Water Committee Report for June 28, 2025 annual meeting

A. Financial report

Table 1. Operations account balances at end of water year (March 31, 2025).
[Amounts below that are described as "approx." are due to work not yet performed. Although not paid, the funds are committed; therefore the actual cost will deviate somewhat from budgeted (committed) costs. See Table 2 and it's footnotes.]

- Carryover $19,975
  minus $ 8,000 (approx.) project cost committed but not yet billed (Table 2, lines 1 and 5)
  subtotal $11,975 (approx.) after-commitment carryover

- Emergency repairs reserve subtotal $10,000
Balance total **$21,975 (approx.)**

Table 2. Operating budget line-item report for past water year (April 1, 2024 to March 31, 2025).

Line item	*Budgeted* cost	versus *Actual* cost and explanation
1. Complete equipment installation (to finish the 2-year "data upgrade and archive" project)	$ 300	$0 Roughly $3,000 is committed – see footnote 1 below; not paid because work hasn't been completed.
2. Hire contractor to clean and grout reservoir without taking water system off-line	$10,500	$0 $10,500 is committed – see footnote 2 below; not paid because work not started. *Project and its cost reassigned at the 3/21/2025 Board meeting from Operating budget to Capital reserve.*
3. Flushing hydrant purchase and install	$ 2,000	$3,048 ($1,513 purchase + $233 freight + $1,302 excavation/install)
Planned projects subtotal (lines 1-3)	**$12,800**	**$3,048** plus roughly $3,000 committed
4. Base operations	$2,390	$2,310 Electricity, water testing, OHA and OAWU dues, Wildeye data logging and cloud archiving.
5. Unanticipated repairs	$2,390	• $788 to correct a blind water connection (not owner's fault). • Plus roughly $5,000 of repairs for the "data upgrade and archive" project is committed – see footnote 1 below; not paid because work hasn't been completed.
6. Emergency repair reserve contribution	$ 0	$ 0
7. **Total**	**$17,580** *budgeted* cost	$6,146 spent plus roughly $8,000 committed but non-invoiced costs = **roughly $14,146** *actual* cost.

Footnote 1. Project delayed and cost is much higher than anticipated. This project was part of – and a continuation of – the 2023/24 water year "data upgrade and archive" project.
Status detail: The logic controller failed nearly 1.5 years ago and the pump has been controlled manually during this time. Enterprise Electric was hired to fix or replace it. In June 2024, after 4 bird-dogging calls, Enterprise Electric informed us they will discontinue controller work on Wallowa County water systems. Jon Russell from Spokane was hired based on recommendations from water system operators in the county.

- Jon's initial site visit in July 2024 found the logic controller's programming was unrecoverable and Enterprise Electric didn't have a copy of the programming. This meant the entire control system had to be reprogrammed and a new controller purchased (*unanticipated repairs line item*).
- I requested Jon add programming that allows pump control by operator-specified water levels (*new project scope*). See attached Powerpoint slide.
- Jon found other things that need to be fixed (*unanticipated repairs line item*):
  (a) Install electrical current "cleaner" for controller (its absence may have caused the controller failure),
  (b) Improve grounding system in reservoir control room (probably responsible for pattern of transducer failures),
  (c) Install correct transducer model (to get rid of large drift in transducer readings).
- Two other pieces of hardware are needed for getting reservoir data to the Wildeye data logger that the engineer/contractor and therefore the water committee wasn't originally aware of (*new project scope*).
- Programming of new controller is complete and tested. Jon at 76 years old is awaiting spring weather to install.
- Itemized cost of Jon Russell's materials, labor, and travel (3 trips) as of December 1 was $4,365. Jon estimated an additional cost of $3k to $4k to finish the project = expected total cost of $7.4k to $8.4k. Rough allocation is $3,000 of additional project scope (Table 2, line 1) and $5,000 is unanticipated repairs (Table 2, line 5). No payment has been made; payment will be made when work is complete.

Footnote 2. Project delayed. Contract signed in July but contractor (out of Medford) could not schedule work before winter.

Table 3. Operating budget request and revenue request for current water year (April 1, 2025 to March 31, 2026).

Request follows the 30-Year Plan which provides for a 3% annual inflation adjustment in base operations and unanticipated repairs.

Category	Amount
Planned projects	$ 2,150
Base operations	$ 2,460^
Unanticipated repairs	$ 2,460
Emergency repair reserve contribution	$ 0^^
Operating budget request	**$ 7,070**
Capital reserve contribution	$11,070
Total revenue request	**$18,140**

^ 30-Year Plan allows additional $2,000 (plus 3% annual inflation) for a part-time water system operator, but system improvements have so far made a part-time water operator unnecessary. Request does not include this $2,000.
^^ Request is zero because this reserve's balance is presently at the $10,000 cap.

Table 4. Line item detail for the planned projects category in Table 3.

Line item	Budgeted cost	Notes
1. Repair and maintenance of reservoir insulation	$1,650	Spray foam, paint, rental equipment
2. Non-routine water sampling	$ 500	PFAS (per- and poly-fluoroalkyl substances, aka "forever chemicals").
Planned projects total	**$2,150**	

B. Water assessments
Will remain at $430 per lot and $10.50 per 1,000 gallons of water use.

C. Mitigating potential water shortage
No Board action needed. This is a status report of action taken and future outlook.
At present the HLOA is at risk of a water shortage every August (see accompanying figure and explanation). As the number of HLOA lots with full-time residents increases beyond the current proportion, the risk of a water shortage expands to many more months. Previously the water committee was considering a second well. However, analysis in summer 2024 and spring 2025 using new depth-indexed flow rate data (enabled by the 2023 "instrument upgrade and data archive" project) showed the current well should be adequate until the proportion of lots with full-time residents reaches about 50%, perhaps one to two decades from now. This result was accomplished by writing new code for the logic controller that allows a smarter strategy for pumping water in months when the aquifer has low hydrostatic pressure. This new strategy involves a trade-off: to control residence time in the reservoir, there will be less water in the reservoir for use in a wildfire. The accompanying figure explains solutions for avoiding a water shortage when greater than 50% of the lots have full-time residents.

D. Non-routine water analyses
Radon. Board approved a radon-in-water analysis. Sample taken from the High Lostine wellhead had a concentration of 397 picoCuries/liter (pCi/L). This is a safe concentration but resampling may be desired.

Explanation: The vast majority of radon in home air is coming from the soil underneath the home, not from water use in the home. For every 10,000 pCi/L found in the water supply, approximately 1.0 pCi/L will be added to the home's indoor radon concentration. Therefore, radon in HLOA water is contributing approximately 0.04 pCi/L to the home air (if the water entered your house before reaching the reservoir which is the case for homes at lower elevations in the High Lostine), The EPA's action level for radon in home air is 4 pCi/L or approximately 100 times higher than what is coming from water use in a home in the High Lostine.

No maximum contaminant level for radon in water has been adopted by EPA. However, the generally accepted do-not-exceed level for radon in water is 4,000 pCi/L based on the concept of allowing no more risk from the water-derived radon present in home air than is posed by the radon naturally present in *outdoor* air.

The sample was taken July 10 and therefore represents subsurface radon moving into water from that year's melting snow and rainfall. Sampling was originally scheduled for winter when we use geologically old water which likely has a higher radon concentration, but scheduling and transportation problems delayed sampling. If we want to be sure the well water radon concentration is not near or above 4,000 pCi/L in the late summer through winter, a repeat sample (about $160) should be analyzed from that time period. The national average for radon in public water systems using groundwater is 540 pCi/L but some wells in igneous aquifers (like the High Lostine's) have concentrations of 10,000 to (rarely) above 100,000 pCi/L.

Arsensic, lead, uranium. Kristine and Brett Parker had a broad suite of analyses (but not radon) done on a water sample from their house. Water was safe for all elements/chemicals (confirming results obtained in circa 2001). In particular, arsenic, lead, and uranium were roughly 20x, 10x, and 200x, respectively, below the federally enforceable maximum contaminant level (MCL).