



# Great Lakes Water Authority

Key Performance Indicators and  
Effective Utility Management (EUM) Metrics

January 28, 2026

# 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)

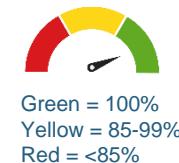


Attribute	Attribute Components
<b>Product Quality</b>	Produces “fit for purpose” water that meets or exceeds full compliance with regulatory and reliability requirements and consistent with customer, public health, ecological, and economic needs. Products include treated drinking water, treated wastewater effluent, recycled water, storm water discharge, and recovered resources.
<b>Customer Satisfaction</b>	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).
<b>Community Sustainability</b>	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.
<b>Water Resource Sustainability</b>	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.
<b>Stakeholder Understanding and Support</b>	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.

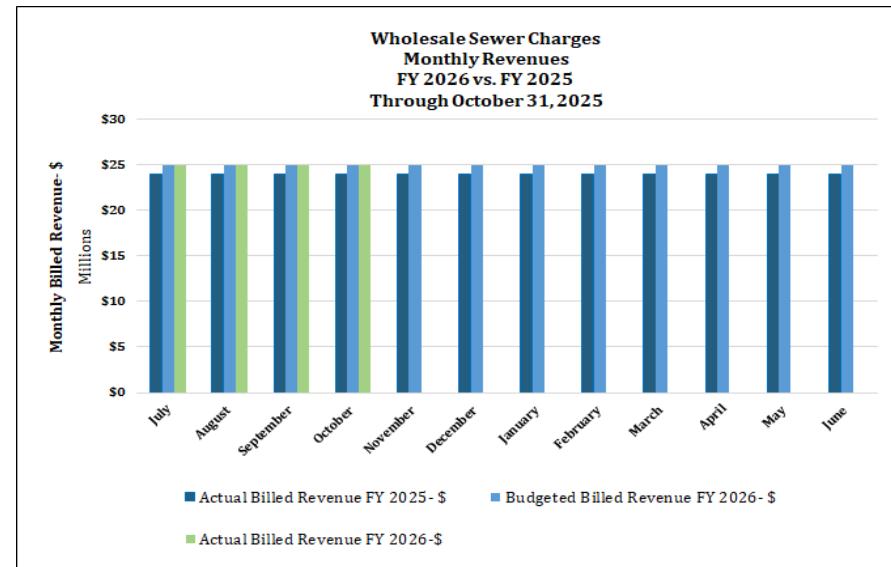
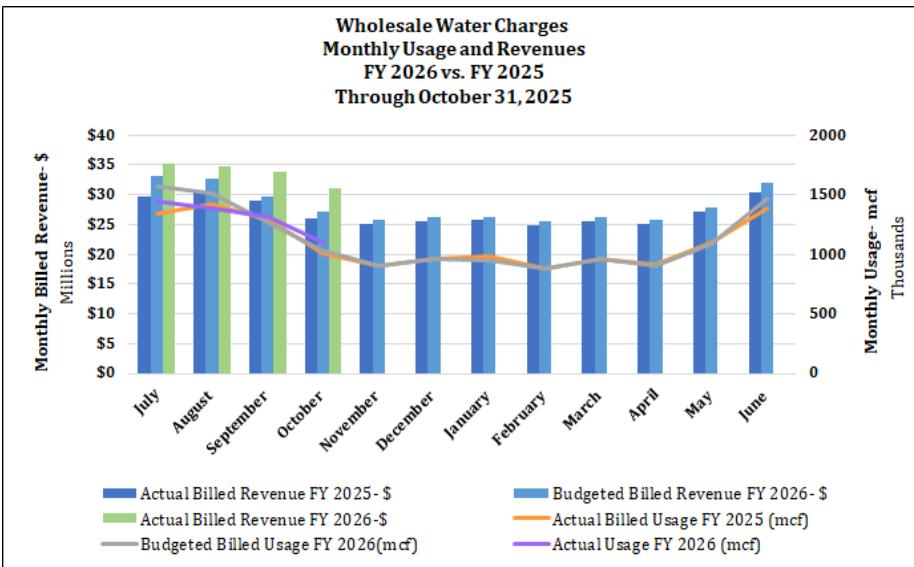


# EUM Attribute: Financial Viability

# Financial Viability – Reliability of Wholesale Water and Sewer Revenue Projections



Water system wholesale monthly billed revenues exceeds the budgeted amount.



Wholesale Water System billed revenues for FY 2026 are at 101.72% of original, budgeted charge revenue. Actual usage is at 103.05% of original, budgeted usage. This equates to a revenue surplus of \$2.26 million through October 2025. Billed revenue for FY 2026 was 7.7% higher compared to the same period in FY 2025.

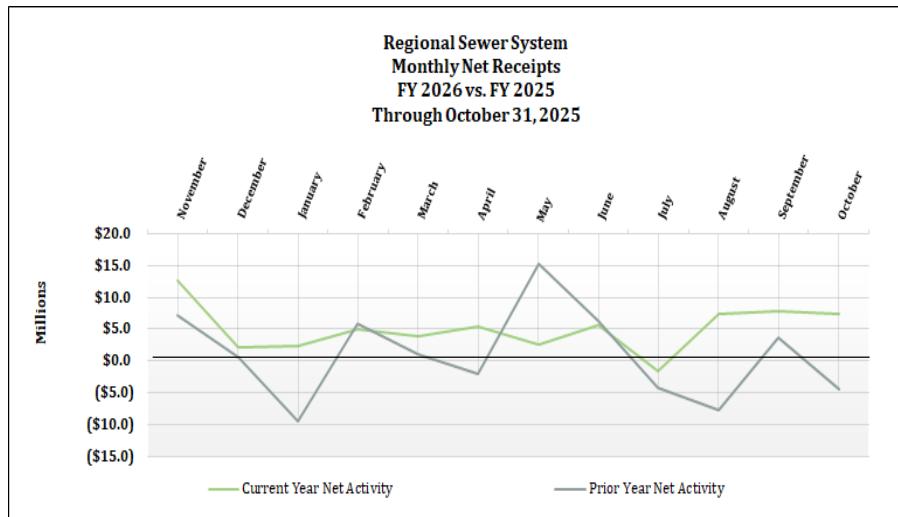
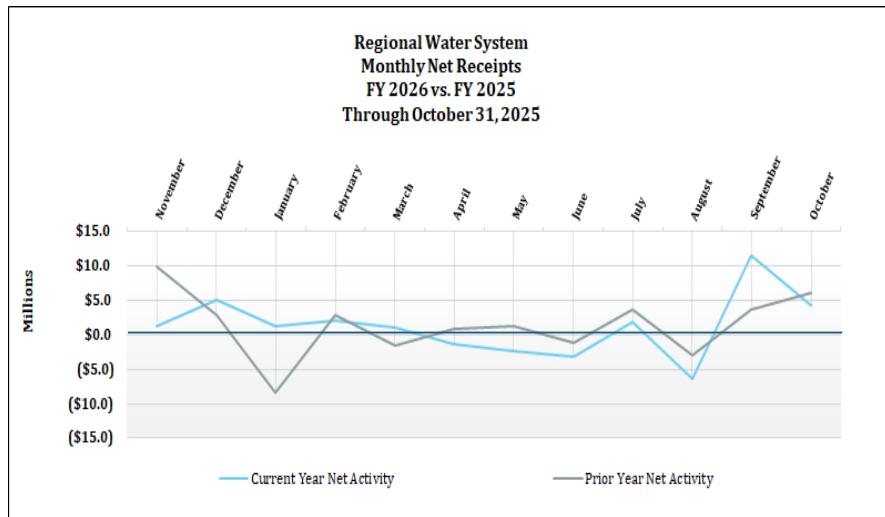
Wholesale Sewer System billed revenues for FY 2026 are at 100% of original budgeted charge revenue (based on the full fixed monthly charge). Billed revenue for FY 2026 was 4.4% higher compared to the same period in FY 2025.

# 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.

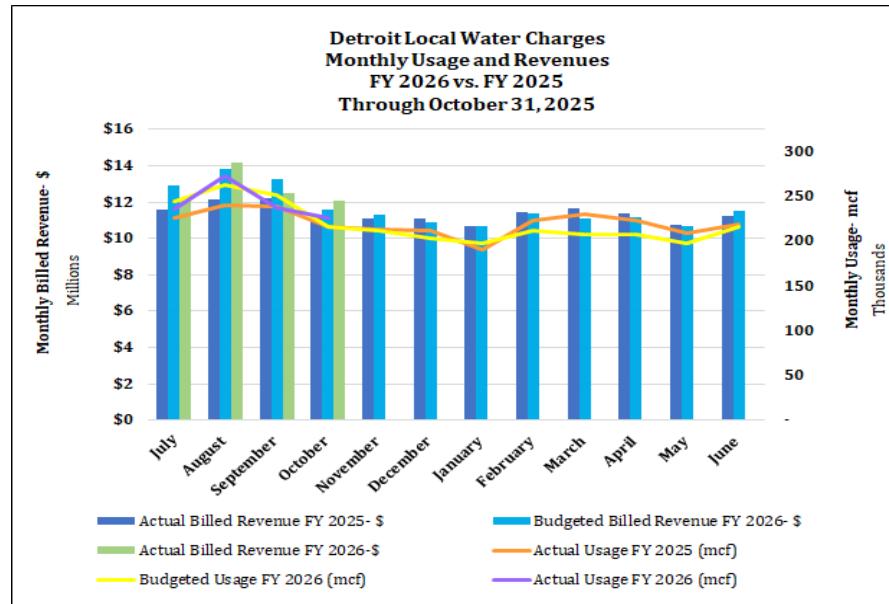
While this measure may vary monthly based on billing and collection cycles, cumulative positive net receipts supports long-term financial sustainability.



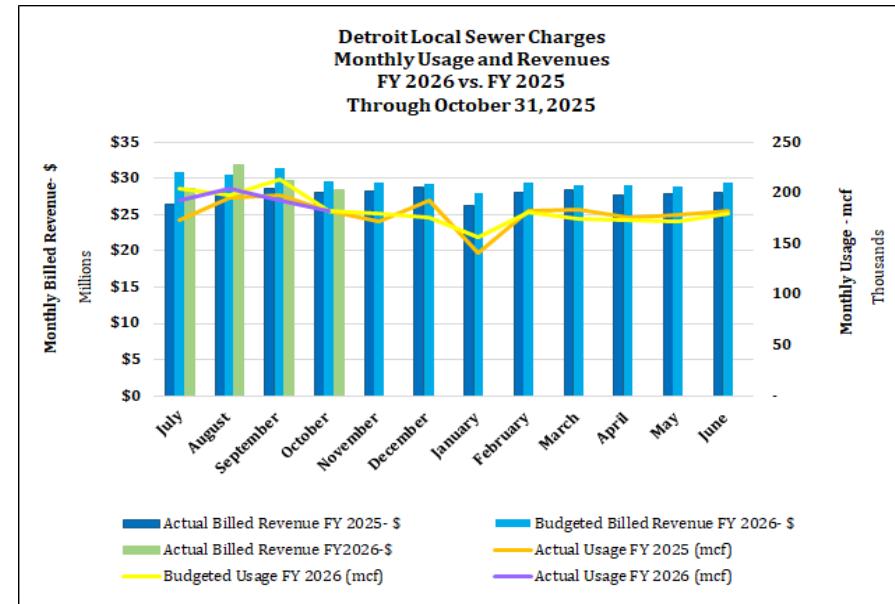
Regional Water System net receipts for the month of October 2025 exceeded required MBO disbursements by \$4.2 million. This equates to a 9% surplus of net monthly receipts over required disbursements or an \$11.2 million surplus year-to-date.

Regional Sewer System net receipts for the month of October 2025 exceeded required MBO disbursements by \$7.3 million. This equates to a 13% surplus of net monthly receipts over required disbursements or a \$21 million year-to-date.

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



Detroit Local Water System billed revenues for FY 2026 are at 98.48% of budget and actual usage at 99.86% of budget through October 2025. Billed revenue for FY 2026 is 7.6% higher compared to the same period in FY 2025.



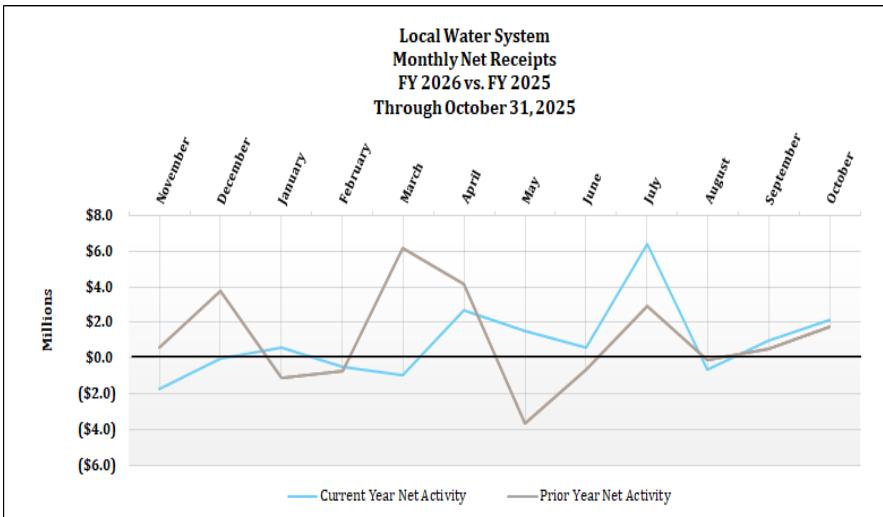
Detroit Local Sewer System billed revenues for FY 2026 are at 97.00% of budget and actual usage at 96.72% of budget through October 2025. Billed revenue for FY 2026 is 6.8% higher compared to the same period in FY 2025.

# Financial Viability – DWSD Local System Net Receipts

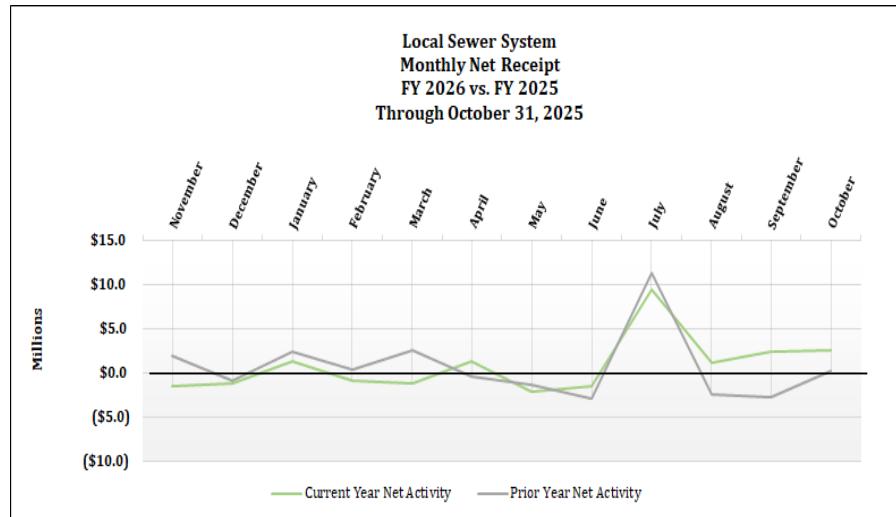
For the purposes of this reporting, **Net Receipts equals cash collections less Master Bond Ordinance (MBO) disbursements.**

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

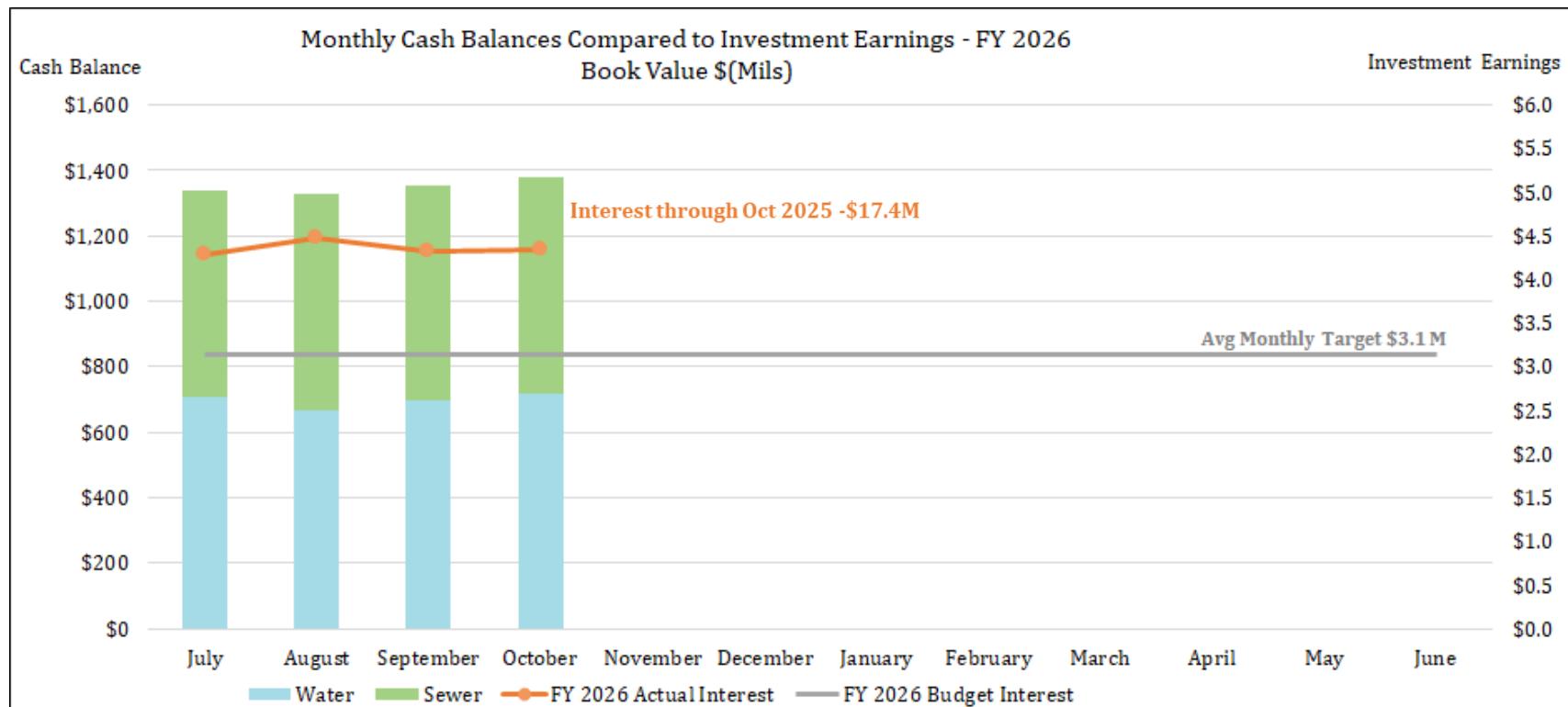


Local Water System net receipts for the month of October 2025 exceeded required MBO disbursements by \$2.1 million. This equates to a 21% surplus of net monthly receipts over required disbursements or an \$8.9 million surplus year-to-date.



Local Sewer System net receipts for the month of October 2025 exceeded required MBO disbursements by \$2.5 million. This equates to a 15% surplus of net monthly receipts over required disbursements or a \$15.5 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 \$3.1 million is based on an annual forecast of \$37.7 million for interest earnings.
- For the month of October 2025, GLWA had investment earnings of \$4.3 million and cumulative FY 2026 earnings of \$17.4 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



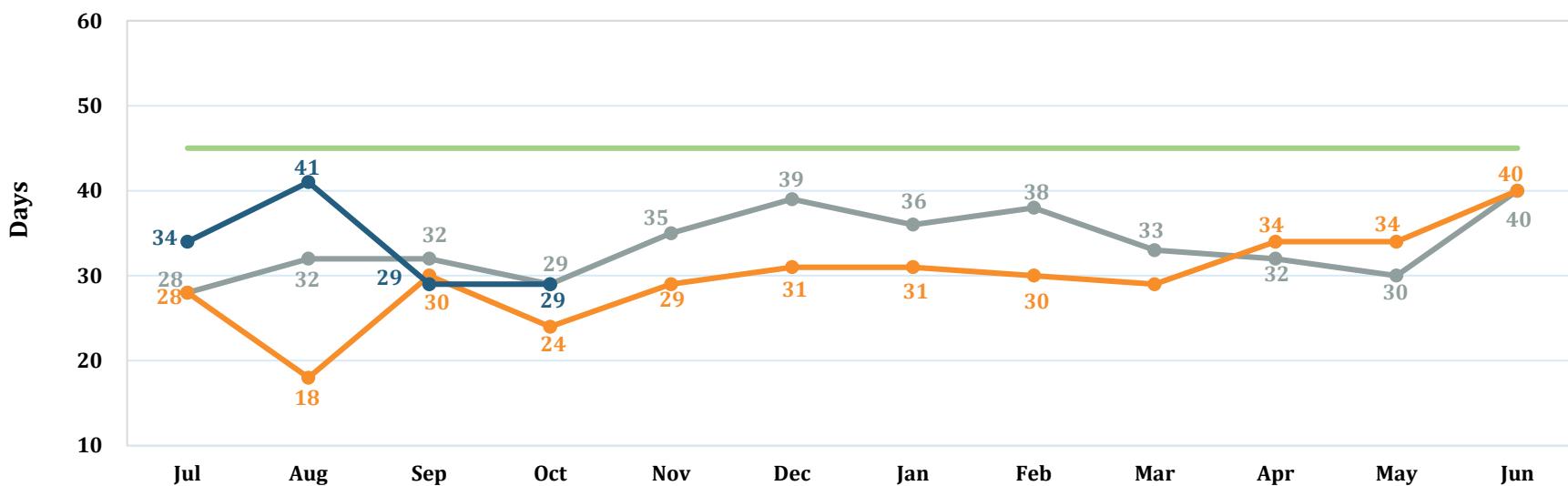
Green = 30 days or less  
Yellow = >30 to <35 days  
Red = >35 days

The current 12-month average days to pay is not within the desired target due to vendor noncompliance with submitting timely and accurate invoices in prior months.

## Average Days To Payment FY Comparison

Payment Terms are 45 Days

— FY 2024    — FY 2025    — FY 2026    — GLWA Payment Terms



Timely vendor payments support:

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

Twelve-month average days to payment

FY 2024	FY 2025	FY 2026 (rolling calendar)
34	30	33

The **FY 2026 average days to pay does not align with the target** of 30 days or less. The Accounts Payable team continues to work in conjunction with the Procurement team to assist in improving vendor management and compliance.



# EUM Attribute: Product Quality

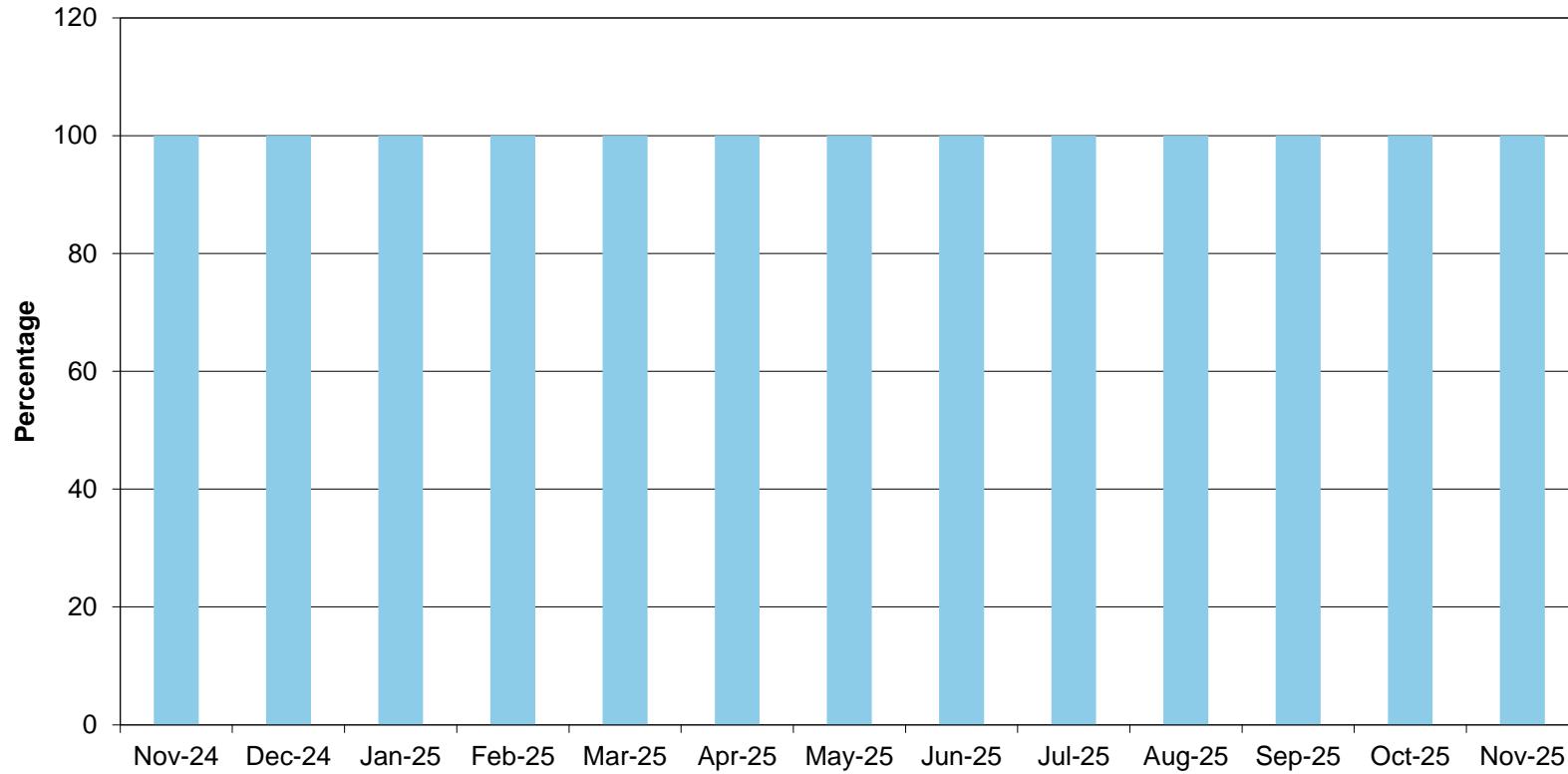
# Product Quality – SDWA Compliance



GLWA will maintain 100% compliance with Safe Drinking Water Act

Green = 100% compliance  
Red = <100% compliance

## Percent Compliance with Safe Drinking Water Act (SDWA) by Month



**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 –

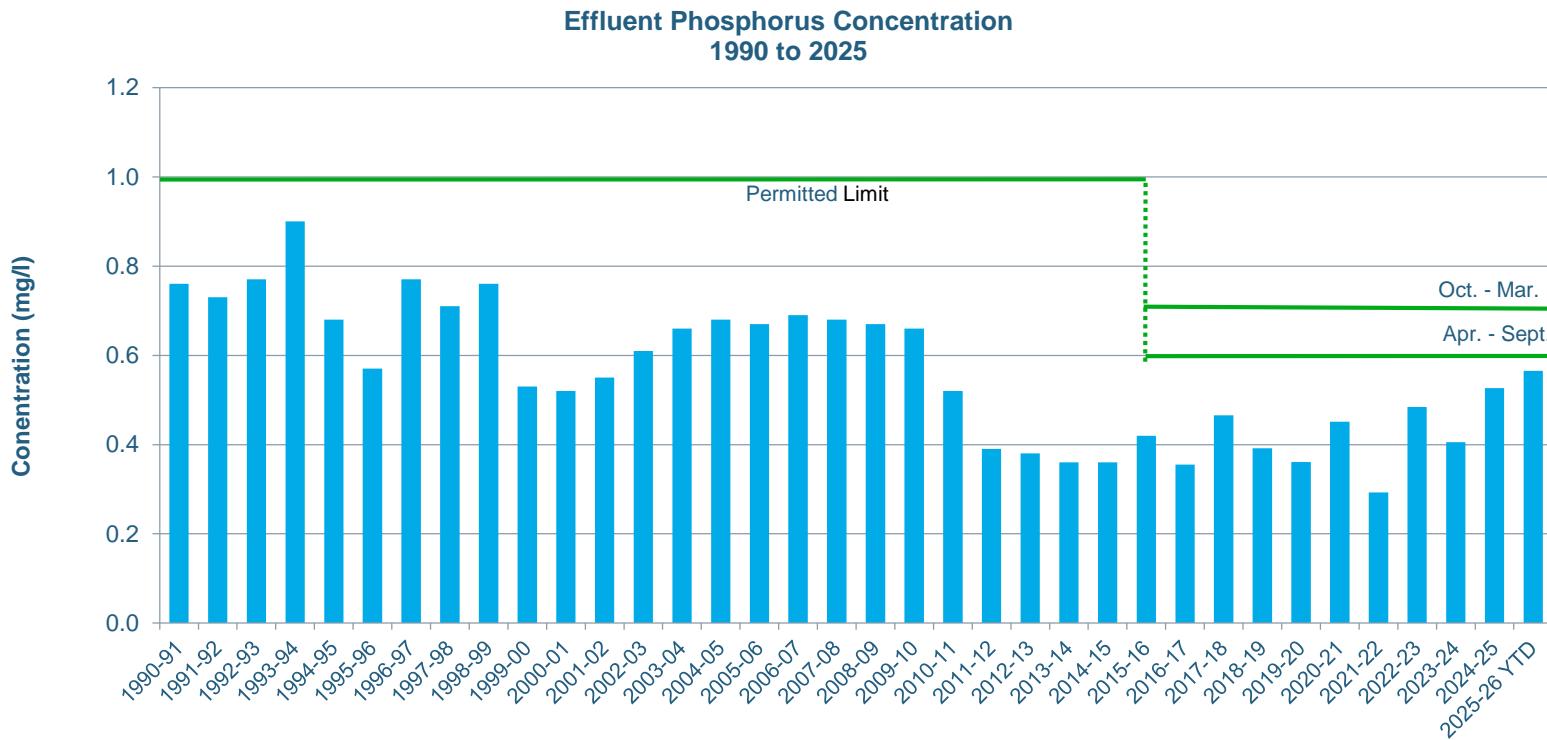
### Effluent Phosphorous Concentration

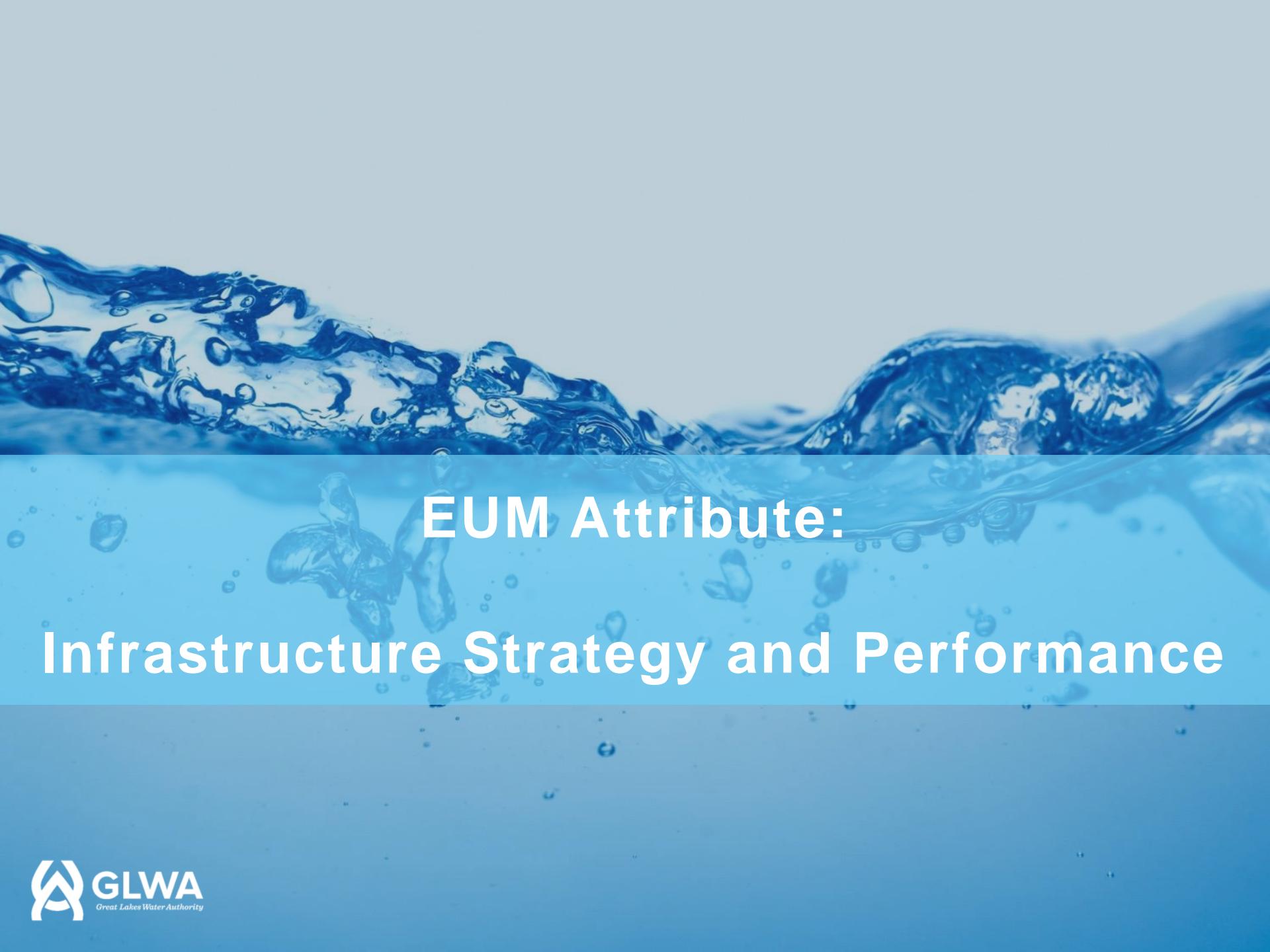


Green = Below 80% of permit levels  
Yellow = 80-100% of permit levels  
Red = Exceeds permit level

YTD average of 0.57 mg/l is 81.4% of the regulatory limit. However, the plant is performing better than expected during the 3.5 months of record-low flow conditions.

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





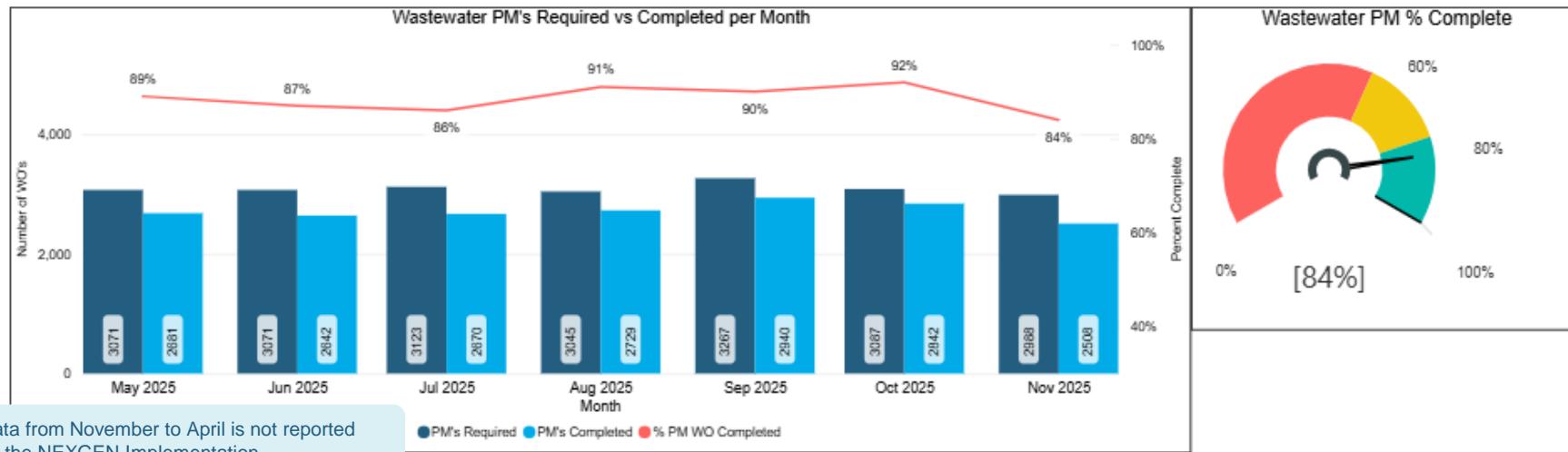
# **EUM Attribute:**

# **Infrastructure Strategy and Performance**

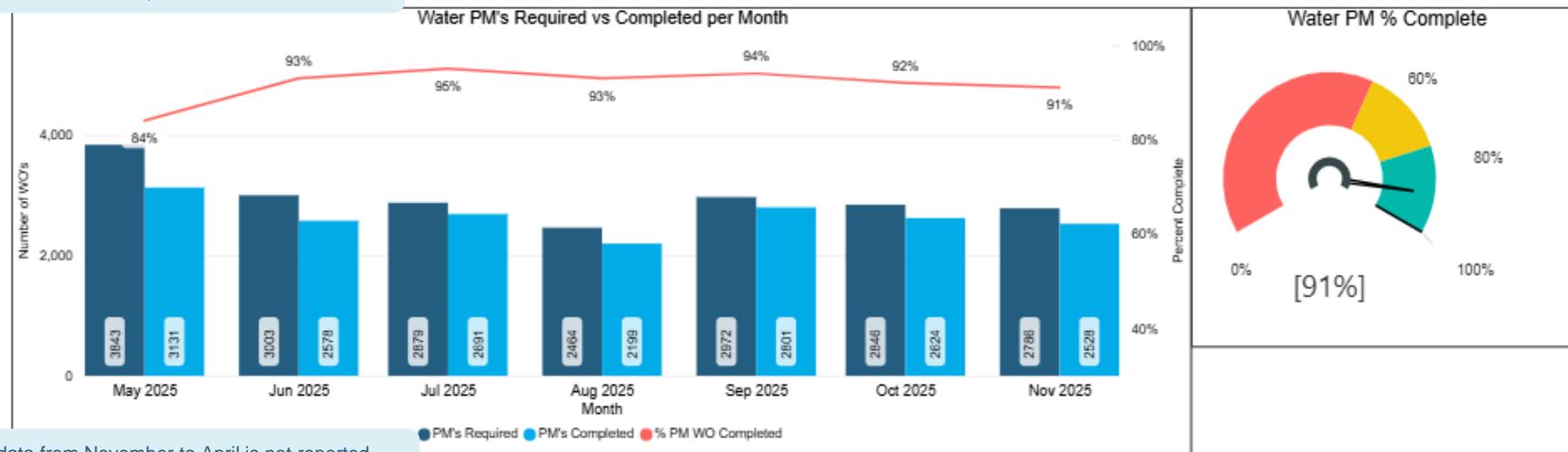
# Infrastructure Strategy and Performance – Wastewater and Water Preventative Maintenance (PM) Management



Results were in line with targets



KPI data from November to April is not reported due to the NEXGEN Implementation



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\*Timely preventative maintenance extends asset useful life and minimizes unplanned downtime.

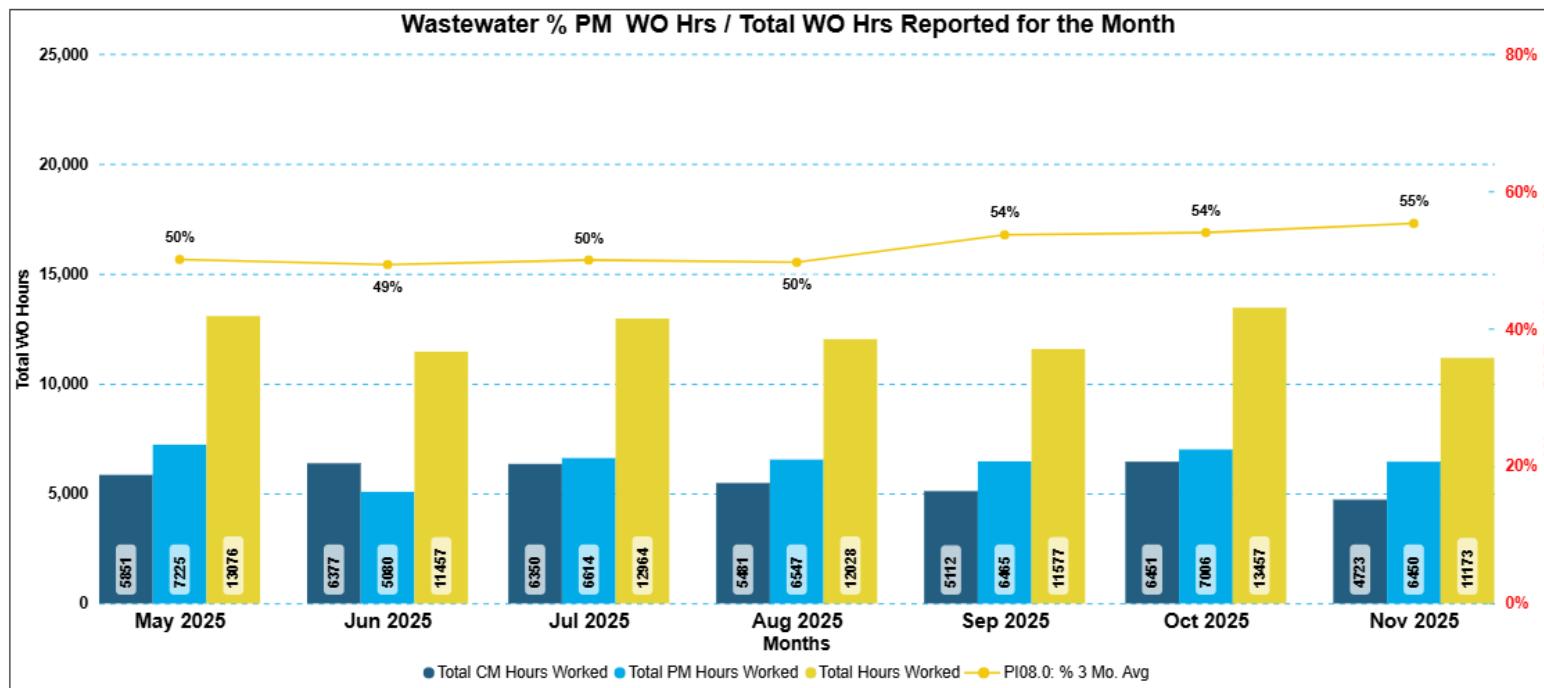
\*Unplanned downtime can lead to permit non-compliance and negative environmental impacts.

# Infrastructure Strategy and Performance – Wastewater Preventative & Corrective Maintenance Management

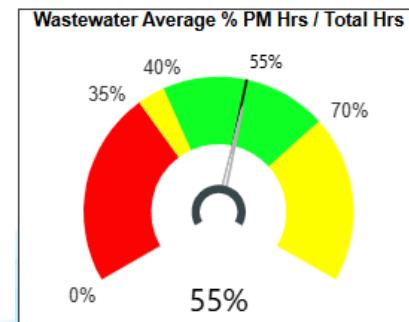


Results were in line with targets

November 2025



PI08: Proactive vs. Total Maintenance Labor Hours KPI aligns with the Society of Maintenance and Reliability Professionals (SMRP) Best Practice 5.1.2 and AWWA's planned maintenance ratio KPI. This indicator builds upon the previous work order ratio KPI by using labor hours instead of work order counts, providing a more accurate reflection of the resources required for different types of maintenance. It acknowledges the varying labor demands between corrective and proactive work and aligns more closely with industry best practices. The KPI uses a running average to minimize volatility and leverages enhanced data capture capabilities made possible through the implementation of NEXGEN at GLWA.

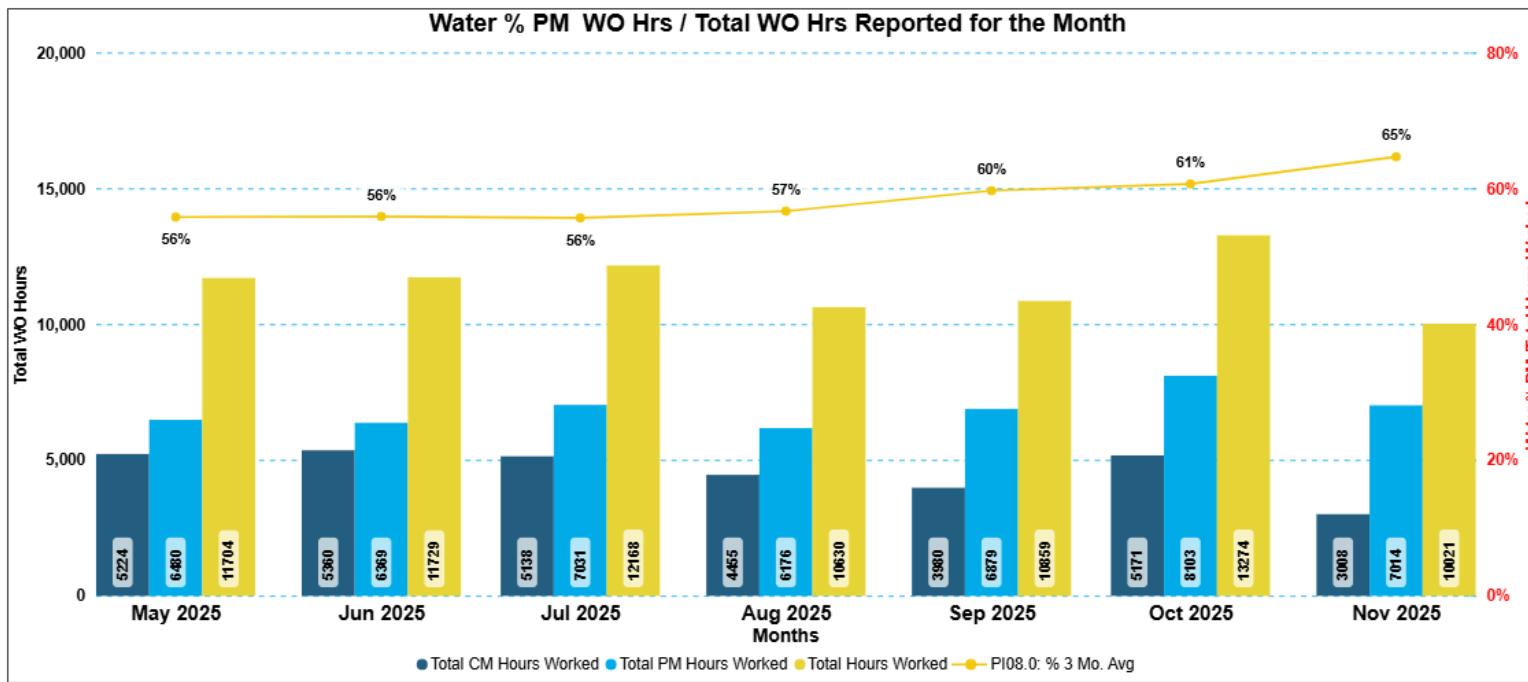


# Infrastructure Strategy and Performance – Water Preventative & Corrective Maintenance Management

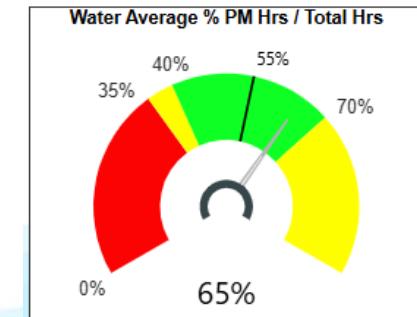


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## November 2025



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PM = Preventative Maintenance  
CM = Corrective Maintenance



# EUM Attribute: Operational Optimization

# Operational Optimization

## Regulatory Compliance –

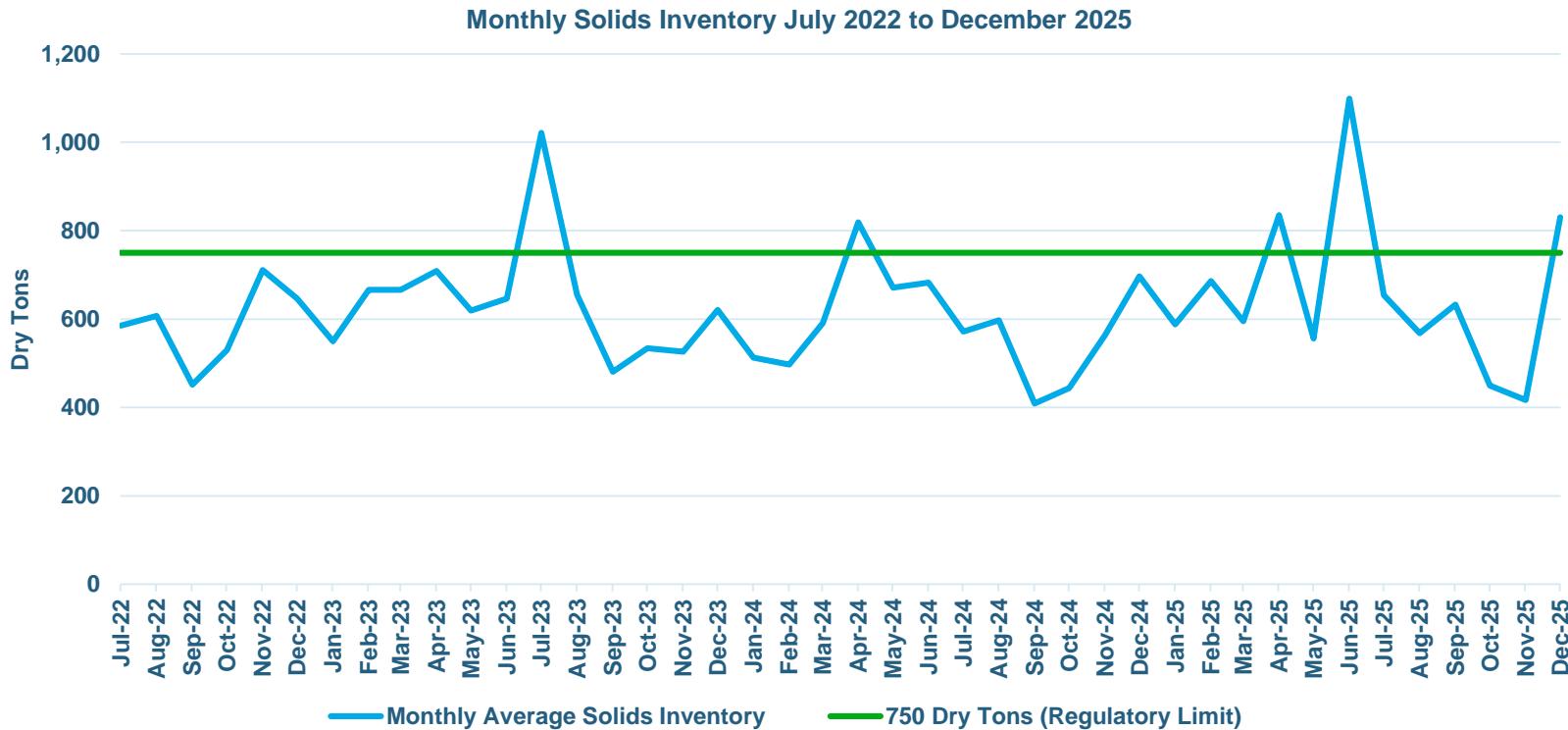
### Monthly Solids Inventory



Green= Avg. <725 dry tons  
Yellow = Avg. 725-750 dry tons  
Red = Avg. >750 dry tons

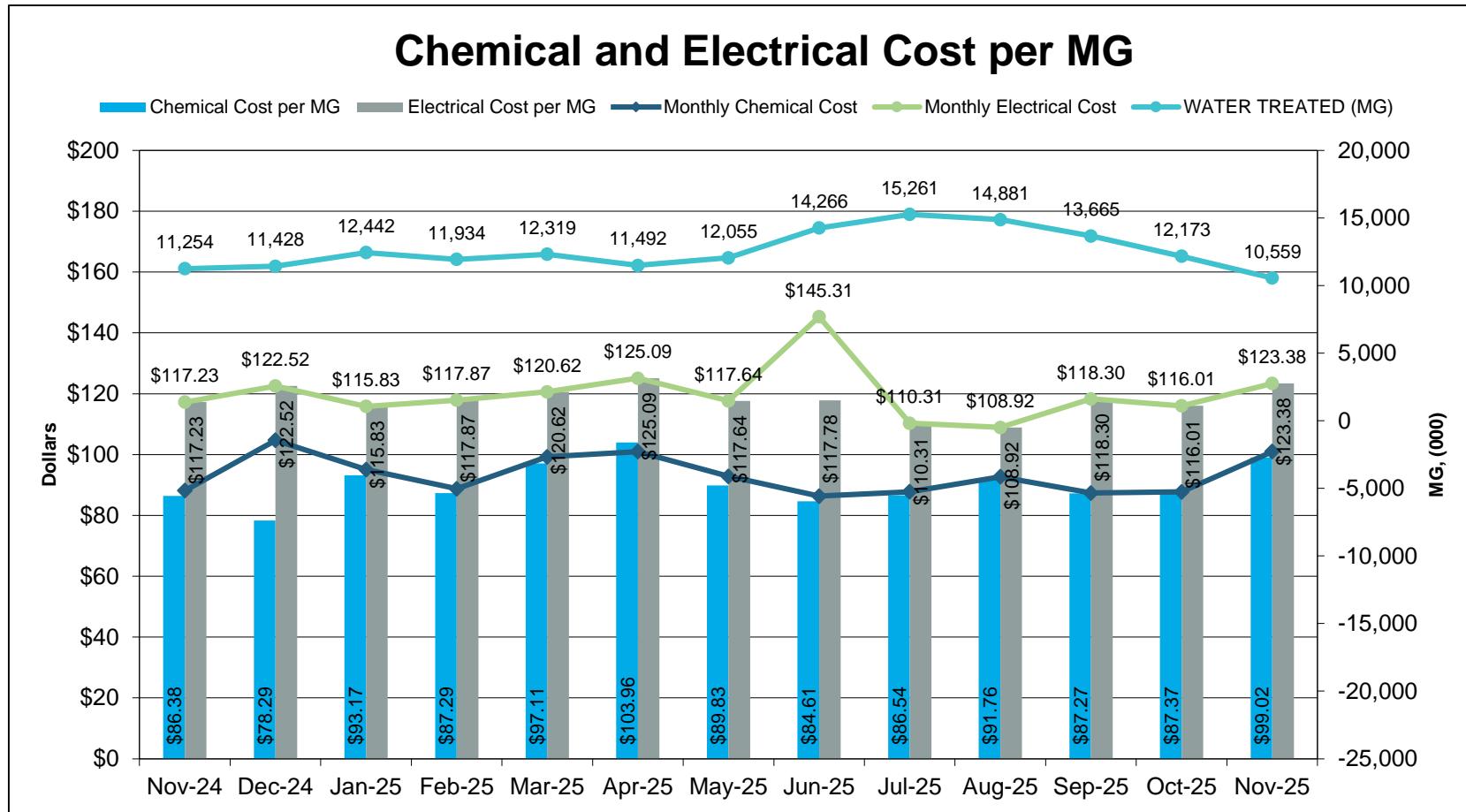
The inventory average exceeded the regulatory limit. Wet weather at the end of the month brought heavy solids loading. Ash system problems limited disposal capacity.

- 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.

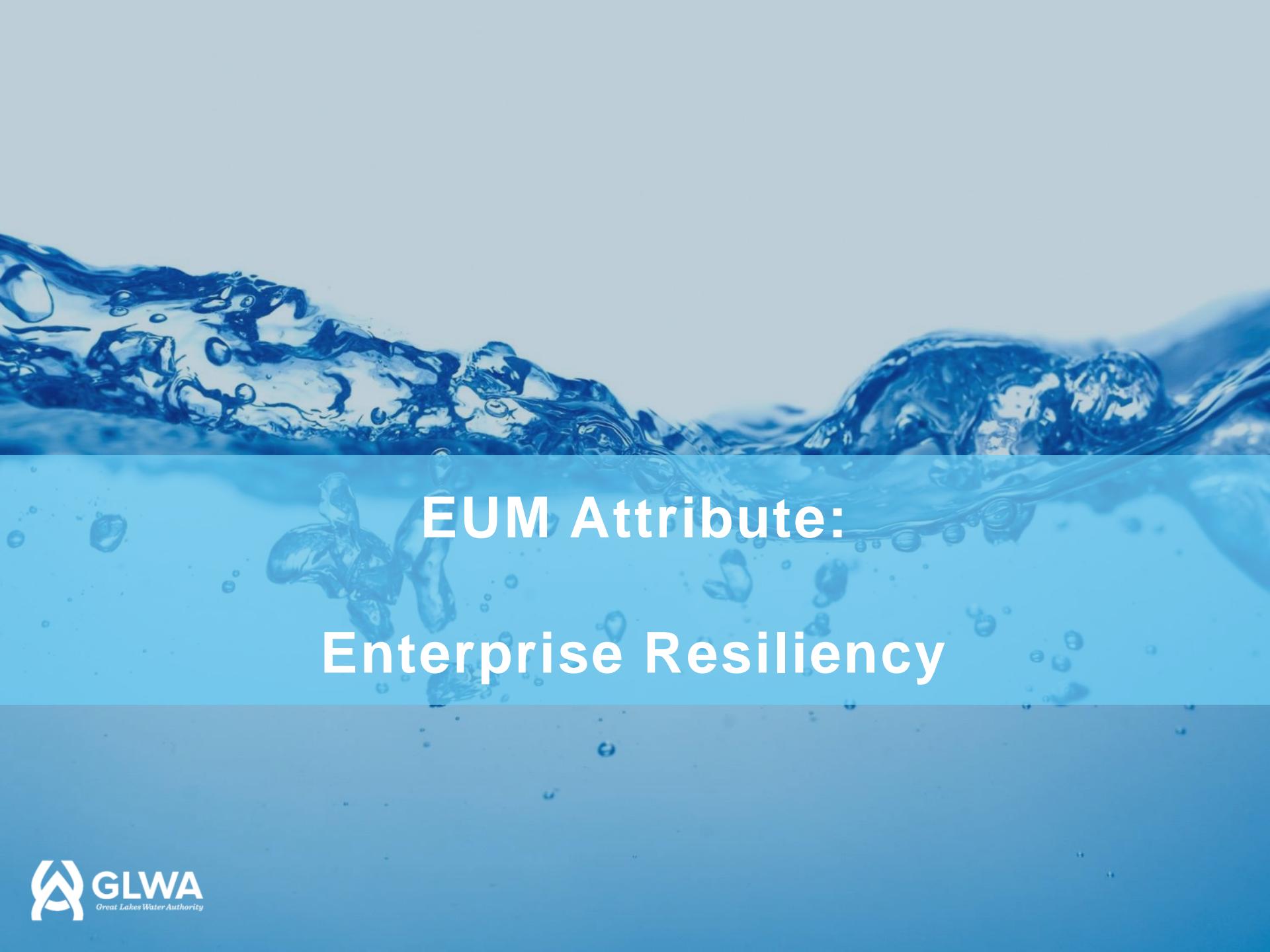


Note: No violation occurred in July 2023, April 2024, April 2025, or June 2025: the limit did not apply in those months due to the number of days on which Primary Effluent discharge occurred. A violation did occur in December 2025.

# Operational Optimization Chemical & Electrical Costs



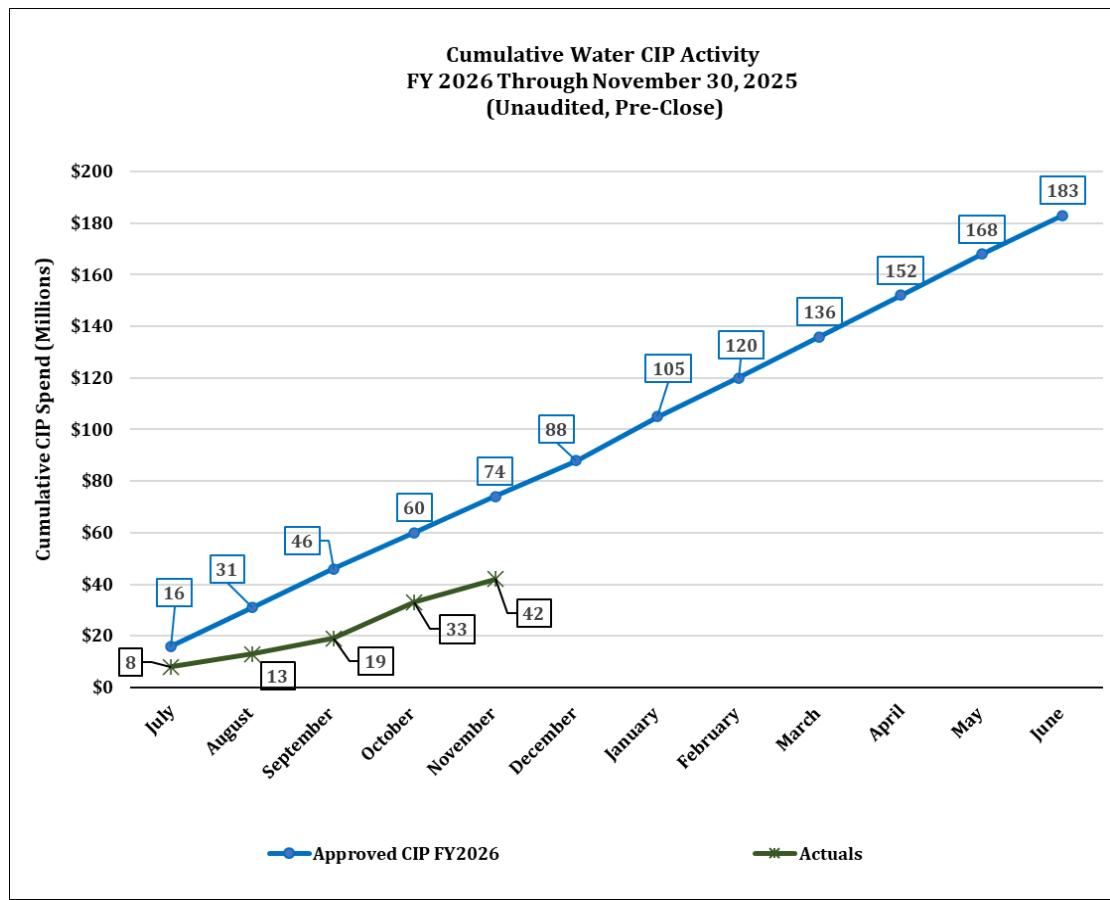
**Operational Optimization:** Being able to identify ongoing performance improvements for chemical and electrical usage per MG of water pumped is a key metric in managing operational cost. This slide is under development to include tracking of total costs per MG.



# EUM Attribute: Enterprise Resiliency

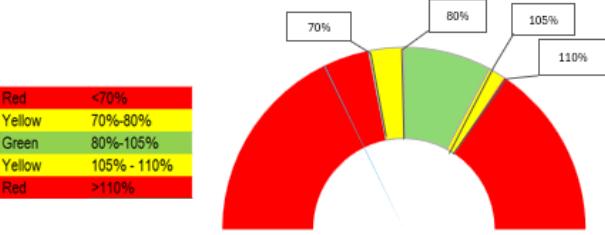
# Enterprise Resiliency

## FY 2026 Total Water CIP Spend



Note: The Capital Spend Ratio for FY 2026 CIP is 100% Of Board Approved

Red	<70%
Yellow	70%-80%
Green	80%-105%
Yellow	105% - 110%
Red	>110%



The water system incurred \$42 million of CIP costs through November 2025.

This is 57% of the FY 2026 monthly Board Approved CIP2026-2030.

170602: 36-inch 24 Mile Road Transmission Main Condition Assessment - Early Finish

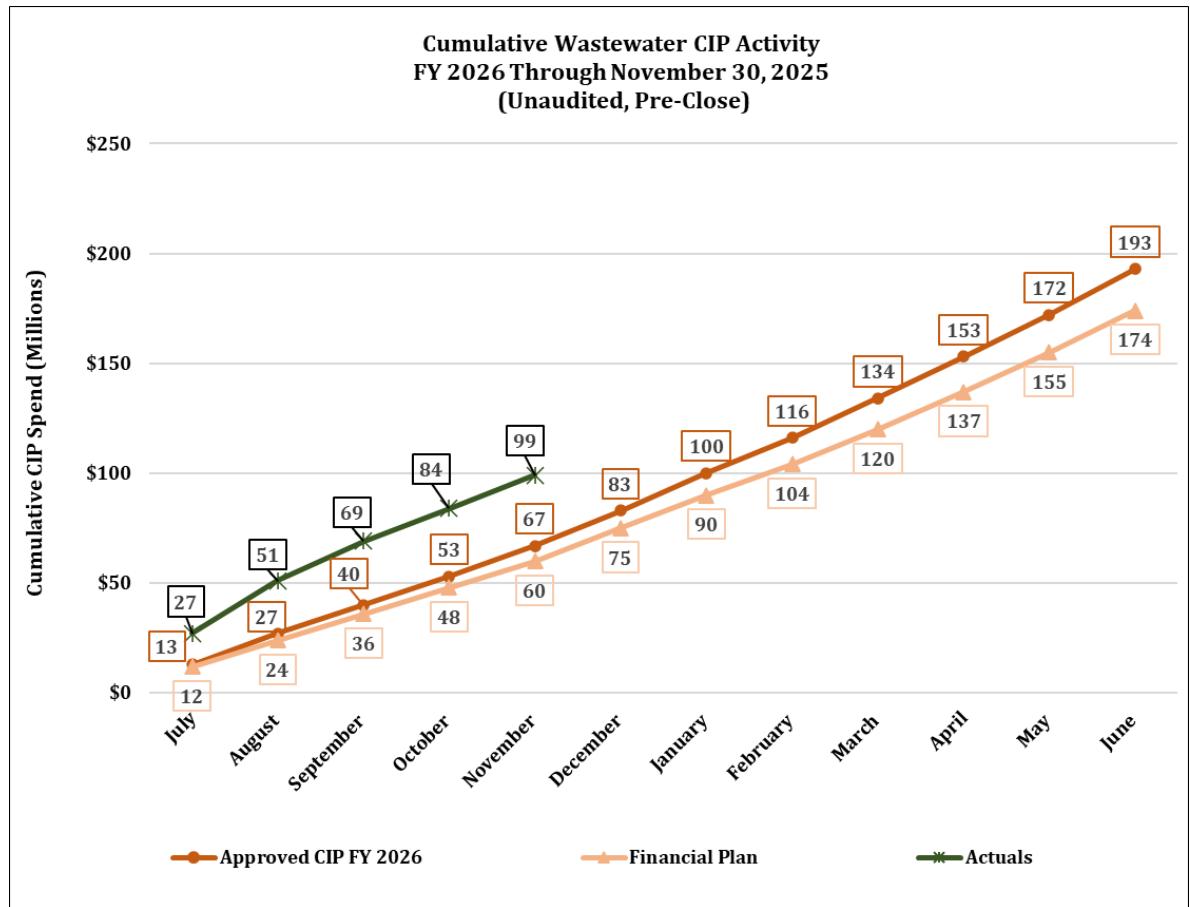
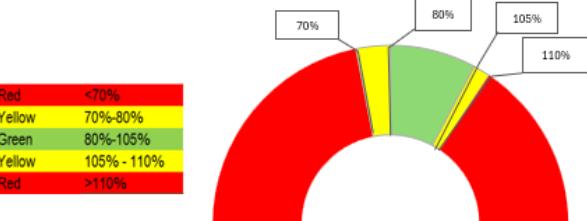
111006: Lake Huron WTP, Filter Instrumentation and Raw Water - Flow Metering Improvements - Phase II Execution Delay

111009: Lake Huron WTP - High Lift Pumping, Water Production Flow Metering and Yard Piping Improvements – Contractor Execution Delay

111001: Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Improvements -Delayed Construction Phase

# Enterprise Resiliency

## FY 2026 Total Wastewater CIP Spend



**Note:** Capital Spend Ratio for FY 2026 CIP is 90% of Board Approved Financial Plan=Board approved CIP X CSR

### Current Status:

The wastewater system incurred \$99 million of CIP costs through November 2025.

This is 165% of the FY 2026 monthly *Approved with CSR CIP2026-2030*.

232005: Freud Pump Station Improvements – Project split from CIP 232002

260209: Sewer Rehabilitation and Repair - Anticipated Early Finish

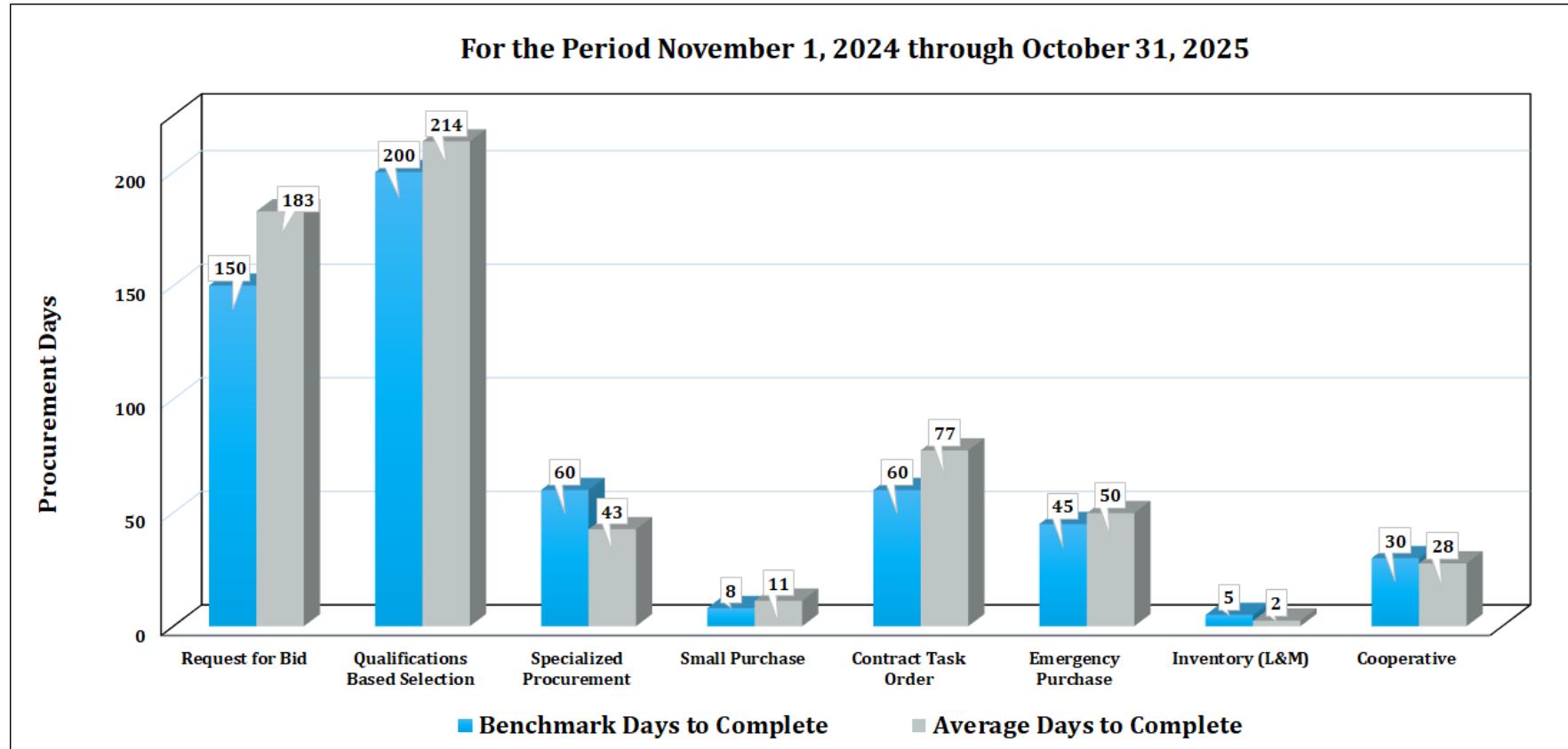
222001: Oakwood District Intercommunity Relief Sewer Modification at Oakwood District - Ahead of Schedule

211007: WRRF PS #2 Bar Racks Replacements and Grit Collection System Improvements -Accelerated Spending

# Enterprise Resiliency – Procurement Cycle

Procurement cycles indicate the amount of time that passes from sourcing to contract (purchase order) award.

For the Period November 1, 2024 through October 31, 2025



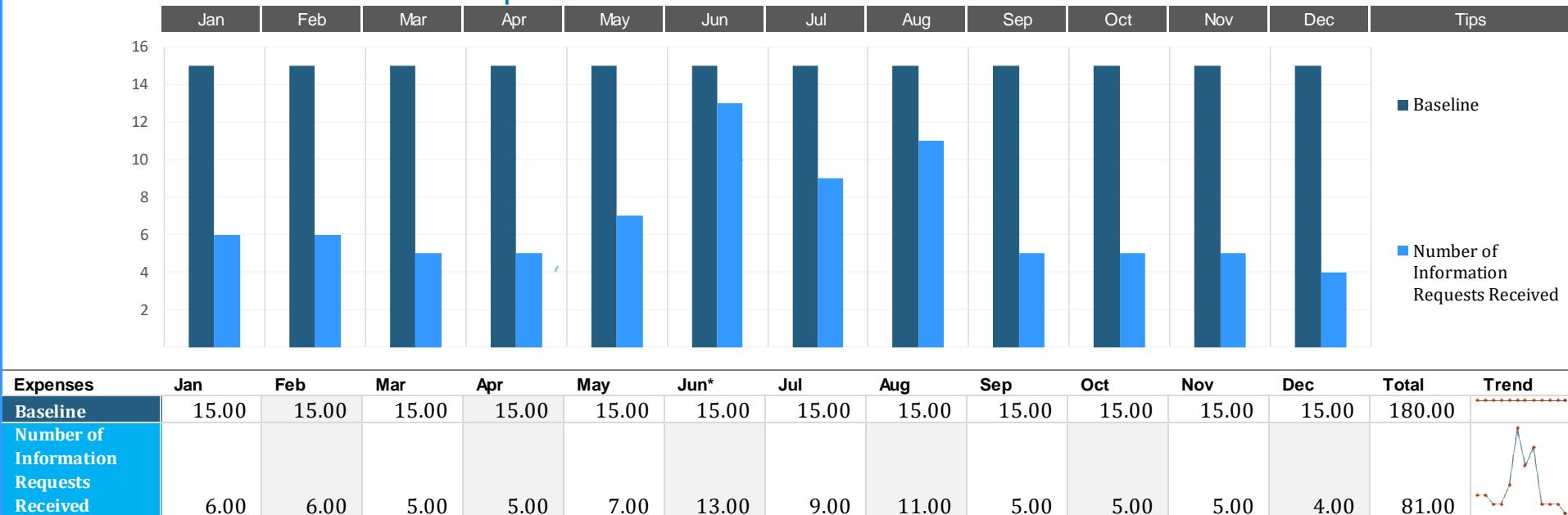
- Average Days represents the last twelve-month period. During that time, GLWA awarded \$699.9 million and completed 5,062 purchase requests.
- Combined Request for Bid's (RFB) and Qualifications Based Selection's (QBS) total \$556.1 million or 79 percent of the total. Bids provide transparency while ensuring optimal pricing and favorable contract terms.
- The transition to Workday did cause a few of the RFB's and QBS's to exceed the Benchmark Day's targets. The increased timeframes did not adversely influence the execution of the contracts.

# Enterprise Resiliency – General Counsel Information Requests Received



Green= <15 requests  
Yellow = 15 requests  
Red = >15 requests

## General Counsel Information Request Received



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.

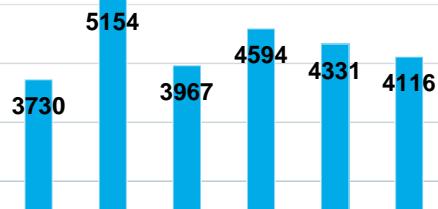
# Enterprise Resiliency – Security & Integrity



Green= 2350 or more patrols  
Yellow = 2000-2350 patrols  
Red = <2000 patrols

## Patrols

Patrol hours and resulting ratio of reports generated. Effective goal is 1.9 to 2.7



	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26
Report/Patrol Ratio	2.4%	2.0%	1.9%	1.9%	2.0%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Patrols	3730	5154	3967	4594	4331	4116						

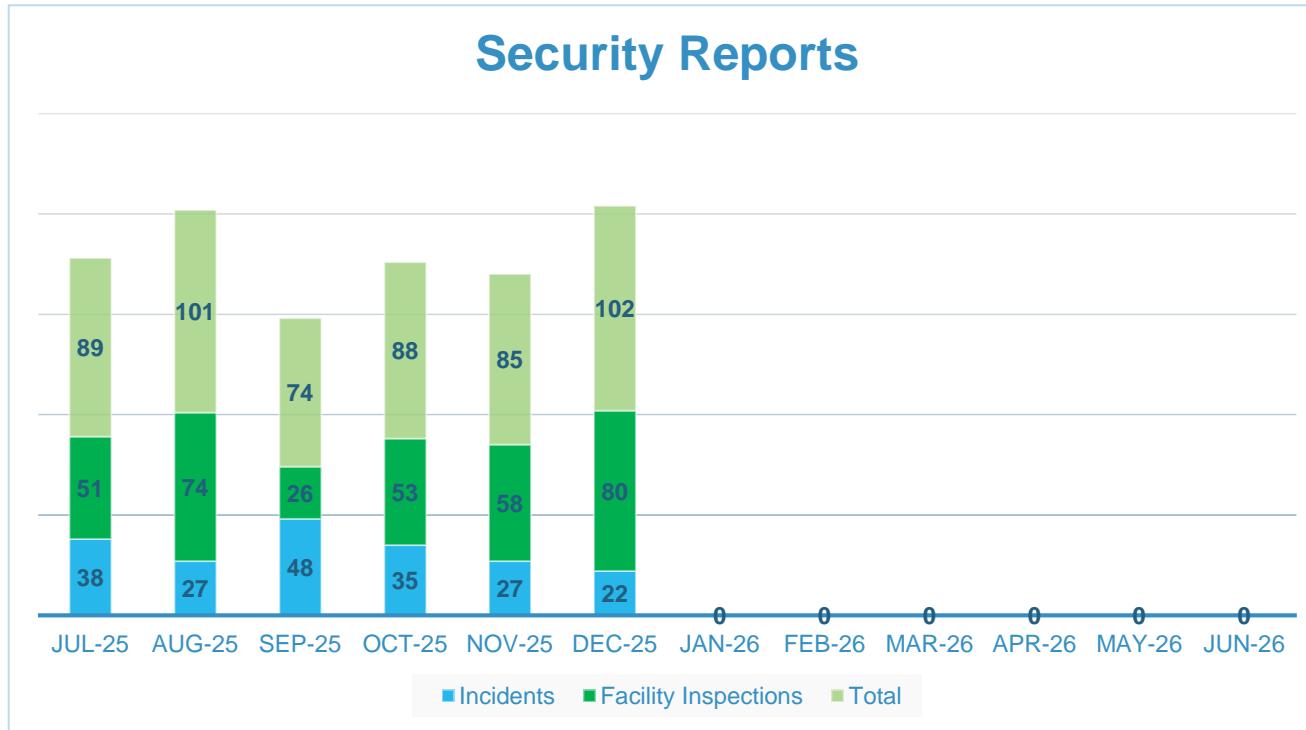
- Patrols are an indication of the level of services rendered by the staff of the Security & Integrity Group.

# Enterprise Resiliency – Security & Integrity



Green= 1.9-2.7 avg. per patrol  
Yellow = 1.5-<1.9 avg. per patrol  
Red = <1.5 or >2.9 avg. per patrol

## Security Reports

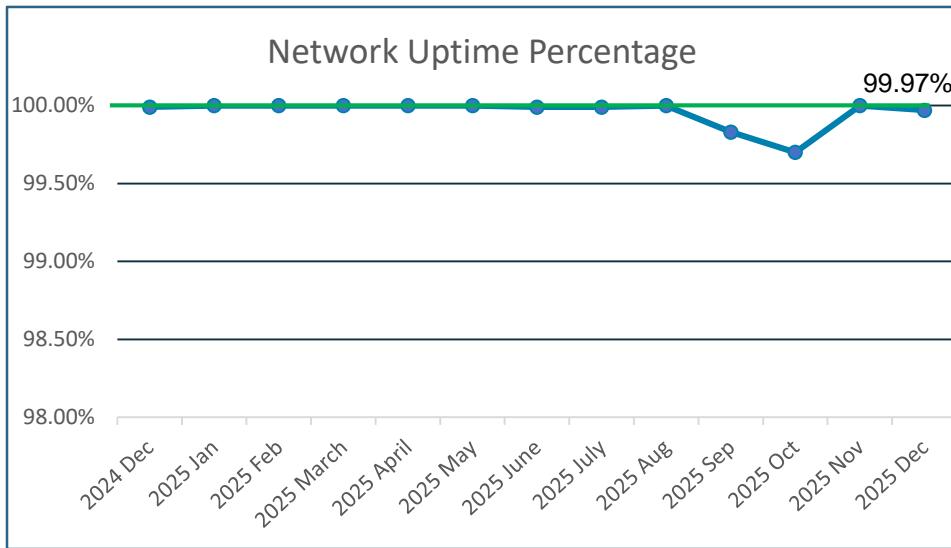


- Security reports are an indication of the effectiveness of security programs (less is better).

# Enterprise Resiliency – Information Technology



Green = 99.98-100%  
Yellow = 99.5-99.97%  
Red = <99.5%

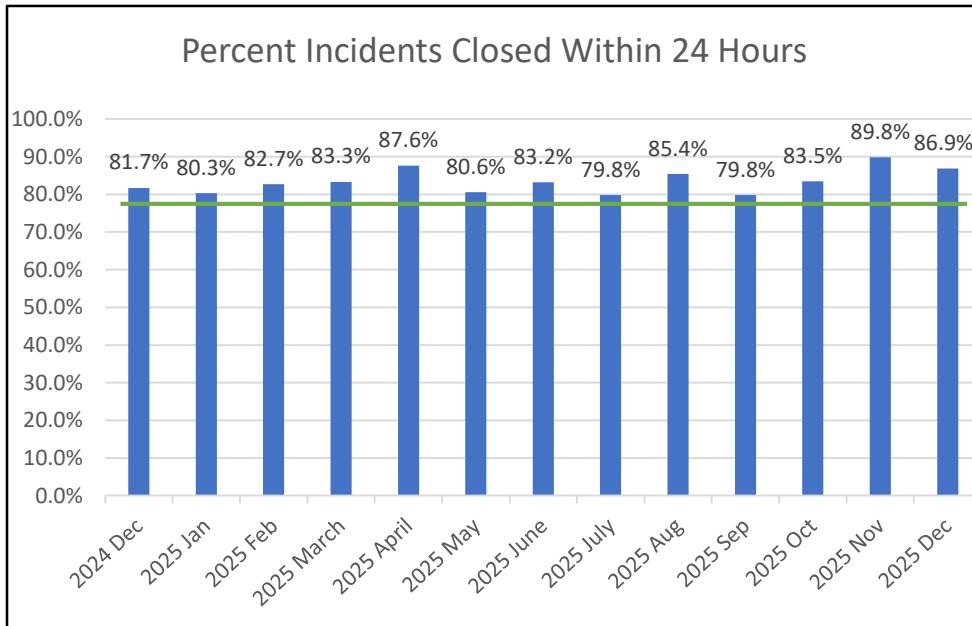


- GLWA has 42 monitored, network-connected sites, including offices, plants, pump stations, and other facilities.
- Network connectivity allows employees to access the applications needed to do their work and connects plants and pump stations to the intranet to report operational data

# Enterprise Resiliency – Information Technology



Green= 78-100%  
Yellow = 68-77%  
Red = <68%

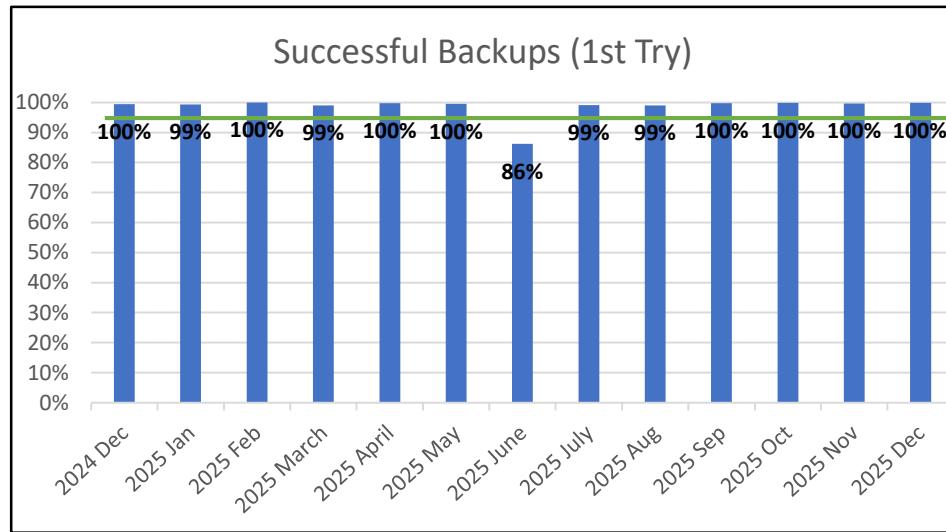


- An Incident is a technology issue that is preventing an employee from performing some part of their job duties
- Quick resolution of incidents increases employee productivity.
- The industry standard for 24-hour resolution is 68%

# Enterprise Resiliency – Information Technology



Green= 95-100% of 1<sup>st</sup> attempts  
Yellow = 90-<95% of 1<sup>st</sup> attempts  
Red = <90% of 1<sup>st</sup> attempts

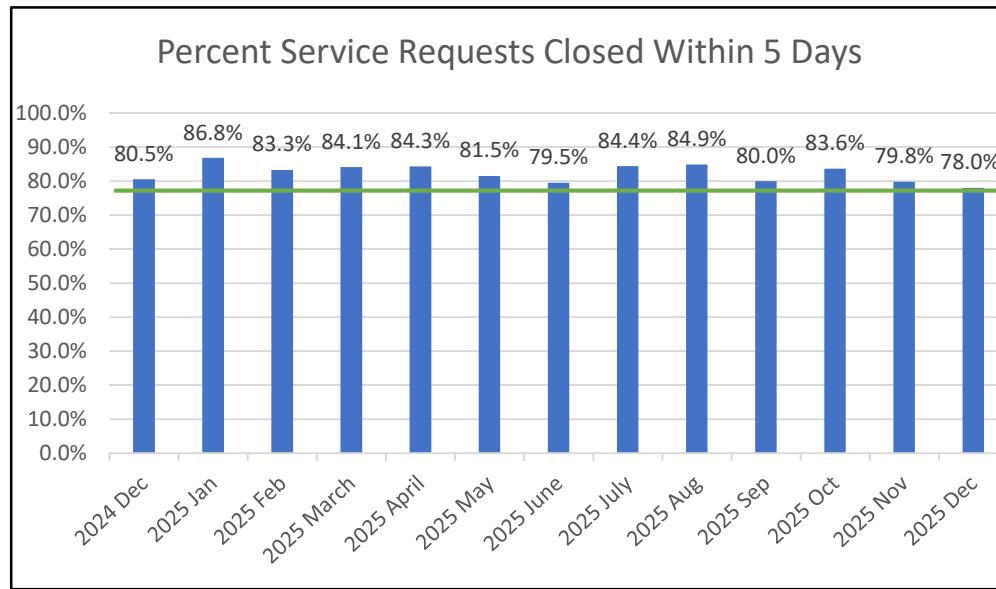


- Backups ensure that GLWA's information is safe in case of unexpected disruptions.
- Successfully backing up on the first try streamlines operations and frees up resources for other tasks.

# Enterprise Resiliency – Information Technology



Green= 78-100%  
Yellow = 68-<78%  
Red = <68%



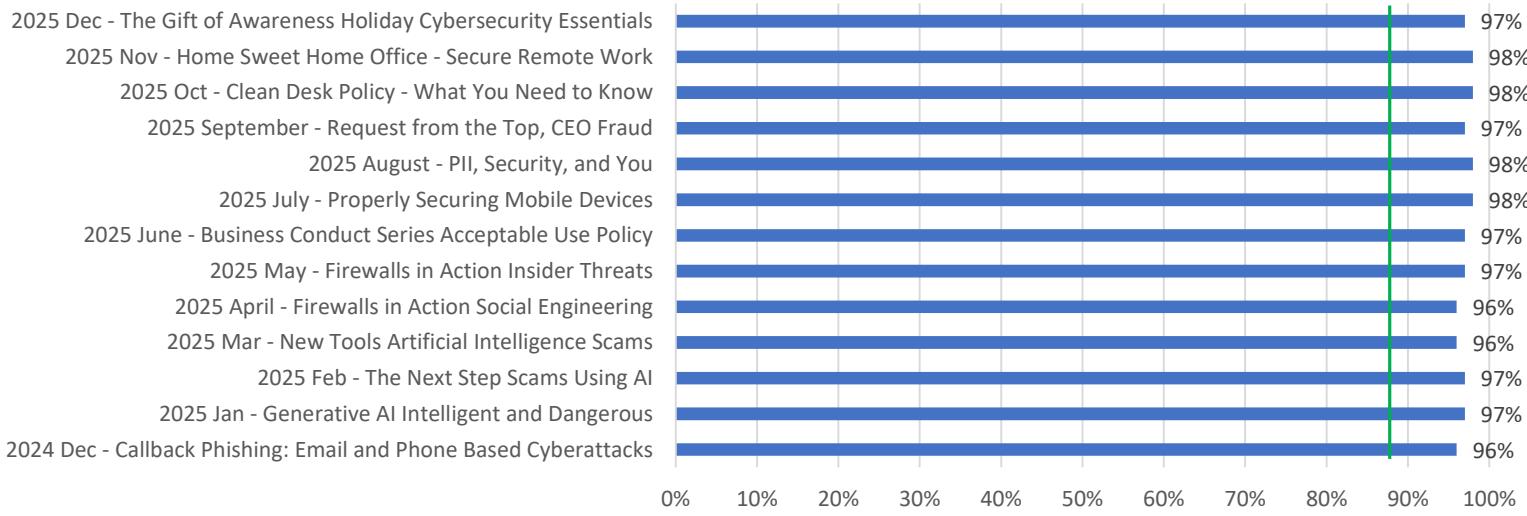
- A service request is a request for IT work that is not preventing an employee from performing their work.
- Timely fulfilment of service requests ensure that employees have the technology resources needed to do their jobs and increases job satisfaction.

# Enterprise Resiliency – Information Technology



Green= 90-100%  
Yellow = 80-90%  
Red = <80%

Percent of Team Members Completing Cybersecurity Training Within One Month



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

# Enterprise Resiliency Days Without an OSHA Recordable Injury

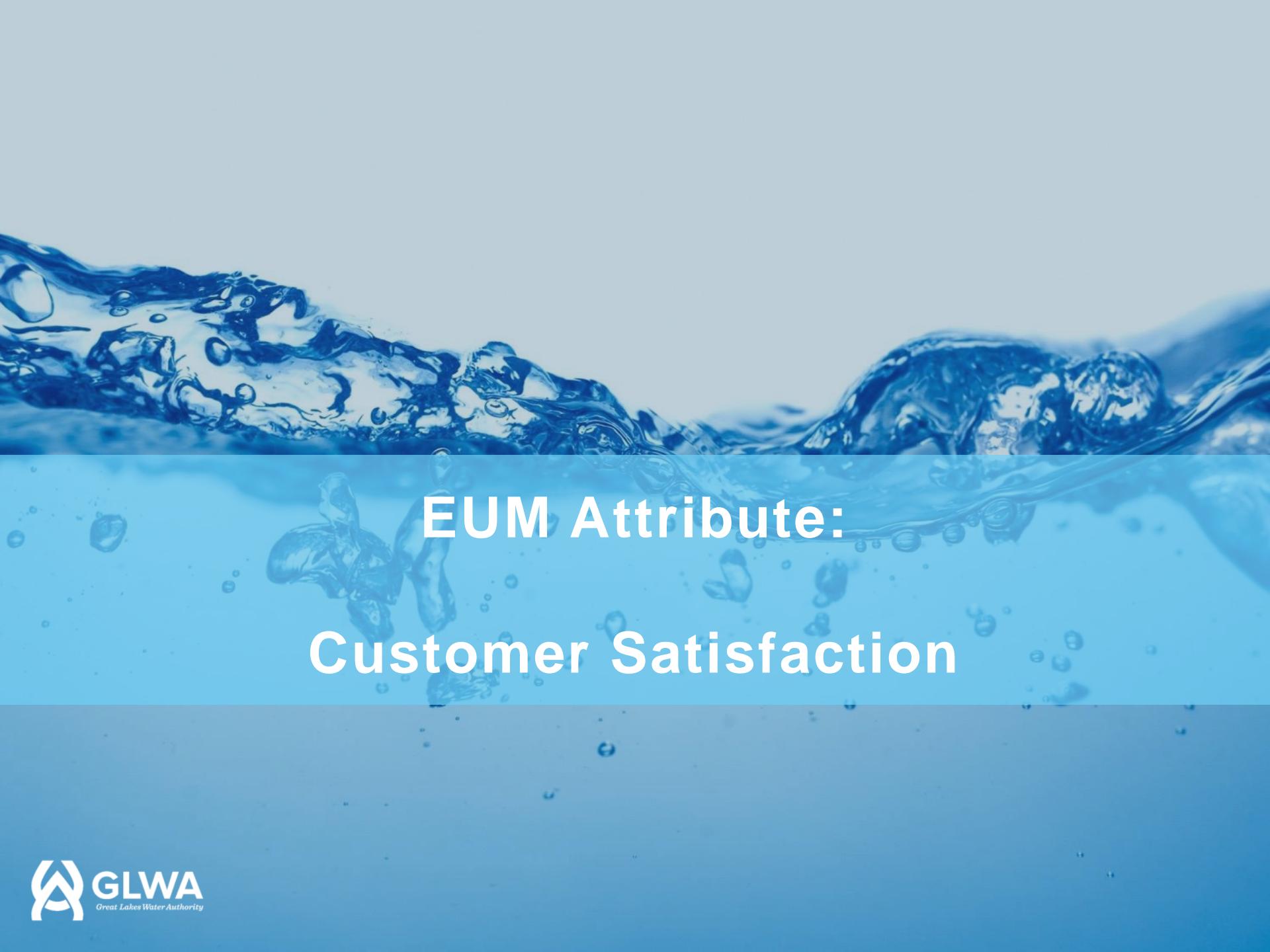
Current number of days without  
a GLWA team member having  
an OSHA recordable accident event.

**12**

FY 2026: Longest number of days without  
a GLWA team member having  
an OSHA recordable accident event.

**29**

***Key Performance Criteria:*** Promoting Team Member safety is a key part of Enterprise Resiliency



# EUM Attribute: Customer Satisfaction

# Customer Satisfaction – Water & Field Services

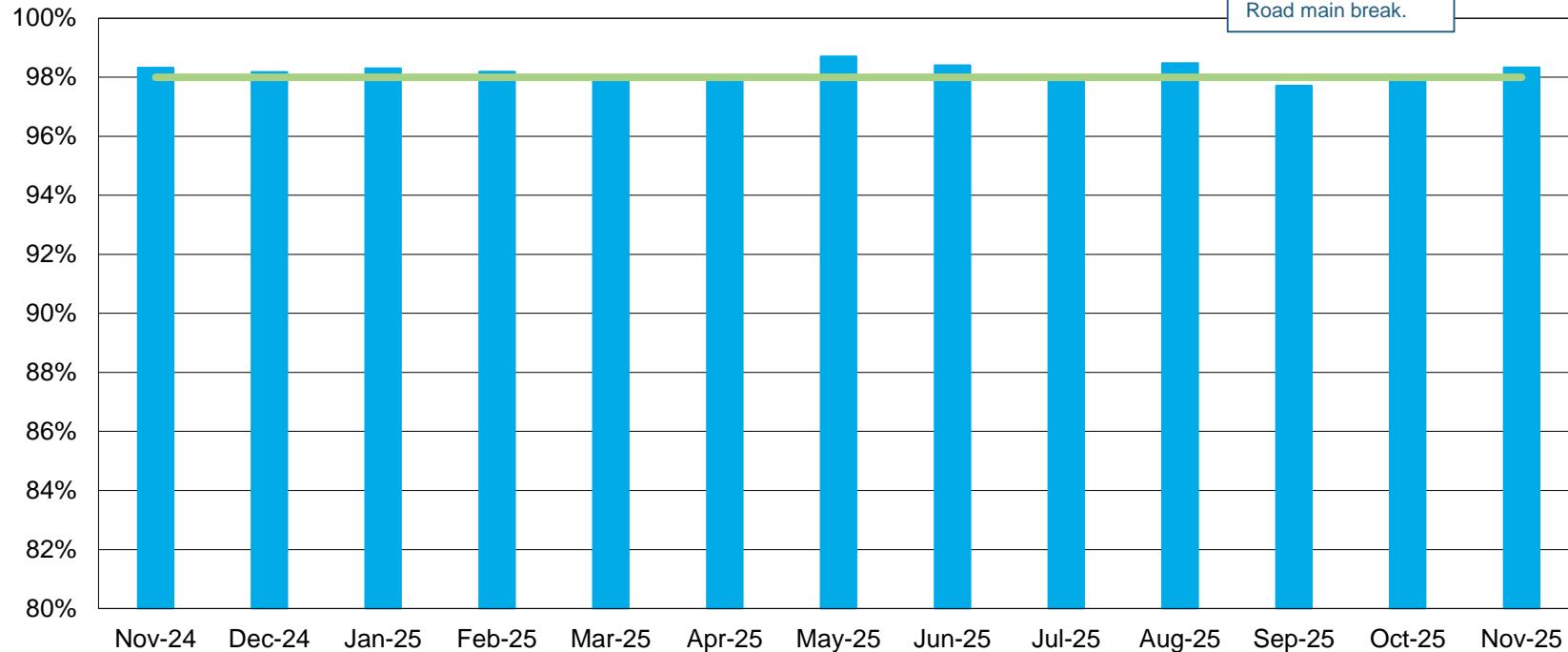


Green= 98-100%  
Yellow = 95-<98%  
Red = <95%

## Customer Pressure Compliance %

Compliance %      98% Target

September and  
October 2025  
compliance number  
is low due to 14 Mile  
Road main break.

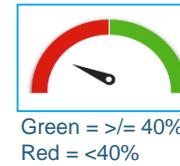


**Operational Resiliency:** To exceed customer compliance by being greater than 98% of contractual pressures.



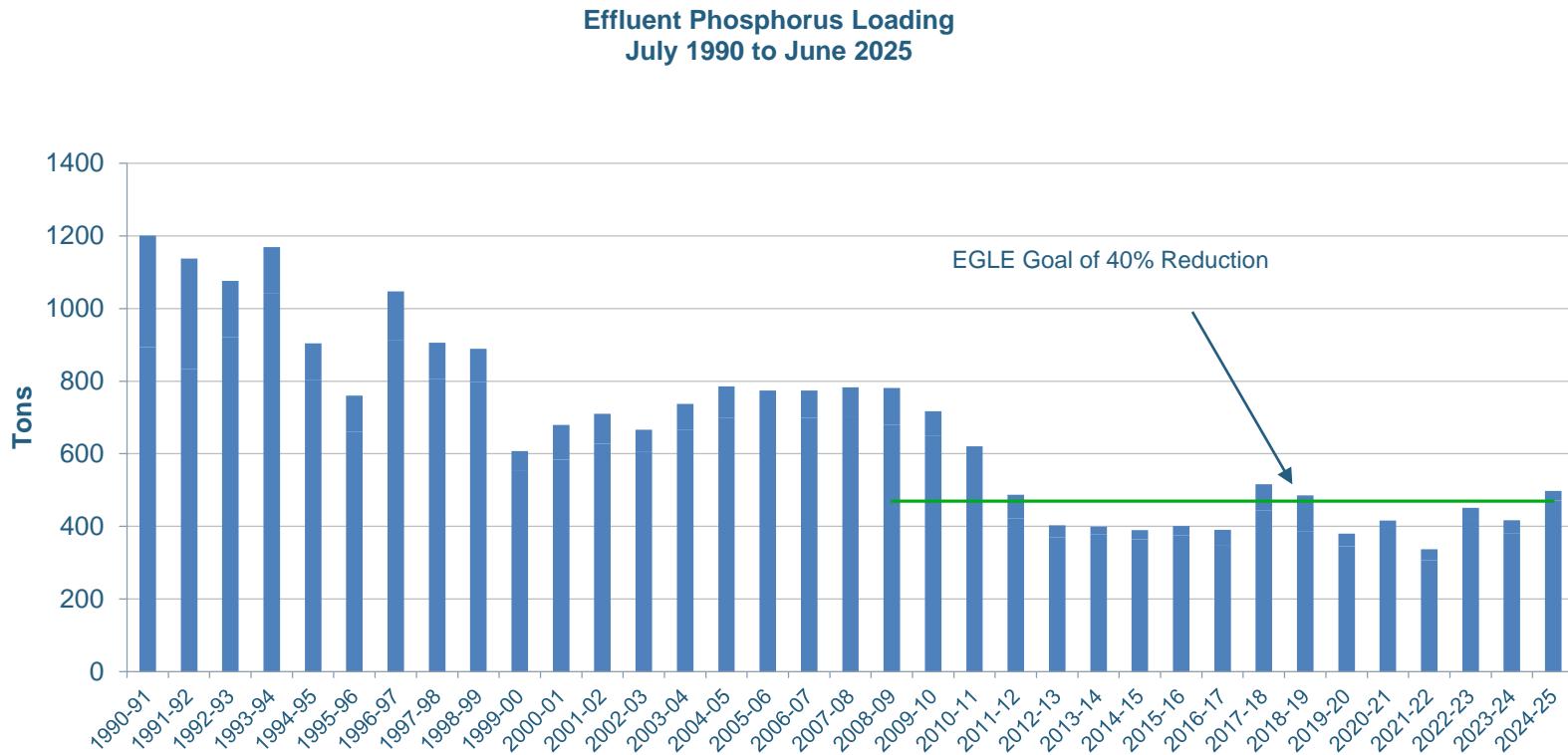
# EUM Attribute: Community Sustainability

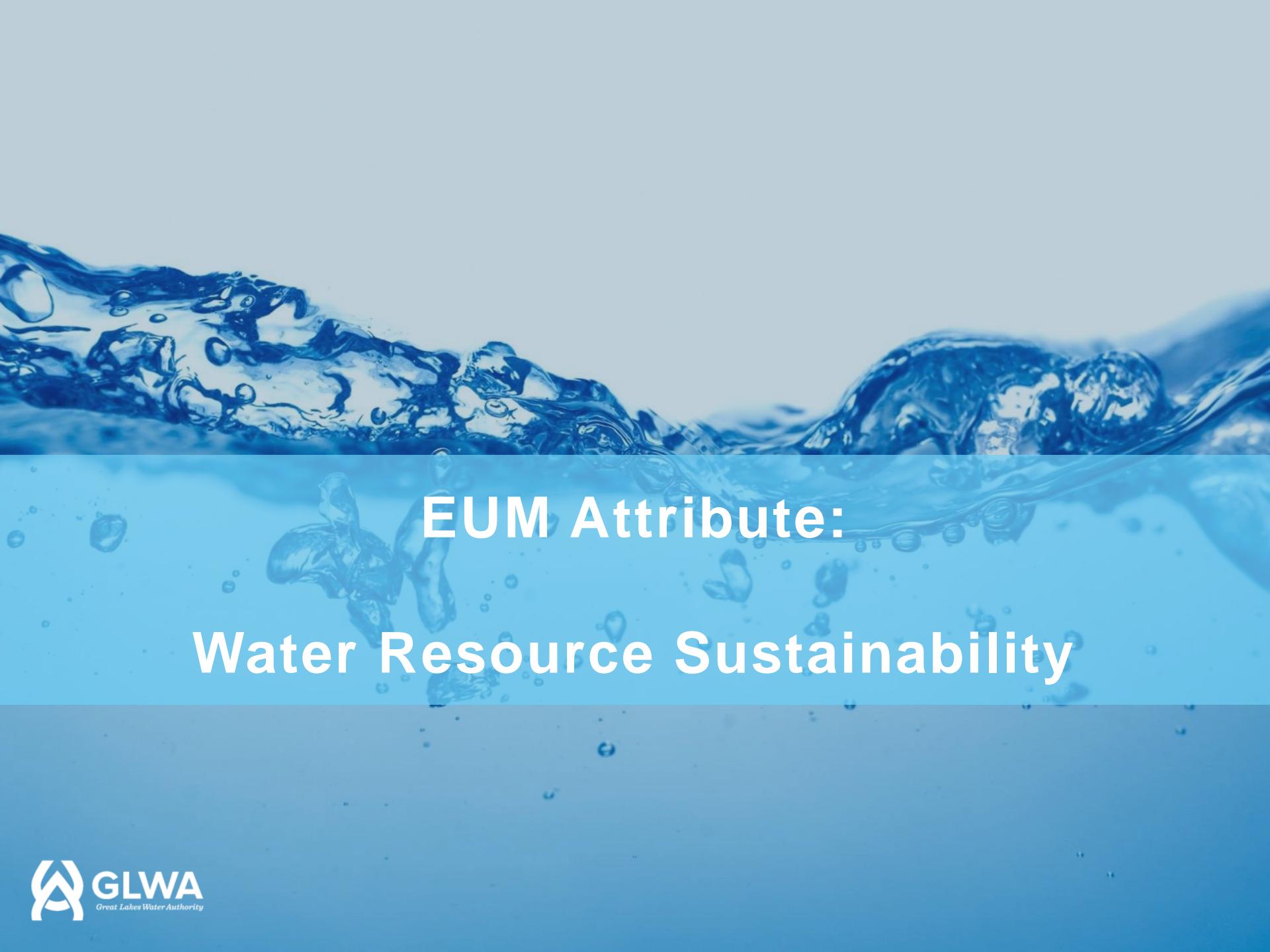
# Community Sustainability – Watershed Health



The 2024-25 loading exceeded the goal by 28 tons (6%) due to increased dosing of orthophosphate to the water distribution system.

- 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.





# EUM Attribute: Water Resource Sustainability

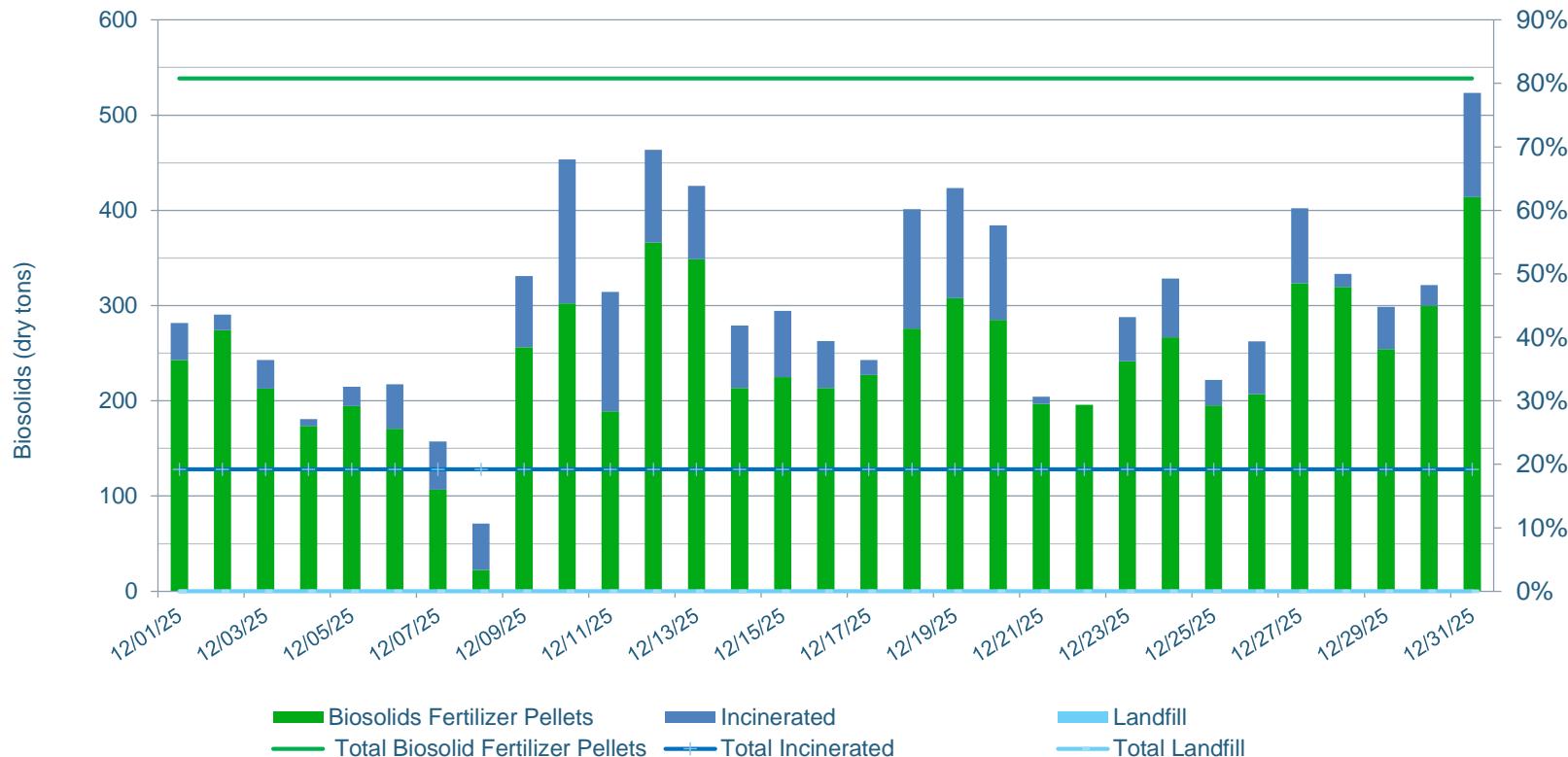
# Water Resource Sustainability – Biosolids Handling by Method

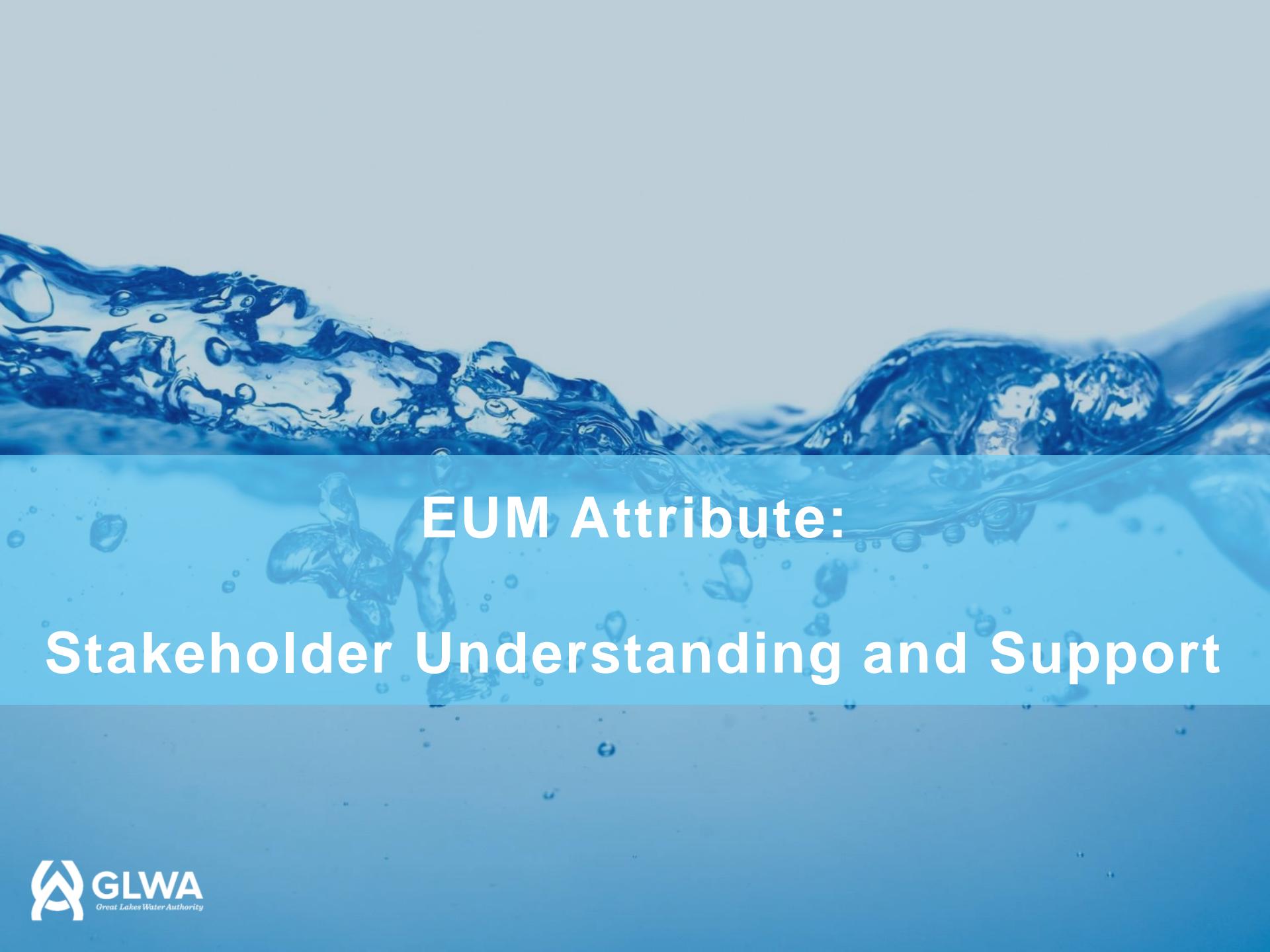


Green = 10% or less sent to landfill  
Red = >10% sent to landfill

Biosolids Dryer Facility handled 81% of solids production for December 2025. No solids were landfilled.

- 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.





# **EUM Attribute:**

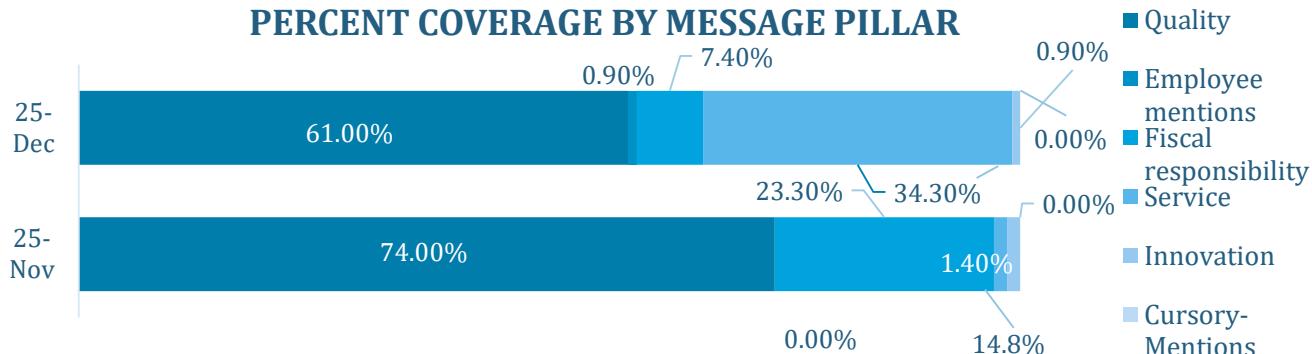
# **Stakeholder Understanding and Support**

# TRADITIONAL MEDIA SUMMARY

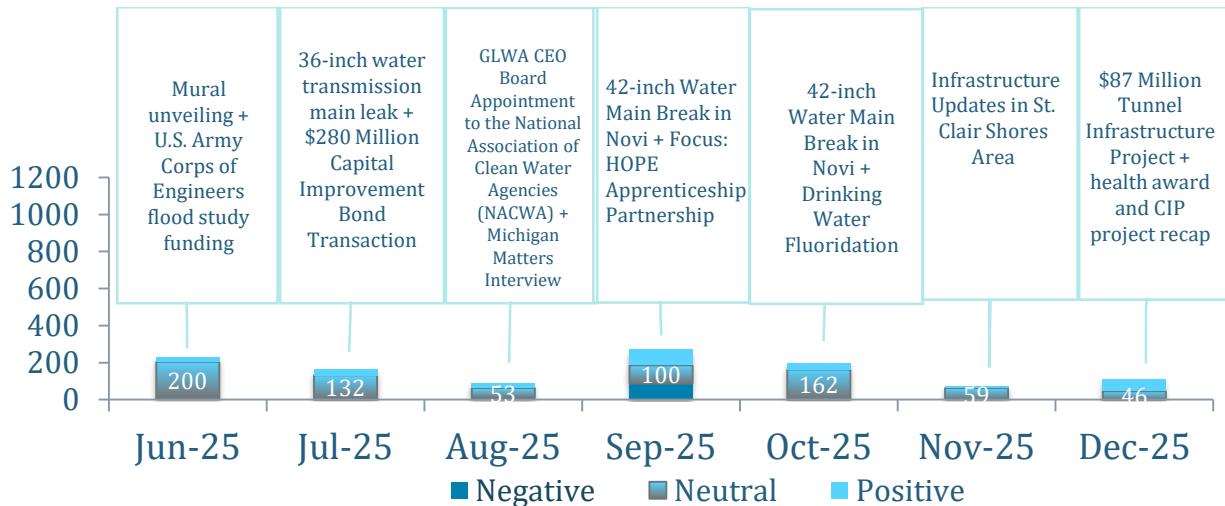


Traditional media coverage this month was equally distributed between neutral and positive news. The majority of coverage was about the new \$87 million sewage relief tunnel infrastructure project GLWA is starting in Southwest Detroit. There was excellent message pull-through around GLWA's 2026 infrastructure projects in Detroit, including the relocation of the 96-inch water transmission main on Dequindre Road. Additionally, there was strong message pull-through centered around GLWA's honors at the 2025 Metropolitan Detroit's Best and Brightest Companies To Work For ceremony. This month's media coverage yielded 100 percent of stories with non-cursory mentions containing a GLWA quote or message.

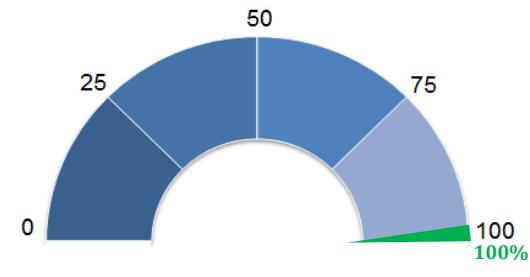
## PERCENT COVERAGE BY MESSAGE PILLAR



## MEDIA MENTIONS + SENTIMENT



## MESSAGE PULL-THROUGH\*



MEDIA VOLUME: 108

CURSORY OR FLINT MENTIONS: 0

INCLUDED GLWA MESSAGE: 108

\*\*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.

# FACEBOOK Q4 2025 REVIEW

## Facebook Impressions



## Facebook Post Engagements



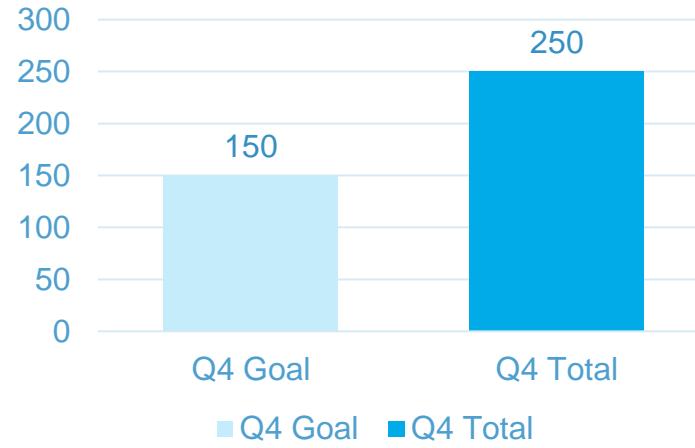
- At the beginning of this quarter, posts around the 42-inch main break took precedence, while posts about CEO initiatives and CIP events performed better at the end
- Top content includes information around the **42-inch main break in Novi** and team member events

# X Q4 2025 REVIEW

## X Impressions



## X Engagements



- ◆ This quarter's X content includes updates around the **42-inch main break** and large initiatives involving GLWA Member Partners
- ◆ Top content includes posts around **tours and community meetings** and the **42-inch main break in Novi**

# LINKEDIN Q4 2025 REVIEW

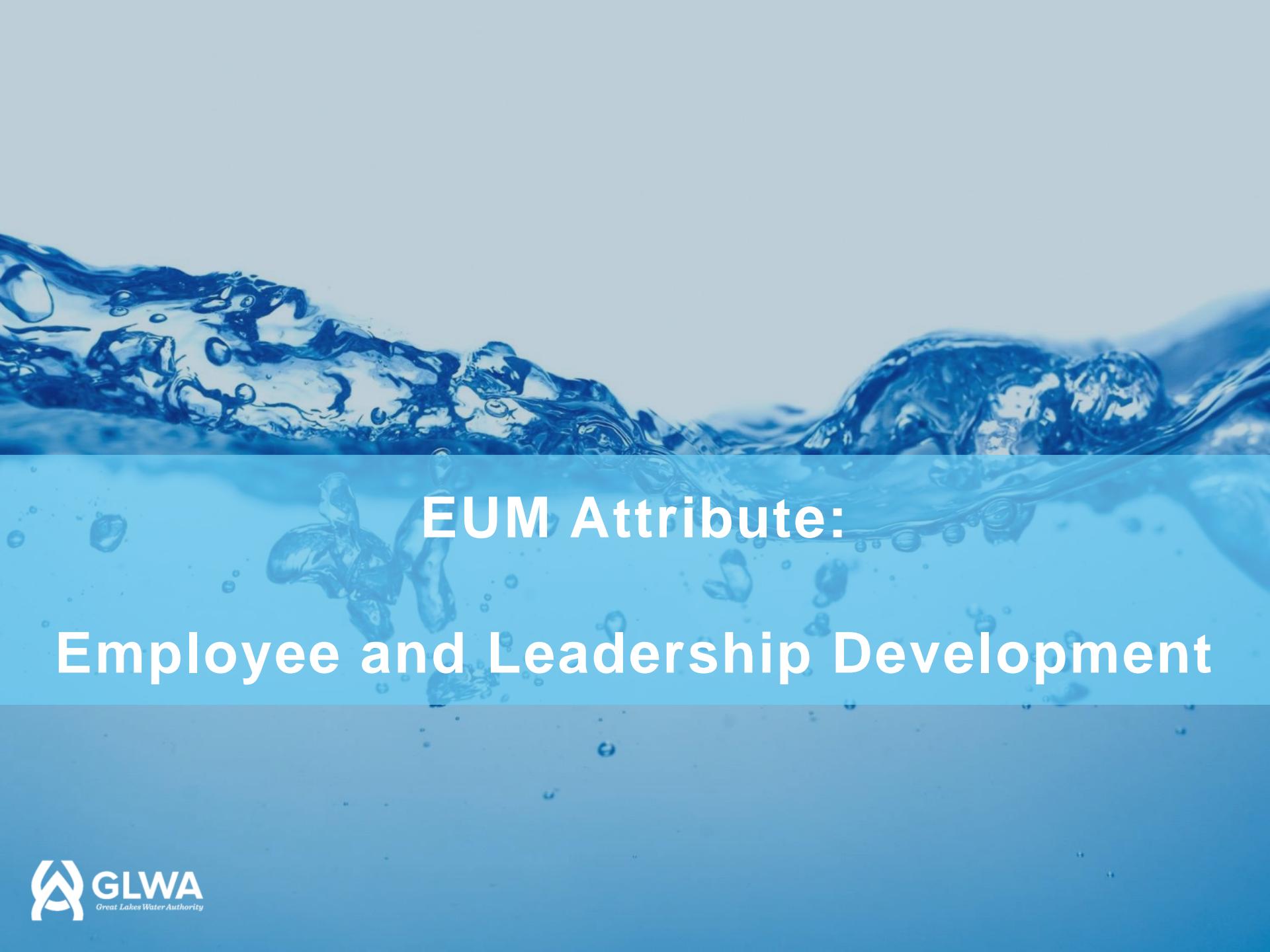
## LinkedIn Impressions



## LinkedIn Page Engagement



- Top content includes team member stories and large capital project highlights



## EUM Attribute:

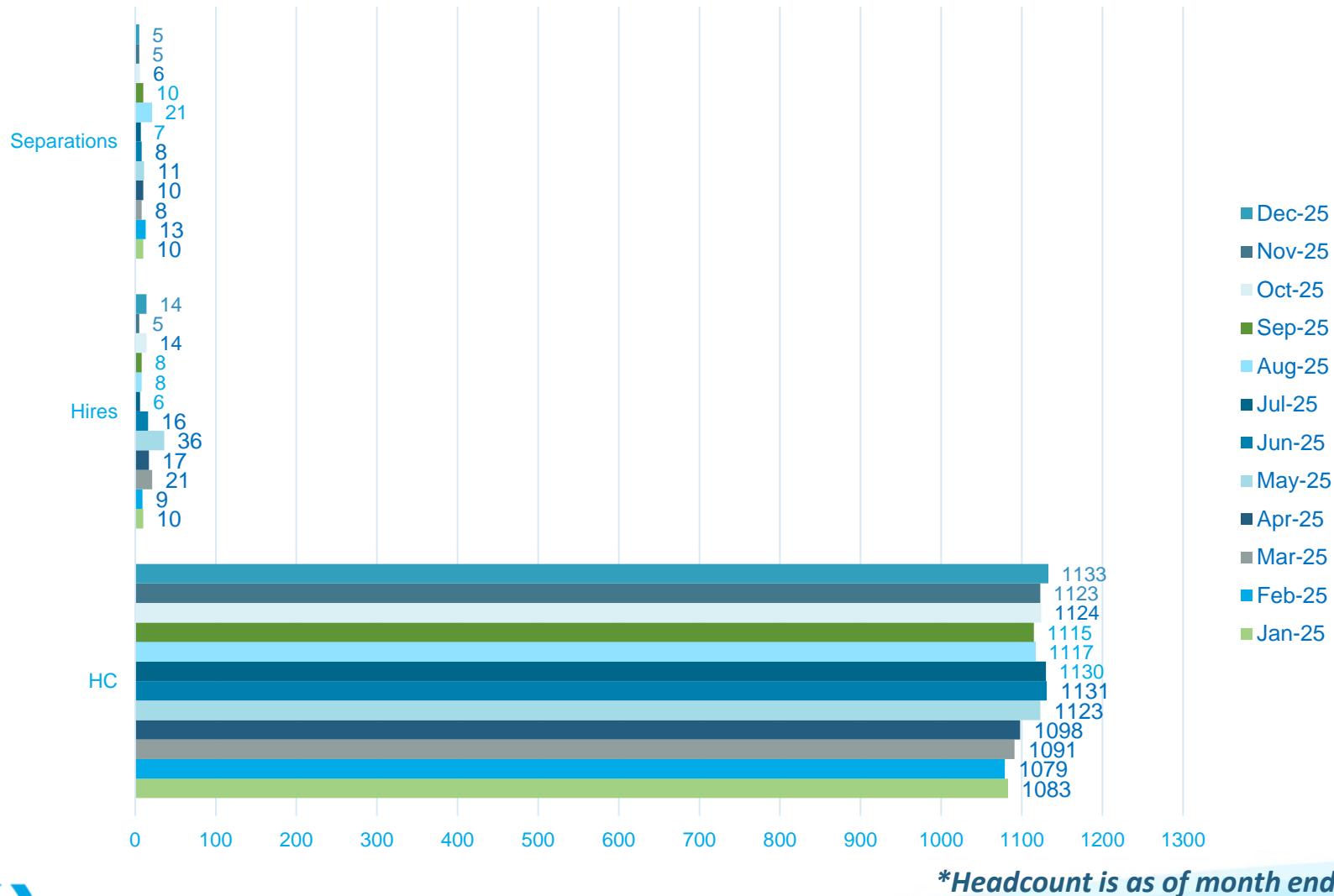
# Employee and Leadership Development

# Organizational Development



Green = +5 to -3 FTE  
 Yellow = -3 to -5 FTE  
 Red = >-5 FTE

GLWA Jan 2025 - December 2025 Headcount, Hires, & Separations

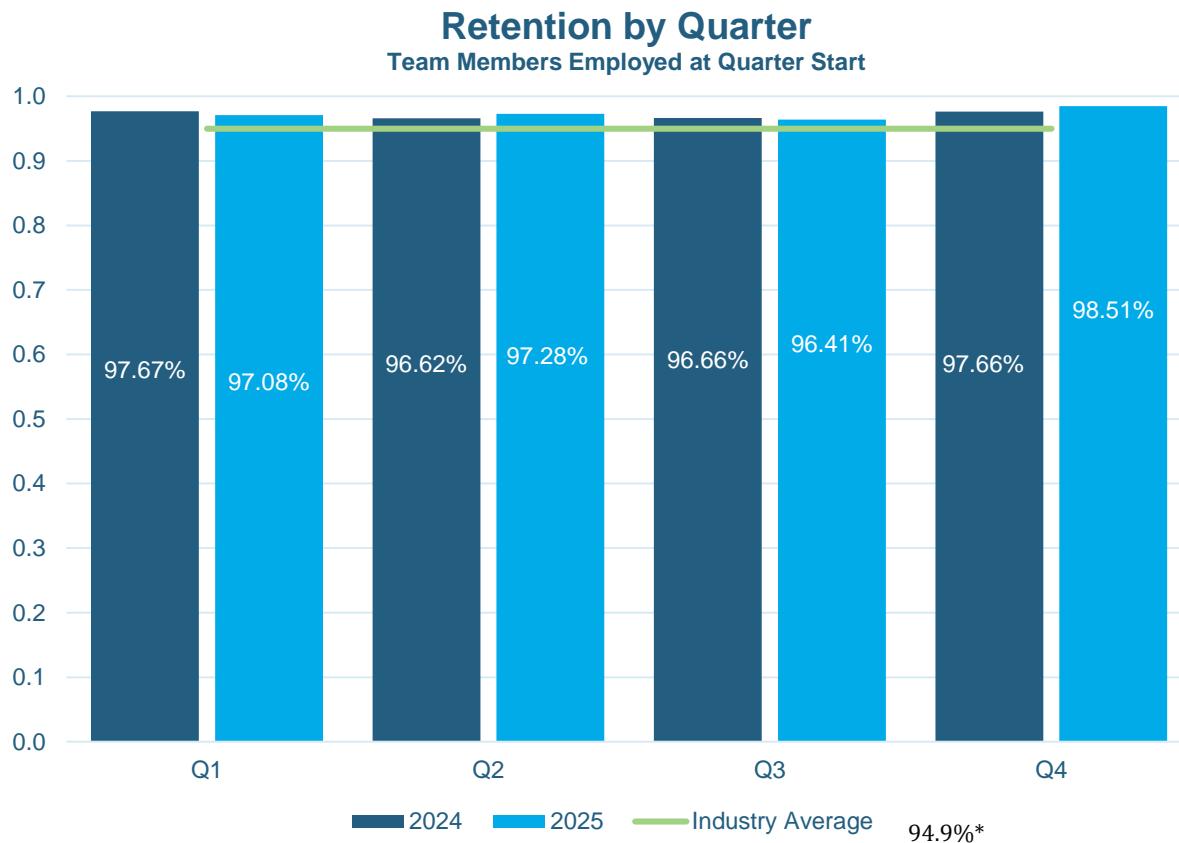


\*Headcount is as of month end

# Organizational Development



Green = >94.9%  
Yellow = 94.9%  
Red = >94.9%



- 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."

Above retention rates are reflected in percentages