



**ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA
TRABUCO CANYON WATER DISTRICT
ADMINISTRATION FACILITY
32003 DOVE CANYON DRIVE, TRABUCO CANYON, CA
NOVEMBER 1, 2023 AT 7:00 AM**

COMMITTEE MEMBERS

Michael Safranski, Committee Chair
Stephen Dopudja, Committee Member
Don Chadd, 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 | NOVEMBER 1, 2023

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. October 4, 2023

ITEM 2: SYSTEM WIDE ARC FLASH AND COORDINATION STUDY

RECOMMENDED ACTION:

Recommend the Board of Directors authorize the General Manager to execute a contract for the System Wide Arc Flash and Coordination Study to PS2, Inc. in the amount of \$136,800, plus a 10% contingency of \$13,680, for a total not-to-exceed amount of \$150,480 (Action Calendar).

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Status of improvements in Dove Plaza
2. Lead & Copper Rules Revision Compliance
3. Golf Club SLS construction bid update
4. Saddle Crest Development update
5. 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 4: WATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 5: WASTEWATER SYSTEM UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | NOVEMBER 1, 2023**

ITEM 6: MAINTENANCE DEPARTMENT UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

REGULATORY AND OTHER MATTERS

ITEM 7: OTHER MATTERS/REPORTS

RECOMMENDED ACTION:

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

ADJOURNMENT

AVAILABILITY OF AGENDA MATERIALS

Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the 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 | NOVEMBER 1, 2023**

ADMINISTRATIVE 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. *October 4, 2023 Committee Meeting*

CONTACTS (staff responsible): PALUDI/PEREA



TRABUCO CANYON WATER DISTRICT ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | OCTOBER 4, 2023

DIRECTORS PRESENT

Mike Safranski, Committee Chair
Stephen Dopudja, Committee Member

STAFF PRESENT

Fernando Paludi, General Manager
Michael Perea, Assistant General Manager
Lorrie Lausten, District Engineer
Gary Kessler, Water Superintendent
Jason Stroud, Maintenance Superintendent
Karen Warner, Principal Accountant
Phil Serpas, CMMS/SCADA Administrator
Roseann Lejsek, Administrative Assistant

PUBLIC PRESENT

There were members of the public present.

CALL MEETING TO ORDER

Director Safranski called the October 4, 2023 Engineering/Operational Committee Meeting to order at 7:00 a.m.

VISITOR PARTICIPATION

No comments were received.

ORAL COMMUNICATION

Ms. Sue Marucci addressed the Committee, and she expressed her concerns with the new adopted meter flat charges. Ms. Marucci provided a handout to the Committee listing her concerns and assumed impacts on elderly customers in her community. Ms. Marucci suggested the District consider setting a different rate between residential and commercial meters.

COMMITTEE MEMBER COMMENTS

Director Dopudja expressed his appreciation to Ms. Marucci for her comments, and he explained that District staff has expedited a proposal to address customer concerns on this matter.

Director Safranski reported that the Energy Efficiency Ad Hoc Committee meeting is scheduled to meet the following morning, and he has requested to place an item on the regular board meeting agenda to present the committee findings.

REPORT FROM THE GENERAL MANAGER

Mr. Paludi reported on the following matters:

- The Meter Resizing Procedure is not agendized for this meeting, but District staff will agendize this matter for a future discussion.
- Southern California Water Coalition (SCWC) Annual Meeting is scheduled for November 2nd and the District has received five complimentary tickets for the Board and staff.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | OCTOBER 4, 2023**

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

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

- MOTION:** Approve the Engineering/Operational Committee Meeting Recap and recommended that the Board receive and file the same (Consent Calendar) – Director Dopudja
- SECOND:** Director Safranski
- AYES:** Directors Dopudja & Safranski
- NOES:** None
- ABSTAIN:** None
- MOTION PASSED/FAILED:** Passed 2 – 0

ITEM 2: ARC FLASH STUDY REQUEST FOR PROPOSAL (RFP)

Ms. Lausten presented this matter for Committee review and consideration, and she reported that District staff have evaluated the appropriate needs for this matter and invited qualified firms to bid on the request for proposals (RFP). Ms. Lausten presented the RFP for Committee review, and she reported that this matter is budget for Fiscal Year 2023-24. Discussion occurred concerning coordination with ACWA/JPIA for infra-red testing of District equipment and project costs. Director Safranski requested additional information related to the project budget.

MOTION: None – Informational item only.

ITEM 3: GOLF CLUB SEWER LIFT STATION IMPROVEMENTS

Ms. Lausten presented this matter for Committee consideration, and she provided a brief project status update including an overview of the construction plans. Discussion occurred concerning project costs and timeline for completion. Director Safranski noted that the project costs for FY 2023-24 are projected to exceed the adopted budget.

MOTION: None – Informational item only.

ITEM 4: MANUAL TRANSFER SWITCH UPGRADE FOR EMERGENCY OPERATIONS

Mr. Paludi presented this matter for Committee consideration, and he reported that District staff has identified five water and wastewater facilities that require installation of a manual transfer switch for emergency operations. Mr. Paludi added that these improvements would allow for District Operations to connect backup emergency generators to continue facility operations during power loss or emergency situations. Ms. Lausten provided a handout which summarized the proposed improvement costs provided by Hydrotech Electric. Mr. Paludi mentioned that this is a priority for District staff, and he recommends proceeding with these improvements. The Committee concurred with staff recommendation.

MOTION: The Committee recommended forwarding this matter to the Board of Directors for consideration (Action Calendar).

ITEM 5: RESOLUTION AUTHORIZING SUBMITTAL OF AN APPLICATION FOR THE USBR WATERSMART DROUGHT RESPONSE PROGRAM: DROUGHT RESILIENCY PROJECTS FOR FY 2024

Mr. Paludi presented this matter for Committee consideration, and he reported that District staff is applying to the US Bureau of Reclamation (USBR) WaterSMART Drought Response Program Drought Resiliency Project for FY 2024 for improvements to the Dove and Tick Creek pump stations. Mr. Paludi added that this project has already

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | OCTOBER 4, 2023**

been awarded \$380,000 which is approximately 50% of the total project cost, and that this grant award would fund the majority of the remaining balance of the project budget. Discussion occurred concerning the total project budget and costs associated with applying for the USBR grant. Ms. Lausten commented that the FY 2023-24 project budget is \$800,000 and that the project includes construction, electrical, and the purchase of new pumps.

MOTION: The Committee recommended forwarding this matter to the Board of Directors for consideration (Action Calendar).

ITEM 6: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Saddleback Meadows Development

Ms. Lausten provided an update on this matter, and she reported that District staff has notified the developer with concerns that the depth of certain sewer manholes exceed the District’s standards and specifications. Discussion occurred concerning potable water services and developer costs associated with the system improvements to meet development water demands. Ms. Lausten mentioned that the District is evaluating the costs for the installation of dedicated services as opposed to an inter-agency agreement to deliver water services from another agency. Director Safranski asked if the proposed homes will include interior fire sprinklers; Ms. Lausten confirmed that the homes will include fire sprinklers.

2. Oaks at Trabuco Development

Ms. Lausten reported that the developer has requested conditional will serve letters for two newly constructed homes. Discussion occurred concerning certain sewer system challenges inherent to the development.

**3. Other Projects –
None**

MOTION: None – Informational item only.

ITEM 8: WATER SYSTEM UPDATES

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

1. Responded to and repaired an emergency pipeline break on Golf Ridge in the Dove Canyon community.
2. Responded to and repaired a broken 4” fire system valve in the Dove Canyon Plaza.
3. Replaced two residential service curb stops on Greenspring and Muirfield in the Dove Canyon community.
4. Worked with Engineering staff on Saddle Crest pump station and reservoir 10-day start up period.
5. Installed data log devices for potable water system monitoring at the Saddle Crest development.
6. Worked with TESCO controls to address systemwide SCADA communication issues.

Mr. Kessler presented the Water System Summary for Committee review, and he reported on the recent SCADA system challenges systemwide. Mr. Kessler added that the recently installed HMI screens at District facilities were instrumental during the period of SCADA issues.

MOTION: None – Informational item only.

ITEM 9: 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:

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | OCTOBER 4, 2023**

1. Assisted in TESCO Controls in PLC upgrades to Barneburg and Heritage Sewer Lift Stations.
2. Installed new level control systems at Barneburg and Heritage Sewer Lift Stations.
3. Replaced a 6" check valve on the force main at Barneburg Sewer Lift Station.
4. Assisted in the replacement of 4 rollers for the Belt Filter Press at the Robinson Ranch WWTP.

Mr. Ulloa presented the Recycled Water System Summary for Committee review, and he provided the Sewer System Management Plan (SSMP) monthly update. Mr. Ulloa presented and reviewed the third-quarter SSMP report with the Committee.

MOTION: None – Informational item only.

ITEM 10: 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. Assisted Operations with the installation of a new SCADA UPS battery at Dove Tank.
2. New emergency generator "MTS switches" were installed by Hydrotech Electric at: Dove tank, Joplin Tanks, Harris Grade Tanks for telemetry backbone operations during power outages.
3. Assisted Operations at Saddle Crest Booster Pump Station during station startup testing.

Wastewater Operations

1. Emergency Work: Worked with Operations on failed NEQ pump at Robinson Ranch WWTP on the evening of 09/01. Assisted with troubleshooting the pump and worked with Hydrotech Electric for pump restoration by the following day.
2. Assisted Operations at Barneburg Sewer Lift Station during SCADA panel upgrades with Hydrotech Electric and TESCO Controls.
3. Assisted Operations at Heritage Sewer Lift Station for SCADA panel upgrades with Hydrotech Electric and TESCO Controls. Mobilized the Godwin Mobile Transfer Pump for station bypass during project work.
4. Assisted Operations reviewing blower room upgrades, fiber optic install, and station operation with Engineering Support Mr. David Rodriguez.

District Fleet Upgrades & Other Projects

1. Replaced battery in vehicle #10
2. Oil change service and auxiliary lighting repairs on vehicle #12 F-250 service body
3. Oil change service on vehicle #27 F650 (Dump Truck)
4. Quarterly BIT program started and completed.
5. Met with AGM and SCE Field Supervisor for property access concerning power pole upgrades near Robinson Ranch WWTP Reclaimed Water Reservoir.
6. Two staff members attended pump training at Evans Hydro site.
7. Met with Orange County Public Works (OCPW) staff on Trabuco Creek Road grading and road repairs.
8. OCFA (Orange Co Fire Authority) USR (Urban Search and Rescue) team performed trench setup and rescue training at Porter Ranch. This is an annual training event hosted by TCWD.

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | OCTOBER 4, 2023**

MOTION: None – Informational item only.

ITEM 11: OTHER MATTERS/REPORTS

There were no others matter reported.

MOTION: None

ADJOURNMENT

Director Safranski adjourned the October 4, 2023 Engineering/Operational Committee Meeting at 7:52 a.m.

DRAFT

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | NOVEMBER 1, 2023**

ENGINEERING MATTERS

ITEM 2: SYSTEM WIDE ARC FLASH AND COORDINATION STUDY

Regulations have advanced since the District’s facilities were originally constructed to better protect personnel from arc flash and other electrical hazards. Compliance with these regulations is not only a legal obligation but also integral to safeguarding the well-being of our personnel. In keeping with the District’s commitment to safety and regulatory compliance, District staff recommend conducting a System-Wide Arc Flash and Coordination Study (Study) to achieve the following objectives:

1. Confirm that each facility complies with the National Electric Code (NEC), National Fire Protection Association (NFPA) 70E, and Occupational Safety and Health Administration (OSHA) requirements;
2. Make recommendations to bring each facility into compliance;
3. Create single line diagrams;
4. Prepare an arc flash analysis report;
5. Implement arc flash signage/labels; and
6. Provide staff with training.

In September 2023, the District invited a shortlist of eight qualified firms to respond to an RFP for the System-Wide Arc Flash and Coordination Study. Staff received proposals from the following companies:

Arc Flash Companies
P2S, Inc.
EPS Voltyx Company
NCS Delta Systems
Hazen & Sawyer
Tesco Controls, Inc.

Staff evaluated the proposals (Exhibit 1) and are recommending PS2, Inc. due to their project understanding, local experience, and thoroughness of the proposal. In addition to the Study, Staff has coordinated with ACWA-JPIA to perform the infrared/thermograph imaging at all our facilities in November 2023, which is at no cost. The District intends to enter into a professional services contract with the successful respondent. The Study is not considered a capital improvement and therefore will be funded by the General Fund.

FUNDING SOURCE:

General Fund

FISCAL IMPACT (PROJECT BUDGET):

Project Budget: \$90,000

Project Cost: \$150,480

ENVIRONMENTAL COMPLIANCE:

Not Applicable

RECOMMENDED ACTION:

Recommend the Board of Directors authorize the General Manager to execute a contract for the System Wide Arc Flash and Coordination Study to PS2, Inc. in the amount of \$136,800, plus a 10% contingency of \$13,680, for a total not-to-exceed amount of \$150,480 (Action Calendar).

EXHIBIT(S):

1. Proposal Evaluation

CONTACTS (staff responsible): PALUDI/LAUSTEN

PROPOSAL EVALUATION
System Wide Arc Flash and Coordination Study

Category	Weight	P2S	NCS Delt Systems	Tesco	EPS VOLTYX	Hazen & Sawyer
		Project Understanding and Level of Effort Project Approach, Understanding of the Scope of Work & Level of Effort on the Proposal	50%	45	33	41
Proposed Team Qualification in Arc Flash Studies Team Expertise & Experience (Qualifications, Registrations, Licenses), including subconsultants	20%	15	12	13	10	15
Company Qualification Firms Experience on Similar Projects, Local Staffing	15%	12	8	6	5	
Project Management and QA/QC	15%	12	9	10	4	14
Total Weighted Score:	100%	29.1	21.5	25.5	24.4	27.1
System Wide Arc Flash Coordination Study Project	Total	\$136,800.0	\$161,130.0	\$134,150.0	\$343,644.0	\$281,390.0
Arc Flash Separate Costs for Additional Items						
Separate Cost: O'Neill Lift Station		\$4,000.0	\$0.0	\$5,725.0	\$0.0	\$11,890.0
Separate Cost: Infrared Inspection of Electrical Equipment		\$27,000.0	\$16,113.0	\$54,550.0	\$0.0	\$86,892.0
Separate Cost: Arc Flash Training		\$0.0	\$0.0	\$10,950.0	\$0.0	\$6,310.0
Total		\$31,000.0	\$16,113.0	\$71,225.0	\$0.0	\$105,092.0
Total Project Costs for All Items		\$167,800.0	\$177,243.0	\$205,375.0	\$343,644.0	\$386,482.0

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | NOVEMBER 1, 2023**

ENGINEERING MATTERS

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Status of improvements in Dove Plaza
2. Lead & Copper Rules Revision Compliance
3. Golf Club SLS construction bid update
4. Saddle Crest Development update
5. 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 | NOVEMBER 1, 2023**

OPERATIONAL MATTERS

ITEM 4: WATER SYSTEM UPDATES

The following is a brief report of the water system through **October 2023**.

Projects and Repairs

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

1. Worked on start-up testing for the Saddle Crest development onsite reservoir and pump station.
2. Worked with Ferreira Construction on the Dove Canyon Plaza valve replacement project.
3. Prepared and completed the annual inspection by the Regional Water Board.
4. Restarted the Dimension Water Treatment Plant (DWTP).

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 - 2022

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
Dimension WTP	8%	17%	25%	33%	42%	50%	58%	67%	75%	83%	92%	100%	
SAC Pipeline Meter	91.2	109.2	15.0	25.3	41.2	2.5	0.0	93.3					377.7
Backwash, AF	2.7	3.5	0.8	1.1	1.9	0.6	0.0	3.5	1.5				15.5
Flushwater, AF	4.2	3.7	0.6	1.8	2.9	0.6	0.0	6.0	2.5				22.2
DWTP Effluent (1)	92.2	111.3	10.2	27.1	39.7	2.6	0.0	99.2	66.9				449.2
Groundwater, AF													
Trabuco Creek GWTF	0.0	0.0	17.9	103.1	100.2	105.7	112.3	91.9	0.0				439.2
U.S. Well AF	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	17.9	103.1	100.2	105.7	112.3	91.9	0.0				531.1
Water Purchases, AF													
SMWD Treated Interconnection	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
IRWD Treated Interconnections	0.0	0.0	58.0	0.0	9.3	41.2	106.2	0.0	127.9				342.6
IRWD Irvine Lake	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
Total Purchases (3)	0.0	0.0	58.0	0.0	9.3	41.2	106.2	0.0	0.0				214.7
Total Supply													
Total Supply AF (1,2,3)	92.2	111.3	86.1	130.2	149.2	149.5	218.5	190.3	194.8				1,322.1
% Year - Peak Prod. - 2,449 AF (2018)	4%	17%	12%	21%	23%	29%	38%	46%	54%				38%
AF/Day	3.0	4.0	2.8	4.3	4.8	5.0	7.0	6.1	6.5				4.4
CFS/Day, Avg.	1.5	2.0	1.4	2.2	2.4	2.5	3.5	3.0	3.2				2.2
Reservoir Storage													
Monthly Average, MG	9.1	9.1	9.0	8.8	8.8	9.0	8.7	8.8	9.0				8.9
Monthly Average, AF	27.9	27.9	27.6	27.0	27.0	27.6	27.0	27.0	27.0				27.4
Days of Storage	4.0	4.0	4.0	3.0	3.0	4.0	3.0	3.0	4.0				3.6
SYSTEM DEMANDS													
District Operations, AF (1)													
Dimension WTP	0.18	0.13	0.03	0.04	0.07	0.01	0.00	0.11	0.12				0.69
Robinson Ranch WWTP	0.001	0.001	0.007	0.004	0.004	0.005	0.004	0.001	0.003				0.03
Supplemental Domestic to RW Res.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.00
Subtotal	0.2	0.0	0.4	0.044	0.074	0.015	0.004	0.11	0.123				0.93
System Losses, AF (2)													
Flushing	0.98	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00				1.64
Sewer Cleaning	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02				0.18
Line Breaks	0.46	0.00	0.15	0.00	0.05	0.00	0.01	0.30	2.00				2.97
Subtotal	1.46	0.68	0.17	0.02	0.07	0.02	0.03	0.32	2.02				4.79
Zone Demands, AF (3)													
Topanga Canyon	0.4	0.4	1.0	2.1	2.0	1.8	3.0	3.0	2.3				15.90
Falcon Estates	0.04	0.1	0.1	0.3	0.5	0.3	0.9	0.8	0.8				3.80
Rose PRV/The Oaks	0.6	1.7	1.9	1.9	1.5	1.8	2.2	2.0	2.3				15.87
Canyon Creek	0.1	0.2	0.1	0.3	0.3	0.4	0.4	0.3	0.1				2.34
Rose Pump Station	0.0	0.1	0.4	0.5	0.6	0.6	0.3	0.5	0.4				3.36
Robinson Ranch	19.6	26.1	18.1	35.3	36.8	35.6	63.2	59.4	56.3				350.42
Dove Canyon	38.8	43.9	39.2	54.8	63.5	65.6	80.5	73.4	65.8				525.45
Subtotal	59.5	72.2	60.8	95.1	105.2	106.1	150.5	139.4	128.1				916.85
Total System Demand (1,2,3)	61.2	72.9	61.3	95.2	105.3	106.1	150.5	139.8	130.2				922.57

TRABUCO CANYON WATER DISTRICT
MONTHLY WATER SYSTEM OPERATIONS SUMMARY - 2022

System Demands**													
AF/Day	3.0	4.0	2.8	4.3	4.4	5.0	7.0	6.1	6.5				4.3
Daily Average, CFS	1.5	2.0	1.4	2.2	2.2	2.5	3.4	3.0	3.2				2.2
Other Water Deliveries/Purchases													
Ridgeline (DWTP Delivery)	85.2	103.0	8.9	24.9	35.5	2.0	0.0	90.4	61.8				259.5
El Toro (Interconnection Purchase)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0
Baker WTP (CSC Delivery)	115.0	108.0	55.2	55.2	81.7	72.2	79.8	103.8	103.8				567.1
Portola Hills (Wholesale Purchase)	8.0	8.4	6.9	7.7	9.0	11.0	12.3	14.3	14.0				63.3
Skyridge (Wholesale Purchase)	1.5	1.5	1.6	1.9	1.7	2.0	2.2	2.5	2.5				12.5
* Usage estimated	** Excludes Operational use, losses, and supplement to Recycled Water Reservoir (RW)												

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING | NOVEMBER 1, 2023**

OPERATIONAL MATTERS

ITEM 5: WASTEWATER SYSTEM UPDATES

The following is a brief report of the wastewater system through **October 2023**.

Projects and Repairs

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

1. Worked with Tesco on programming repairs of El Toro, Bell Canyon, and Barneburg Sewer Lift Station.
2. Cleaned and prepped Robinson Ranch Wastewater Treatment Plant (WWTP) facility for the public tour.
3. Inspected manholes at Saddle Crest development and cleaned gravity lines.
4. Repaired a roller and performed the cleaning of the filter belt press at the WWTP.

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	43,000
Total Sewer Line Cleaned (Ft) – Cleaning Cycle	166,440
Cleaning Cycle Period (Mos.) [Start date: 9/1/22]	13
Total Sewer Line Cleaned, %	78%
The Oaks at Trabuco – Pumping Frequency for the Month	13
O'Neill Park Sewer System Status	Ok
O'Neill Park Sewer System Repairs	None
SSMP Quarterly Report – <i>Next Quarterly Report</i>	4Q 2023
SSMP Program Audit – <i>Next Audit Report**</i>	February 2024

**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 | NON-DOMESTIC WATER SYSTEM SUMMARY - 2023

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	58.6	37.8	34.6	29.2	38.2	27.1	40.9	43.2	38.2				347.7	529.1
Reclaimed Reservoir Level, FT	1274.5	1,273.0	1,274.0	1,272.5	1,272.2	1,272.0	1,270.0	1,259.0	1,262.2	1,258.5				-	-
Reclaimed Reservoir Free Board, FT	25.5	1.5	0.5	2.0	2.3	2.5	4.5	15.5	12.3	16.0				-	-
Reclaimed Reservoir Storage, AF	145.5	135.7	139.3	132.1	130.0	128.6	118.8	67.0	78.6	64.3				-	-
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	35.5

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	0.07	0.1	0.0	0.3	0.2	0.2	0.2	0.3	0.3				1.68	20.4%
Dove Canyon Golf Course	106.7	0.29	5.9	0.2	17.4	15.0	26.4	51.2	41.2	23.6				181.25	169.9%
Dove Canyon Master Association	279.3	0.28	1.1	0.1	7.6	16.6	13.1	26.3	21.1	18.3				104.49	37.4%
Robinson Ranch	80.2	0.25	1.4	0.3	0.8	1.4	2.9	4.0	3.3	3.4				17.65	22.0%
Trabuco Highlands	159.7	2.25	5.9	0.1	6.5	8.5	5.3	11.4	6.2	5.8				51.84	32.5%
City of RSM	0.1	0.00	0.03	0.00	0.04	0.05	0.05	0.03	0.01	0.00				0.20	156.2%
Construction Water	N/A	0.00	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				0.00	0.0%
SMWD	N/A	41.74	40.6	7.7	0.0	2.3	4.1	5.3	6.2	45.5				153.62	N/A
TY Nursery	17.9	0.00	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.05	0.3%
TOTAL, AF	653.2	44.9	55.1	8.4	32.7	44.1	52.0	98.5	78.2	96.9				510.77	78.2%
PERCENTAGE OF NDW ALLOCATION/YEAR		6.9%	15.3%	16.6%	21.6%	28.3%	36.3%	51.4%	63.4%	78.2%					
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		0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01				0.22	14.2
Dove Tick Creek Production*	<i>Dry Season</i>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7	8.8				16.5	58.8
	TCWD Portion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	4.4				8.3	-
	SMWD Portion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	4.4				8.3	-
Dove Lake Water Pumped		0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.7	18.2				65.9	185.8
Dove Lake Free Board, Ft		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5				-	-
Dove Lake Storage, AF		331.0	331.0	331.0	331.0	331.0	331.0	331.0	331.0	328.3				-	-
Total Rainfall, In.		8.1	2.1	10.3	0.0	1.1	0.0	0.0	3.0	0.3				24.7	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 | NOVEMBER 1, 2023**

OPERATIONAL MATTERS

ITEM 6: MAINTENANCE DEPARTMENT UPDATES

The following is a brief report of work completed by Maintenance staff through **October 2023**

Projects and Repairs

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

Water Operations

1. Worked with Operations to test the Saddle Crest development onsite reservoir and pump station.

Wastewater Operations

1. Worked with Operations and TESCO Controls at Bell Canyon Sewer Lift Station.

District Fleet Upgrades & Other Projects

1. Annual SMOG on four District vehicles.
2. Repairs on Truck No. 3 to prepare for SMOG testing.
3. Completed emergency diesel repairs on the small backup power generator at administration facility.
4. Completed weed abatement on El Toro Road bike trail, WWTP, and access road/ridge between Brookseed Drive and Dove Reservoir.
5. Assisted with logistics on the District Facilities Tour.

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 | NOVEMBER 1, 2023**

**REGULATORY AND OTHER MATTERS
ITEM 7: 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