

Memorandum

To: Ingrid Gaub, P.E. Director of Public Works, City of Auburn **Date:** June 26, 2023

From: Angie Sanchez Virnoche, Principal, FCS GROUP

CC: Frank Downard, Ryan Vondrak

RE Wholesale Rate Update

INTRODUCTION

A Wholesale Water Rate Update is part of the 2022 contracted services with the City of Auburn under the Water, Sewer, and Storm Utilities Rate Study. The rate update is consistent with wholesale service agreements in effect and incorporates current conditions. The update uses the previously established wholesale rate study methodology for assignment of eligible asset infrastructure and utility operating costs.

The City currently has two wholesale water agreements in effect. One of the agreements is to provide permanent wholesale water services to the City of Algona (Algona). The other agreement is to provide interruptible wholesale service to Lake Meridian Water District (LMWD).

For both types of wholesale customers (permanent and interruptible) the City of Auburn charges wholesale rates that reflects the cost of providing the specific type of wholesale water service, with wholesale costs of service analyzed in the context of the overall City cost of water service. The cost-of-service analysis completed for this study is in accordance with the requirements of both Agreements.

WHOLESALE RATE UPDATE

The wholesale rate methodology used to establish and update wholesale rates is the Utility Basis approach. This approach recovers applicable operating and maintenance costs, plus a capital cost recovery based on the original cost of capital investment committed to the wholesale customer's service. The capital cost recovery includes two components: depreciation of fixed assets and a rate of return on the net investment or book value of those wholesale serving assets. The three key wholesale rate components are summarized below:

- Operating and Maintenance Expenses (O&M) related to ongoing maintenance and operation
 of eligible assets.
- Annual Depreciation Expense of eligible fixed assets related to the loss in value of facilities, not restored by current maintenance, due to wear and tear, decay, and obsolescence as useful life is consumed.
- **Return on Investment** applied to net system investment intended to pay the annual interest cost of debt capital and provide owner equity return for the facilities used to provide water service.

WHOLESALE RATE UPDATE

The purpose of a cost-of-service analysis is to provide a rational basis for distributing the eligible costs of utility service to each customer based on the facilities used to deliver water service and in proportion to the demands they place on the system. The following list highlights some of the key documents and assumptions used in the development of the wholesale water rate update.

- 2022 operations and maintenance (O&M) budget, projected forward for the 2023 test year
- Debt service balance through 12/31/2022 (to calculate the weighted average cost of capital)
- Booked fixed assets through 12/31/2021 including original cost, accumulated depreciation, and annual depreciation
- Customer use and revenue for 2022
- Contract capacity demands per Agreements

Basis of Cost Allocation

Cost allocation is accomplished by developing customer specific allocation factors identifying characteristics including number of accounts, contracted peak demand, actual consumption levels, and share of eligible fixed assets. Allocation factors used in the wholesale rate update are summarized in **Exhibit 1**.

Exhibit 1: Summary of Key Allocation Factors

Allocation Factors								
	Algona	LMWD	Retail	Total				
Accounts	0.0%	0.0%	100.0%	100.0%				
Fixed Asset Allocation	2.0%	4.6%	93.4%	100.0%				
% of Usage	5.7%	0.0%	94.3%	100.0%				
Conservation	2.0%	0.0%	98.0%	100.0%				
Contracted Demand Capacity	5.6%	12.6%	81.7%	100.0%				

Notes: Algona few accounts do not show up due to rounding.

Allocation of Assets and Costs Relevant to Wholesale Water Customers

The City's water system asset schedule drives several calculations in the wholesale rate calculation, including both the allocation of capital assets (depreciation) and the allocation of asset-related operating costs to functions of service (and ultimately to wholesale customers). The 2023 rate update is based on plant-in-service for year-end 2021. A detailed asset-by-asset review was completed with the assistance of staff identifying assets by function as shown in **Exhibit 2** (e.g., Supply/Treatment, Storage, Pumping, Transmission/Distribution, etc.).

Exhibit 2: Total Existing System Assets

Functional Category	Total
Original Cost	
1 - Supply/Treatment	\$ 46,221,039
2 - Pumping	9,919,079
3 - Storage	9,850,524
4 - Transmission & Distribution	100,882,465
5 - Meters & Services	7,261,201
6 - Hydrants	1,126,857
7 - General Plant	1,736,399
8 - Customer	62,150
Total Eligible Existing Assets	\$ 177,059,713



The total system assets of \$177.1 million are adjusted for contributed assets of \$43.5 million and accumulated depreciation of \$56.4 million to determine the net book value of system assets. **Exhibit** 3 provides the functional detail of the calculated net book value ("rate base") of non-donated assets.

Exhibit 3: Functional Net Book Value (Rate Base)

Net Book Value (non-Donated Assets)	Total
1 - Supply/Treatment	\$ 31,684,234
2 - Pumping	6,685,101
3 - Storage	4,631,462
4 - Transmission & Distribution	31,141,809
5 - Meters & Services	2,819,133
6 - Hydrants	23,286
7 - General Plant	179,348
8 - Customer	300
Net Book Value (Rate Base)	\$ 77,164,673

During the detailed asset-by-asset review, staff identified which individual assets are used to provide wholesale service. Assets within each functional category were allocated to wholesale or City retail customers using the allocation basis shown in **Exhibit 4**.

Exhibit 4: Fixed Asset Allocation Basis

Functional Category	Allocation Basis
1 - Supply/Treatment	Share of system peak demand or Retail only
2 - Pumping	Share of system peak demand or Retail only
3 - Storage	Share of peak demand excluding Algona, contracted share of Lakeland Hills Reservoir, or Retail Only
4 - Transmission & Distribution	Retail only, Algona only or share of peak demand excluding Algona
5 - Meters & Services	Retail Only or Algona Only
6 – Hydrants	Retail Only
7 - General Plant	Retail Only or Common to All
8 – Customer	Retail Only or Customer Billing System

WHOLESALE RATE UPDATE: ALGONA

The allocated costs in the wholesale update for Algona include consideration that permanent wholesale water service is provided. The eligible assets and applicable operating and maintenance costs that comprise the return on rate base, depreciation and O&M costs for Algona are as follows:



Rate Base

Exhibit 5 shows the total eligible existing system assets identified for Algona by applying the fixed asset allocation basis in Exhibit 4. Algona assets total \$3.5 million – roughly 2.0% of the total system existing assets.

Exhibit 5: Algona Eligible Assets

Functional Category	Algona				
Original Cost					
1 - Supply/Treatment	\$	2,492,897			
2 - Pumping		194,752			
3 - Storage		273,020			
4 - Transmission & Distribution		283,427			
5 - Meters & Services		240,169			
6 - Hydrants		-			
7 - General Plant		33,237			
8 - Customer		4			
Total Eligible Existing Assets	\$	3,517,506			

Exhibit 6 calculates the net book value for Algona after making deductions for assets that were paid for directly (\$906K) and for accumulated depreciation on non-donated eligible assets (\$672K).

Exhibit 6: Algona Net Book Value (Rate Base)

Net Book Value (non-Donated Assets)	Algona
1 - Supply/Treatment	\$ 1,747,890
2 - Pumping	81,403
3 - Storage	31,712
4 - Transmission & Distribution	74,978
5 - Meters & Services	-
6 - Hydrants	-
7 - General Plant	3,490
8 - Customer	0
Net Book Value (Rate Base)	\$ 1,939,472

Return on Investment

The return on investment (rate base) component of the revenue requirement is a function of the *rate base* and the *weighted average cost of capital* (WACC), which in turn is a function of the average rate on the City's outstanding debt and the assumed return on equity rate. The net book value is multiplied by the weighted average cost of capital to determine the return on rate base.

Weighted Average Cost of Capital (WACC)

The City's *outstanding debt rate* is currently 4.18% – a weighted average of the current outstanding six (6) bonds and loans.

For an *equity rate*, this analysis assumes a rate of 4.30%, representing the average of the 25-Bond Revenue Bond Index and 20-Bond GO Index as of Oct 2022 (these indices are published by *The Bond Buyer* at the time this update began). In our judgment, the average between these two indices is a rough approximation of what the City could expect to pay for a newly issued revenue bond series.



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The equity rate of return generally incorporates a risk premium to compensate City ratepayers for the risk they are assuming as a result of the City's decision to secure excess supply capacity beyond the needs of the retail customer base. The City chose to forego this risk premium in prior analysis. For consistency, the risk premium has not been included in this update.

Exhibit 7 shows how the assumed equity rate of 4.18% is blended with the 4.30% average outstanding debt rate. Auburn's water capital structure is currently about 32% debt, 68% equity (total outstanding debt ÷ total net book value). Applying those weights to the average debt percentage and the assumed equity percentage, the City's weighted average cost of capital is 4.26%.

Auburn Rate of Return						
	% of Net		Weighted			
	Book Value	Rate	Rate			
Debt	32%	4.18%	1.33%			
Equity	68%	4.30%	2.93%			
Weighted Average Cost of Capital			4.26%			

Exhibit 7: Rate of Return

Exhibit 8 shows the return on investment component of the revenue requirement for Algona. This is calculated by multiplying the \$1.9 million rate base by the 4.26% weighted average cost of capital.

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Algona Rate Base	\$	1,939,472	
Weighted Average Cost of Capital (WACC)		4.26%	
Return on Investment	\$	82,645	

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Depreciation

Annual depreciation is calculated on the total assets identified in **Exhibit 5** and exclude amounts contributed by others. The annual depreciation value is calculated using the straight-line method. This method takes the value of an asset and reduces it uniformly over each period until it reaches the end of its useful life. Total depreciation for Algona eligible assets is approximately \$40,737.

Operating & Maintenance Expenses

The 2023 operating budget is grouped into the cost centers of administration, finance, and operations. A line-by-line analysis was completed of the detailed accounts allocating each cost in part or in full to either wholesale or City retail customers using total fixed asset allocation, accounts, or percentage of use. Although most costs are allocated based on the percent of eligible fixed assets, utility billing costs were based on accounts and operating supplies, chemicals, utilities, and Tacoma water purchase emergency supply were based on percent of use. The result is approximately \$285,476 of O&M expenses are assigned to Algona comprising 2.2% of total water system operating and maintenance expenses.

Total Algona-Cost of Service and Rate Calculation

Exhibit 9 summarizes the three components of the wholesale cost of service: return on investment, depreciation, and O&M costs - as well as the resulting Algona wholesale rate per hundred cubic feet



(CCF) of water use. The calculated rate of \$2.39/CCF is an increase of \$0.06 from the current rate of \$2.33/CCF.

Exhibit 9: Total Algona Wholesale Cost of Service Rate

Wholesale Rate Calculation	Algona		
Return on Rate Base Depreciation	\$	82,645 40,737	
O&M		285,476	
Total Annual Costs	\$	408,857	
2022 Use in CCF		170,933	
Rate per CCF	\$	2.39	

Projected Algona Rate Calculation

The rates in this analysis are based on the 2023 operating budget. Algona rates are composed of both a fixed meter charge, by size of meter, and the volume rate shown in **Exhibit 9**. The base meter rates will be tied to the retail rate charges by meter size (3 - 8") meters and 1 - 6" meter) that were updated during the retail rate study completed in 2022. The fixed charges are intended to pay for the replacement of the meters over time.

In between cost-of-service analysis updates, it has been City practice to adjust the rates each year based on the annual increase in the CPI-U for Seattle-Tacoma-Bellevue from October of one year to October of the next year. This is a practice that the City can continue to monitor adjusting as needed to align with underlying cost increases. **Exhibit 10** shows the Algona wholesale base and volume rates for 2023 - 2025. Future volume rates per CCF are adjusted by the five-year average (2016-2020) CPI-U for Seattle-Tacoma-Bellevue. Years 2021 and 2022 were excluded due to the higher than normal inflation rates experienced during that time.

Exhibit 10: Algona Proposed 2023 - 2025 Rates

Algona Rate Schedule	Cui	rrent Rate	2023 Cost of Service		2024		2025
Estimated CPI Adjustment						2.50%	2.50%
Wholesale Rate per CCF				•			
City of Algona		\$2.33		\$2.39	\$	2.45	\$ 2.51
Meter Charge per Month							
8" Meter	\$	102.37	\$	110.05	\$	118.30	\$ 127.17
6" Meter	\$	79.24	\$	85.18	\$	91.57	\$ 98.44

Under the terms of the agreement, the Algona rate change can take place whenever the cost-of-service analysis is updated. We recommend that the cost-of-service analysis be updated every 3-5 years, so that wholesale rates do not drift too far away from their underlying cost factors.



WHOLESALE RATE UPDATE: LAKE MERIDIAN WATER DISTRICT (LMWD)

Wholesale water service to LMWD is interruptible service. LMWD has indicated that they may request water service from Auburn, if needed. If Auburn has the supply available, Auburn will provide it to LMWD (as interruptible wholesale supply). It is likely that no service may be requested or delivered in any given year, yet facilities must be available and in good repair to provide service when requested. The existing utility basis methodology still applies in determining eligible costs and assets for LMWD. When and how the costs will be recovered will depend on use.

Per the Agreement with LMWD, the City will serve up to 2.5 million gallons a day if requested and available. The eligible assets and applicable operating and maintenance costs are based on this capacity commitment. The return on rate base, depreciation, and O&M costs allocable to LMWD are as follows:

Rate Base

Exhibit 11 shows the total eligible existing system assets identified for LMWD by applying the fixed asset allocation basis in Exhibit 4. LMWD assets total \$8.1 million – roughly 4.5% of the total system existing assets.

Exhibit 11: LMWD Eligible Assets

Functional Category	LMWD
Original Cost	
1 - Supply/Treatment	\$ 5,586,174
2 - Pumping	435,335
3 - Storage	550,103
4 - Transmission & Distribution	1,459,069
5 - Meters & Services	-
6 - Hydrants	-
7 - General Plant	76,607
8 - Customer	-
Total Eligible Existing Assets	\$ 8,107,288

Notes: Transmission & Distribution includes Tacoma Pipeline 5 assets.

Exhibit 12 calculates the net book value for LWMD after making deductions for assets that were paid for directly (\$1.8 million) and for accumulated depreciation on non-donated eligible assets (\$2.0 million).



Exhibit 12: LMWD Net Book Value (Rate Base)

Net Book Value (non-Donated Assets)	LMWD
1 - Supply/Treatment	\$ 3,915,780
2 - Pumping	182,682
3 - Storage	33,529
4 - Transmission & Distribution	168,262
5 - Meters & Services	-
6 - Hydrants	-
7 - General Plant	8,045
8 - Customer	-
Net Book Value (Rate Base)	\$ 4,308,298

Notes: Transmission & Distribution includes Tacoma Pipeline 5 assets.

When water is not being delivered, the eligible assets are reduced by the \$3.9 million supply/treatment net book value for a modified net book value (or rate base) of \$392,518. The supply/treatment assets have been removed from allocable costs as water is not being delivered.

Exhibit 13: LMWD Net Book Value – Rate Base (No Supply/Treatment)

Net Book Value (non-Donated Assets)	LMWD (< Supply/Treat)	
Net Book Value of Non-Donated Assets		
1 - Supply/Treatment	\$ -	
2 - Pumping	182,682	
3 - Storage	33,529	
4 - Transmission & Distribution	168,262	
5 - Meters & Services	-	
6 - Hydrants	-	
7 - General Plant	8,045	
8 - Customer	-	
Net Book Value (Rate Base)	\$ 392,518	

Notes: Transmission & Distribution includes Tacoma Pipeline 5 assets.

Standby Charge

The charges applicable to LMWD include a standby charge that is paid monthly regardless of use. When water is used, a volume charge will apply in addition to the fixed stand-by charge.

The monthly standby charge is comprised of the following components:

• Annual depreciation of the facilities required to deliver service. The depreciation on the remaining assets is eligible as the City must maintain the delivery assets ready for operation. As shown in **Exhibit 14**, the supply/treatment assets have been eliminated from the stand-by charge as assets are not being utilized when water is not requested for delivery. The storage value is shown as zero as the eligible assets are fully depreciated or represent land which does not depreciate. The monthly depreciation amount on eligible assets totals \$579.29 (\$6,951 ÷ 12 months)



LMWD (< Supply/Treat) **Depreciation on Non-Donated Assets** Existing System Eligible Assets 1 - Supply/Treatment \$ 2 - Pumping 499 3 - Storage 4 - Transmission & Distribution 6,295 5 - Meters & Services 6 - Hydrants 7 - General Plant 158 8 - Customer **Total Existing System Assets Depreciation** 6,951

Exhibit 14: Annual Depreciation Eligible Assets – No Supply/Treatment

Note: Transmission & Distribution includes Tacoma Pipeline 5 assets.

- Tacoma Ready to Serve charge. This fixed charge to the City is based on contracted peak capacity and is a new cost addition for this update. The fixed charge is paid by the City to Tacoma to have water readily available when needed. The City pays this fixed charge per MGD of requested contract peak capacity regardless of use. This cost is allocated to LMWD based on the allocation of peak capacity to LMWD (12.63%) and recovered 50% in the standby charge. The remaining 50% of the allocated LMWD cost will be recovered in the volume charge when water is delivered.
- Meter charge equal to the retail rate by meter size intended to pay over time for the replacement of the 8" meter servicing the District.

Exhibit 15 summarizes the 2023-2025 standby charge paid monthly regardless of water being delivered or not to LMWD.

Exhibit 15: LMWD Monthly Standby Charge

	Current	2023	2024	2025
Mo. Depreciation on Eligible Assets	\$ 1,045.55	\$579.29	\$ 579.29	\$ 579.29
Tacoma Contract Peak Capacity (50% of eligible cost)		886.15	886.15	886.15
8" Meter Replacement (Retail Published Rate)	102.37	110.05	118.30	127.17
Total LMWD Mo. Standby Charge	\$ 1,147.92	\$ 1,575.49	\$ 1,583.74	\$ 1,592.61

In total, the calculated charge is higher than the current rate. There is a reduction in the depreciation charge as the eligible asset value has been reduced, likely due to retirements. However, the charge is increased with the addition of the Tacoma Ready to Serve charge which is a change from the last wholesale rate update.

Wholesale Rate Delivered Water

When water is requested and delivered, all wholesale rate components apply - rate of return on investment, depreciation, and O&M costs on the full eligible assets (including supply/treatment) as shown in **Exhibit 11** (\$8.1 million).

Return on Investment

As noted previously, the return on investment (rate base) component of the revenue requirement is a function of the *rate base* and the *weighted average cost of capital* (WACC) – **Exhibit 7**, which in turn is a function of the average rate on the City's outstanding debt and the assumed return on equity



rate. The net book value is multiplied by the weighted average cost of capital to determine the return on rate base. **Exhibit 16** summarizes the total eligible assets and return under full service delivery.

Exhibit 16: LMWD Return on Rate Base

	LMWD
Eligible Rate Base	\$ 4,308,298
Weighted Average Cost of Capital (WACC)	4.26%
Return on Investment	\$ 183,585

The return listed in **Exhibit 16**, is recoverable when water is delivered. The unit cost associated with the return is \$0.15/CCF. The calculation is derived by identifying the eligible assets and return on rate base of \$183,585 divided by the contract demand capacity of 2.5 MGD (converted to CCF 2,500,000 MGD x 365 days \div 748 = 1,219,920 annual CCF).

Depreciation

Annual depreciation is calculated on the total net book value of eligible assets identified in Exhibit 12 (\$4.3 million) and exclude amounts contributed by others as well as excludes the amount of depreciation recovered in the stand-by charge identified in **Exhibit 15**. The annual depreciation value is calculated using the straight-line method. This method takes the value of an asset and reduces it uniformly over each period until it reaches the end of its useful life. Depreciation for LMWD total eligible assets is approximately \$91,222. Similar to the rate of return, the depreciation calculation is derived by taking the net amount divided by the annual contract demand in CCF resulting in \$0.07/CCF.

Operating & Maintenance Expenses

As noted, when describing the Key Assumptions, a line-by-line analysis of the detailed 2023 budget was completed, allocating each O&M line item to either wholesale or City retail. The wholesale O&M unit costs are consistent for both wholesale customers and have been adjusted only for those O&M costs that have been identified as having a higher allocable cost resulting from the line-by-line analysis. As most costs are allocated based on the "by fixed assets" allocation factor, LMWD has a higher O&M allocation of total costs. This is due to the higher contractual amount of 2.50 MGD resulting in a higher allocation amount when water is delivered. The resulting cost differential of 1.26 is applied to the admin, finance, and operations cost centers. A factor was not applied for costs such as operating supplies, chemical analysis and the Tacoma emergency supply and standby contract peak capacity costs.

Total LMWD Delivered Water Rate

The delivered water rate for LMWD is shown in **Exhibit 17**. The rate is composed of a fixed monthly charge and a volume charge when water is delivered and available.

The fixed charge is the same as the standby charge shown in **Exhibit 15**. The volume charge is developed to recover eligible costs when water is requested and delivered. It should be noted that the volume charge includes the remaining 50% of the allocated LMWD costs related to the Tacoma Ready to Serve charge (incurred by the City to have water readily available) and eliminates the Tacoma Emergency Supply as City water sources are assumed when water is delivered. The unit cost per CCF is \$2.13.



Exhibit 17: LMWD Delivered Water Rate

	2023 Rates
Fixed Monthly Charge	
Depreciation (standby portion)	\$579.29
Contract Peak Capacity (50% of eligible total)	886.15
8" meter (published rate)	110.05
Total Fixed Monthly Charge	\$1,575.49
Volume Charge (water delivery)	
Depreciation (not recovered in standby charge)	\$0.07
Return	\$0.15
O&M	
Admin Cost Centers	\$0.55
Finance Cost Center	0.09
Operations Cost Center	0.48
Supplies	0.05
Chemical Analysis	0.02
Tacoma Emergency Supply	-
Tacoma Standby Contract Peak Capacity	0.03
Utilities	0.33
As all other (general)	0.05
Transfer/Taxes	0.30
Subtotal O&M	\$1.91
Total Depreciation, Return, O&M, per CCF	\$2.13

In between cost-of-service analysis updates, it has been City practice to adjust the rates each year based on the annual increase in the CPI-U for Seattle-Tacoma-Bellevue from October of one year to October of the next year. **Exhibit 18** shows the LMWD wholesale standby charge and usage charge for 2023 - 2025. Future usage charges per CCF are adjusted by the five-year average (2016-2020) CPI-U for Seattle-Tacoma-Bellevue. Years 2021 and 2022 were excluded due to the higher than normal inflation rates experienced during that time.

Exhibit 18: LWMP Proposed 2023 - 2025 Delivered Water Rates

	Current	2023	2024	2025
Mo. Depreciation on Eligible Assets	\$ 1,045.55	\$ 579.29	\$ 579.29	\$ 579.29
Tacoma Contract Peak Capacity (50% of eligible cost)		886.15	886.15	886.15
8" Meter Replacement (Retail Published Rate)	102.37	110.05	118.30	127.17
Total LMWD Mo. Standby Charge	\$ 1,147.92	\$ 1,575.49	\$ 1,583.74	\$ 1,592.61
Estimated CPI Adjustment Usage Charge	\$ 2.07	\$2.13	2.50% \$2.19	2.50% \$2.24

The rates in this analysis are based on the 2023 operating budget. Under the terms of the agreement, the rate change can take place whenever the cost-of-service analysis is updated. We recommend that the cost-of-service analysis be updated every 3-5 years, so that the wholesale rates do not drift too far away from their underlying cost factors.

Wholesale Purchased Water Surcharge

The wholesale rate review includes updating the City's wholesale purchased water surcharge to cover costs when the City water resources are not sufficient and Tacoma water purchases are required to meet demands. The purchased water surcharge was developed using the LMWD costs of service



rates and the 2023 Tacoma wholesale rate published in the Tacoma Municipal Code, Title 12 Utilities – 12.10.400 Rates Inside and Outside City Limits.

Exhibit 19 details the calculation of the updated wholesale purchase water surcharge. Applicable costs include fixed costs that would remain regardless of the water source being used and include the administrative and finance cost centers along with transfer/taxes. The Tacoma Emergency Supply peaking rate and the Tacoma Ready to Serve charge would replace the variable costs associated with the City's own supply source inclusive of the operations center, supplies, chemical analysis, utilities and other. The current Tacoma published peaking rate is \$2.569/CCF. In addition, as of the last update, Tacoma has imposed a fixed Ready to Serve charge. The LMWD eligible portion (based on peak capacity) of this cost is collected 50% from the standby fixed fee and 50% from the variable charge or \$0.03/CCF. The total cost applicable when Tacoma water is used totals \$3.76/CCF.

The difference between the total cost of \$3.76 (when Tacoma water is being purchased) less the cost-of-service rate of \$2.13 becomes the pre-tax purchased water surcharge of \$1.63/CCF. This rate would be paid in addition to the regular volume charge. Additional City taxes would be assessed based on the higher costs/revenue received making the final purchased water surcharge rate, including taxes \$1.82/CCF.

Exhibit 19 shows the costs that comprise the purchased water surcharge. The rates shown are for 2023. The Tacoma wholesale peaking rate may change again in 2024 per the published rates. It is recommended that the City monitor the published rates and update the purchased water surcharge in alignment with any changes. It should be noted that the surcharge has been reduced from the current rate of \$3.31/CCF. This reduction is due to the restructuring of the Tacoma Wholesale rate to reduce the peak usage charge (\$3.96 to \$2.57/CCF) and add a Wholesale Ready to Serve Charge (\$2,741.53) assessed per million gallons a day (MGD) of contracted peak capacity.

Exhibit 19: Purchased Water Surcharge Calculation

		Applicable Unit
	2023 Rates	Costs/CCF
Volume Charge		
Depreciation (not recovered in standby charge)	\$0.07	\$0.07
Return	\$0.15	\$0.15
O&M		
Admin Cost Centers	\$0.55	\$0.55
Finance Cost Center	0.09	0.09
Operations Cost Center	0.48	-
Supplies	0.05	-
Chemical Analysis	0.02	-
Tacoma Emergency Supply	=	2.57
Tacoma Standby Contract Peak Capacity	0.03	0.03
Utilities	0.33	-
As all other (general)	0.05	-
Transfer/Taxes	0.30	0.30
Subtotal O&M	\$1.91	\$3.54
Total Depreciation, Return, O&M, per CCF	\$2.13	\$3.76
Total Recoverable Variable Costs	\$2.13	
Calculated Total Costs w/ Tacoma Rate	3.76	
Cost Difference	\$1.63	
Plus Additional Taxes	0.19	
Total Wholesale Purchased Water Surcharge /CCF	\$1.82	



Summary

The Wholesale rates are updated for Algona and LMWD based on the water cost of service study completed in 2022. The rate projection for Algona includes a fixed charge per meter size based on the retail published meter charge rates plus an updated volume charge of \$2.39/CCF, an increase of \$0.06/CCF.

The rate for LMWD considers they are served as an interruptible customer. The stand-by charge has been updated for the retail published meter charge rate, depreciation on current eligible asset values and the Tacoma Ready to Serve charge. The rate is calculated at \$1,575.49 per month. The volume charge has been updated to \$2.13 from a current rate of \$2.07 when water is requested and available based on 2023 budget operating costs. In addition, the wholesale purchased water surcharge intended to cover costs when the City is required to purchase Tacoma Water to meet demands, has been updated. The annual purchased water surcharge is calculated at \$1.82 per CCF in addition to the general volume charge. The rate is down from the current surcharge of \$3.31 per CCF due to the restructuring of rates by Tacoma that reduces the peak water consumption rate and adds a fixed ready to serve charge per MGD.

