

Report to the Board at the February 17, 2017 Board meeting/--Water Committee

1. Budget and spending to date for water year 2016/17 (approx. May 1, 2016 to April 30, 2017)

- Board-approved budget of \$12,765 (Nov. 2015 column)
- Revised budget of \$11,615 due to removal of two projects (Apr. 2016 column)
- Spending predicted to be \$10,871 by end of WY; predicted contribution to reserve account \$5,826

Line item	-----Budgeted cost-----		Spent and fenced as of Feb 17, 2017	Explanation
	Nov. 2015	Apr. 2016		
1. Below-ground electric line to reservoir	\$6,265	\$6,265	\$6,853	• Completed
2. Flushing hydrants on legs east of Lostine River Road	\$2,200	\$2,200	\$0	• Defer due to total cost overruns of ~\$1,100 on electrical line, base operations, and addition of meter setters to backflow valves
3. Install two missing backflow prevention valves in meter box	\$400	\$0	\$900	• Project removed in April 2016, but re-evaluation indicated they were missing. • To be done in April (weather permitting). • Cost increase is for addition of two meter setters (per new policy).
4. Improved method for disinfection	\$750	\$0	\$0	Project removed in April 2016.
5. Base operations	\$1,500	\$1,500	\$2,023	• Electricity, water analysis, OAWU dues, misc. • Current cost is \$1,785. • Estimate \$2,023 by end of water year. Coliform-positive samples responsible for ~\$350 of cost overrun.
6. Unanticipated repairs	\$1,500	\$1,500	\$1,095	• \$290 – 50% of replacing broken part on trencher rental used for electrical line • \$805 – troubleshoot telemetry, install new radio
7. Consultation with professionals	\$150	\$150	\$0	
8. Total, lines 1 - 7	\$12,765	\$11,615	\$10,871	We would be ~\$300 over the \$12,765 budget (assuming no unanticipated costs through April) if we did the flushing hydrants this year.
9. Predicted contribution to reserve account	\$3,275 (projected income of \$16,040 minus l. 8)	\$5,082 (projected income of \$16,697 minus l. 8)	\$5,826 (projected income of \$16,697 minus l. 8)	

2. Preview of budget request for WY2017-18.

- Two flushing hydrants	\$2,200
- Engineering review of 30-Year Plan (look into 100% loan forgiveness thru DWSRF)	
- Base operations	\$1,800
- Unanticipated repairs	\$1,500
- Consultation	\$150
- Capital reserve	<u>\$5,000?</u>
Total	\$10,650 plus cost of engineering review if no loan forgiveness

3. Modeling

- Summary from last meeting: A mathematical model was developed to determine if coliform-positive samples may be caused by more than the deferred flushing of (dead-end) hydrants. The model showed reservoir residence times (RRT's) of 1-3 months (3 of 7 use scenarios) and infinite RRT's (i.e., little to no fresh water supplied to reservoir) for 4 of 7 use scenarios. RRT is supposed to be a maximum of 3-5 days.
- Update: The mathematical model was redone to capture the way the system will work with the new radio. Using 50-75% of reservoir capacity, RRT's were 2-3 weeks for summer and roughly 5 weeks for June through October. The latter RRT's were considered insufficient. Using 25-35% of reservoir capacity (reduced fire-fighting capacity), RRT's were 2-3 weeks for June through October.

4. Telemetry system

- Signal send strength was turned up to maximum. Jared (Enterprise Electric) said the received signal is improved but is not very strong, and if we continue to experience loss-of-signal alarms we will need better antennas.
- In discussing our RRT problems with Jared, he concluded our system has not been operating correctly. Specifically, the water levels are supposed to fluctuate between the low water setpoint and the high water setpoint; they have not been doing that for many years. This led to troubleshooting and discovery of a malfunctioning radio.

5. Monitoring program to assess well quality (i.e., is a 2nd well a near-term need, or not?)

We began using the air line to measure the static water level and perform draw-down tests and recovery tests. We will record data for a full year and issue a report in spring 2018.

6. Lostine Fire Department request

They asked if they could use our hydrants or reservoir, and supplies in fire barrels in event of fire at HiLo, downriver, and upriver. I gave a qualified yes but said I had to obtain approval from Board.

7. Professional evaluation of our water system by the Oregon Association of Water Utilities (OAWU)

Unchanged. We asked for a walk-around evaluation of our water system and a written report. Originally scheduled for April 2016. Circuit rider has been contacted 4 additional times to keep us on his radar.

8. 30-Year Plan

- First draft completed and sent to Board
- Needs an engineering review. OAWU has agreed to review it, but they have already qualified that it won't be to the depth of an engineering review