



**ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA
TRABUCO CANYON WATER DISTRICT
ADMINISTRATION FACILITY
32003 DOVE CANYON DRIVE, TRABUCO CANYON, CA
FEBRUARY 5, 2025 AT 8:00 AM**

COMMITTEE MEMBERS

Glenn Acosta, Committee Chair
Mark Anderson, Committee Member
John Horst, Committee Member Alternate

DISTRICT STAFF

Fernando Paludi, General Manager
Michael Perea, District Secretary
Lorrie Lausten, District Engineer
Gary Kessler, Water System Superintendent
Oscar Ulloa, Wastewater Superintendent
Jason Stroud, Maintenance Superintendent

AGENDA NOTE:

Trabuco Canyon Water District (District) will make this Engineering/Operational Committee Meeting available by telephone audio as follows:

Telephone Audio: 1 (669) 900-6833

Access Code: 973-7562-7682

Persons desiring to monitor the Committee meeting agenda items may download the agenda and documents on the internet at www.tcwd.ca.gov. You may submit public comments by email to the Committee at mperea@tcwd.ca.gov. In order to be part of the record, emailed comments on meeting agenda items must be received by the District at the referenced e-mail address not later than 7:00 a.m. (PDT) on the day of the meeting.

CALL MEETING TO ORDER

VISITOR PARTICIPATION

Members of the public wishing to address the Committee regarding a particular item on the agenda are requested to submit public comments by email to the Committee at mperea@tcwd.ca.gov. The Committee Chair will call on the visitor following the Committee's discussion about the matter. Committees do not constitute a quorum of the Board of Directors and Committee Members cannot make decisions on matters. The Committee makes recommendations only to the Board of Directors. Members of the public will be given the opportunity to speak to the Committee prior to making a recommendation on the matter. For persons desiring to make verbal comments and utilizing a translator to present their comments into English reasonable time accommodations, consistent with State law, shall be provided. Please limit comments to three minutes.

ORAL COMMUNICATION

Members of the public who wish to make comment on matters not appearing on the agenda are requested to submit oral communication by email to the Committee at mperea@tcwd.ca.gov. Under the requirements of State Law, Directors cannot take action on items not identified on the agenda and will not make decisions on such matters. The Board President may direct District Staff to follow up on issues as may be deemed appropriate. For persons desiring to make verbal comments and utilizing a translator to present their comments into English reasonable time accommodations, consistent with State law, shall be provided. Please limit comments to three minutes.

COMMITTEE MEMBER COMMENTS

REPORT FROM THE GENERAL MANAGER

TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | FEBRUARY 5, 2025

ENGINEERING MATTERS

**PRESENTER(S): FERNANDO PALUDI, GENERAL MANAGER
MICHAEL PEREA, ASSISTANT GENERAL MANAGER
LORRIE LAUSTEN, DISTRICT ENGINEER**

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

RECOMMENDED ACTION:

Approve the following Engineering/Operational Committee Meeting Recap(s) and recommend that the Board receive and file same (Consent Calendar).

1. *January 8, 2025 Committee Meeting*

ITEM 2: SOURCES OF SUPPLY AD HOC COMMITTEE REPORT – JANUARY 28, 2025 MEETING

RECOMMENDED ACTION:

Committee to receive information at the time of the Committee Meeting.

ITEM 3: DISCUSSION CONCERNING TRABUCO CANYON WATER DISTRICT SERVER UPGRADE PROJECT – CAL-OES CYBERSECURITY GRANT FUNDED

RECOMMENDED ACTION:

Recommend the Board of Directors approve the following actions:

1. *Amend the FY 2024-25 Capital Improvement Program Server Upgrade Project budget to \$300,000 with partial funding of \$250,000 from the approved CalOES Cybersecurity Grant (Action Calendar).*
2. *Approve the Highroad IT Quote No. TCWD25-0129A in the amount of \$279,146.26 for the TCWD Server Project Upgrade (Action Calendar).*

ITEM 4: 2024 UPDATE TO STANDARD DRAWINGS, SPECIFICATIONS, AND CONSTRUCTION MANUAL

RECOMMENDED ACTION:

Recommend the Board of Directors adopt Resolution No. 2025-1340 adopting the Domestic and Non-Domestic Water and Sewer Design & Construction Manual (Action Calendar).

ITEM 5: RESOLUTION CLARIFYING APPLICATION OF IN-LIEU STORAGE FEES

RECOMMENDED ACTION:

The Committee will receive information at the time of the meeting and take action(s) as deemed appropriate.

ITEM 6: POTABLE WATER SYSTEM STORAGE EVALUATION 2024 UPDATE

RECOMMENDED ACTION:

Recommend the Board of Directors receive and file the Trabuco Canyon Water District - 2024 Storage Evaluation report.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | FEBRUARY 5, 2025**

ITEM 7: GOLF CLUB SEWER LIFT STATION IMPROVEMENTS PROJECT COMPLETION

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 8: HERITAGE SEWER LIFT STATION IMPROVEMENTS PROJECT PHASE 1 COMPLETION

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 9: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. District Facility Backup Generator Power Summary
2. Saddle Crest Development Update
3. Oaks at Trabuco Development Update
4. Other Projects

RECOMMENDED ACTION:

Committee to receive project status updates at the time of the Committee Meeting.

OPERATIONAL MATTERS

**PRESENTER(S): GARY KESSLER, WATER SYSTEM SUPERINTENDENT
OSCAR ULLOA, WASTEWATER OPERATIONS SUPERINTENDENT
JASON STROUD, MAINTENANCE DEPARTMENT SUPERINTENDENT**

ITEM 10: WATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 11: WASTEWATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 12: MAINTENANCE DEPARTMENT UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

REGULATORY AND OTHER MATTERS

ITEM 13: OTHER MATTERS/REPORTS

RECOMMENDED ACTION:

Hear Other Matters/Reports that may have arisen after the posting of the agenda.

ADJOURNMENT



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | FEBRUARY 5, 2025**

AVAILABILITY OF AGENDA MATERIALS

Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Trabuco Canyon Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection at the Trabuco Canyon Water District Administrative Facility, 32003 Dove Canyon Drive, Trabuco Canyon, California (District Administrative Facility) or will be posted online on the District's website located at www.tcwd.ca.gov. If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available online at www.tcwd.ca.gov at the same time as they are distributed to the Board Members, except that, if such writings are distributed immediately prior to or during the meeting, they will be posted online on the District's website located at www.tcwd.ca.gov.

COMPLIANCE WITH THE REQUIREMENTS OF CALIFORNIA GOVERNMENT CODE SECTION 54954.2

In compliance with California law and the Americans with Disabilities Act, if you need special disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 858-0277, at least 48 hours in advance of the scheduled Board meeting. Notification at least 48 hours prior to the meeting will assist the District in making reasonable arrangements to accommodate your request. The Board Meeting Room is wheelchair accessible.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

RECOMMENDED ACTION:

Approve the following Engineering/Operational Committee Meeting Recap(s) and recommend that the Board receive and file same (Consent Calendar):

1. *January 8, 2025 Committee Meeting*

CONTACTS (staff responsible): PALUDI/PEREA



TRABUCO CANYON WATER DISTRICT ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | JANUARY 8, 2025

DIRECTORS PRESENT

Glenn Acosta, Committee Chair
Mark Anderson, Committee Member

STAFF PRESENT

Fernando Paludi, General Manager
Michael Perea, Assistant General Manager
Lorrie Lausten, District Engineer
Gary Kessler, Water Superintendent
Oscar Ulloa, Wastewater Superintendent
Jason Stroud, Maintenance Superintendent
Roseann Lejsek, Executive Assistant

DISTRICT CONSULTANTS

Claire Collins, District General Legal Counsel – Hanson Bridgett, LLP

PUBLIC PRESENT

John Schatz, Esq. representing California Quartet
Fred Graylee, Hunsaker & Associates

CALL MEETING TO ORDER

Director Acosta called the January 8, 2025 Engineering/Operational Committee Meeting to order at 7:00 a.m.

VISITOR PARTICIPATION

No comments were received.

ORAL COMMUNICATION

No comments were received.

COMMITTEE MEMBER COMMENTS

None

REPORT FROM THE GENERAL MANAGER

Mr. Paludi welcomed Director Mark Anderson to the Engineering/Operational Committee.

Mr. Paludi noted that Mr. John Schatz was in the audience for Item 2 on the agenda.

Mr. Paludi provided a report on the power outage impacts to District facilities due to Southern California Edison's (SCE) Public Safety Power Shutoff (PSPS) event.

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

Mr. Paludi presented the Engineering/Operational Committee Meeting Recap for Committee review in accordance with the agenda.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | JANUARY 8, 2025**

RECOMMENDATION: The Committee recommended forwarding this matter to the Board of Directors (Consent Calendar).

ITEM 2: SADDLEBACK MEADOWS DEVELOPMENT UPDATE

Mr. Paludi presented this matter for Committee consideration, and he introduced Mr. Schatz to provide information on this matter. Mr. Paludi provided a brief overview and history of the development for Committee consideration. Mr. Paludi added that the developer has requested the District approve the development tract map and other related matters.

John Schatz – Mr. Schatz presented the Committee with a handout, and he provided a brief summary of the Developer’s efforts to work with District staff to obtain the District’s authorization of the Final Tract Map. Mr. Schatz requested that the District sign off on the Final Tract Map so that it could be considered by the County of Orange for approval.

Discussion occurred among the Committee, staff, Mr. Schatz and Mr. Graylee regarding this matter.

RECOMMENDATION: None – Informational item only.

ITEM 3: AGREEMENT AMENDMENT NO. 1 WITH WM LYLES FOR SCADA UPGRADE PROJECT – PHASE 2

Mr. Paludi presented this matter for Committee consideration, and he provided a history of the project and the District’s challenges with the original contractor TESCO Controls, which resulted in the termination of their contract. Mr. Paludi reported that the District contracted with W.M. Lyles Co. in April 2024 for the first of two phases to complete the project. Mr. Paludi stated that the proposed Agreement Amendment No. 1 budget would be utilized to complete Phase 2 of the SCADA project.

RECOMMENDATION: Committee to recommend the Board of Directors approve and authorize the General Manager to execute Amendment No. 1 to the SCADA Integration Services Agreement with W.M. Lyles Co. for a not-to-exceed amount of \$59,695 plus a 10% contingency of \$5,970 for a total not-to-exceed amount of \$65,665 [total Agreement not-to-exceed \$283,535] (Action Calendar).

ITEM 4: QUARTERLY CAPITAL IMPROVEMENT PROGRAM UPDATE

Mr. Paludi presented this matter for Committee consideration, and Ms. Lausten presented the Capital Improvement Program (CIP) budget summary update for FY 2024-25. Ms. Lausten highlighted projects that have been completed since the previous quarterly update in September 2024. Discussion occurred in regards to adding Engineering information on the District’s website for transparency purposes.

RECOMMENDATION: None – Informational item only.

ITEM 5: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Golf Club SLS Improvement Project

Ms. Lausten provided an update on this matter, and she reported that this project is complete. Ms. Lausten added that the Notice of Completion should be filed the following month.

2. Heritage SLS Improvement Project

Ms. Lausten provided an update on this matter, and she reported that this project is complete. Discussion occurred concerning the District’s other Lift Stations, and Mr. Ulloa stated that although the other Lift Stations

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | JANUARY 8, 2025**

do need improvements, both Golf Club and Heritage Lift Stations are critical facilities and were prioritized as such.

3. Trabuco Bridge Replacement Project

Ms. Lausten provided an update on this matter, and she reported that the County of Orange will complete the design by the end of 2025. Ms. Lausten stated that the District has two pipelines adjacent to the bridge, and she questioned whether the District may want to relocate the two pipelines. Ms. Lausten stated that she will bring this item back to the Committee when she has more information.

4. Other Projects

None

RECOMMENDATION: None – Informational item only.

ITEM 6: WATER SYSTEM UPDATES

Mr. Kessler reviewed the projects and repairs for the prior month, and he reported that Water Operations staff had completed the following tasks:

1. Replaced all Influent and Effluent valves on 18 filters at the Groundwater Treatment Facility (GWTF).
2. Assisted Maintenance Department with the transfer of power supply at the El Toro Field Office during the PSPS event.
3. Worked with Orange County Public Works (OCPW) on the Trabuco Creek berm modification.
4. Assisted with the PLC upgrade at the Robinson Ranch PS.
5. Replaced all 4 air vacs at the El Toro PS.

Mr. Kessler presented the Water System Summary for Committee review. Mr. Kessler reported that the Dimension Water Treatment Plant (DWTP) and the 16" potable water transmission pipeline is offline due to the condition of the pipeline. Discussion occurred regarding potential options to repair the pipeline. Discussion also occurred regarding the District's sources of supply, and putting together the costs associated with each source for a future discussion.

RECOMMENDATION: None – Informational item only.

ITEM 7: WASTEWATER SYSTEM UPDATES

Mr. Ulloa reviewed the projects and repairs for the prior month, and he reported that Wastewater Operations staff had completed the following tasks:

1. Assisted in shutdown and install of new 10" and 6" Cla-Vals for Dove Canyon Golf Course.
2. Assisted in the installation and startup of the sewer pump at Heritage Lift Station.
3. Quarterly cleaning of gravity sewer hot spots throughout the District.
4. Repaired 6" recycled line at the WWTP.

Mr. Ulloa presented the Recycled Water System Summary for Committee review, and he reported that Dove Lake had approximately 11 feet of freeboard. Mr. Ulloa reported on various improvement projects that the staff is working on. Mr. Ulloa noted that staff has completed the sewer line cleaning for the year.

RECOMMENDATION: None – Informational item only.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | JANUARY 8, 2025**

ITEM 8: MAINTENANCE DEPARTMENT UPDATES

Mr. Stroud reviewed the projects and repairs for the prior month, and he reported that Maintenance staff completed the following tasks:

Projects and Repairs

Maintenance staff performed and/or completed the following tasks and projects:

Water Operations

1. Attended meeting with Water Operations and OCPW on debris flow, berm repair and creek preparations.
2. PSPS required the mobile generator at field office.

Wastewater Operations

1. Assisted WW ops with small reclaim leak at WWTP.

District Fleet Upgrades & Other Projects

1. Completed BIT Inspections.
2. SMOG'd four service trucks.
3. Attended RSM Town Hall meeting on the debris flow concerns. OCSD, OCFA, and OCPW presented info that TCWD is already aware of.
4. Received Greenstone delivery of sand and road base.
5. HAZMAT/CERS report was submitted and accepted by OC Environmental Health.
6. Mobile generator having issues that Maintenance Dept. is dealing with and utilizing Duthie Power Services.

RECOMMENDATION: None – Informational item only.

ITEM 9: OTHER MATTERS/REPORTS

There were no other matters reported.

RECOMMENDATION: None

ITEM 10: CLOSED SESSION: CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

The Committee entered closed session at 8:28 a.m. The General Manager, Assistant General Manager, District Engineer and District General Counsel participated in closed session.

This closed session ended at 9:35 a.m.

ITEM 11: REPORT OF ACTION(S) TAKEN IN CLOSED SESSION

Ms. Collins reported that the Committee met in closed session to review the matter as agendaized, and that there was no action to be reported in closed session.

ADJOURNMENT

Director Acosta adjourned the January 8, 2025 Engineering/Operational Committee Meeting at 9:36 a.m.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 2: SOURCES OF SUPPLY AD HOC COMMITTEE REPORT – JANUARY 28, 2025 MEETING

Board President Mandich approved the formation of an Ad Hoc Committee of the Board of Directors to oversee the evaluation and comparison of Trabuco Canyon Water District’s alternative sources of potable water supply. This item will provide an opportunity for Committee and/or staff members to recap the discussions and possible direction to staff from the initial meeting on January 28.

FUNDING SOURCE:

Not applicable

FISCAL IMPACT:

None at this time

ENVIRONMENTAL COMPLIANCE:

Not applicable

RECOMMENDED ACTION:

Committee to receive information at the time of the Committee Meeting.

EXHIBIT(S):

None

CONTACTS (staff responsible): PALUDI/PEREA/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 3: DISCUSSION CONCERNING TRABUCO CANYON WATER DISTRICT SERVER UPGRADE PROJECT – CAL-OES CYBERSECURITY GRANT FUNDED

Background

TCWD’s business system is comprised of two physical servers and multiple virtual machines to provide staff the required software solutions and storage requirements for day-to-day business. The last server upgrade occurred in 2016, and the District has fully maximized the storage expansion capacity and the use of the existing business system since that time. The physical servers require replacement as there is approximately ten percent storage capacity remaining, and the risk of not replacing the servers include (1) the inability to increase file storage; (2) limitations on critical system upgrades; and (3) the risk of system failure using non-updated software due to storage capacity restrictions.

District staff worked with Highroad IT (the District’s independent contract IT manager) in early 2024 to budget for a two-phased upgrade approach in Fiscal Years 2024-25 and 2025-26. The project was originally designed to include the implementation of a Single Node On-Premises Server System (Single Node) with Microsoft Azure Disaster Recovery Network Solution (Azure) and associated networking configuration improvements to ensure continuous access, storage availability, and redundant systems. Please note that this project is independent and separate from the District’s SCADA server environment.

At the August 15, 2024 Regular Board Meeting, the Board approved a quote from Highroad IT (Quote No. TCWD24-0726A) in the amount of \$99,648 for the first phase of the project. Simultaneously, Cal OES announced the 2024 Cybersecurity Grant opportunity of unmatched funding up to \$250,000 in cybersecurity enhancements for public agencies to meet significant cyber threats. TCWD did not move forward on Quote No. TCWD24-0726A due to the timing of the Cal OES grant announcement in an effort to secure additional funding to augment the project.

Updated Information

In September 2024, District staff worked with Highroad IT and Soto Resources to apply for the Cal OES Cybersecurity Grant and was subsequently awarded the full grant amount of \$250,000 in December 2024 (Exhibit 1). In the application, District staff modified the planned improvements to include not only Azure but Microsoft Defender Server Antivirus as well to meet Cal OES minimum goals for cybersecurity system hardening, redundancy, and reliability which increased the total project costs beyond the Board-approved funding. Additionally, the proposal reflects an increase in manufacturer hardware and software costs in comparison with the early 2024 budget proposal.

In January 2025, District staff and Highroad IT reviewed the planned improvements submitted to Cal OES in the application and the possibility of enhancing the project to include a second node as indicated in the table below.

	CIP Budget	\$ 180,000
	CalOES Grant	\$ 250,000
	Total Available Funds	\$ 430,000
CalOES Proposal Option	Single Node - Azure - Defender	\$ 279,147
Cybersecurity Enhanced Option	Dual Node - Azure - Defender	\$ 399,937

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

Staff Recommendation

District staff recommends amending the approved CIP project budget to accommodate the updated Cal OES Proposal Option of \$279,146.26 (Exhibit 2) augmented with the approved grant funding from Cal OES and a small contingency for unforeseen project changes, resulting in an approximate \$130,000 in capital improvement project fund savings as indicated below.

Total NTE Project Budget	\$ 300,000
Cal OES Grant Funding	\$ 250,000
TCWD Funding	\$ 50,000
TCWD Approved CIP Funding	\$ 180,000
Total CIP Savings to TCWD	\$ 130,000

More information may be provided at the time of the meeting.

FUNDING SOURCE:

Capital Improvement Program

FISCAL IMPACT (PROJECT BUDGET):

Original Budget

Original Highroad IT Quote:	\$ 99,648
Project Contingency:	\$ 15,352
FY 24/25 Budget (Phase 1):	\$115,000
FY 25/26 Budget (Phase 2):	\$ 65,000
Total Project Budget:	\$180,000

Proposed Amended Budget

Cal OES Proposal Option	\$279,147
Contingency	\$ 20,853
Total Project Amended Budget	\$300,000

ENVIRONMENTAL COMPLIANCE:

None

RECOMMENDED ACTION:

Recommend the Board of Directors approve the following actions:

- 1. Amend the FY 2024-25 Capital Improvement Program Server Upgrade Project budget to \$300,000 with partial funding of \$250,000 from the approved CalOES Cybersecurity Grant (Action Calendar).*
- 2. Approve the Highroad IT Quote No. TCWD25-0129A in the amount of \$279,146.26 for the TCWD Server Project Upgrade (Action Calendar).*

EXHIBITS:

1. Cal OES Notification of Subrecipient Allocation FY 2024 State & Local Cybersecurity Grants for Local & Tribal Governments (SL) Program
2. Highroad IT Quote No. TCWD25-0129A for TCWD Server Project Upgrade

CONTACTS (staff responsible): PALUDI/PEREA



December 24, 2024

DELIVERED VIA EMAIL: FPaludi@tcwd.ca.gov

Fernando Paludi
General Manager
Trabuco Canyon Water District
32003 Dove Canyon Drive
Trabuco Canyon, CA 92679

SUBJECT: NOTIFICATION OF SUBRECIPIENT ALLOCATION

Fiscal Year (FY) 2024 State & Local Cybersecurity Grants for Local & Tribal Governments (SL) Program

Grant Subaward Performance Period: December 1, 2024, to December 31, 2026

Dear Fernando Paludi:

We are pleased to announce that your proposal has been selected to receive funding through the FY 2024 SL Program of the California Governor's Office of Emergency Services (Cal OES). As outlined in the SL Program Competitive Funding Opportunity (CFO) section E, 3. Notification Process, Applicants not selected for funding may appeal Cal OES's decision pursuant to the Cal OES Appeal Guidelines for Competitive Funding. If any appeal is successful, this may affect your requested funding amount. Provided there are no successful appeals, your organization will be awarded the amount of \$250,000.

This subaward is subject to requirements in Title 2 Code of Federal Regulations, Part 200, including the Notice of Funding Opportunity (NOFO), the Preparedness Grants Manual, the California Supplement to the NOFO, reporting requirements, all policies and provisions set forth in the FY 2024 SL CFO, and all applicable federal, state, and local requirements. All activities funded with this subaward must be completed within the subaward period of performance. Any funds received in excess of current needs, approved amounts, or those found owed as a result of a final review or audit, must be refunded to Cal OES.

Subrecipients must obtain written approval **prior** to incurring costs for activities such as aviation, watercraft, allowability request logs, noncompetitive procurement,



and projects requiring Environmental Planning and Historic Preservation review.

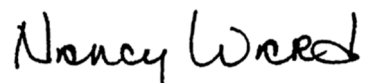
Your organization will be required to prepare and submit performance reports annually for the duration of the subaward period of performance or until all activities are completed and the subaward is formally closed. Failure to submit required reports could result in subaward reduction, suspension, or termination. Throughout the subaward cycle, project status and milestones from the performance reports will be used as indicators of project feasibility, performance, and grant management capacity. This information may also be used in assessing proposals for future grant opportunities.

Next Steps:

- Your signature is required on this letter. Please sign and return this letter via email to your Cal OES Grants Analyst (GA) within 20 calendar days of receipt and keep a copy for your records.
- If you have not already, please visit the [Grants Central System \(GCS\) webpage](#) to register your organization.
- You will be notified to complete your application as soon as it is available in GCS – we anticipate mid-January 2025.
- Once the completed application is submitted and approved in GCS, you will be able to request reimbursement of eligible subaward expenditures in the system.

Please contact your GA if you have questions or need further assistance.

Sincerely,



NANCY WARD
Director

Quote for Products and Services

Company Name	Trabuco Canyon Water District	Quote Number	TCWD25-0129A
Requested By	Michael Perea	Initiate Date	January 29, 2025
Quote Type	Project	Expiration Date	February 28, 2025
Description	CalOES Cybersecurity Grant Project – Hardware and Software Implementation		

Cost Breakdown						
Item Description	Qty	Unit Price	Total <i>(2 year)</i>	Type	Taxable	Notes
IT Infrastructure Fortification						
Dell AX7525 (32 Core)	1	96,993	96,993	Hardware		
Azure Local (32 core)	1	400/month	8,400	Software		Monthly renewal (21 months)
Windows Server Standard - 2 Core Pack	16	992/year	15,872	Software		Annual renewal (2 years)
Windows Server User CAL	33	60/year	1,980	Software		Annual renewal (2 years)
SQL Server Standard - 2 Core	2	4,620/year	9,240	Software		Annual renewal (2 years)
I7 16GB 512GB SSD	1	1,224	1,224	Hardware		
Windows 11 Pro	1	233	233	Software		
Configuration and Installation	160	100	16,000	Services		
Networking						
Netgear 28-Port Ethernet 10G	2	2,699	5,398	Hardware		
10GBASE Transceiver	12	65	780	Hardware		
Network Cabling	1	4,860	4,860	Hardware		
Configuration and Installation	8	100	800	Services		
Cybersecurity Enhancement						
Business Premium Upgrade	31	22/month	15,004	Software		Monthly renewal (22 months)
Defender Implementation	120	100	12,000	Services		
Azure Cloud Disaster Recovery						
Network Build and Data Migration - Qty 240	240	100	24,000	Services		
Azure Cloud Subscriptions	1	2,886/month	57,720	Software		Monthly renewal (20 months)
Shipping	1	175	175	Taxes		
Orange County Sales Tax		7.75%	8,467.26	Taxes		
Total			\$279,146.26	<i>Includes all costs incurred over the 2-year grant reimbursement period ending December 30, 2026</i>		

All applicable taxes, shipping and handling will be applied at the time of invoice.



As evidenced by the signature below, I hereby authorize Highroad IT to furnish all materials and services mentioned in this quote, and Trabuco Canyon Water District agrees to pay the quoted amount, including all applicable taxes, shipping, and handling costs.

Approval Signature	
Printed Name	
Title	
Approved Date	

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 4: 2024 UPDATE TO STANDARD DRAWINGS, SPECIFICATIONS, AND CONSTRUCTION MANUAL

Trabuco Canyon Water District (District) standards, specifications, and construction and design guidelines (Standards) are intended for use by consultants, contractors, and developers for the design and construction of facilities owned and/or operated by the District. The last update to the Standards was in 2007. The Standards update was produced by the District Engineer with the assistance of engineering consulting services, and reviewed by Engineering and Operations staff have produced a comprehensive document that ensures consistency for design and construction, along with providing policies and procedures for development and obtaining service from the District. Hard copies of the Standards (Draft) will be distributed at the time of the meeting.

FUNDING SOURCE:

General Fund

FISCAL IMPACT:

The estimated cost of producing the updated Standards is \$60,000.

ENVIRONMENTAL COMPLIANCE:

Not Applicable

RECOMMENDED ACTION:

Recommend the Board of Directors adopt Resolution No. 2025-1340 adopting the Domestic and Non-Domestic Water and Sewer Design & Construction Manual (Action Calendar).

EXHIBIT(S):

1. Draft Resolution No. 2025-1340

CONTACTS (staff responsible): PALUDI/LAUSTEN

RESOLUTION NO. 2025-1340

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE
TRABUCO CANYON WATER DISTRICT ADOPTING UPDATED
DOMESTIC AND NON DOMESTIC WATER AND SEWER
DESIGN & CONSTRUCTION MANUAL**

WHEREAS, the Trabuco Canyon Water District (“District”) adopted Procedures and Design Criteria for Water and Sewer Facilities (“Standard Specifications”) in July 2002; and

WHEREAS, the District has revised its Standard Specifications to include updated policies and procedures, design criteria, general technical specifications and standard drawings for domestic and non-domestic water and sewer facilities; and

WHEREAS, it would be in the best interest of the District to have said revised Standard Specifications approved and adopted by the Board of Directors.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE TRABUCO CANYON WATER DISTRICT DOES HEREBY RESOLVE, DETERMINE, AND ORDER AS FOLLOWS:

Section 1. The Board of Directors of the Trabuco Canyon Water District hereby adopt the 2025 edition of the Domestic and Non Domestic Water and Sewer Design and Construction Manual.

Section 2. Said revisions shall apply to all design and construction of domestic and non-domestic water and sewer facilities effective the date of the adoption.

ADOPTED, SIGNED, AND APPROVED this 20th day of February 2025

TRABUCO CANYON WATER DISTRICT

By: _____
President/Vice President

By: _____
Secretary/Assistant Secretary

STATE OF CALIFORNIA)

) ss.

COUNTY OF ORANGE)

I, Michael Perea, District Secretary of the Trabuco Canyon Water District, do hereby certify that the foregoing resolution was duly adopted by the Board of Directors at a meeting of said Board held on the 20th day of June 2024, and that it was so adopted by the following vote.

AYES:

NOES:

ABSTAIN:

ABSENT:

District Secretary,
Trabuco Canyon Water District

STATE OF CALIFORNIA)

) ss.

COUNTY OF ORANGE)

I, Michael Perea, District Secretary of the Trabuco Canyon Water District, do hereby certify that the foregoing is a full, true, and correct copy of Resolution No. 2025-1340 of such Board and that the same has not been amended or repealed.

Dated this 20th day of February 2025.

District Secretary,
Trabuco Canyon Water District

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 5: RESOLUTION CLARIFYING APPLICATION OF IN-LIEU STORAGE FEES

An In-Lieu Water Storage Charge (Storage Charge) is imposed for operational, fire flow, and emergency water storage capacity and the revenue derived from the Storage Charge is used for the acquisition and construction of District water storage facilities as needed to meet the District’s overall storage demand. The District’s General Manager has determined the need to clarify the District’s existing rules and requirements regarding the application of the Storage Charge. More information will be provided at the time of the meeting.

FUNDING SOURCE:

Not applicable.

FISCAL IMPACT:

This item does not propose a change in the amount of the Storage Charge.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDED ACTION:

The Committee will receive information at the time of the meeting and take action(s) as deemed appropriate.

EXHIBIT(S):

None

CONTACTS (staff responsible): PALUDI/LAUSTEN/COLLINS

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 6: POTABLE WATER SYSTEM STORAGE EVALUATION 2024 UPDATE

Reservoir storage is a critical component of the Trabuco Canyon Water District's (District) potable water system. Reservoir storage provides operational storage to meet daily demands, fire-flow storage to provide the required flow and duration to fight a structure fire, and emergency storage to meet daily demands in the event of a supply outage. Hazen & Sawyer was retained to review the District's storage inventory and future needs in light of a proposed development known as Saddleback Meadows.

The purpose of the 2024 Storage Evaluation includes the following:

1. Consideration of future usage estimates and the potential impact on storage needs.
2. Review of the 2021 Saddleback Meadows (SBM) Sub Area Master Plan (SAMP) related to storage recommendations, and providing a professional opinion on the recommendations.
3. Determine how much District-wide storage is available today, and how much is needed in the future.

The District's storage criteria is to have 7-days of emergency storage with a 25% customer demand reduction per the 2022 District Master Plan, which is consistent with Metropolitan Water District's guidelines.

The study looked at various scenarios on existing and future needs. The results of the evaluation are the following:

1. Currently, with all supplies offline and existing demand reduced by 25%, the District has 5 - 6 days of storage under average day demand (ADD). Under this scenario, there is a need for an additional 1.56 million gallons (MG) of storage.
2. Currently, with all supplies offline and existing demands reduced by 25%, the District has 2 - 2.5 days of emergency storage under maximum day demand (MDD), which would typically occur in the summer.
3. With all supplies offline and projected future demands reduced by 25%, an additional 2.14 MG of storage under ADD is needed to achieve 7-days of emergency storage.
4. SBM must provide an additional 0.93 MG of reservoir storage to support this development.

FUNDING SOURCE:

General Fund

FISCAL IMPACT:

\$35,150 in consulting fees

ENVIRONMENTAL COMPLIANCE:

Not Applicable

RECOMMENDED ACTION:

Recommend the Board of Directors receive and file the Trabuco Canyon Water District - 2024 Storage Evaluation report.

EXHIBIT(S):

1. 2024 Storage Evaluation Report

CONTACTS (staff responsible): PALUDI/LAUSTEN

Hazen *Technical Memorandum*

January 10, 2025

To: Lorrie Lausten, PE, TCWD District Engineer

From: Tori Yokoyama, PE, Hazen and Sawyer
Amy Erdenedalai, EIT, Hazen and Sawyer

Trabuco Canyon Water District – 2024 Storage Evaluation

FINAL

20120-006

1. Introduction and Background

Reservoir storage is a critical component of the District's potable water system. Reservoir storage provides operational storage to meet daily demands, fire storage to provide the required flow and duration to fight a structure fire, and emergency storage to meet daily demands in the event of a supply outage. Potable water reservoirs are not sized for fighting wildfires.

The purpose of this technical memorandum is to conduct analyses related to the District's storage:

- Consideration of future usage estimates (gallons per capita per day (gpcd) factors) and the potential impact on storage needs.
- Review of the 2021 Saddleback Meadows (SBM) Sub Area Master Plan (SAMP) related to storage recommendations, and providing a professional opinion on the recommendations.
- Determining how much storage is available today, and how much is needed in the future.

2. Usage Factor Evaluation

The purpose of this section is to evaluate water usage factors and the potential impact on the storage evaluation. This section addresses the following:

- Review of usage factors from previous planning documents – 2021 Saddleback Meadows SAMP (Psomas, Dec 2021) and the 2022 Master Plan
- Review of latest production data
- Conclusion on usage factors

For the purpose of this discussion, both production and demand (or consumption) are considered the same, since both typically trend within 10% of each other.

2.1 Usage Factors from SBM SAMP and the Master Plan

2.1.1 SBM SAMP Usage Factor

Saddleback Meadows will have 181 single-family dwelling units, with an average lot size of 6,067 sq ft. Based on evaluating demand data from 2017 and 2018 for similar sized lots in Trabuco Highlands, Robinson Ranch, and Dove Canyon, the SBM SAMP identified a proposed average day demand usage factor of 352 gpd/du.

2.1.2 Master Plan Usage Factor

The Master Plan evaluated demand data for the entire service area from 2014 through 2021. Demand factors were calculated for residential lots for the entire service area, as well as separate factors for both

the Portola and Skyridge developments. The residential demand factors from 2021 demand data are shown in Table 1.

Table 1: 2021 Residential Demand Factors

Rate Code	Average Daily Demand (Per Dwelling Unit Demand Factor)
System-wide Residential	400 gpd
Residential Portola	246 gpd
Residential Skyridge	279 gpd

It was observed that production in 2021 was close to the average of production from 2015-2021.

2.2 Review of Latest Production Data

Water system production trends closely with demand data. Production includes water supplied to the system from:

- Dimension Water Treatment Plant (DWTP)
- Rose Canyon Groundwater Treatment Plant
- Ridgeline Road connection or Plano Trabuco connection

Production data from January 2022 through December 2023 was obtained to compare recent production data to the data used in the Master Plan (2013-2021). Rainfall data from January 2016 through December 2023 was obtained through NOAA’s Climate Data Report for Trabuco Canyon Station US1CAOR0049, and rainfall data from January 2014 through December 2021 was obtained through NOAA’s Climate Data Report for Mission Viejo Station US1CAOR0019. The production and rainfall data are shown in Figure 1 and Figure 2, respectively.

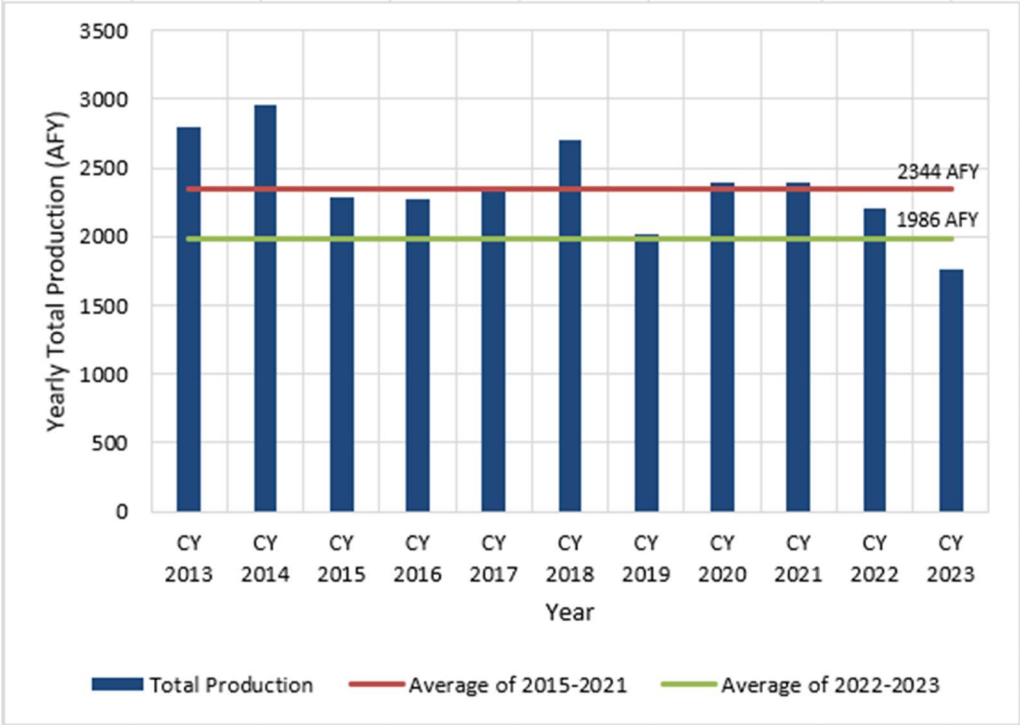


Figure 1: Annual Total Production

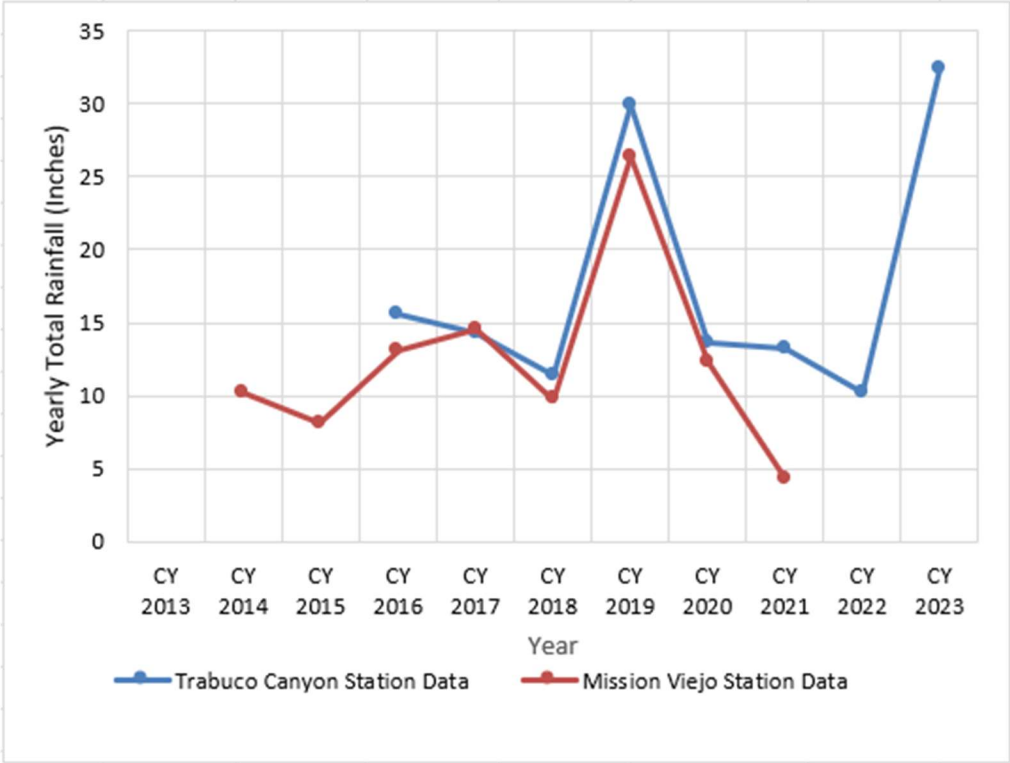


Figure 2: Annual Total Rainfall

Conservation mandates were implemented starting in 2015, so production data prior to that is skewed higher. Looking at the data from the Master Plan (2015-2021), yearly production averaged 2344 AFY. Compared to that average, the production data from 2022 was consistent with the 2015-2021 average. However, production in 2023 was 25% below the average.

Annual rainfall typically does impact total production. The years 2019 and 2023, which experienced significant rainfall, saw production levels drop approximately 15% and 25% below the 2015-2021 average of 2344 AFY, respectively. In the years 2014-2018 with lower rainfall totals, higher production occurred.

2.3 Urban Water Use Objectives and Projected Demand Impacts

The Urban Water Use Objectives (UWUO), established under California’s 2018 water conservation legislation, set long-term efficiency regulatory standards for indoor residential, outdoor residential, and CII (commercial, industrial, and institutional) water use. Starting in 2024, these standards require urban water agencies to calculate their UWUO annually based on efficient water use across various categories, including indoor and outdoor residential water use, CII irrigation, water losses, and approved variances. These objectives influence demand forecasts by integrating efficiency standards and local growth assumptions. See Figure 3.

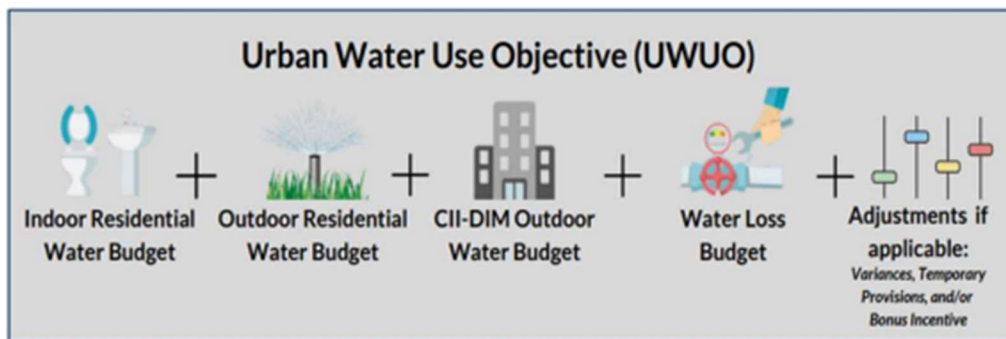


Figure 3: Components of the Urban Water Use Objectives (UWUO)

For the District’s service area, preliminary estimates suggest that adherence to UWUO standards could reduce projected demands by 5-10%. To maintain a conservative approach, the system-wide storage analysis in Section 4 assumes a 5% reduction on projected future demand. This reduction, driven by efficiency measures and conservation, highlights the potential impact of UWUO compliance on future demand and storage needs.

2.4 Usage Factor Summary

In summary:

- Usage factors from the SBM SAMP were based on demand data from 2017 and 2018
- Usage factors from the Master Plan were based on data from 2021

- Production data from 2022-2023 shows a lower trend compared to the 2015-2021 period
- Years with greater rainfall result in less water production data
- A 5% reduction in projected (2045) demand, based on UWUO compliance, has been conservatively applied to inform storage evaluation analysis

Although 2023 production data is over 20% lower than the previous years (2015-2021), it is uncertain if this lower trend will continue. There is a clear trend that depicts lower production data due to wetter years.

At this time, it is recommended to:

- Use the SBM SAMP recommended demand estimates for the Saddleback Meadows development – 352 gpd/du (plus common area irrigation).
- Use the Master Plan recommended demand factors for other future demand estimates – 400 gpd/du.
- Monitor demand and production data over the next two years to observe if the lower trends continue or if they return to higher levels. If the lower trends continue over the next two years, it is recommended to adjust down future demand factors.

3. Review of Saddleback Meadows SAMP Storage Recommendations

The purpose of this section is to review the Saddleback Meadows SAMP storage recommendations. This section addresses:

- Storage criteria comparison
- Revised storage requirements for Saddleback Meadows
- Recommendations

3.1 SBM SAMP Storage Criteria

The SBM SAMP storage criteria compared with the latest Master Plan storage criteria are compared side-by-side in Table 2. The Master Plan criteria has a lower requirement for operational storage, but a higher requirement for emergency storage. The fire flow requirement is approximately the same.

Table 2: SBM SAMP vs Master Plan Storage Criteria

Storage Component	SBM SAMP Criteria	Master Plan Criteria
Operational	42% (or 10 hrs) of Maximum Day Demand	20% of Maximum Day Demand
Fire Flow	1,125 gpm Fire Flow for 1 Hour	Worst-Case Fire Flow Volume

Storage Component	SBM SAMP Criteria	Master Plan Criteria
Emergency	5 days of Average Day Demand	7 Days of Average Day Demand

3.2 Saddleback Meadows Storage Requirement

It is recommended to reassess the required storage for SBM based on the Master Plan Criteria. However, as discussed in Section 2, it is recommended to use the demand estimates from the SBM SAMP. The SBM SAMP required storage, and the updated Master Plan criteria required storage are shown in Table 3.

Table 3: SAMP vs 2021 MP Storage Requirement Analysis

Storage Type	SBM SAMP Required Storage (gal)	Master Plan Required Storage (gal)
Operational	101,000	48,000
Fire Flow	68,000	60,000 ¹
Emergency	587,000	821,000
Total	0.75 MG	0.93 MG

¹Based on most recent requirement from Orange County Fire Authority of 1000 gpm for 1-hr duration.

The updated required storage for SBM is a minimum 0.93 MG.

3.3 Recommendations

Based on the Master Plan criteria, it is recommended to add a minimum 0.93 MG additional storage to the system to support the proposed SBM development.

4. Water System Storage Evaluation

Storage evaluations for a water system are conducted to assess how much storage is available for daily operations, fire flow needs, and emergencies. The District’s storage criteria is to have 7-days of emergency storage. Emergency storage is needed when a major supply (or supplies) go off-line. Determining how much emergency storage is available is based on system demand, fire flow needs, and how much local water supply is available.

4.1 Water Demands

Existing water demands are based on average production from 2015 – 2021. As discussed in Section 2, this is over 20% higher than production seen in 2023, but it is not known if this lower trend will continue or return back to previous year levels. Future demands are based on the estimates from the 2020 UWMP. The District’s existing and projected demands are shown in Table 4.

Table 4: Water Demands

Scenario	Average Day	Max Day
Existing	2.09 MGD	3.88 MGD
	3.2 cfs	6.0 cfs
	2342 AFY	4349 AFY
Future (2045)	2.31 MGD	4.27 MGD
	3.6 cfs	6.6 cfs
	2589 AFY	4786 AFY
Future (2045 with UWUO)	2.19 MGD	4.05 MGD
	3.4 cfs	6.3 cfs
	2460 AFY	4547 AFY

4.2 Reservoir Storage

There are eight (8) active reservoirs (also called tanks) in the water system. The total capacity of the active reservoirs is 11.40 MG, however total effective volume based on actual operating levels is 10.73 MG. A summary of reservoir type, capacity, and year of construction is provided in Table 5.

Table 5: Existing Reservoirs

Pressure Zone	Name	HWL Elevation (ft)	Total Capacity (MG)	Type	Year Constructed
Cooks	Cooks	1165	0.06	Steel	1963
Harris Grade	Harris Grade No. 1	1504	2.00	Steel	1980
	Harris Grade No. 2	1496	0.42	Steel	1965
	Saddle Crest	1508	1.50	Steel	2020
Rose Canyon	Rose Canyon	1357	0.42	Steel	1979
Upper Dove Canyon	Upper Dove Canyon	1418	2.50	Steel	1988
Trabuco	Trabuco No. 1	1686	1.50	Steel	1984
	Trabuco No. 2	1686	3.00	Steel	1986
Total Capacity (MG)			11.40¹		

¹Total effective volume based on actual operating level is 10.73 MG

4.3 Analysis

Emergency storage was calculated under both Average Day Demand (ADD) and Maximum Day Demand (MDD) under one supply outage scenario –all supplies. It is assumed all reservoirs are full and there is access to the total effective storage for each reservoir. Emergency storage days were calculated as:

- $\text{Emergency Storage Days} = \text{Emergency Storage} / (\text{Average Day Demand} - \text{Supply})$
- Supply Facilities:
 - DWTP
 - Ridgeline Pump Station (supply from IRWD)
 - Plano Trabuco (supply from SMWD/IRWD)

4.3.1 Average Day Demand Storage Analysis - All Water Supplies Offline

This analysis evaluates emergency storage with all supply sources offline under average day demand (ADD) conditions. Table 6 shows that the District has approximately 4 – 4.5 days of emergency storage if all supply facilities were to go offline.

Table 6: System-wide Storage Analysis under ADD – All Water Supplies Offline

Scenario	Local Supply (MGD)	Average Day Demand (MGD)	Total Effective Storage ¹ (MG)	Equalization Storage (MG)	Fire Flow Storage (MG)	Emergency Storage (MG)	Emergency Storage (Days)
Existing	0.00	2.09	10.73	0.78	0.54	9.41	4.5
Future (2045)	0.00	2.31	10.73	0.85	0.54	9.34	4.0
Future (2045 with UWUO)	0.00	2.19 ²	10.73	0.81	0.54	9.38	4.3

¹Calculated using reservoir diameter and operating level.

²Assumes a 5% demand reduction per UWUO guidance in the year 2045

4.3.2 Average Day Demand Storage Analysis – Reduced Demand with all Supplies Offline

In the event of a water supply emergency such as a loss of all water supplies, MWD assumes a demand reduction of 25 percent could be achieved by placing short-term restrictions on irrigation and non-essential water usage. Table 7 shows storage analysis results with a 25% reduction in average day demand and with all water supply sources offline. The District has 5-6 days of emergency storage when average day demands are reduced by 25 percent.

Table 7: System-wide Storage Analysis under ADD – Reduced demand with all Supplies Offline

Scenario	Local Supply (MGD)	Average Day Demand ² (MGD)	Total Effective Storage ¹ (MG)	Equalization Storage (MG)	Fire Flow Storage (MG)	Emergency Storage (MG)	Emergency Storage (Days)
Existing	0.00	1.57	10.73	0.78	0.54	9.41	6.0
Future (2045)	0.00	1.73	10.73	0.85	0.54	9.34	5.4
Future (2045 with UWUO)	0.00	1.65 ³	10.73	0.81	0.54	9.38	5.7

¹Calculated using reservoir diameter and operating level.

²Average day demand reduced by 25 percent.

³Assumes a 5% demand reduction per UWUO guidance in the year 2045

4.3.3 Max Day Demand Storage Analysis - All Water Supplies Offline

This analysis evaluates emergency storage with all supply sources offline under MDD conditions. Table 8 shows that the District has approximately 2 – 2.5 days of emergency storage if all supply facilities were to go offline.

Table 8: System-wide Storage Analysis under MDD – All Water Supplies Offline

Scenario	Local Supply (MGD)	Max Day Demand (MGD)	Total Effective Storage ¹ (MG)	Equalization Storage (MG)	Fire Flow Storage (MG)	Emergency Storage (MG)	Emergency Storage (Days)
Existing	0.00	3.88	10.73	0.78	0.54	9.41	2.4
Future (2045)	0.00	4.27	10.73	0.85	0.54	9.34	2.2
Future (2045 with UWUO)	0.00	4.05 ²	10.73	0.81	0.54	9.38	2.3

¹Calculated using reservoir diameter and operating level.

²Assumes a 5% demand reduction per UWUO guidance in the year 2045

4.3.4 Max Day Demand Storage Analysis – Reduced Demand with all Supplies Offline

In the event of a water supply emergency such as a loss of all water supplies, Table 9 shows storage analysis results with a 25% reduction in max day demand. The District has 2-3 days of emergency storage when max day demands are reduced by 25 percent.

Table 9: System-wide Storage Analysis under MDD – Reduced demand with all Supplies Offline

Scenario	Local Supply (MGD)	Max Day Demand ² (MGD)	Total Effective Storage ¹ (MG)	Equalization Storage (MG)	Fire Flow Storage (MG)	Emergency Storage (MG)	Emergency Storage (Days)
Existing	0.00	2.91	10.73	0.78	0.54	9.41	3.2
Future (2045)	0.00	3.20	10.73	0.85	0.54	9.34	2.9
Future (2045 with UWUO)	0.00	3.04 ³	10.73	0.81	0.54	9.38	3.1

¹Calculated using reservoir diameter and operating level.

²Max day demand reduced by 25 percent.

³Assumes a 5% demand reduction per UWUO guidance in the year 2045

In order to achieve an emergency storage duration of 7 days under ADD for existing conditions, the District would need to add 1.56 MG of new effective storage to the system.

In order to achieve an emergency storage duration of 7 days under ADD for future (2045) conditions, the District would need to add 2.14 MG of new effective storage to the system.

4.4 Storage Evaluation Recommendations

This technical memorandum concludes that:

- Additional 0.93 MG of storage is needed for the proposed SBM development.
- With all supplies offline and existing demands reduced by 25%, an additional 1.56 MG of storage under ADD.
- With all supplies offline and projected future (2045 with UWUO) demands reduced by 25%, an additional 2.14 MG of storage under ADD to achieve 7-days of emergency storage. Note, projected future demands include the proposed SBM development.

It is recommended the District construct additional storage in their system – a minimum of 1.56 MG. This additional storage would provide 7-days of emergency storage under existing conditions with all supplies off-line (the worst-case scenario), and 6.6 days of emergency storage under projected future conditions.

The District would be justified in only constructing 1.56 MG of new storage for several reasons. First, it is unknown to what extent future demands will increase. As discussed, recent trends in consumption show lower trends, and even if the future demands are realized, the District is still providing 6.6 days of emergency storage in this future condition. Second, the District’s three primary supplies enter the system at three different locations from three different sources. The likelihood is low that all three supplies go off-line at the same time. Third, although additional storage provides a benefit in emergencies, it also can be a challenge to manage water quality during lower demand conditions. The more storage that is added, the bigger that challenge becomes.

5. Summary and Recommendations

Section 2 showed that although 2023 production data is over 20% lower than the previous years (2015-2021), it is uncertain if this lower trend will continue due to it being a wet year.

At this time, it is recommended to:

- Use the SBM SAMP recommended demand estimates for the Saddleback Meadows development
- Use the Master Plan recommended demand factors for other future demand estimates
- Monitor demand and production data over the next two years to observe if the lower trends continue or if they return to higher levels. If the lower trends continue over the next two years, it is recommended to adjust down future demand factors.

Section 3 compared the storage criteria from the SBM SAMP and the Master Plan. Based on the Master Plan criteria, SBM requires an additional 0.93 MG of reservoir storage to support this new development.

Section 4 conducted system-wide storage analyses. The results show that the District does not have 7-days of emergency storage when all water supply sources are offline. It is recommended the District construct additional storage in their system – a minimum of 1.56 MG. This additional storage would provide 7-days of emergency storage under existing conditions with all supplies off-line (the worst-case scenario), and 6.6 days of emergency storage under projected future conditions.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 7: GOLF CLUB SEWER LIFT STATION IMPROVEMENTS PROJECT COMPLETION

Trabuco Canyon Water District (District) owns and operates the Golf Club Sewer Lift Station (SLS) in the Dove Canyon community adjacent to the golf club driving range. This station receives wastewater flows from majority of the community by way of Bell Canyon and Barneburg Sewer Lift Stations and gravity sewer flows and then conveys the wastewater to the Robinson Ranch Wastewater Treatment Plant via a sewer force main on Hillrise.

Staff have made improvements to the station in stages from 2021-2024, to include the following:

- Installed a Sewer Bypass Tee
- Replaced a Section of Force Main Pipe and Valving
- Replaced the Motor Control Center
- Multiple Sewer Bypasses
- Replaced Dry Pit Piping, Valves, Pumps and Appurtenances
- Replaced the First Stage Submersible Pumps and Railing System
- Recoated and Repaired the Sewer Wet Well
- Constructed a New Bypass Wet Well, Sewer Pipe and Manhole.
- Installed Flow metering Vault
- Relocated and Installed New Surge Tank
- Supportive Electrical and Telemetry Upgrades
- Installed Fence and Gate.

This Capital Improvement Plan project was completed and accepted by the District on January 15, 2025 per the Notice of Completion filed with the County of Orange. The construction contractor for the project was Pacific Hydrotech Corporation.

FUNDING SOURCE:

Capital Improvement Program

FISCAL IMPACT:

The total cost of refurbishment of Golf Club Sewer Lift Station is included below:

<i>Item</i>	<i>Description</i>	<i>Cost</i>
1	Insertion Valve	\$19,000
2	Temporary Bypass Station	\$175,000
3	Repair Surge Tank	\$8,000
4	Bypass Tee and Valve	\$93,000
5	MCC Replacement	\$285,000
6	Survey/Easements	\$15,000
7	Design/CSDC	\$220,000
8	Submersible Pump Procurement-4	\$250,000
9	Surge Tank	\$70,000
10	Geotechnical Service-Design and Construction	\$20,000
11	Construction Management/Inspection/Testing	\$258,620
12	Construction	\$1,889,300
Total		\$3,302,920

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENVIRONMENTAL COMPLIANCE:

Notice of Exemption was filed with the County of Orange on November 1, 2021.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBIT(S):

None

CONTACTS (staff responsible): PALUDI/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 8: HERITAGE SEWER LIFT STATION IMPROVEMENTS PROJECT PHASE 1 COMPLETION

Trabuco Canyon Water District (District) owns and operates the Heritage Sewer Lift Station (SLS) located on Heritage Drive between Robinson Ranch Road and Silvertree Lane in the Trabuco Highlands Community. The Heritage SLS is a critical pump station that conveys pumped wastewater flows from a portion of the lower Dove Canyon community and Rancho Cielo community (from Via Alegre SLS), Walden Homes, Trabuco Marketplace, Dahlia Court community, and lower Robinson Ranch (from Plano Trabuco SLS) via a sewer force main. The facility also receives gravity sewer flows from the upper Robinson Ranch community and Trabuco Highlands community and serves as the final pump station of the sanitary sewer system before the Robinson Ranch Wastewater Treatment Plant (WWTP).

Staff have made improvements to the station in stages from 2021-2024, to include the following:

Phase 1 Improvements:

- Installed a Sewer Bypass Tee
- Replaced Dry Pit Piping, Valves, Pumps and Appurtenances
- New SCE Transformer

Phase 2 Improvements are currently in design and include the following:

- Replacement of the Motor Control Center
- Installation of Two New Pumps, Piping, and Valves in the Dry Pit
- Installation of a Flow Metering Vault
- Construct a New Bypass Wet Well, Sewer Pipe and Connections
- Sewer Bypass Equipment on Site
- Replace the Wet Well Lid due to Access Issues
- Site Improvements to Include Clear and Grub, Grading, Drainage, Paving, Wall and Gates
- Telemetry Upgrades
- New SCE Service Meter

FUNDING SOURCE:

Capital Improvement Program

FISCAL IMPACT

The cost of on-going improvements to Heritage Sewer Lift Station are included below.

<i>Item</i>	<i>Description</i>	<i>Cost</i>
1	Bypass Tee and Valves	\$27,000
2	Design-Site Improvements	\$72,000
3	Design-Mechanical and Electrical	\$178,000
4	Pump Procurement (3)	\$180,000
5	Construction-Phase 1	\$174,000
6	Geotechnical Service-Design	\$9,500
7	Geotechnical Service- Construction (Estimate)	\$10,000
8	Construction Services During Construction – Phase 2	Future
9	Construction Management/Inspection – Phase 2	Future
10	Construction-Phase 2 – Phase 2	Future
Total		\$650,500

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENVIRONMENTAL COMPLIANCE:

Notice of Exemption was filed with the County of Orange on October 21, 2021

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBIT(S):

None

CONTACTS (staff responsible): PALUDI/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

ENGINEERING MATTERS

ITEM 9: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. District Facility Backup Generator Power Summary
2. Saddle Crest Development Update
3. Oaks at Trabuco Development Update
4. Other Projects

RECOMMENDED ACTION:

Committee to receive project status updates at the time of the Committee Meeting.

EXHIBIT(S):

None

CONTACTS (staff responsible): PALUDI/PEREA/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

OPERATIONAL MATTERS

ITEM 10: WATER SYSTEM UPDATES

The following is a brief report of the water system through **January 2025**.

Projects and Repairs

Water Operations staff performed and/or completed the following tasks and projects:

1. Worked with contractor to replace 8" isolation valve on the slope at the end on Foxtail in Dove Canyon.
2. Serviced all 4 pump flow control valves at El Toro BPS.
3. Worked to keep generator power running at all key locations during extended PSPS event.
4. Exercised 102 valves in the Dove Canyon and Rancho Cielo service areas.

Monthly Water System Operations Summary

The Monthly Water System Operations Summary is attached for the Committee's review. Any anomalies will be presented at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

1. Monthly Water System Operations Summary

CONTACTS (staff responsible): PEREA/KESSLER

TRABUCO CANYON WATER DISTRICT
MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2024

SYSTEM PRODUCTION/SUPPLIES	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	TOTAL
Number of Days	31	28	31	30	31	30	31	31	30	31	30	31	365
<i>Dimension WTP</i>	8%	17%	25%	33%	42%	50%	58%	67%	75%	83%	92%	100%	
SAC Pipeline Meter	0.0	61.3	52.5	0.0	0.0	0.0	0.0	51.7	0.0	0.0	0.0	0.0	165.5
Backwash, AF	0.0	2.2	1.6	0.0	0.0	0.0	1.2	2.4	0.0	0.0	0.1	0.0	7.6
Flushwater, AF	0.0	3.7	1.8	0.0	0.0	0.0	1.9	1.8	0.0	0.0	0.1	0.0	9.3
DWTP Effluent (1)	0.0	65.0	49.3	0.0	0.0	0.0	26.9	52.0	0.0	0.0	0.0	0.0	193.2
Groundwater, AF													
Trabuco Creek GWTF	0.0	0.0	32.6	98.1	115.2	111.7	91.2	0.0	0.0	0.0	0.0	0.0	448.8
U.S. Well AF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Groundwater (2)	0.0	0.0	32.6	98.1	115.2	111.7	91.2	0.0	0.0	0.0	0.0	0.0	448.8
Water Purchases, AF													
SMWD Treated Interconnection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0	1.0	1.3	4.1	1.5	18.9
IRWD Treated Interconnections	96.1	17.0	9.6	0.0	34.2	71.2	92.3	159.0	207.1	178.7	125.9	131.2	1,122.3
IRWD Irvine Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Purchases (3)	96.1	17.0	9.6	0.0	34.2	71.2	92.3	170.0	208.1	180.0	130.0	132.7	1,141.2
Total Supply													
Total Supply AF (1,2,3)	96.1	82.0	91.5	98.1	149.4	182.9	210.4	222.0	208.1	180.0	130.0	132.7	1,783.2
% Year - Peak Prod. - 2,449 AF (2018)	4%	7%	11%	15%	21%	29%	37%	46%	55%	62%	67%	73%	73%
AF/Day	3.1	2.8	3.0	3.3	4.8	6.1	6.8	7.2	6.9	5.8	4.3	4.2	5.0
CFS/Day, Avg.	1.5	1.4	1.5	1.6	2.4	3.0	3.4	3.6	3.5	2.9	2.2	2.1	2.5
Reservoir Storage													
Monthly Average, MG	9.1	9.1	9.0	9.0	9.1	9.0	9.0	9.1	9.1	9.1	9.0	9.0	9.1
Monthly Average, AF	27.9	27.9	27.0	27.0	27.9	27.0	27.0	27.9	27.9	27.9	27.0	27.0	27.5
Days of Storage	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
SYSTEM DEMANDS													
District Operations, AF (1)													
Dimension WTP	0.00	0.00	0.12	0.00	0.00	0.00	1.90	1.91	0.00	0.01	0.01	0.00	3.95
Robinson Ranch WWTP	0.004	0.004	0.004	0.004	0.004	0.004	0.020	0.020	0.020	0.020	0.020	0.020	0.144
Supplemental Domestic to RW Res.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
Subtotal	0.004	0.004	0.124	0.004	0.004	0.004	1.920	1.930	0.020	0.030	0.030	0.020	4.09
System Losses, AF (2)													
Flushing	0.00	3.00	3.00	2.80	3.00	3.00	1.50	1.50	3.50	3.0	3.0	2.3	29.60
Sewer Cleaning	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.24
Line Breaks	0.00	0.00	0.23	0.00	0.27	0.02	0.01	1.00	1.50	0.0	2.0	0.0	5.03
Subtotal	0.02	3.02	3.25	2.82	3.29	3.04	1.53	2.52	5.02	3.02	5.02	2.32	34.87
Zone Demands, AF (3)													
Topanga Canyon	Inop.	Inop.	Inop.	Inop.	Inop.	Inop.	Inop.	0.4	3.1	1.2	2.9	2.8	10.42
Falcon Estates	0.13	0.1	0.1	0.0	0.1	0.8	0.9	0.6	0.9	0.9	0.7	0.5	5.73
Rose PRV/The Oaks	1.5	2.5	1.4	1.04	1.9	3.4	3.0	5.0	2.1	1.5	0.9	0.8	25.05
Canyon Creek	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.2	0.2	2.90
Rose Pump Station	0.5	1.5	0.4	0.8	0.7	0.3	0.2	0.8	1.6	0.8	0.4	0.6	8.64
Robinson Ranch	21.1	12.4	6.1	19.2	39.2	41.9	56.9	60.6	55.6	51.7	38.0	37.7	440.36
Dove Canyon	45.2	37.5	36.1	43.3	63.5	77.7	84.7	91.2	86.4	76.2	60.1	61.9	763.85
Subtotal	68.6	54.1	44.3	64.6	105.6	124.4	146.0	159.4	150.1	132.7	103.2	104.6	1,257.45
Total System Demand (1,2,3)	68.6	57.1	47.7	67.4	108.9	127.4	149.5	163.8	155.1	135.7	108.3	106.9	1,296.41

TRABUCO CANYON WATER DISTRICT
MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2024

System Demands**													
AF/Day	3.1	2.8	3.0	3.3	4.8	6.1	6.8	7.2	6.9	5.8	4.3	4.2	4.9
Daily Average, CFS	1.5	1.4	1.5	1.6	2.4	3.0	3.4	3.6	3.5	2.9	2.2	2.1	2.4
Other Water Deliveries/Purchases													
Ridgeline (DWTP Delivery)	0.0	51.5	43.4	0.0	0.0	0.0	26.9	48.0	0.0	0.0	0.0	0.0	169.8
El Toro (Interconnection Purchase)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Baker WTP (CSC Delivery)	89.1	89.7	106.2	106.3	115.6	119.4	104.9	90.6	85.8	89.7	101.5	69.7	1,168.5
Portola Hills (Wholesale Purchase)	8.5	7.5	7.0	7.2	7.5	11.0	11.0	13.0	14.4	11.5	12.2	10.0	120.8
Skyridge (Wholesale Purchase)	1.7	1.5	1.5	1.5	1.6	2.0	1.9	2.3	2.6	2.1	2.4	1.9	23.0

* Usage estimated

** Excludes Operational use, losses, and supplement to Recycled Water Reservoir (RW)

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

OPERATIONAL MATTERS

ITEM 11: WASTEWATER SYSTEM UPDATES

The following is a brief report of the wastewater system through **January 2025**.

Projects and Repairs

Wastewater Operations staff performed and/or completed the following tasks and projects:

1. Repaired 8" line break at Dove Recycle Pump Station.
2. Assisted in the fiber optic work at the WWTP.
3. Assisted in the cutover to the new SCADA system at Dove and Tick Creek Dry Season Recovery System.
4. Replaced the call-out float at Plano Sewer Lift Station.
5. Replaced a submersible pump at Shadow Rock Dry Season Recovery.

Sewer System Management Plan (SSMP) Report

The purpose of the program is to communicate on a regular basis with the public on the development, implementation, and performance of TCWD's SSMP. Status updates on the work and type of work performed on the sewer system will be provided, including sewer line and manhole cleaning, system repairs, lift station cleaning, and updates from satellite facilities:

Sewer System Management Plan (SSMP) Monthly Update	
Total Sewer Line, Feet*	212,045
Total Sewer Line Cleaned (Ft) – Month	10,000
Total Sewer Line Cleaned (Ft) – Cleaning Cycle	10,000
Cleaning Cycle Period (Mos.) [Start date: 1/1/24]	1
Total Sewer Line Cleaned, %	.04%
The Oaks at Trabuco – Pumping Frequency for the Month	14
O'Neill Park Sewer System Status	Ok
O'Neill Park Sewer System Repairs	None
SSMP Quarterly Report – <i>Next Quarterly Report</i>	1Q 2025
SSMP Program Audit – <i>Next Audit Report**</i>	March 2025

**This amount includes the OC Parks-owned O'Neill Park sewer system the District is contracted to clean.*

***Periodic internal audits shall be conducted, at a minimum every two years, with reports kept on file. The audit shall focus on evaluating the effectiveness of the SSMP and TCWD's compliance with the mandatory elements of TCWD's SSMP:*

Monthly Recycled Water System Operations Summary

The Monthly Recycled Water System Operations Summary is attached for the Committee's review. Any anomalies will be presented at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

1. Monthly Recycled Water System Operations Summary

CONTACTS (staff responsible): PEREA/ULLOA

TRABUCO CANYON WATER DISTRICT | RECYCLED WATER SYSTEM SUMMARY - 2024

RECYCLED WATER SUPPLY															
	MAX	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	FIVE YEAR AVG
WWTP Reclaimed Water Production, AF	78.3	39.4	40.0	42.4	42.1	41.7	39.1	39.1	40.3	36.6	35.6	37.4	36.5	470.3	517.2
Reclaimed Reservoir Level, FT	1274.5	1,272.8	1,273.0	1,273.5	1,273.5	1,271.0	1,266.0	1,250.5	1,247.0	1,257.2	1,252.0	1,262.0	1,264.3	-	-
Reclaimed Reservoir Free Board, FT	25.5	1.7	1.5	1.0	1.0	3.5	8.5	24.0	27.5	17.3	22.5	12.5	10.2	-	-
Reclaimed Reservoir Storage, AF	145.5	134.3	135.7	137.5	137.5	126.8	96.4	37.1	28.6	58.8	41.1	77.7	89.1	-	-
Supplemental Domestic Water Added, AF	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2

RECYCLED WATER SYSTEM DEMAND															
NON DOMESTIC WATER USER	ALLOC. AF	8% JAN	17% FEB	25% MAR	33% APR	42% MAY	50% JUN	58% JUL	67% AUG	75% SEP	83% OCT	92% NOV	100% DEC	TOTAL	ALLOC. %
Dahlia Court	8.2	0.00	0.1	0.1	0.2	0.2	0.2	0.4	0.5	1.0	0.4	0.2	0.2	3.41	41.5%
Dove Canyon Golf Course	106.7	0.54	1.1	0.4	8.5	29.7	38.8	49.3	60.4	97.1	30.1	12.9	13.7	342.61	321.2%
Dove Canyon Master Association	279.3	0.90	1.2	3.0	4.6	23.2	24.5	28.9	30.8	52.5	20.7	10.7	10.7	211.67	75.8%
Robinson Ranch	80.2	0.78	1.1	0.3	0.4	2.2	3.0	4.1	5.4	8.6	3.9	2.0	1.9	33.60	41.9%
Trabuco Highlands	159.7	1.97	2.0	0.2	1.7	6.8	5.9	7.7	10.2	16.9	8.6	3.8	2.2	68.04	42.6%
City of RSM	0.1	0.03	0.00	0.00	0.01	0.04	0.03	0.06	0.03	0.07	0.00	0.00	0.02	0.28	216.2%
Construction Water	N/A	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	N/A
Sakaida Nursery	1.1	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0%
SMWD	N/A	0.00	0.0	0.0	0.0	2.4	5.1	7.7	6.1	6.1	0.0	0.0	0.0	27.32	N/A
TY Nursery	17.9	0.00	0.00	0.0	0.0	0.0	0.0	11.5	7.2	7.2	0.0	0.0	0.0	25.99	145.3%
TOTAL, AF	653.2	4.2	5.5	4.0	15.4	64.5	77.5	109.6	120.6	189.4	63.7	29.6	28.7	712.93	109.1%
PERCENTAGE OF NDW ALLOCATION/YEAR		0.6%	1.5%	2.1%	4.5%	14.3%	26.2%	43.0%	61.5%	90.5%	100.2%	104.7%	109.1%		
TOTAL ANNUAL AVG. NDW AVAILABLE**	774.36														

URBAN RUNOFF CAPTURE AND REUSE															
DISTRICT FACILITY		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	FIVE YEAR AVG
Shadow Rock Detention Basin Production		0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.7	0.86	14.2
Dove Tick Creek Production*	<i>Dry Season</i>	4.9	0.0	0.0	0.0	0.0	0.0	0.0	4.9	4.9	6.9	4.6	4.4	30.6	43.5
	TCWD Portion	4.9	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	3.5	4.6	4.4	22.2	-
	SMWD Portion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	3.5	0.0	0.0	8.3	-
Dove Lake Water Pumped		0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.1	60.9	1.7	31.7	0.7	161.1	183.0
Dove Lake Free Board, Ft		0.0	0.0	0.0	0.0	0.0	0.0	0.5	3.0	7.8	9.7	11.7	11.4	-	-
Dove Lake Storage, AF		331.0	331.0	331.0	331.0	331.0	331.0	328.2	308.9	186.2	136.0	115.2	118.8	-	-
Total Rainfall, In.		4.7	11.0	4.5	1.6	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	22.4	14.7

* SMWD share of Dove/Tick Pump Station Dry Season Water is 50% of production.

** Based on 5-Year Average Reclaimed Water Reservoir Base Supply & Recycled Water Production

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

OPERATIONAL MATTERS

ITEM 12: MAINTENANCE DEPARTMENT UPDATES

The following is a brief report of work completed by Maintenance staff through **January 2025**.

Projects and Repairs

Maintenance staff performed and/or completed the following tasks and projects:

Water Operations

1. Mobilized emergency generators to Field Office/Booster One pump station
2. Mobilized emergency generator to Canyon Creek booster pump station
3. Oil changes on booster pumps at Plano Intertie
4. Hydrotech disconnected pump #2 at Shadow Rock dry season recovery for removal.

Wastewater Operations

1. El Toro Lift Station bypassed due to Surge Tank system failure. Waiting for replacement parts.
2. Golf Club Lift Station bypass to replace failed flow meter with new flow meter. PacHydro and Hydrotech Electric performing work.
3. MWDOC site visit at WWTP is preps for Boy Scout field trip.
4. Assisted Wastewater with pipe/header repair at Dove Recycle Booster Pump Station.
5. Rebuilt slope at Dove Recycle Booster Station due to water erosion.
6. Continued Fiber Optic install with Hydrotech at WWTP.

District Fleet Upgrades & Other Projects

1. Assisted with re-fueling emergency generators during SCE PSPS.
2. Oil change on truck #25.
3. Sent out Truck #18 to upholstery shop for front seat repair.
4. Sent out Truck #1 for new brakes and suspension alignment.
5. Attended CERT training at OC Sheriff Training Center with WEROC, El Toro WD and City of Orange. Emergency water distribution displays were onsite and demonstrated to CERT participants.
6. Sat on an interview panel for City of Westminster to begin a hiring process for Meter Dept foreman.
7. SMOG HD diesel trucks.

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBITS

None

CONTACTS (staff responsible): PEREA/STROUD

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | FEBRUARY 5, 2025**

**REGULATORY AND OTHER MATTERS
ITEM 13: OTHER MATTERS/REPORTS**

Other Matters/Reports from the General Manager and/or District staff may be provided at the time of the Engineering/Operational Committee Meeting.

RECOMMENDED ACTION:

Hear Other Matters/Reports that may have arisen after the posting of the agenda.

EXHIBITS

None

CONTACTS (staff responsible): PALUDI/PEREA