

2025 Recommended Budget

Livingston County Water
& Sewer Authority

September 18, 2024



The Bottom Line

- ▶ **Impact for Average Customer**
 - ❖ Average Water & Sewer customer - \$21.50/qtr. Increase

- ▶ **Increase in Costs**
 - ❖ Long-term Capital Costs
 - ❖ Health Insurance
 - ❖ Inflation
 - ❖ Utility Costs

- ▶ **Rate Structure Adjustments**
 - ❖ Operational and capital charge increases
 - ❖ Consolidation of rate structures

- ▶ **Continued Capital Investment**
 - ❖ Supports continued operations and **\$37,800,000** of water & sewer capital improvements between 2019-2030.

Regulatory Updates

- NYS DEC Consent Order R8-20180803-83
 - Last monitoring report February 2024

- EPA Administrative Order SDWA-02-2019-8032
 - ❖ Chlorine improvements (Operational 12/31/2022)
 - ❖ TTHM removal improvements (Spring 2024)

- Groveland Station WWTP – SPDES Permit (NY0247227)
 - ❖ UV Treatment on hold; Notice of Violation issued September 2024; Groveland Correctional WWTF determination pending.

2024 Grant/Loan Updates

- ▶ **\$100,000 Grant** – Camp Run Analysis: *DEC/EFC Wastewater Infrastructure Eng. Planning Grant Program*
- ▶ **\$700,000 Grant** – Cyber Security Improvement Grant: *Congressional Member Item*
- ▶ **\$3M Grant/\$5.5M Loan** - Countywide Water System Improvements (*Project No.:18746*)
- ▶ **\$3.75M Grant/\$5M Loan** - Conesus Lake Pump Station Improvements (*C8-6449-06-00*) – Received additional \$2.5M BIL Funding and interest free long-term financing.

New Grants

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New Grants

- Consolidated Funding Applications
 1. Climate Smart Communities – \$150,000
 - ✓ Leakage Initiative to mitigate loss water (\$150,000 local match)
 2. LGE Program – L/Y Regional Water Project - \$1,000,000

- WIIA/IMG Application
 1. IMG - \$35,800,000 – *L/Y Regional Water Project*
 2. WIIA - \$5,590,000 – *Lakeville Outbound PS Improvements*
 3. WIIA - \$1,640,000 – *Leicester/Mt. Morris Outbound PS Improvements*

- 2024 County Shared Services Plan

- ~~EPA Climate Pollution Reduction Grant~~

Other Updates

- **Lakeville WWTP Improvements: Chemical Feed Building**
 - ❖ Operational May 2024.

- **County Wide Water Improvements Project: THM Removal**
 - ❖ 7 Chlorine analyzers and pumps installed.
 - ❖ THM removal system install at Airport Tank.

- **2024 Bond : Sewer Collection Improvements**
 - ❖ 6,000 lf of sewer lining around Conesus Lake.
 - ❖ 59 manholes lined.
 - ❖ 60 manhole frames and covers replaced.
 - ❖ Variety of sewer valves and new sludge pump replaced.

- **11W Sewer Lift Station SCADA improvements implemented**

- **Geographic Information System (GIS)**
 - Over 32,800 assets have been mapped.

An aerial photograph of a large, circular wastewater treatment tank. The tank is filled with dark water and has a complex network of metal walkways and railings around its perimeter and across the water. The surrounding area is grassy. In the top right corner, there is a green rectangular box containing the number 7.

Proposed Water & Sewer Rate

Factors Driving Operating Expenditures

□ Health Insurance/Personnel Costs

- ❖ Active health insurance costs have increased 11% , \$69,000.
- ❖ Additional WWTP operator position - \$80,000 (w/benefits).
- ❖ Succession overlap.
 - Asst. Director of Ops. - \$120,000 (w/benefits).
- ❖ Retirement/Pension – Employer contributions have increased 28%, or \$44,000.

□ Utilities

- ❖ Electricity costs have increased 17%, or \$50,000.
- ❖ Wholesale water has increased 4%, or \$46,000.

□ Liability Insurance Coverage

- ❖ Insurance coverage has increased \$13,000, or 10%

□ General Inflation

- ❖ ¾" water meter: \$130 (2016) vs \$380 (2024) = 192% increase

Current Water Sources & Rates

➤ City of Rochester – Hemlock Lake Source

- ❑ 1988 Town of Livonia water supply agreement --- currently \$.78/1,000 gals. Agreement terminates in 2028.
- ❑ Outside Town of Livonia with Hemlock source --- currently \$1.25/1,000 gals.
- ❑ City increased the Consolidated Hemlock source by \$.07.
- ❑ Livonia (V) Lease water rate structure is limited to 4% increase per year ending 2028.

➤ Non-Hemlock Lake Source

- ❑ Currently there are 3 different water rates for non-Hemlock water supply service areas.
- ❑ Makes up 11% of LCWSA water customer base - Lima (TL), Caledonia #1 (WC), Caledonia #3 (WA), South Avon (WB), Town of Leicester (TLe & Rt. 36)
- ❑ Leicester (T) Lease water rate structure is limited to 4% increase per year ending 2028.

Proposed Water Rates

% of units		Current		Proposed	
72%	Consolidated	\$40.00/Unit	\$3.95/1,000 gals.	\$40.00/Unit	\$4.25/1,000 gals.
15%	Livonia (V)	\$38.50/Unit	\$3.59/1,000 gals.	\$40.00/Unit	\$3.75/1,000 gals.
5%	WB, WA	\$40.00/Unit	\$6.55/1,000 gals.	\$40.00/Unit	\$5.25/1,000 gals.
2%	WC, TL	\$40.00/Unit	\$5.25/1,000 gals.		
6%	TLe (Rt. 36)	\$37.00/Unit	\$6.25/1,000 gals.		
	TLe	\$37.00/Unit	\$5.25/1,000 gals.		

Proposed rate increases equals about a 4.5% (~\$4.50/qtr.) increase for 90% of customers.

Sewer Rates

% of units		Current		Proposed	
91%	SL, SA	\$86/Unit	\$6.14/1,000 gals.	\$90/Unit	\$6.15/1,000 gals.
6%	SD, SM	\$100/Unit	\$7.14/1,000 gals.	\$105/Unit	\$7.15/1,000 gals.
3%	Sewer Only	\$100/Unit		\$115/Unit	
		14,000 gals./Unit allowance		13,000 gals./Unit allowance	

Proposed rate increases equals approximately a 11% (~\$11/qtr.) increase for 90% of customers.

2025 Vehicle/Equipment

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<u>Equipment/Vehicle</u>	<u>Est. Cost</u>	<u>Funding Source</u>
Replace/Upgrade Mini-excavator	\$60,000	Trade-in Credit/Reserve Funds
Zero-Turn Mower	\$12,000	Operating Budget
Headworks & Heat Exchanger SCADA	\$75,000	Reserve Funds

2025 Planning Initiatives

<u>Project</u>	<u>Est. Cost</u>	<u>Funding Source</u>	<u>Timeline</u>
Space Needs Assessment	\$25,000	<i>Reserve Fund</i>	Oct. 2023 – October 2024
NYS DEC Asset Management Program	NYSDEC	<i>NYS DEC</i>	May 2023 – Dec. 2024
Camp Run Analysis	\$120,000	<i>\$100,000 – EFC Grant \$20,000 – Local Share; workforce</i>	August 2024 – May. 2025

Capital Charges

Factors Driving Capital Expenditures

► Sewer Capital

- ❖ Lakeville WWTP is over 40 years old.
- ❖ 26 Conesus Lake Pump Stations are over 50 years old.
- ❖ SCADA and communication system is antiquated, with inconsistent updates over the past 20-25 years.
- ❖ 19 Outbound sewer pump stations are approaching end of life.
- ❖ Sewer collection system is complex and requires a lot of operational and capital investment to maintain.
- ❖ Recent and future capital investments require long-term financing.

► Water Capital

- ❖ 13 water storage tanks, 25 PRVs and 4 booster pump stations spread out over 130 miles of pipe requires significant investment to maintain and operate.
- ❖ Complex water systems require more frequent capital investment to keep updated and functional.
- ❖ Current \$8.5M of upgrades (2021-2025) requires long-term financing.

Proposed Water/Sewer Capital Charges

➤ **Sewer Capital Charge**

- ❖ Supports debt for prior and current Lakeville WWTP Improvements, upcoming Conesus Lake Pump Station Improvements and contributes to Capital Reserve.
- ❖ Supports \$19M of upgrades (2019-2025).
- ❖ Introduces a capital charge for SM and SA customers for future capital projects for Outbound Pump Station Improvements.

➤ **Water Capital Charge**

- ❖ Supports debt for County Wide Water Improvement Project and contributes to Capital Reserve.
- ❖ Supports \$8.5M of upgrades (2021-2025).
- ❖ Anticipates \$2.5M water line replacement project in 2030.

Proposed Water/Sewer Capital Charges

Water (per quarter)

	Current		Proposed	
WR	\$9/Unit	\$.25/1,000 gals.	\$9/Unit	\$.35/1,000 gals.
TL, WC, WA, WB	\$9/Unit	\$.25/1,000 gals.	\$9/Unit	\$.35/1,000 gals.

Sewer (per quarter)

	Current		Proposed	
SL	\$24.75/Unit	\$.75/1,000 gals.	\$26.25/Unit	\$1.00/1,000 gals.
SL91	\$22.25/Unit	\$.75/1,000 gals.	\$25.00/Unit	\$1.00/1,000 gals.
SM/SA	\$0	\$0	\$0	\$.25/1,000 gals.
Sewer Only	\$25/Unit		\$30/Unit	

Sewer Capital Projects

Sewer Debt & Capital Charges											
Existing/Future Debt	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2009 EFC Bond - Lakeville Sewer (C8-6449-04-00)	\$ 112,198	\$ 111,335	\$ 115,288	\$ 114,285	\$ 118,314	\$ 117,262	\$ 121,372	\$ 120,242	\$ 119,041	\$ 123,098	\$ 122,054
2012 EFC Bond - Lakeville Sewer (C8-6449-04-01)	\$ 52,735	\$ 51,933	\$ 54,189	\$ 55,721	\$ 54,697	\$ 53,967	\$ 53,487	\$ 52,986	\$ 57,132	\$ 55,867	\$ 54,769
2019 EFC Bond - Lakeville WWTP (C8-6449-05-00)	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080	\$ 255,080
2024 Bond Collection System Impr.	\$ 69,108	\$ 121,213	\$ 119,250	\$ 121,250	\$ 118,000	\$ 119,750	\$ 121,250	\$ 117,500	\$ 118,750	\$ 119,750	\$ 120,500
Conesus Lake PS Imprv. (Est.)	\$ -	\$ 70,000	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667	\$ 166,667
Lakeville Outbound PS Imprv. (Est.)	\$ -	\$ -	\$ -	\$ -	\$ 93,167	\$ 93,167	\$ 93,167	\$ 93,167	\$ 93,167	\$ 93,167	\$ 93,167
Leicester/Mt. Morris Outbound PS Imprv. (Est.)	\$ -	\$ -	\$ -	\$ -	\$ 27,333	\$ 27,333	\$ 27,333	\$ 27,333	\$ 27,333	\$ 27,333	\$ 27,333
Total Sewer Debt	\$ 489,120	\$ 609,561	\$ 710,473	\$ 713,003	\$ 833,258	\$ 833,225	\$ 838,356	\$ 832,975	\$ 837,170	\$ 840,961	\$ 839,569
Capital Charge											
SL Capital Charge/Yr.	\$ 99.00	\$ 105.00	\$ 110.00	\$ 114.00	\$ 118.00	\$ 122.00	\$ 126.00	\$ 126.00	\$ 126.00	\$ 126.00	\$ 126.00
SL Capital Volume Charge/ 1,000 gals.	\$ 0.75	\$ 1.00	\$ 1.25	\$ 1.50	\$ 1.75	\$ 2.00	\$ 2.25	\$ 2.50	\$ 2.50	\$ 2.50	\$ 2.50
SM Capital Charge/Yr.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SA Capital Charge/Yr.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
SM/SA Capital Volume Charge/ 1,000 gals.	\$ -	\$ 0.25	\$ 0.50	\$ 1.00	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.25

SL – Lakeville System
 SM – Leicester/Mt. Morris System
 SA – Avon System

Sewer Capital Investments

(Long-term Financing)

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2009 Bond Installment - \$2,184,000

- ✓ Provided pump station upgrades, digester improvements, grit collector replacement, Consent Order Improvements.

2012 Bond Installment - \$1,323,000

- ✓ Provided trickling filter improvements, clarifier upgrades and influent structure improvements.

2019 Bond Installment - \$7,700,000

- ✓ Added bio-tower treatment, additional secondary clarifier upgrades, UV treatment, other major treatment upgrades and pump improvements.

2024 Bond Installment - \$1,150,000

- ✓ Provided sewer collection system improvements, manhole lining, and upgrades, valve and pump replacement added chemical feed building.

2026 Bond (est.) - \$5,000,000

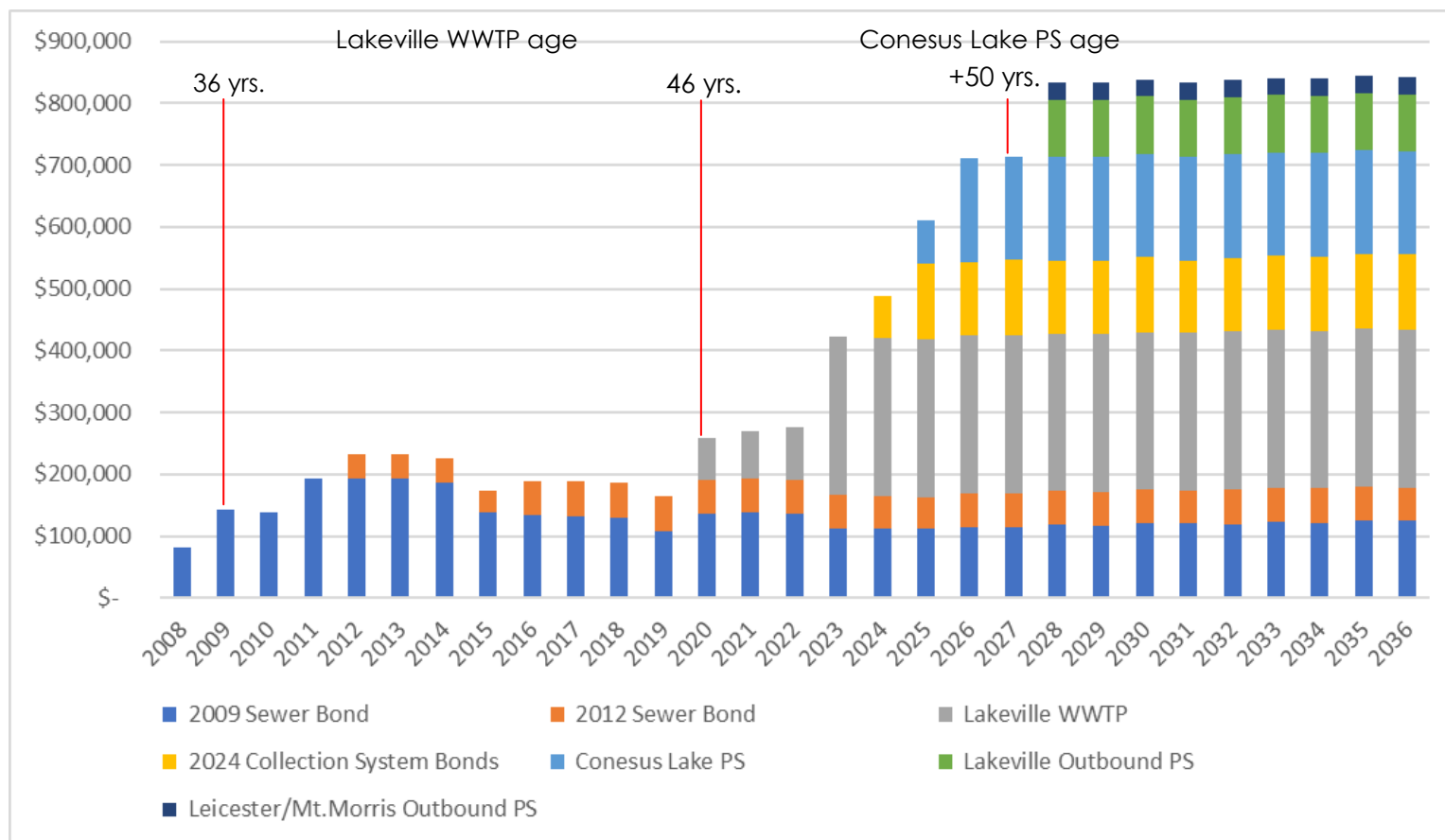
- ✓ Replace and upgrade 26 pump stations and SCADA system.

2028 Bond (est.) - \$3,615,000

- ✓ Replace and upgrade 19 outbound pump stations and SCADA system.

Sewer Improvements & Debt

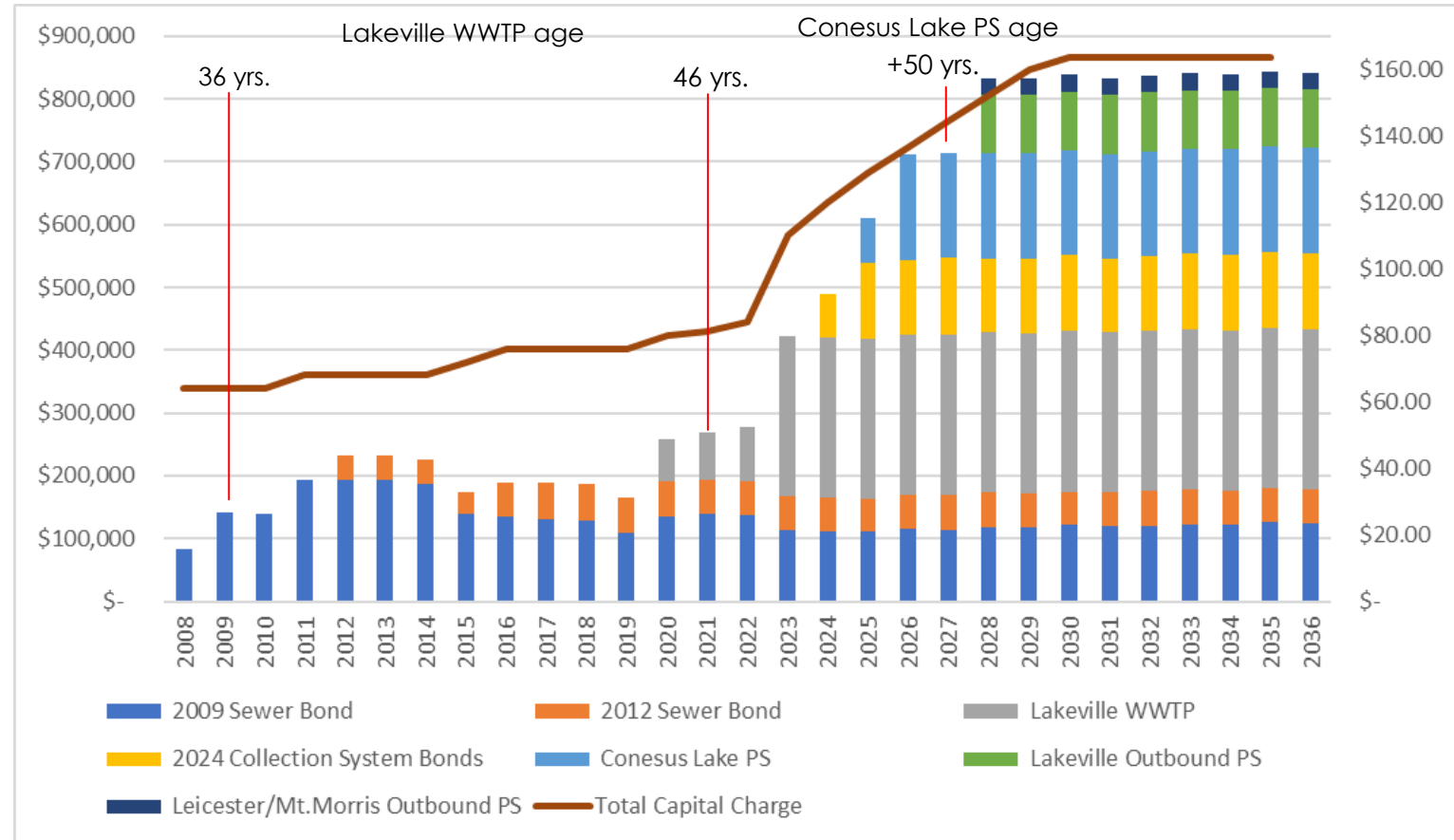
(Past, Current & Projected
Debt)



- Second major improvements to plant were in 2019/2021, partially due to a Consent Order and increased regulatory requirements by NYS DEC. The plant was 46 years old.
- Pump stations around Conesus Lake were constructed circa 1968. All pumps are original and are +50 years old.

Sewer Debt & Capital Charges

(Past, Current & Projected)



- Capital charges increase with assumption of new long-term debt.
- \$4.5B in NYS Funding & \$50B in Federal Funding – most water/sewer funding available since 1970's

Water Capital Projects

Existing/Future Debt	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
2009 EFC Bond - Grov. Water (#17369)	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725	\$ 31,725
2024 County Wide Improvements (#18746) Est.	\$ 70,000	\$ 70,000	\$ 213,115	\$ 213,115	\$ 213,115	\$ 213,115	\$ 213,115	\$ 213,115	\$ 213,115	\$ 213,115	\$ 213,115
2030 New Water Project Est.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 119,444	\$ 119,444	\$ 119,444	\$ 119,444	\$ 119,444
Total Water Debt	\$ 101,725	\$ 101,725	\$ 244,840	\$ 244,840	\$ 244,840	\$ 294,840	\$ 364,284	\$ 364,284	\$ 364,284	\$ 364,284	\$ 364,284
Capital Charge											
Groveland Water Charge/Yr.	\$ 240	\$ 220	\$ 210	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205	\$ 205
WR Capital Charge/Yr.	\$ 36	\$ 36	\$ 37	\$ 38	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39	\$ 39
Capital Volume Charge/ 1,000 gals.	\$ 0.25	\$ 0.35	\$ 0.45	\$ 0.55	\$ 0.65	\$ 0.75	\$ 0.75	\$ 0.75	\$ 0.75	\$ 0.75	\$ 0.75

Water Capital Investments (Long-term Financing)

2011 Bond Installment - \$951,750

- ✓ Water line and water storage tank installation at Groveland Station.

2024 Bond Installment - \$1,333,333

- ✓ Provided water line installation, replacement of water meters, chlorination upgrades, THM removal, SCADA upgrades and new 2.5M-3.0M water storage tank.

2030 Bond Installment - \$2,500,000

- ✓ Anticipated water line replacement for legacy water lines.

Future Capital Projects

- **Facility needs** – Current administration facilities are at maximum capacity. Improved administrative and maintenance facilities will likely be needed in next 5-10 years.
- **Collection system & water line improvements** – Asset management and I/I planning will assist with identifying future sewer and water main investments. Both long-term debt and cash-for-capital investments will be needed to avoid aging infrastructure risks.
- **Groveland Station WWTF** – The current facility has approached its useful life. Groveland Correction WWTF maybe reasonable alternative.
- **Unknown Regulatory Requirements** – Future regulatory requirements may trigger future capital investments.

Total Rate Impact

(Average customer 15,000 gals/qtr.)

Most water and sewer residential customer of 15,000 gallons/quarter will experience a 9% increase in their water/sewer bill, or \$21.50/quarter. This includes both operational and capital costs.

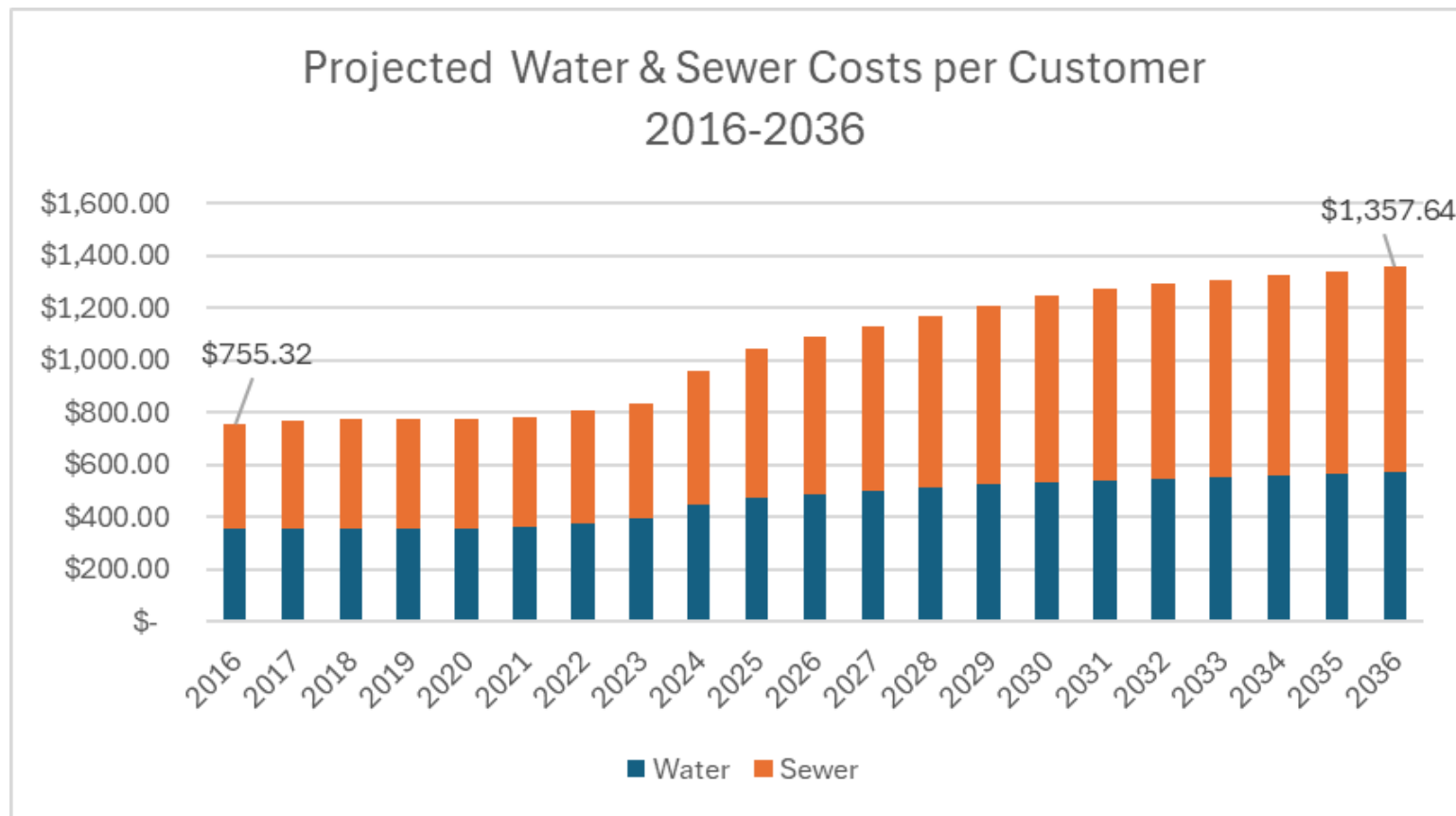
Annual water and sewer bill = \$87 per month, or \$1,046 per year.

In comparison:

	Monthly	Yearly
Internet	\$81	\$975
Mobile Plans	\$66	\$793
Streaming	\$55	\$660
Cable TV	\$80	\$962

Future Snapshot

(Average customer 15,000 gals/qtr.)



- Assumes all long-term capital financing for projects through 2030.
- 1-3% operational cost increases.
- Does not consider customer base growth.

Future Snapshot

(Average customer 15,000 gals/qtr.)



Annual projected water and sewer bill per customer increases an average of 3% per year between 2016 and 2036.



Over a 20-year period, average annual increase water/sewer service is \$30/yr. or \$2.50 per month.



Includes maintaining current water and sewer service levels and making over **\$37,500,000** of improvements to the water and sewer systems between 2019-2030.



Does not consider customer base growth.

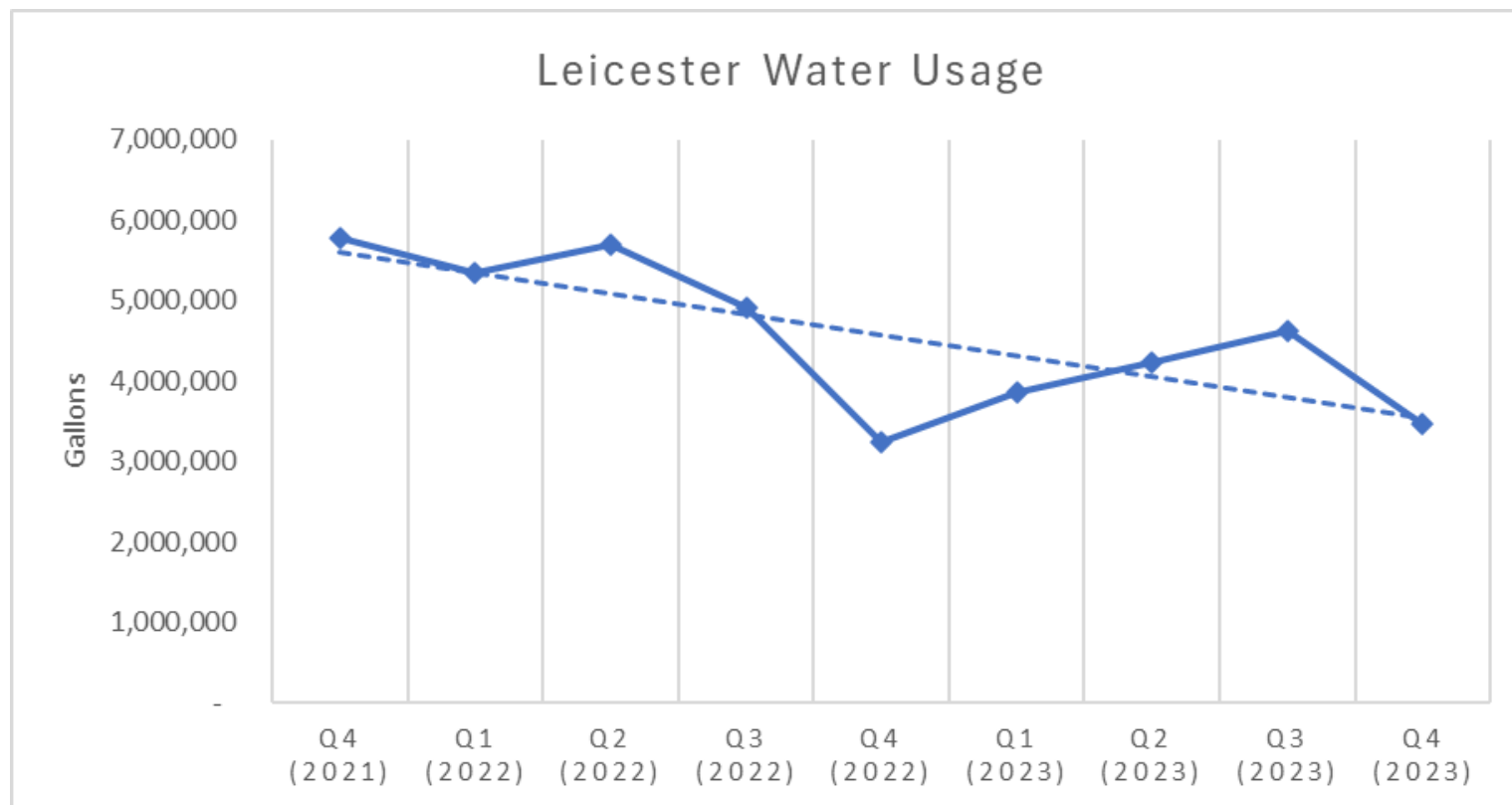
Challenges & Opportunities

A photograph of a wastewater treatment plant facility. In the foreground, there are several rectangular aeration tanks with green metal railings. A dark blue building with a white roof is in the middle ground. To the left, there is a brick building and a tall light pole. The background shows a grassy field, trees with autumn foliage, and a cloudy sky with a prominent rainbow. The text "Challenges & Opportunities" is overlaid in white in the center of the image.

Positive Impacts

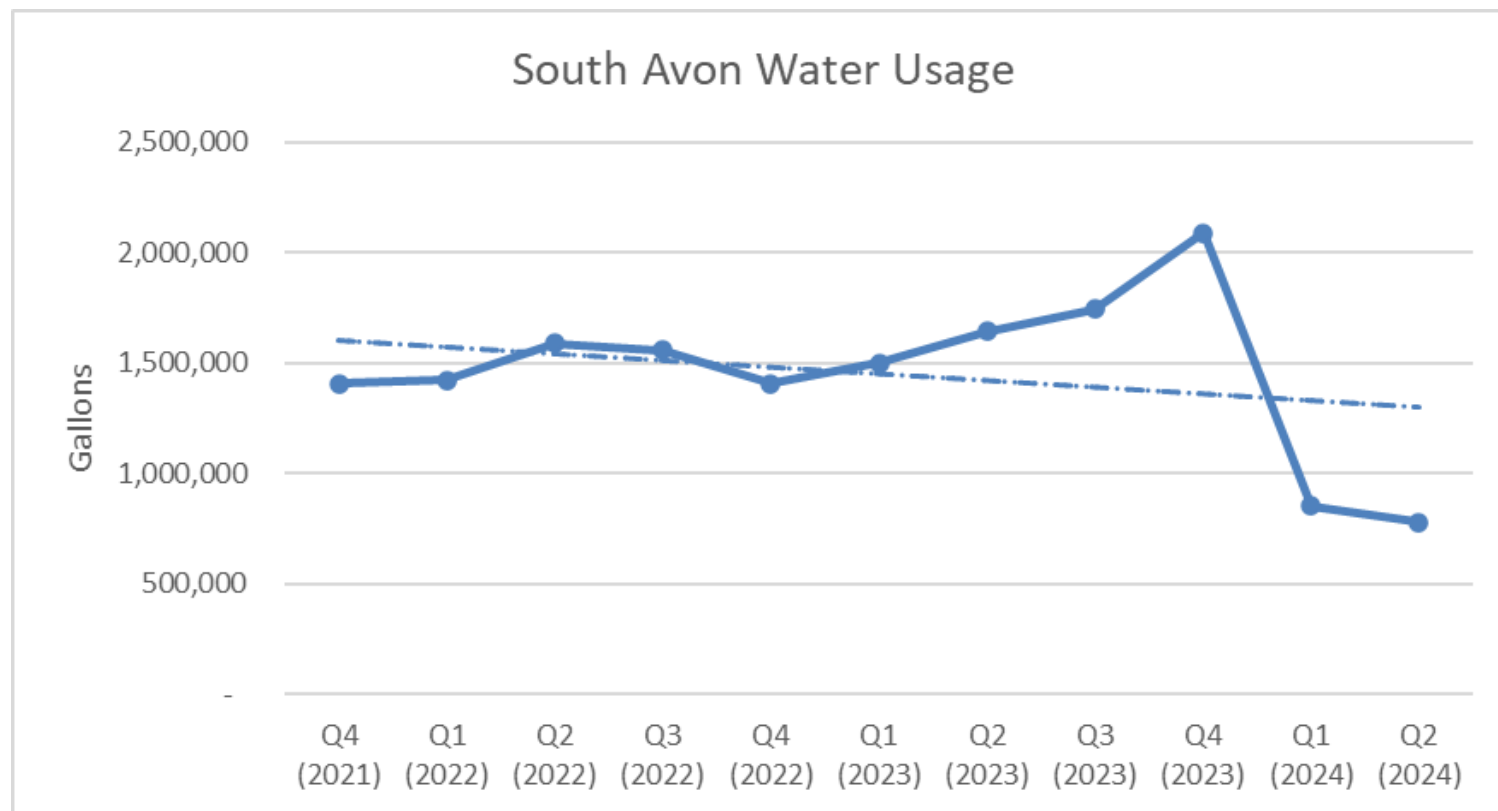
- **Improvement Utility Management**
 - ❖ Proactive leak detection – reducing loss/non-revenue water.
 - ❖ Community Solar initiative – 20%-30% reduction in electricity charges.
 - ❖ Proactive I&I mitigation – Over 50% of sump pumps have been disconnected, leading to low flows at the WWTP.
- **Improved Water Quality**
 - ❖ Reduction in THM levels across the entire water system.
 - ❖ Surveillance sampling program.
- **Meeting Infrastructure Needs**
 - ❖ Received over \$16,000,000 in grant funding since 2017 to support \$25,000,000 in capital projects.
 - ❖ Water meter replacement – less loss water and gained 1 FTE by decreasing meter reading times.
- **Software Upgrades**
 - ❖ Billing/Accounting – Providing better customer information.
 - ❖ GIS Program – Improving internal workflow and resource management - digital outlay of all infrastructure, active inventory and simplified work order system.
 - ❖ SCADA improvements – leading to quicker responses preventing interruptions in service. Allows for trending and analysis for operational improvements.

Proactive Leak Detection



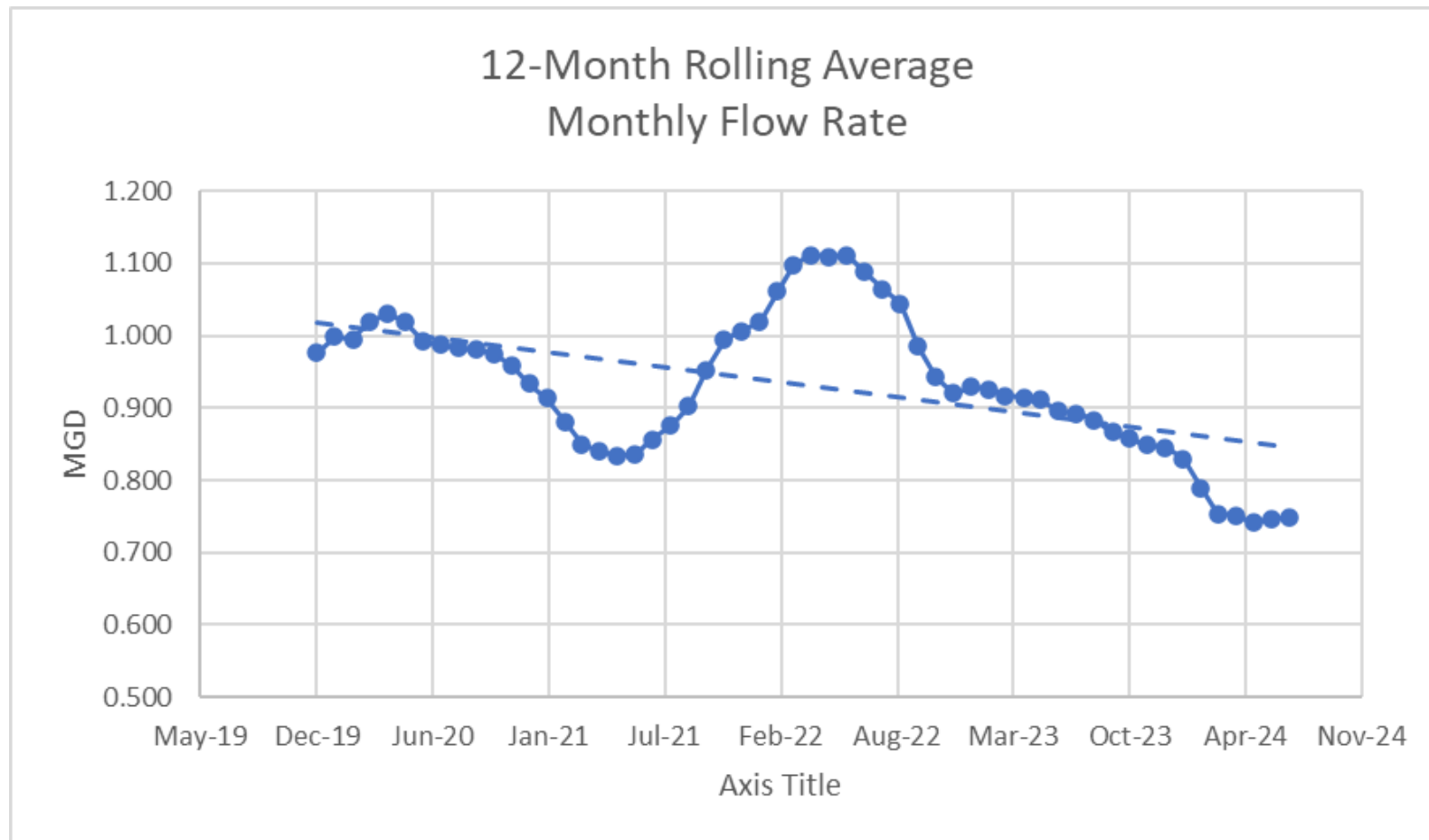
- ❖ Since working on the Leicester system in January 2023, water consumption is decreasing due to meter replacements and proactive leak detection and correction.
- ❖ Wholesale water purchase is \$25,000 less in 2025 than in 2022.

Proactive Leak Detection



- ❖ After repairing a valve leak, wholesale water purchase decreased by 50%, saving over \$10,000 annually.

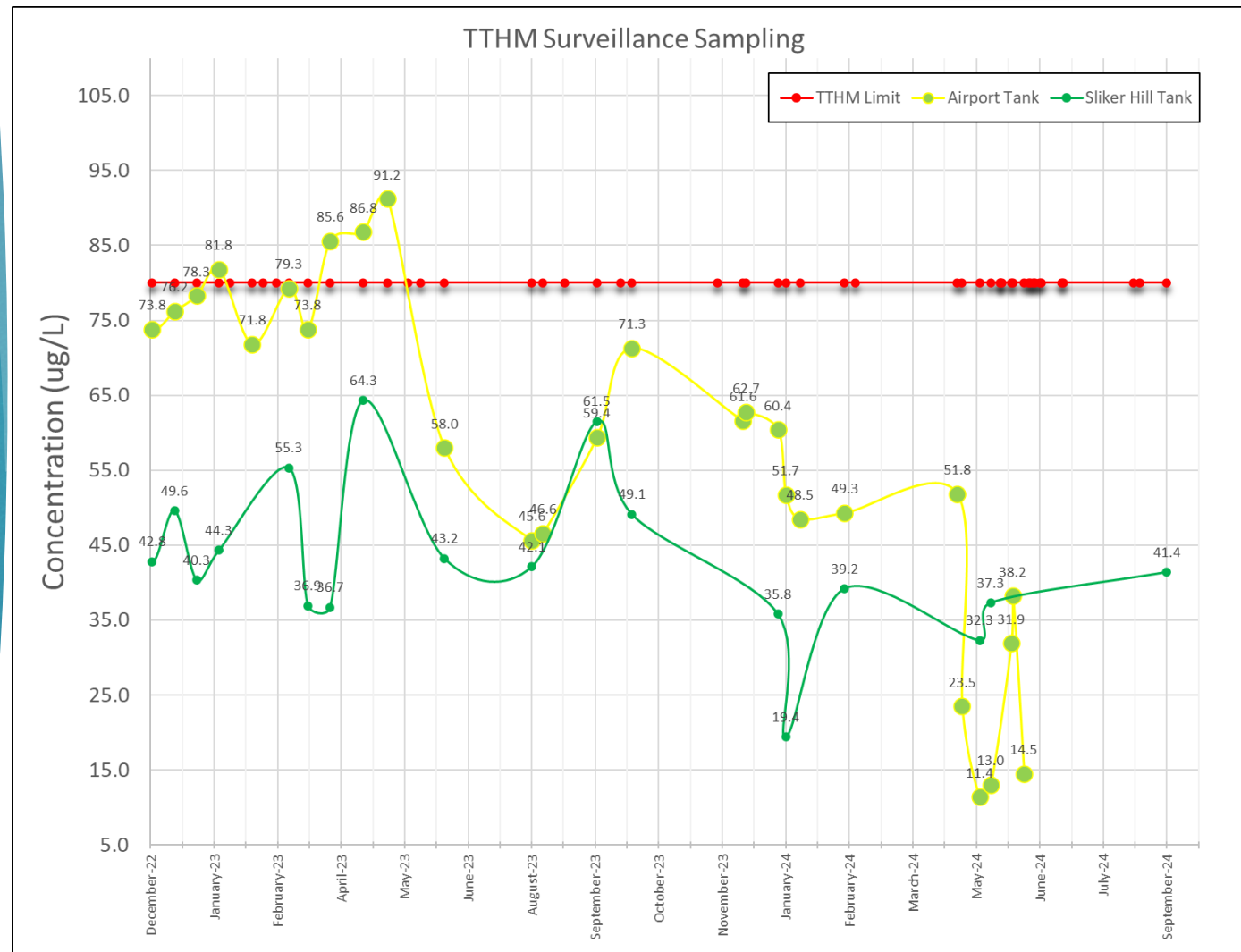
Proactive I & I Mitigation



- ✓ Since 2022 - Over 1,000 manholes inspected, 49 home sump pump disconnected, 6,000 lf of sewer main lined, 59 manholes lined and over 60 manhole frames and covers replaced.
- ✓ Proactive I&I mitigation has resulted in average monthly flow rate decreasing from 1.12 MGD in June 2022 to .74 MGD in June 2024.

Chlorine Management & THM Removal

- ✓ Chlorine analyzers installed February 2023.
- ✓ THM removal installed in May 2024.



Challenges

➤ **Infrastructure Needs**

- ❖ Sewer collection system, including pump stations.
- ❖ Water pipe replacement; starting with transite pipe circa 1950's.

➤ **Succession**

- ❖ Up to 7 staff could retire in next 5-7 years.
- ❖ Loss of institutional knowledge.
- ❖ Need to continue efforts to overlap new staff with retiring staff.

➤ **Water loss/Non-Revenue Water Mgt.**

- ❖ Leak detection
- ❖ Maintenance Best Practices

➤ **Material Costs**

- ❖ Project costs continue to be volatile
- ❖ Supply chains are still negatively impacted
- ❖ Inflation

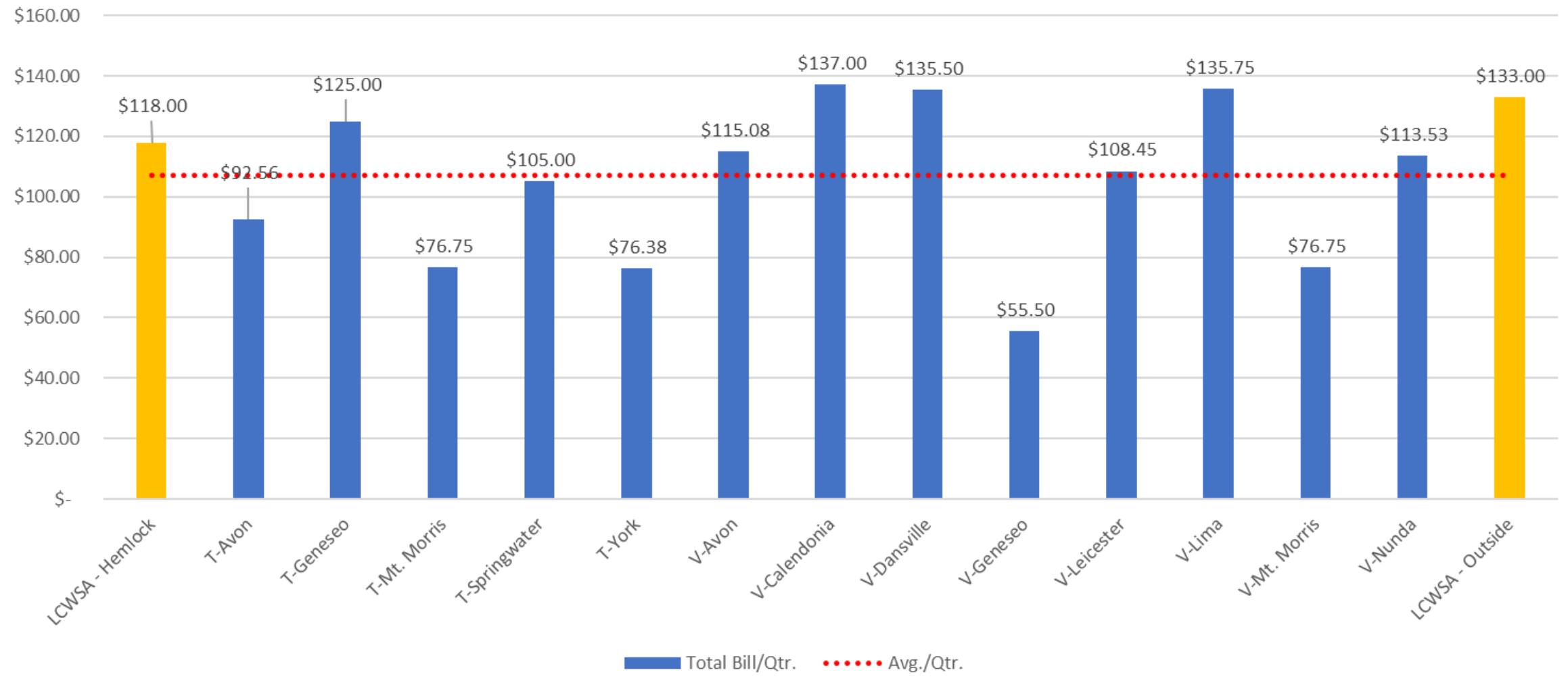
2025 Opportunities

- ✓(T) Groveland – Currently awarded WD#1; possible construction in 2025 followed by transfer (*120+ users*).
- ✓Lakeville Outbound Pump Station Improvements (2024 WIIA).
- ✓Leicester/Mt. Morris Pump Station Improvements (2024 WIIA).
- ✓Town of Springwater transfer water and sewer service to LCWSA.
- ✓Leicester/York Regional Water Supply Expansion Supply Project.
- ✓Streamlined operations and workorder process with GIS software upgrades.
- ✓Water loss reduction efforts = decrease in water expenditures.

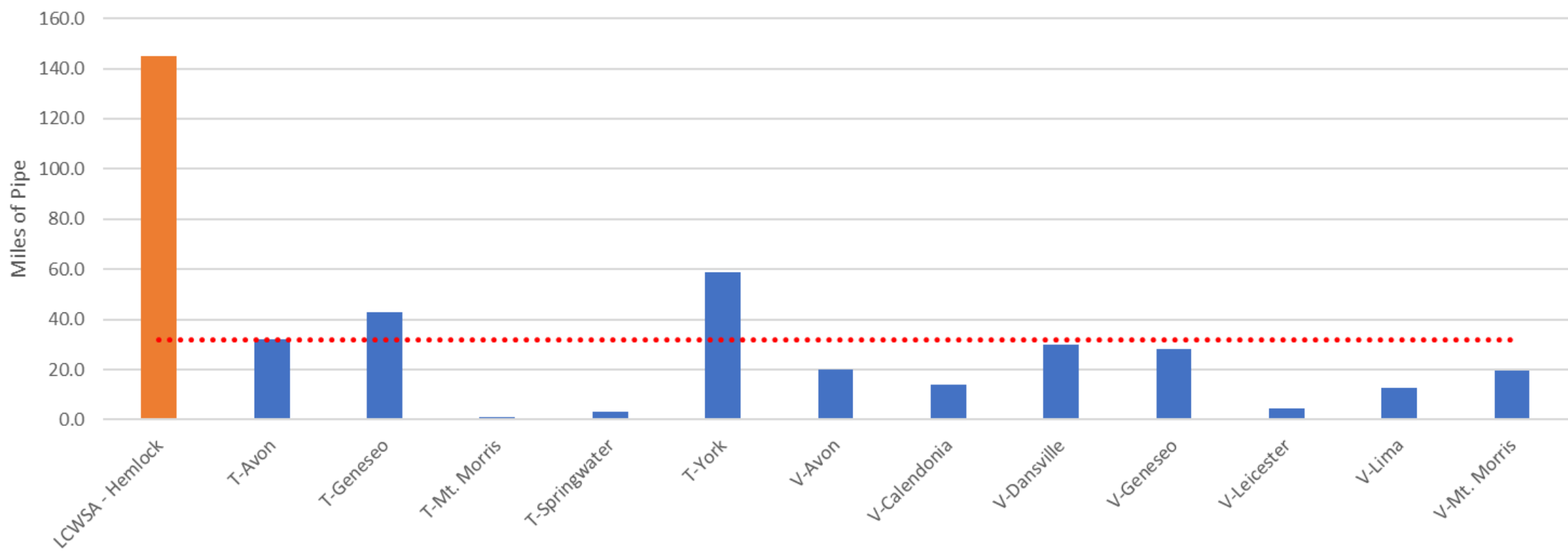
Future Opportunities

- ❑(T) Lima – Possible additional water district
- ❑(T) Caledonia – Possible additional water district
- ❑(T) Leicester – Possible Pine Tavern water district
- ❑(T) Livonia – Possible South Livonia water district

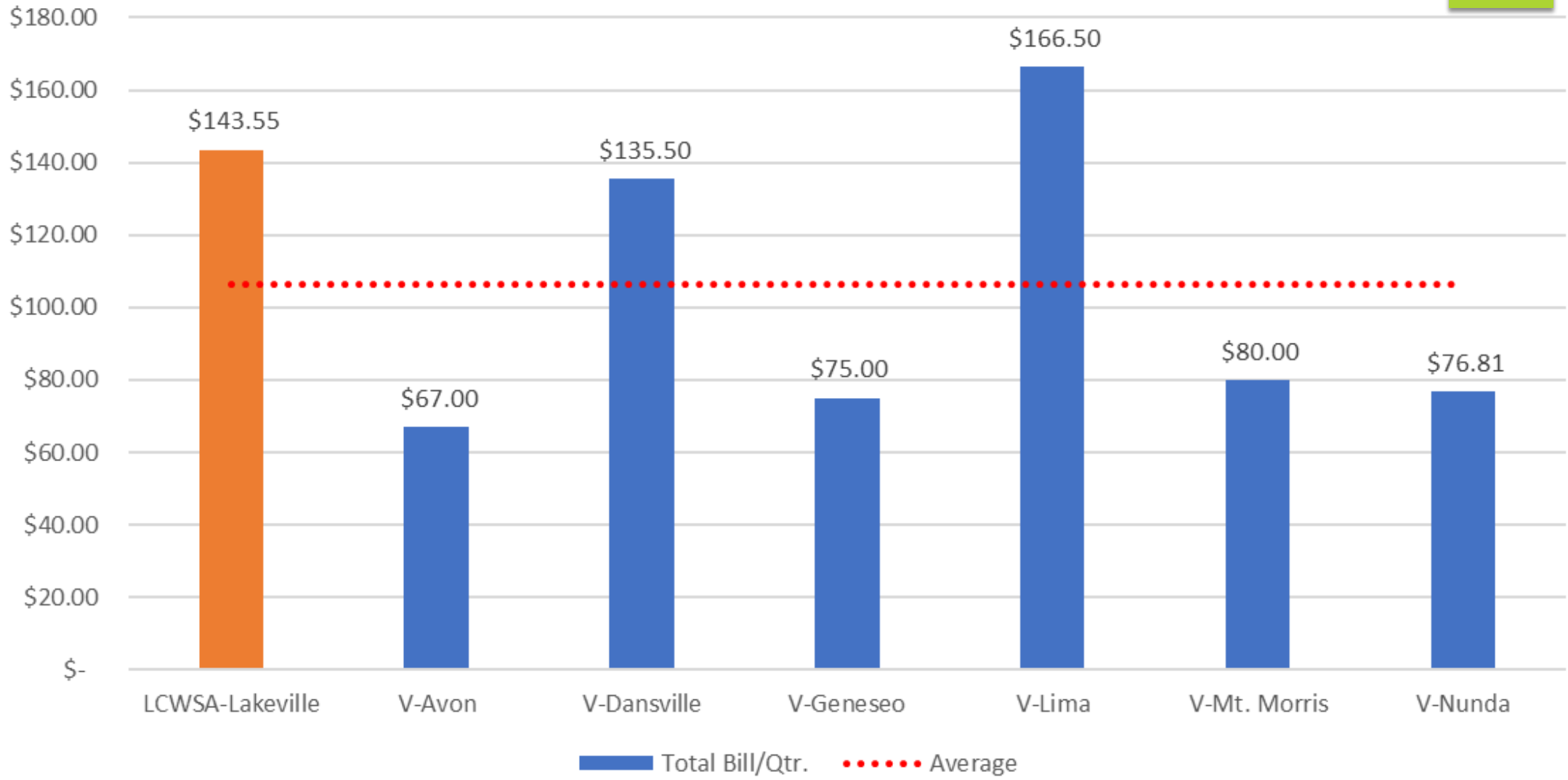
Quarterly Water Bill



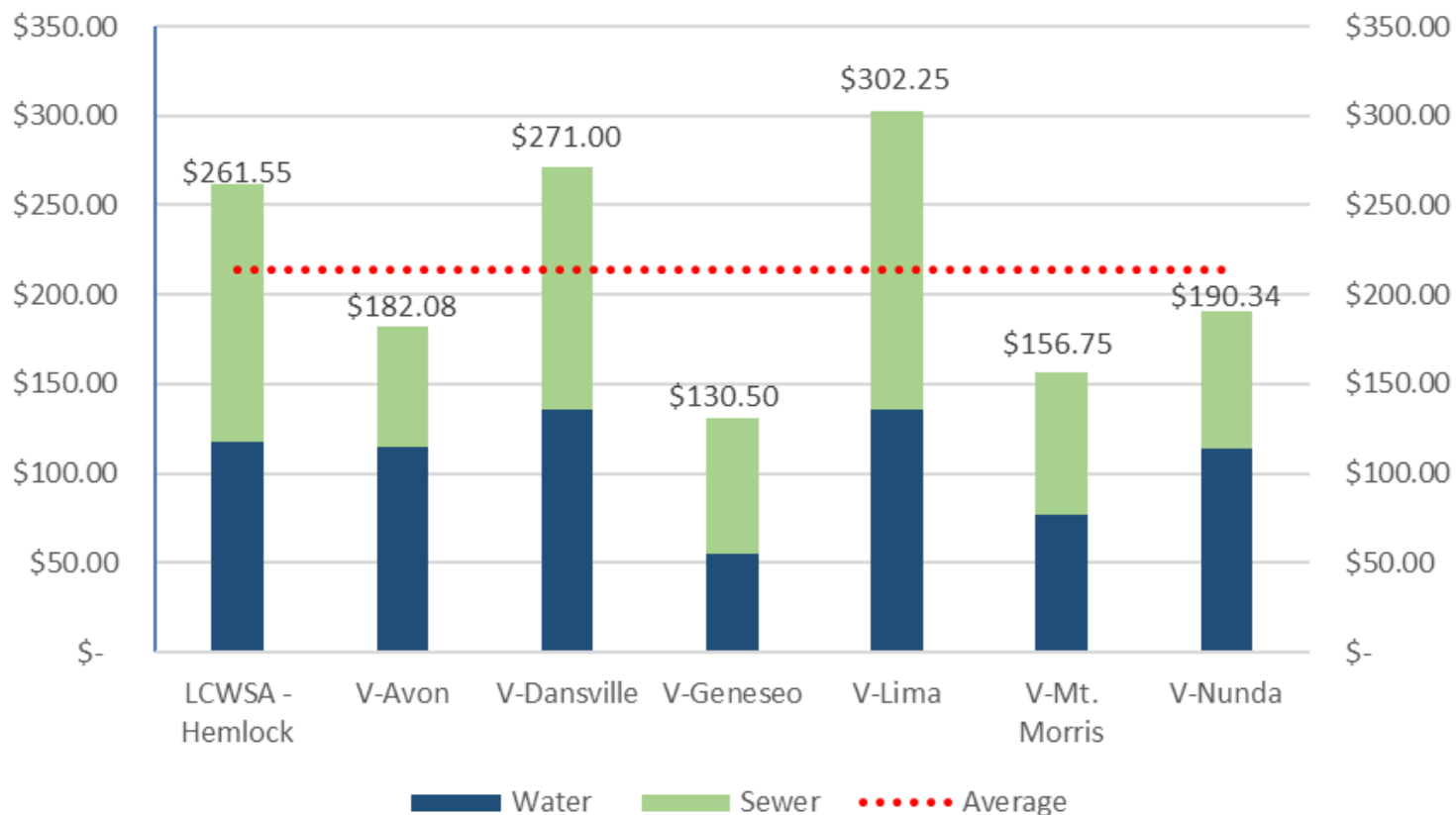
Size of Water Distribution System



Quarterly Sewer Bill



Combined Water/Sewer Quarterly Bill



- LCWSA combined rates are affordable in comparison to surrounding municipalities.
- LCWSA rates include continued proactive investment in both water and sewer systems and capital reserve contributions.
- Other municipal rates do not account for infrastructure deficits and higher risk due to reactive capital investment approach.





LAKEVILLE