## civil & environmental engineering



2805-00

July 13, 2022

Mr. Ron Miner, Superintendent Merrimack Village District 2 Greens Pond Road Merrimack, NH 03054

Re: 2022 Rate Assistance

Merrimack Village District

Merrimack, NH

Dear Mr. Miner:

In accordance with ESR #63, Underwood Engineers (UE) has reviewed key financial and system data and is providing rate increase recommendations to support the FY2023 budget and first loan payment for WTP improvements which is anticipated Fall 2023 (first half of FY2024).

UE used the following information provided by MVD along with the most recent rate model version (December 2018 with 2021 updates to include tiered rates) to estimate rate needs for FY2023.

- FY2022 budget and projected ending reserve fund balance
- FY2023 budget
- New debt service information
- Updated meter counts

## The following assumptions were made:

- FY2024 budget estimated at a total of \$5,603,584 which consists of:
  - \$5,052,438 operating budget (FY2023 budget increased by 5% for inflation. Note the model had been using 3% for inflation, however 5% was used due to current price fluctuations)
  - o \$540,681 for PFAS Loan (No principal forgiveness was assumed. Up to 50% loan forgiveness may be granted should the state reach any PFAS settlements).
  - o \$10,465 for DWGT & DWSRF Loan
  - o Constant payments were assumed for each loan. It is still unknown whether payments will be once or twice annually.
- Water Consumption
  - O Total water consumption of 1,900,000 gpd was used, based on the previous 3-year average (2019-2021). This is 5% less than the previous model assumption, despite an increase in accounts. UE notes that while much of this consumption was during the Covid-19 pandemic, 2019 consumption was lower than 2020 and 2021. Consumption will be reviewed for the next rate model update and updated as needed.
  - O Assume % water consumption per tier same as calculated in FY2022.

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Noting this is only an interim review, UE recommends the following:

- UE estimates that an overall rate increase of 24% may be necessary over FY2023 & FY2024 to support the new loan payments. UE recommends implementing part of this increase for FY2023, then implementing the second part of the rate increase for FY2024, after performing a rate model update in FY2024. This will allow for time for MVD to further define actual debt schedules, O&M costs, and the FY2024 budget, and adjust the second rate increase accordingly. FY2023 rate increase options should start at a minimum of 9%, however UE suggests that an 11% rate increase be implemented for FY2023, in order to cover expenses, generate approximately \$500k for asset management, and begin setting aside funds for the first loan payment. Additionally, this option most evenly spreads out the rate increase should the FY2024 assumptions hold true, with a 12% rate increase estimated for FY2024.
- The 11% rate increase in FY2023 will generate a surplus of approximately \$678k, of which \$500k is designated for asset management and \$20k is designated for the contingency fund. This leaves approximately \$158k to set aside for the Fall 2023 loan payment.
- An additional rate increase will be required in FY2024 to bring revenues up enough to cover the loan payment in FY2024 and moving forward.
- UE understands that MVD will utilize the unassigned fund balance to cover the debt payment while revenues come in for the rest of the fiscal year.

UE notes that the original 2018 model estimated an overall rate increase of 79% would be needed to fund construction and O&M of both PFAS projects at Wells 7&8 and Wells 2&3, as well as the Fe/Mn project at Well #3. If the assumptions in this review hold true, this would result in an overall rate increase of 80%.

Additional attached supplemental information includes:

- FY2023 sample bills with the following scenarios for low, average, and high residential users, commercial users, and industrial users:
  - Current rates
  - o Current rates with 11% rate increase
- Rate Schedule for FY2023 with 11% rate increase.

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Please call if you have any questions.

Very truly yours,

UNDERWOOD ENGINEERS, INC.

Meagan L. McCowan, P.E.

Project Engineer

MLM/kap

Encl.



## 15. SAMPLE WATER BILLS

Town of Merrimack, NH

	Average	Meter	Consum.	Annual	Annual			Qtrly	Annual	Annual	Annual
Description	gpd	Size	CF/Qtr	Hydrant \$	Meter \$	Cons. T1	Cons. T2	Total \$	Total \$	\$ Inc.	% Inc.
Residential (Hydrant Only)											
Current Rates FY2022	N/A	N/A	N/A	\$95	N/A	N/A	N/A	\$24	\$95		
Proposed Rates FY2023 - 11%	N/A	N/A	N/A	\$105	N/A	N/A	N/A	\$26	\$105	\$10	11%
Residential Single Unit (Very Low Use	er)										
Current Rates FY2022	80	5/8"	976	\$95	\$78	\$2.83	\$3.11	\$71	\$284		
Proposed Rates FY2023 - 11%	80	5/8"	976	\$105	\$87	\$3.14	\$3.45	\$79	\$315	\$31	11%
Residential Single Unit (Average Resi	dential in Town	)									
Current Rates FY2022	206	5/8"	2513	\$95	\$78	\$2.83	\$3.11	\$114	\$458		
Proposed Rates FY2023 - 11%	206	5/8"	2513	\$105	\$87	\$3.14	\$3.45	\$127	\$508	\$50	11%
Residential Single Unit (Higher user)											
Current Rates FY2022	400	5/8"	4880	\$95	\$78	\$2.83	\$3.11	\$187	\$747		
Proposed Rates FY2023 - 11%	400	5/8"	4880	\$105	\$87	\$3.14	\$3.45	\$207	\$829	\$82	11%
Residential Single Unit (Very High us	er)										
Current Rates FY2022	820	5/8"	10000	\$95	\$78	\$2.83	\$3.11	\$346	\$1,385		
Proposed Rates FY2023 - 11%	820	5/8"	10000	\$105	\$87	\$3.14	\$3.45	\$384	\$1,535	\$150	11%
Residential Single Unit (Based on NH	DES Statewide	Average)									
Current Rates FY2022	197	5/8"	2403	\$95	\$78	\$2.83	\$3.11	\$111	\$445		
Proposed Rates FY2023 - 11%	197	5/8"	2403	\$105	\$87	\$3.14	\$3.45	\$124	\$494	\$49	11%
STATE AVERAGE COST (2022)	197	5/8"	2403						\$577		
Commercial											
Current Rates FY2022	2500	2"	30498	\$190	\$317	\$2.83	\$3.11	\$1,068	\$4,272		
Proposed Rates FY2023 - 11%	2500	2"	30498	\$211	\$352	\$3.14	\$3.45	\$1,184	\$4,735	\$463	11%
Industrial											
Current Rates FY2022	5000	4"	60996	\$473	\$747	\$2.83	\$3.11	\$2,196	\$8,784		
Proposed Rates FY2023 - 11%	5000	4"	60996	\$525	\$829	\$3.14	\$3.45	\$2,434	\$9,735	\$951	11%

## MVD - Proposed Rate Schedule with 11% Rate Increase July 13, 2022

<u>Description of Service:</u>	Rate:					
Water Consumption/Usage Charge:	\$3.14 per 100 cubic feet for usage up to 3,000 cubic feet per quarter \$3.45 per 100 cubic feet for usage over 3,000 cubic feet per quarter					
Meter Charge	Quarterly:	<u>Yearly:</u>				
5/8"	\$21.75	\$87.00				
1"	\$38.50	\$154.00				
1-1/2"	\$59.75	\$239.00				
2"	\$88.00	\$352.00				
3"	\$133.75	\$535.00				
4"	\$207.25	\$829.00				
6"	\$387.50	\$1,550.00				
8"	\$601.25	\$2,405.00				
10"	\$848.00	\$3,392.00				
12"	\$1,508.50	\$6,034.00				
Hydrant Charge	Quarterly:	<u>Yearly:</u>				
Domestic	\$26.25	\$105.00				
Mercantile	\$52.75	\$211.00				
Industrial	\$131.25	\$525.00				
Fire Protection	Quarterly:	<u>Yearly:</u>				
2"	\$75.75	\$303.00				
4"	\$151.75	\$607.00				
6"	\$340.00	\$1,360.00				
8"	\$605.25	\$2,421.00				
10"	\$1,049.50	\$4,198.00				
12"	\$1,362.25	\$5,449.00				