

October 13, 2026

MEMORANDUM - WASTEWATER

Sonny Weathers, City Administrator
City of Medical Lake
124 S Lefevre St.
PO Box 369
Medical Lake, WA 99022

Re: 2026 Wastewater Fund Rate Study
Methodology, Decisions, & Assumptions

This memorandum summarizes the methodology, key assumptions, and recommended rate adjustments for the Medical Lake wastewater system. The initial recommended structure applies an approximate 27 percent increase across the existing customer classes, resulting in a residential base rate of \$53.30 per month (from the current \$42.00). The approach is consistent with established industry practice for small systems while recognizing the City's longer-term objective of moving toward a more refined equivalent residential unit (ERU) or cost-of-service allocation.

1. Revenue Requirement

The revenue requirement is assembled from three components for both the wastewater treatment plant (WWTP) and the collection system:

- **Operations & Maintenance.** WWTP O&M is \$1,300,000; collection system O&M is \$368,000.
- **Short-Lived Asset Reserves.** Annual SLA contributions are \$197,900 for the WWTP and \$216,500 for the collection system.
- **Capital Project Debt Service (ratepayer share).** Existing ratepayers are assigned 25 percent of the debt service on a \$5.4 million WWTP project and a \$4 million collection project, both financed on the USDA Rural Development model at 3.75 percent for 40 years. This produces annual ratepayer shares of approximately \$65,700 (WWTP) and \$48,700 (collection). The 25 percent allocation reflects a reasonable starting point that recognizes growth will contribute the balance over time.

Total annual revenue required to meet these goals is \$2,196,800.

2. Current Revenue and Shortfall

Current annual revenue consists of approximately \$906,300 from rates, \$712,000 from Washington State DSHS (associated with the WWTP), and \$14,000 from sewer connections, for a total of \$1,632,300.

In addition to half of the WWTP O&M already reflected in the DSHS contribution, DSHS would cover half of the WWTP SLA requirement (approximately \$99,000). Incorporating this produces an effective current revenue base of \$1,731,300.

The resulting shortfall is approximately \$465,500, or a required increase of about 26.9 percent over effective current revenue.

3. Rate Design Approach and Industry Guidance

Medical Lake currently charges fixed monthly rates by customer class (for example, \$42.00 per dwelling unit, higher fixed amounts for restaurants, laundries, and service stations) rather than a pure per-ERU volumetric structure for ongoing user charges. While the municipal code contains an ERU schedule used for capital improvement charges, developing precise ERU assignments for every existing connection type would require substantial additional data collection and analysis.

WEF Manual of Practice 27 (Financing and Charges for Wastewater Systems) and related guidance for small systems (including principles consistent with AWWA M1 and M54) recognize that a full cost-of-service allocation by class is the preferred long-term approach. However, they also support simplified, transparent methods—such as a uniform percentage adjustment across existing classes—as a practical interim step when resources or data for a complete ERU or strength/volume study are limited. This approach maintains relative equity among classes already established in the current rate structure while recovering the necessary revenue. It is therefore an acceptable and defensible method for the current rate cycle, provided the City continues progress toward a more refined allocation in the future.

The recommended rates apply the calculated 26.9 percent increase uniformly to the existing class rates. This produces a residential base of \$53.30 and corresponding increases for other classes (examples below).

4. Recommended Rates

Applying the 26.9 percent factor to current rates yields the following recommended schedule (rounded for implementation):

Customer Class	Current	Recommended
Dwelling unit / Motel unit / Mobile home lot	\$42.00	\$53.30
Garages/service stations (no wash racks)	\$51.61	\$65.50
Garages/service stations (with wash racks)	\$63.15	\$80.15
Restaurants, cafes, taverns, laundries	\$77.10	\$97.85
Stores, offices, halls, churches, dry cleaning	\$51.61	\$65.50

School base and full time equivalent student rates would be adjusted by the same percentage.

5. Calculation Walk-Through

Required revenue: \$2,196,800

Effective current revenue (rates + DSHS + connections + additional DSHS SLA share):
\$1,731,300

Required increase: $(\$2,196,800 - \$1,731,300) / \$1,731,300 \approx 26.9\%$

Residential example: $\$42.00 \times 1.269 \approx \$53.30$

6. Regional Comparison

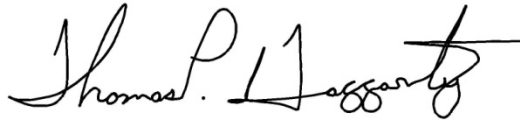
Medical Lake's recommended residential rate of \$53.30 remains competitive with surrounding purveyors. Many West Plains and regional systems charge higher fixed residential rates, particularly those with more recent treatment plant upgrades or higher debt loads.

Purveyor	Residential Monthly Rate
Medical Lake (Recommended)	\$53.30
City of Cheney	\$43.96
City of Spokane	\$76.09
Spokane County	\$50.41
City of Deer Park	\$60.40
City of Airway Heights	\$83.33
Liberty Lake Sewer & Water District	\$85.00
Post Falls	\$73.74
Chewelah	\$75.60
Colville	\$77.41
Kettle Falls	\$80.00

Rates are approximate current residential base charges and may include varying capital or volume components.

Please do not hesitate to contact us should questions or concerns arise.

Sincerely,



Thomas P. Haggarty, P.E.
Principal