

August 13, 2020
via email: nmostardo@libertyville.com

Nicholas A. Mostardo, Finance Director
Village of Libertyville
118 West Cook Avenue
Libertyville, IL 60048

Subject: Stormwater Fee Affordability Impact Evaluation

Dear Mr. Mostardo:

During the course of Phase I of our Stormwater Utility Feasibility and Rate Study we developed a report detailing the five-year projection of stormwater utility fees that would be needed to support the initial implementation of the Village's Master Stormwater Management Plan as well as estimated fees over a twenty year period based on the Village's stormwater capital improvement plan. We received feedback from the Village's elected officials about the affordability impact of the fees on the Village's customers. This is a very important issue that should be addressed when implementing any new utility fee.

We have prepared an Affordability Impact Evaluation that demonstrates the customer bill impact of the Village's customers in terms of industry standard affordability metrics. We have also benchmarked the results of this analysis to other municipalities with water, wastewater, and stormwater utilities. Our evaluation includes recommendations that the Village may consider to address customer affordability concerns.

Please contact me at ecallocchia@newgenstrategies.com or 443-951-4207 if you would like to discuss our approach and the methodologies used to develop the recommendations contained in this memorandum.

Sincerely,



Eric Callocchia
Executive Consultant
NewGen Strategies and Solutions, LLC

Background and Methodology

On July 21, 2020 NewGen Strategies and Solutions, LLC (NewGen) presented to the Village of Libertyville Board of Trustees the results of Phase I of our Stormwater Utility Feasibility and Rate Study. The recommended fee structure was a fee based both on the impervious area of each Village parcel stated as an Equivalent Residential Unit (ERU) as well as the percent of each parcel that was covered in impervious area, called an Intensity of Development Factor (IDF). The recommended fees were as follows:

Recommended Stormwater Fees – NewGen Phase I Report dated July 15, 2020

	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Fee per Parcel ERU + IDF	\$13.00	\$13.00	\$14.00	\$17.00	\$17.00

During the question and answer session of the Phase I results presentation, the impact of the proposed stormwater fees on customer affordability was raised. NewGen was asked to perform an affordability evaluation and identify the impact on customer bills of the proposed stormwater fees.

There are many ways to define whether or not a service is “affordable” for a given customer. For the purposes of this evaluation, NewGen used the US Environmental Protection Agency’s (EPA) guideline for utility service affordability based on Median Household Income (MHI):

“It is commonly inferred that EPA would consider a combined annual water and wastewater bill of less than 4.5% of MHI to be affordable (2.5% for water, plus 2.0% for wastewater services and CSO controls).”¹

Within this definition, the Village’s stormwater fee would be considered part of the wastewater / CSO controls portion of a customer’s bill.

To perform our evaluation, NewGen used income data from the United States Bureau of Labor and Statistics (BLS)² and an Affordability Assessment Tool developed by the Environmental Finance Center at the University of North Carolina, Chapel Hill. Income data as of 2018 is the most recently available BLS income data. To estimate the median residential water, wastewater, and stormwater bill, NewGen used the median bi-monthly water consumption of the Village’s residential customers (8,000 gallons) and the median residential parcel of 1.0 ERU and 1.0 IDF. The evaluation was performed using the Village’s FY 2021 water and wastewater rates and the proposed FY 2022 stormwater fee of \$13.00 per ERU and IDF. The most recently available water, wastewater, and stormwater rates and fees of comparable systems were used to benchmark the Village’s affordability metrics.

Village of Libertyville Stormwater Affordability Impact Evaluation

The following table shows the income breakdown of the Village’s population and the percent spent annually on water, wastewater, and stormwater bills.

¹ Affordability Assessment Tool for Federal Water Mandates, Copyright 2013, U.S. Conference of Mayors, American Water Works Association, and Water Environment Federation.

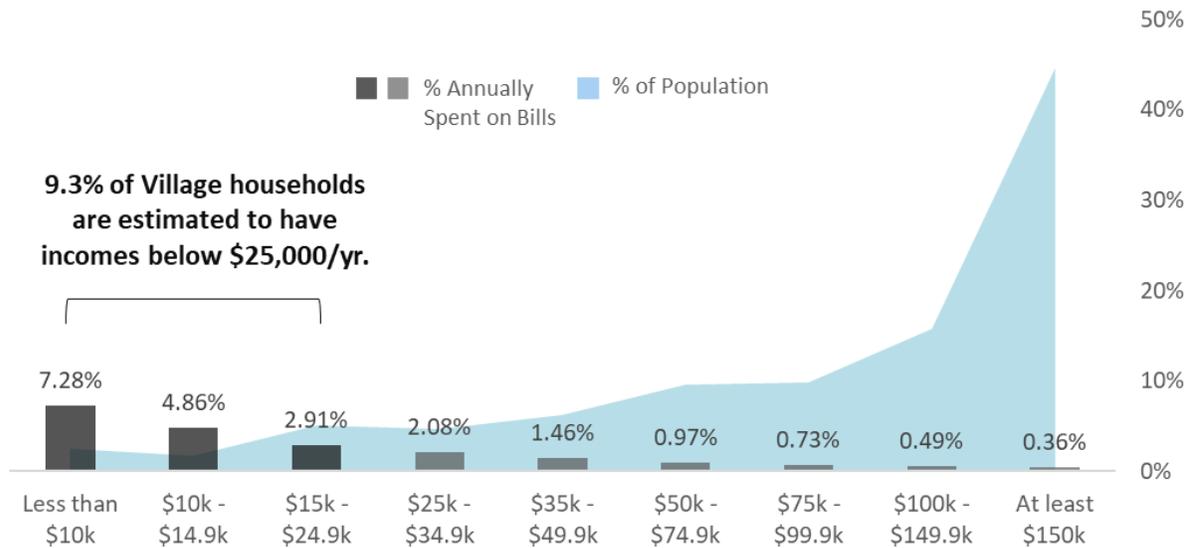
² Accessed via <https://data.census.gov/cedsci/advanced>. Reports DP03: Selected Economic Characteristics and B25118: Tenure by Household Income In The Past 12 Months for Libertyville Village, Illinois

Libertyville Water, Wastewater, and Stormwater Affordability

Income Bracket (All Households)	% of service population	Household income spent annually on water & wastewater bills	Household income spent annually on water, wastewater, & stormwater bills
Less than \$10,000	2.5%	7.28%	8.84%
\$10,000 to \$14,999	1.7%	4.86%	5.90%
\$15,000 to \$24,999	5.1%	2.91%	3.54%
\$25,000 to \$34,999	4.7%	2.08%	2.53%
\$35,000 to \$49,999	6.2%	1.46%	1.77%
\$50,000 to \$74,999	9.6%	0.97%	1.18%
\$75,000 to \$99,999	9.8%	0.73%	0.88%
\$100,000 to \$149,999	15.8%	0.49%	0.59%
\$150,000 or more	44.6%	0.36%	0.44%

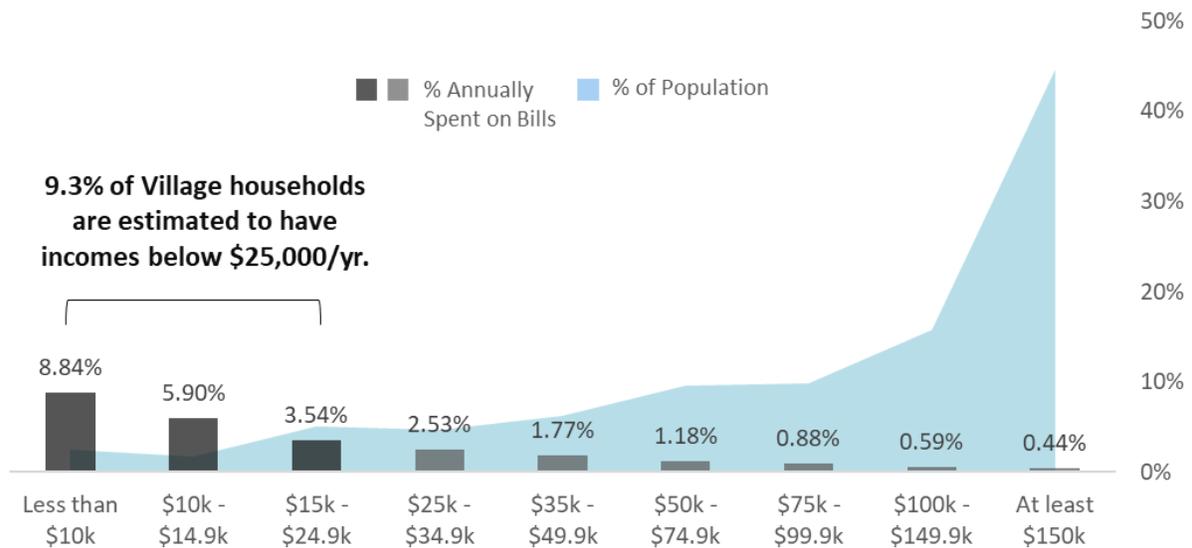
There are several assumptions made to produce the above table. First, it is assumed that the service population’s income distribution is the same as the Village’s income distribution. Second, each customer is assumed to use the median water usage of 8,000 gallons bi-monthly and is assumed to have a property with 1.0 ERU and 1.0 IDF. The chart below shows the relative affordability of the Village’s current water and wastewater rates.

Affordability of Current Water and Sewer Bills



The following chart shows the impact of adding the recommended stormwater fee of \$13.00 per ERU and IDF.

Affordability of Water, Sewer and Stormwater Bills



The addition of the FY 2022 stormwater fee does have an impact on the cost of utility service throughout the Village, however no additional customers are made to exceed the US EPA guideline of 4.5% of household income. Therefore, the implementation of the stormwater fee would not change the overall affordability profile within the Village.

Regional Benchmarking

The affordability metric of 4.5% of MHI can be used to compare the cost burden of water, wastewater, and stormwater service between jurisdictions. Below is a summary table showing the percentage of households in each benchmark jurisdiction that meet or exceed the 4.5% MHI cost burden. In each case, the most recent water, wastewater, and stormwater rates and fees were used to calculate the median residential bill in each municipality, assuming 4,000 gallons of monthly water usage and a residential parcel with 3,800 square feet of impervious area, which is the Village of Libertyville ERU.

Regional Water, Wastewater, and Stormwater Affordability	
Municipality	% of households spending >4.5% household income on water, wastewater, and stormwater bills
Mundelein	3.0%
Highland Park	4.1%
Libertyville	4.2%
Winnetka	5.1%
Downers Grove	7.4%
Rolling Meadows	10.6%
Champaign	28.9%

The Village's water, wastewater, and stormwater fees would remain relatively affordable for a vast majority of the Village's households.

Findings and Recommendations

The affordability evaluation resulted in the following findings:

- At the Village's current water and wastewater rates, about 4.2% of households in the Village pay more than 4.5% of household income on water and wastewater service.
- The implementation of the recommended stormwater fee would not increase the number of households in the Libertyville that exceed the US EPA guideline of spending 4.5% of household income on water, wastewater, and stormwater utility service.
- Relative to similar regional municipal utilities, the Village of Libertyville's water, wastewater, and stormwater rates and fees remain affordable for most households.

To address the affordability of the additional stormwater fee burden on the 4.2% of households in Libertyville that exceed the US EPA guideline of spending 4.5% of household income on water, wastewater, and stormwater bills, NewGen recommends that the Village investigate existing Village, County, or state programs that help low income households pay for utility service. In general, NewGen does not recommend developing and implementing a stand-alone programs or stormwater fee structures that directly reduce fees for low income households. The administrative burden of verifying household income and tracking changes in income to maintain compliance with such a program would be difficult. Also, any reduction in stormwater fee revenue would need to be addressed by either delaying the Village's planned implementation of its Master Stormwater Management Plan, reducing the level of protection of the projects in the Village's stormwater capital plan, or increasing fees for all other stormwater customers.

Instead, the Village should make an effort to advertise any existing services that already provide support to low income households so that they can get the assistance they need to pay water, wastewater, and stormwater bills while also allowing the Village to fully fund its Master Stormwater Management Plan.