DES MOINES WATER WORKS

Board of Water Works Trustees



2201 George Flagg Parkway | Des Moines, Iowa 50321-1190 | (515) 283-8700 | www.dmww.com

MEMORANDUM

DATE: September 28, 2022

TO: Ted Corrigan, CEO and General Manager

FROM: Amy Kahler, Chief Financial Officer

SUBJECT: Proposed 2023 Water Rates

Background

DMWW's Cost of Service model, developed by Raftelis and performed by DMWW annually, determines revenue requirements and distributes costs to customer classes. Raftelis is a nationally known financial advisor specializing in public-sector work. The firm has helped author the AWWA's rate setting manual, "Principles of Water Rates, Fees, and Charges," more commonly known in the water industry as the "M1 Manual." The Cost of Service model used by DMWW today is consistent with widely accepted industry cost and rate-making principles and is used as a guide in establishing DMWW's wholesale and retail water rates. DMWW's approach to rate setting is to identify costs by customer class and set rates such that all customer classes "pay their own way."

Several years ago, Raftelis' calculations and methodologies showed DMWW is not fully recovering the cost to serve some customer classes, especially the Wholesale Purchased Capacity customer class. Because DMWW recovers 100% of costs from all customers in total, where one customer class is under-recovering costs, another customer class is over-recovering. This is called cross-subsidization and is not permitted per the Wholesale Water Service Master Agreement ("Master Agreement") and agreements with other entities served by DMWW. To achieve full cost recovery in the Purchased Capacity rate, a three-year phase-in approach was recommended and implemented. Rate increases of 15% implemented in each of 2021 and 2022 were established to bring alignment between revenue and costs in the Purchased Capacity customer class. Next year, 2023, will be the third and final year of this phase-in approach.

Summary of Cost of Service Results Using 2023 Budget

DMWW has completed the annual Cost of Service Study (COS) using 2023 budgeted expenses. Summary Figure 14 from the COS is shown below. These Cost of Service results serve as a basis for the rate recommendations within this memo.

Figure 14: Cost of Service Results

Customer	Cost of Service		4/1 Proposed Rate Increase	2023 Projected Revenue		COS Recovery	
Retail							
Des Moines Inside City	\$	37,515,556	5.50%	\$	36,647,682	98%	
Des Moines Outside City		2,398,116	10.00%		1,182,233	49%	
Total: Retail	\$	39,913,672		\$	37,829,915	95%	
Full Service							
Polk County	\$	6,513,209	5.50%	\$	7,151,909	110%	
Runnells		164,993	5.50%		167,950	102%	
Cumming		127,141	5.50%		122,016	96%	
Alleman		102,580	5.50%		120,461	117%	
Pleasant Hill Inside City		2,818,471	5.50%		3,045,282	108%	
Pleasant Hill Outside City		5,084	5.50%		4,768	94%	
PCRWD		172,691	5.50%		149,947	87%	
Berwick		242,944	8.00%		169,461	70%	
Windsor Heights		910,672	5.50%		1,038,304	114%	
Less: Future FS Capital Costs	(2,087,360.00)					
Total: Full Service	\$	8,970,425		\$	11,970,098	133%	
Wholesale - PC							
Altoona	\$	79,973	10.00%	\$	31,618	40%	
Ankeny		5,807,637	10.00%		6,760,709	116%	
Bondurant		557,414	10.00%		605,983	109%	
Clive		2,467,850	10.00%		2,218,441	90%	
Norwalk		1,204,089	10.00%		1,080,239	90%	
Waukee		2,247,423	10.00%		2,039,276	91%	
Urbandale		6,075,208	10.00%		5,285,263	87%	
Warren Rural Water		1,849,658	10.00%		1,997,122	108%	
West Des Moines		3,872,869	10.00%		2,977,241	77%	
Xenia		1,999,311	10.00%		2,286,946	114%	
Polk City		457,388	10.00%		353,057	77%	
Total: Wholesale - PC	\$	26,618,820		\$	25,635,895	96%	
Wholesale with Storage							
West Des Moines - Storage	\$	131,984	0.00%	\$	43,488	33%	
Johnston		3,366,981	0.00%		3,507,914	104%	
Water Development Co		57,913	0.00%		72,485	125%	
Total: Wholesale with Storage	\$	3,556,878		\$	3,623,887	102%	
Total: Utility	\$	79,059,795		\$	79,059,795	100%	

Results

The rate recommendations as noted in Figure 14 of the COS bring each class in close alignment to full cost recovery.

DMWW's three-year phase-in approach to aligning rates with costs for each customer class has resulted in notable cost recovery improvements. The following chart summarizes this progress for key customer classes:

Customer Class	Cost Recovery 2020 Budgeted Expenses	Cost Recovery 2023 Budget Expenses
Des Moines Inside City	109%	98%
Wholesale Purchased Capacity	80%	96%
Wholesale With Storage	126%	102%

The Full Service customer class as an aggregate group recovers greater than 100% of budgeted costs because most of these Full Service areas have relatively few customers and significant capital needs in the face of projected growth. The rates are intentionally set at a level to accumulate the capital balances over time that will be necessary to sustain these growth-driven system improvements. Excess revenues are tracked and maintained for each separate Full Service area in a Capital Improvement Fund and are used for the sole benefit of capital projects in that specific service area.

Water Rates

The chart on pages 5 and 6 shows the staff recommendation for retail rate increases for DM and Full Service customers, most of which are proposed at 5.5%. Where the COS shows several customer classes significantly under-recovering costs, rate increases are proposed at 8-10%. This chart also includes Runnells wastewater rates.

Based on COS results, staff recommends a 10% increase for Purchased Capacity customers, and a 0% rate increase for the Wholesale With Storage customer class.

All rates are proposed to be effective April 1, 2023.

In recent years, Board and staff have discussed transitioning to a different wholesale rate structure that would distribute costs more equitably to wholesale customers within the Purchased Capacity and With Storage classes based on the demands each customer places on the system. These changes have not been implemented pending the outcome of regionalization discussions. As the Central Iowa Water Works (CIWW) 28E is anticipated to be signed by the effective date of the new rates, staff is not recommending changes to the wholesale water rate structure at this

time. If, contrary to expectations, CIWW does not come to fruition, staff would likely recommend reconsidering changes to the wholesale rate structure before next year's rate cycle.

Capital Improvement Fees

Capital improvement fees are included in the rate chart on pages 5 and 6. Staff recommends no change in the capital improvement fee for Des Moines Inside City, Unincorporated Polk County, or Windsor Heights customers. For Des Moines Inside City and Polk County, the capital improvement fee is a decreasing block structure where the declining blocks mirror that of the water volume rate. Windsor Heights has a uniform water rate and capital improvement fee.

Availability Fees

Staff recommends no change to availability fees by meter size. A separate summary of availability fees by meter size is shown below.

Monthly Availability by Meter Size - No Change Recommended

	5/8''	3/4''	1"	1 1/2"	2''	3"	4" & Above
Des Moines Inside City	\$6.00	\$7.00	\$8.00	\$14.00	\$22.00	\$45.00	\$75.00
Des Moines Outside City	\$8.00	\$10.00	\$14.00	\$35.00	\$60.00	\$150.00	\$250.00
Polk County	\$7.00	\$8.00	\$9.00	\$15.00	\$23.00	\$46.00	\$77.00
Pleasant Hill	\$10.00						
Windsor Heights	\$6.00	\$7.00	\$8.00	\$14.00	\$22.00	\$45.00	\$75.00
PCRWD #1	\$4.00						
Berwick	\$3.00						
Runnells	\$6.00						
Cumming	\$9.00						
Alleman	\$6.00	\$8.00	\$11.00	\$35.00	\$60.00	\$150.00	\$250.00

Looking Ahead - Affordability and Retail Rate Study

Water affordability and designing retail water rate structures to encourage wise use of water are important conversations in the water industry today. The 2023 Budget includes a study to evaluate water affordability and DMWW's retail rate structure considering modern objectives of a sustainable water system.

Des Moines Water Works 2023 Proposed Water Rates Effective April 1, 2023



	2022 Rate Per	2023 Rate Per			Dollar Monthly Increase for Avg. Home With:	
	1,000 Gallons	1,000 Gallons	Increase	Percent Increase	2 Person 3,750 gal	4 Person 7,500 gal
Des Moines Inside City						
Residential (Step 1)	\$5.35	\$5.64	\$0.29	5.50%	\$1.09	\$2.18
Commercial (Step 2)	3.59	3.79	0.20	5.50%		
Industrial (Step 3)	2.76	2.91	0.15	5.50%		
Capital Improvement Fee						
Step 1	\$0.25	\$0.25	\$0.00	0.00%	\$0.00	\$0.00
Step 2	0.17	0.17	0.00	0.00%		
Step 3	0.13	0.13	0.00	0.00%		
Des Moines Outside City						
Residential (Step 1)	\$6.20	\$6.82	\$0.62	10.00%	\$2.33	\$4.65
Commercial (Step 2)	4.66	5.13	0.47	10.00%	\$2.00	ψσε
Industrial (Step 3)	3.33	3.66	0.33	10.00%		
Off Peak	2.75	3.03	0.28	10.00%		
Polk County						
Residential (Step 1)	\$10.54	\$11.12	\$0.58	5.50%	\$2.18	\$4.35
Commercial (Step 2)	6.45	6.80	0.35	5.50%	Ψ2.10	Ψ1.33
Industrial (Step 3)	5.03	5.31	0.28	5.50%		
Capital Improvement Fee			0.120	0.007		
Step 1	\$1.50	\$1.50	\$0.00	0.00%	\$0.00	\$0.00
Step 2	0.92	0.92	0.00	0.00%		
Step 3	0.71	0.71	0.00	0.00%		
Pleasant Hill						
Residential (Step 1)	\$9.80	\$10.34	\$0.54	5.50%	\$2.03	\$4.05
Commercial (Step 2)	8.27	8.72	0.45	5.50%		, , , , ,
Outside City	16.80	17.72	0.92	5.50%	\$3.45	\$6.90

(continued)

(continued)	2022	2023				
	Rate	Rate			Dollar Monthly Increas	
	Per	Per			for Avg. He	
					J	
	1,000	1,000		Percent	2 Person	4 Person
	Gallons	Gallons	Increase	Increase	3,750 gal	7,500 gal
Windsor Heights	\$5.45	\$5.75	\$0.30	5.50%	\$1.13	\$2.00
Capital Improvement Fee	2.00	2.00	0.00	0.00%	\$0.00	\$0.00
PCRWD #1	\$5.14	\$5.42	\$0.28	5.50%	\$1.05	\$2.10
Berwick	\$4.28	\$4.62	\$0.34	8.00%	\$1.28	\$2.55
Runnells						
Water	\$8.86	\$9.35	\$0.49	5.50%	\$1.84	\$3.68
Waste Water	9.61	10.14	0.53	5.50%	\$2.00	\$3.98
Cumming	\$9.14	\$9.64	\$0.50	5.50%	\$2.00	\$3.75
Alleman	\$10.85	\$11.45	\$0.60	5.50%	\$2.25	\$4.50
Wholesale						
Purchased Capacity	\$3.08	\$3.39	\$0.31	10.00%		
With Storage	\$4.57	\$4.57	\$0.00	0.00%		