DIRECTORS PRESENT

Edward Mandich, Committee Chair Stephen Dopudja, Committee Member

STAFF PRESENT

Hector Ruiz, General Manager
Michael Perea, District Secretary
Lorrie Lausten, Engineer
Travis Jones, Wastewater Department Chief Plant Operator
Jason Stroud, Maintenance Technologist II

STAFF ABSENT

Kris Hanberg, Wastewater Department Superintendent Neil McKenna, Water Department Superintendent

PUBLIC PRESENT

There were no members of the public present.

CALL MEETING TO ORDER

Director Mandich called the April 6, 2016, 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 commended District staff on the new Utility Vehicle for Chemical Transfer.

Director Mandich had no comments.

REPORT FROM THE GENERAL MANAGER

Mr. Ruiz reported the following matters:

- Mr. Ruiz reported that the District purchased a new Utility Vehicle for Chemical Transfer which will be used
 in District Operations, and mentioned that the vehicle is on display in the Administrative Facility parking lot
 for Committee review, as well as the older Utility Vehicle which is failing, corroded, and at the end of its
 service life.
- Mr. Ruiz reported that District staff is scheduled to work with the U.S. Army Reserve Unit on emergency response training exercises on April 8, 2016. The training exercise is mutually beneficial as the Army reserves have previously coordinated with the District for providing emergency generators and assistance.

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

The March 2, 2016, Engineering/Operational Committee Meeting Recap was presented to the Committee.

RECOMMENDED ACTION

The Committee approved the meeting recap and recommended that the Board receive and file the March 2, 2016, Engineering/Operational Committee Meeting Recap (Consent Calendar).

ITEM 2: ALTERNATE RAW WATER TRANSMISSION LINE - PW79

Mr. Ruiz provided a status update on this project, and reviewed the project tasks remaining with the Committee. Mr. Ruiz mentioned that the CEQA required 30-day review period of the Notice of Intent to Adopt a Mitigated Negative Declaration will be completed on April 18, 2016, and that District staff will schedule a Public Hearing for the April 20, 2016 Regular Board Meeting for public questions and input regarding the project, and subsequent Board approval of project and adoption of the Mitigated Negative Declaration. Mr. Ruiz added that District staff is currently waiting for the completion of the National Environmental Protection Act (NEPA) process which is being managed by the Federal Emergency Management Agency (FEMA). Mr. Ruiz reported that the easement agreement with Sukut has been executed, and provided a brief review of the status of the existing easement agreements with the Committee. Discussion occurred concerning the County of Orange permitting process and the timeline for project completion.

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, and mentioned that the Project Committee is scheduled to meet on April 14, 2016. Mr. Ruiz mentioned that Irvine Ranch Water District (IRWD) has revised the project completion date to October 6, 2016, due to project delays. Mr. Ruiz reviewed the status of current contract change orders, and highlighted that there are twenty-five unresolved open items totaling \$328,190 that are under IRWD review.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 4: DISCUSSION AND POSSIBLE ACTION(S) RELATING TO TCWD'S DOMESTIC WATER STORAGE AND RESERVOIR SITING STUDY

Mr. Ruiz provided a status update on this project, and presented the final draft Domestic Water Storage and Reservoir Siting Study (Study) as prepared by PSOMAS. Mr. Ruiz highlighted the District's Water Storage Reservoirs (Table 1-1) which demonstrated that the District currently has 8.0 million gallons (MG) Effective Total Storage Available, and reviewed the District's Existing Reservoir Locations (Figure 1-1) with the Committee. Mr. Ruiz reviewed the Water Storage Components and District Requirements (Section 2.1) which included the current operational and fire storage requirements. Mr. Ruiz reviewed the Storage Required for Future Developments (Section 2.2), and highlighted the planned New Developments Requiring Storage and Potential Reservoir Sites (Figure 2-1) in the District's service area. Discussion occurred concerning the Storage Requirements for Majority of New Developments (Table 2-1); Mr. Ruiz reviewed the development types and storage types by density levels, and explained that District staff reviewed the storage requirements and impacts of each development. Mr. Ruiz reviewed the Estimated Required Storage for Existing Emergency Storage and New Developments (Table A-2-1) with the Committee, and highlighted the required storage demand levels in five year increments beginning in 2015 through 2030. Discussion occurred concerning District funding for the construction of new reservoirs; Mr. Ruiz said that the District will use the funds collected through the Water

Reliability and Emergency Storage charge (WRESF) on customer monthly utility bills, and the potential for costsharing with the proposed Saddle Crest reservoir. Discussion occurred concerning the impact of unknown future developments on the results of this Study; Mr. Ruiz replied that the Study has enough flexibility for planning for future water needs.

RECOMMENDED ACTION

The Committee received information concerning TCWD Domestic Water Storage and Reservoir Siting Study, and recommended that the Study be forwarded to the Board for review (Action Calendar).

ITEM 5: DISCUSSION AND POSSIBLE ACTION(S) RELATING TO TCWD'S 2015 URBAN WATER MANAGEMENT PLAN

Ms. Lausten provided a status update on this project, and mentioned that Municipal Water District of Orange County (MWDOC) has posted their draft 2015 Urban Water Management Plan (UWMP) on their website for public review. Ms. Lausten added that she has been working with WSO (Consultant) to complete the required independent Water Audit which is a reference document for the District's UWMP, and the final draft UWMP will be prepared in the next two weeks. Ms. Lausten added that the City of Lake Forest has notified District staff that they would like to review the District's draft UWMP. Ms. Lausten reviewed the project milestones, and mentioned that the Public Hearing has been tentatively scheduled to be held at the June 15, 2016, Regular Board Meeting for public questions and input.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 6: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING PLANO TRABUCO RECYCLED WATERLINE EXTENSION PROJECT

Mr. Ruiz presented the item for Committee review, and mentioned that the District's portion of the project has been completed by GCI Construction (Contractor). Mr. Ruiz added that District staff has filed a Notice of Completion with the County of Orange Office of the Recorder, and that the property owner was currently working with the Contractor to complete the onsite portion of the project. Mr. Ruiz commented that District staff are scheduled to install the three-inch water meter, and that a two-inch recycled water service connection was added for the benefit of a future recycled water conversion project for the Robinson Ranch Homeowner's Association.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 7: OTHER ENGINEERING AND OPERATIONS PROJECTS

1. Recycled Water Conversion Project Opportunities

Mr. Ruiz restated that during the Plano Trabuco Recycled Waterline Extension Project, District staff had GCI Construction install a two-inch recycled water service line for the Robinson Ranch Homeowner's Association.

2. Orange County Water System Gap Analysis

Mr. Ruiz provided a status update on this matter, and added that District staff is coordinating with MWDOC staff for a presentation on this matter at a future Committee Meeting.

3. TCWD Fiscal Year 2016/2017 Capital Improvement Program Review

Mr. Ruiz presented this new item for Committee review, and commented that District staff is working with the District Treasurer on the Fiscal Year 2016/2017 Capital Improvement Program (CIP) and General Fund Budgets.

Mr. Ruiz presented a handout of the Adopted Fiscal Year 2015/2016 Capital Improvement Program for Committee review, and commented on the following projects:

WATER SYSTEM

- 2MG Reservoir:
 - Mr. Ruiz commented that this project will be moved to Column A for Fiscal Year 2016/2017
- Cook's Reservoir Replacement:
 - Mr. Ruiz commented that although the Board approved this project at the March 16, 2016, Regular Board Meeting, that the contractor is unable to finish the project by the end of this fiscal year. Mr. Ruiz added that Water Operations staff recommends delaying this project to September/October in Fiscal Year 2016/2017.
- Dimension WTP Backwash Recycling:
 - Mr. Ruiz commented that this project has been cancelled because it did not provide any benefit towards the District's compliance with the State Water Board's conservation mandate.
- Utility Valve/Hydrant Flushing Vehicle:
 - Mr. Ruiz commented that District staff would like to purchase this vehicle next fiscal year, and reviewed the multiple benefits of this type of vehicle.
- Ridgeline PS Electrical Upgrades:
 - Mr. Ruiz commented that this project is scheduled for Fiscal Year 2016/2017 due to the need for partially meeting pumping requirements by the proposed Saddle Crest development.
- Dimension Water Treatment Plant Perimeter Security Fencing:
 - Mr. Ruiz commented that this project has been completed.

WASTEWATER SYSTEM

- Access/Service Road Desilting:
 - Mr. Ruiz commented that this project has been completed.
- Santiago Lift Station Electrical Panel Replacement:
 - Mr. Ruiz commented that this project is scheduled for Fiscal Year 2016/2017.
- Aerobic Digester Sludge PS and Dewatering PS Replacement:
 - Mr. Ruiz commented that District staff would like to complete this project this fiscal year with the possibility of using a package system solution.

RECLAIMED/RECYCLED WATER SYSTEMS

Dove Lake DO/Temp Probes:

Mr. Ruiz commented that this project is scheduled for Fiscal Year 2016/2017.

MAINTENANCE

• Mr. Ruiz commented that all of the Maintenance CIP purchases were completed in Fiscal Year 2015/2016, and that District staff is currently collecting price quotes for a Crane Truck for next fiscal year.

MAJOR REPAIRS/EXPENSES

- Administrative Building Coating:
 - Mr. Ruiz commented that this project is scheduled for this year, and that District staff is currently securing cost proposals for the work.
- Plano LS/Bell LS/Via Allegre/NEQ Rehabilitation/Recoating:
 - Mr. Ruiz commented that some of this work will be completed this year, with the remaining facility rehabilitation and recoating to be completed in Fiscal Year 2016/2017.

- Pressure Reducing Station:
 - Mr. Ruiz commented that this project is close to completion for the fiscal year, and included work throughout the distribution system and at the Dimension Water Treatment Plant. Mr. Ruiz added that District staff plan to work on the recycled water pressure reducing stations in Fiscal Year 2016/2017.
- Reservoir Study:
 - Mr. Ruiz commented that this project has been completed.
- Recycled Water PS Replacement Study/Pre-Design:
 - Mr. Ruiz commented that this project is scheduled for Fiscal Year 2016/2017.
- SCADA Master Plan Study:
 - Mr. Ruiz commented that this project is scheduled for Fiscal Year 2016/2017.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 8: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING THE PLANO TRABUCO DEVELOPMENT, WILLIAM LYON HOMES, INC., CITY OF RANCHO SANTA MARGARITA (36 UNIT TRIPLEX BUILDING DESIGN)

Mr. Ruiz provided a status update on this matter to the Committee, and mentioned that Ms. Lausten is currently working with the developer, contractor, and the onsite construction inspector to coordinate the installation of water, wastewater, and recycled water utilities. Mr. Ruiz added that a Special Board Meeting is scheduled for Monday, April 11, 2016 to review matters pertaining to the development. Discussion occurred concerning the planned upgrades to the District's Via Allegre Sewer Lift Station; Mr. Ruiz mentioned that the planned upgrades are scheduled for Fiscal Year 2016/2017.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 9: SKYRIDGE DEVELOPMENT (84 DUs)

Mr. Ruiz provided a status update on this development, and reported that District staff has not received any comments from Santa Margarita Water District (SMWD) on the Agreement for the Provision of Certain Services and Purchase of Capacity Rights (Agreement). Mr. Ruiz mentioned that SMWD has not forwarded the Agreement to the SMWD Board of Directors for their approval. Mr. Ruiz commented that the Contractor has successfully connected to the El Toro Road Trunk Sewer, and that the neighboring Hillside Montessori has expressed interest in transitioning from their existing failing septic system to the District's sewer system as a result. Mr. Ruiz added that this matter was on the agenda for discussion. Ms. Lausten provided a status update on the project construction work, which included hydrostatic testing of the onsite fire hydrants and the planned delivery of lumber for construction of the model homes.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 10: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING HILLSIDE MONTESSORI WILL SERVE LETTER (SEWER SERVICE)

Mr. Ruiz presented this matter for Committee review, and mentioned that the Hillside Montessori is adjacent to the new Skyridge development. Mr. Ruiz commented that the owners of the Hillside Montessori have expressed interest in transitioning from their existing failing septic system to the District's sewer system, and that the new Skyridge development has presented an opportunity for this connection. Mr. Ruiz added that District staff has prepared a technical memorandum (exhibit) which analyzed the historical water demands, and that he has

reviewed this information with the Director of the Hillside Montessori. Mr. Ruiz commented that he would like to bring the attached (exhibit) DRAFT Will Serve Letter (WSL) for sewer service before the Board at the following Regular Board Meeting for their review and approval in order to provide the Hillside Montessori access to the District's sewer system.

RECOMMENDED ACTION

The Committee received the status update, and recommended that the Hillside Montessori Will Serve Letter (Sewer Service) be forwarded to the Board (Action Calendar).

ITEM 11: SADDLE CREST DEVELOPMENT (65 DUs)

Mr. Ruiz provided a status update on this development, and commented that District staff is currently working on the WSL for the development. Mr. Ruiz added that there are certain remaining items which need to be addressed prior to the WSL's completion. Mr. Ruiz commented that District staff has worked with PSOMAS (Consultant) to review the water storage tank design for the development, and that he has met with the developer to address concerns regarding construction water usage language for the WSL. Mr. Ruiz added that the developer plans to rough grade the site from July through September.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 12: ACTIVE DEVELOPMENTS

1. Summerfield Homes, County of Orange - Tract 15800 (5 DUs | WSL)

Ms. Lausten provided a status update on this development, and mentioned that District staff has met with the developer to confirm the relocation of the onsite backflow prevention devices and replacement of damaged water meter boxes.

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

Mr. Ruiz commented that he plans to meet with the developer the following week concerning the currently planned construction of a new home next to the future onsite wastewater treatment facility. Discussion occurred concerning the developer agreement with the District concerning the onsite wastewater treatment facility and the challenges with the Title 22 compliance with that specific facility.

3. Other Active Developments

No other active developments were discussed.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 13: WATER SYSTEM STATUS

Mr. Ruiz commented that Mr. McKenna was absent. Mr. Ruiz presented the Water System Status Update through March, 2016, and reported on the following matters:

- 1. Water Department staff repaired two leaking residential service laterals in the Dove Canyon and Rancho Cielo communities.
- 2. Water Department staff was assisted by contractors to tie in the 12-inch line to the 8-inch line on Santiago Canyon Road. This work was a temporary fix resulting form the recent emergency main break.
- 3. Water Department staff was assisted by contractors with the installation of two 2-inch services to the residences on Country Home Road.

4. Water Department staff completed the rehabilitation of 5 Cla-vals at the Dimension Water Treatment Plant.

Mr. Ruiz provided an updated Monthly Water System Operations Summary report for March, 2016, for Committee review, and provided additional information for calendar year 2013 for comparison purposes. Discussion occurred concerning the current conservation efforts of District customers; Mr. Ruiz commented that the District's customers demand reduced by 28% in month of February, 2016, in comparison to February, 2013.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 14: WASTEWATER SYSTEM STATUS

Mr. Jones presented the Wastewater System Status Update through March, 2016, and reported on the following matters:

- 1. Wastewater Department staff completed it's annual cleaning of the District's Sewer Lift Station Wet Wells.
- 2. Wastewater Department staff replaced the 15HP and 20HP pumps at the Bell Canyon Sewer Lift Station with refurbished units.
- 3. Wastewater Department staff removed the 40HP pump at the Heritage Sewer Lift Station for repair.

Mr. Jones provided an updated Monthly Recycled Water System Operations Summary for March, 2016, for Committee review, and mentioned that the Dove Lake freeboard was at 1.5 feet due to the recent rain events. Mr. Jones added that the Shadow Rock Detention Basin Facility produced 3.0 acre-feet of water for the recycled water system.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 15: OTHER MATTERS/REPORTS

Mr. Ruiz had no other matters to report.

ADJOURNMENT

Director Mandich adjourned the April 6, 2016, Engineering/Operational Committee Meeting at 8:15 AM.