



**ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA
TRABUCO CANYON WATER DISTRICT
ADMINISTRATION FACILITY
32003 DOVE CANYON DRIVE, TRABUCO CANYON, CA
APRIL 3, 2024 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 | APRIL 3, 2024

ENGINEERING MATTERS

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

ITEM 1: LIVE OAK PIPELINE REPLACEMENT ENGINEERING DESIGN

RECOMMENDED ACTION:

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

ITEM 2: QUARTERLY CAPITAL IMPROVEMENT PROGRAM (CIP) UPDATE

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Golf Club Sewer Lift Station Construction
2. The Oaks at Trabuco Development Update
3. SCADA Upgrade Project Update

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.

ITEM 6: MAINTENANCE DEPARTMENT UPDATES

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.



**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING AGENDA | APRIL 3, 2024**

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 APRIL 3, 2024**

ENGINEERING MATTERS

ITEM 1: LIVE OAK PIPELINE REPLACEMENT ENGINEERING DESIGN

Trabuco Canyon Water District (District) operates 10-inch and 14-inch pipelines in Live Oak Canyon Road, which distribute water from the Ridgeline Booster Pump Station to the Harris Grade Zone. The 10-inch pipeline, built in 1964, is undersized and at the end of its service life. The District has budgeted to replace this pipeline over the next three fiscal years. The proposed improvements are to build an 18-inch pipeline, approximately 4,900 LF, from Cooks Corner to the Harris Grade Reservoirs.

Staff sent out Request for Proposals for the Design portion of the project to seven (7) firms. On March 28, 2024, Staff received three (3) proposals from the following consultants:

Consultants
AKM Consulting Engineers
JIG Consultants
DRP Engineering

Staff are currently evaluating the proposals. More information may be presented at the time of the meeting.

FUNDING SOURCE:

Capital Improvement Program

FISCAL IMPACT (PROJECT BUDGET)

FY23-24: \$250,000

FY24-25: \$1,750,000

FY25-26: \$500,000

ENVIRONMENTAL COMPLIANCE:

Notice of Exemption

RECOMMENDED ACTION:

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

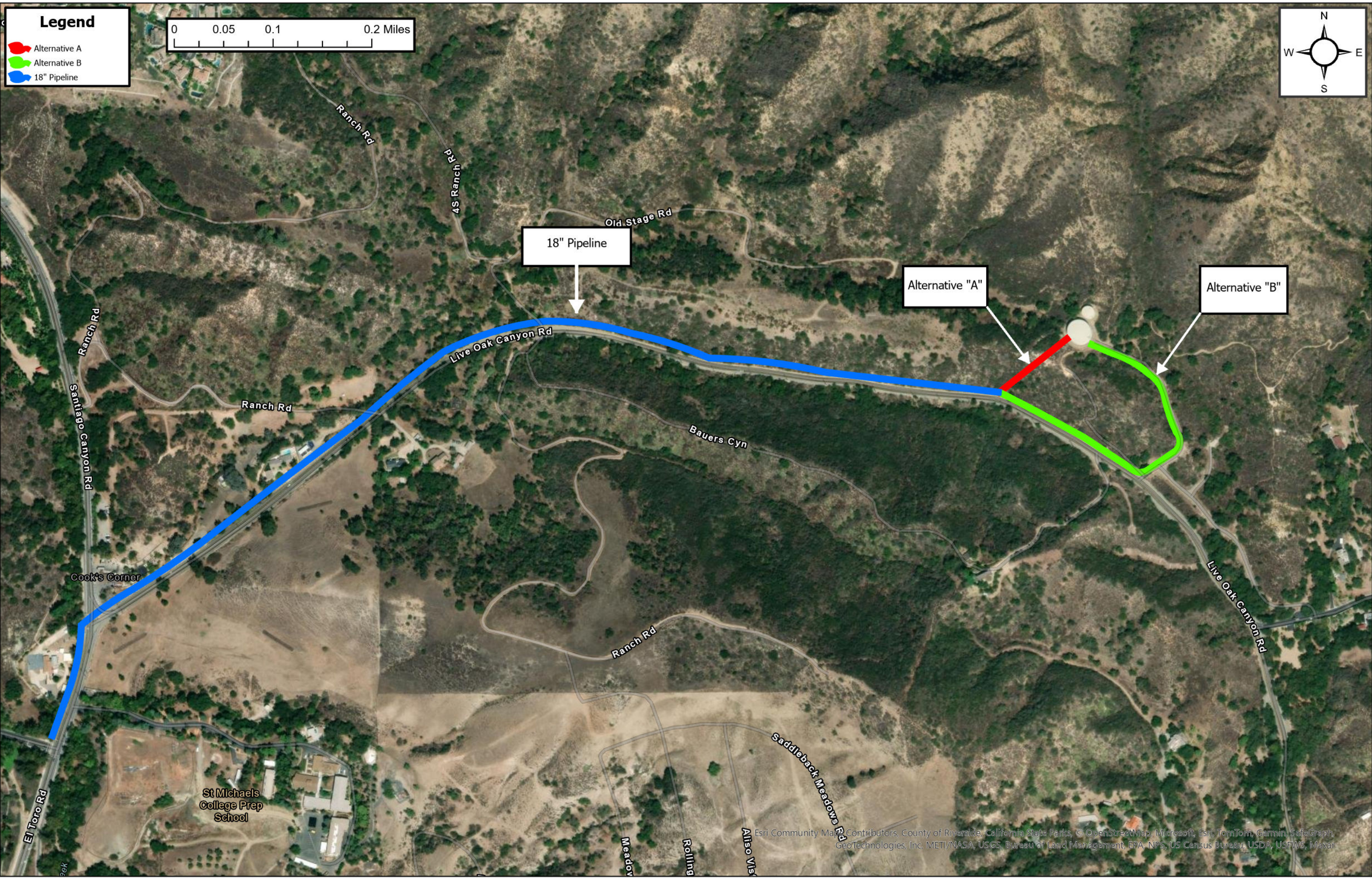
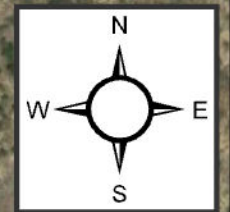
EXHIBIT(S):

1. Project location map

CONTACTS (staff responsible): PALUDI/LAUSTEN

Legend

- Alternative A
- Alternative B
- 18" Pipeline



18" Pipeline

Alternative "A"

Alternative "B"

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING APRIL 3, 2024**

ENGINEERING MATTERS

ITEM 2: QUARTERLY CAPITAL IMPROVEMENT PROGRAM (CIP) UPDATE

This report summarizes the status of Trabuco Canyon Water District's (District's) Capital Improvement Program (CIP) Update as summarized below and per the attached Exhibit 1.

Status of the CIP Projects	
No.	Status
1	Completed
2	Out to Bid
2	Design/Planning
8	Ongoing
8	In Construction

FUNDING SOURCE:

Capital Improvement Program

FISCAL IMPACT (PROJECT BUDGET):

\$4,512,000

ENVIRONMENTAL COMPLIANCE:

Not Applicable

RECOMMENDED ACTION:

Committee to receive system status updates. No action required.

EXHIBIT(S):

1. CIP Budget Update

CONTACTS (staff responsible): PALUDI/LAUSTEN

**TRABUCO CANYON WATER DISTRICT
CAPITAL IMPROVEMENT PLAN BUDGET
FY 2023/2024**

Item	Name	Status	Project Basis	Original Amount	Revised Amount
WATER PROJECTS					
1	DWTP Office Replacement	Cancelled	Safety/End of Service Life	\$350,000	65,000
2	10" Pipeline Replacement - Cooks to Harris Grade (Design)	Design/Planning	Reliability	\$250,000	50,000
3	PSPS Transfer Switch Upgrade-Water	In Construction	Reliability	\$60,000	60,000
4	DWTP Vault Improvements	In Construction	Safety	\$75,000	75,000
Sub-Total				\$735,000	250,000
SEWER PROJECTS					
5	Golf Club SLS Improvement	In Construction	End of Service Life	\$1,800,000	\$1,800,000
6	WWTP - Blower Replacements	Out to Bid	Reliability	\$400,000	\$400,000
7	Chiquita FY23/24	Ongoing	Contract Agreement	\$178,000	\$178,000
8	Heritage SLS Pump Replacement	In Construction	End of Service Life	\$100,000	\$230,000
9	PSPS Transfer Switch Upgrade-Sewer	In Construction	Reliability	\$60,000	\$60,000
10	WWTP SCADA/Fiber Optic Upgrade	In Construction	End of Service Life	\$130,000	\$330,000
11	El Toro Force Main Valve Replacements	Completed	Reliability/End of Service Life	\$79,000	\$79,000
Sub-Total				\$2,747,000	\$3,077,000
NON-DOMESTIC WATER PROJECTS					
12	Dove/Robinson Ranch Recycled BPS Improvements (Design)	Design/Planning	End of Service Life	\$100,000	\$100,000
13	Recycled PRV Improvements	Out to Bid	End of Service Life	\$200,000	\$155,000
Sub-Total				\$300,000	\$255,000
SHARED PROJECTS					
14	SCADA System Upgrades FY 23-24	In Construction	Reliability/End of Service Life	\$400,000	\$400,000
Sub-Total				\$400,000	\$400,000
EQUIPMENT					
15	Fleet	Ongoing	General Maintenance	\$130,000	\$250,000
16	Pump Replacements - Sewer	Ongoing	End of Service Life	\$50,000	\$50,000
17	Pump Replacements - Water	Ongoing	End of Service Life	\$50,000	\$50,000
Sub-Total				\$230,000	\$350,000
PROGRAM					
18	PRV - Water	Ongoing	General Maintenance	\$20,000	\$10,000
19	Valve Replacement - Water	Ongoing	General Maintenance	\$30,000	\$120,000
20	Wet Well Recoating	Ongoing	General Maintenance	\$30,000	\$30,000
21	Manhole Recoating	Ongoing	General Maintenance	\$20,000	\$20,000
Sub-Total				\$100,000	\$180,000
Total				\$4,512,000	\$4,512,000

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING APRIL 3, 2024**

ENGINEERING MATTERS

ITEM 3: OTHER ENGINEERING AND OPERATIONS PROJECT UPDATES

1. Golf Club Sewer Lift Station Construction
2. The Oaks at Trabuco Development Update
3. SCADA Upgrade Project Update

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 APRIL 3, 2024**

OPERATIONAL MATTERS

ITEM 4: WATER SYSTEM UPDATES

The following is a brief report of the water system through **March 2024**.

Projects and Repairs

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

1. Repaired a leaking potable service on Morningside Drive in the Trabuco Highlands community.
2. Repaired a leaking PRV on North Lane in the Trabuco Oaks community.
3. Worked with Maintenance Department staff to replace the mechanic seal on the 3 CFS pump at Robinson Ranch Booster Pump Station.
4. Worked with Maintenance Department to replace the backup generator automatic transfer switch at Topanga Canyon Booster Pump Station.
5. Worked with Mr. Phil Serpas on resolving SCADA-related issues at the Trabuco Canyon Groundwater Treatment Facility (Wells). The wells are started on March 20th.

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 Demands**													
AF/Day	3.1	2.8											3.0
Daily Average, CFS	1.5	1.4											1.5
Other Water Deliveries/Purchases													
Ridgeline (DWTP Delivery)	0.0	51.5											51.5
El Toro (Interconnection Purchase)	0.0	0.0											0.0
Baker WTP (CSC Delivery)	89.1	89.7											178.8
Portola Hills (Wholesale Purchase)	8.5	7.5											16.0
Skyridge (Wholesale Purchase)	1.7	1.5											3.2
* Usage estimated													
** Excludes Operational use, losses, and supplement to Recycled Water Reservoir (RW)													

**TRABUCO CANYON WATER DISTRICT
ENGINEERING/OPERATIONAL COMMITTEE MEETING APRIL 3, 2024**

OPERATIONAL MATTERS

ITEM 5: WASTEWATER SYSTEM UPDATES

The following is a brief report of the wastewater system through **March 2024**.

Projects and Repairs

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

1. Worked with TESCO Controls and Hydrotech Electric to complete PLC upgrades and testing at Via Allegre Sewer Lift Station (SLS), and installation of OIT screen at O’Neill SLS.
2. Worked with Pacific Hydrotech to complete the installation/startup of the new surge tank at Golf Club SLS.
3. Completed weed abatement at Dove Lake and the Robinson Ranch Wastewater Treatment Plant (WWTP)
4. Met with State Department of Dam Safety to complete the annual inspection of WWTP Dam and Dove Dam.
5. Worked with Water Operations Department to repair a potable water line break in the Dove Canyon community.
6. Repaired damaged electrical conduit at Dove Lake in the Dove Canyon community.

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	30,600
Cleaning Cycle Period (Mos.) [Start date: 1/1/24]	3
Total Sewer Line Cleaned, %	14%
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 2024
SSMP Program Audit – <i>Next Audit Report**</i>	February 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											79.4	517.2
Reclaimed Reservoir Level, FT	1274.5	1,272.8	1,273.0											-	-
Reclaimed Reservoir Free Board, FT	25.5	1.7	1.5											-	-
Reclaimed Reservoir Storage, AF	145.5	134.3	135.7											-	-
Supplemental Domestic Water Added, AF	N/A	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											0.06	0.7%
Dove Canyon Golf Course	106.7	0.54	1.1											1.66	1.6%
Dove Canyon Master Association	279.3	0.90	1.2											2.15	0.8%
Robinson Ranch	80.2	0.78	1.1											1.87	2.3%
Trabuco Highlands	159.7	1.97	2.0											3.97	2.5%
City of RSM	0.1	0.03	0.00											0.03	26.2%
Construction Water	N/A	0.00	0.0											0.00	N/A
Sakaida Nursery	1.1	0.00	0.0											0.00	0.0%
SMWD	N/A	-	-											0.00	N/A
TY Nursery	17.9	0.00	0.00											0.00	0.0%
TOTAL, AF	653.2	4.2	5.5											9.74	1.5%
PERCENTAGE OF NDW ALLOCATION/YEAR		0.6%	1.5%												
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											0.12	14.2
Dove Tick Creek Production*	<i>Dry Season</i>	4.9	0.0											4.9	43.5
	TCWD Portion	4.9	0.0											4.9	-
	SMWD Portion	0.0	0.0											0.0	-
Dove Lake Water Pumped		0.0	0.0											0.0	183.0
Dove Lake Free Board, Ft		0.0	0.0											-	-
Dove Lake Storage, AF		331.0	331.0											-	-
Total Rainfall, In.		4.7	11.0											15.8	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 APRIL 3, 2024**

OPERATIONAL MATTERS

ITEM 6: MAINTENANCE DEPARTMENT UPDATES

The following is a brief report of work completed by Maintenance staff through **March 2024**

Projects and Repairs

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

Water Operations

1. Assisted Water Operations staff with potable service line repair on Morningside Drive in the Trabuco Highlands community.
2. Worked with Duthie Electric and Water Operations to install a new automatic transfer switch at Topanga Canyon BPS.
3. Worked with Evans Hydro to install a new mechanical seal at Robinson Ranch BPS.

Wastewater Operations

1. Assisted Wastewater Operations staff to bypass Via Allegre SLS during PLC upgrade with TESCO Controls.
2. Witnessed installation of new surge tank at Golf Club SLS.
3. Participated in job walk for electrical trunk line at WWTP.
4. Participated in condition assessment at Crystal Canyon WWTP (The Oaks at Trabuco community).
5. Worked with Hydrotech Electric on upgrades/repairs at O'Neill SLS, Golf Club SLS, Heritage SLS, and WWTP.

District Fleet Upgrades & Other Projects

1. Repurposed Unit No. 8 for emergency mobile pump service truck.
2. Completed BIT inspection on heavy duty fleet vehicles.
3. Completed CARB Zero Emission Vehicles (ZEV) reporting prior to April 1 deadline.

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 APRIL 3, 2024**

**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