

LCWSD Wastewater Treatment Facility Septage Feasibility Summary For Flathead County

Lakeside, Montana

December 2023



What's Included?

- ▶ Is it feasible for the LCWSD to receive county-wide septage in lieu of constructing a county-owned septage facility?
- ▶ This study evaluates receiving and treating septage at the LCWSD-owned Wastewater Treatment Facility (WWTF) over a 20-year period.
- ▶ LCWSD WWTF improvements necessary to accept septage include:
 - Septage Receiving
 - Treatment of Septage
 - Disposal of Additional Solids Generated from Septage
 - Acceptance of outside biosolids and composting is not included as part of this summary



Needed Additions at the WWTF Include:

- ▶ Septage Receiving Station
- ▶ Septage Pump Station
- ▶ Force main from Septage Receiving Station to the WWTF
- ▶ Modifications to the proposed Headwork Building
- ▶ Septage Flow Equalization
- ▶ Septage SBR
- ▶ Solids Handling/Disposal



What Might the Proposed WWTF Improvements Look Like?

Summary of Capital Costs

ITEM	COST
Septage Receiving Station	\$2,977,200
Septage Pump Station	\$390,400
Force Main from Septage Receiving Station to the WWTF	\$960,800
Modification to the Proposed Headwork Building	\$526,700
Septage SBR	\$7,147,900
Additional Solids Handling/Disposal	\$616,000
Total Capital Cost	\$12,619,000

Annual Operation and Maintenance Costs

- All O&M costs shown are based on the assumption that the Septage Receiving Station receives 20,000 gpd
- Septage Tipping Fee in 2024 dollars assuming 20,000 gpd of septage received: \$80/1,000 gallon
- However, we do not feel it is safe to assume we will receive 20,000 gpd the first couple of years. We are considering \$95/1,000 gallons as an initial starting point.

ITEM	ANNUAL COST
Personnel and General Cost	\$168,200
Septage Receiving Station	\$52,900
Headworks Building	\$32,300
Septage SBR	\$345,000
Total Annual O&M Cost	\$598,400

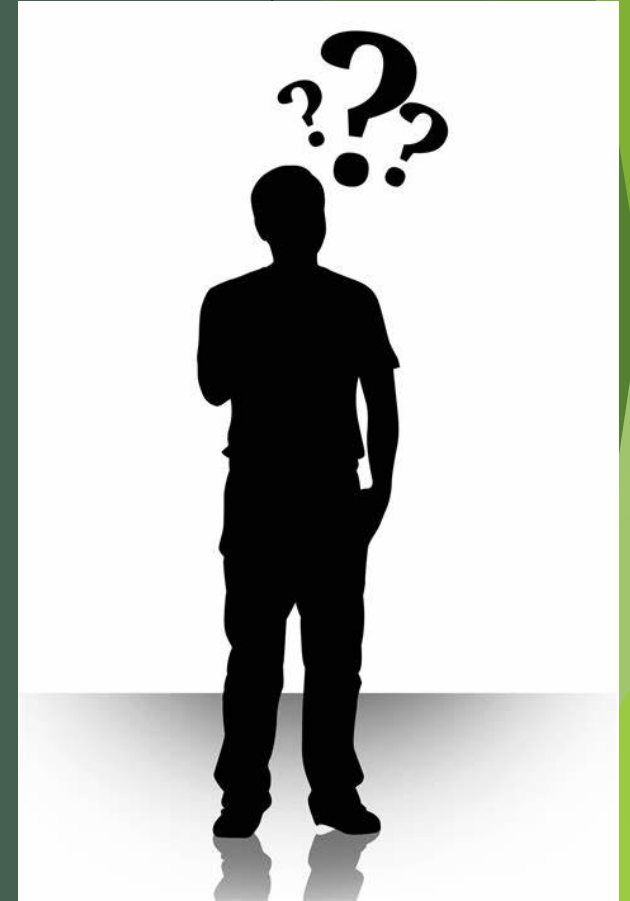
Potential Septage Fee Schedule

Year	Fee
2024	\$95
2025	\$90
2026	\$85

- It is assumed that by year 2026 the Septage Receiving Station will receive 20,000 gpd.
- The 2026 \$85 fee is based on the current O&M costs plus 3% inflation per year.
- The 2024 and 2025 fees are increased to account for receiving less than 20,000 gpd of septage.

What Would Happen to the Wylie Dike Property?

- ▶ Possible future land application site for alfalfa crop
- ▶ Potential wetland mitigation for future infiltration ponds to be located at the treatment site



LCWSD Proposed Cost

Anticipated Additional Project Costs	\$12,619,000
Total for LCWSD WWTF	\$11,000,000
• Wylie Dike Property - (Credit)	(\$1,500,000)
• Connection Fees Previously Paid (Credit)	<u>(\$611,235)</u>
Funds to be Utilized for LCWSD WWTF	\$8,888,765
Total LCWSD WWTF Cost	\$23,619,000

Construction of Phase 1- To Begin Fall of 2024

- Septage Receiving Station
- Septage Pump Station
- Force main from Septage Receiving Station to the WWTF
- Headworks Facility

Construction of Phase 2 - Spring 2026

- Septage SBR
- Plant SBR
- Solids Handling
- Effluent Disposal

Questions?