

**MINUTES OF THE ENGINEERING COMMITTEE MEETING
OF THE RAINBOW MUNICIPAL WATER DISTRICT
JUNE 3, 2015**

1. **CALL TO ORDER** – The Engineering Committee Meeting of the Rainbow Municipal Water District on June 3, 2015 was called to order by Chairperson Prince at 3:01 p.m. in the Board Room of the District, 3707 Old Highway 395, Fallbrook, CA 92028. Chairperson Prince, presiding.

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL:**

Present: Member Brazier
Member Taufer
Member Stitle
Member Prince
Member Rhyne
Member Kirkpatrick
Member Kirby
Alternate Kennedy

Absent: Member Strapac

Also Present: Director Tory, Water Operations Manager Atilano, Finance Manager Thomas, Superintendent Zuniga and Assistant Rubio

Mr. Elliott, Mr. McCarty, Mr. Gillingham, Mr. Ratican, Mr. Murray and Dr. Robertson (in at 3:15 p.m.) were the public members present.

4. **PUBLIC COMMENT RELATING TO ITEMS NOT ON THE AGENDA**

There were no public comments.

COMMITTEE ACTION ITEMS

*5. **APPROVAL OF MINUTES**
A. May 6, 2015

ACTION:

Moved by Ms. Brazier to approve the minutes as written. Seconded by Mr. Taufer. After consideration, the motion CARRIED by the following vote:

AYES: Member Brazier, Member Taufer, Member Prince, Member Rhyne, Member Stitle, Member Kirkpatrick and Mr. Kirby.
NOES: None.
ABSTAINED: None.
ABSENT: Member Strapac.

6. DISCUSSION AND POSSIBLE ACTION REGARDING COMMITTEE APPOINTMENTS AND OTHER CHANGES TO COMMITTEE MEMBERSHIP

Ms. Brazier said Mr. Kirby was approved by the Board as a new member of the Engineering Committee. She mentioned there are other people present that were interested in joining this committee:

- Mr. Ratican said he attended last month's Engineering Committee and Board of Directors meetings and was still interested in joining this committee.
- Mr. Murray said he is a member of the community and a retired Systems Engineer with experience in corrosion control.

Mr. Prince announced at the next committee meeting there would be a recommendation to the Board to add new members.

7. DISCUSSION AND POSSIBLE ACTION REGARDING ENGINEERING COMMITTEE MEETING DAYS AND TIMES

Mr. Prince said based on the comments brought forth the day and time of the Engineering Committee Meetings would remain the same.

8. MASTER PLAN UPDATE

Mr. Kennedy said as part of the Master Plan Update a preliminary analysis was conducted to review the opportunity and options for wastewater treatment and disposal. He introduced Mr. Elliott, Project Manager with ATKINS consulting firm presenting the Draft Wastewater Treatment / Reclamation Alternatives Study.

Mr. Elliott introduced his team of consultants, Mr. McCarty and Mr. Gillingham. He said part of updating the District's Water Master Plan included researching opportunities in developing a new local water supply. He stated there were three key issues with the Water Master Plan – supply, reliability and CIP development. He pointed out the presentation would be focusing on wastewater treatment and reclamation with costs and benefits for the District's ratepayers and the possibility to provide a local water supply. He said there were two fundamental wastewater treatment and disposal alternatives:

- No Project Alternative: Continue sending wastewater to Oceanside.
- District Plant Alternative: Building a District wastewater reclamation plant.

Mr. Elliott pointed out the key success factors and benefits for the Wastewater Treatment/Reclamation Alternatives study included:

- Reduce treatment costs to Oceanside and reduce ocean disposal.
- Develop reliable source of local water supply and future plan for Indirect Potable Reuse/Direct Potable Reuse.
- Provide drought-proof supply for major agriculture users and nurseries.
- Serve as a possible water supply offset mitigation plan.

Mr. Elliott stated the reclamation plant alternative offers opportunities from a life cycle cost stand point in comparisons to staying with Oceanside. He pointed out a large expense would be the recycled water piping. He said wastewater treatment and disposal alternatives were defined

through discussions with District staff. He stated the following alternatives were defined for further evaluation:

- Alternative 1: No Project Alternative. Under this alternative, the District would continue to convey wastewater generated within its service area to the San Luis Rey Water Reclamation Facility (SLRWRF) for treatment and disposal as governed by the terms and conditions of the inter-agency agreement, and eliminating the potential for a local recycled water resource for revenue generation and reduction of imported water volumes.
- Alternative 2: Construction of a new treatment facility near the District office site. Under this alternative, the District could construct a 0.9-mgd Water Recycling Facility (WRF) either on District property adjacent to its current office location or on a suitable site in the vicinity. Construction of such a facility would reduce conveyance to the SLRWRF to approximately 0.72-mgd, and reducing capital, operation and maintenance obligations under the inter-agency agreement.
- Alternative 3: Construction of a new treatment facility near the existing Lift Station 1 (LS-1) site. Under this alternative, the District could construct a 1.5-mgd WRF at or near the District's existing LS-1 site. Construction of such a facility would reduce conveyance to the SLRWRF to approximately 0.12-mgd, and significantly reducing capital, operation and maintenance obligations under the inter-agency agreement.
- Alternative 4: Construction of a new treatment facility near the District office with conveyance of LS-1 flows to the WRF. Under this alternative, the District could construct a 1.5-mgd WRF at or near the District office site, with a companion 0.6-mgd lift station at the LS-1 site. Wastewater flow tributary to the LS-1 site is pumped to the new WRF for treatment. Construction of these facilities would reduce conveyance to the SLRWRF to approximately 0.12-mgd, and reducing capital, operations and maintenance obligations under the inter-agency agreement.
- Alternative 5: Construction of a new treatment facility near the District office site with conveyance of LS-1 and LS-2 flows to the WRF. Under this alternative, the District could construct a 1.62-mgd WRF at or near the District office site, with companion 0.72-mgd and 0.12-mgd lift stations at or near the LS-1 and LS-2 sites, respectively. Wastewater flow tributary to the LS-2 site would be conveyed to the LS-1 site, and all flows tributary to the LS-1 site would be conveyed to the WRF for treatment. Construction of these facilities would eliminate conveyance to the SLRWRF, and eliminating capital, operation and maintenance obligations under the inter-agency agreement.

Mr. Gillingham presented the preliminary cost analysis provided on Table 5-1 of the Draft Wastewater Treatment / Reclamation Alternatives Report. He said a preliminary life cycle cost analysis was prepared for each wastewater treatment plant alternative. He pointed out the table provides conceptual flow parameters, life-cycle cost summary, total equivalent annual costs, and total present worth costs. Discussion ensued.

Mr. Kennedy said the Board would have to consider how much the new water supply was worth and the challenge of the cost. He stated the Draft Wastewater Treatment / Reclamation Alternatives Report provided a lot of useful information to obtain the necessary approvals. Discussion ensued.

9. DISCUSSION AND POSSIBLE ACTION REGARDING MORRO TANK

Mr. Kennedy said the District has observed an uplift of the Morro Tank floor plate relative to the surrounding grade. He mentioned that this displacement was first observed about 25 years ago. He pointed out the District retained the services of Kennedy/Jenks a consulting firm to conduct a study to determine the causes of the observed distress, and to develop/evaluate alternative solutions to address the distress. He stated the alternatives were very costly, which involved replacing the tank with different types and/or sizes. He mentioned based on discussions with the District Operators it was determine to evaluate the possibility of providing water to this zone from the Pala Mesa Tank and eliminating the Morro Tank. He said the consultant was tasked to conduct additional hydraulic analysis to evaluate supplying the Tank Zone from other pressure zones such as Pala Mesa Tank and the Morro Reservoir.

Mrs. Kirkpatrick referred to the Morro Tank Pressure Zone Analysis Technical Memorandum which provided the results of the additional hydraulic analysis. She reiterated that during water shutdowns of Morro Tank the Operators can provide water to that zone by bringing water from the Pala Mesa Tank zone. She said the District would like to close down Morro Tank, however, the following upgrades would be required:

- Upsizing pipelines in the Tank Zone as was recommended in the Master Plan.
- Upsizing additional pipelines near Morro Reservoir zone and tank zoned boundaries.
- The addition of a fire pump with an emergency generator.

Mr. Kennedy said the cost of removing the tank would possibly be offset by the scrap metal and the parcel could be sold.

10. LIST OF SUGGESTED AGENDA ITEMS FOR THE NEXT SCHEDULED ENGINEERING COMMITTEE MEETING

The following agenda items were suggested for the next Engineering Committee Meeting: Committee Appointments, Master Plan Update, Morro Tank, and the Ground Water Report.

11. ADJOURNMENT

The meeting was adjourned at 4:22 p.m.

Tim Prince, Committee Chairperson

Dawn M. Washburn, Board Secretary