

## FLATHEAD LAKE BIOLOGICAL STATION: WATER AND SEWER SYSTEM REPLACEMENT COST: \$2.5 MILLION

This project would install a new water supply and purification system and replace lift pumps and sewer piping to and from the waste treatment plant at the Flathead Lake Biological Station.

FLBS's water supply system is at least 70 years old, and its origin predates anyone currently with institutional knowledge.

The water system originates from a spring on the grounds, travels through steel pipes to a cistern, then to a large steel pressure tank inside the workshop building from where it is distributed to individual buildings. The wastewater treatment plant and associated delivery systems (sewage influent and treated water effluent) were constructed in 1976. The treatment plant is scheduled to be replaced, but the sewer lines to and from the plant are original.

The existing water supply system is at the end of its useful life and needs to be upgraded to meet current environmental and engineering standards. Also, the existing wastewater piping and infrastructure to the new wastewater plant is at the end of its useful life and needs upgrading. The water system pumps are starting to fail, and the old steel components (including the large steel pressure tank) are corroding and at risk of failure. The sewage treatment plant is scheduled to be replaced, however lift pumps are regularly failing, and there is evidence of cracked underground pipes and tree roots compromising sewer flow, regularly causing backups in several buildings.

To assure safety of our drinking and laboratory water supply, the over 70-year-old water supply infrastructure needs to be replaced and the filtration upgraded to a UV purification system.

The sewer lines to and from the treatment plant need to be replaced to reduce the risk of a sewage spill and contamination to the lake.

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