



Great Lakes Water Authority

Key Performance Indicators and
Effective Utility Management (EUM) Metrics

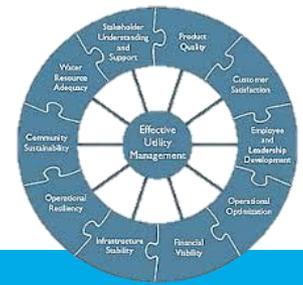
January 8, 2025

Ten Attributes of Effectively Managed Water Sector Utilities (EUM)



Attribute	Attribute Components
Employee and Leadership Development	Recruits and retains a workforce that is competent, motivated, adaptive, and safety-focused. Establishes a participatory, collaborative organization dedicated to continual learning, improvement, and innovation. Ensures employee institutional knowledge is retained, transferred, and improved upon over time. Provides a focus on and emphasizes opportunities for professional and leadership development, taking into account the differing needs and expectations of a multi-generational workforce and for resource recovery facilities. Establishes an integrated and well-coordinated senior leadership team.
Operational Optimization	Ensures ongoing, timely, cost-effective, reliable, and sustainable performance improvements in all facets of its operations in service to public health and environmental protection. Makes effective use of data from automated and smart systems, and learns from performance monitoring. Minimizes resource use, loss, and impacts from day-to-day operations, and reduces all forms of waste. Maintains awareness of information and operational technology developments to anticipate and support timely adoption of improvements.
Financial Viability	Understands the full life-cycle cost of utility operations and value of water resources. Establishes and maintains an effective balance between long-term debt, asset values, operations and maintenance expenditures, and operating revenues. Establishes predictable rates—consistent with community expectations and acceptability—adequate to recover costs, provide for reserves, maintain support from bond rating agencies, plan and invest for future needs, and taking into account the needs of disadvantaged households. Implements sound strategies for collecting customer payments. Understands the opportunities available to diversify revenues and raise capital through adoption of new business models.
Infrastructure Strategy and Performance	Understands the condition of and costs associated with critical infrastructure assets. Plans infrastructure investments consistent with anticipated growth, system reliability goals, and relevant community priorities, building in flexibility for evolution in technology and materials, and uncertainty in the overall future operating context (e.g., climate impacts, customer base). Maintains and enhances the condition of all assets over the long-term at the lowest possible life-cycle cost and acceptable risk consistent with customer, community, and regulator-supported service levels. Assures asset repair, rehabilitation, and replacement efforts are coordinated within the community to minimize disruptions and other negative consequences.
Enterprise Resiliency	Ensures utility leadership and staff work together internally, and with external partners, to anticipate, respond to, and avoid problems. Proactively identifies, assesses, establishes tolerance levels for, and effectively manages a full range of business risks (including interdependencies with other services and utilities, legal, regulatory, financial, environmental, safety, physical and cyber security, knowledge loss, and natural disaster-related) in a proactive way consistent with industry trends and system reliability goals.

Ten Attributes of Effectively Managed Water Sector Utilities (EUM)

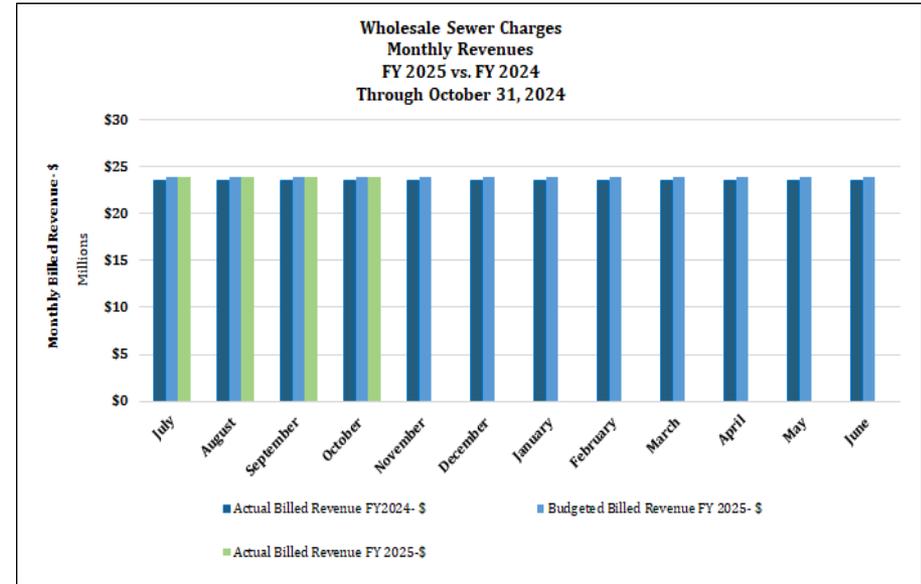
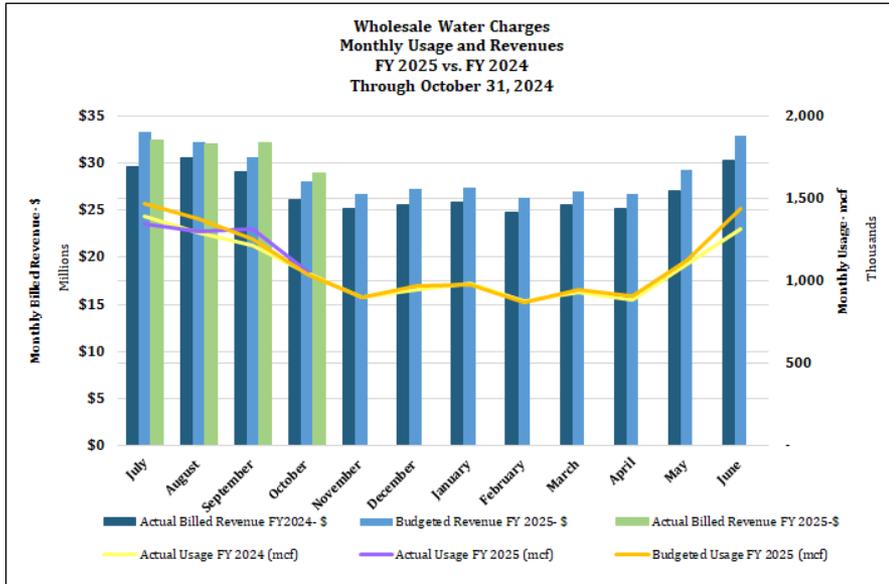


Attribute	Attribute Components
Product Quality	Produces “fit for purpose” water that meets or exceeds full compliance with regulatory and reliability requirements and consistent with customer, public health, ecological, and economic needs. Products include treated drinking water, treated wastewater effluent, recycled water, storm water discharge, and recovered resources.
Customer Satisfaction	Provides reliable, responsive, and affordable services in line with explicit, customer-derived service levels. Utilizes a mix of evolving communication technologies to understand and respond to customer needs and expectations, including receiving timely customer feedback and communicating during emergencies. Provides tailored customer service and outreach to traditional residential, commercial, and industrial customers, and understands and exercises as appropriate the opportunities presented by emergent customer groups (e.g., high strength waste producers, power companies).
Community Sustainability	Takes an active leadership role in promoting and organizing community sustainability improvements through collaboration with local partners (e.g., transportation departments, electrical utilities, planning departments, economic development organizations, watershed and source water protection groups). Manages operations, infrastructure, and investments to support the economic, environmental, and social health of its community. Integrates water resource management with other critical community infrastructure, social, and economic development planning to support community-wide resilience, sustainability, and livability to enhance overall water resource sustainability.
Water Resource Sustainability	Ensures the availability and sustainable management of water for its community and watershed, including water resource recovery. Understands its role in the complete water cycle, understands fit for purpose water reuse options, and integrates utility objectives and activities with other watershed managers and partners. Understands and plans for the potential for water resource variability (e.g., extreme events, such as drought and flooding), and utilizes as appropriate a full range of watershed investment and engagement strategies (e.g., Integrated Planning). Engages in long-term integrated water resource management, and ensures that current and future customer, community, and ecological water-related needs are met.
Stakeholder Understanding and Support	Engenders understanding and support from stakeholders (anyone who can affect or be affected by the utility), including customers, oversight bodies, community and watershed interests, and regulatory bodies for service levels, rate structures, operating budgets, capital improvement programs, and risk management decisions. Actively promotes an appreciation of the true value of water and water services, and water’s role in the social, economic, public, and environmental health of the community. Involves stakeholders in the decisions that will affect them, understands what it takes to operate as a “good neighbor,” and positions the utility as a critical asset to the community.

A dynamic splash of water in shades of blue, with bubbles and ripples, set against a light blue background. The water is captured in motion, creating a sense of freshness and movement.

EUM Attribute: Financial Viability

Financial Viability – Reliability of Wholesale Water and Sewer Revenue Projections



Wholesale Water System billed revenues for FY 2025 are at 101.02% of original, budgeted charge revenue. Actual usage is at 97.43% of original, budgeted usage. This equates to a revenue surplus of \$1.3 million through October 2024. Billed revenue for FY 2025 was 4.0% higher compared to the same period in FY 2024.

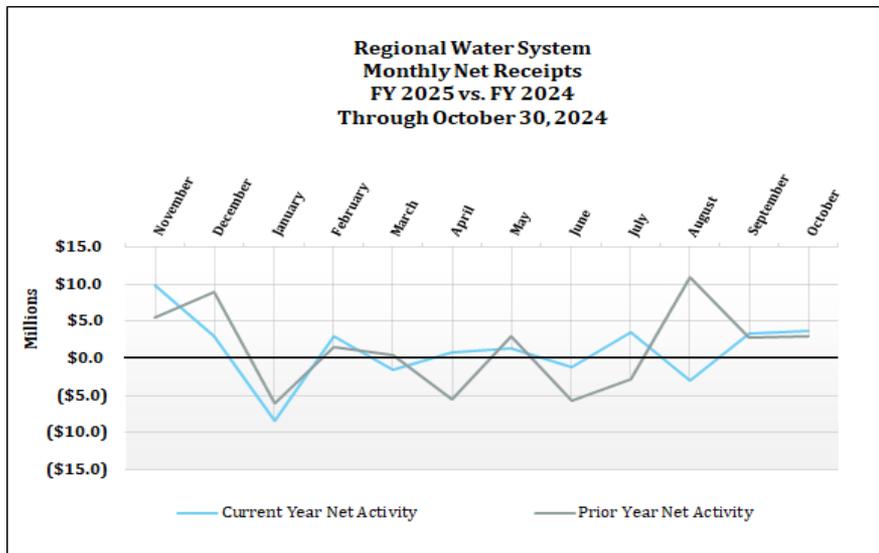
Wholesale Sewer System billed revenues for FY 2025 are at 100% of original budgeted charge revenue (based on the full fixed monthly charge). Billed revenue for FY 2025 was 1.7% higher compared to the same period in FY 2024

CEO Priority KPI Performance Criteria: Water system wholesale monthly billed revenues will meet or exceed budgeted amount. (Green = 100%; Yellow= 90-99%; Red = <90%)

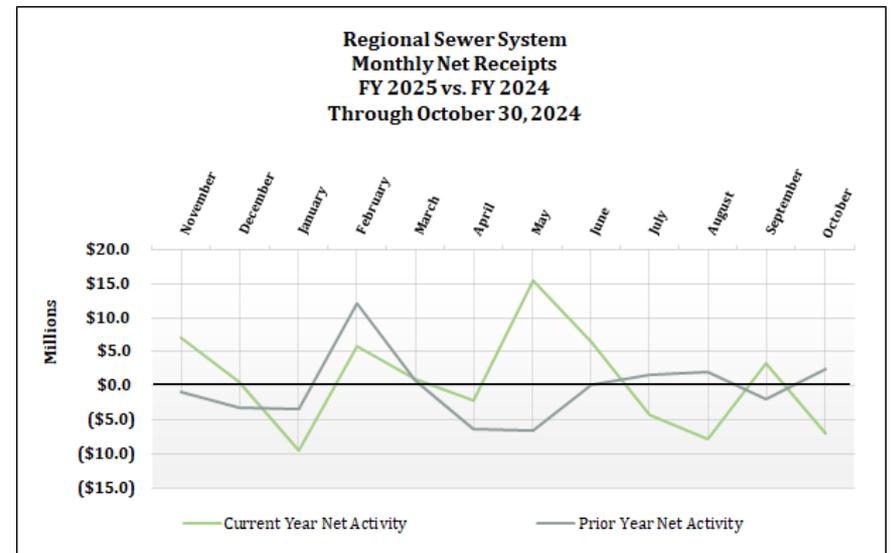
Commentary: This KPI is Green.

Financial Viability – GLWA Regional System Net Receipts

For the purposes of this reporting, Net Receipts equals cash collections less Master Bond Ordinance (MBO) disbursements. The black line in the charts below at zero highlights the minimum goal for net receipts. While this measure may vary monthly based on billing and collection cycles, cumulative positive net receipts supports long-term financial sustainability.

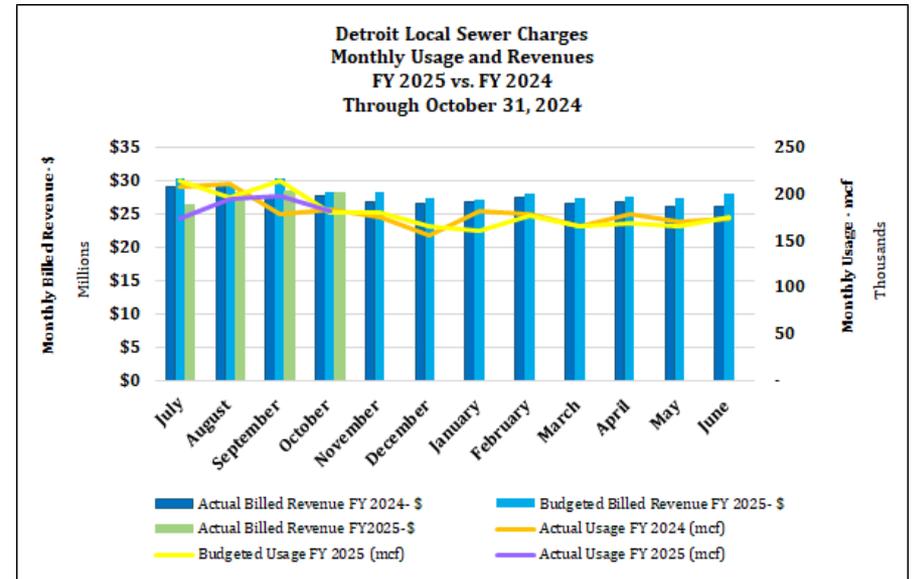
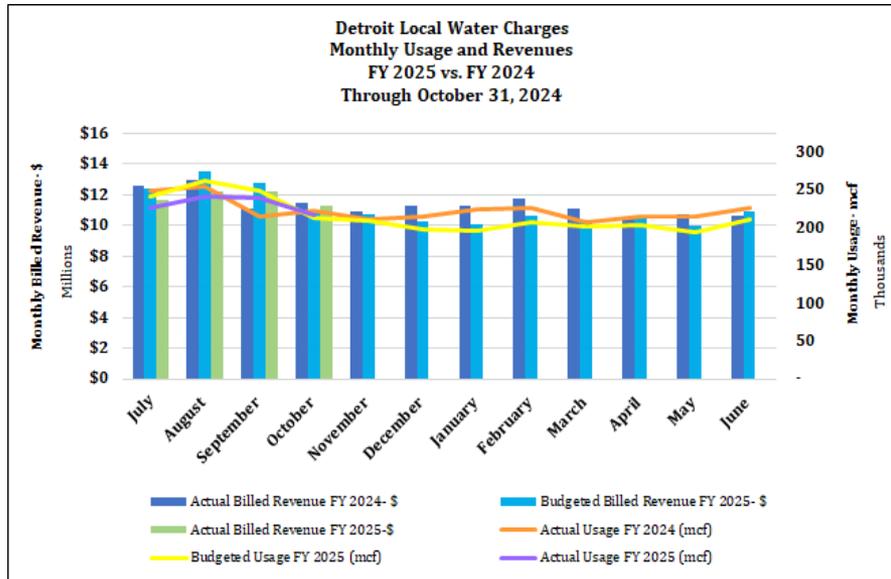


Regional Water System net receipts for the month of October 2024 exceeded required MBO disbursements by \$3.7 million. This equates to a 6% surplus of net monthly receipts over required disbursements or \$7.9 million year-to-date.



Regional Sewer System net receipts for the month of October 2024 fell short of required MBO disbursements by \$7.0 million. This equates to a 9% shortfall of net monthly receipts over required disbursements or \$15.1 million year-to-date. This shortfall results from \$15 million Highland Park credits applied to member partners.

Financial Viability – Reliability of Detroit Local Water and Sewer Revenue Projections



Detroit Local Water System billed revenues for FY 2025 are at 95.2% of budget and actual usage at 95.9% of budget through October 2024. Billed revenue for FY 2025 is 1.8% lower compared to the same period in FY 2024.

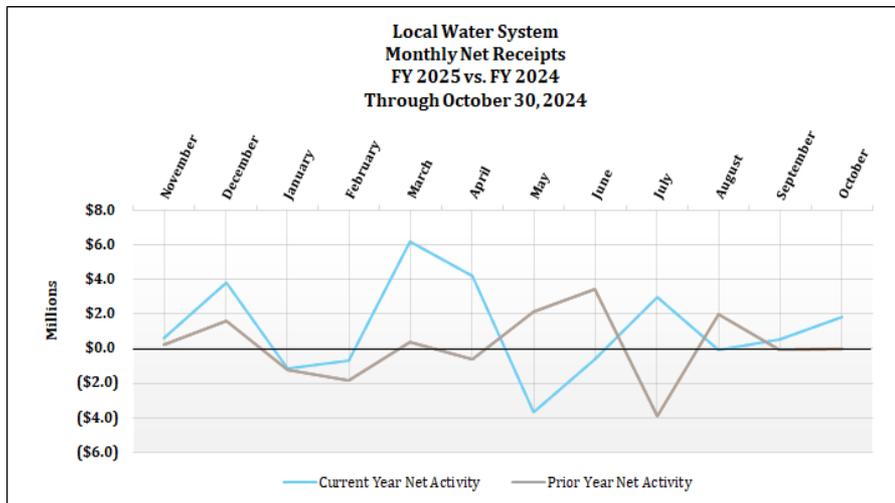
Detroit Local Sewer System billed revenues for FY 2025 are at 94.2% of budget and actual usage at 93.0% of original budget through October 2024. Billed revenue for FY 2025 is 2.0% lower compared to the same period in FY 2024.

Financial Viability – DWSD Local System Net Receipts

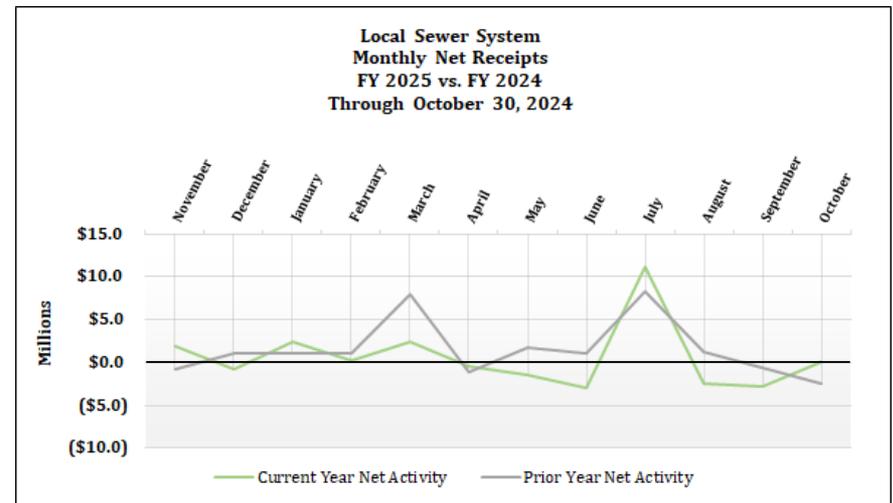
For the purposes of this reporting, Net Receipts equals cash collections less Master Bond Ordinance (MBO) disbursements.

The black line in the charts below at zero highlights the minimum goal for net receipts.

While this measure may vary monthly based on billing and collection cycles, Cumulative positive net receipts supports long-term financial sustainability.

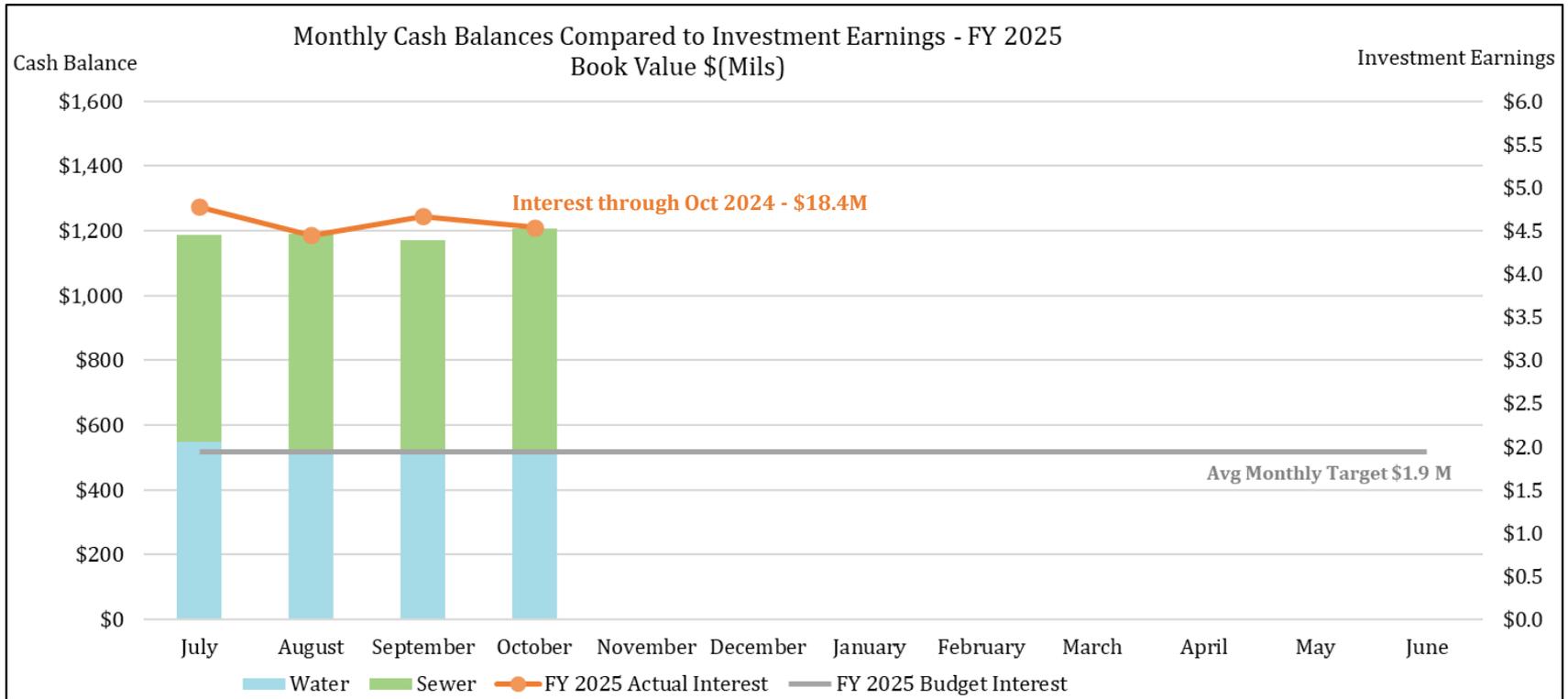


Local Water System net receipts for the month of October 2024 exceeded required MBO disbursements by \$1.8 million. This equates to a 13% surplus of net monthly receipts over required disbursements or a \$5.2 million surplus year-to-date.



Local Sewer System net receipts for the month of October 2024 exceeded required MBO disbursements by \$137 thousand. This equates to a 6% surplus of net receipts over required disbursements or a \$6.2 million surplus year-to-date.

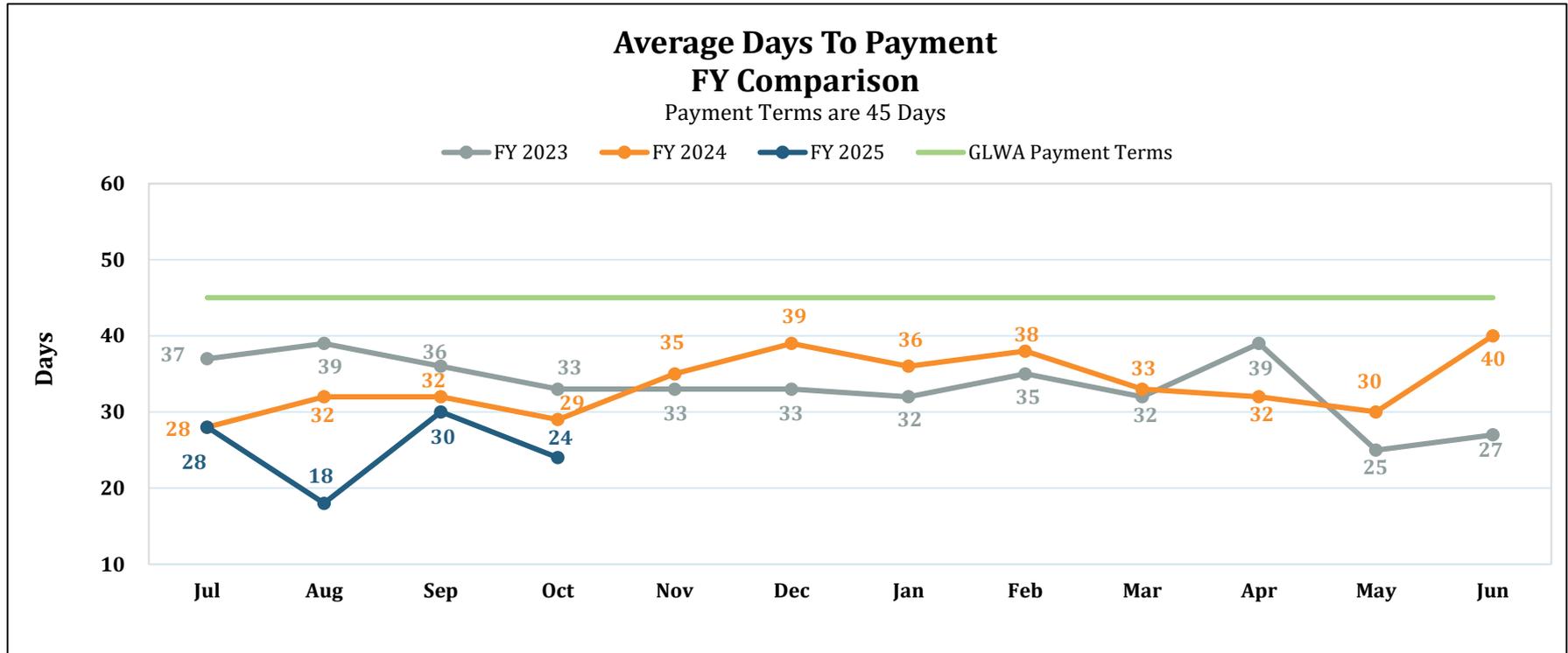
Financial Viability – Optimizing Cash Balances



- Cash & investment balances for the water & sewer funds change each month based on Master Bond Ordinance funding, operational requirements, capital funding, and debt payments.
- Investment earnings fluctuate monthly with the cash & investment balances as well as market conditions and investment strategy.
- The average monthly target of \$1.9 million is based on an annual forecast of \$23.3 million for interest earnings.
- For the month of October 2024, GLWA had investment earnings of \$4.5 million and cumulative FY 2025 earnings of \$18.4 million.
- GLWA continues to refine cash flows and work with its investment advisor to identify strategies to maximize future investment earnings while meeting the objectives of safety and liquidity.

Financial Viability – Days to Pay an Invoice

The goal is a twelve-month average of < 30 days to support vendor relations and expand the early payment discount program. The number of days is calculated as the days between invoice and payment date.



Timely vendor payments support:

- Positive supplier relations;
- Leveraging early payment discounts; and
- Effective cashflow management.

Twelve-month average days to payment		
FY 2023	FY 2024	FY 2025 (rolling calendar)
33	30	32

The average days to pay is higher than the target of less than 30 days date due to challenges with a small number of vendors. The Accounts Payable team continues to work in conjunction with the Procurement team to assist in improving vendor management and compliance.

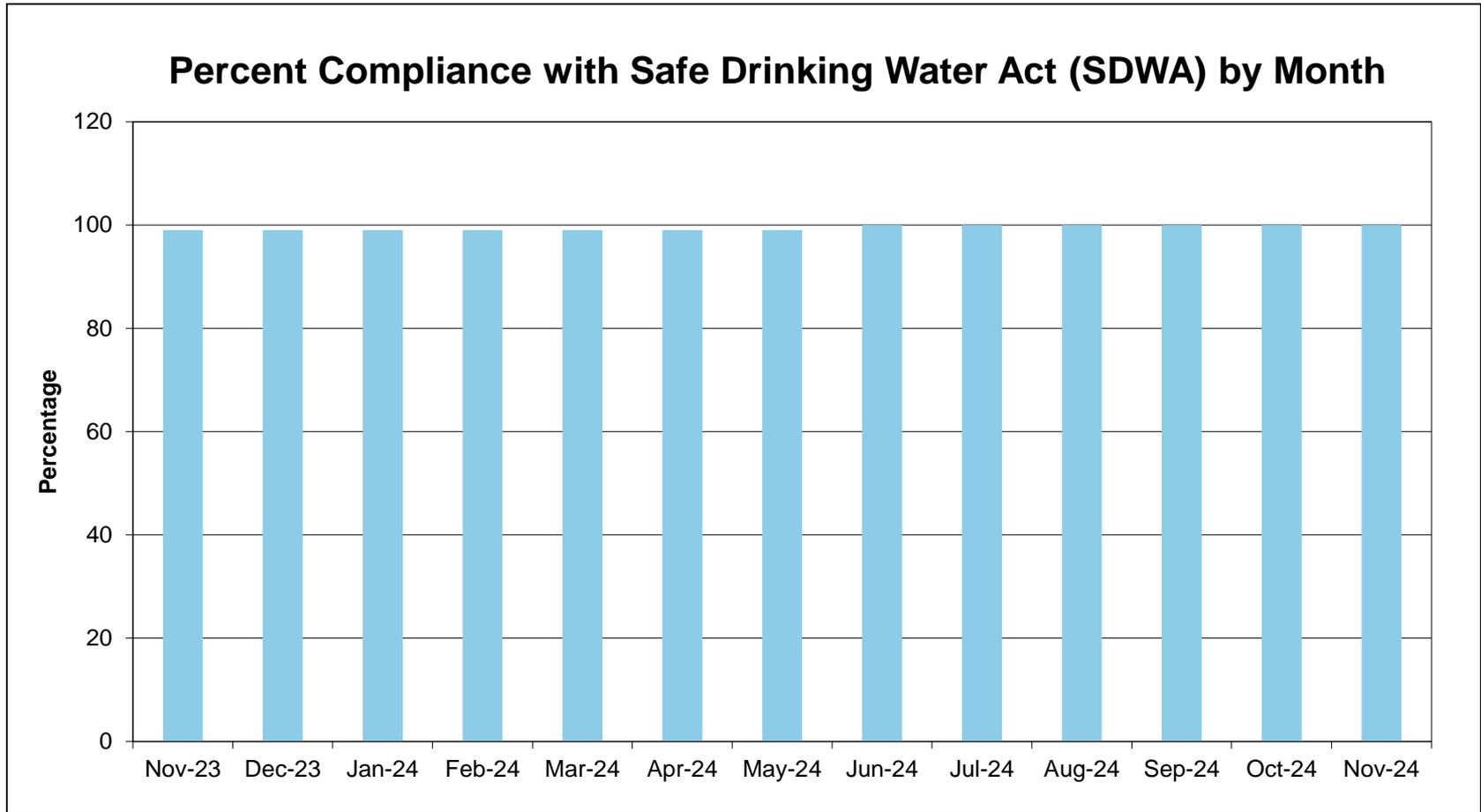
CEO Priority KPI Performance Criteria: Days to pay an invoice is monitored to support healthy supplier relationships. (Green = 40 days or less; Yellow = >40 to <45 days; Red = >45 days)

Commentary: The KPI is green at 24 days for the month of October, within the stated criteria.

A dynamic splash of water in shades of blue, with bubbles and ripples, set against a light blue background. The water is captured in motion, creating a sense of freshness and purity.

EUM Attribute: Product Quality

Product Quality – SDWA Compliance

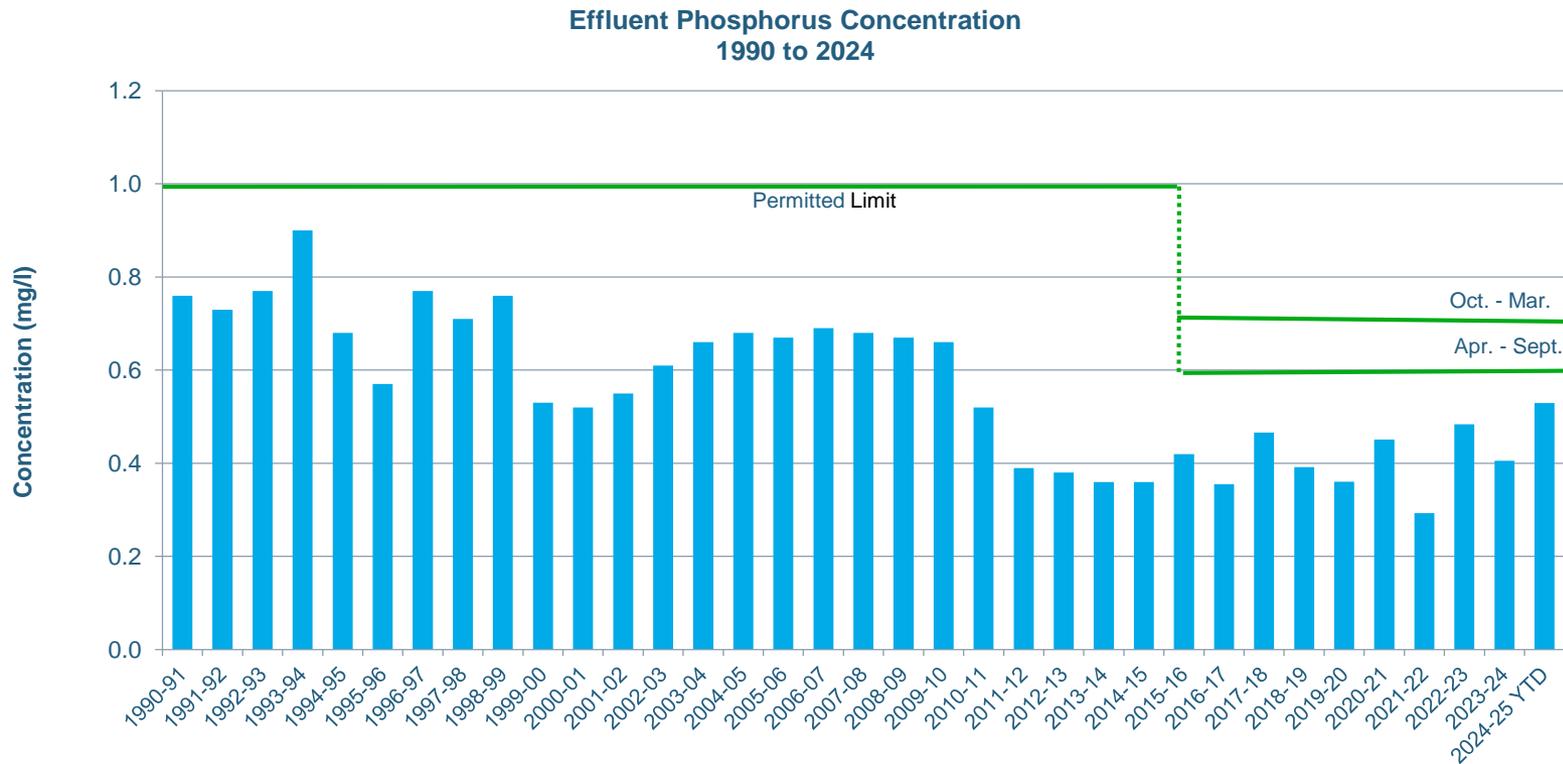


Product Quality: GLWA's goal is to surpass Safe Drinking Water Act requirements and this slide indicates compliance for the month.

Product Quality

Regulatory Compliance – Effluent Phosphorous Concentration

- Significant progress has been made in the reduction of effluent phosphorus.
- GLWA strives to surpass Federal and State requirements.



A dynamic splash of blue water with bubbles and ripples, set against a light blue background. The water is captured in motion, creating a sense of energy and freshness.

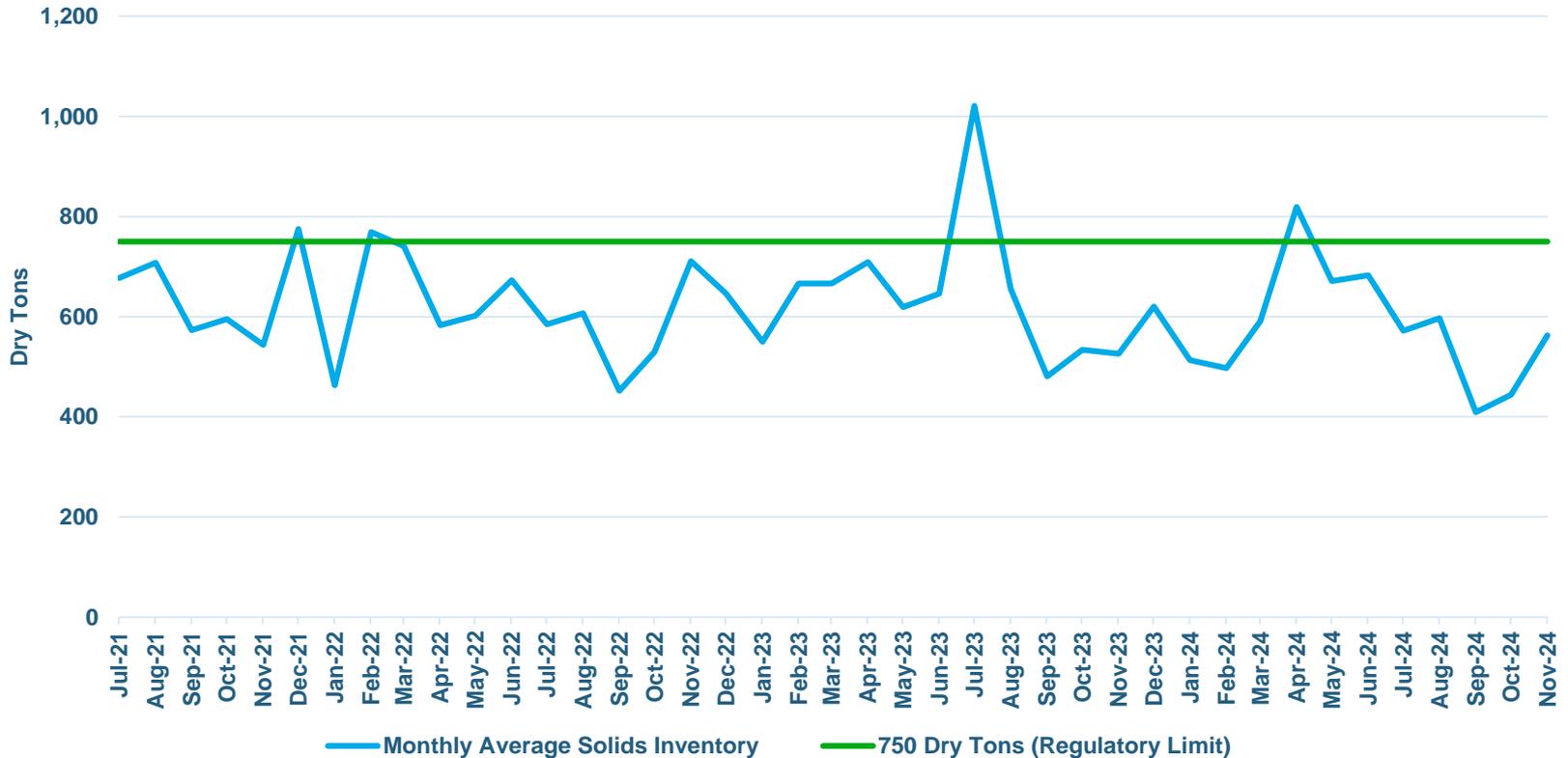
EUM Attribute: Operational Optimization

Operational Optimization

Regulatory Compliance – Monthly Solids Inventory

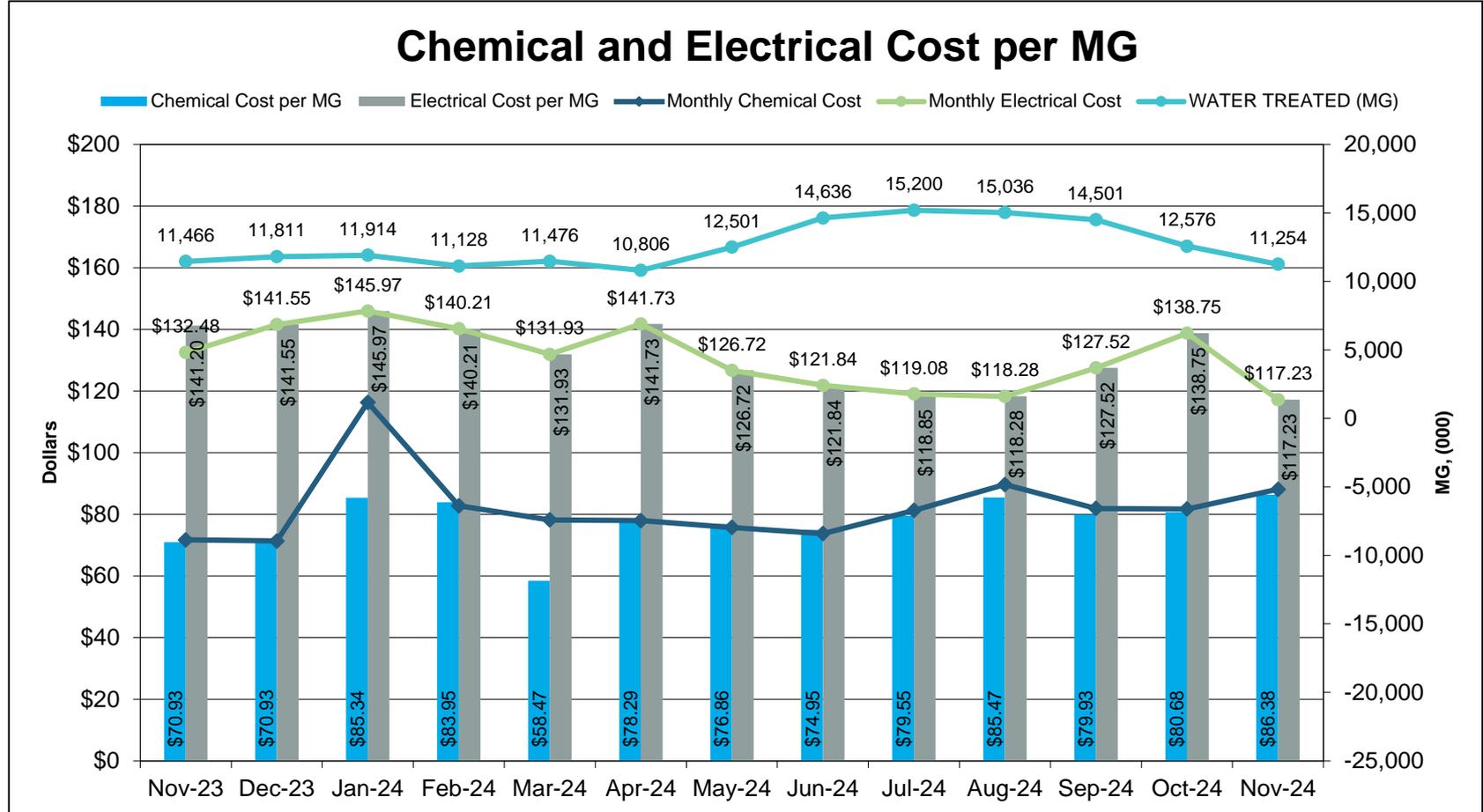
- Solids inventory is a measure of process performance and is regulated by the State.
- Having consistently tracked below 750 dry tons since Oct. 2014 is noteworthy.

Monthly Solids Inventory July 2021 to November 2024

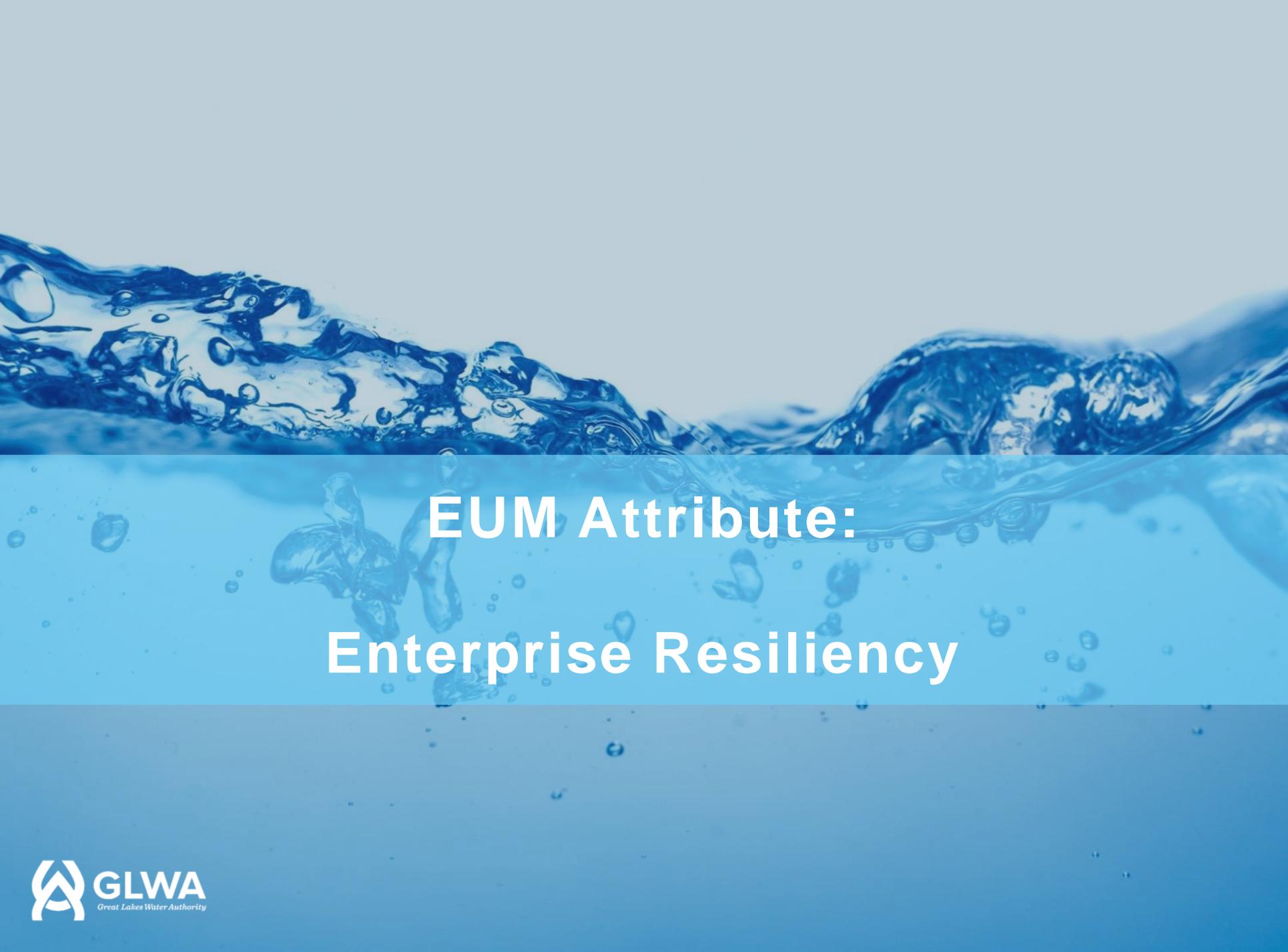


Note: No violation occurred in December 2021, February 2022, July 2023, or April 2024: the limit did not apply in those months due to the number of days on which Primary Effluent discharge occurred.

Operational Optimization Chemical & Electrical Costs

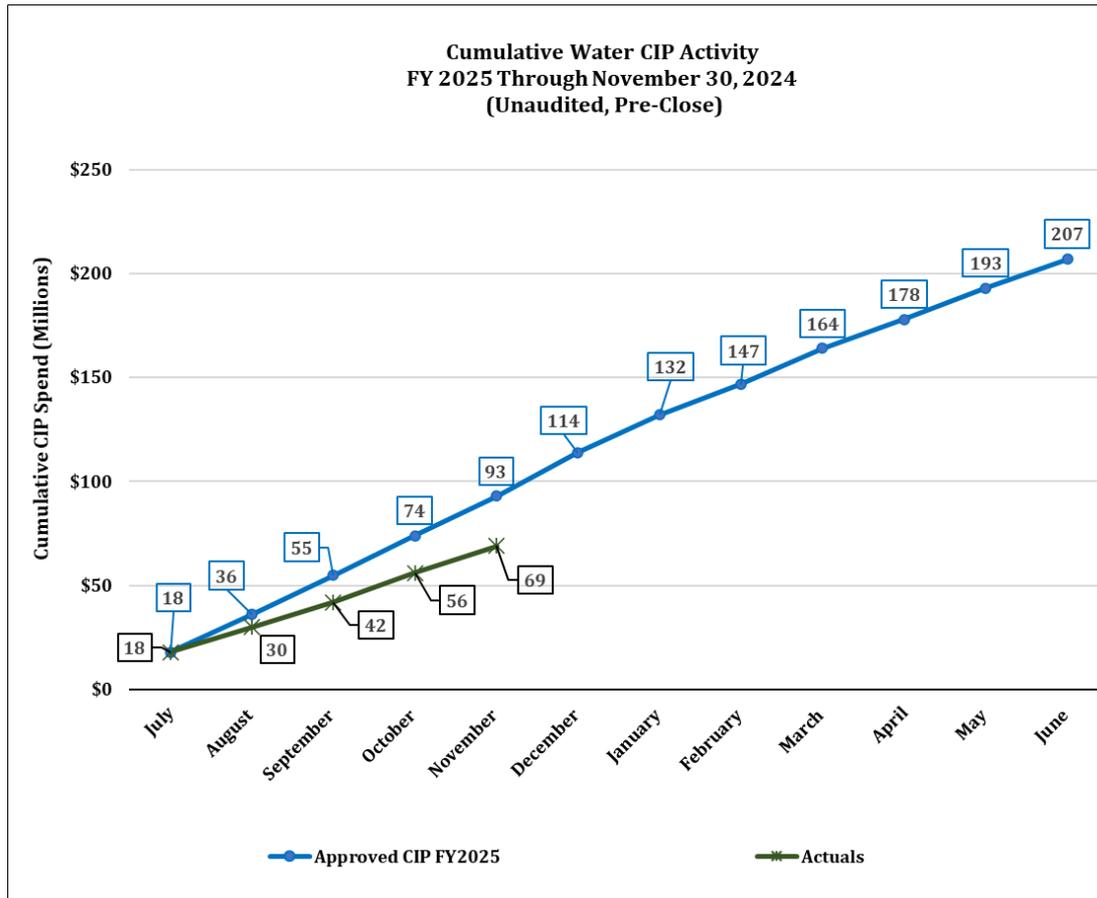


Operational Optimization: Being able to identify ongoing performance improvements for chemical and electrical usage per MG of water pumped is a key metric in managing operational cost. This slide is under development to include tracking of total costs per MG.

A dynamic splash of blue water with bubbles and ripples, set against a light blue background. The water is captured in motion, creating a sense of energy and freshness.

EUM Attribute: Enterprise Resiliency

Enterprise Resiliency FY 2025 Total Water CIP Spend



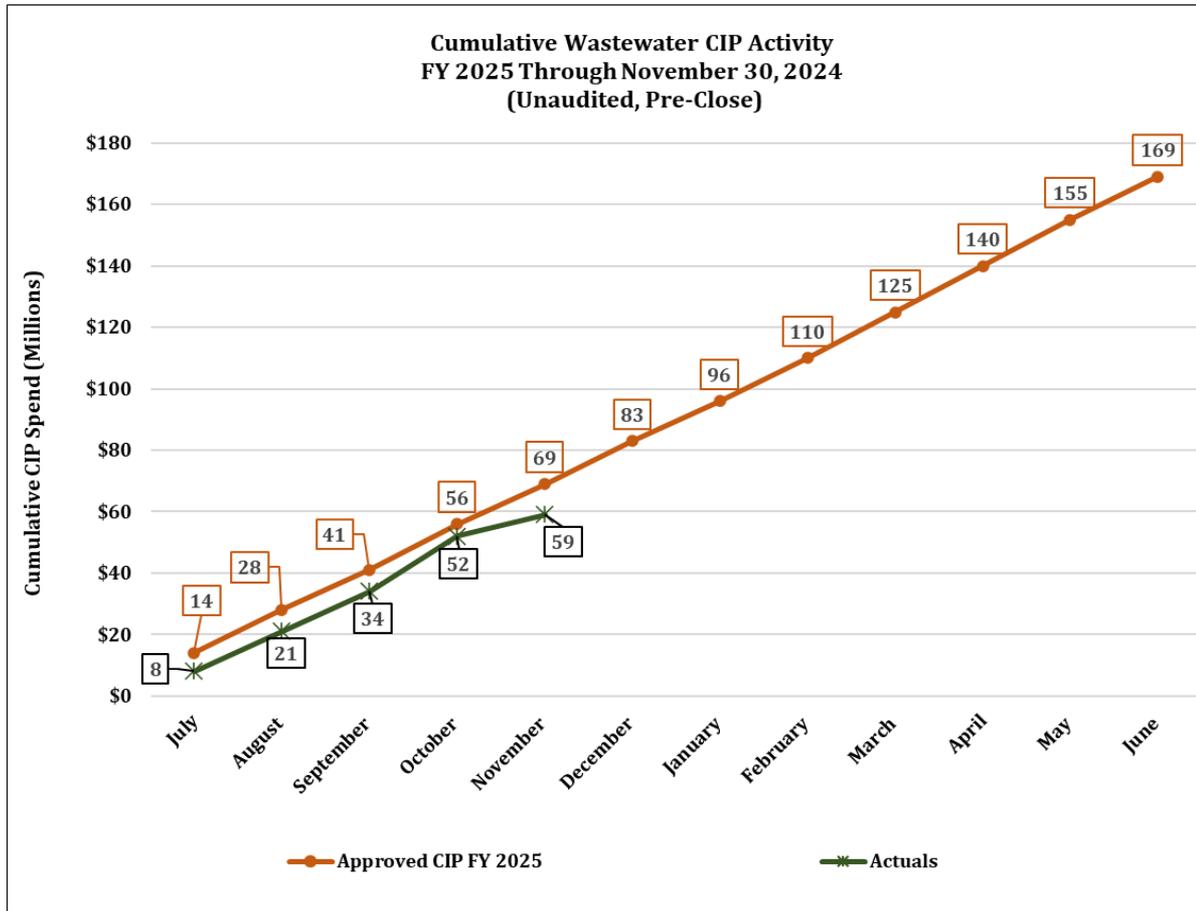
Current Status:

The water system incurred \$69 million of CIP costs through November 2024.

This is 74% of the FY 2025 monthly *Approved CIP2025-2029*.

Note: The Capital Spend Rate for FY 2025 CIP with a new forecast of \$207 million is set with a capital spending ratio of 100%.

Enterprise Resiliency FY 2025 Total Wastewater CIP Spend



Current Status:

The wastewater system incurred \$59 million of CIP costs through November 2024.

This is 86% of the FY 2025 monthly *Approved CIP2025-2029*.

Note: The Capital Spend Rate for FY 2025 CIP with a new forecast of \$169 million is set with a capital spending ratio of 100%.

Enterprise Resiliency - Procurement Cycle

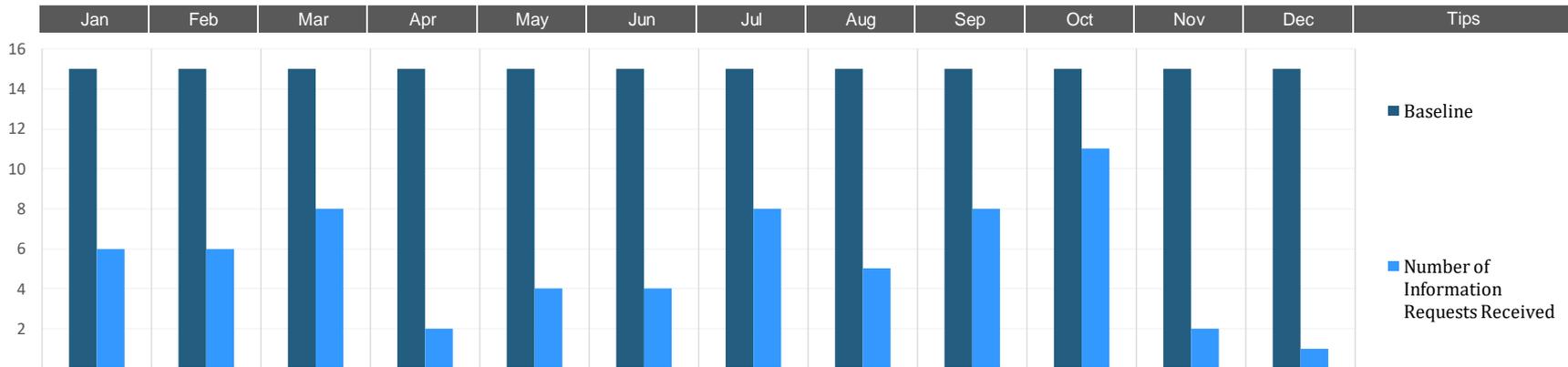
November 1, 2023 through October 31, 2024

Procurement cycle times are the amount of time that passes from sourcing to contract (purchase order) award. This report contains BS&A and Workday data.

Award Bracket	Purchase Type	Average Calander Days	Count of Requisition	Total Amount
Greater than \$1M	Request for Bid (RFB)	184.3	6	263,131,235
	Qualifications Based Selection (QBS)	188.5	7	251,889,594
	Specialized Procurement	46.0	8	22,433,658
Greater than \$1M Total		135.5	21	\$ 537,454,487
Between \$50K & \$1M	Specialized Procurement	29.1	148	30,992,926
	Request for Bid (RFB)	78.7	12	4,772,715
	Qualifications Based Selection (QBS)	221.7	5	3,360,800
	Contract Task Order/ITQ	30.1	9	2,866,390
	Emergency Purchase	10.3	6	1,875,429
	Inventory (L&M only)	18.2	10	1,506,262
Between \$50K & \$1M Total		37.6	190	\$ 45,374,522
Less than \$50K	Small Purchase	5.0	1416	8,874,100
	Inventory (L&M only)	2.6	2301	6,538,833
	Specialized Procurement	47.2	25	496,711
	Unauthorized	2.8	6	11,543
Less than \$50K Total		3.8	3748	\$ 15,921,187
Grand Total			3959	\$ 598,750,196

- Multiple methods are utilized to procure goods and services.
- Specialized Procurement includes efficiencies gained by using cooperative agreements thus enhancing the quality of procurement.
- GLWA awarded \$598.8 million and completed 3,959 purchase requests.
- Purchases over \$50K averaged 47.3 days to complete.

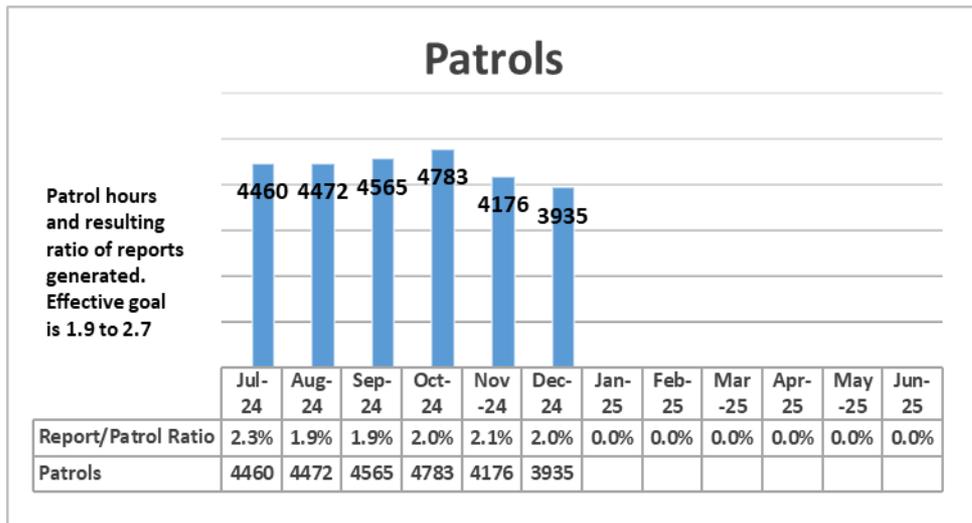
Enterprise Resiliency – General Counsel Information Requests Received



Expenses	Jan	Feb	Mar	Apr	May	Jun*	Jul	Aug	Sep	Oct	Nov	Dec	Total	Trend
Baseline	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	180.00
Number of Information Requests Received	6.00	6.00	8.00	2.00	4.00	4.00	8.00	5.00	8.00	11.00	2.00	1.00	65.00	

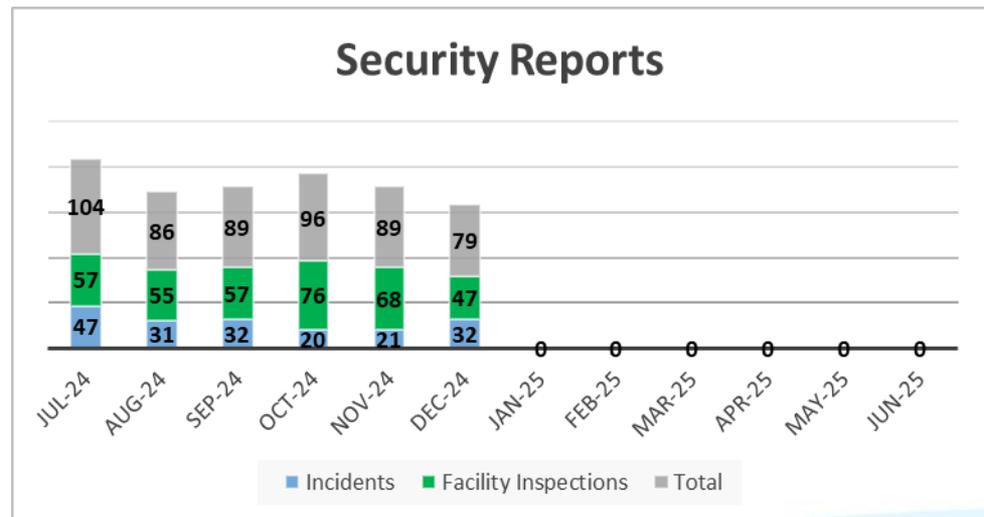
One of the measures of organizational transparency is access to information. GLWA maintains many avenues of informal information access, including through its website. To the extent the information is readily available, the Office of the General Counsel should receive fewer FOIA requests over time.

Enterprise Resiliency – Security & Integrity

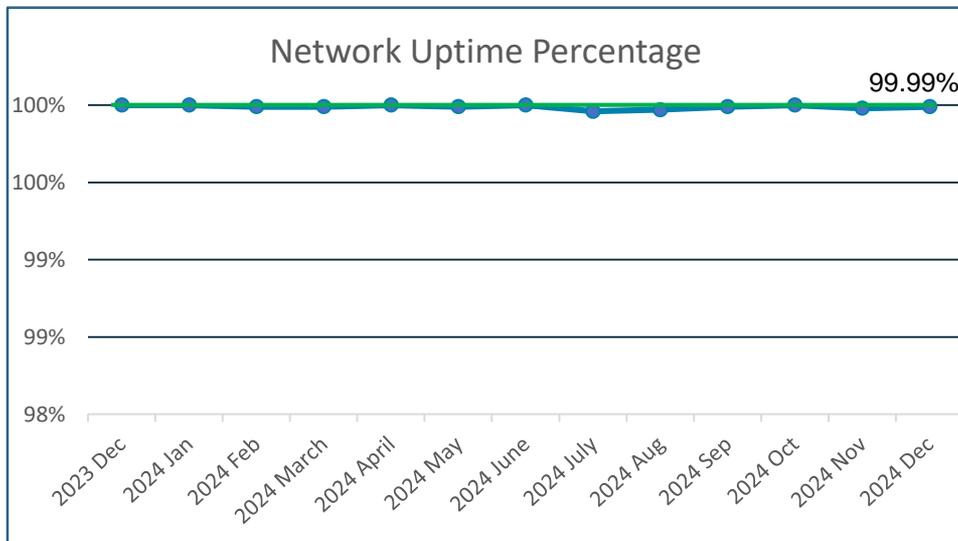


- Patrols are an indication of the level of services rendered by the staff of the Security & Integrity Group.

- Security reports are an indication of the effectiveness of security programs (less is better).

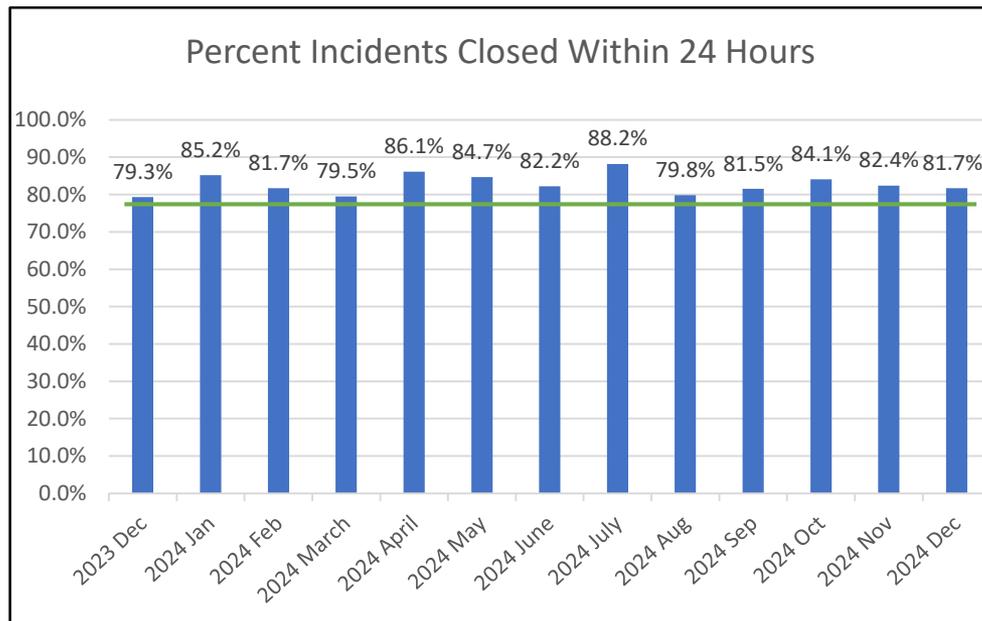


Enterprise Resiliency – Information Technology

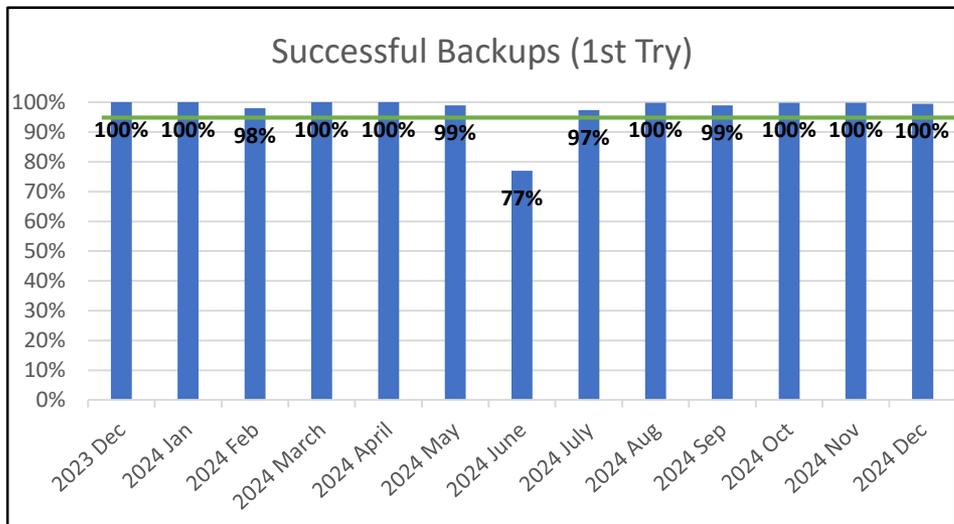


- GLWA has 42 monitored, network-connected sites, including offices, plants, pump stations, and other facilities.
- Network connectivity allows employees to access the applications needed to do their work and connects plants and pump stations to the intranet to report operational data

- An Incident is a technology issue that is preventing an employee from performing some part of their job duties
- Quick resolution of incidents increases employee productivity.
- The industry standard for 24-hour resolution is 68%

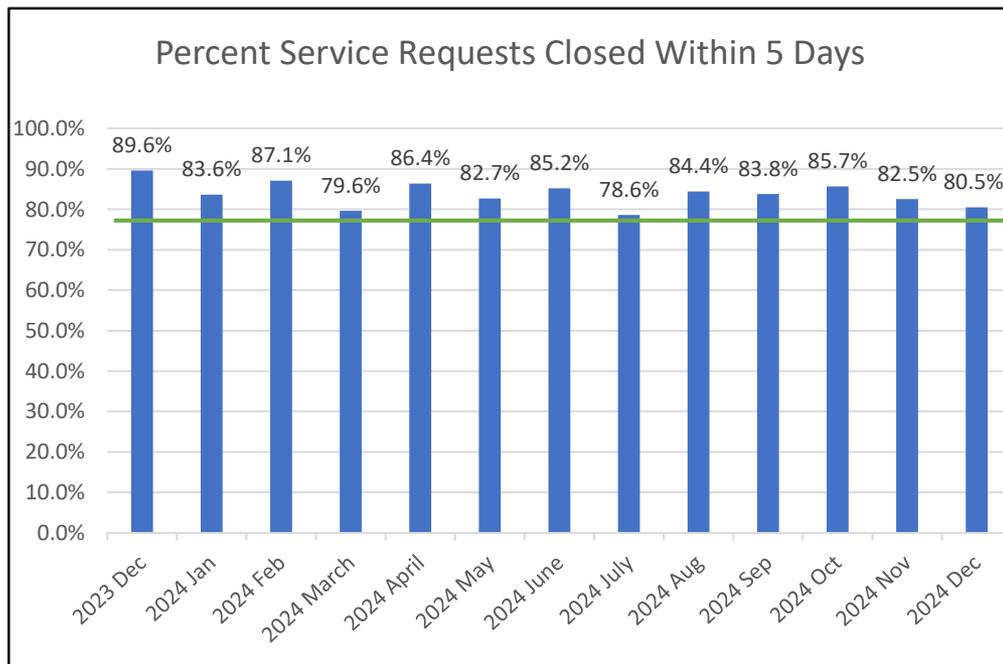


Enterprise Resiliency – Information Technology

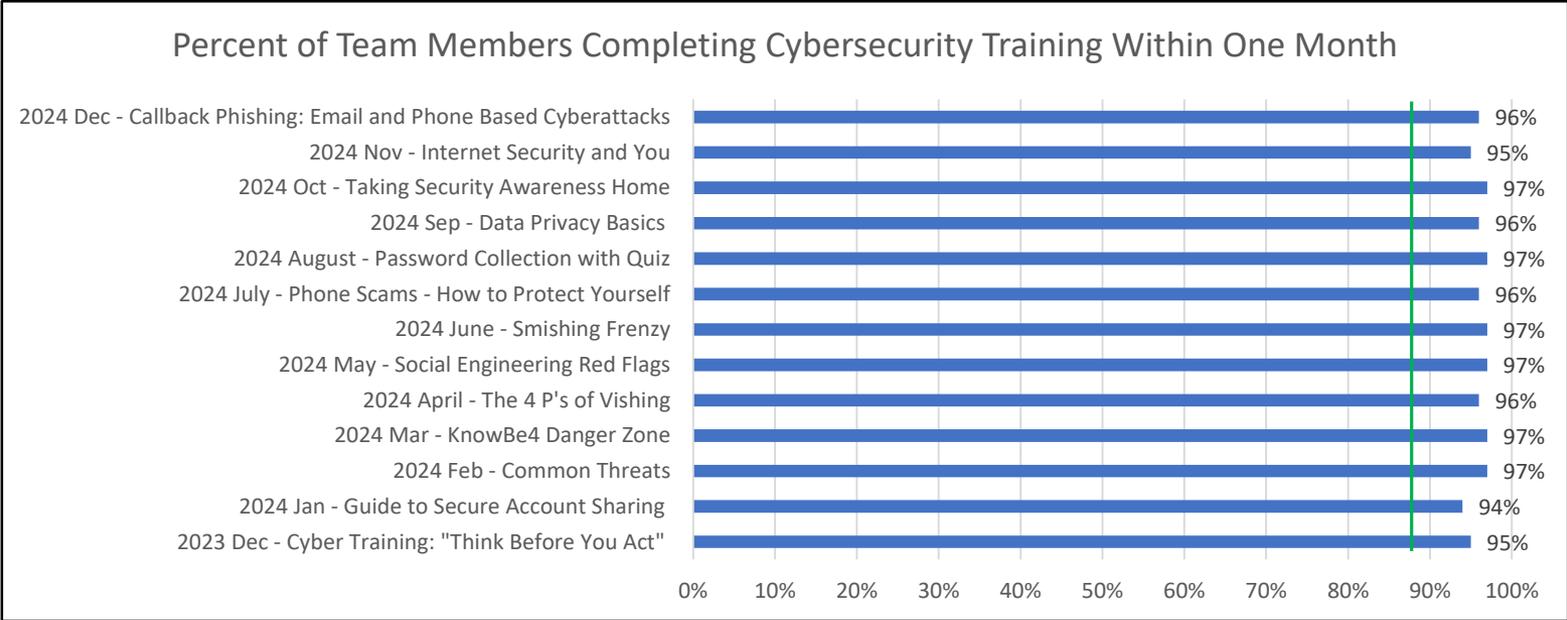


- Backups ensure that GLWA's information is safe in case of unexpected disruptions.
- Successfully backing up on the first try streamlines operations and frees up resources for other tasks.

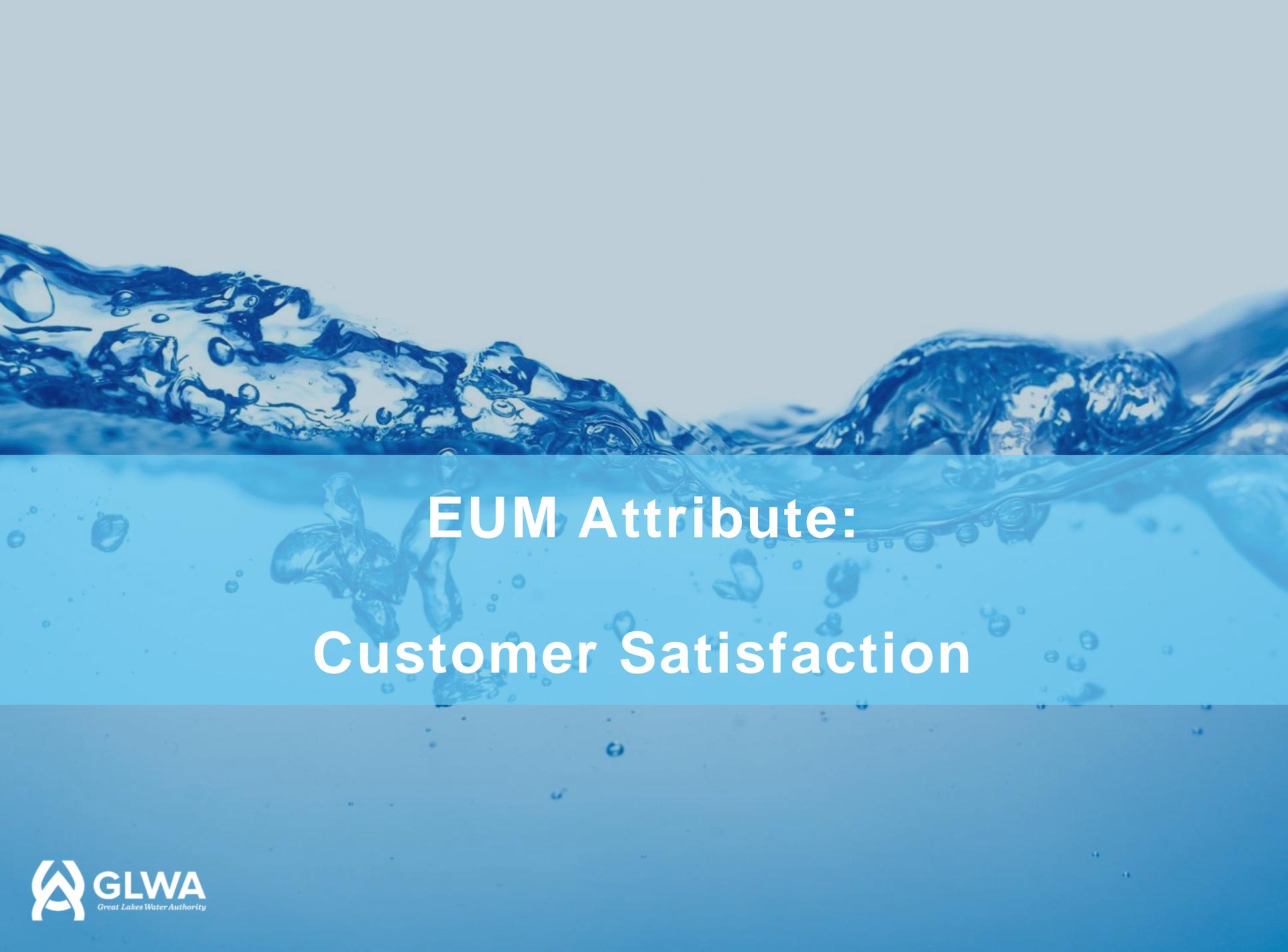
- A service request is a request for IT work that is not preventing an employee from performing their work.
- Timely fulfilment of service requests ensure that employees have the technology resources needed to do their jobs and increases job satisfaction.



Enterprise Resiliency – Information Technology

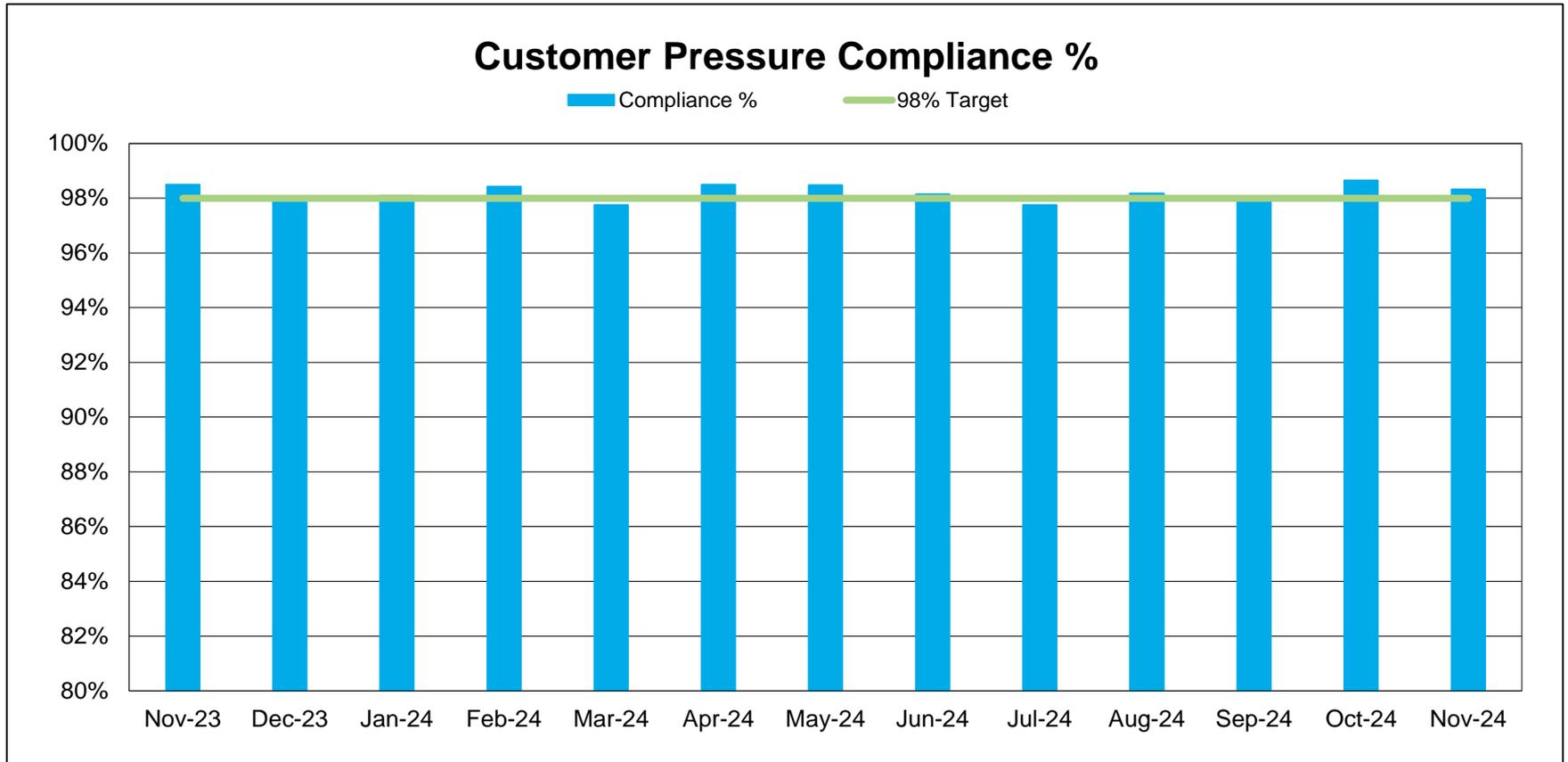


- End users are responsible for 80 percent of cybersecurity breaches.
- Well trained users are less likely to take action that could cause a breach

A dynamic splash of water in shades of blue, with bubbles and ripples, set against a light blue background. The water appears to be moving from left to right, creating a sense of motion and freshness.

EUM Attribute: Customer Satisfaction

Customer Satisfaction – Water & Field Services



Operational Resiliency: To exceed customer compliance by being greater than 98% of contractual pressures.

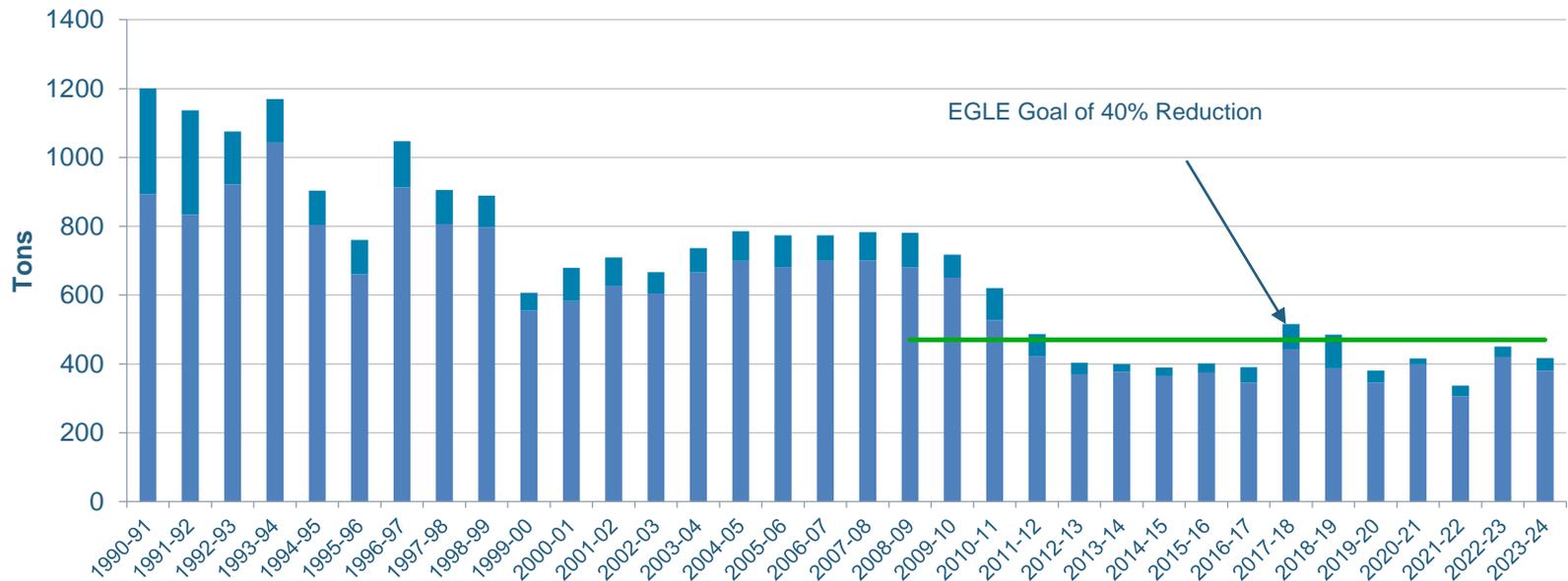
A dynamic splash of clear water against a light blue background, with a semi-transparent blue horizontal band across the middle.

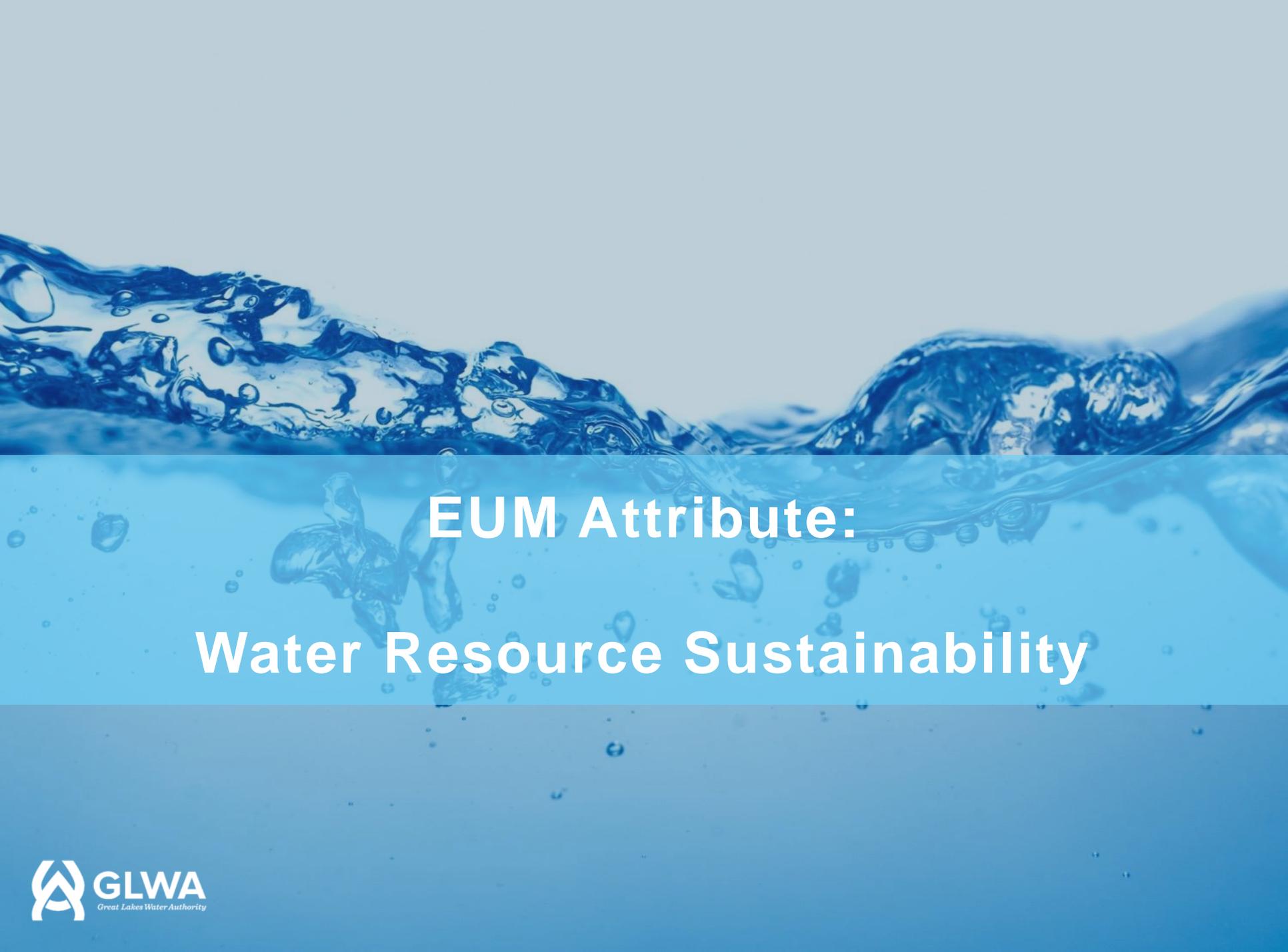
EUM Attribute: Community Sustainability

Community Sustainability – Watershed Health

- State and Federal regulators have a goal of 40 percent reduction in phosphorus loading in the Western Lake Erie Basin.
- GLWA has surpassed the State and Federal goal.

Effluent Phosphorus Loading
July 1990 to June 2024

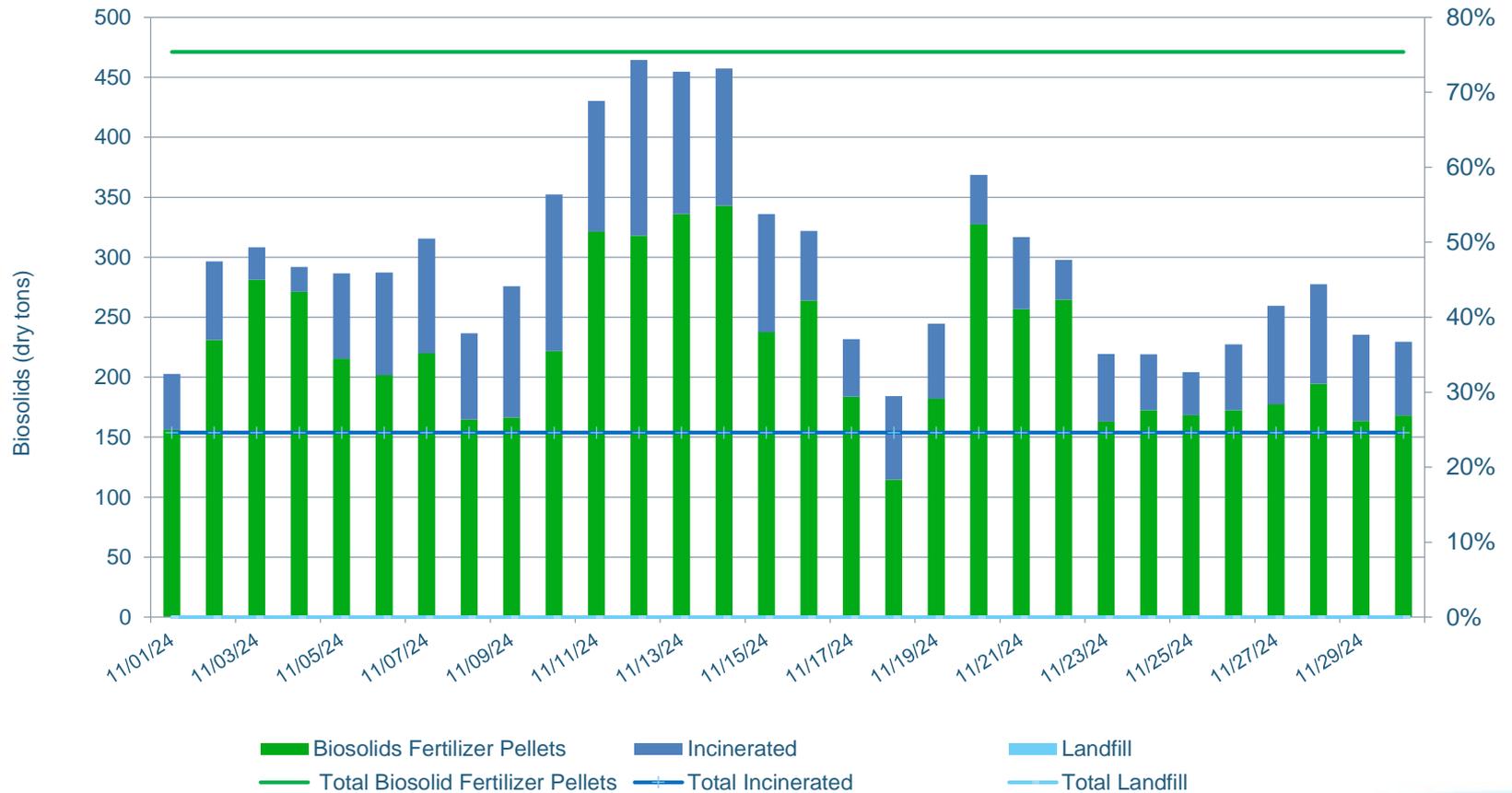


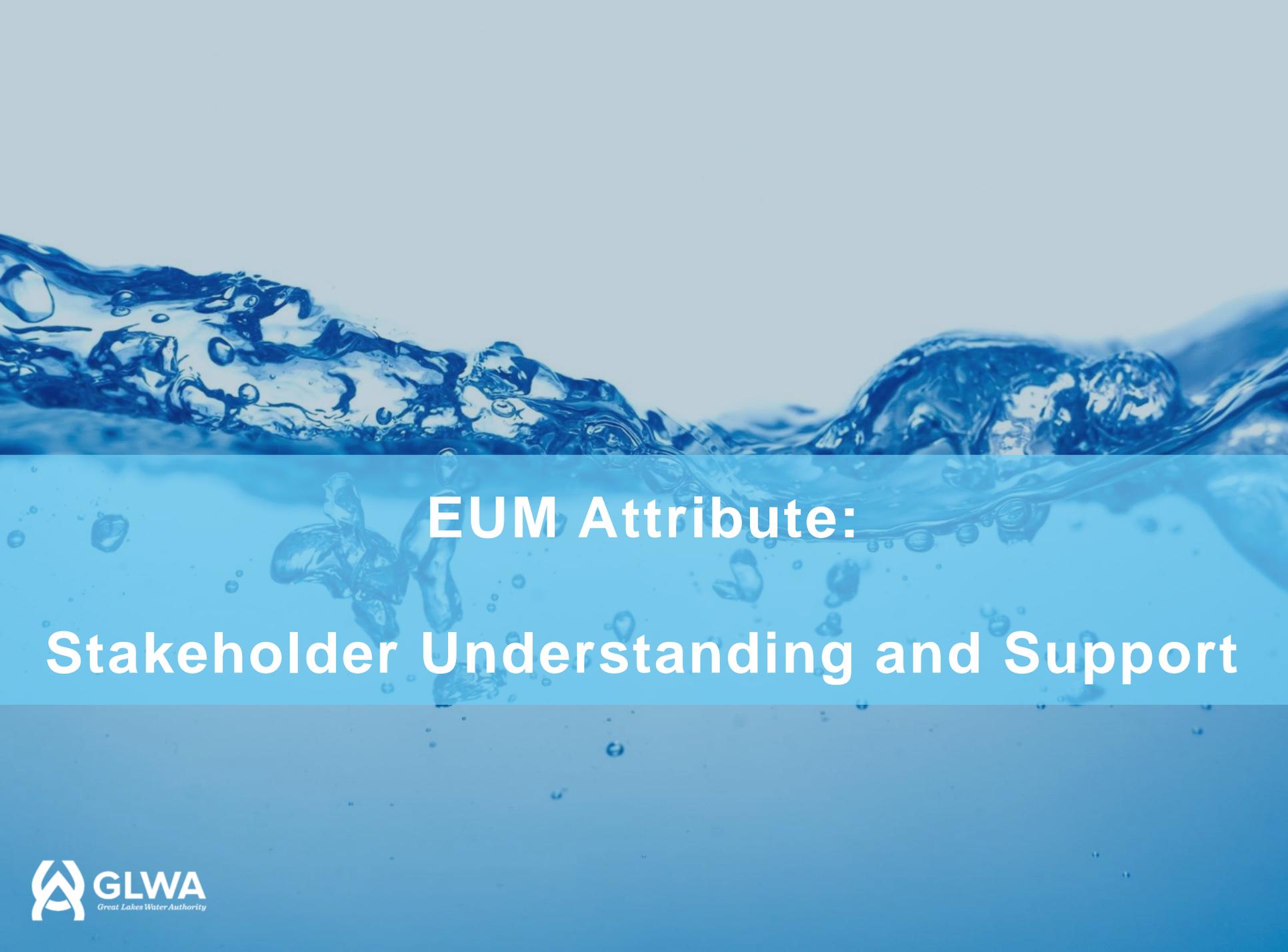
A dynamic splash of clear blue water against a light blue background, with bubbles and ripples visible throughout. A semi-transparent blue horizontal band is overlaid across the middle of the image, serving as a background for the text.

EUM Attribute: Water Resource Sustainability

Water Resource Sustainability – Biosolids Handling by Method

- GLWA strives to increase nutrient recovery and beneficial reuse of biosolids.
- Use of the biosolids dryer facility for solids handling is preferred because it uses biosolids for the production of fertilizer pellets.

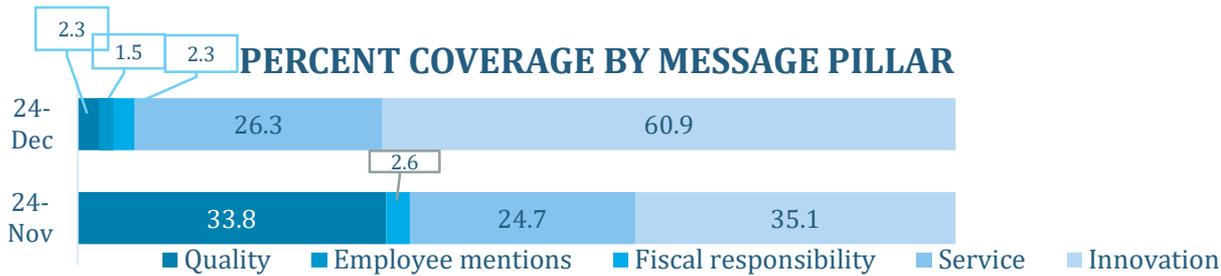


A high-speed photograph of water splashing, creating a dynamic and energetic scene. The water is captured in mid-air, with numerous droplets and bubbles visible. The background is a soft, light blue gradient, which transitions into a darker blue band at the bottom where the text is located.

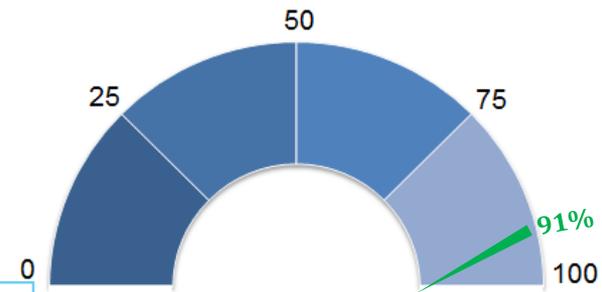
EUM Attribute: Stakeholder Understanding and Support

TRADITIONAL MEDIA SUMMARY

Traditional media coverage showed an uptick this month with **prominent coverage** following the **PR Newswire distribution by Aquasight**, of an article featuring commentary on GLWA's use of the system by Terry Daniel, Deputy COO Water and Field Services. GLWA achieved **effective message placement** during reporting on the Michigan Department of Transportation's proposed I-94 drainage tunnel project on Detroit's east side. We continued to see sustained coverage regarding the ongoing construction updates for the Oakland County road closure. This month's media coverage yielded **93 percent non-cursory mentions**. Of the stories with non-cursory mentions, **91 percent** included a GLWA quote or message.



MESSAGE PULL-THROUGH*



93% of coverage with a non-cursory mention included a GLWA message (**GOAL = 75%**)

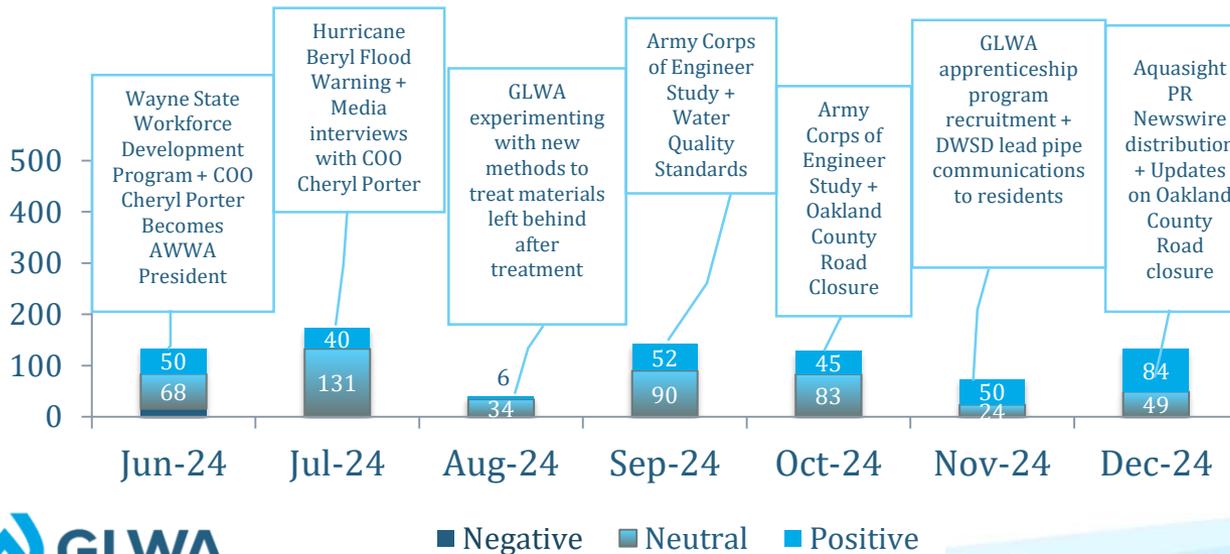
MEDIA VOLUME: = 133

CURSORY OR FLINT MENTIONS: 9

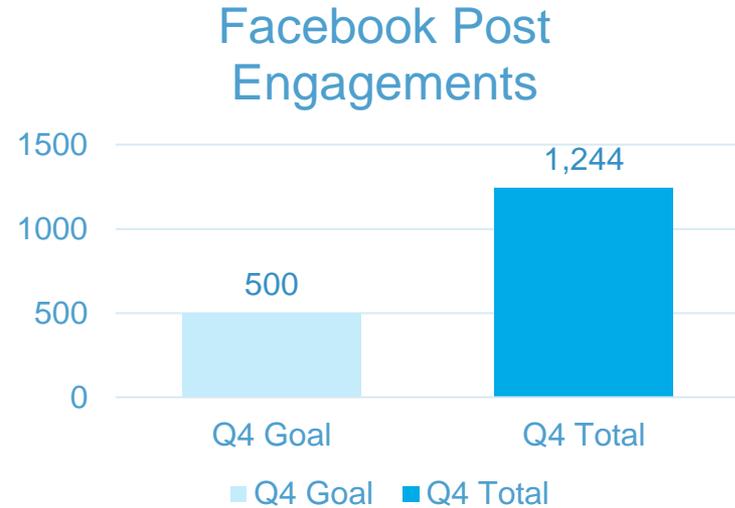
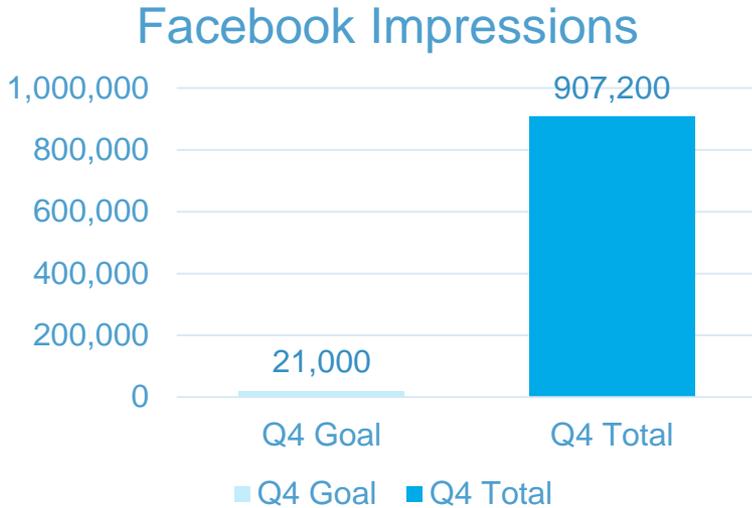
INCLUDED GLWA MESSAGE: 124

**Message pull-through includes quotes or comments from a GLWA spokesperson, a quote from a GLWA press release or underlying theme of GLWA providing safe and clean water.

MEDIA MENTIONS + SENTIMENT

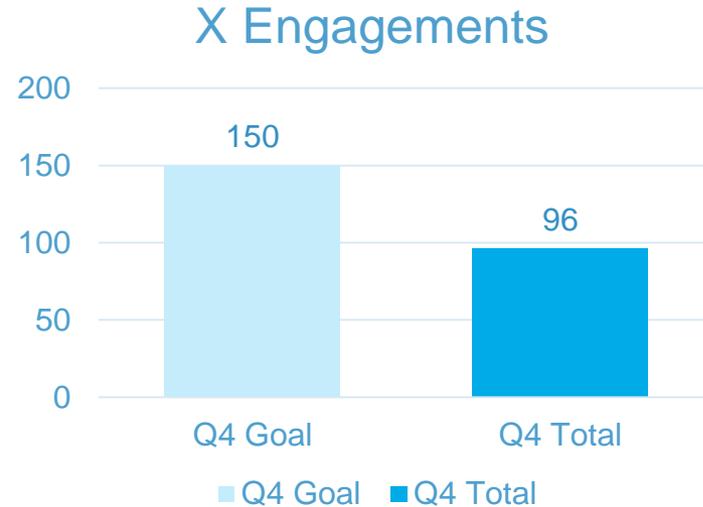
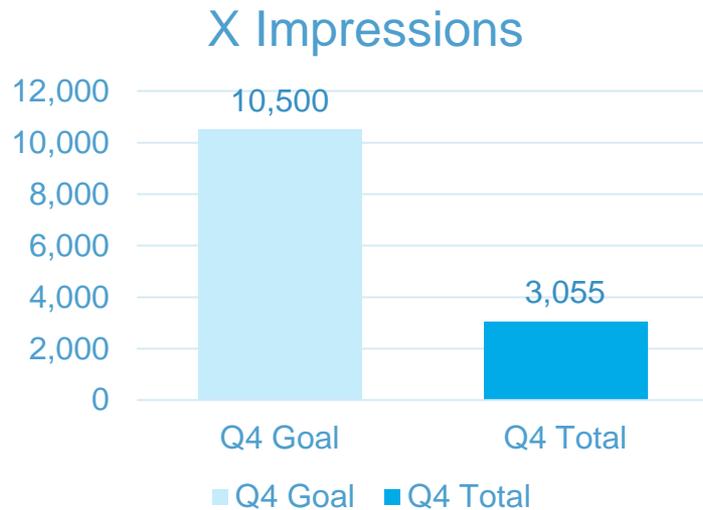


FACEBOOK Q4 2024 REVIEW



- ◆ Full photo sets work best for engagement
- ◆ Posts containing info about community events or local road impacts are regularly shared
- ◆ Top content includes the Tap In recruitment campaign, posts centered around Water and Wastewater Professionals week, and construction maps

X Q4 2024 REVIEW



- 💧 X is our slowest growing platform and continues to struggle with reach outside our community partners
- 💧 GLWA is often tagged in projects from our Research & Innovation team on X
- 💧 Top content includes community event information and reshared posts

LINKEDIN Q4 2024 REVIEW

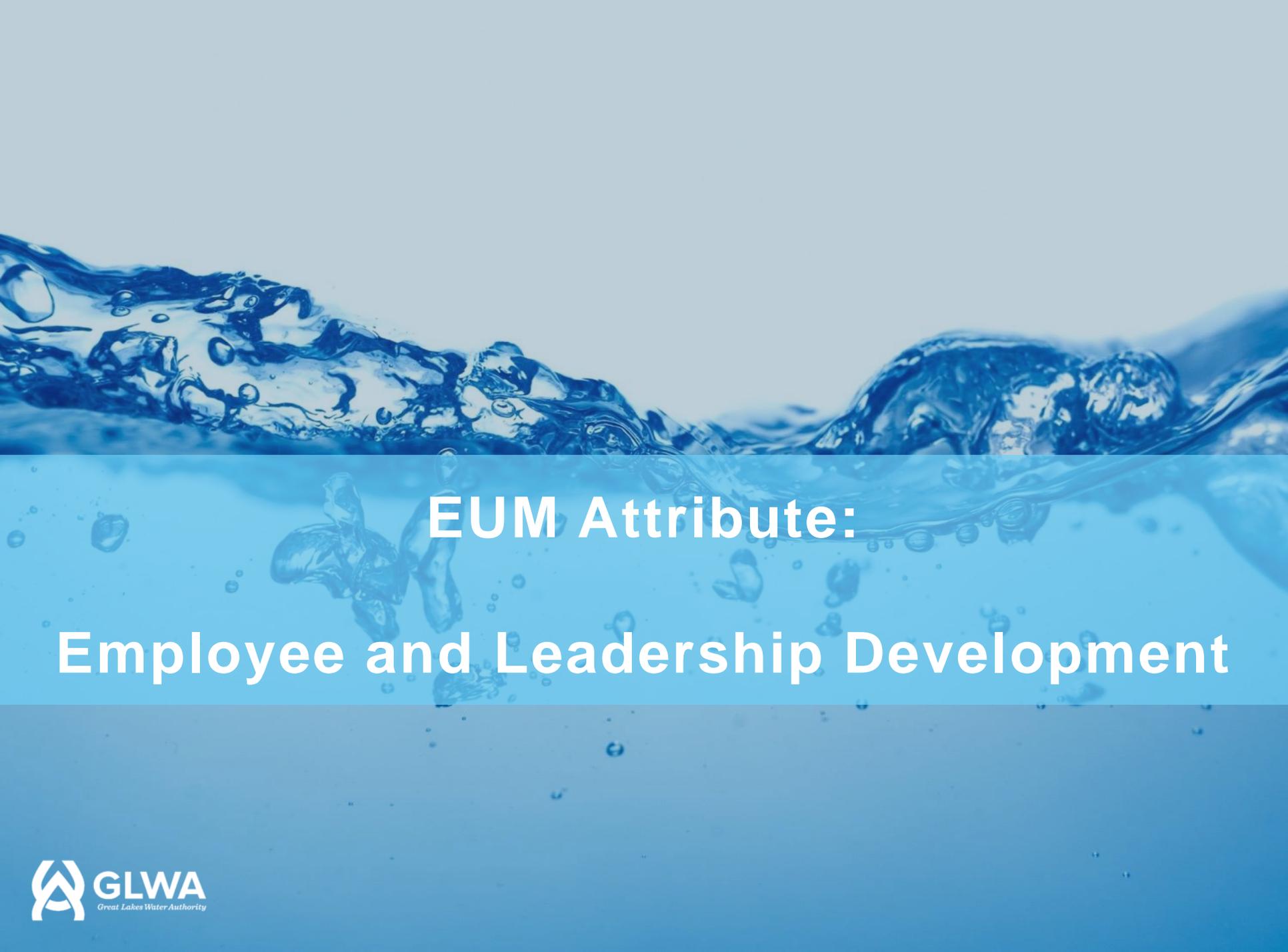
LinkedIn Impressions



LinkedIn Page Engagement



- 💧 LinkedIn is GLWA's top overall platform
- 💧 LinkedIn continues to grow in both followers and impressions
- 💧 Top content includes team member recognition, group award photos, and recruitment posts

A dynamic splash of water in shades of blue, with bubbles and ripples, set against a light blue background. The water is captured in motion, creating a sense of energy and freshness.

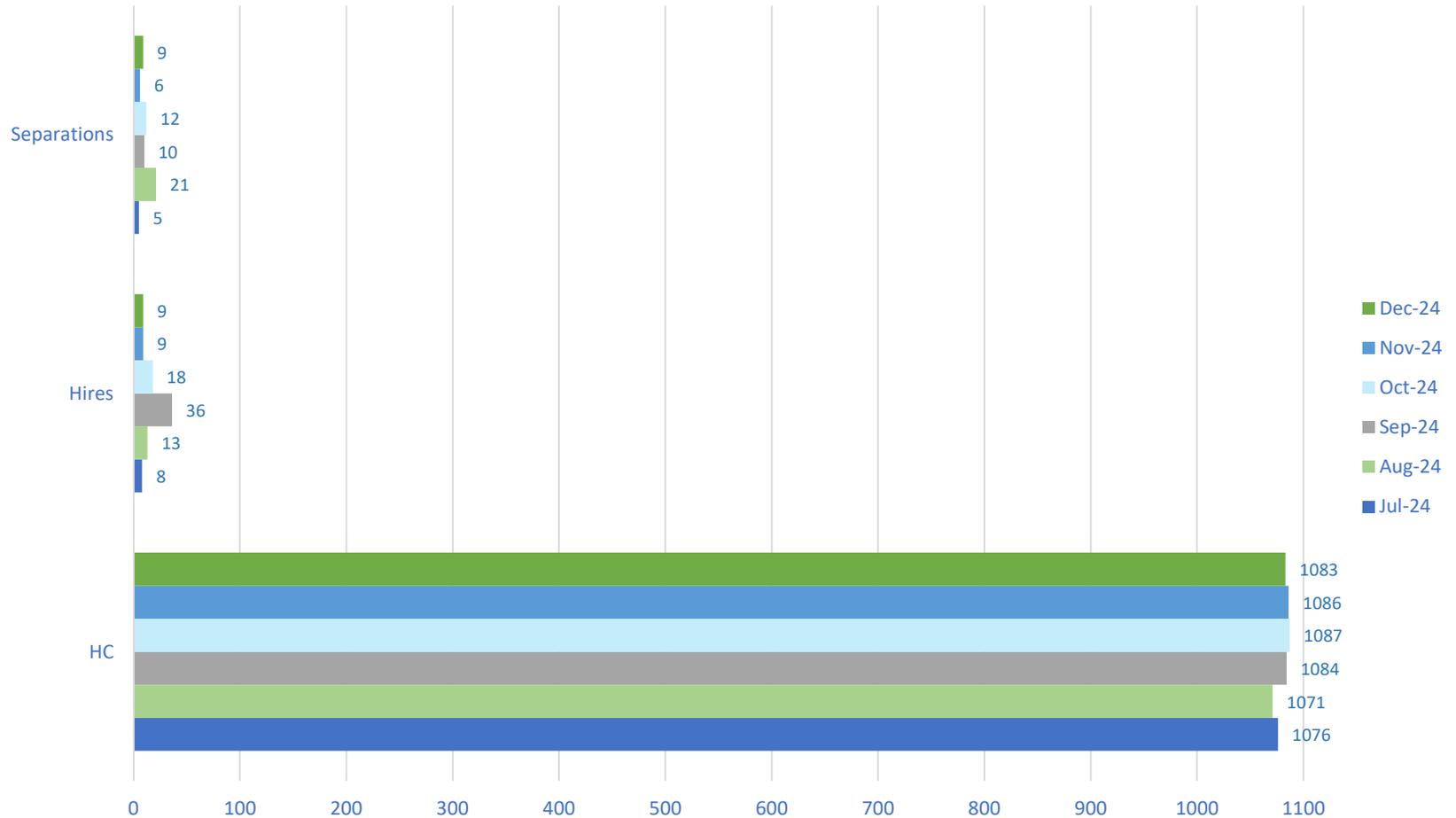
EUM Attribute:

Employee and Leadership Development

Organizational Development

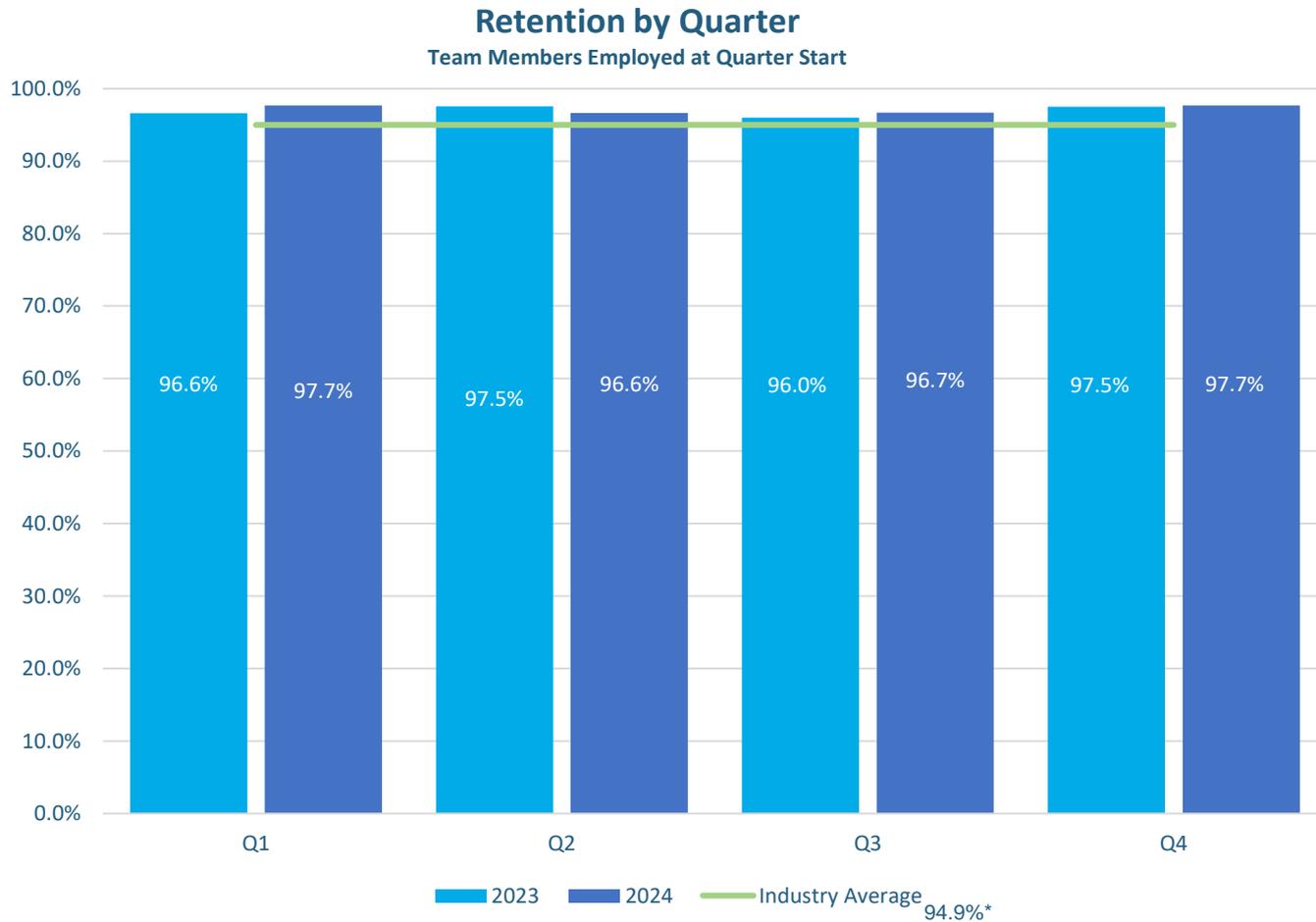
GLWA

July 2024 - December 2024 Headcount, Hires, & Separations



**Headcount is as of month end*

Organizational Development



Retention leads to decreased training costs, increased productivity, and cross training and development.

*From the U.S. Bureau of Labor Statistics 10-Oct-2016 report for the sector "State and Local Government, Excluding Education."