



TRABUCO CANYON WATER DISTRICT ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP | APRIL 5, 2017

DIRECTORS PRESENT

Edward Mandich, Committee Chair
Stephen Dopudja, Committee Member

STAFF PRESENT

Hector Ruiz, General Manager
Michael Perea, District Secretary
Lorrie Lausten, Principal Engineer
Lisa Sangi, Administrative Assistant
Kris Hanberg, Wastewater Department Superintendent
Gary Kessler, Water Department Superintendent
Jason Stroud, Maintenance Superintendent

PUBLIC PRESENT

There were members of the public present.

CALL MEETING TO ORDER

Director Mandich called the April 5, 2017, Engineering/Operational Committee Meeting to order at 7:00 AM.

VISITOR PARTICIPATION

No comments were received.

ORAL COMMUNICATION

No comments were received.

COMMITTEE MEMBER COMMENTS

Director Dopudja commented on his attendance at the Municipal Water District of Orange County (MWDOC) Water Policy Forum and Dinner, and mentioned that the condition of Lake Oroville's emergency spillway was discussed.

Director Mandich commented on the status of the repairs of the damage at Lake Oroville, and mentioned that there were several videos online demonstrating the damage to the emergency spillway.

REPORT FROM THE GENERAL MANAGER

No comments were received.

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

The March 1, 2017, Engineering/Operational Committee Meeting Recap was presented to the Committee.

RECOMMENDED ACTION

The Committee approved, and recommended that the Board receive and file the March 1, 2017, Engineering/Operational Committee Meeting Recap (Consent Calendar).

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ITEM 2: ALTERNATE RAW WATER TRANSMISSION LINE - PW79

Ms. Lausten provided a status update on this project for Committee review, and mentioned that a preliminary bird survey was made earlier in the week and that there were no bird nests observed at the project site at that time, however, other bird surveys will be done as the project commences. Ms. Lausten reported that the preliminary construction portion of the project is scheduled to start the following week, and that District staff is scheduled to hold an onsite kick-off meeting on the following Monday. Discussion occurred concerning the onsite storage of equipment. Mr. Ruiz provided a status update on the project timeline extension with CalOES/FEMA, and mentioned that he had not received a formal response to date. Discussion occurred concerning the typical response timeline for submitted extension requests; Mr. Ruiz explained that a formal response typically depends on CalOES/FEMA current workload and disaster response.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 3: BAKER WATER TREATMENT FACILITY

Mr. Ruiz provided a status update on this project for Committee review, and mentioned that Irvine Ranch Water District (IRWD) was currently using Irvine Lake water as the Baker Water Treatment Plant's water source. Mr. Ruiz added that District Water Operations indicated that there were some challenges with water quality due to increased turbidity and natural organics in the water. Mr. Ruiz mentioned that the March 9, 2017 Project Committee (PC) Meeting was cancelled, and that the PC will meet on April 13, 2017. Mr. Ruiz reported that he has met with City of San Clemente staff to begin discussions on the memorandum of understanding for the sale of Baker water. Mr. Chris Kinney, District customer, addressed the Committee, and asked about the water quality issues with the Irvine Lake water; Mr. Ruiz replied that the water from Irvine Lake had a higher level of dissolved organics than normal due to the recent rain events, but that the Dimension Water Treatment Plant was able to successfully filter and treat the water prior to entering the District's distribution system. Mr. Ruiz mentioned that he anticipates that there will be greater concentrations of THMs or disinfection byproducts in certain areas of the District.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 4: OTHER ENGINEERING AND OPERATIONS PROJECTS

1. Supervisory Control and Data Acquisition (SCADA) System – Phase 1

Ms. Lausten provided a status update on this project, and mentioned that TESCO is scheduled to provide an Executive Summary of their findings to District staff by Friday, April 8, 2017. The final report is expected to be provided by the month of May.

2. Plano Sewage Lift Station and Plano Water Booster Pump Station Facility Site Security Improvements

Ms. Lausten provided a status update on this project, and mentioned that the facility security gate was delivered painted in the wrong color. Ms. Lausten added that the facility security gate will be repainted per the specification and then installed in the coming weeks.

3. Existing Network Infrastructure Upgrade

Mr. Perea provided a status update on this project, and reported that he was working with Synoptek (the District's IT Manager) to ensure that the District's new financial/utility billing system was installed on the new server and accessible at user workstations for upcoming training.

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4. Dove Canyon & Robinson Ranch Recycled Water Pump Stations –Phase 1

Ms. Lausten provided a status update on this project, and mentioned that she had met with Operations staff to collect preliminary data and information related to the facility design. Discussion occurred concerning the qualifications and experience of the firm to design the new facility, and current standard operating procedures versus preferred operations procedures for the new facility.

5. Tick Creek Pump Station –Slide Weir Gate

Ms. Lausten provided a status update on this project, and reported that the slide gate design has been completed. Ms. Lausten added that the District contracted with SWC Construction, and that the project is approximately \$14,000, to which the Audubon Society has agreed to contribute \$5,000, and that the remaining costs would be split evenly by the District and Santa Margarita Water District (SMWD). Ms. Lausten provided a brief timeline for project design and completion.

6. Other Projects

Ms. Lausten discussed the County of Orange Live Oak County Road Safety Project, and provided handouts which highlighted the project. Ms. Lausten reviewed photographs of the potholing sites to determine the location of the District’s water pipelines in relation to the proposed project improvement areas, and briefly discussed the potholing results. Discussion occurred concerning the challenges associated with the planned road improvements and the County’s request for TCWD to move sections of the large water mains. Ms. Lausten added that District staff is currently reviewing the planned improvement areas for the possible installation of pipeline valves for improved operational control of the distribution system.

Discussion occurred concerning a Dove Canyon Master Association (DCMA) owned v-ditch adjacent to the District’s Recycled Water Reservoir that had been compromised by slope erosion due to the failure of an irrigation line; Mr. Ruiz mentioned that District staff had contacted DCMA concerning the matter.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 5: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING WATER MAIN REPLACEMENT AT THE END OF MOUNTAIN VIEW ROAD

Mr. Ruiz presented this project for Committee review, and mentioned that the project was approved by the Board on the Fiscal Year 2016/2017 Capital Improvement Program (CIP). Mr. Ruiz provided a brief history of past water main improvement plans for the end of Mountain View Road, and discussed the current planned improvements which included the replacement and extension of approximately 300 feet of existing undersized water main to the end of the road. Mr. Ruiz added that the planned improvements include the installation of new fire hydrants that will meet District standards. Discussion occurred concerning water pressure requirements and the necessity of pressure regulators for residential applications; Mr. Ruiz mentioned that District staff will provide notification to customers in the event their services are impacted by higher than normal water pressure.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 6: CAPITAL IMPROVEMENT PROGRAM (CIP) UPDATE AND PROPOSED FISCAL YEAR 2017/2018 CIP

Mr. Ruiz provided a status update on this matter, and mentioned that he has met with District staff to review the remaining unfinished Fiscal Year 2016/2017 Capital Improvement Program (CIP) projects. Mr. Ruiz briefly reviewed the Fiscal Year 2016/2017 CIP (exhibit), and highlighted the projects planned for completion before the end of the year. Mr. Ruiz added that District Operations staff has determined that the Reclaimed Water Storage Reservoir Level and Dissolved Oxygen Level Monitoring Project should be cancelled due to other completed

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eration improvements consisting of surface aerators at the reservoir that have made this project unnecessary. Mr. Ruiz reviewed the proposed draft Fiscal Year 2017/2018 CIP projects with the Committee, and highlighted the following projects by department:

Administrative Services

- HVAC Modification for New Server Room:

Mr. Ruiz said that District staff is currently evaluating the impacts of relocation of the server equipment, and the necessity of HVAC improvements to the File Room.

- Customer Service Area Improvements:

Mr. Ruiz said that District staff is currently obtaining quotes for the replacement of the existing customer service area workspaces and furniture.

- AMR/Conventional Meters:

Mr. Ruiz said that District staff will continue to implement automatic meter reading equipment in strategically located areas of the District to decrease meter read times. Discussion occurred concerning opportunities for grant funding for AMR meter implementation, and the challenges associated with cellular communication of water meter reads.

Water Operations

- Canyon Creek Pump Station Pipe/Electrical Replacement:

Mr. Ruiz said that this project involves improvements to the facility building as well as pipes and valves, and as such, District staff is currently evaluating the total proposed costs.

Wastewater Operations

- Oaks at Trabuco Secondary Treatment Modifications:

Mr. Ruiz said that District staff is currently working with the State Water Board and South Orange County Wastewater Authority (SOCWA) to reclassify this Title 22 facility as a Secondary Treatment facility with the ability to discharge the effluent as irrigation. Discussion occurred concerning onsite supervision of the irrigation; Mr. Ruiz mentioned that the irrigation area would be restricted to a two-acre area with a safety buffer zone, and would be managed by the District.

- Wastewater Facility Site Security Improvements:

Mr. Ruiz said that District staff is currently obtaining quotes for site security improvements to the Robinson Ranch Wastewater Treatment Plant due to recent incidents of vandalism.

Recycled Water

- Dove & Robinson Ranch RW Pump Stations Replacement Phase II:

Mr. Ruiz said that District staff plans to implement the recommended facility upgrades from the Phase 1-Study once completed. Mr. Ruiz added that this project is a critical priority, as he believes that the facility can only operate in its current state for another year or two.

Engineering

- Digital Aerial Maps Update for 2017 & 2019:

Mr. Ruiz said that District staff would like to update the current GIS files in order to capture the newer developments and other changes to the District's service area.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

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ITEM 7: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING SADDLE CREST DEVELOPMENT (65 DUs)

Mr. Ruiz provided a status update on this development, and reported that the District is in receipt of the required developer deposit in the amount of \$1.8 Million. Mr. Ruiz provided a brief description of the challenges associated with finalizing the agreed terms between the District and the developer concerning the onsite reservoir storage tank, and mentioned that the developer initially selected the 0.88 million gallon reservoir storage tank. Mr. Ruiz added that the developer requested an extension of one week for the completion of the Will Serve Letter, as well as additional assurances and guidance from the District based on the proposed Developer Services Agreement. Mr. Ruiz mentioned that he discussed this extension request with the Board President, and that President Acosta approved the request. Discussion occurred concerning the planned improvements to the District's Ridgeline Booster Pump Station; Mr. Ruiz indicated that the facility improvements are required to meet the development's projected water demands. Mr. Ruiz recommended that he work with the developer to finalize the Developer Services Agreement for presentation to the Board at the April 19, 2017 Regular Board Meeting.

RECOMMENDED ACTION:

The Committee recommended that the General Manager work with the developer, in support of the Board President's decision, to extend the Will Serve Letter due date and to finalize the terms of the Developer Services Agreement.

ITEM 8: ACTIVE DEVELOPMENTS

1. Dahlia Court Development (36 DUs | WSL)

Ms. Lausten reported that thirty-one of the planned thirty-six units have been completed, and that the District has provided as many water meters and meter boxes to the developer.

2. Skyridge Development (84 DUs | WSL)

Ms. Lausten reported there were no updates

3. Oaks at Trabuco, County of Orange (9 DUs | WSL)

Ms. Lausten reported there were no updates

4. Other Active Developments

Ms. Lausten reported there were no other active developments.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 9: WATER SYSTEM UPDATES

Mr. Kessler presented the Water System Status Update through March, 2017, and reported on the following matters:

1. Water System Department staff worked to bring the Trabuco Creek Wells Facility online. The facility is operational and producing approximately two cubic feet per second (CFS) of treated groundwater.

2. Water System Department staff painted approximately thirty (30) fire hydrants in the Dove Canyon community.

3. Water System Department staff repaired a broken air-vac at the top of the switchbacks on Trabuco Canyon Road.

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4. Water System Department staff operated the Dimension Water Treatment Plant (DWTP) with Irvine Lake water from February 15, 2017 to March 6, 2017, and additionally on March 17 and 18. During this period, the DWTP treated approximately one to three cubic feet per second (CFS). The DWTP produced water quality that met drinking water standards, however, a greater amount of dissolved organic matter was observed in the raw water, and is believed to have resulted in higher disinfection-by-products, as measured on a quarterly basis, in certain locations with low water demands.

Mr. Kessler reported that the Trabuco Creek Wells Facility well levels have not decreased and the water has been used to meet the District's potable water demands. Mr. Kessler expressed his appreciation for the Maintenance Department's assistance with the startup of the facility. Mr. Kessler reported that on March 13th, the District exceeded the Trihalomethane (THM) maximum contaminant limit (MCL) at one sample location due to the higher level of dissolved organics from Irvine Lake water. Mr. Kessler added that District staff coordinated with the Department of Public Health (DPH) to report the anomaly, and determined that the longer than normal detention times due to the wet weather and low demands are believed to have adversely affected the water quality.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 10: WASTEWATER SYSTEM UPDATES

Mr. Jason Stroud presented the presented the Wastewater System Status update through March, 2017, and reported on the following matters:

1. Wastewater Department staff exercised both the Dove Dam Sluice Gate Valve and Robinson Ranch Dam Sluice Gate Valve in the presence of the State of California Division of Safety of Dams Inspector.
2. Wastewater Department staff removed the Robinson Ranch Wastewater Treatment Plant (WWTP) West Sequencing Batch Reactor (SBR) to repair an aeration system header.
3. Wastewater Department staff accompanied the State Water Control Board for an inspection of the Robinson Ranch Wastewater Plant.

Mr. Stroud reviewed the Recycled Water System Summary with the Committee. Mr. Hanberg reported that District staff completed the annual inspection of the WWTP with the State Water Board, and that there were no recommendations made at the time of inspection.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 11: OTHER MATTERS/REPORTS

There were no other matters or reports received.

RECOMMENDED ACTION

The Committee received the information, no action taken.

ADJOURNMENT

Director Mandich adjourned the April 5, 2017, Engineering/Operational Committee Meeting at 8:21 AM.