



# WESTERN MUNICIPAL WATER DISTRICT COST OF SERVICE REPORT

Murrieta Wastewater Service Area  
Treated by Eastern Municipal Water District

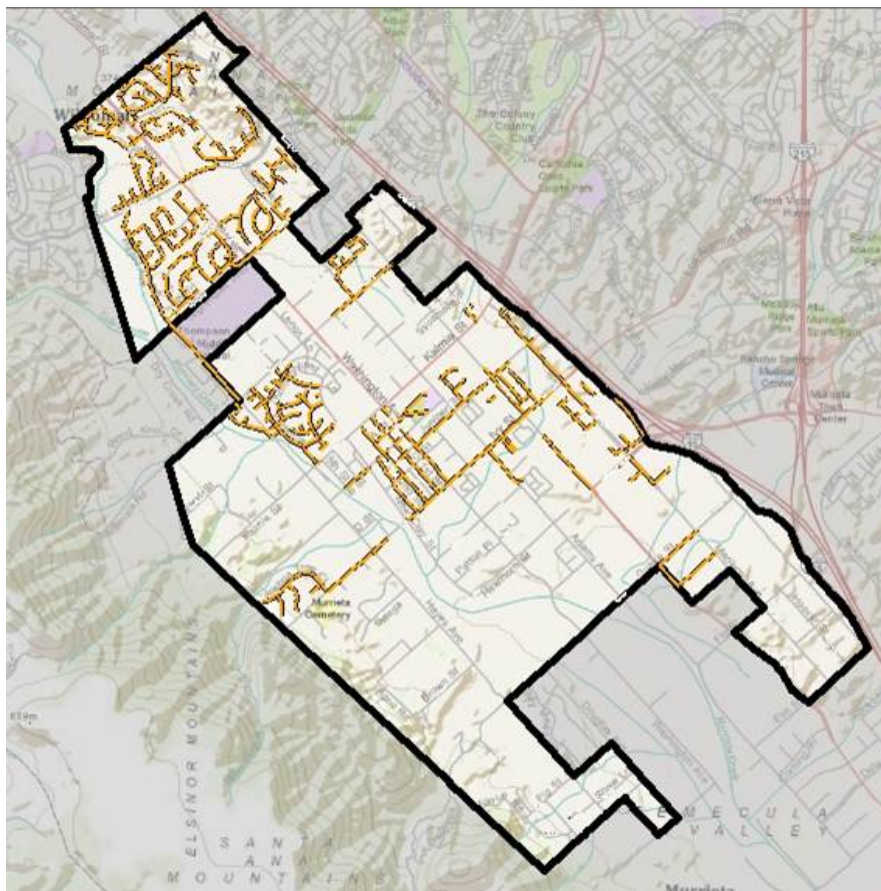
For rates effective October 1, 2018 and October 1, 2019  
Version 1

# Murrieta Wastewater Service Area – Treated by Eastern Municipal Water District

## Service Area Description

Western Municipal Water District (Western or District) provides wastewater (sewer) service to properties in its Murrieta Wastewater Service Area. Within this service area, there are 74 commercial accounts along the Madison Avenue corridor that discharge to Eastern Municipal Water District’s (Eastern) treatment facility. Western contracts with Eastern to provide this treatment service. There are additional customers in this service area that discharge to the Santa Rosa Regional Resources Authority (SRRRA) treatment facility, likewise under contract with Western.

## Service Area Map



## Inputs into the District’s Wastewater Rate Model

Charges from Eastern. An input into the rate model is the per-EDU rate that Eastern charges to treat and dispose of the wastewater generated by Western’s customers. “EDU” stands for “equivalent dwelling unit” and equals the amount of wastewater generated by an average single-family residential home. In determining the rate charged to its customers, Western passes through the EDU rate from Eastern, as well as adds an amount per EDU to cover the District’s administrative costs and collection system maintenance costs (“Western Costs”). The EDU rate from Eastern is presented in Table 1 below.

**Table 1 – Eastern’s Rate per EDU  
Rates are for Fiscal Year (FY) 2018-19 and 2019-20**

<b>Rate per EDU per Month</b>	<b>FY 2018-19 Adopted</b>	<b>FY 2019-20 Projected</b>
Eastern’s Service Area No. 34 Rate: (\$1.06 Per Day x 365 days) / 12 Months	\$ 32.24	
Eastern’s Service Area No. 34 Rate: (\$1.12 Per Day x 365 days) / 12 Months		\$ 34.07
Eastern’s Monthly Capital Charge	\$ 2.75	\$ 3.00
<b>Total Rate per EDU per Month</b>	<b>\$ 34.99</b>	<b>\$ 37.07</b>

Number of EDUs. Another input into the rate model is the number of EDUs assigned to Western customers within the service area. All single family residential customers are assigned one EDU, whereas commercial customers are assigned multiple EDUs depending on industry-determined standards for various types of businesses. Factors considered in the assignment of EDUs for commercial customers include, for example, facility square footage, number of restrooms, kitchen facilities, seating capacity, among others. EDU billing reflects the capacity and peak demand that a customer places on the wastewater system. There are 683 EDUs associated with the customers in the Murrieta Wastewater Service Area that are served by Eastern. There are an additional 3,570 EDUs that are served by SRRRA for a grand total of 4,253 EDUs.

Western Costs. The final input into the rate model is the calculation of Western Costs that are allocated to its Murrieta Wastewater Service Area customers. The Board-adopted operating budgets for Fiscal Year 2018-19 and Fiscal Year 2019-20 was the basis for calculating the Western Costs. The operating budgets include all expenses associated with operating and maintaining the conveyance facilities such as labor, vehicle use, system maintenance and supplies, debt service obligations, as well as reserve funding such as asset replacement reserves and operating reserves. The operating budget is for the entire Murrieta Wastewater Service Area, which includes customers served by both Eastern and SRRRA. The operating budget is used to calculate the Western Costs rate per EDU per month for all customers in the service area. This calculation is presented in Table 2 below.

**Table 2 – Summarized Fiscal Year 2018-2019 and 2019-20 Operating Budgets**

<b>Expense Category</b>	<b>FY 2018-19</b>	<b>FY 2019-20</b>
Labor and Benefits	\$ 27,948	\$ 29,877
Maintenance and Supplies	15,707	15,793
Administrative	109,854	144,890
Other Operating Expenses	6,971	7,014
Asset Replacement Reserve Funding	91,000	98,000
Operating Reserve Funding	111,450	26,316
Total Western Costs	\$ 362,930	\$ 321,890
Total EDUs in the Murrieta Wastewater Service Area (Treated by Eastern & SRRRA)	4,253	4,253
<b>Western Costs per EDU per Month (Expenses ÷ EDUs ÷ 12 Months)</b>	<b>\$ 7.11</b>	<b>\$ 6.31</b>

**Revenue Requirement**

To determine the proposed rates for wastewater service, the amount of revenue required to provide reliable wastewater service is determined. This “Revenue Requirement” is the total of (1) Eastern’s rate per EDU per month multiplied by 12 months and multiplied by the number of EDUs, plus (2) Western’s costs from Table 2. All sources of revenue in the service area are then applied against the revenue requirement, including revenue anticipated from existing rate payers based on current rates. The resulting unfunded revenue requirement (shortfall) is the amount that is needed to be received from a rate increase. The revenue requirement and the subsequent revenue shortfall are calculated in Tables 3 and 4 for Fiscal Year 2018-19 and 2019-20 below.

**Table 3 – Revenue Requirement & Shortfall Determination for FY 2018-19**

Eastern Charges: \$34.99 (from Table 1) x 683 EDUs x 12 months	\$ 286,778
Western Costs: \$7.11 (from Table 2) x 683 EDUs x 12 months	58,274
<b>Total Revenue Requirement</b>	<b>\$ 345,052</b>
Less Revenue from Existing Rates 683 EDUs x the current monthly rate of \$40.87 x 12 months	- 334,971
<b>Revenue Shortfall (amount needed from rate increase)</b>	<b>\$ 10,081</b>

**Table 4 – Revenue Requirement & Shortfall Determination for FY 2019-20**

Eastern Charges: \$37.07 (from Table 1) x 683 EDUs x 12 months	\$ 303,826
Western Costs: \$6.31 (from Table 2) x 683 EDUs x 12 months	51,717
<b>Total Revenue Requirement</b>	<b>\$ 355,543</b>
Less Revenue from Existing Rates 683 EDUs x the current monthly rate of \$42.10 x 12 months	- 345,052
<b>Revenue Shortfall (amount needed from rate increase)</b>	<b>\$ 10,491</b>

**Proposed EDU Rates**

The proposed EDU rates needed to meet the Revenue Shortfall as presented in Tables 3 and 4 above are shown in Tables 5 and 6 below.

**Table 5 – EDU Rate Increase Needed to Meet Revenue Shortfall for FY 2018-19**

\$10,081 (from Table 3) ÷ 683 EDUs ÷ 12 months	\$ 1.23 per EDU per month, or 3.0%
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**Table 6 – EDU Rate Increase Needed to Meet Revenue Shortfall for FY 2019-20**

\$10,491 (from Table 4) ÷ 683 EDUs ÷ 12 months	\$ 1.28 per EDU per month, or 3.0%
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**Current and Proposed Rates**

Tables 7 and 8 below summarize current rates and proposed rates needed to meet the revenue requirement for providing wastewater service.

**Table 7 – Current and Proposed Monthly EDU Rates for Fiscal Year 2018-19**

	<b>Current Rate</b>	<b>Proposed Rate</b>	<b>Change</b>	<b>Change as a Percent</b>
Commercial customers	\$ 40.87	\$ 42.10	\$ 1.23	3.0%

**Table 8 – Prior and Proposed Monthly EDU Rates for Fiscal Year 2019-20**

	<b>Prior Rate</b>	<b>Proposed Rate</b>	<b>Change</b>	<b>Change as a Percent</b>
Commercial customers	\$ 42.10	\$ 43.38	\$ 1.28	3.0%

For more information regarding this Cost of Service Report, please contact Daisy Banuelos, Financial Analyst at dbanuelos@wmwd.com or 951-571-7113.