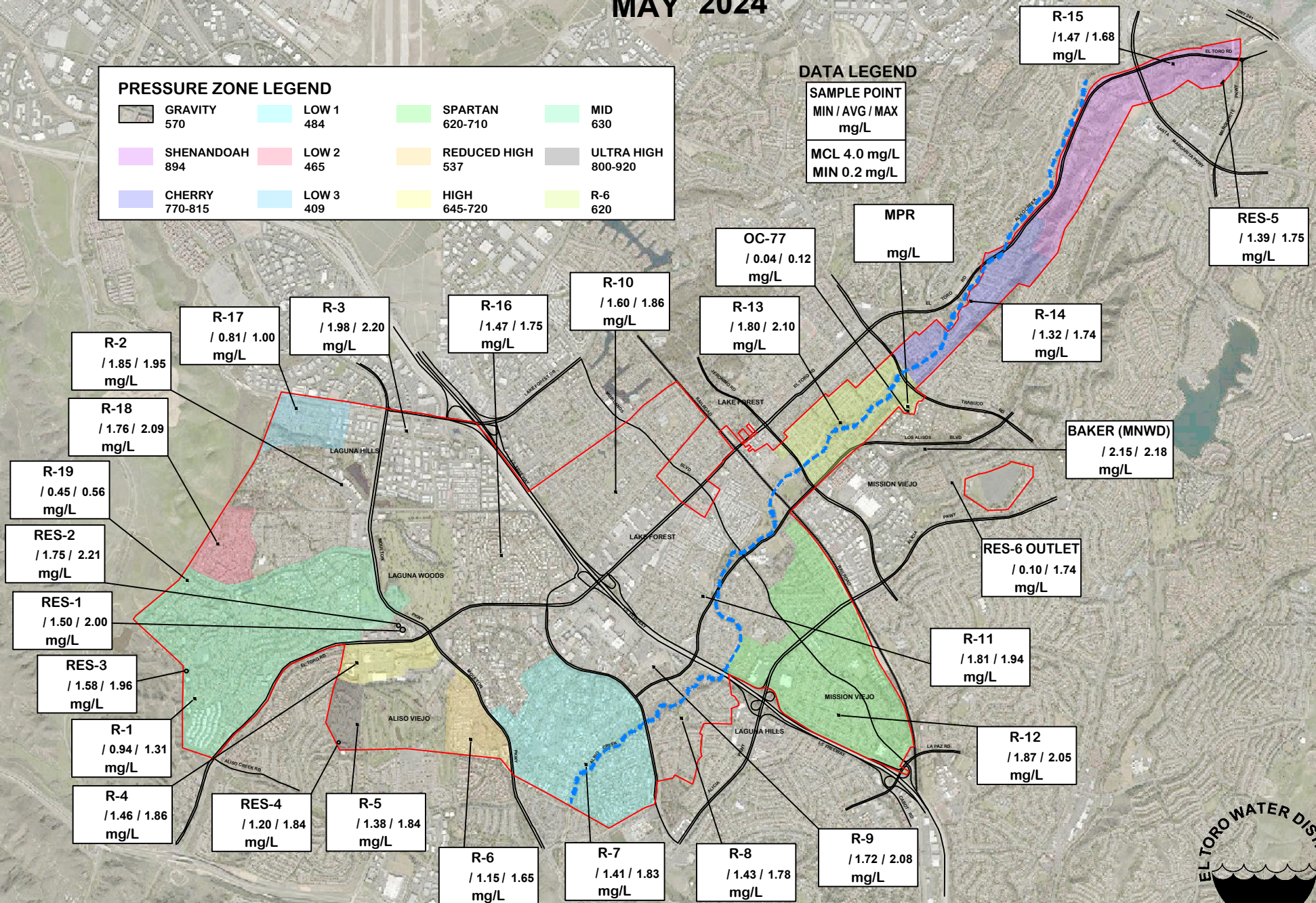
### PRESSURE ZONE LEGEND

GRAVITY 570	LOW 1 484	SPARTAN 620-710	MID 630
SHENANDOAH 894	LOW 2 465	REDUCED HIGH 537	ULTRA HIGH 800-920
CHERRY 770-815	LOW 3 409	HIGH 645-720	R-6 620

### DATA LEGEND

SAMPLE POINT  
MIN / AVG / MAX  
mg/L

MCL 4.0 mg/L  
MIN 0.2 mg/L



# NITRITE MONITORING

## MAY 2024

### PRESSURE ZONE LEGEND

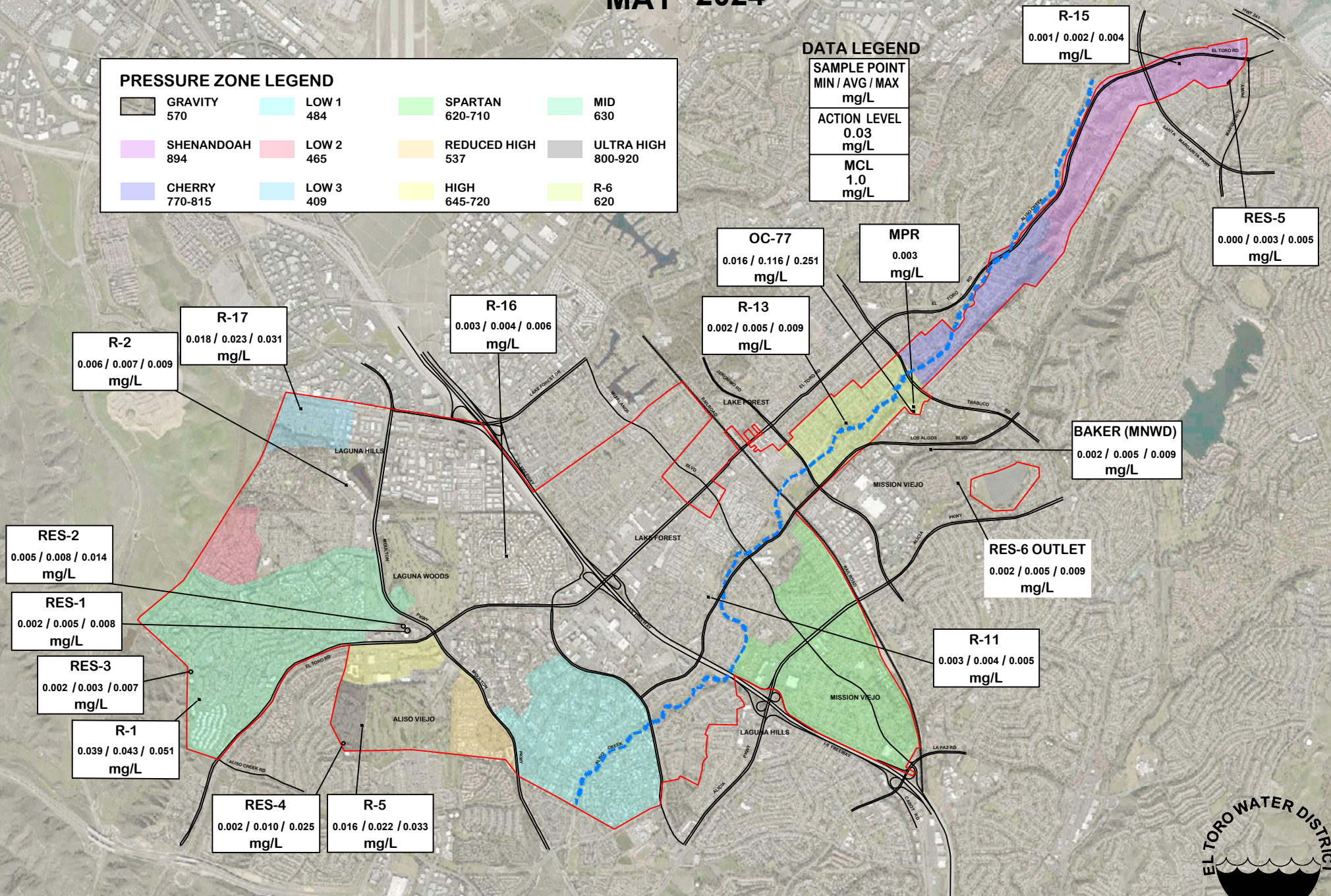
GRAVITY 570	LOW 1 484	SPARTAN 620-710	MID 630
SHENANDOAH 894	LOW 2 465	REDUCED HIGH 537	ULTRA HIGH 800-920
CHERRY 770-815	LOW 3 409	HIGH 645-720	R-6 620

### DATA LEGEND

SAMPLE POINT  
MIN / AVG / MAX  
mg/L

ACTION LEVEL  
0.03  
mg/L

MCL  
1.0  
mg/L





## STAFF REPORT

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**To: Board of Directors**

**Meeting Date: June 24, 2024**

**From: Hannah Ford, Director of Engineering  
Rory Harnisch, Senior Engineer**

**Subject: Capital Project Status Report**

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### I. New Warehouse

The general contractor Dumarc Corporation (Dumarc) is currently off site. District staff and Dumarc are coordinating site paving and final electrical equipment installation. Anticipated delivery of the long lead item electrical components remains in early September 2024.

District staff continues coordinating with the Air Quality Management District (AQMD) and their contractor in order for them to install a concrete pad, electrical duct bank, and equipment. Staff met with AQMD in the field again to finalize potholing activities in late April and is drafting construction access and lease agreements.

Table 1 summarizes the cost and schedule as percent complete. Dumarc's billings reflect work through April 2024 and have not invoiced the District since then. Budget expenditure is now closer to schedule completion because, delayed installation of electrical is extending schedule.

**Table 1 – New Warehouse Project Schedule and Budget Status**

Construction Contract	Total	Earned to Date	Percent Complete
Budget	\$2,164,842 <sup>1</sup>	\$1,826,326	84%
Schedule	June 13, 2023 – September 4, 2024		84%

<sup>1</sup>Includes Change Order Nos. 1, 2, and 3 with a net credit of \$19,158.22.

### II. Grit Chamber Rehabilitation

Staff is working with both engineering consultants, Wood Rodgers Inc and Carollo Engineers, Inc. (Carollo), and the construction contractor, Kingmen Construction Inc (Kingmen) in the submittal phase of the project. Kingmen, District staff, and both design engineers will hold the preconstruction meeting in late June and continue to work with Kingmen leading up to the construction start date.

### III. Caltrans I-5 Widening Utility Relocations

Phase C is nearly complete; the contractor, Paulus Engineering (Paulus), relocated the existing irrigation service lateral in mid-February. Paulus will install concrete pads around the relocated fire hydrants once the Caltrans contractor completes the surrounding curb, gutter, and sidewalk activities.

In mid-December, Caltrans discovered a conflict with the District's existing sewer manhole and a proposed curb-ramp due to the upcoming Village at Laguna Hills development. District staff and Caltrans amended the existing utility agreement to rectify this conflict. In mid-May, Paulus adjusted both manholes' shafts and cones to adhere to the proposed grades. Paulus is currently on hold to replace the existing liner in one manhole until Caltrans places the surrounding sidewalk concrete.



Figure 1 – Conflicting Manholes



Figure 2 – Conflicting Manholes

### IV. Headworks and Secondary Clarifier No. 1 Rehabilitation Project

The 60% design submittal is on track for July delivery. As part of the Basis of Design Report (BODR), Carollo performed a high-level structural analysis and determined the need for a new center column foundation to accommodate a new clarifier mechanism. Seismic codes have evolved since Secondary Clarifier No. 1's original construction in 1963, and the new mechanism will require larger anchors than the current foundation can support. The construction cost estimate for these modifications is \$686,110. The District amended Carollo's existing design contract in the amount of \$39,846 to incorporate final design of the structural modifications required to bring Secondary Clarifier No. 1 into compliance with the latest seismic code.

District staff continue to operate the free polymer test skid from Velodyne and are monitoring performance. Final results will be analyzed in July to determine whether a more permanent installation makes sense for the District.

**V. Lead and Copper Rule Revisions Compliance**

District staff have been working diligently on completing the field investigations, as shown in the Operations report. In July, the District will start working with its subcontractor on the sites that require excavations. To date, no lead has been discovered. The District remains on track to comply with the October 16<sup>th</sup> deadline.

**VI. Tertiary Disinfection Optimization Project**

The District continues to await DDW's comments on the revised proposal anticipated to arrive by the end of June. Implementation of the low CT approach at the Tertiary Treatment Plant (TTP) is delayed until DDW approves the revised proposal approval. District staff are aiming for implementation by the end of 2024.

**VII. Asset Management Program**

District staff finalized the WRP asset management plan and now are focused on integration with the Computerized Maintenance Management System (CMMS). District staff have narrowed software providers to a short list of four vendors and will continue to refine scope and cost prior to selection. After evaluation, District staff will recommend implementation of CMMS at the WRP this year, where no CMMS is currently employed.

**VIII. WRP Main Electrical Power Breaker**

The District is planning a second shutdown for June 27<sup>th</sup> to install the fourth pole on the new Automatic Transfer Switches (ATSS). District staff conducted a pre-installation meeting at the end of May with Schneider Electric (Schneider) and are working through the final coordination.

**IX. System Wide Arc Flash and Coordination Study**

District staff completed all necessary Southern California Edison (SCE) shutdowns and site investigations. SCE is still responding to the District's data request from September 2023. For the sites that SCE has provided data, Hazen is developing arc flash calculations for District review. Upon completion of these calculations, the District will install arc flash labels on equipment and make recommended protective device trip settings.

**X. Cathodic Protection Repair on Moulton Parkway**

The District conducted a kickoff meeting with Corrpro to develop the final design of the recommended cathodic protection solution along Moulton Parkway and El Toro Road. Corrpro conducted some field surveys this month and will discuss their findings to develop bid documents over the next two months.

## **XI. R-6 Reservoir and Main Office Security System**

Main Office camera installation and datacenter server, software, and storage installation are complete. The R-6 Reservoir chemical tank and radar cameras are installed and feeding video back to Main Office Datacenter for 24/7 recording. District staff completed all associated routing. Radar is installed and functioning, directing the point-tilt-zoom (PTZ) camera to any movement. Convergent is working on feeding the radar alarms back to the Main Office Genetec server. Once the server receives the alarms, Magos plans to meet staff after hours during darkness to fine tune the system. Employees, especially on-call staff, have access to all cameras. District staff are reviewing monitoring and alarm response documents and a comprehensive service plan for both systems.

## **XII. Northline Coating Improvement Project**

The contractor, MC Painting, Inc. (MC Painting), has been off site since mid-March. Staff is negotiating a change order with the contractor, MC Painting, Inc. (MC Painting), for additional work performed to date and for potential additional repairs. Staff expects to finalize negotiations and complete the project by early July.

## **XIII. Energy Efficiency Analysis**

The District recently met with Terra Verde and SitelogIQ to discuss potential energy efficiency opportunities. Staff will continue these discussions to determine the most appropriate path forward in the pursuit of energy efficiency projects.

District staff also met with SoCalREN to discuss potential energy efficiency opportunities. Due to the proposed revised operation of the waste activated cell (WAC), the Headworks and Secondary Clarifier No. 1 Rehabilitation Project may be eligible for a SCE incentive of approximately \$15,000 and potential additional funding through the Department of Energy Industrial Application Centers (IAC) grant. By bifurcating the WAC, the District will be able to reduce its energy demand from the WAC blower by approximately half. District staff are working on responding to a data request and further developing this opportunity.

**F.Y. 2023/24 CAPITAL IMPROVEMENT PROGRAM BUDGET ITEMS > \$50,000**  
**BOARD APPROVAL SCHEDULE**

Category	Project Description	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Revenue Bond / CIP Budget	Board Approved Cost
2023/24 Capital Projects															
	P-3 Pump Station Rehabilitation	Deferred in pursuit of grant funding												\$200,000	
	Moulton/EI Toro Cathodic Protection Study	ET	ET	ET	ET	ET	ET	ET	ET	RFP	E	E	E	\$100,000	< \$50,000
	Surcharge Capacity Repair on Gowdy Avenue	Cancelled project due to marginal benefit relative to cost and complexity												\$52,000	
	Northline Coating Improvement Project					B	A	C	C	C	C	C	C	\$91,000	\$63,168
	Headworks and Secondary Clarifier Rehabilitation			RFP	RFP	A	E	E	E	E	E	E	E	\$2,926,000	\$785,217
	Grit Chamber Rehabilitation	E	A	E	E	B	B	B	B	A	C	C	C	\$861,861	\$1,015,760
	DAF Unit No. 2 Rehabilitation Project	A	C	C	C	C	C							\$221,641	\$209,595
	Aliso Creek Pump Station Rehabilitation Project	RFP	RFP	A	E	E	E	E	E	E	RFP	RFP	A	\$826,000	\$120,000
	Asset Management	A	E	E	E	E	E	E	E	BP				\$120,000	\$113,140
	System-Wide Arc Flash and Coordination Study	RFP	A	E	E	E	E	E	E	E	E			\$180,000	\$179,550
2023/24 Capital Equipment															
	R-6 Security Cameras and Fence Alarm Replacement			A	C	C	C	C	C	C	C	C		\$84,000	\$114,234
	Freeway Electrical Equipment Replacement		A	Equipment receipt expected next fiscal year										\$110,000	\$155,646
	Core Switch Replacement	Ordered and received, total cost was within GM authority												\$63,000	< \$50,000
Revenue Bond Projects															
	R-6 Reservoir Floating Cover	C	C	A	C	C	C	C	C					\$12,442,344	\$11,903,880
	New Warehouse	C	C	C	C	C	C	C	C	C	C	C	C	\$4,006,421	\$3,924,409
	South Orange County Turnout Project	Coordinating with MNWD on schedule												\$3,000,000	
Previous Fiscal Year Carryover															
	P-4 Pump Replacement	ET	A										R	\$59,000	\$73,701
	ETM Backflow Prevention Project	C	C	C	C									-	\$304,463
	Tertiary Disinfection Optimization Project	A	E	E	E	E	E	E	E	E	E	E	P	-	\$107,321
	Effluent Pump Station Rehabilitation		C	C	C									\$150,000	\$425,000
	WRP Main Electrical Power Breaker Upgrades						R	R	R		C			\$140,000	\$196,124
	Mathis Lift Station Inlet Drop Piping Repair	E	E	E	A	C	C	C	C	C	C			-	\$33,510
	Caltrans I-5 Widening Utility Relocations							C	C	C	C			\$0	\$627,365
Total														\$25,633,267	\$20,352,083

**Key:**

	Water
	Wastewater
	Split between Water and Wastewater
	Board Involvement

**Abbreviations:**

A = Approve by Board
B = Bid
BP = Board Presentation
C = Construction

E = Engineering/Study
ET = Evaluate
L = Legal
N = Negotiate

O = Order
P = Permit
RFP = Request for Proposal
R = Receive

F.Y. 2024/25 CAPITAL IMPROVEMENT PROGRAM BUDGET ITEMS > \$50,000

BOARD APPROVAL SCHEDULE

Category	Project Description	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	CIP Budget	Board Approved Cost
2024/25 Capital Projects															
	Regional Potable Reuse Implementation Plan	Pending grant award												\$0	
	OOPS MCC and Valve Replacement Project	A									R	C	C	\$191,000	
	Lead and Copper Rule Revision Service Line Inventories	E	E	E	E									\$141,607	\$138,607
2024/25 Capital Equipment															
	Cherry Booster Station Pump & Motor Replacement		A					R	C					\$167,000	
	R-4 Reservoir Mixing System Replacement								E	E	A	C	C	\$70,000	
	Westline Main Switchboard Replacement	A											R	\$149,000	
	Westline Generator Unit 213 Replacement				A									\$267,000	
	DAF No. 1 MCC Replacement	O								B / R	A			\$149,000	
	Additional Tertiary Filter Disks	A			R	C								\$92,000	
	WRP Unit 290 Radiator Replacement	A	R											\$150,000	
	New Turbo Blower				B	A	R							\$631,000	\$279,834
	F-550 with Valve Maintenance Skid		A											\$206,000	
	Documentum Replacement / Corporate Intranet Development		A	ET	ET	C	C							\$61,000	
Previous Fiscal Year Carryover															
	P-3 Pump Station Rehabilitation	Pending grant award												\$0	
	Moulton/EI Toro Cathodic Protection Study	B	A	C	C	C	C							\$145,000	
	Headworks and Secondary Clarifier Rehabilitation	E	E	E	E	E	E	E	B	A	C	C	C	\$1,998,800	
	Grit Chamber Rehabilitation	C	C	C	C	C	C	C	C					\$1,046,502	\$1,015,760
	Aliso Creek Pump Station Rehabilitation Project	E	E	E	E	E	E	E	E	E	E	E	E	\$600,000	
	Asset Management	ET	ET	ET	ET	ET	ET	ET	ET	A				\$100,000	
	New Warehouse	C	C	C											
	Freeway Electrical Equipment Replacement									R	C	C		\$263,362	\$155,646
	Tertiary Disinfection Optimization Project	E	E	E	A	C	C							\$132,000	
	Caltrans I-5 Widening Utility Relocations	C	C											\$0	\$627,365
Total														\$6,227,664	\$2,078,605

Key:

Water

Wastewater

Recycled Water

Split between All Departments

Board Involvement

Abbreviations:

A = Approve by Board

B = Bid

BP = Board Presentation

C = Construction

E = Engineering/Study

ET = Evaluate

L = Legal

N = Negotiate

O = Order

P = Permit

RFP = Request for Proposal

R = Receive

# **EL TORO WATER DISTRICT**

## **Glossary of Water Terms**

**Accumulated overdraft:** The amount of water necessary to be replaced in the intake area of the groundwater basin to prevent the landward movement of ocean water into the fresh groundwater body.

**Acre-foot, AF:** A common water industry unit of measurement. An acre-foot is 325,851 gallons, or the amount of water needed to cover one acre with water one foot deep. An acre-foot serves annual needs of two typical California families.

**ACWA:** Association of California Water Agencies.  
A statewide group based in Sacramento that actively lobbies State and Federal Government on water issues.

**Advanced treatment:** Additional treatment processes used to clean wastewater even further following primary and secondary treatment. Also known as tertiary treatment.

**AFY:** Acre-foot per year.

**Alluvium:** A stratified bed of sand, gravel, silt, and clay deposited by flowing water.

**AMP:** Allen McCulloch pipeline.

Major pipeline transporting treated water to water districts between Yorba Linda, where it starts to El Toro Water District reservoir, where it terminates.

**Annexation:** The inclusion of land within a government agency's jurisdiction.

**Annual overdraft:** The quantity by which the production of water from the groundwater supplies during the water year exceeds the natural replenishment of such groundwater supplies during the same water year.

**Aqueduct:** A man-made canal or pipeline used to transport water.

**Aquifer:** An underground geologic formation of rock, soil or sediment that is naturally saturated with water; an aquifer stores groundwater.

**Arid:** Dry; deserts are arid places. Semi-arid places are almost as dry as a desert.

**Artesian:** An aquifer in which the water is under sufficient pressure to cause it to rise above the bottom of the overlying confining bed, if the opportunity is provided.

**Artificial recharge:** The addition of surface water to a groundwater reservoir by human activity, such as putting surface water into recharge basins. (See also: groundwater recharge and recharge basin.)

**AWWA** American Water Works Association  
Nationwide group of public and private water purveyors and related industrial suppliers.

**Base flow:** The portion of river surface flow which remains after deduction of storm flow and/or purchased imported water.

**Bay-Delta:** The Sacramento-San Joaquin Bay-Delta is a unique natural resource of local, state and national significance. The Delta is home to more than 500,000 people; contains 500,000 acres of agriculture; provides habitat for 700 native plant and animal species; provides water for more than 25 million Californians and 3 million acres of agriculture; is traversed by energy, communications and transportation facilities vital to the economic health of California; and supports a \$400 billion economy.

**BIA:** Building Industry Association.

**Biofouling:** The formation of bacterial film (biofilm) on fragile reverse osmosis membrane surfaces.

**Biosolids:** Solid organic matter recovered from a sewage treatment process and used especially as fertilizer.

**BMP:** Best Management Practice. An engineered structure or management activity, or combination of these, that eliminates or reduces adverse environmental effects.

**Brackish water:** A mixture of freshwater and saltwater.

**Brown Act:** Ralph M. Brown Act enacted by the State legislature governing all meetings of legislative bodies. Also known as the Open Meeting requirements.

**Canal:** A ditch used to move water from one location to another.

**CASA:** California Association of Sanitation Agencies The sanitation equivalent of ACWA concerned solely with issues affecting the treatment and disposal of solid waste and wastewater.

**CEQA:** California Environmental Quality Act.

**CERCLA:** Comprehensive Environmental Response, Compensation and Liability Act. This federal law establishes the Superfund program for hazardous waste sites. It provides the legal basis for the United States EPA to regulate and clean up hazardous waste sites, and if appropriate, to seek financial compensation from entities responsible for the site.

**CFS:** Cubic feet per second.

**Chloramines:** A mixture of ammonia and chlorine used to purify water.

**Clarify:** To make clear or pure by separation and elimination of suspended solid material.

**Coagulation:** The clumping together of solids so they can more easily be settled out or filtered out of water. A chemical called aluminum sulfate (alum) is generally used to aid coagulation in water treatment and reclamation.

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**Coastkeepers:** A non-profit organization dedicated to the protection and preservation of the marine habitats and watersheds of Orange County through programs of education, restoration, enforcement and advocacy.

**Colored water:** Groundwater extracted from the basin that is unsuitable for domestic use without treatment due to high color and odor exceeding drinking water standards.

**Condensation:** The process of water vapor (gas) changing into liquid water. An example of condensation can be seen in the tiny water droplets that form on the outside of a glass of iced tea as warmer air touches the cooler glass.

**Confined aquifer:** An aquifer that is bound above and below by dense layers of rock and contains water under pressure.

**Conjunctive use:** Storing imported water in a local aquifer, in conjunction with groundwater, for later retrieval and use.

**Contaminate:** To make unclean or impure by the addition of harmful substances.

**CPCFA:** California Pollution Control Financing Authority. State agency providing funds for wastewater reclamation projects.

**Crisis:**

1. **a:** The turning point for better or worse **b:** a paroxysmal attack of pain, distress, or disordered function **c:** an emotionally significant event or radical change of status in a person's life <a midlife crisis>
2. The decisive moment (as in a literary plot)
3. **a:** An unstable or crucial time or state of affairs in which a decisive change is impending; *especially* : one with the distinct possibility of a highly undesirable outcome <a financial crisis> **b:** a situation that has reached a critical phase

**CTP** Coastal Treatment Plant

**CWPCA** California Water Pollution Control Association. A 7000 member non-profit educational organization dedicated to water pollution control.

**Dam:** A barrier built across a river or stream to hold water.

**Decompose:** To separate into simpler compounds, substances or elements.

**Deep percolation:** The percolation of surface water through the ground beyond the lower limit of the root zone of plants into a groundwater aquifer.

**Degraded water:** Water within the groundwater basin that, in one characteristic or another, does not meet primary drinking water standards.

**Delta:** Where the rivers empty; an outlet from land to ocean, also where the rivers deposit sediment they carry forming landforms.

**Delta Vision:** Delta Vision is intended to identify a strategy for managing the Sacramento-San Joaquin Delta as a sustainable ecosystem that would continue to support environmental and economic functions that are critical to the people of California.

**Demineralize:** To reduce the concentrations of minerals from water by ion exchange, distillation, electro-dialysis, or reverse osmosis.

**De-nitrification:** The physical process of removing nitrate from water through reverse osmosis, microfiltration, or other means.

**Desalting (or desalination):** Removing salts from salt water by evaporation or distillation. Specific treatment processes, such as reverse osmosis or multi-stage flash distillation, to demineralize seawater or brackish (saline) waters for reuse. Also sometimes used in wastewater treatment to remove salts other pollutants.

**Desilting:** The physical process of removing suspended particles from water.

**Dilute:** To lessen the amount of a substance in water by adding more water.

**Disinfection:** Water treatment which destroys potentially harmful bacteria.

**Drainage basin:** The area of land from which water drains into a river, for example, the Sacramento River Basin, in which all land area drains into the Sacramento River. Also called catchment area, watershed, or river basin.

**Drought:** A prolonged period of below-average precipitation.

**DPHS:** California Department of Public Health Services. Regulates public water systems; oversees water recycling projects; permits water treatment devices; certifies drinking water treatment and distribution operators; supports and promotes water system security; provides support for small water systems and for improving technical, managerial, and financial (TMF) capacity; provides funding opportunities for water system improvements.

**DVL:** Diamond Valley Lake. Metropolitan's major reservoir near Hemet, in southwestern Riverside County.

**DWR:** California Department of Water Resources. Guides development/management of California's water resources; owns/operates State Water Project and other water facilities.

**Endangered Species:** A species of animal or plant threatened with extinction.

**Endangered Species Act of 1973 (ESA):** The most wide-ranging of the dozens of United States environmental laws passed in the 1970s. As stated in section 2 of the act, it was designed to protect critically imperiled species from extinction as a "consequence of economic growth and development untended by adequate concern and conservation.

**Ecosystem:** Where living and non-living things interact (coexist) in order to survive.

**Effluent:** Wastewater or other liquid, partially or completely treated or in its natural state, flowing from a treatment plant.

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**Evaporation:** The process that changes water (liquid) into water vapor (gas).

**Estuary:** Where fresh water meets salt water.

**Evapotranspiration:** The quantity of water transpired (given off), retained in plant tissues, and evaporated from plant tissues and surrounding soil surface. Quantitatively, it is expressed in terms of depth of water per unit area during a specified period of time.

**FCH** Federal Clearing House – Environmental Review/Processing

**FEMA** Federal Emergency Management Agency

**Filtration:** The process of allowing water to pass through layers of a porous material such as sand, gravel or charcoal to trap solid particles. Filtration occurs in nature when rain water soaks into the ground and it passes through hundreds of feet of sand and gravel. This same natural process of filtration is duplicated in water and wastewater treatment plants, generally using sand and coal as the filter media.

**Flocculation:** A chemical process involving addition of a coagulant to assist in the removal of turbidity in water.

**Forebay:** A reservoir or pond situated at the intake of a pumping plant or power plant to stabilize water level; also, a portion of a groundwater basin where large quantities of surface water can recharge the basin through infiltration.

**Gray water reuse:** Reuse, generally without treatment, of domestic type wastewater for toilet flushing, garden irrigation and other non-potable uses. Excludes water from toilets, kitchen sinks, dishwashers, or water used for washing diapers.

**Green Acres Project (GAP):** A 7.5 million gallons per day (MGD) water reclamation project that serves tertiary treated recycled water to irrigation and industrial users in Costa Mesa, Fountain Valley, Huntington Beach, Newport Beach, and Santa Ana.

**God Squad:** A seven-member committee that is officially called the "Endangered Species Committee". Members consist of Secretary of the Interior, the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Council of Economic Advisers, the Administrator of the National Oceanic and Atmospheric Administration and one individual from the affected state. The squad was established in 1978 by an amendment to the 1973 Endangered Species Act (ESA). It has only been called into action three times to deal with proposed federal agency actions that have been determined to cause "jeopardy" to any listed species. Such actions may receive an exemption from the ESA if five members of the committee determine that the action is of regional or national significance, that the benefits of the action clearly outweigh the benefits of conserving the species and that there are no reasonable and prudent alternatives to the action.

**Groundwater:** Water that has percolated into natural, underground aquifers; water in the ground, not water puddled on the ground.

**Groundwater basin:** A groundwater reservoir defined by the overlying land surface and the underlying aquifers that contain water stored in the reservoir. Boundaries of success-ively deeper aquifers may differ and make it difficult to define the limits of the basin.

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**Groundwater mining:** The withdrawal of water from an aquifer in excess of recharge over a period of time. If continued, the underground supply would eventually be exhausted or the water table could drop below economically feasible pumping lifts.

**Groundwater overdraft:** The condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years during which water supply conditions approximate average.

**Groundwater recharge:** The action of increasing groundwater storage by natural conditions or by human activity. See also: Artificial recharge.

**Ground Water Replenishment System (GWRS):** A joint project of the Orange County Water District and the Orange County Sanitation District that will provide up to 100,000 acre-feet of reclaimed water annually. The high-quality water will be used to expand an existing underground seawater intrusion barrier and to replenish the groundwater basin underlying north and central Orange County.

**Groundwater table:** The upper surface of the zone of saturation (all pores of subsoil filled with water), except where the surface is formed by an impermeable body.

**GPM:** Gallons per minute.

**Ground Water Replenishment System (GWRS):** Orange County Water District's state-of-the-art, highly advanced, waste-water treatment facility.

**Hydrologic balance:** An accounting of all water inflow to, water outflow from, and changes in water storage within a hydrologic unit over a specified period.

**Hydrologic cycle:** The process of water constantly circulating from the ocean, to the atmosphere, to the earth in a form of precipitation, and finally returning to the ocean.

**Imported water:** Water that has originated from one hydrologic region and is transferred to another hydrologic region.

**Inflatable rubber dams:** Designed to replace temporary sand levees that wash out during heavy storm flow, the dams hold back high-volume river flows and divert the water into the off-river system for percolation.

**Influent:** Water or wastewater entering a treatment plant, or a particular stage of the treatment process.

**Irrigation:** Applying water to crops, lawns or other plants using pumps, pipes, hoses, sprinklers, etc.

**JPIA** Joint Powers Insurance Authority. A group of water agencies providing self-insurance to members of the ACWA.

**LAIF** Local Agency Investment Fund. Statewide pool of surplus public agency money managed by State Treasurer.

**Leach:** To remove components from the soil by the action of water trickling through.

**MAF:** Million acre feet.

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**MCL:** Maximum contaminant level set by EPA for a regulated substance in drinking water. According to health agencies, the maximum amount of a substance that can be present in water that's safe to drink and which looks, tastes and smells good.

**MET:** Metropolitan Water District of Southern California.

**MGD:** Million gallons per day.

**Microfiltration:** A physical separation process where tiny, hollow filaments members separate particles from water.

**Microorganism:** An animal or plant of microscopic size.

**MWD:** Metropolitan Water District of Southern California.

**MWDOC:** Municipal Water District of Orange County. Intermediate wholesaler between MWD and 27 member agencies including ETWD.

**Non-point source pollution:** Pollution that is so general or covers such a wide area that no single, localized source of the pollution can be identified.

**NPDES** National Pollution Discharge Elimination System

**OCBC:** Orange County Business Council.

**OCEMA** Orange County Environmental Management Agency

**OCWD:** Orange County Water District.

**Opportunity:**

1. A favorable juncture of circumstances.
2. A good chance for advancement or progress .

**Organism:** Any individual form of life, such as a plant, animal or bacterium.

**PCM** Professional Community Management, Inc. Property Management company providing services to Laguna Woods Village and other homeowner associations.

**Perched groundwater:** Groundwater supported by a zone of material of low permeability located above an underlying main body of groundwater with which it is not hydrostatically connected.

**Percolation:** The downward movement of water through the soil or alluvium to the groundwater table.

**Permeability:** The capability of soil or other geologic formations to transmit water.

**Point source:** A specific site from which waste or polluted water is discharged into a water body, the source of which is identified. See also: non-point source.

**Potable water:** Suitable and safe for drinking.

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**PPB:** Parts per billion.

**Precipitation:** Water from the atmosphere that falls to the ground as a liquid (rain) or a solid (snow, sleet, hail).

**Primary treated water:** First major treatment in a wastewater treatment facility, usually sedimentation but not biological oxidation.

**Primary treatment:** Removing solids and floating matter from wastewater using screening, skimming and sedimentation (settling by gravity).

**Prior appropriation doctrine:** Allocates water rights to the first party who diverts water from its natural source and applies the water to beneficial use. If at some point the first appropriator fails to use the water beneficially, another person may appropriate the water and gain rights to the water. The central principle is beneficial use, not land ownership.

**Pumping Plant:** A facility that lifts water up and over hills.

**Recharge:** The physical process where water naturally percolates or sinks into a groundwater basin.

**Recharge basin:** A surface facility, often a large pond, used to increase the infiltration of surface water into a groundwater basin.

**Reclaimed wastewater:** Wastewater that becomes suitable for a specific beneficial use as a result of treatment. See also: wastewater reclamation.

**Reclamation project:** A project where water is obtained from a sanitary district or system and which undergoes additional treatment for a variety of uses, including landscape irrigation, industrial uses, and groundwater recharge.

**Recycling:** A type of reuse, usually involving running a supply of water through a closed system again and again. Legislation in 1991 legally equates the term "recycled water" to reclaimed water.

**Reservoir:** A place where water is stored until it is needed. A reservoir can be an open lake or an enclosed storage tank.

**Reverse osmosis:** (RO) A method of removing salts or other ions from water by forcing water through a semi-permeable membrane.

**RFP** Request for Proposal

**Riparian:** Of or on the banks of a stream, river, or other body of water.

**RO:** Reverse osmosis. See the listing under "reverse osmosis."

**R-O-W** Right-of-way

**Runoff:** Liquid water that travels over the surface of the Earth, moving downward due to gravity. Runoff is one way in which water that falls as precipitation returns to the ocean.

**RWQCB** Regional Water Quality Control Board. State agency regulating discharge and use of recycled water.

**Safe Drinking Water Act (SDWA):** The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources: rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.) SDWA authorizes the United States Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems work together to make sure that these standards are met.

**Safe yield:** The maximum quantity of water that can be withdrawn from a groundwater basin over a long period of time without developing a condition of overdraft, sometimes referred to as sustained yield.

**SAFRA** Santa Ana River Flood Protection Agency

**Salinity:** Generally, the concentration of mineral salts dissolved in water. Salinity may be measured by weight (total dissolved solids - TDS), electrical conductivity, or osmotic pressure. Where seawater is known to be the major source of salt, salinity is often used to refer to the concentration of chlorides in the water.

**SAWPA:** Santa Ana Watershed Project Authority.

**SCADA** Supervisory Control and Data Acquisition

**SCAP** Southern California Alliance of Publicly. Newly formed group of public agencies seeking reasonable regulation of sewer industry.

**SCH** State Clearing House – Environmental Review/Processing

**Seasonal storage:** A three-part program offered by Metropolitan Water District of Southern California:

**STSS (Short Term Seasonal Storage)** financially encourages agencies with local groundwater production capabilities to produce a higher percentage of their demand in the summer from their local groundwater supplies, thus shifting a portion of their demand on the MWD system from the summer to winter;

**LTSS (Long Term Seasonal Storage)** financially encourages retail agencies to take and store additional amounts of MWD water above their normal annual demands for later use; Replenishment Water provides less expensive interruptible water that is generally available and used to increase the operating yield of groundwater basins.

**Seawater intrusion:** The movement of salt water into a body of fresh water. It can occur in either surface water or groundwater basins.

**Seawater barrier:** A physical facility or method of operation designed to prevent the intrusion of salt water into a body of freshwater.

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**Secondary treatment:** The biological portion of wastewater treatment which uses the activated sludge process to further clean wastewater after primary treatment. Generally, a level of treatment that produces 85 percent removal efficiencies for biological oxygen demand and suspended solids. Usually carried out through the use of trickling filters or by the activated sludge process.

**Sedimentation:** The settling of solids in a body of water using gravity.

**Settle:** To clarify water by causing impurities/solid material to sink to a container's bottom.

**Sewer:** The system of pipes that carries wastewater from homes and businesses to a treatment plant or reclamation plant. Sewers are separate from storm drains, which is a system of drains and pipes that carry rain water from urban streets back to the ocean. Overwatering your yard can also cause water to run into the streets and into storm drains. Storm drain water is not treated before it is discharged.

**SigAlert:** Any unplanned event that causes the closing of one lane of traffic for 30 minutes or more, as opposed to a planned event, like road construction, which is planned.

**SJBA** San Juan Basin Authority

**Sludge:** The solids that remain after wastewater treatment. This material is separated from the cleaned water, treated and composted into fertilizer. Also called biosolids.

**SOCWA** South Orange County Wastewater Authority. Regional Joint Powers Authority formed for collection and treatment of sewerage (previously known as AWMA/SERRA/SOCRA). SOCWA member agencies:

CSC – City of San Clemente

CSJC – City of San Juan Capistrano

CLB – City of Laguna Beach

ETWD – El Toro Water District

EBSD – Emerald Bay Service District

IRWD – Irvine Ranch Water District

MNWD – Moulton Niguel Water District

SCWD – South Coast Water District

SMWD – Santa Margarita Water District

TCWD – Trabuco Canyon Water District

**SRF** State Revolving Fund

**Storm Drain:** The system of pipes that carries rain water from urban streets back to the ocean. Overwatering your yard can also cause water to run into the streets and into storm drains. Storm drain

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water is not treated before it is discharged. Storm drains are separate from sewers, which is a separate system of pipes to carry wastewater from homes and businesses to a treatment plant or reclamation plant for cleaning.

**Storm flow:** Surface flow originating from precipitation and run-off which has not percolated to an underground basin.

**SWP:** State Water Project. An aqueduct system that delivers water from northern California to central and southern California.

**SWRCB** State Water Resources Control Board

**TDS:** Total dissolved solids. A quantitative measure of the residual minerals dissolved in water that remain after evaporation of a solution. Usually expressed in milligrams per liter.

**Tertiary treatment:** The treatment of wastewater beyond the secondary or biological stage. Normally implies the removal of nutrients, such as phosphorous and nitrogen, and a high percentage of suspended solids.

**THM:** Trihalomethanes. Any of several synthetic organic compounds formed when chlorine or bromine combine with organic materials in water.

**TMA:** Too many acronyms.

**TMDL:** Total maximum daily load; A quantitative assessment of water quality problems, contributing sources, and load reductions or control actions needed to restore and protect bodies of water.

**Transpiration:** The process in which plant tissues give off water vapor to the atmosphere as an essential physiological process.

**Turbidity:** Thick or opaque with matter in suspension; muddy water.

**Ultraviolet light disinfection:** A disinfection method for water that has received either secondary or tertiary treatment used as an alternative to chlorination.

**VE** Value Engineering

**VOC:** Volatile organic compound; a chemical compound that evaporates readily at room temperature and contains carbon.

**Wastewater:** Water that has been previously used by a municipality, industry or agriculture and has suffered a loss of quality as a result.

**Water Cycle:** The continuous process of surface water (puddles, lakes, oceans) evaporating from the sun's heat to become water vapor (gas) in the atmosphere. Water condenses into clouds and then falls back to earth as rain or snow (precipitation). Some precipitation soaks into the ground (percolation) to replenish groundwater supplies in underground aquifers.

**Water rights:** A legally protected right to take possession of water occurring in a natural waterway and to divert that water for beneficial use.

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**Water-use Efficiency:** The water requirements of a particular device, fixture, appliance, process, piece of equipment, or activity.

**Water year (USGS):** The period between October 1st of one calendar year to September 30<sup>th</sup> of the following calendar year.

**Watermaster:** A court appointed person(s) that has specific responsibilities to carry out court decisions pertaining to a river system or watershed.

**Water Reclamation:** The treatment of wastewater to make it suitable for a beneficial reuse, such as landscape irrigation. Also called water recycling.

**Watershed:** The total land area that from which water drains or flows to a river, stream, lake or other body of water.

**Water table:** The top level of water stored underground.

**WEF** Water Environment Federation. Formerly – Water Pollution Control Federation (WPCF). International trade group advising members of sewage treatment techniques and their effect on the environment.

**Weir box:** A device to measure/control surface water flows in streams or between ponds.

**Wellhead treatment:** Water quality treatment of water being produced at the well site.

**Wetland:** Any area in which the water table stands near, at, or above the land surface for a portion of the year. Wetlands are characterized by plants adapted to wet soil conditions.

**Xeriscape:** Landscaping that requires minimal water.