



# Village of Lemont

## Water and Sewer Rate Study

May 2023

HR Green Project No: 211373

HR Green, Inc.  
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New Lenox, IL 60451

**Prepared For:**  
Village of Lemont  
418 Main Street  
Lemont, IL 60439



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## I. Introduction

The Village of Lemont retained HR Green, Inc. to assist with conducting a water and sewer rate study. HR Green partnered with Baker Tilly US, LLC to assess the financial performance of the Water & Sewer Fund for the Village of Lemont and to make the recommended water and sewer rate adjustments to allow the fund to remain financially sustainable and in compliance with bond covenants. The intent of the study was to restructure the rates to meet the following objectives:

1. Promote water conservation to meet the permit conditions established by the Illinois Department of Natural Resources (IDNR) to obtain a Lake Michigan Water Allocation.
2. Determine the revenue needed to cover the costs of operations, annual debt service, and capital improvements while meeting the following financial criteria:
  - a. Meet the debt covenant requirement.
  - b. Maintain a 3-month operating expenditure reserve.
  - c. Prioritize funding with cash rather than debt.
  - d. Maintain a positive cash balance.
3. Reduce the financial burden on senior citizens for essential water.

This memo offers some background on Lemont's water and sewer systems, expands on the purpose of this study, provides insight on the current water usage trends for Lemont customers, summarizes Baker Tilly's recommended rates, and provides a community comparison for the existing and proposed residential bills.

## II. Background

The Village of Lemont provides water and sewer services to approximately 17,629 residents, based on the 2020 U.S. Census. The Village's water system consists of the following major assets:

- Four deep wells (Well 3, 4, 5, and 6)
- One emergency shallow well (Well 2)
- Four water softening plants (ion exchange)
- One 500,000 gallon storage reservoir
- One 750,000 gallon elevated storage tank
- One 300,000 gallon elevated storage tank
- Three booster pumps
- 104.16 miles of watermain ranging in size from 3 inches to 16 inches in diameter (one pressure zone)
- Approximately 1,614 fire hydrants and 800 valves in the water distribution system
- 6,406 service connections

The Village supplies approximately 1.57 million gallons of water per day (MGD) with a maximum day demand of about 2.89 MGD. The total water system capacity is approximately 4.9 MGD (excluding the emergency well).

The Village of Lemont's wastewater is conveyed through approximately 150 miles of sewer pipe to one of the Metropolitan Water Reclamation District's (MWRD) water treatment facilities (Lemont Water Reclamation Plant). The Village is responsible for the operation and maintenance of its sewer system.

## II.A Existing Water and Sewer Rates

Table 1 provides the Village of Lemont’s existing water and sewer rates. Currently, each customer is required to pay a minimum of \$42.59 for the first 4,000 gallons of water (bimonthly). Each additional 1,000 gallons is charged at a rate of \$7.52 per 1,000 gallons. There is currently no financial incentive to conserve water for the first 4,000 gallons because each customer is charged the same fee regardless of actual water usage. The IDNR-OWR requested the Village of Lemont to restructure the water rates in order to promote water conservation for all water consumed. For sewer, residents are charged a flat rate and commercial is charged an additional \$0.25 per 1,000 gallons for water used above 20,000 gallons.

At this time, senior citizens receive a 50% discount on both water and sewer. Currently, 25% of the Village’s water and sewer accounts consist of senior citizen accounts. With such a large portion of the customers qualifying for the senior citizen discount, the Village has less revenue available to cover the water and sewer expenses. Therefore, a major goal of this water and sewer study was to identify the best way to adjust the senior citizen discount to avoid impacting seniors using essential water while also allowing the Village to obtain the revenue necessary to continue to operate the water and sewer systems.

Table 1: Village of Lemont’s current water and sewer fees

Existing Water and Sewer Fees		
Type of Charge	Regular Fee	Senior Citizen Fee
<b>Current Water Service Fees</b>		
Minimum Charge (4,000 gallons)	\$42.59	\$21.31
Each additional 1,000 gallons	\$7.52	\$3.76
<b>Current Sewer Fees</b>		
Residential – Flat Rate	\$40	\$20
Commercial	\$40 for first 20,000 gallons & \$0.25 / 1,000 gallons thereafter	N/A

## II.B Water and Sewer Account & Consumption Summary

The Village of Lemont currently has 6,406 active water accounts and approximately 25% are senior citizen accounts. Figure 1 provides the non-senior vs. senior account breakdown based on bimonthly water consumption in the winter. Figure 2 provides the breakdown of accounts based on bimonthly water consumption in the summer. The graphs show that the percentage of seniors and non-seniors using over 12,000 gallons increases substantially in the summertime, likely for outdoor water uses (irrigation, swimming pools, etc.). The graphs suggest that there are opportunities within the Village to conserve more water in the summer months.

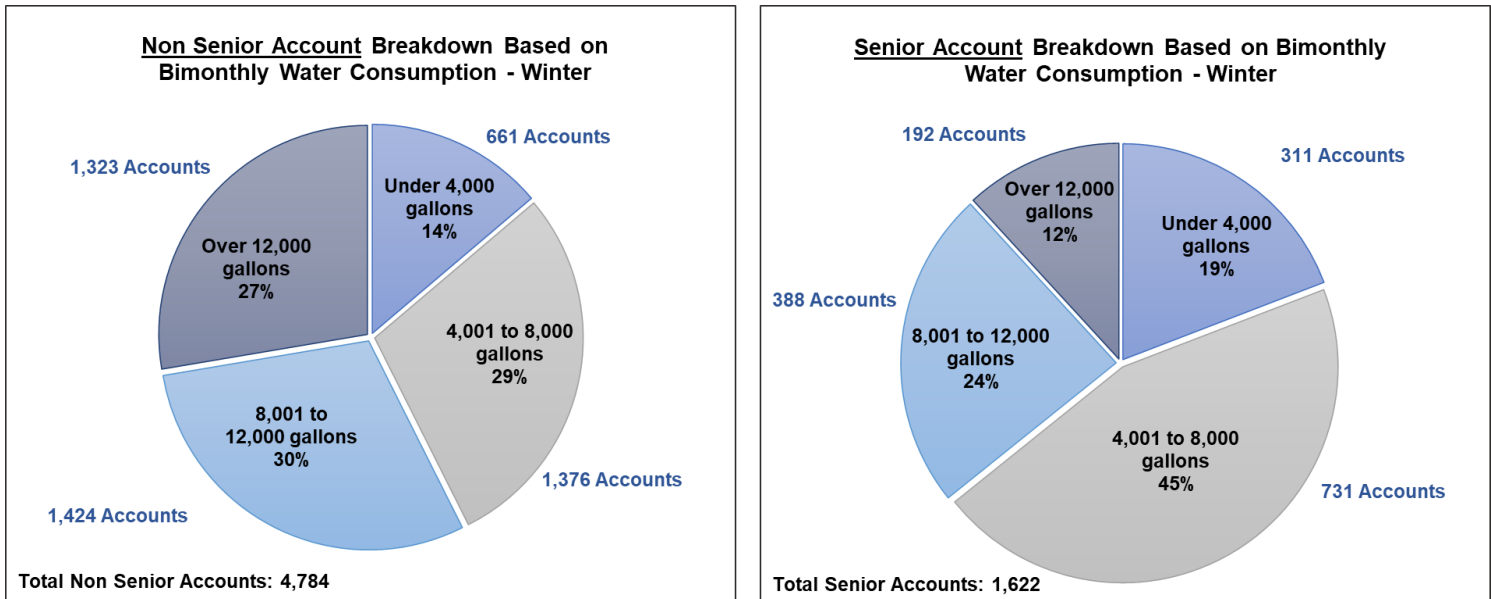


Figure 1: Non Senior (left) and Senior (right) account breakdown based on bimonthly water consumption in winter months

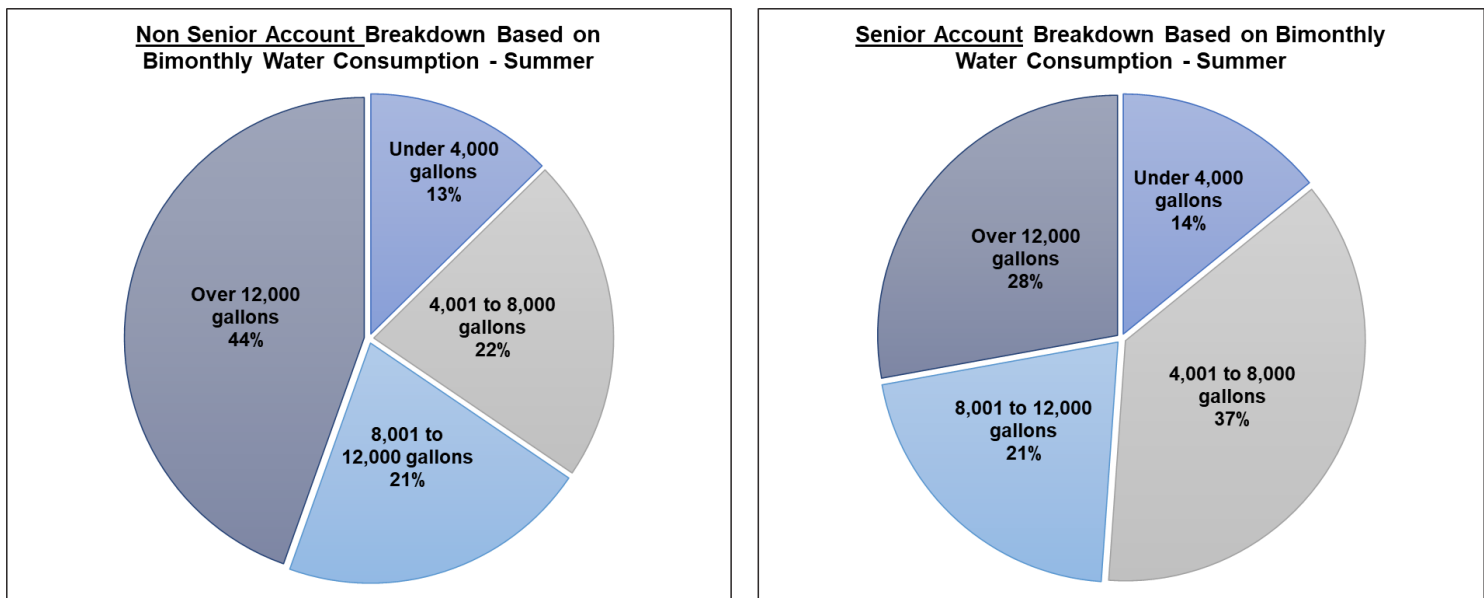


Figure 2: Non Senior (left) and Senior (right) account breakdown based on bimonthly water consumption in summer months

Figure 3 provides the annual water consumption breakdown in million gallons based on tier blocks. The figure shows that approximately 63% of the annual water consumption is provided to customers using more than 12,000 gallons bimonthly. The second highest tier is for customers using between 8,001 and 12,000 gallons of water bimonthly, which consists of 18% of the total annual water consumption. Table 2 provides a more detailed breakdown of the water usage by tier and by user type. As shown in the table, almost 80% of the water is consumed by residents (includes senior citizens). The remaining 20% is used by commercial, industrial, and government users.

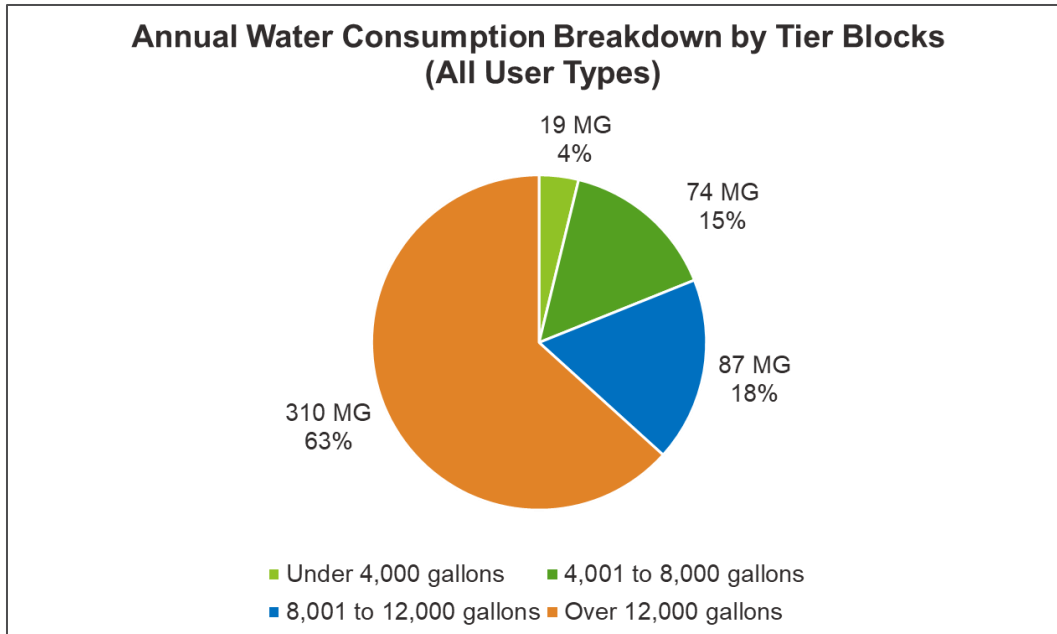


Figure 3: Annual water consumption breakdown by tier blocks in million gallons (billing data from FY 2022)

Table 2: Annual water consumption by user type and tier block in million gallons (billing data from FY 2022)

Annual Water Consumption By User Type and Tier Block in Million Gallons (MG)				
Tier Block	Residential	Senior	Commercial / Industrial / Government	Total
Under 4,000 gallons	9	8	2	19
4,001 to 8,000 gallons	48	23	3	74
8,001 to 12,000 gallons	66	18	3	87
Over 12,000 gallons	182	34	94	310
<b>Total</b>	<b>306</b>	<b>83</b>	<b>101</b>	<b>490</b>

### III. Capital Improvement Plan

The Village of Lemont provided the capital improvement plan for use in the financial model. Appendix 1 provides the list of water and sewer projects for fiscal years 2023 to 2034. Most of the projects and costs were provided by the Village staff. One exception was the lead service line replacement program which HR Green adjusted to better reflect the Village's current assumptions. The Village has approximately 2,135 water service lines with unknown material. However, the Village does not anticipate that all the unknown service lines will be lead. Upon further discussion, the Village staff assumed that 500 lead service lines will require replacement (for the purpose of developing a cost estimate for the water and sewer rate study). The Village assumed a 7% annual replacement to meet the requirements of the Lead Service Line Replacement and Notification Act. HR Green developed the annual anticipated costs for the annual replacement of 35 lead service lines, adjusted for annual inflation.

### IV. Water and Sewer Rate Analysis

Baker Tilly coordinated with the Village of Lemont and HR Green staff to complete a detailed water and sewer rate analysis. The detailed methodology and results are provided in Baker Tilly's memorandum in Appendix 2. Baker Tilly assessed three different rate structures and two senior citizen discounts for the Village's consideration. Note that all rate structure and senior discounts offered the same amount of revenue for the Water and Sewer Fund; the difference between each scenario was how the costs were distributed among customers.

After comparing the resulting water and sewer rates for each rate structure and senior discount, Baker Tilly recommended for the Village to move forward with Scenario 3A. This scenario consisted of a residential tiered rate structure to promote water conservation, a bimonthly base fee, and a single water/sewer rate for commercial users. Additionally, senior citizens would have a 50% discount on the bimonthly water and sewer base fees as well as a 50% discount on the water and sewer rates for the first 4,000 gallons used bimonthly. Senior citizens would pay the regular rates for water use above 4,000 gallons bimonthly.

Scenario 3A was selected because it offered more relief for senior citizens using essential water. This scenario also distributed the costs more equitably among customers by asking senior citizens that use higher volumes of water to cover more of the costs; this in turn would reduce some of the financial burden placed on non-seniors. Table 3 provides the proposed water service fees and Table 4 provides the proposed sewer fees.

Table 3: Water Service Fees Proposed by Baker Tilly

Scenario 3A: Water Service Fees										
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>Non-Residential Bimonthly Fees</b>										
Base Fee (\$)	\$18.43	\$18.89	\$19.36	\$19.84	\$20.33	\$20.83	\$21.35	\$21.87	\$22.42	\$22.97
Water Rate (\$/1,000 gallons)	\$8.23	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80
<b>Residential Bimonthly Fees: Regular User</b>										
Base Fee (\$)	\$18.43	\$18.89	\$19.36	\$19.84	\$20.33	\$20.83	\$21.35	\$21.87	\$22.42	\$22.97
0 - 4,000 gallons (\$/1,000 gallons)	\$8.23	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80
4,001 - 8,000 gallons (\$/1,000 gallons)	\$10.29	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00
8,001 - 12,000 gallons (\$/1,000 gallons)	\$12.86	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75
Greater than 12,000 gallons (\$/1,000 gallons)	\$16.07	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19
<b>Residential Bimonthly Fees: Senior Citizen</b>										
Base Fee (\$)	\$9.22	\$9.44	\$9.68	\$9.92	\$10.16	\$10.42	\$10.67	\$10.94	\$11.21	\$11.49
0 - 4,000 gallons (\$/1,000 gallons)	\$4.11	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40
4,001 - 8,000 gallons (\$/1,000 gallons)	\$10.29	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00
8,001 - 12,000 gallons (\$/1,000 gallons)	\$12.86	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75
Greater than 12,000 gallons (\$/1,000 gallons)	\$16.07	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19

Table 4: Sewer Service Fees Proposed by Baker Tilly

Scenario 3A: Sewer Service Fees										
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>Non-Residential Bimonthly Fees</b>										
Base Fee (\$)	\$13.61	\$13.95	\$14.29	\$14.65	\$15.01	\$15.38	\$15.76	\$16.15	\$16.55	\$16.96
Water Rate (\$/1,000 gallons)	\$2.41	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59
<b>Residential Bimonthly Fees: Regular User</b>										
Base Fee(\$)	\$13.61	\$13.95	\$14.29	\$14.65	\$15.01	\$15.38	\$15.76	\$16.15	\$16.55	\$16.96
0 - 4,000 gallons (\$/1,000 gallons)	\$2.41	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59
4,001 - 8,000 gallons (\$/1,000 gallons)	\$3.01	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24
8,001 - 12,000 gallons (\$/1,000 gallons)	\$3.77	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05
Greater than 12,000 gallons (\$/1,000 gallons)	\$4.71	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07
<b>Residential Bimonthly Fees: Senior Citizen</b>										
Base Fee (\$)	\$6.81	\$6.97	\$7.15	\$7.32	\$7.51	\$7.69	\$7.88	\$8.08	\$8.28	\$8.48
0 - 4,000 gallons (\$/1,000 gallons)	\$1.20	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30
4,001 - 8,000 gallons (\$/1,000 gallons)	\$3.01	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24
8,001 - 12,000 gallons (\$/1,000 gallons)	\$3.77	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05
Greater than 12,000 gallons (\$/1,000 gallons)	\$4.71	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07

The Village also has 96 sewer-only accounts which are not metered and are currently charged a flat fee. Baker Tilly recommended the flat fees in Table 5 for sewer-only customers. This fee was developed by matching the sewer bill for an average residential user (12,000 gallons of bimonthly usage) and offering a 50% discount on the flat fee for senior citizens.

Table 5: Proposed flat fees for sewer-only accounts.

Sewer Service Fees for Unmetered Sewer Accounts										
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>Scenario 3A</b>										
Flat Fee – Sewer Only – Regular User (\$)	\$50.36	\$53.52	\$53.87	\$54.22	\$54.58	\$54.95	\$55.33	\$55.72	\$56.12	\$56.53
Flat Fee – Sewer Only – Senior Citizen (\$)	\$25.18	\$26.76	\$26.94	\$27.11	\$27.29	\$27.48	\$27.67	\$27.86	\$28.06	\$28.27



## V. Community Comparison

The Village of Lemont staff requested HR Green to compare the Village’s existing and proposed rates to those of other communities in the region. The Village requested that the list included a mixture of groundwater and Lake Michigan drinking water source communities. The list also included several communities which send wastewater to the MWRD (rather than treating their own wastewater), similar to the Village of Lemont. Table 6 provides the list of communities used for this assessment along with information on the water source and where wastewater is treated.

Table 6:

List of Nearby Communities Assessed for this Study		
Community	Water Source	Sewer
Lemont	Groundwater	MWRD - Lemont Water Reclamation Plant
New Lenox	Lake Michigan Water - Oak Lawn	Wastewater Treatment Facility
Romeoville	Groundwater (Currently)	Wastewater Treatment Facility
Palos Park	Lake Michigan Water - Oak Lawn	MWRD - Calumet Water Reclamation Plant
Plainfield	Lake Michigan Water - IL American	Wastewater Treatment Facility
Lockport	Groundwater	Wastewater Treatment Plant
Western Springs	Groundwater	MWRD- Stickney Water Reclamation Plant
Burr Ridge	Lake Michigan Water - Bedford Park	Wastewater- DuPage County & Flagg Creek Water Reclamation District
Frankfort	Groundwater	Wastewater Treatment Plant
Woodridge	Lake Michigan Water- DuPage Water Commission	DuPage County - Woodridge-Greene Valley WWTP
Orland Park	Lake Michigan Water - Oak Lawn	MWRD - Calumet Water Reclamation Plant
Homer Glen	Illinois American Water	Illinois American Water
Bolingbrook	Illinois American Water	Illinois American Water

### V.A Senior Discount Comparison for Region

HR Green researched senior discounts available in the region to show how the Village of Lemont’s discounts compare to other communities. Below is a summary of the senior citizen discounts available:

- Village of Lemont (Existing)
  - 50% Senior Discount on Water & Sewer Rates & Flat Fees (bimonthly)
- Village of Western Springs
  - 28.6% Discount on Water & Sewer Rate (bimonthly)
  - No Discount on Flat Fee
- City of Lockport
  - 50% Water Rate Discount on first 3,000 gallons (monthly)
  - 50% Discount Water Flat Fee (monthly)
  - No Sewer Discount
- Village of New Lenox
  - 50% Water Rate Discount on first 3,000 gallons (monthly)
  - 50% Discount Water Flat Fee (monthly)
  - No Sewer Discount
- Village of Plainfield
  - 10% Senior Discount on Water & Sewer Rates & Flat Fees (monthly)

- Village of Romeoville
  - 10% Water Rate Discount on first 8,000 gallons (monthly)
  - 10% Sewer Rate Discount (monthly)

The following communities do not have senior citizen discounts available:

- Village of Frankfort
- Village of Palos Park
- Village of Orland Park
- Village of Burr Ridge
- Village of Woodridge
- Village of Homer Glen
- Village of Bolingbrook

In comparison to the 12 communities listed above, the Village of Lemont has the highest senior citizen discounts available. The newly proposed senior discount (50% discount on the flat fee and 50% discount on the first 4,000 gallons used bimonthly) more closely aligns with the discounts seen in other communities.

### V.B Community Rate and Bill Comparison

HR Green researched the water and sewer rates and fees offered by each of the 12 communities assessed for this study. The rate structures vary significantly from one community to another, making it difficult to compare the typical residential bill among each community. Therefore, compiling a bill comparison for each community required several assumptions:

1. If communities had varying rates for incorporated vs. unincorporated areas, we used the rates for incorporated areas.
2. Some communities have special rates and fees for specific subdivisions. Our analysis excludes the special rates and instead computes the typical bill based on the fees offered to the majority of the residents in the community.
3. The bills were computed for a resident with a metered connection.
4. Some communities, such as Woodridge, have a varying flat fee depending on the meter size. Table 7 provides the Village of Lemont’s meter sizes relative to the percent of Lemont’s total annual water consumption. The table shows that the largest percentage of the annual water consumption comes from 3/4-inch meters. Therefore, we assumed a 3/4 inch meter size to calculate a typical residential bill.
5. If the community had capital improvement and/or maintenance fees for water and/or sewer, they were included in the bill computation.

Table 7:

Village of Lemont's Meter Sizes	
Meter Size (inches)	% of Total Water Consumption
5/8	21%
3/4	34%
1	24%
1 1/2	5%
2	7%
3	1%
4	7%
5	0.10%

Figures 4, 5, and 6 provide the typical residential water/sewer bill based on bimonthly usage of 4,000 gallons, 12,000 gallons, and 20,000 gallons, respectively. This analysis is based on water and sewer rate data publicly available on May 1<sup>st</sup>, 2023; HR Green assessed data available on municipal websites and the current code of ordinances and used whichever sources reflected rates for the most current fiscal year. Please note that water and sewer rates for the listed communities may still change throughout this fiscal year, as each community may update their water/sewer rates at different times. Lemont’s existing rates are shown for the fiscal year 2023. Lemont’s proposed rates are shown for fiscal year 2025 because the proposed rate increases will occur over two years (FY 2024 and 2025). Therefore, fiscal year 2025 offers a more conservative comparison since the FY 2025 bill is higher. However, note that other communities are likely to increase their water and sewer rates in FY 2025 as well. Despite some limitations, these figures offer some insight on where the Village of Lemont’s typical bill may stand currently in comparison to other communities and where the typical bill may stand for the proposed rates [References 1 through 12].

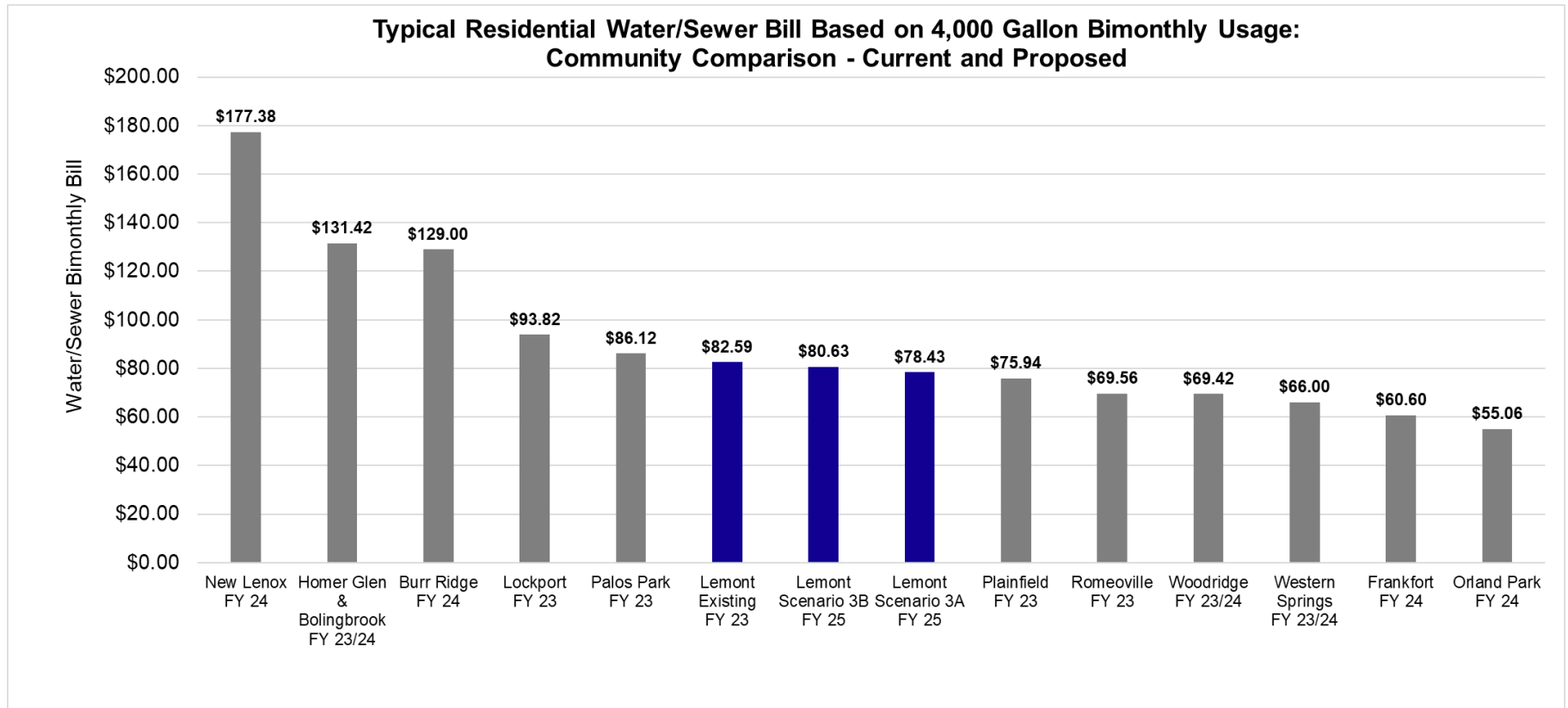


Figure 4: Community comparison for typical residential water/sewer bills for a 4,000 gallon bimonthly user (using data available 5/1/2023)

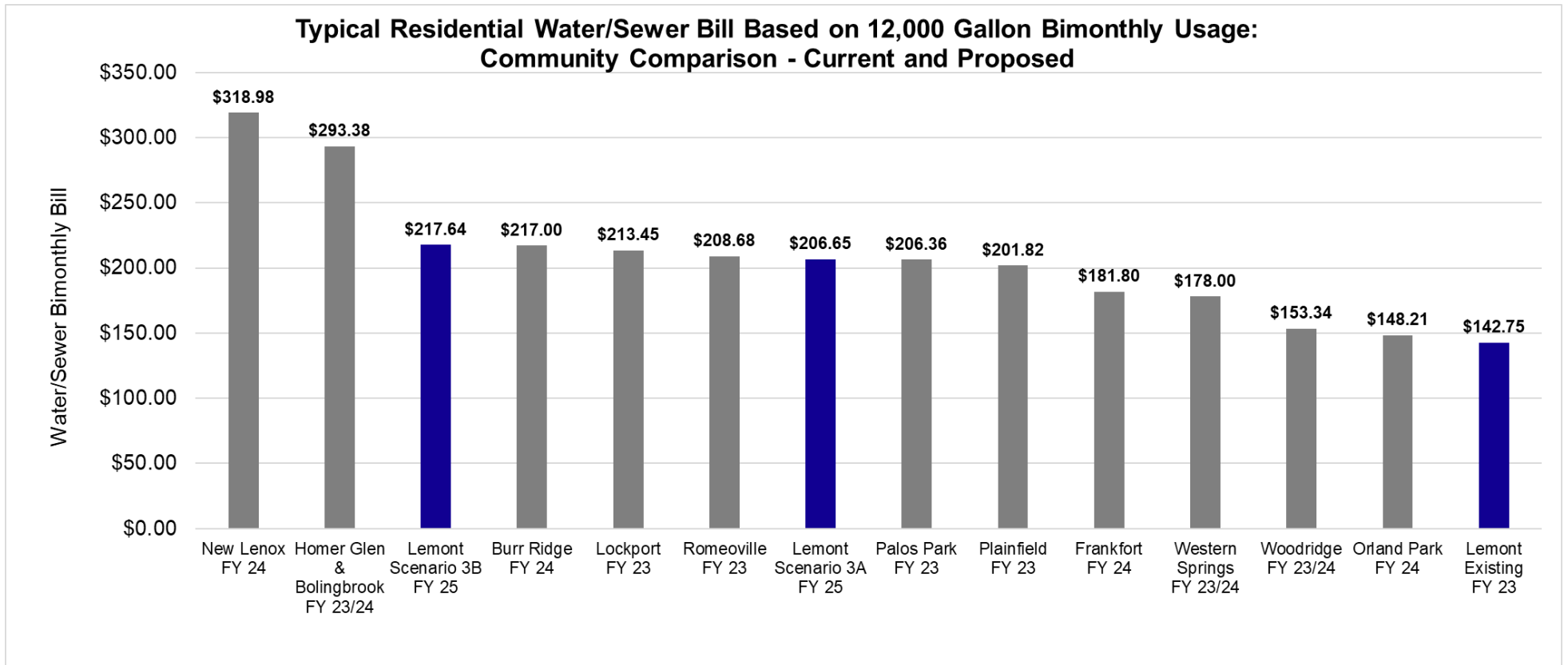


Figure 5: Community comparison for typical residential water/sewer bills for a 12,000 gallon bimonthly user (using data available 5/1/2023)

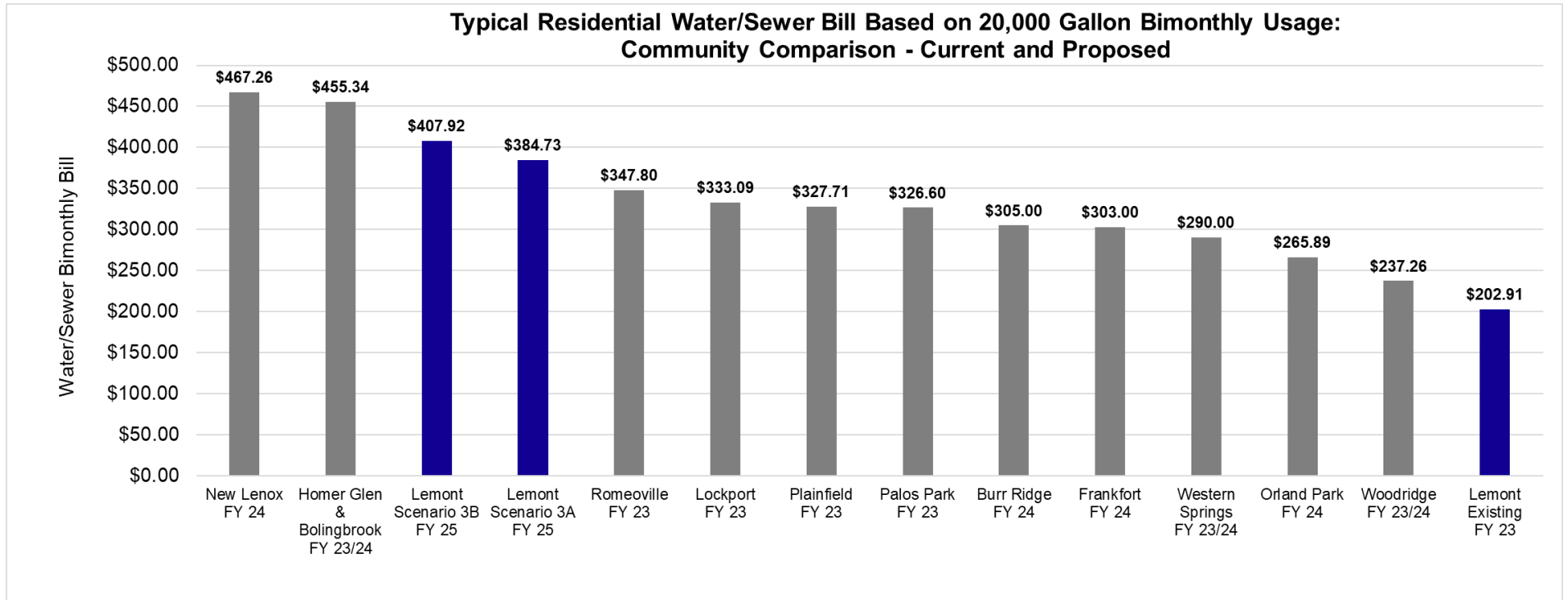


Figure 6: Community comparison for typical residential water/sewer bills for a 20,000 gallon bimonthly user (using data available 5/1/2023)

## VI. Conclusion

HR Green partnered with Baker Tilly to assist with the Village of Lemont water and sewer rate study. Baker Tilly completed a detailed financial analysis and provided a recommendation for the proposed rate structure and senior citizen discount. HR Green completed additional analysis using the Village's billing data and Baker Tilly's financial model to assist the Village with selecting the rate structure that best meets the Village's needs and objectives. The recommended rate structure is most likely to encourage water conservation, meeting the IDNR Lake Michigan allocation requirements; meanwhile, the recommended senior discount will offer financial aid to seniors using essential water, but will ask seniors using higher volumes of water to cover more of the costs. Baker Tilly worked closely with the Village financial staff in order to meet the minimum revenue and the debt covenant requirements. This memorandum offered a brief summary of the results of the Lemont water and sewer study and provided other data for consideration. For more details on the financial analysis, please see Baker Tilly's memorandum in Appendix 2.

## VII. References

- [1] <https://www.lemont.il.us/departments/public-works/water-system-and-services/water-billing>
- [2] [https://www.frankfortil.org/government/transparency\\_portal/taxes\\_\\_\\_fees/index.php#w\\_s\\_rates](https://www.frankfortil.org/government/transparency_portal/taxes___fees/index.php#w_s_rates)
- [3] <http://www.romeoville.org/749/Current-Rates>
- [4] <https://wsprings.com/151/Water-Service-Billing>
- [5] <https://www.palospark.org/185/Utility-Rates>
- [6] [https://codelibrary.amlegal.com/codes/orlandpark/latest/orlandpark\\_il/0-0-0-2907](https://codelibrary.amlegal.com/codes/orlandpark/latest/orlandpark_il/0-0-0-2907)
- [7] <https://www.plainfieldil.gov/services/water-service>
- [8] <https://www.newlenox.net/pView.aspx?id=27232&catid=528>
- [9] [https://www.burr-ridge.gov/government/departments/public\\_works/water\\_\\_\\_sewer/e-billing\\_for\\_water\\_bill/index.php](https://www.burr-ridge.gov/government/departments/public_works/water___sewer/e-billing_for_water_bill/index.php)
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[https://www.amwater.com/ilaw/resources/rates/Chicago\\_Metro\\_Wastewater.pdf](https://www.amwater.com/ilaw/resources/rates/Chicago_Metro_Wastewater.pdf)

# Appendix 1







## Sewer System Capital Improvement Plan and Assumed Funding Source

Year	Sewer CIP		Sewer Fund	Revenue Bond	Equipment Certificate
2023	Mini Excavator	\$ 145,000	\$ 145,000		
2023	Sewer Lining Program	\$ 108,000	\$ 108,000		
2023	MWRDGC Infiltration and Inflow plan	\$ 15,000	\$ 15,000		
2023	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2023	Archer Avenue & State Street Lift Station Generator Replacement	\$ 120,000	\$ 120,000		
2023	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2024	Equipment	\$ 290,000	\$ 290,000		
2024	Sewer Lining Program	\$ 108,000	\$ 108,000		
2024	Archer Avenue & Derby Road Public Works Annex Sitework (roads, sewer, septic	\$ 550,000	\$ 550,000		
2024	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2024	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2024	Stormwater Maintenance	\$ 100,000	\$ 100,000		
2025	Sewer Lining Program	\$ 108,000	\$ 108,000		
2025	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2025	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2025	Stormwater Maintenance	\$ 107,000	\$ 107,000		
2026	Equipment	\$ 343,914	\$ 343,914		
2026	Sewer Lining Program	\$ 108,000	\$ 108,000		
2026	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2026	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2026	Stormwater Maintenance	\$ 114,490	\$ 114,490		
2027	Sewer Lining Program	\$ 200,000	\$ 200,000		
2027	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2027	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2027	Stormwater Maintenance	\$ 120,215	\$ 120,215		
2028	Equipment	\$ 122,973	\$ 122,973		
2028	Sewer Lining Program	\$ 206,000	\$ 206,000		
2028	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2028	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2028	Stormwater Maintenance	\$ 126,225	\$ 126,225		
2029	Sewer Lining Program	\$ 212,180	\$ 212,180		
2029	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2029	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2029	Stormwater Maintenance	\$ 132,536	\$ 132,536		
2030	Equipment	\$ 549,683	\$ 549,683		
2030	Sewer Lining Program	\$ 218,545	\$ 218,545		
2030	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2030	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2030	Stormwater Maintenance	\$ 139,163	\$ 139,163		
2031	Sewer Lining Program	\$ 225,102	\$ 225,102		
2031	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2031	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2031	Stormwater Maintenance	\$ 146,121	\$ 146,121		
2032	Equipment	\$ 131,552	\$ 131,552		
2032	Sewer Lining Program	\$ 231,855	\$ 231,855		
2032	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2032	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2032	Stormwater Maintenance	\$ 153,428	\$ 153,428		
2033	Sewer Lining Program	\$ 238,810	\$ 238,810		
2033	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2033	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2033	Stormwater Maintenance	\$ 161,099	\$ 161,099		
2034	Emergency Sewer Projects	\$ 250,000	\$ 250,000		
2034	Equipment	\$ 136,086	\$ 136,086		
2034	Sewer Lining Program	\$ 245,975	\$ 245,975		
2034	Combined Sewer Overflow (Long Term Control Plan)	\$ 25,000	\$ 25,000		
2034	Stormwater Maintenance	\$ 169,154	\$ 169,154		
	<b>Total Sewer</b>	<b>\$ 9,384,106</b>	<b>\$ 9,384,106</b>	<b>\$ -</b>	<b>\$ -</b>
	<b>Total Sewer by Year</b>				
2023	2023 Total	\$ 663,000	\$ 663,000	\$ -	\$ -
2024	2024 Total	\$ 1,323,000	\$ 1,323,000	\$ -	\$ -
2025	2025 Total	\$ 490,000	\$ 490,000	\$ -	\$ -
2026	2026 Total	\$ 841,404	\$ 841,404	\$ -	\$ -
2027	2027 Total	\$ 595,215	\$ 595,215	\$ -	\$ -
2028	2028 Total	\$ 730,198	\$ 730,198	\$ -	\$ -
2029	2029 Total	\$ 619,716	\$ 619,716	\$ -	\$ -
2030	2030 Total	\$ 1,182,391	\$ 1,182,391	\$ -	\$ -
2031	2031 Total	\$ 646,223	\$ 646,223	\$ -	\$ -
2032	2032 Total	\$ 791,835	\$ 791,835	\$ -	\$ -
2033	2033 Total	\$ 674,909	\$ 674,909	\$ -	\$ -
2034	2034 Total	\$ 826,215	\$ 826,215	\$ -	\$ -

# Appendix 2



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## MEMORANDUM

TO: Andy Lemke, HR Green  
Sylwia Kokoszka, HR Green

FROM: Nick Dragisich, Managing Director

DATE: April 27, 2023

SUBJECT: Lemont Water and Sewer Rate Study

Baker Tilly was retained by HR Green to review the financial performance of the Water & Sewer Fund of the Village of Lemont, Illinois and to make recommendations for water and sewer rate adjustments which may be required to ensure that the utility fund remains financially sustainable and in compliance with the terms of their bond covenants. A number of analyses were completed and reviewed with the Village staff and HR Green for discussion and feedback. This memorandum provides a summary of our recommended findings based on those reviews and updated financial information provided by the Village.

### Financial Review

Baker Tilly began its analysis by reviewing recent financial statements and budgets for the Village of Lemont Water & Sewer Fund. These reports included the annual financial statements for FY 2020, FY 2021, and FY 2022, along with the Village's Water and Sewer budgets for fiscal years 2022, and 2023.

Other data reviewed for this study included:

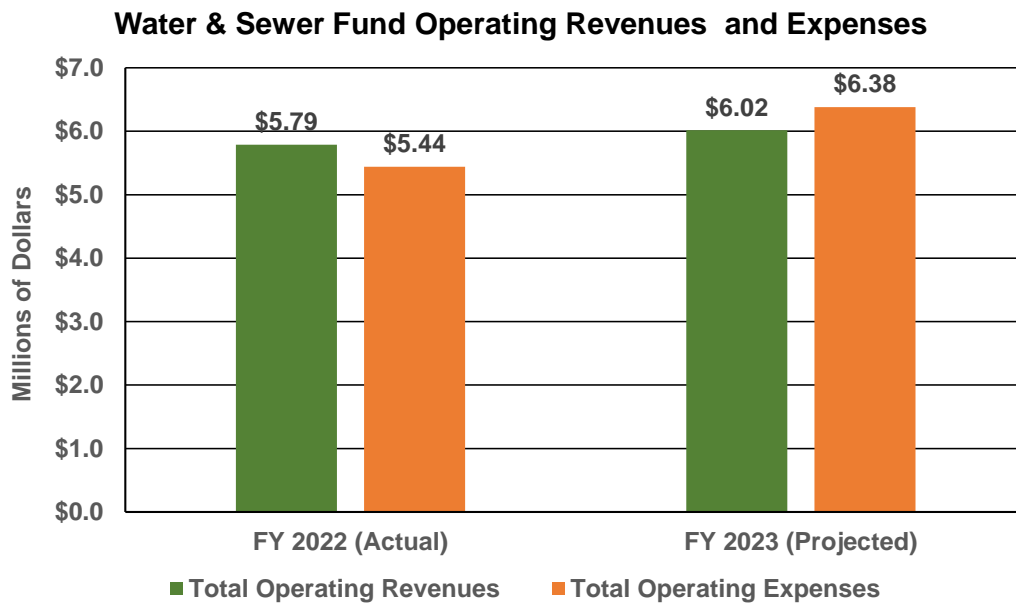
- 2023 Fee Ordinance
- Billing data for water usage for the period May 2021 through April 2022
- Outstanding bond covenants
- Village's capital improvement program for 2023 through 2034
- Projected growth in the Village through 2040

One challenge which complicated our analysis was the Water and Sewer revenues and expenditures are not separated in the financial statements for the combined Fund. To allow for a reasonable analysis of the distinct Water and Sewer operations, we worked with Village staff to allocate costs between the two utilities.

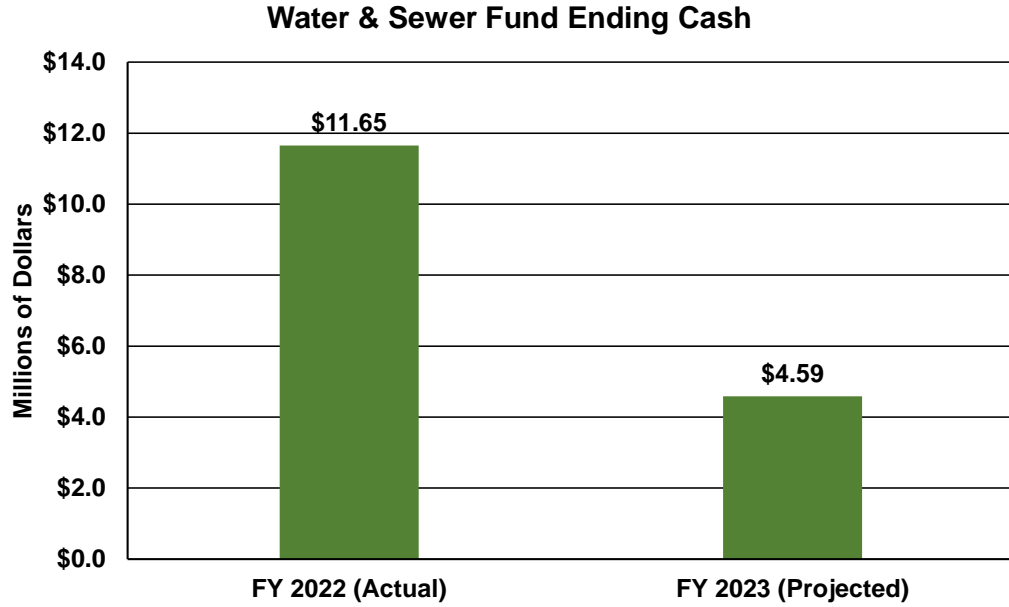
The projected FY 2023 revenues and expenditures were used as a baseline to project revenues and expenditures through FY 2033. The FY 2023 projection was only for April 2023, as the Village had data available for May 2022 through March 2023 for use in the financial model. We assumed Administration and HR expenses would increase 3.5% each year and operating expenses, with the exception of other expenses, would increase 5% each year. Other expenses were assumed to increase 1% each year. Operating revenues not related to user charges were projected forward with minimal growth.

### Historical Information

The Water & Sewer Fund showed operating revenues were greater than operating expenses in FY 2022 by approximately \$350,000 but are projected to be approximately \$365,000 less than operating expenses in FY 2023. This was primarily due to increases in administration, personnel services, utilities, and other expenses. These past two fiscal years' operating revenues and expenses are shown in the chart below.



Ending cash decreased from approximately \$11.65 million at the end of FY 2022 to \$4.59 million projected at the end of FY 2023. This is primarily a result of capital expenditures paid for with cash. The ending cash balances are shown in the chart on the following page.



The operating statement for the Water & Sewer Fund for the past two years is shown in the table on the following page and allows you to see the changes in individual line items of revenues and expenses.

	Fiscal Year	Fiscal Year
Combined Water & Sewer Utility	2022	2023
	Actual	Projected
<b>Operating Revenues</b>		
Water	\$ 4,237,302	\$ 4,211,964
Sewer	\$ 1,492,244	\$ 1,446,331
License, Permits and Fees	\$ 960	\$ -
Penalties, fines and forfeitures	\$ 57,877	\$ 70,289
Other income	\$ -	\$ 287,332
<b>Total Operating Revenues</b>	<b>\$ 5,788,383</b>	<b>\$ 6,015,915</b>
<b>Operating Expenditures</b>		
Administration	\$ 818,909	\$ 1,001,022
HR	\$ 50,404	\$ 61,613
Vehicle Maint	\$ 179,899	\$ 227,343
Facilities Maint	\$ 99,636	\$ 125,913
Personnel services	\$ 893,957	\$ 1,129,712
Outside services	\$ 45,817	\$ 57,900
Materials and supplies	\$ 9,225	\$ 11,657
Other expenses	\$ 45,813	\$ 57,895
Well #3	\$ 50,437	\$ 63,738
Well #4	\$ 13,418	\$ 16,956
Well #5	\$ 19,000	\$ 24,010
Well #6	\$ 16,883	\$ 21,335
Utilities	\$ 319,222	\$ 403,408
Other expenses	\$ 1,616,671	\$ 1,928,460
<b>Total Operations</b>	<b>\$ 4,179,290</b>	<b>\$ 5,130,961</b>
Depreciation-Existing	\$ 1,261,872	\$ 1,250,000
<b>Total Operating Expenses</b>	<b>\$ 5,441,162</b>	<b>\$ 6,380,961</b>
<b>Operating Income (Loss)</b>	<b>\$ 347,221</b>	<b>\$ (365,045)</b>
<b>Nonoperating revenues (expenses)</b>		
Interest income	\$ (140,846)	\$ 233,049
Interest Expense - existing debt	\$ (481,281)	\$ (661,586)
Other	\$ 189,227	\$ -
<b>Total nonoperating revenues (expenses)</b>	<b>\$ (432,900)</b>	<b>\$ (428,537)</b>
<b>Transfers In</b>	<b>\$ 232,460</b>	<b>\$ 6,684</b>
<b>Transfers Out</b>	<b>\$ (26,000)</b>	<b>\$ -</b>
<b>Changes in Net Position</b>	<b>\$ 120,780</b>	<b>\$ (786,899)</b>
<b>Cash Position</b>		
<b>Beginning Cash</b>	<b>\$ 7,013,275</b>	<b>\$ 11,652,427</b>
Net Income	\$ 120,780	\$ (786,899)
Add-back Depreciation	\$ 1,261,872	\$ 1,250,000
Acquisition and Construction of Assets	\$ (2,353,500)	\$ (6,119,180)
Proceeds from Long-term Debt/Loans	\$ 6,700,000	\$ -
Principal Pmts on Existing Long-term Debt	\$ (1,090,000)	\$ (1,410,000)
<b>Ending Cash</b>	<b>\$ 11,652,427</b>	<b>\$ 4,586,348</b>

### Projected Capital Expenditures

The list of capital improvements developed by the Village and HR Green for the period FY 2023 through FY 2034 was provided to Baker Tilly for the financial projections. Projected capital expenditures totaled \$60.0 million. Based on discussion with the Village staff, the CIP was projected to be mostly funded as one-time cash outlays from the Water & Sewer Fund. The exceptions to this included lead service line replacements which are assumed to be funded with low-interest loans from the Illinois Environmental Protection Agency and a new well in FY 2030 which was assumed to be funded with a revenue bond. The capital improvement list covers projects from FY 2023 through FY 2034.

A summary of the projected capital expenditures is shown in the table below. It is organized by fund, fiscal year, and funding source.

Fiscal Year	Water Fund	Water Debt	IEPA Loan	Total Water	Sewer Fund	Total Sewer	Total
2023	\$ 7,283,561	\$ -	\$ -	\$ 7,283,561	\$ 663,000	\$ 663,000	\$ 7,946,561
2024	\$ 4,235,000	\$ -	\$ -	\$ 4,235,000	\$ 1,323,000	\$ 1,323,000	\$ 5,558,000
2025	\$ 2,405,600	\$ -	\$ 571,259	\$ 2,976,859	\$ 490,000	\$ 490,000	\$ 3,466,859
2026	\$ 2,141,592	\$ -	\$ 611,247	\$ 2,752,839	\$ 841,404	\$ 841,404	\$ 3,594,243
2027	\$ 3,566,172	\$ -	\$ 606,489	\$ 4,172,661	\$ 595,215	\$ 595,215	\$ 4,767,876
2028	\$ 2,193,480	\$ -	\$ 636,654	\$ 2,830,134	\$ 730,198	\$ 730,198	\$ 3,560,332
2029	\$ 2,364,076	\$ -	\$ 668,654	\$ 3,032,730	\$ 619,716	\$ 619,716	\$ 3,652,446
2030	\$ 2,292,449	\$ 10,001,086	\$ 702,967	\$ 12,996,502	\$ 1,182,391	\$ 1,182,391	\$ 14,178,893
2031	\$ 1,559,727	\$ -	\$ 737,191	\$ 2,296,918	\$ 646,223	\$ 646,223	\$ 2,943,141
2032	\$ 1,443,829	\$ -	\$ 774,051	\$ 2,217,880	\$ 791,835	\$ 791,835	\$ 3,009,715
2033	\$ 1,722,299	\$ -	\$ 812,753	\$ 2,535,052	\$ 674,909	\$ 674,909	\$ 3,209,961
2034	\$ 2,465,009	\$ -	\$ 853,391	\$ 3,318,400	\$ 826,215	\$ 826,215	\$ 4,144,615
<b>Total</b>	<b>\$ 33,672,794</b>	<b>\$ 10,001,086</b>	<b>\$ 6,974,656</b>	<b>\$ 50,648,536</b>	<b>\$ 9,384,106</b>	<b>\$ 9,384,106</b>	<b>\$ 60,032,642</b>

### Water & Sewer Fund Projections at Current Rates

Two financial projections were made for the Water & Sewer Fund. The first projection showed the financial performance at current rates and the second projection showed the financial performance at recommended rates.

The financial projection at current rates shows the following outcomes:

- Operating expenses exceed operating revenues every year
- Ending cash is negative every year (the fund runs out of cash)
- The debt service coverage requirement is not met in any year

The financial projections at current rates are shown on the following pages.

**Water & Sewer Fund Projections at Current Rates**

	Fiscal Year 2023 Projected	Fiscal Year 2024 Est.	Fiscal Year 2025 Est.	Fiscal Year 2026 Est.	Fiscal Year 2027 Est.	Fiscal Year 2028 Est.	Fiscal Year 2029 Est.	Fiscal Year 2030 Est.	Fiscal Year 2031 Est.	Fiscal Year 2032 Est.	Fiscal Year 2033 Est.
<b>Combined Water &amp; Sewer Utility</b>											
<b>Operating Revenues</b>											
Water	\$ 4,211,964	\$ 4,511,968	\$ 4,589,695	\$ 4,636,866	\$ 4,684,265	\$ 4,731,891	\$ 4,779,745	\$ 4,827,827	\$ 4,856,980	\$ 4,886,154	\$ 4,915,348
Sewer	\$ 1,446,331	\$ 1,582,957	\$ 1,609,134	\$ 1,625,164	\$ 1,641,273	\$ 1,657,461	\$ 1,673,729	\$ 1,690,076	\$ 1,700,140	\$ 1,710,214	\$ 1,720,299
License, Permits and Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Penalties, fines and forfeitures	\$ 70,289	\$ 70,992	\$ 71,702	\$ 72,419	\$ 73,143	\$ 73,874	\$ 74,613	\$ 75,359	\$ 76,113	\$ 76,874	\$ 77,642
Other income	\$ 287,332	\$ 290,205	\$ 293,107	\$ 296,038	\$ 298,999	\$ 301,989	\$ 305,009	\$ 308,059	\$ 311,139	\$ 314,251	\$ 317,393
<b>Total Operating Revenues</b>	<b>\$ 6,015,915</b>	<b>\$ 6,456,122</b>	<b>\$ 6,563,638</b>	<b>\$ 6,630,487</b>	<b>\$ 6,697,679</b>	<b>\$ 6,765,215</b>	<b>\$ 6,833,096</b>	<b>\$ 6,901,321</b>	<b>\$ 6,944,372</b>	<b>\$ 6,987,492</b>	<b>\$ 7,030,682</b>
<b>Operating Expenditures</b>											
Administration	\$ 1,001,022	\$ 1,036,058	\$ 1,072,320	\$ 1,109,851	\$ 1,148,695	\$ 1,188,900	\$ 1,230,511	\$ 1,273,579	\$ 1,318,155	\$ 1,364,290	\$ 1,412,040
HR	\$ 61,613	\$ 63,770	\$ 66,002	\$ 68,312	\$ 70,703	\$ 73,178	\$ 75,739	\$ 78,390	\$ 81,133	\$ 83,973	\$ 86,912
Vehicle Maint	\$ 227,343	\$ 238,710	\$ 250,645	\$ 263,178	\$ 276,336	\$ 290,153	\$ 304,661	\$ 319,894	\$ 335,889	\$ 352,683	\$ 370,317
Facilities Maint	\$ 125,913	\$ 132,208	\$ 138,819	\$ 145,759	\$ 153,047	\$ 160,700	\$ 168,735	\$ 177,172	\$ 186,030	\$ 195,332	\$ 205,098
Personnel services	\$ 1,129,712	\$ 1,186,198	\$ 1,245,508	\$ 1,307,783	\$ 1,373,172	\$ 1,441,831	\$ 1,513,922	\$ 1,589,618	\$ 1,669,099	\$ 1,752,554	\$ 1,840,182
Outside services	\$ 57,900	\$ 60,795	\$ 63,834	\$ 67,026	\$ 70,378	\$ 73,896	\$ 77,591	\$ 81,471	\$ 85,544	\$ 89,822	\$ 94,313
Materials and supplies	\$ 11,657	\$ 12,240	\$ 12,852	\$ 13,495	\$ 14,169	\$ 14,878	\$ 15,622	\$ 16,403	\$ 17,223	\$ 18,084	\$ 18,988
Other expenses	\$ 57,895	\$ 60,789	\$ 63,829	\$ 67,020	\$ 70,371	\$ 73,890	\$ 77,584	\$ 81,463	\$ 85,537	\$ 89,813	\$ 94,304
Well #3	\$ 63,738	\$ 66,925	\$ 70,271	\$ 73,785	\$ 77,474	\$ 81,348	\$ 85,415	\$ 89,686	\$ 94,170	\$ 98,879	\$ 103,823
Well #4	\$ 16,956	\$ 17,804	\$ 18,694	\$ 19,629	\$ 20,610	\$ 21,641	\$ 22,723	\$ 23,859	\$ 25,052	\$ 26,304	\$ 27,620
Well #5	\$ 24,010	\$ 25,211	\$ 26,471	\$ 27,795	\$ 29,184	\$ 30,644	\$ 32,176	\$ 33,785	\$ 35,474	\$ 37,248	\$ 39,110
Well #6	\$ 21,335	\$ 22,402	\$ 23,522	\$ 24,698	\$ 25,933	\$ 27,230	\$ 28,591	\$ 30,021	\$ 31,522	\$ 33,098	\$ 34,753
Utilities	\$ 403,408	\$ 423,578	\$ 444,757	\$ 466,995	\$ 490,345	\$ 514,862	\$ 540,605	\$ 567,635	\$ 596,017	\$ 625,818	\$ 657,109
Other expenses	\$ 1,928,460	\$ 1,947,744	\$ 1,967,222	\$ 1,986,894	\$ 2,006,763	\$ 2,026,830	\$ 2,047,099	\$ 2,067,570	\$ 2,088,245	\$ 2,109,128	\$ 2,130,219
<b>Total Operations</b>	<b>\$ 5,130,961</b>	<b>\$ 5,294,431</b>	<b>\$ 5,464,745</b>	<b>\$ 5,642,219</b>	<b>\$ 5,827,182</b>	<b>\$ 6,019,979</b>	<b>\$ 6,220,974</b>	<b>\$ 6,430,545</b>	<b>\$ 6,649,090</b>	<b>\$ 6,877,025</b>	<b>\$ 7,114,788</b>
Depreciation-Existing	\$ 1,250,000	\$ 1,208,333	\$ 1,168,055	\$ 1,129,120	\$ 1,091,483	\$ 1,055,100	\$ 1,019,930	\$ 985,932	\$ 953,068	\$ 921,299	\$ 890,589
<b>Total Operating Expenses</b>	<b>\$ 6,380,961</b>	<b>\$ 6,718,475</b>	<b>\$ 7,052,611</b>	<b>\$ 7,408,366</b>	<b>\$ 7,742,462</b>	<b>\$ 8,084,130</b>	<b>\$ 8,405,993</b>	<b>\$ 8,762,132</b>	<b>\$ 9,574,366</b>	<b>\$ 9,849,223</b>	<b>\$ 10,143,419</b>
<b>Operating Income (Loss)</b>	<b>\$ (365,045)</b>	<b>\$ (552,558)</b>	<b>\$ (782,081)</b>	<b>\$ (1,073,918)</b>	<b>\$ (1,343,781)</b>	<b>\$ (1,620,904)</b>	<b>\$ (1,877,906)</b>	<b>\$ (2,168,871)</b>	<b>\$ (2,941,134)</b>	<b>\$ (3,175,982)</b>	<b>\$ (3,430,129)</b>
<b>Nonoperating revenues (expenses)</b>											
Interest income	\$ 233,049	\$ 91,727	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Expense - existing debt	\$ (661,586)	\$ (657,008)	\$ (615,513)	\$ (573,638)	\$ (523,800)	\$ (467,600)	\$ (409,250)	\$ (348,200)	\$ (285,250)	\$ (219,800)	\$ (201,000)
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total nonoperating revenues (expenses)</b>	<b>\$ (428,537)</b>	<b>\$ (565,281)</b>	<b>\$ (615,513)</b>	<b>\$ (586,491)</b>	<b>\$ (549,890)</b>	<b>\$ (506,257)</b>	<b>\$ (460,580)</b>	<b>\$ (412,311)</b>	<b>\$ (812,307)</b>	<b>\$ (745,479)</b>	<b>\$ (724,737)</b>
<b>Transfers In</b>	<b>\$ 6,684</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Transfers Out</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Changes in Net Position</b>	<b>\$ (786,899)</b>	<b>\$ (1,117,839)</b>	<b>\$ (1,397,594)</b>	<b>\$ (1,660,409)</b>	<b>\$ (1,893,672)</b>	<b>\$ (2,127,160)</b>	<b>\$ (2,338,486)</b>	<b>\$ (2,581,181)</b>	<b>\$ (3,753,441)</b>	<b>\$ (3,921,461)</b>	<b>\$ (4,154,867)</b>



**Water & Sewer Fund Projections at Current Rates (continued)**

	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Combined Water & Sewer Utility	Projected	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.
<b>Cash Position</b>											
<b>Beginning Cash</b>	\$ 11,652,427	\$ 4,586,348	\$ (2,080,447)	\$ (6,235,775)	\$ (10,570,964)	\$ (16,233,727)	\$ (20,823,825)	\$ (25,661,701)	\$ (31,165,858)	\$ (36,394,629)	\$ (40,656,770)
Net Income	\$ (786,899)	\$ (1,117,839)	\$ (1,397,594)	\$ (1,660,409)	\$ (1,893,672)	\$ (2,127,160)	\$ (2,338,486)	\$ (2,581,181)	\$ (3,753,441)	\$ (3,921,461)	\$ (4,154,867)
Add-back Depreciation	\$ 1,250,000	\$ 1,424,044	\$ 1,587,866	\$ 1,766,147	\$ 1,915,280	\$ 2,064,151	\$ 2,185,019	\$ 2,331,587	\$ 2,925,276	\$ 2,972,198	\$ 3,028,631
Acquisition and Construction of Assets	\$ (6,119,180)	\$ (5,558,000)	\$ (3,466,859)	\$ (3,594,243)	\$ (4,767,876)	\$ (3,560,332)	\$ (3,652,446)	\$ (14,178,893)	\$ (2,943,141)	\$ (3,009,715)	\$ (3,209,961)
Proceeds from Long-term Debt/Loans	\$ -	\$ -	\$ 571,259	\$ 611,247	\$ 606,489	\$ 636,654	\$ 668,654	\$ 10,704,053	\$ 737,191	\$ 774,051	\$ 812,753
Principal Pmts on Existing Long-term Debt	\$ (1,410,000)	\$ (1,415,000)	\$ (1,450,000)	\$ (1,435,000)	\$ (1,475,000)	\$ (1,530,000)	\$ (1,600,000)	\$ (1,650,000)	\$ (1,715,000)	\$ (550,000)	\$ (565,000)
<b>Ending Cash</b>	<b>\$ 4,586,348</b>	<b>\$ (2,080,447)</b>	<b>\$ (6,235,775)</b>	<b>\$ (10,570,964)</b>	<b>\$ (16,233,727)</b>	<b>\$ (20,823,825)</b>	<b>\$ (25,661,701)</b>	<b>\$ (31,165,858)</b>	<b>\$ (36,394,629)</b>	<b>\$ (40,656,770)</b>	<b>\$ (45,322,858)</b>
<b>Minimum Cash Requirements</b>											
For operations (3 months)	\$ 1,595,240	\$ 1,679,619	\$ 1,763,153	\$ 1,852,092	\$ 1,935,615	\$ 2,021,033	\$ 2,101,498	\$ 2,190,533	\$ 2,393,592	\$ 2,462,306	\$ 2,535,855
For debt service (100.00%)	\$ 2,072,008	\$ 2,065,513	\$ 2,044,423	\$ 2,072,875	\$ 2,109,666	\$ 2,161,198	\$ 2,192,034	\$ 3,006,964	\$ 1,822,693	\$ 1,867,381	\$ 1,918,994
Capital reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Minimum Cash</b>	<b>\$ 3,667,248</b>	<b>\$ 3,745,132</b>	<b>\$ 3,807,576</b>	<b>\$ 3,924,966</b>	<b>\$ 4,045,282</b>	<b>\$ 4,182,230</b>	<b>\$ 4,293,532</b>	<b>\$ 5,197,497</b>	<b>\$ 4,216,285</b>	<b>\$ 4,329,687</b>	<b>\$ 4,454,848</b>
<b>Amount Over (Under) Minimum</b>	<b>\$ 919,100</b>	<b>\$ (5,825,579)</b>	<b>\$ (10,043,351)</b>	<b>\$ (14,495,931)</b>	<b>\$ (20,279,009)</b>	<b>\$ (25,006,055)</b>	<b>\$ (29,955,233)</b>	<b>\$ (36,363,355)</b>	<b>\$ (40,610,914)</b>	<b>\$ (44,986,457)</b>	<b>\$ (49,777,706)</b>
<b>Debt Coverage Ratio</b>	0.43	0.56	0.53	0.48	0.42	0.35	0.28	0.21	0.10	0.06	(0.05)

### Water & Sewer Fund Projection at Recommended Rates

The financial projections for the Water & Sewer Fund showed rate increases are needed in FY 2024 and beyond to adequately fund the utility. The revenue needed from user fees would need to increase from approximately \$5.40 million projected for FY 2023 to \$9.55 million in FY 2024 and to \$10.35 million in FY 2025. These increases are primarily needed to fund the Village’s capital improvement program. Discussions with Village staff on options to minimize the rate increases resulted in a recommendation for the Village to transfer funds into the Water & Sewer Fund in both FY 2024 and FY 2025. The recommended transfers included \$1.6 million from the Village’s Infrastructure Fund and \$820,000 from A.R.P.A. funds. The transfer in from the Infrastructure Fund was recommended because most of the rate increases are needed to fund necessary capital improvements. The revenue required and the recommended transfers are shown in the table below.

	Fiscal Year	Fiscal Year	Fiscal Year
	2023	2024	2025
	Projected	Est.	Est.
<b>Revenue Required from user fees</b>	\$ 5,399,432	\$ 9,545,203	\$ 10,350,656
<b>Transfers In</b>			
ARPA Funds		\$ 820,000	
Infrastructure Fund		\$ 1,000,000	\$ 600,000
Other	\$ 6,684	\$ -	\$ -
<b>Total Transfers In</b>	<b>\$ 6,684</b>	<b>\$ 1,820,000</b>	<b>\$ 600,000</b>

The financial projections showed that no rate increases will be needed for the remainder of the planning period which includes FY 2026 to FY 2033.

The recommended rate increases will provide sufficient revenues for the Water & Sewer Fund to have at least ninety days of operating cash plus an amount needed to meet the bond debt service covenants including debt service coverage over the planning period. Operating income is positive each year. The ending cash balance is projected to decline from \$4,586,348 in FY 2023 (projected) to \$3,786,333 at the end of FY 2024. From that point through the end of the planning period ending cash is projected to vary from a minimum of \$4,954,672 in FY 2027 to a maximum of \$6,833,495 at the end of the planning period in FY 2033. The fluctuations in ending cash are driven by the annual capital outlay amounts. The financial projection is shown on the following pages.

**Water & Sewer Fund Projection at Recommended Rates**

Combined Water & Sewer Utility	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
	2023 Projected	2024 Est.	2025 Est.	2026 Est.	2027 Est.	2028 Est.	2029 Est.	2030 Est.	2031 Est.	2032 Est.	2033 Est.
<b>Operating Revenues</b>											
Water	\$ 4,211,964	\$ 7,511,328	\$ 8,117,854	\$ 8,202,657	\$ 8,287,861	\$ 8,373,466	\$ 8,459,471	\$ 8,545,877	\$ 8,597,594	\$ 8,649,332	\$ 8,701,089
Sewer	\$ 1,446,331	\$ 2,579,263	\$ 2,781,092	\$ 2,809,623	\$ 2,838,290	\$ 2,867,094	\$ 2,896,035	\$ 2,925,112	\$ 2,942,671	\$ 2,960,240	\$ 2,977,819
Penalties, fines and forfeitures	\$ 70,289	\$ 122,106	\$ 131,343	\$ 132,656	\$ 133,983	\$ 135,323	\$ 136,676	\$ 138,043	\$ 139,423	\$ 140,817	\$ 142,225
Other income	\$ 287,332	\$ 290,205	\$ 293,107	\$ 296,038	\$ 298,999	\$ 301,989	\$ 305,009	\$ 308,059	\$ 311,139	\$ 314,251	\$ 317,393
<b>Total Operating Revenues</b>	<b>\$ 6,015,915</b>	<b>\$ 10,502,902</b>	<b>\$ 11,323,397</b>	<b>\$ 11,440,975</b>	<b>\$ 11,559,133</b>	<b>\$ 11,677,871</b>	<b>\$ 11,797,190</b>	<b>\$ 11,917,091</b>	<b>\$ 11,990,827</b>	<b>\$ 12,064,639</b>	<b>\$ 12,138,527</b>
<b>Operating Expenditures</b>											
Administration	\$ 1,001,022	\$ 1,036,058	\$ 1,072,320	\$ 1,109,851	\$ 1,148,695	\$ 1,188,900	\$ 1,230,511	\$ 1,273,579	\$ 1,318,155	\$ 1,364,290	\$ 1,412,040
HR	\$ 61,613	\$ 63,770	\$ 66,002	\$ 68,312	\$ 70,703	\$ 73,178	\$ 75,739	\$ 78,390	\$ 81,133	\$ 83,973	\$ 86,912
Vehicle Maint	\$ 227,343	\$ 238,710	\$ 250,645	\$ 263,178	\$ 276,336	\$ 290,153	\$ 304,661	\$ 319,894	\$ 335,889	\$ 352,683	\$ 370,317
Facilities Maint	\$ 125,913	\$ 132,208	\$ 138,819	\$ 145,759	\$ 153,047	\$ 160,700	\$ 168,735	\$ 177,172	\$ 186,030	\$ 195,332	\$ 205,098
Personnel services	\$ 1,129,712	\$ 1,186,198	\$ 1,245,508	\$ 1,307,783	\$ 1,373,172	\$ 1,441,831	\$ 1,513,922	\$ 1,589,618	\$ 1,669,099	\$ 1,752,554	\$ 1,840,182
Outside services	\$ 57,900	\$ 60,795	\$ 63,834	\$ 67,026	\$ 70,378	\$ 73,896	\$ 77,591	\$ 81,471	\$ 85,544	\$ 89,822	\$ 94,313
Materials and supplies	\$ 11,657	\$ 12,240	\$ 12,852	\$ 13,495	\$ 14,169	\$ 14,878	\$ 15,622	\$ 16,403	\$ 17,223	\$ 18,084	\$ 18,988
Other expenses	\$ 57,895	\$ 60,789	\$ 63,829	\$ 67,020	\$ 70,371	\$ 73,890	\$ 77,584	\$ 81,463	\$ 85,537	\$ 89,813	\$ 94,304
Well #3	\$ 63,738	\$ 66,925	\$ 70,271	\$ 73,785	\$ 77,474	\$ 81,348	\$ 85,415	\$ 89,686	\$ 94,170	\$ 98,879	\$ 103,823
Well #4	\$ 16,956	\$ 17,804	\$ 18,694	\$ 19,629	\$ 20,610	\$ 21,641	\$ 22,723	\$ 23,859	\$ 25,052	\$ 26,304	\$ 27,620
Well #5	\$ 24,010	\$ 25,211	\$ 26,471	\$ 27,795	\$ 29,184	\$ 30,644	\$ 32,176	\$ 33,785	\$ 35,474	\$ 37,248	\$ 39,110
Well #6	\$ 21,335	\$ 22,402	\$ 23,522	\$ 24,698	\$ 25,933	\$ 27,230	\$ 28,591	\$ 30,021	\$ 31,522	\$ 33,098	\$ 34,753
Utilities	\$ 403,408	\$ 423,578	\$ 444,757	\$ 466,995	\$ 490,345	\$ 514,862	\$ 540,605	\$ 567,635	\$ 596,017	\$ 625,818	\$ 657,109
Other expenses	\$ 1,928,460	\$ 1,947,744	\$ 1,967,222	\$ 1,986,894	\$ 2,006,763	\$ 2,026,830	\$ 2,047,099	\$ 2,067,570	\$ 2,088,245	\$ 2,109,128	\$ 2,130,219
<b>Total Operations</b>	<b>\$ 5,130,961</b>	<b>\$ 5,294,431</b>	<b>\$ 5,464,745</b>	<b>\$ 5,642,219</b>	<b>\$ 5,827,182</b>	<b>\$ 6,019,979</b>	<b>\$ 6,220,974</b>	<b>\$ 6,430,545</b>	<b>\$ 6,649,090</b>	<b>\$ 6,877,025</b>	<b>\$ 7,114,788</b>
Depreciation-Existing	\$ 1,250,000	\$ 1,208,333	\$ 1,168,055	\$ 1,129,120	\$ 1,091,483	\$ 1,055,100	\$ 1,019,930	\$ 985,932	\$ 953,068	\$ 921,299	\$ 890,589
Depreciation-New	\$ -	\$ 215,711	\$ 419,811	\$ 637,027	\$ 823,797	\$ 1,009,051	\$ 1,165,089	\$ 1,345,655	\$ 1,972,209	\$ 2,050,899	\$ 2,138,042
<b>Total Operating Expenses</b>	<b>\$ 6,380,961</b>	<b>\$ 6,718,475</b>	<b>\$ 7,052,611</b>	<b>\$ 7,408,366</b>	<b>\$ 7,742,462</b>	<b>\$ 8,084,130</b>	<b>\$ 8,405,993</b>	<b>\$ 8,762,132</b>	<b>\$ 9,574,366</b>	<b>\$ 9,849,223</b>	<b>\$ 10,143,419</b>
<b>Operating Income (Loss)</b>	<b>\$ (365,045)</b>	<b>\$ 3,494,222</b>	<b>\$ 3,977,678</b>	<b>\$ 3,736,570</b>	<b>\$ 3,517,673</b>	<b>\$ 3,291,752</b>	<b>\$ 3,086,189</b>	<b>\$ 2,846,900</b>	<b>\$ 2,105,322</b>	<b>\$ 1,901,165</b>	<b>\$ 1,677,715</b>
<b>Nonoperating revenues (expenses)</b>											
Interest income	\$ 233,049	\$ 91,727	\$ 75,727	\$ 101,330	\$ 112,862	\$ 103,448	\$ 120,347	\$ 132,481	\$ 144,916	\$ 154,397	\$ 188,396
Interest Expense - existing debt	\$ (661,586)	\$ (657,008)	\$ (615,513)	\$ (573,638)	\$ (523,800)	\$ (467,600)	\$ (409,250)	\$ (348,200)	\$ (285,250)	\$ (219,800)	\$ (201,000)
Interest Expense - new debt from CIP	\$ -	\$ -	\$ -	\$ (12,853)	\$ (26,090)	\$ (38,657)	\$ (51,330)	\$ (64,111)	\$ (527,057)	\$ (525,679)	\$ (523,737)
<b>Total nonoperating revenues (expenses)</b>	<b>\$ (428,537)</b>	<b>\$ (565,281)</b>	<b>\$ (539,786)</b>	<b>\$ (485,162)</b>	<b>\$ (437,028)</b>	<b>\$ (402,809)</b>	<b>\$ (340,233)</b>	<b>\$ (279,830)</b>	<b>\$ (667,391)</b>	<b>\$ (591,083)</b>	<b>\$ (536,341)</b>
<b>Transfers In</b>	<b>\$ 6,684</b>	<b>\$ 1,820,000</b>	<b>\$ 600,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Transfers Out</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Changes in Net Position</b>	<b>\$ (786,899)</b>	<b>\$ 4,748,941</b>	<b>\$ 4,037,891</b>	<b>\$ 3,251,409</b>	<b>\$ 3,080,644</b>	<b>\$ 2,888,943</b>	<b>\$ 2,745,956</b>	<b>\$ 2,567,070</b>	<b>\$ 1,437,931</b>	<b>\$ 1,310,083</b>	<b>\$ 1,141,374</b>

**Water & Sewer Fund Projection at Recommended Rates (continued)**

Combined Water & Sewer Utility	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Projected	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.	Est.
<b>Cash Position</b>											
<b>Beginning Cash</b>	\$ 11,652,427	\$ 4,586,348	\$ 3,786,333	\$ 5,066,491	\$ 5,643,119	\$ 4,954,672	\$ 5,380,679	\$ 5,627,244	\$ 5,271,338	\$ 5,233,939	\$ 6,203,342
Net Income	\$ (786,899)	\$ 4,748,941	\$ 4,037,891	\$ 3,251,409	\$ 3,080,644	\$ 2,888,943	\$ 2,745,956	\$ 2,567,070	\$ 1,437,931	\$ 1,310,083	\$ 1,141,374
Add-back Depreciation	\$ 1,250,000	\$ 1,424,044	\$ 1,587,866	\$ 1,766,147	\$ 1,915,280	\$ 2,064,151	\$ 2,185,019	\$ 2,331,587	\$ 2,925,276	\$ 2,972,198	\$ 3,028,631
Acquisition and Construction of Assets	\$ (6,119,180)	\$ (5,558,000)	\$ (3,466,859)	\$ (3,594,243)	\$ (4,767,876)	\$ (3,560,332)	\$ (3,652,446)	\$ (14,178,893)	\$ (2,943,141)	\$ (3,009,715)	\$ (3,209,961)
Proceeds from Long-term Debt/Loans	\$ -	\$ -	\$ 571,259	\$ 611,247	\$ 606,489	\$ 636,654	\$ 668,654	\$ 10,704,053	\$ 737,191	\$ 774,051	\$ 812,753
Principal Pmts on New Long-term Debt	\$ -	\$ -	\$ -	\$ (22,932)	\$ (47,984)	\$ (73,410)	\$ (100,618)	\$ (129,723)	\$ (479,656)	\$ (527,214)	\$ (577,644)
Principal Pmts on Existing Long-term Debt	\$ (1,410,000)	\$ (1,415,000)	\$ (1,450,000)	\$ (1,435,000)	\$ (1,475,000)	\$ (1,530,000)	\$ (1,600,000)	\$ (1,650,000)	\$ (1,715,000)	\$ (550,000)	\$ (565,000)
Adjustments to Accruals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Ending Cash</b>	<b>\$ 4,586,348</b>	<b>\$ 3,786,333</b>	<b>\$ 5,066,491</b>	<b>\$ 5,643,119</b>	<b>\$ 4,954,672</b>	<b>\$ 5,380,679</b>	<b>\$ 5,627,244</b>	<b>\$ 5,271,338</b>	<b>\$ 5,233,939</b>	<b>\$ 6,203,342</b>	<b>\$ 6,833,495</b>
<b>Minimum Cash Requirements</b>											
For operations (3 months)	\$ 1,595,240	\$ 1,679,619	\$ 1,763,153	\$ 1,852,092	\$ 1,935,615	\$ 2,021,033	\$ 2,101,498	\$ 2,190,533	\$ 2,393,592	\$ 2,462,306	\$ 2,535,855
For debt service (100.00%)	\$ 2,072,008	\$ 2,065,513	\$ 2,044,423	\$ 2,072,875	\$ 2,109,666	\$ 2,161,198	\$ 2,192,034	\$ 3,006,964	\$ 1,822,693	\$ 1,867,381	\$ 1,918,994
Capital reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Minimum Cash</b>	<b>\$ 3,667,248</b>	<b>\$ 3,745,132</b>	<b>\$ 3,807,576</b>	<b>\$ 3,924,966</b>	<b>\$ 4,045,282</b>	<b>\$ 4,182,230</b>	<b>\$ 4,293,532</b>	<b>\$ 5,197,497</b>	<b>\$ 4,216,285</b>	<b>\$ 4,329,687</b>	<b>\$ 4,454,848</b>
<b>Amount Over (Under) Minimum</b>	<b>\$ 919,100</b>	<b>\$ 41,201</b>	<b>\$ 1,258,915</b>	<b>\$ 1,718,153</b>	<b>\$ 909,391</b>	<b>\$ 1,198,448</b>	<b>\$ 1,333,712</b>	<b>\$ 73,842</b>	<b>\$ 1,017,655</b>	<b>\$ 1,873,655</b>	<b>\$ 2,378,647</b>
<b>Debt Coverage Ratio</b>	0.43	2.51	2.84	2.84	2.77	2.68	2.58	2.50	1.78	2.85	2.69

## Water and Sewer Rates

Part of our scope of services was to develop several rate structure alternatives so the Village could select the structure that best meets their needs. Three alternative rate structures were developed including:

- Rate Structure 1 – Single water and sewer rates for all users
  - Volume charge \$/1,000 gallons
  - No base fee
- Rate Structure 2 – Single water and sewer rates for all users
  - Volume charge \$/1,000 gallons
  - Base fee to cover administrative costs
- Rate Structure 3 – Combined tiered and flat rates
  - Residential tiered rate structure
    - Volume charges \$/1,000 gallons increasing with consumption
  - Non-residential single rate \$/1,000 gallons
  - Base fee to cover administrative costs

All three rate structures assumed a bimonthly billing period.

The base fee included in Rate Structure 2 and Rate Structure 3 recovers the administration and HR expenses incurred in the Water & Sewer Fund and provides a fixed revenue source not related to water consumption.

Two discounts for senior citizens were evaluated for each rate option. The first discount, Senior Discount Option A, provided a 50% discount on the base fee and on water and sewer volume charges for the first 4,000 gallons of water use bi-monthly. Regular rates applied to all consumption above 4,000 gallons of water use. The intent of Senior Discount Option A was to reduce the financial burden on senior citizens for essential water use. Essential residential water use is water used for drinking, preparing food, bathing, washing clothes and dishes, flushing your toilets, and brushing your teeth. Non-essential water use includes uses like lawn and landscape irrigation, washing your car, watering your garden, washing paved areas, filling of fountains and pools, and other similar uses. For non-residential customers, essential water use is generally considered the water they need to operate their businesses. For example, a car wash business is entirely based on water use. The cost of water typically encourages these customers to install water saving devices and systems. Taking the car wash example, capturing, filtering, and recycling the water used in the wash bays or using reclaimed water are examples of reducing water use and operating costs. Applying a tiered rate structure to non-residential customers would increase their operating expenses and for some businesses, would cause them to either close or to relocate to another community where the cost of water would be more affordable.

Senior Discount Option B provided a declining discount on both the fixed fee component and the volume fee with the discount beginning at 50% and subsequently declining by 5% each year until it reached 25%.

Rate Structure 3 - combined tiered and flat rates with Senior Option A was determined to be the best option based on the lowest impact on seniors and average residential customers and encouraging required water conservation. The recommended rates are shown below.

### Recommended Water Rates

Scenario 3A: Water Service Fees										
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>Non-Residential Bimonthly Fees</b>										
Base Fee (\$)	\$18.43	\$18.89	\$19.36	\$19.84	\$20.33	\$20.83	\$21.35	\$21.87	\$22.42	\$22.97
Water Rate (\$/1,000 gallons)	\$8.23	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80
<b>Residential Bimonthly Fees: Regular User</b>										
Base Fee (\$)	\$18.43	\$18.89	\$19.36	\$19.84	\$20.33	\$20.83	\$21.35	\$21.87	\$22.42	\$22.97
0 - 4,000 gallons (\$/1,000 gallons)	\$8.23	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80	\$8.80
4,001 - 8,000 gallons (\$/1,000 gallons)	\$10.29	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00
8,001 - 12,000 gallons (\$/1,000 gallons)	\$12.86	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75
Greater than 12,000 gallons (\$/1,000 gallons)	\$16.07	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19
<b>Residential Bimonthly Fees: Senior Citizen</b>										
Base Fee (\$)	\$9.22	\$9.44	\$9.68	\$9.92	\$10.16	\$10.42	\$10.67	\$10.94	\$11.21	\$11.49
0 - 4,000 gallons (\$/1,000 gallons)	\$4.11	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40	\$4.40
4,001 - 8,000 gallons (\$/1,000 gallons)	\$10.29	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00
8,001 - 12,000 gallons (\$/1,000 gallons)	\$12.86	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75	\$13.75
Greater than 12,000 gallons (\$/1,000 gallons)	\$16.07	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19	\$17.19

### Recommended Sewer Rates

Scenario 3A: Sewer Service Fees										
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>Non-Residential Bimonthly Fees</b>										
Base Fee (\$)	\$13.61	\$13.95	\$14.29	\$14.65	\$15.01	\$15.38	\$15.76	\$16.15	\$16.55	\$16.96
Water Rate (\$/1,000 gallons)	\$2.41	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59
<b>Residential Bimonthly Fees: Regular User</b>										
Base Fee(\$)	\$13.61	\$13.95	\$14.29	\$14.65	\$15.01	\$15.38	\$15.76	\$16.15	\$16.55	\$16.96
0 - 4,000 gallons (\$/1,000 gallons)	\$2.41	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59	\$2.59
4,001 - 8,000 gallons (\$/1,000 gallons)	\$3.01	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24
8,001 - 12,000 gallons (\$/1,000 gallons)	\$3.77	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05
Greater than 12,000 gallons (\$/1,000 gallons)	\$4.71	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07
<b>Residential Bimonthly Fees: Senior Citizen</b>										
Base Fee (\$)	\$6.81	\$6.97	\$7.15	\$7.32	\$7.51	\$7.69	\$7.88	\$8.08	\$8.28	\$8.48
0 - 4,000 gallons (\$/1,000 gallons)	\$1.20	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30	\$1.30
4,001 - 8,000 gallons (\$/1,000 gallons)	\$3.01	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24	\$3.24
8,001 - 12,000 gallons (\$/1,000 gallons)	\$3.77	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05	\$4.05
Greater than 12,000 gallons (\$/1,000 gallons)	\$4.71	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07	\$5.07

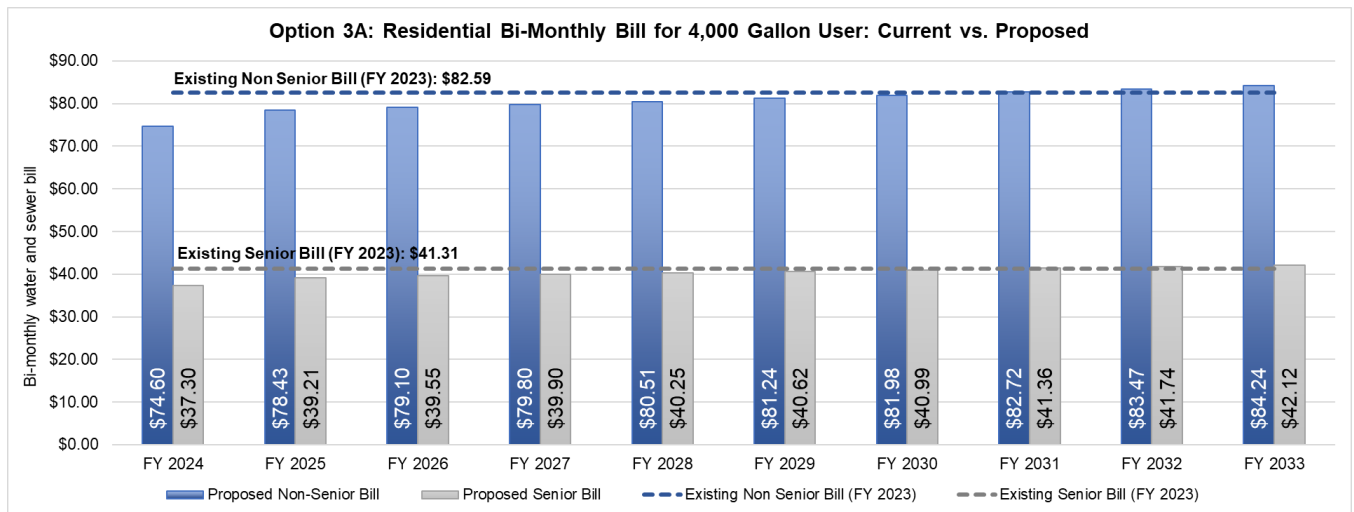
There are approximately 96 Accounts within Village which are sewer only and not metered (72 Non-Senior & 24 Senior). A flat fee is recommended to match the sewer bill for an average residential user (12,000 gallons bimonthly) with a 50% discount for senior citizens as shown on the following page.

Sewer Service Fees for Unmetered Sewer Accounts										
	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
<b>Scenario 3A</b>										
Flat Fee – Sewer Only – Regular User (\$)	\$50.36	\$53.52	\$53.87	\$54.22	\$54.58	\$54.95	\$55.33	\$55.72	\$56.12	\$56.53
Flat Fee – Sewer Only – Senior Citizen (\$)	\$25.18	\$26.76	\$26.94	\$27.11	\$27.29	\$27.48	\$27.67	\$27.86	\$28.06	\$28.27

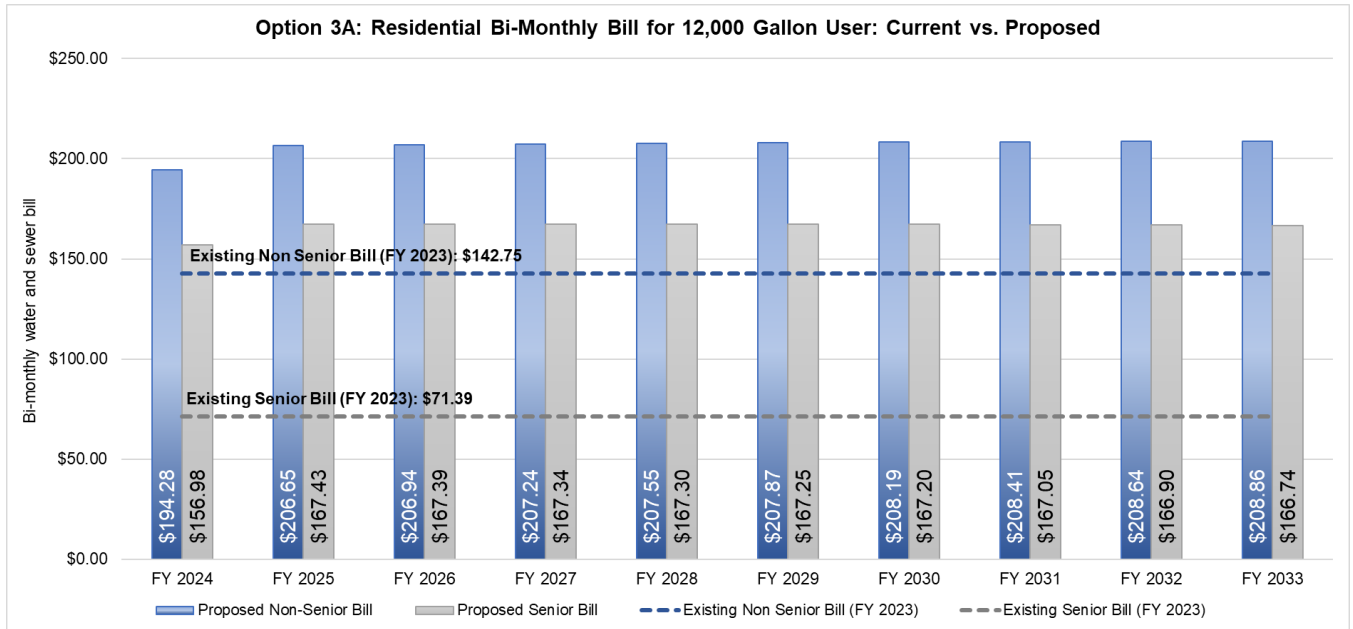
### Impact on Bi-Monthly Bills

The impact of the recommended rates on residential customers is significantly influenced by their water use as the tiered rate structure makes higher water use more costly. The intent is to encourage water conservation while not penalizing essential water use.

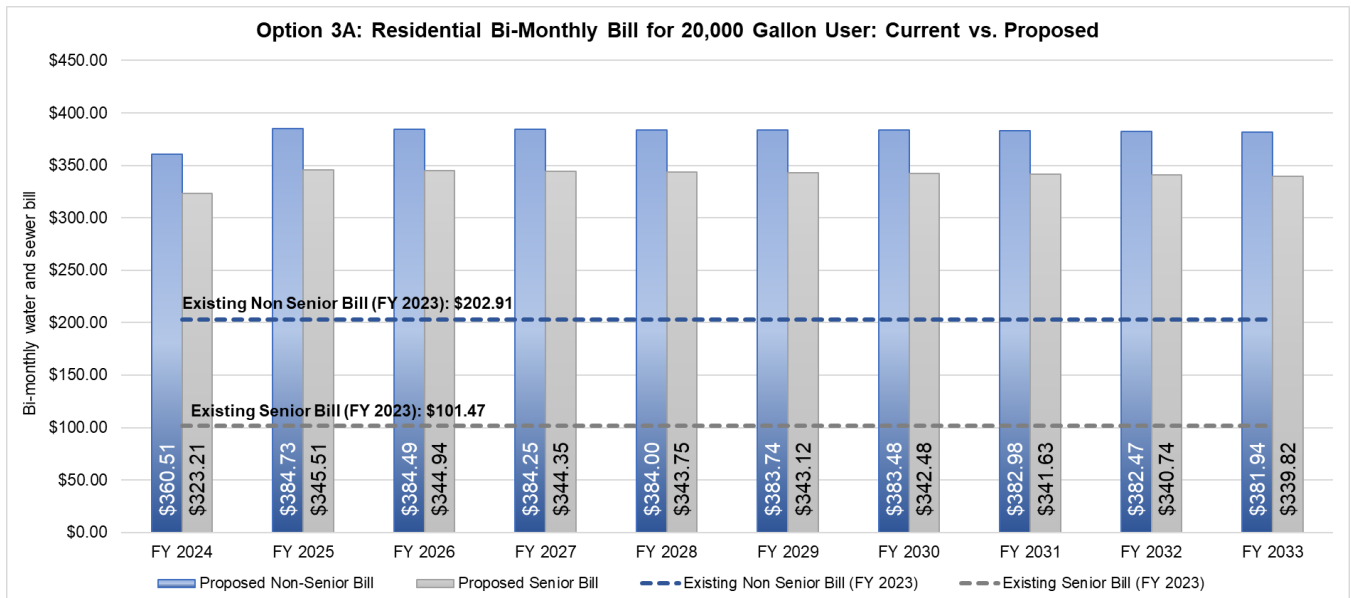
Residential customers who use less than 4,000 gallons bi-monthly would see a reduction in their bills through FY 2031 after which they would see a slight increase as shown in the chart below. Seniors would see their bi-monthly bill decrease from \$41.31 to \$37.30 in FY 2024 while non-seniors would see their bills decrease from \$82.59 to \$74.60 in FY 2024.



Residential customers who use 12,000 gallons bi-monthly would see increases in their bills as their usage over 4,000 gallons would have them billed at the higher tiers. Seniors would see their bills increase from \$71.39 currently to \$156.98 and non-seniors would see their bill increase from \$142.75 to 194.28 in FY 2024. These bills would increase slightly in FY 2025 then remain fairly stable through the planning period ending in FY 2033 as shown on the following page.



Residential customers who use 20,000 gallons bi-monthly would see their bills increase as their consumption moves into to the highest cost tier. A senior would see their bill increase from \$101.47 to \$323.71 while non-seniors would see their bill increase from \$202.91 to \$360.51 in FY 2024. These bills would increase slightly in FY 2025 then remain fairly stable through the planning period ending in FY 2033 as shown below.





### Closing

We hope this analysis proves useful to HR Green and the Village as they continue planning for the future of the Village's water and sewer operations. We believe that the rate adjustments recommended in this study will put these operations on a financially sustainable path which will assure that residents receive safe and reliable service at a reasonable cost.

These recommendations are based on information provided to us by HR Green and Village staff. The Village will need to monitor the Water & Sewer Fund and make any necessary adjustments based upon its actual performance, based upon the actual construction costs of the anticipated capital improvements, and based on any other necessary adjustments made to the capital improvement program.