



# 2026 Municipal Market Outlook and GLWA Debt Management Considerations

December 19, 2025

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# Municipal Market Conditions



## Key Market Themes in 2025

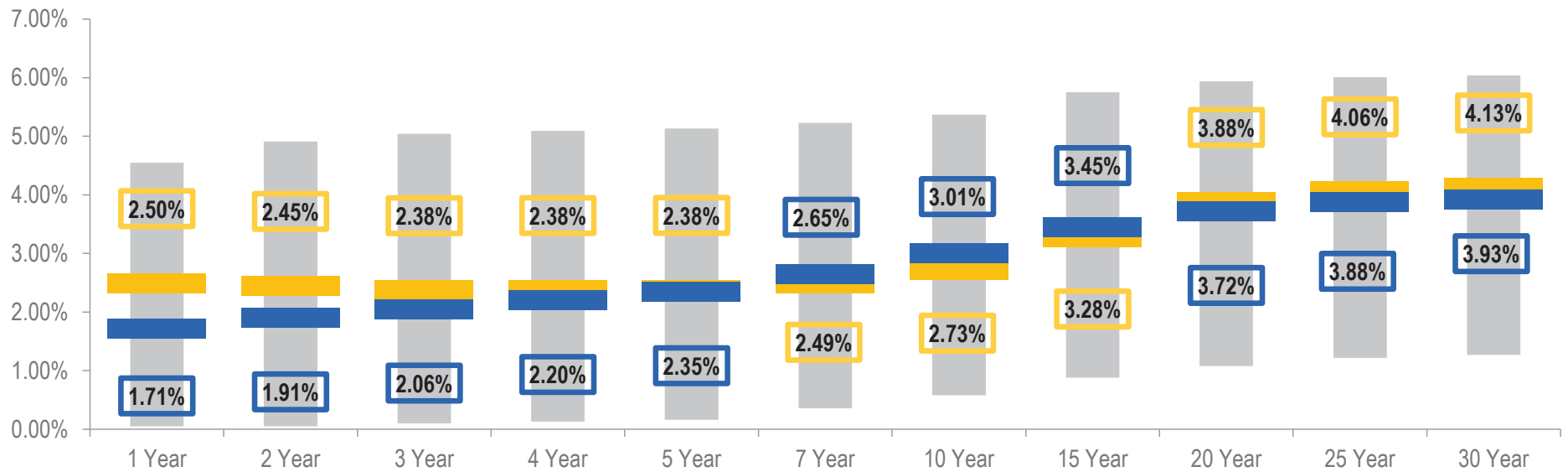
- ◆ Municipal bond volume has grown significantly, but municipal market continues to provide broad access to capital at nearly any size
  - Increase in volume is led by surge in megadeals that are >\$1B
  - Higher rates have attracted strong investor inflows, providing ample support for increased issuance
- ◆ Long-term rates are elevated compared to recent history
- ◆ Despite elevated long-term rates, short-term rates have declined, leading to expectations of a steeper yield curve.
  - Variable rate debt is emerging as a strategic priority for many utilities
- ◆ Value of tax-exemption continues to remain high
  - Taxable-to-tax-exempt tender opportunities and Build America Bond refunding transactions have been areas of notable bond volume activity



## Long-Term Tax-Exempt Rates Near Historical Averages

30 Year History of AAA BVAL Rate Position  
(December 12, 1995 to December 12, 2025)

■ Historical BVAL Range ■ Current BVAL — Average BVAL

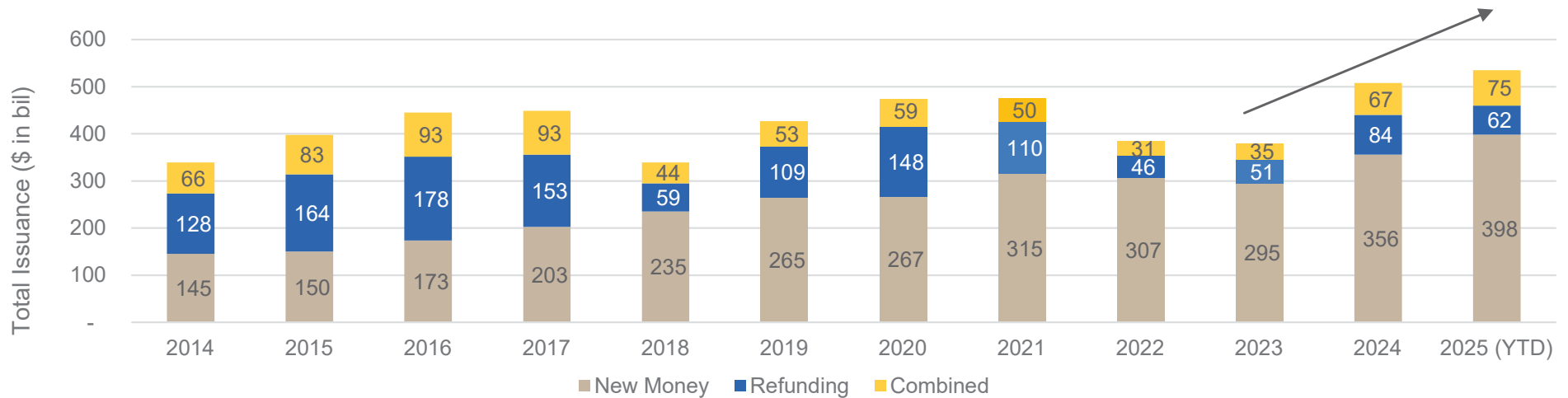


Statistic	1 Year	2 Year	3 Year	4 Year	5 Year	7 Year	10 Year	15 Year	20 Year	25 Year	30 Year
12/12/2025	2.50%	2.45%	2.38%	2.38%	2.38%	2.49%	2.73%	3.28%	3.88%	4.06%	4.13%
Average	1.71%	1.91%	2.06%	2.20%	2.35%	2.65%	3.01%	3.45%	3.72%	3.88%	3.93%
Spread to Avg.	0.78%	0.54%	0.32%	0.17%	0.03%	-0.17%	-0.28%	-0.17%	0.16%	0.18%	0.20%
Minimum	0.05%	0.05%	0.10%	0.13%	0.16%	0.36%	0.58%	0.88%	1.08%	1.22%	1.27%
Spread to Min.	2.45%	2.40%	2.28%	2.25%	2.22%	2.13%	2.15%	2.40%	2.80%	2.84%	2.86%
Maximum	4.55%	4.91%	5.04%	5.09%	5.13%	5.23%	5.37%	5.75%	5.94%	6.01%	6.04%
Spread to Max.	-2.05%	-2.46%	-2.66%	-2.71%	-2.75%	-2.74%	-2.64%	-2.47%	-2.06%	-1.95%	-1.91%
Percent of Market Days Lower	64.77%	62.80%	57.96%	55.50%	51.71%	48.94%	44.77%	45.44%	51.56%	50.24%	50.02%

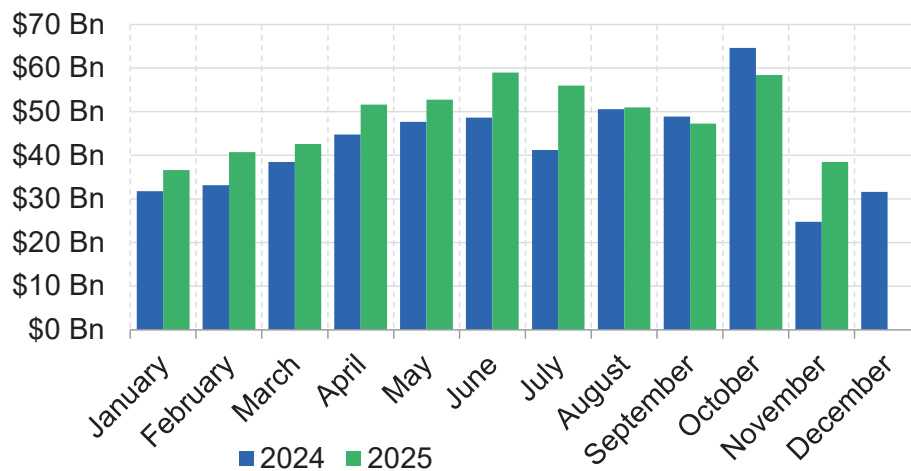


# Increased Volume in the Municipal Market Supported by Strong Inflows

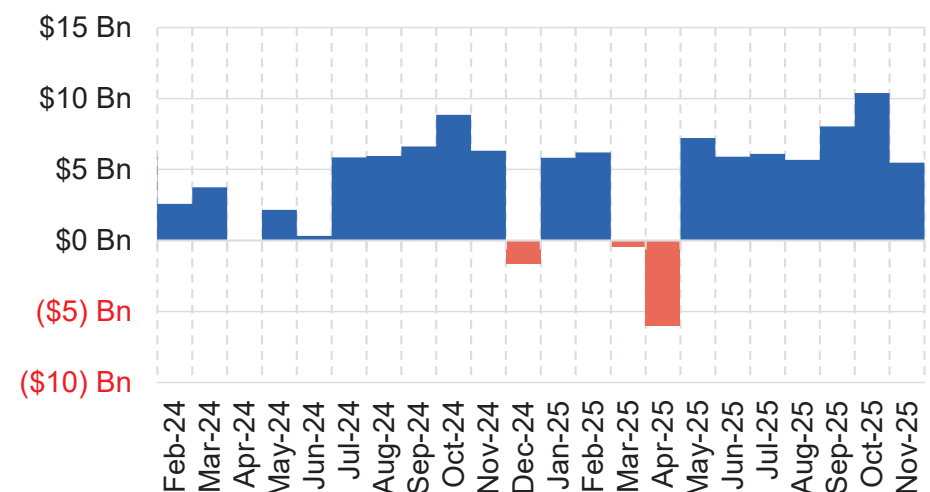
## U.S. Municipal Issuance Year over Year



## Overall Municipal Market Volume (Supply)

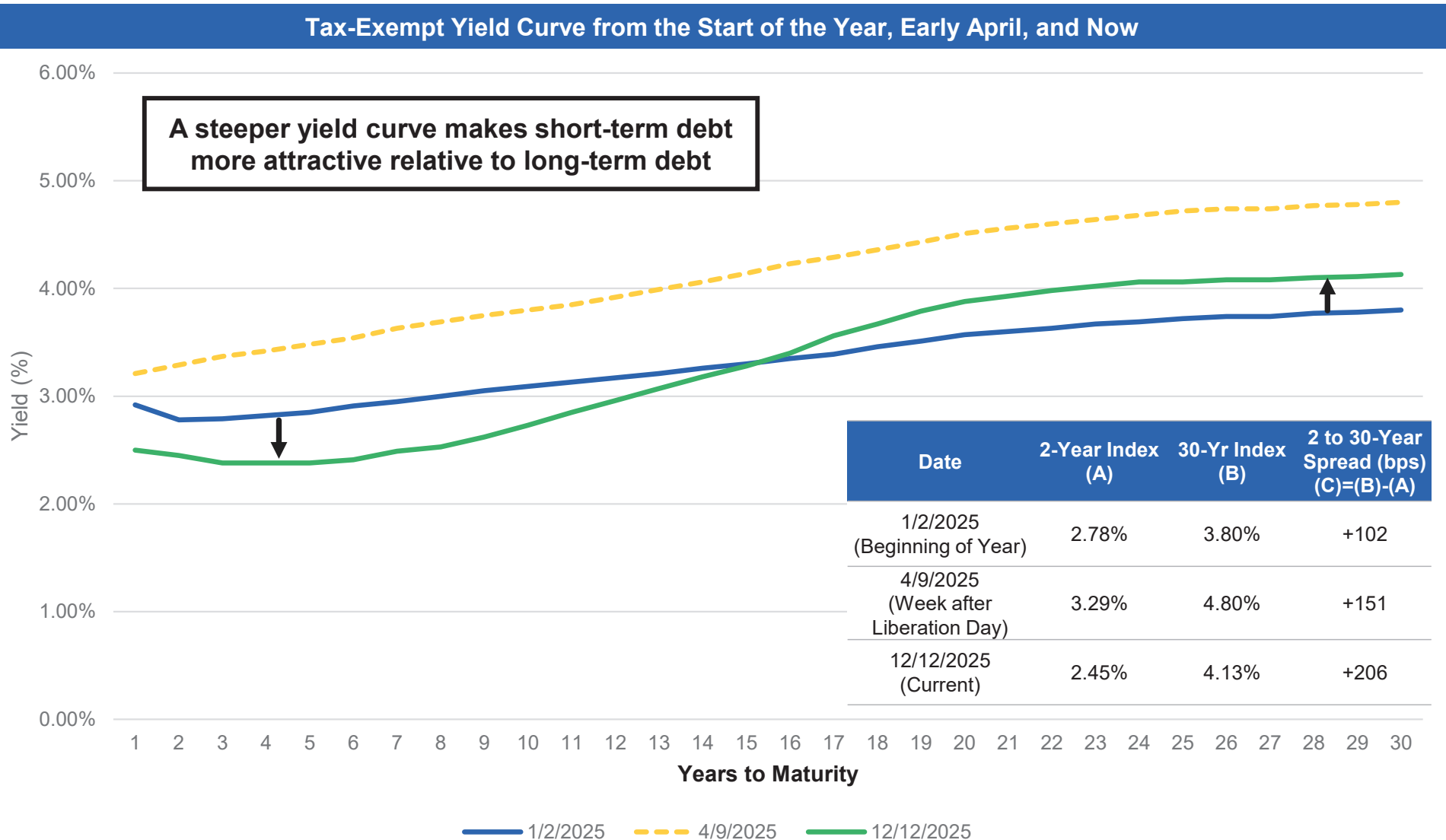


## Monthly Municipal Fund Flows (Demand)





## Tax-Exempt Yield Curve Has Steepened Significantly in 2025

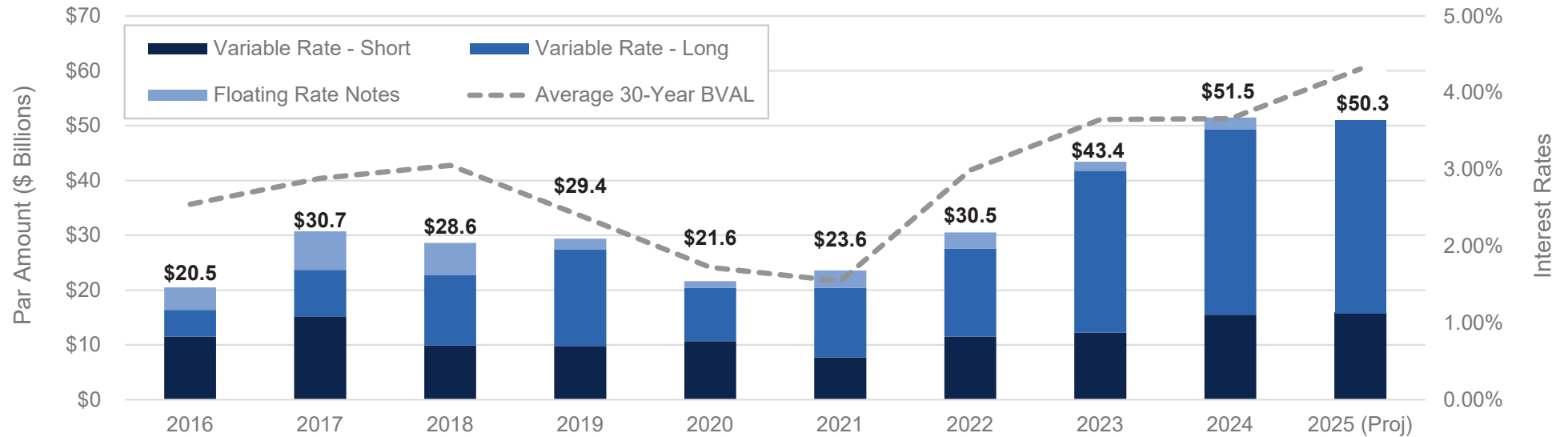


Source Bloomberg; Rates as of December 12, 2025. Index shown is the BVAL AAA Municipal Curve, also referred to as "BVAL". BVAL is a municipal bond index produced by Bloomberg that represents Bloomberg's best estimate for market yields for AAA-rated municipal bonds across different maturities.



# Steeper Yield Curve Has Driven Increasing Municipal Short-Term Issuance

## Short-Term Issuance Compared to 30-Year BVAL



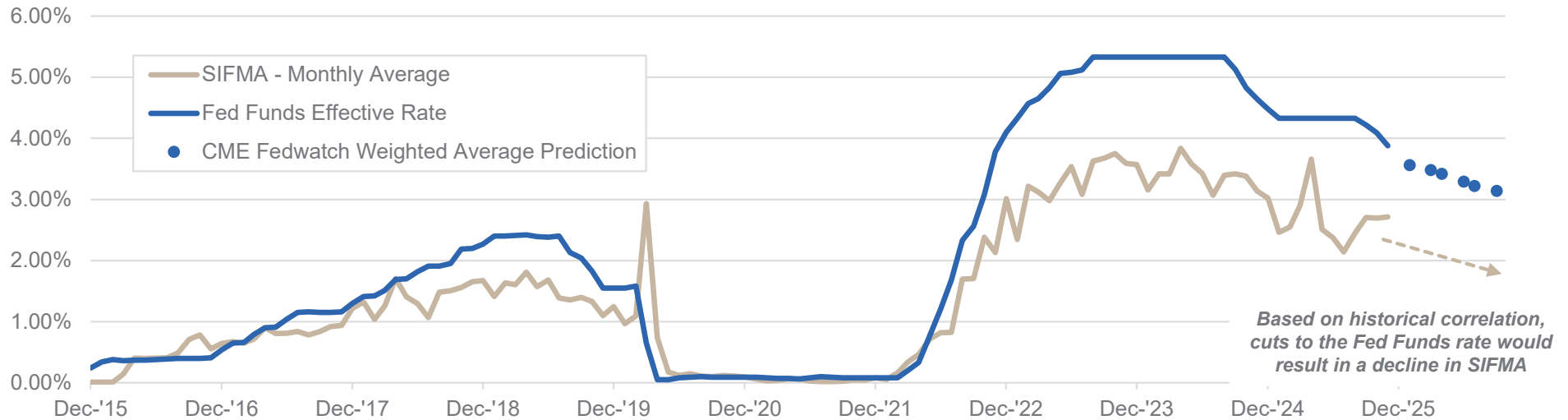
Product (Billions)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 (Proj)
Variable Rate – Short (VRDBs)	\$11.50	\$15.20	\$9.90	\$9.80	\$10.70	\$7.70	\$11.50	\$12.20	\$15.50	\$14.6
Variable Rate – Long (Term Rate)	\$4.90	\$8.50	\$12.80	\$17.60	\$9.70	\$12.70	\$16.10	\$29.60	\$33.80	\$35.7
Floating Rate Notes	\$4.10	\$7.00	\$5.90	\$2.00	\$1.20	\$3.20	\$2.90	\$1.60	\$2.20	--
<b>Total Variable Rate</b>	<b>\$20.50</b>	<b>\$30.70</b>	<b>\$28.60</b>	<b>\$29.40</b>	<b>\$21.60</b>	<b>\$23.60</b>	<b>\$30.50</b>	<b>\$43.40</b>	<b>\$51.50</b>	<b>\$50.3</b>
Fixed Rate Notes	\$35.60	\$48.20	\$41.50	\$46.00	\$46.80	\$33.30	\$24.40	\$27.30	\$32.00	\$31.5
Fixed Rate Bonds	\$388.70	\$369.60	\$268.70	\$350.90	\$415.10	\$426.30	\$336.20	\$309.30	\$424.10	\$391.0
<b>Total Municipal Issuance</b>	<b>\$444.80</b>	<b>\$448.50</b>	<b>\$338.80</b>	<b>\$426.30</b>	<b>\$483.50</b>	<b>\$483.20</b>	<b>\$391.10</b>	<b>\$380.00</b>	<b>\$507.60</b>	<b>\$472.8</b>
Variable Rate as % of Total Issuance	4.61%	6.85%	8.44%	6.90%	4.47%	4.88%	7.80%	11.42%	10.15%	10.64%

Source: LCM as of 10/31/2025. 2025 projection assumes that monthly issuance for December will match the year-to-date average. Short variable rate includes variable rate products with a put feature under 13 months.



# SIFMA is Highly Correlated with Fed Fund Rate, and Expected to Fall

SIFMA Index vs. Effective Fed Funds Rate Over Past 10 Years



CME FedWatch Tool -- Rate Probabilities by Meeting Date Aggregated with Current Target Rate Range Set by Federal Reserve

Meeting Date	2.25% - 2.50%	2.50% - 2.75%	2.75% - 3.00%	3.00% - 3.25%	3.25% - 3.50%	3.50 - 3.75%	3.75 - 4.00%	4.00 - 4.25%
1/28/2026	--	--	--	--	24.4%	75.6%	--	--
3/18/2026	--	--	--	--	57.6%	42.4%	--	--
4/29/2026	--	--	--	--	80.4%	19.6%	--	--
6/17/2026	--	--	--	32.6%	67.4%	0.0%	--	--
7/29/2026	--	--	--	60.4%	39.6%	--	--	--
9/16/2026	--	--	--	91.1%	8.9%	--	--	--
10/28/2026	--	--	4.4%	95.6%	0.0%	--	--	--

Source: Federal Reserve Economic Database (FRED) as of December 12, 2025. CME Fedwatch Tool as of December 12, 2025

**SIFMA** – The Securities Industry and Financial Markets Association Municipal Swap Index is a 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations with certain characteristics.





# Municipal Market Catalysts and Outlook for 2026

## ◆ Federal Government Policy

- Tariff policies that could change due to court decisions or contentious trade negotiations
- Debt ceiling limit that coincides with mid-term elections in fall 2026

## ◆ Federal Reserve

- Cut of 0.25% to Federal Funds rate in December
- Details from meeting highlight fractures among members and cloud path forwards
- Uncertainty around future of Federal Reserve Board composition

## ◆ Labor Market

- Labor market shows signs of slowdown, but not rapid deterioration
- Market will watch non-farm payrolls and unemployment

## ◆ Inflation

- Inflation remains above targets
- Fed continues to carefully watch data and seek confidence that inflation is moderating

Bond Yield Forecast (As of December 12, 2025)										
Average Forecasts	Current	Q4 25	Q1 26	Q2 26	Q3 26	Q4 26	Q1 27	Q2 27	Q3 27	Q4 27
US 30-Year	4.66 %	4.62 %	4.62 %	4.59 %	4.60 %	4.55 %	4.59 %	4.60 %	4.60 %	4.45 %
US 10-Year	4.06 %	4.05 %	4.04 %	4.04 %	4.06 %	3.95 %	3.99 %	3.99 %	3.99 %	3.88 %
US 5-Year	3.65 %	3.63 %	3.60 %	3.62 %	3.64 %	3.61 %	3.65 %	3.67 %	3.69 %	3.59 %
US 2-Year	3.50 %	3.44 %	3.38 %	3.34 %	3.33 %	3.30 %	3.32 %	3.33 %	3.32 %	3.24 %
US 3-Month Term SOFR	3.70 %	3.49 %	3.28 %	3.18 %	3.18 %	3.14 %	3.16 %	3.18 %	3.19 %	3.21 %
Fed Funds Rate - Upper Bound	3.80 %	3.63 %	3.43 %	3.29 %	3.25 %	3.18 %	3.17 %	3.17 %	3.16 %	3.12 %
Fed Funds Rate - Lower Bound	3.55 %	3.38 %	3.18 %	3.04 %	3.00 %	2.93 %	2.92 %	2.92 %	2.91 %	2.87 %

Source: Bloomberg; Federal Reserve press release dated December 10, 2025;



# Rating Agency Update

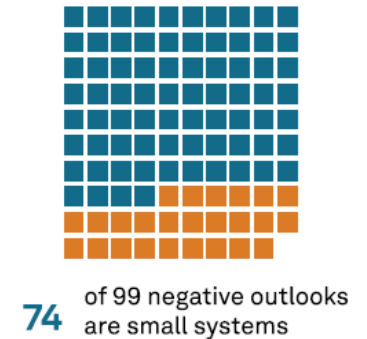
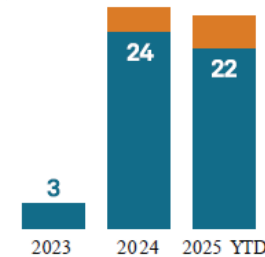


## S&P Water & Sewer Sector Outlook for 2026

- **Stable Outlook for large systems**, revised from negative in 2025, reflecting an easing in federal regulatory policy, slowing rate of inflation for primary cost drivers, and strength of sector management
- **Negative Outlook for small systems**, due to outsize financial impacts of unbudgeted capital expenditures, limited access to economics of scale and capital markets, and limited management flexibility
- Regulatory costs are expected to continue to climb, albeit at a slower pace
- Increases in operating expenses are set to level out and become more predictable
- Rate structure is key to financial stability, with downgrades often caused by inability to recover rising operating costs in a timely manner
- Resilience efforts remain critical to offset credit risk associated with climate variability
- Technology is increasingly important to improve demand forecasting, asset management, and enhancing operational efficiency, but must be balanced with increased cyber risks
- Aging infrastructure and demographics will exacerbate operational and capital challenges

### By the numbers | U.S. water utilities

Multi-notch downgrades  
Nearly 100% small systems



**\$2.6 bil.** a year  
spent on water main breaks

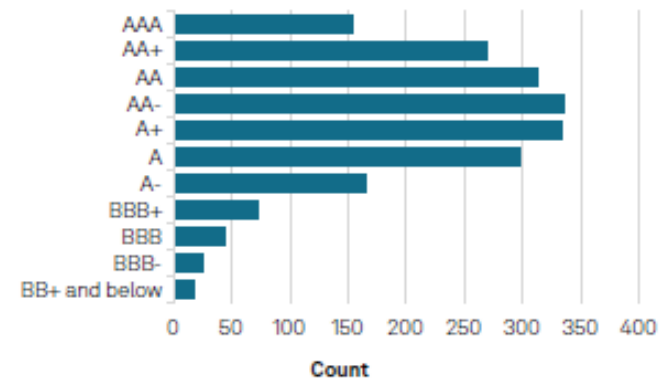
**33.3 tril.** gallons  
of lost water annually

resulting in more than  
**\$187 bil.** in lost revenue

**\$625 bil.**  
EPA water infrastructure needs

**\$30 bil.**  
2021 Infrastructure Investment  
and Jobs Act investment

### U.S. water utility revenue bond rating distribution

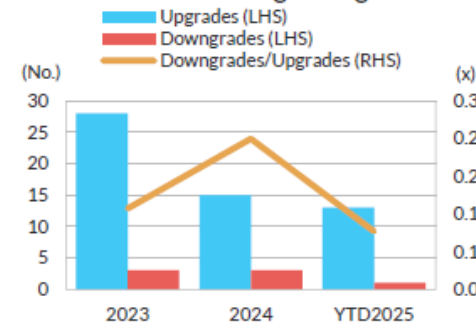




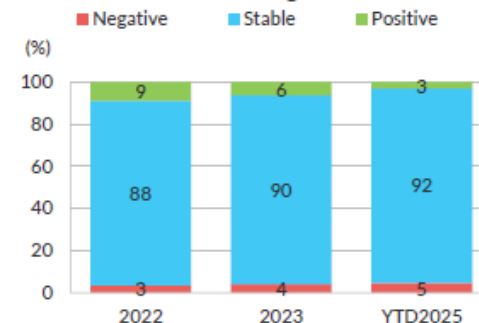
## Fitch Water & Sewer Sector Outlook for 2026

- **Neutral Outlook**, reflecting an operating environment for the upcoming year that is generally stable and no longer deteriorating compared to 2025
- Higher effective tariff rate is expected to work its way into capital programs and contribute to increased spending, stressing financial performance
- Acute operating pressures in 2026 are not expected, as the pace of operating cost increases has normalized
- Interest rates are expected to remain stable or slightly lower, resulting in stable to decreasing financing costs
- Although operating costs have stabilized, resurgent inflation, increased supply costs or labor costs, a severe recession and/or higher long-term interest rates could shift the sector outlook to 'deteriorating'.
- Evolving regulatory environment and the effect of compliance strategies remain concerns in the sector, particularly for emerging contaminants of concern and service lines
- There is a continued need to address aging infrastructure, which remains a long-term challenge for the sector
- While affordability has not materially eroded to date, stakeholders remain focused on affordability concerns as rate actions continue into 2026

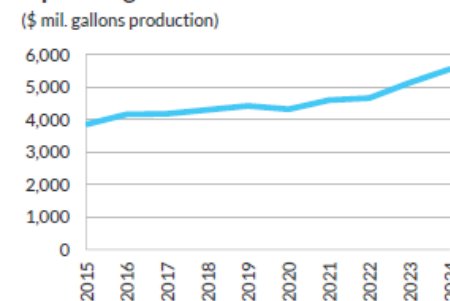
Water & Sewer - Rating Changes



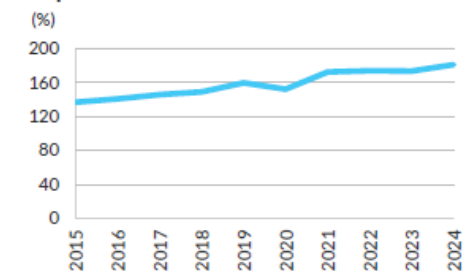
Water & Sewer - Rating Outlooks



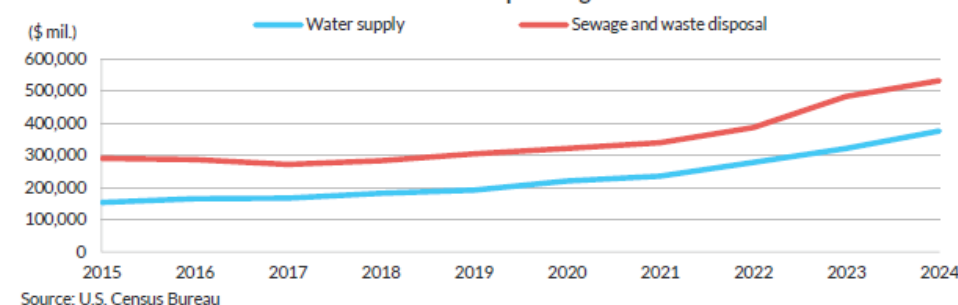
Operating Cost Burden



Five-Year Average Capex to Depreciation



National Public-Sector Annual Construction Spending



Source: U.S. Census Bureau



## Rating Agency Commentary on Factors that Could Change GLWA Ratings

Moody's Aa3	S&P AA-	Fitch A+ (Water); AA (Sewer)
<b>Factors that Could Lead to an Upgrade</b>		
<ul style="list-style-type: none"> <li>• Growth in revenue that continues to outpace borrowing and moderates leverage of pledged resources</li> <li>• Steady improvement in asset condition while lowering debt-to-revenue ratio closer to 4x</li> <li>• Sustained trend of a debt service coverage ratio of at least 1.5x while maintaining around 500 days cash on hand</li> </ul>	<ul style="list-style-type: none"> <li>• GLWA meaningfully outperforms its historical financial trends while still funding its CIP generally as planned and presented in 2025, in a sustainable manner over a long-term horizon</li> <li>• Sustainable, long-term economic recovery in Detroit continues and has meaningful positive effects on its economic fundamentals and utility collection rates</li> </ul>	<ul style="list-style-type: none"> <li>• Greater certainty that upcoming planned capital spending has fully accounted for inflationary pressures and keeps leverage within current expectations</li> <li>• Sustained leverage below 11.0x (Water) or 10.0x (Sewer), assuming stability in the current revenue defensibility and operating risk assessments</li> </ul>
<b>Factors that Could Lead to a Downgrade</b>		
<ul style="list-style-type: none"> <li>• Material reduction to the water or sewer system's liquidity or debt service coverage ratios, with days cash on hand closer to 400 days or debt service coverage below 1.2x</li> <li>• Growth in leverage of the water or sewer system's net revenue (debt-to-revenue above 6x)</li> <li>• Deterioration in asset condition</li> </ul>	<ul style="list-style-type: none"> <li>• Actual financial performance falls below historical trends</li> <li>• Significant deferral of capital projects that artificially increases liquidity but causes deferred maintenance</li> <li>• Erosion of processes that have evolved to help make the budget for both DWSD and GLWA more predictable while minimizing revenue fluctuations</li> </ul>	<ul style="list-style-type: none"> <li>• Sustained leverage approaching 13.0x (Water) or 12.0x (Sewer), assuming stability in the revenue defensibility and operating risk assessments</li> <li>• Weakening of DWSD credit fundamentals</li> <li>• Downward revisions to the system's Purchaser Credit Quality assessment</li> <li>• Material declines in liquidity that expose bondholders to timing risk</li> </ul>

Sources: Moody's Report, "Great Lakes Water Auth, MI", May 30, 2025. S&P Reports, "Great Lakes Water Authority, Michigan; Water/Sewer", May 30, 2025. Fitch Reports, "Great Lakes Water Authority (Water System), Michigan" and "Great Lakes Water Authority (Sewer System), Michigan", dated May 29, 2025.



# **New Money Financing Strategy in 2026**



## Projected Regional Capital Financing Needs Through FY 2030

*Projections represent a working draft presented at the October 8, 2025 meeting of the Board of Directors. Borrowing forecasts are currently under review and subject to update.*

Fiscal Year	2026	2027	2028	2029	2030	Total
<b>Water System</b>						
Capital Projects Spending (in Millions)	\$195	\$277	\$334	\$228	\$187	\$1,220
Bond Funding (in Millions)	\$237	\$302	\$227	\$168	\$78	\$1,012
SRF Loan Draws (in Millions)	\$7	\$ -	\$ -	\$ -	\$ -	\$7
<b>Sewer System</b>						
Capital Projects Spending (in Millions)	\$245	\$255	\$280	\$235	\$185	\$1,200
Bond Funding (in Millions)	\$67	\$126	\$132	\$72	\$54	\$451
SRF Loan Draws (in Millions)	\$98	\$129	\$96	\$55	\$56	\$435

Note: does not include spending for unidentified needs or borrowing on behalf of Local System.



## New Money Borrowing Strategy in 2026 and Beyond

**Larger and more frequent borrowings present an opportunity to diversify funding mix and optimize borrowing costs by more actively managing debt portfolio**

- ◆ GLWA is entering a period of extraordinary capital investment driven by aging infrastructure, regulatory requirements and inflationary cost increases
- ◆ Structurally higher interest rates represent a shift from past decade and present an additional challenge
- ◆ GLWA is well positioned to address these challenges given financial discipline that has supported deleveraging, improved credit ratings, and driven interest among investors
- ◆ GLWA should continue to integrate subsidized funding available from SRF program and explore other options to manage portfolio costs, such as WIFIA
- ◆ Key market-driven opportunity to integrate modest additional variable rate debt within policy limits
  - Complement fixed rate debt to lower portfolio cost of borrowing
  - Improve matching of assets and liabilities to manage risk of falling investment rates
  - Diversify investor mix
  - Add flexibility to debt structure





## Variable Rate Debt Considerations

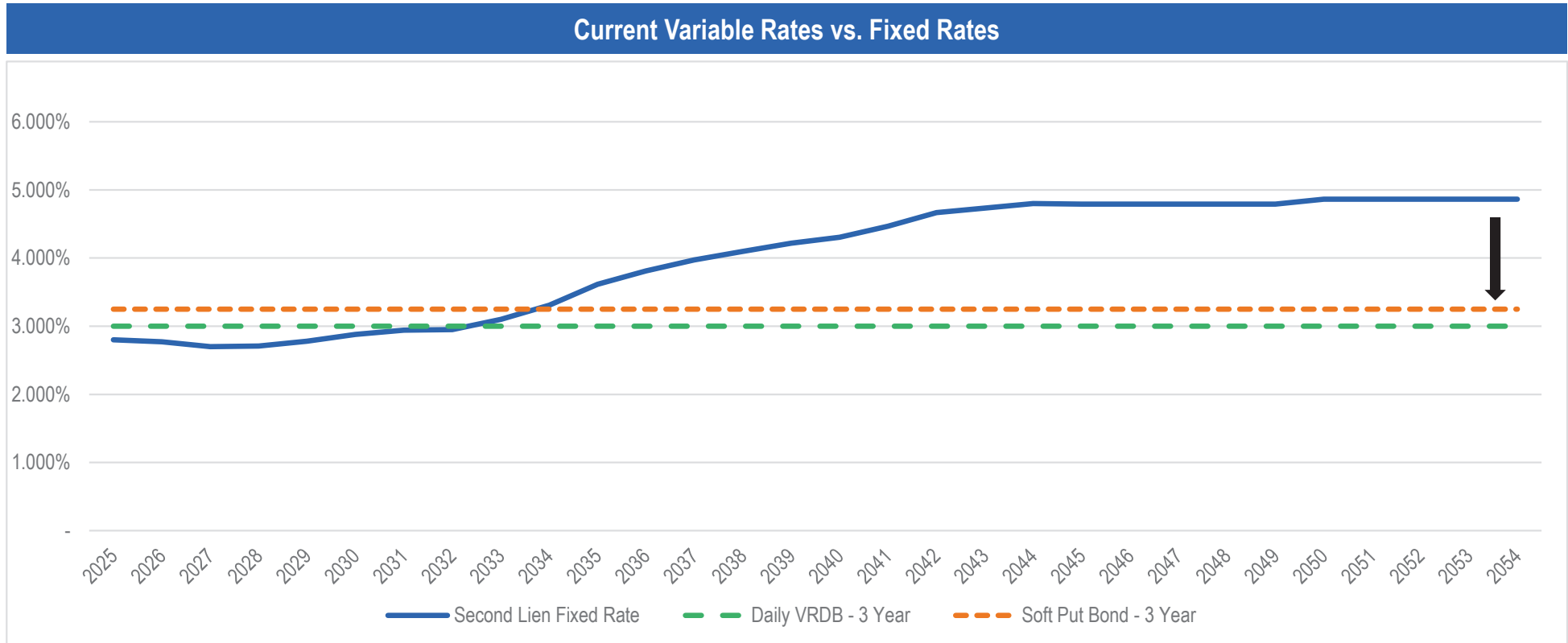
- ◆ GLWA can increase variable rate exposure substantially within policy and rating agency limits
  - Legacy variable rate exposure on Sewer System of \$239.5 million (9.0% of Sewer)
  - Debt Policy permits variable rate debt exposure of up to 20% (*after* netting short-term investments)
  - Rating agencies are comfortable with 20% or more floating rate debt
- ◆ GLWA credit stability and rating trajectory provide significant flexibility to access the benefits of variable rate market
- ◆ Many sector peers integrate variable rate debt into portfolios
  - Trend has been to increase exposure based on market conditions and borrowing needs

Peer Utility Variable Rate Exposure (Sorted by Total Debt)			
Issuer	Variable Rate Debt (millions)	Total Debt (millions)	% Variable Debt
Denver Water	75	1,480	5.1%
Atlanta	-	2,620	-
<b>Great Lakes Water Authority - Water</b>	<b>-</b>	<b>2,629</b>	<b>-</b>
King County, WA	657	2,640	24.9%
<b>Great Lakes Water Authority – Sewer</b>	<b>239</b>	<b>2,663</b>	<b>9.0%</b>
Chicago	-	3,230	-
Philadelphia	125	3,260	3.8%
Dallas	375	3,400	11.0%
San Antonio Water System	581	3,725	15.6%
DC Water	522	3,835	13.6%
Metropolitan Water District of So. Cal	931	4,130	22.5%
Houston CUS	2,430	7,220	33.7%
San Francisco Public Utilities Commission	1,320	9,350	14.1%
New York Municipal Water Fin. Authority	5,150	33,110	15.6%



## Variable Rate Debt Can Be Used to Reduce Portfolio Cost

- Interest on long-dated variable rate debt is based on short-term interest rates, which are historically lower than long-term fixed interest rates
- Variable rate exposure can be managed as part of the full portfolio to optimize the benefit to an issuer
- Currently, short term debt is outperforming the fixed rate yield to maturity on a long-dated fixed rate bond by over 150bps



*Note: Interest Rates as of December 12, 2025; Daily VRDB pricing represents current pricing of SIFMA - 30bps + the estimated ongoing liquidity / dealer costs for a 3 year term (45bps); Soft Put pricing at BVAL +45 for a 3 year term; After 3 year term, liquidity would need to be required for VRDB or the soft put bond would need to be remarketed, which could change the pricing dynamics*



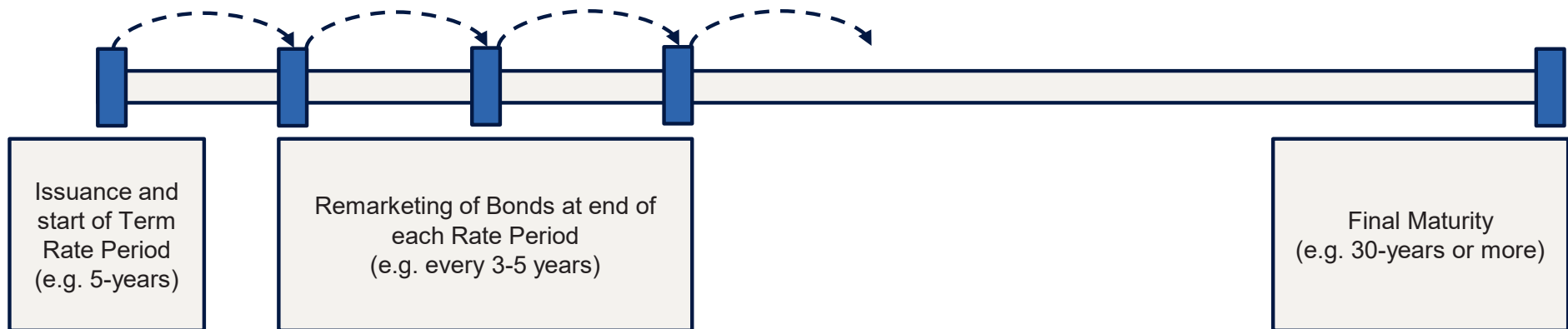
## Comparison of Variable Rate Products Available to GLWA

	Daily Floating Rate		Intermediate	Fixed Rate
Product Overview	Variable Rate Demand Bonds	SIFMA/SOFR Index Notes	Term Rate	Fixed Rate
Interest Rate Reset Frequency	Daily or Weekly	Weekly, Monthly or Quarterly	Up to 10 Years	Never
Remarketing Frequency	Daily or Weekly	Up to 10 Years	Up to 10 Years	Never
Bank Liquidity	Required (or self liquidity)	Not required	Not required	Not required
Extension Feature; Nature of Put Feature	Term out of credit facility upon failed remarketing	Mandatory tender in 1-10 years; Hard put <u>or</u> soft put with amortization to term at a penalty rate	Mandatory tender in 1-10 years; Hard put <u>or</u> soft put with amortization to term at a penalty rate	None
Maximum Maturity	No limit	No limit	No limit	No limit
Call Flexibility	Yes, with notice	Callable on each remarketing date or up to 6 months prior	Callable on each remarketing date or up to 6 months prior	Typically, callable after year 10
Risks				
Interest Rate Risk	Ongoing	Ongoing	At issuance and remarketing only	At issuance only
Remarketing Risk	Ongoing	None	None	None
Issuer Credit Risk	Ongoing	At issuance and remarketing only	At issuance and remarketing only	At issuance only
Bank Liquidity Risk	Bank credit facility renewal required	None	None	None
Investor Base	Exceptionally Broad	Limited in Current Market	Broad	Broad



## Term Rate Bonds Could Provide Beneficial Alternative to Floating Debt

- Term Rate bonds offer an intermediate option between fixed rate debt and floating rate debt
- Key benefit is to take advantage of short end of the yield curve but gain budgetary certainty and limit impacts of short-term interest rate volatility
- While in a Term Rate Period, bonds bear interest at a fixed rate through the expiration of the Rate Period
- The interest rate paid during the Initial Period is determined during the initial pricing based upon the term of the Interest Period and investor evaluation of the creditworthiness of GLWA
- At the end of the Term Rate Period the bonds are intended to be remarketed in a subsequent Term Rate Period or another interest rate mode
- If the bonds are not remarketed or there is a failed remarketing, the bonds would bear interest at a Penalty Rate (e.g. 8.00%) until the bonds can be remarketed or the final maturity of the bonds





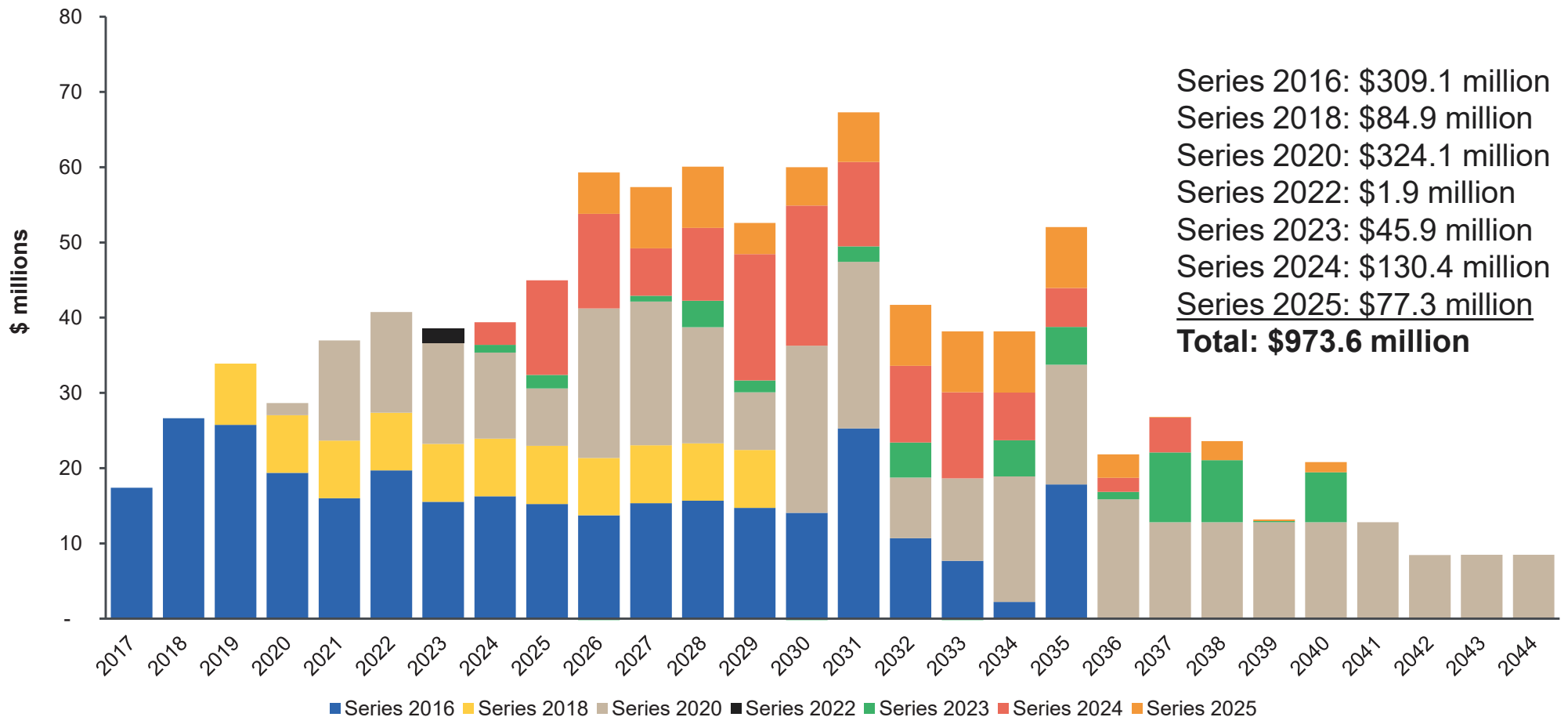
# Refinancing Opportunities



## Nearly \$1B in Debt Service Savings Achieved Since GLWA Standup

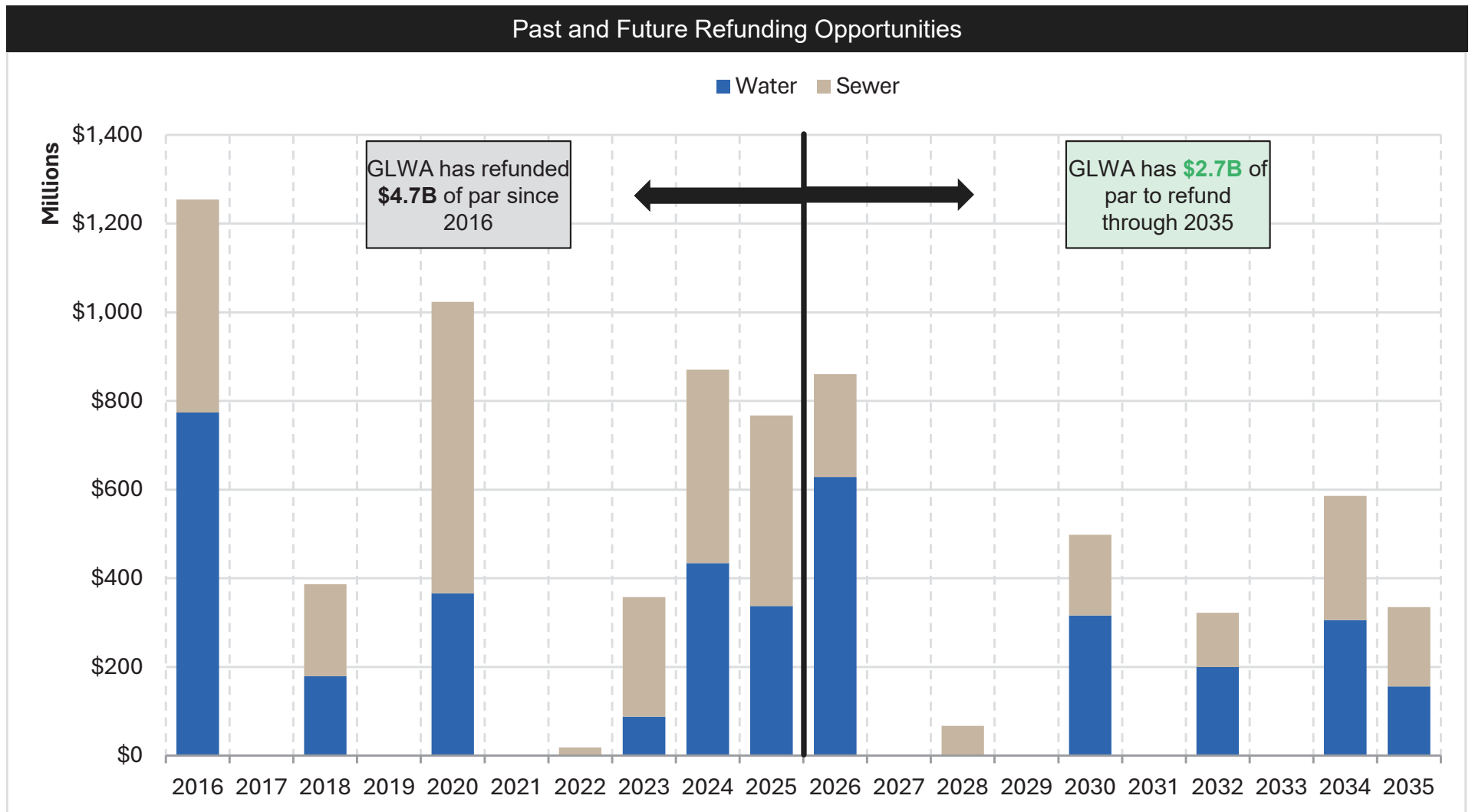
- Refinancing program has reduced debt service by approximately \$60 million **annually** between FY2026 and FY2030

### History of Debt Service Savings Since GLWA Standup





## After 2026, GLWA will have Fewer Opportunities to Create Savings from the Debt Portfolio





## Summary of Current Refunding Opportunities in 2026

### Current Refunding

Up to \$628mm  
(Water)

Up to \$232mm  
(Sewer)

- Refunding candidates for Water System and Sewer System become callable on July 1, 2026
- \$628 million of Water System candidates and \$232 million of Sewer System candidates
- Under current conditions, all candidates generate significant net present value savings meeting debt policy minimums

Water System			
Senior Lien			
	Total Outstanding	Callable Outstanding	Call Date
Series 2016A	87,975	87,970	7/1/2026
Series 2016C	198,335	180,950	7/1/2026
	<b>286,310</b>	<b>268,920</b>	
Second Lien			
	Total Outstanding	Callable Outstanding	Call Date
Series 2016B	163,805	163,800	7/1/2026
Series 2016D	196,990	195,310	7/1/2026
	<b>360,795</b>	<b>359,110</b>	

Sewer System			
Senior Lien			
	Total Outstanding	Callable Outstanding	Call Date
Series 2016B	33,770	33,390	7/1/2026
	<b>33,770</b>	<b>33,390</b>	
Second Lien			
	Total Outstanding	Callable Outstanding	Call Date
Series 2016C	198,560	198,560	7/1/2026
	<b>198,560</b>	<b>198,560</b>	





## Summary of Current Refunding Targets and Economics

Water System: Current Refunding Summary							
Candidate					All Callable Maturities		
Series	Lien	Tax Status	Callable Par	Call Date	PV Savings (\$000s)	PV Savings (%)	Par (\$000s)
Series 2016A	Senior	Tax-Exempt	87,970	7/1/2026	4,708	5.35%	87,970
Series 2016C	Senior	Tax-Exempt	180,950	7/1/2026	16,959	9.37%	180,950
<b>Total Senior</b>			<b>268,920</b>		<b>21,667</b>	<b>8.06%</b>	<b>268,920</b>

Series	Lien	Tax Status	Callable Par	Call Date	PV Savings (\$000s)	PV Savings (%)	Par (\$000s)
Series 2016B	Second	Tax-Exempt	163,800	7/1/2026	7,560	4.62%	163,800
Series 2016D	Second	Tax-Exempt	195,310	7/1/2026	18,725	9.59%	195,310
<b>Total Second</b>			<b>359,110</b>		<b>26,285</b>	<b>7.32%</b>	<b>359,110</b>

<b>Total Water System</b>			<b>628,030</b>		<b>47,953</b>	<b>7.64%</b>	<b>628,030</b>
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Sewer System: Current Refunding Summary							
Candidate					All Callable Maturities		
Series	Lien	Tax Status	Callable Par	Call Date	PV Savings (\$000s)	PV Savings (%)	Par (\$000s)
Series 2016B	Senior	Tax-Exempt	33,390	7/1/2026	4,404	13.19%	33,390
<b>Total Senior</b>			<b>33,390</b>		<b>4,404</b>	<b>13.19%</b>	<b>33,390</b>

Series	Lien	Tax Status	Callable Par	Call Date	PV Savings (\$000s)	PV Savings (%)	Par (\$000s)
Series 2016C	Second	Tax-Exempt	198,560	7/1/2026	23,567	11.87%	198,560
<b>Total Second</b>			<b>198,560</b>		<b>23,567</b>	<b>11.87%</b>	<b>198,560</b>

<b>Total Sewer System</b>			<b>231,950</b>		<b>27,971</b>	<b>12.06%</b>	<b>231,950</b>
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Assumptions: Matched lien refunding with Delivery Date of June 1, 2026; SLGS escrow; Tax-Exempt refunding bonds issued with 5% coupons and a 10 year par call (1/1/2036); Issuance costs of \$8/bond; Maturity by Maturity savings structure; Interest rates as of December 12, 2025; All figures present valued to June 1, 2025 using the corresponding tax-exempt yield



## Summary of Current Refunding Savings in Current Market

### Refunding Candidates

- Includes all bonds callable in 2026

### Current Market Savings Summary

- Water - \$67.8 million in gross cashflow savings (\$49.3 million present value)
- Sewer - \$35.6 million in gross cashflow savings (\$29.4 million present value)

### Assumptions

- Interest rates and SLGS escrow as of December 12, 2025
- Accrued interest through delivery contributed to transaction
- Structured to create level savings, where possible, when compared to refunded bonds
- 5.00% coupon structure with par call on 1/1/2036
- PV at Arb. Yield of each respective series to 6/1/2026

	Water System	Sewer System
Delivery Date:	6/1/2026	6/1/2026
Call Date:	1/1/2036	1/1/2036
Final Maturity:	7/1/2046	7/1/2036
Refunding Par (\$):	580,800,000	204,320,000
Refunded Par (\$):	628,030,000	231,950,000
<b>Sources (\$)</b>		
Par Amount	580,800,000	204,320,000
Premium	52,484,307	29,486,335
Accrued Interest	12,851,849	4,732,313
<b>Total Sources</b>	<b>646,136,156</b>	<b>238,538,648</b>
<b>Uses (\$)</b>		
Escrow Deposit	641,480,329	236,900,551
COI / Underwriter's Discount	4,655,827	1,638,096
<b>Total Uses</b>	<b>646,136,156</b>	<b>238,538,648</b>
<b>Statistics</b>		
Arbitrage Yield (%):	3.61%	3.02%
True Interest Cost (%):	3.97%	3.12%
Weighted Average Life (yrs.):	11.12	8.66
NPV Savings (\$):	<b>49,308,437</b>	<b>29,405,682</b>
NPV Savings (%):	<b>7.85%</b>	<b>12.68%</b>

DSIR Year	Water System Savings (\$)	Sewer System Savings (\$)
7/1/2026	2,570,370	946,463
7/1/2027	3,934,438	1,075,217
7/1/2028	4,346,938	1,102,300
7/1/2029	4,343,438	1,102,300
7/1/2030	4,338,188	5,577,300
7/1/2031	4,345,938	4,408,550
7/1/2032	4,340,688	1,057,050
7/1/2033	4,338,288	5,574,300
7/1/2034	2,577,675	5,577,300
7/1/2035	3,378,988	4,575,250
7/1/2036	2,853,750	4,572,750
7/1/2037	952,750	-
7/1/2038	952,250	-
7/1/2039	951,750	-
7/1/2040	951,250	-
7/1/2041	950,750	-
7/1/2042	4,345,250	-
7/1/2043	4,345,000	-
7/1/2044	4,341,250	-
7/1/2045	4,343,750	-
7/1/2046	4,341,750	-
<b>Total</b>	<b>67,844,445</b>	<b>35,568,779</b>

Preliminary, subject to change.



# Next Steps



## Next Steps on Financing Alternatives

- Working group continues to review financing alternatives for capital program and potential applications for GLWA
- Financing alternatives workshop with Audit Committee to further explore variable rate debt and WIFIA program



## Preliminary 2026 Transaction Calendar

Timing	Event
<b>December 19, 2025</b>	■ Audit Committee Review of Notice of Intent Resolutions
<b>January 28, 2026</b>	■ Board Adoption of Notice of Intent Resolutions
<b>March 27, 2026</b>	■ Audit Committee Review of Series Ordinances and Resolutions
<b>April 22, 2026</b>	■ Board Adoption of Series Ordinances and Resolutions
<b>April 2026</b>	■ Rating Agency Meetings
<b>May 2026</b>	■ Post POS & Investor Presentation
<b>Late May 2026</b>	■ Bond Transaction Pricing
<b>June 2026</b>	■ Bond Transaction Closing

*Note: Schedule is preliminary and subject to change.*



# Appendix



## Select Public Finance Acronyms

- **BVAL** – BVAL AAA Municipal Curve. BVAL is a municipal bond index produced by Bloomberg that represents Bloomberg's best estimate for market yields for AAA-rated municipal bonds across different maturities.
- **COI** – Cost of Issuance. The expenses paid by or on behalf of the issuer in connection with the sale and issuance of bonds..
- **DS** – Debt Service. The amount of money necessary to pay interest on outstanding bonds, the principal of maturing or redeemed bonds and any required contributions to a sinking fund for term bonds
- **DSIR** – Debt Service Installment Requirement. A defined term in the Master Bond Ordinances, this represents the debt service that must be set aside and budgeted within a bond year.
- **DSRF** – Debt Service Reserve Fund. A fund in which funds are placed to be applied to pay debt service if pledged revenues are insufficient to satisfy the debt service requirements.
- **FOMC** – Federal Open Market Committee. A key committee within the Federal Reserve System that oversees open market operations and makes key decisions about interest rates and the growth of the United States money supply.
- **Index Notes** - a bond where the interest rate is set periodically as a spread to a specified short-term interest rate index, rather than being determined through remarketing.
- **PV** – Present Value. The current value of a payment or stream of payments expected to be received in the future discounted at a given interest rate or rates.
- **SIFMA** – The Securities Industry and Financial Markets Association Municipal Swap Index is a 7-day high-grade market index comprised of tax-exempt Variable Rate Demand Obligations with certain characteristics.



## Select Public Finance Acronyms (cont'd)

- ◆ **SLGS** – US Treasury – State and Local Government Series. SLGS securities are offered for sale to issuers of state and local government tax-exempt debt to assist with compliance of yield restriction or arbitrage rebate provisions of the Internal Revenue Code.
- ◆ **SOFR** - SOFR stands for the Secured Overnight Financing Rate. SOFR is a broad, transaction-based overnight interest rate that measures the cost of borrowing cash overnight collateralized by U.S. Treasury securities in the repurchase market.
- ◆ **Term Rate Bond** - Has a fixed interest rate for a predefined term (typically 1-10 years), after which the bond is subject to mandatory tender and either converts to another interest-rate mode, resets for a new term, or is repaid.
- ◆ **UWD** – Underwriter's Discount. The difference between the amount the underwriter pays the issuer for the bonds and the price at which the underwriter sells the bonds to the public. Represents the compensation for the underwriting syndicate.
- ◆ **VRDB or VRDO** – Variable Rate Demand Bond or Variable Rate Demand Obligation. VRDBs (or VRDOs) are short-term debt securities that bear interest at a floating, or variable, rate adjusted at specified intervals (daily or weekly) through a remarketing process. Holders can redeem these securities at designated times.
- ◆ **WAM** – Weighted Average Maturity. A reflection of the rapidity with which the principal of a bond issue is expected to be paid.





## Variable Rate Debt: Policy Considerations

- GLWA's Debt Management Policy provides guidance on the issuance of variable rate debt:
- *GLWA will consider issuance of Variable Rate Debt when it improves matching of assets and liabilities, provides the potential for lower debt service costs over the term of the debt, adds flexibility to GLWA's capital structure, diversifies GLWA's investor base, or in other circumstances where supported by an analysis and recommendation from GLWA's Registered Municipal Advisor that evaluates and quantifies the risks and opportunities*
  - *(1) Limitation on Net Variable Rate Debt Exposure. The percentage of Net Variable Rate Debt may not exceed 20% of GLWA's total outstanding debt. Net Variable Rate exposure is calculated by excluding Variable Rate Debt hedged by Interest Rate Swaps in a synthetic fixed rate structure or by GLWA short-term assets earning variable interest income*
  - *(2) Adequate Safeguards Against Risk. GLWA will ensure that financing structures and/or budgetary safeguards are in place to mitigate adverse impacts from interest rate shifts and liquidity risks; such structures could include, but are not limited to, interest rate caps, offsetting short-term cash investments held at GLWA, Letters or Lines of Credit or other Liquidity Facilities, soft puts, and conservative budgeting practices based on historical fluctuations in interest activity and current market assumptions*

