



Great Lakes Water Authority

Key Performance Indicators and
Effective Utility Management (EUM) Metrics

July 22, 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)

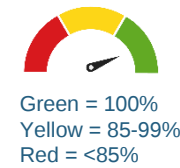


Attribute	Attribute Components
Product Quality	Produces “fit for purpose” water that meets or exceeds full compliance with regulatory and reliability requirements and consistent with customer, public health, ecological, and economic needs. Products include treated drinking water, treated wastewater effluent, 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.

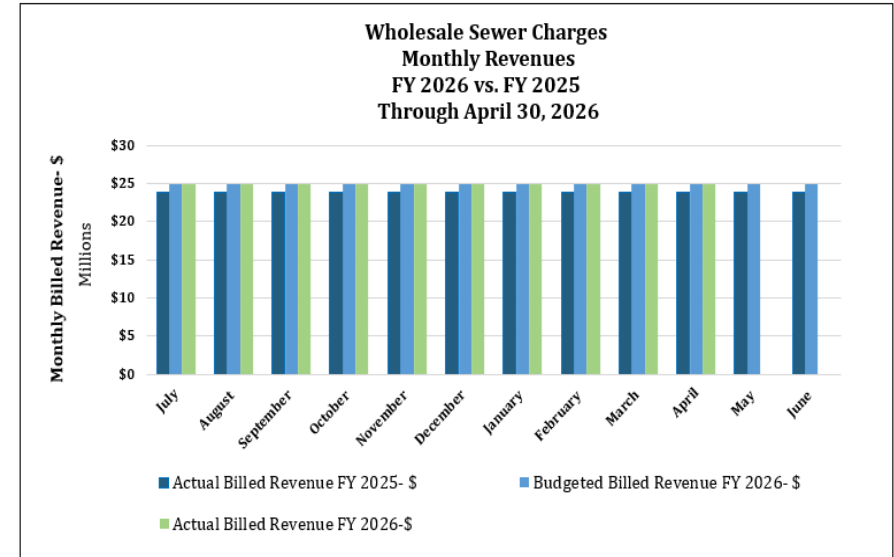
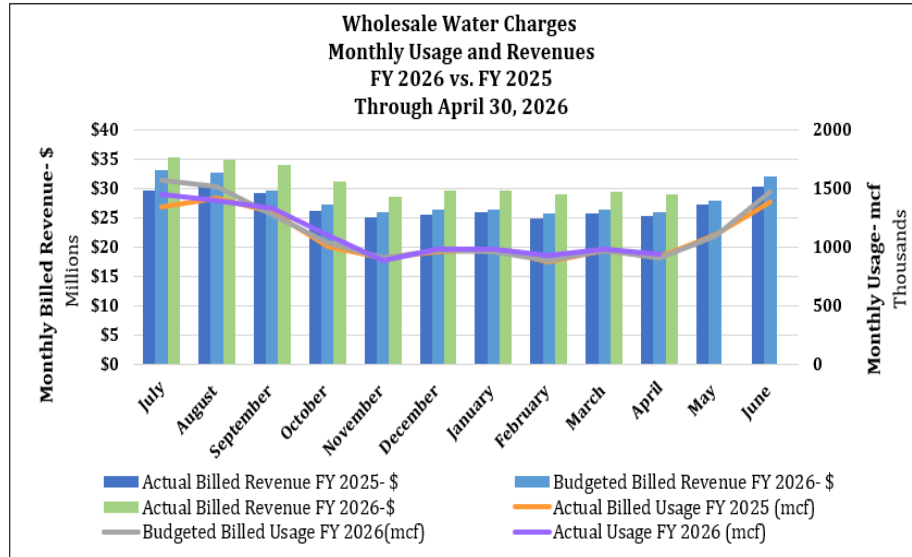
A dynamic splash of water in shades of blue, with bubbles and ripples, serving as the background for the slide.

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 101.28% of original, budgeted charge revenue. Actual usage is at 102.62% of original, budgeted usage. This equates to a revenue surplus of \$3.91 million through April 2026. Billed revenue for FY 2026 was 6.6% higher compared to the same period in FY 2025.

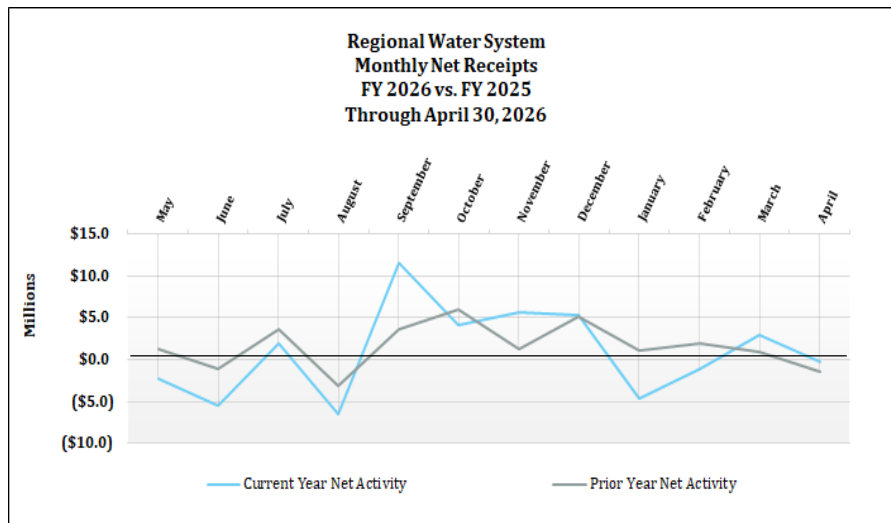
Wholesale Sewer System billed revenues for FY 2026 are at 100% of original budgeted charge revenue (based on the full fixed monthly charge). Billed revenue for FY 2026 was 4.4% higher compared to the same period in FY 2025.

Financial Viability – GLWA Regional System Net Receipts

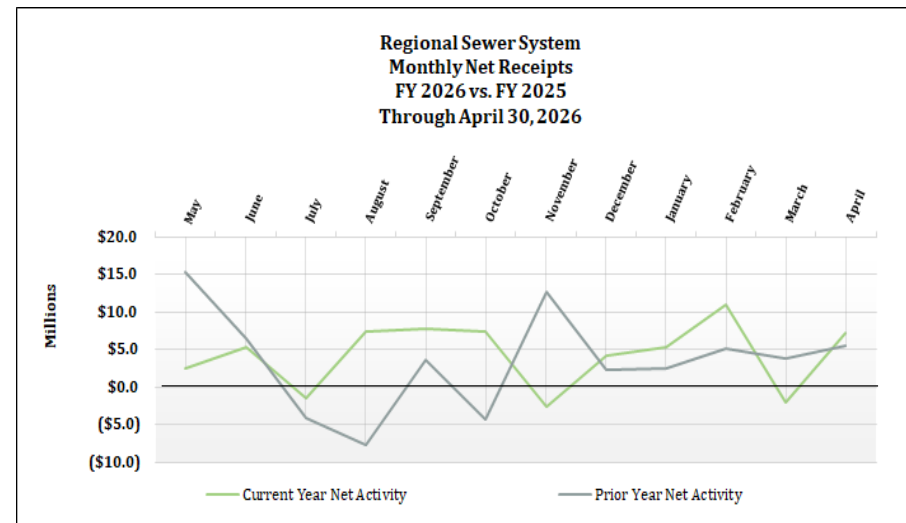
*For the purposes of this reporting, **Net Receipts equals cash collections less Master Bond Ordinance (MBO) disbursements.***

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.

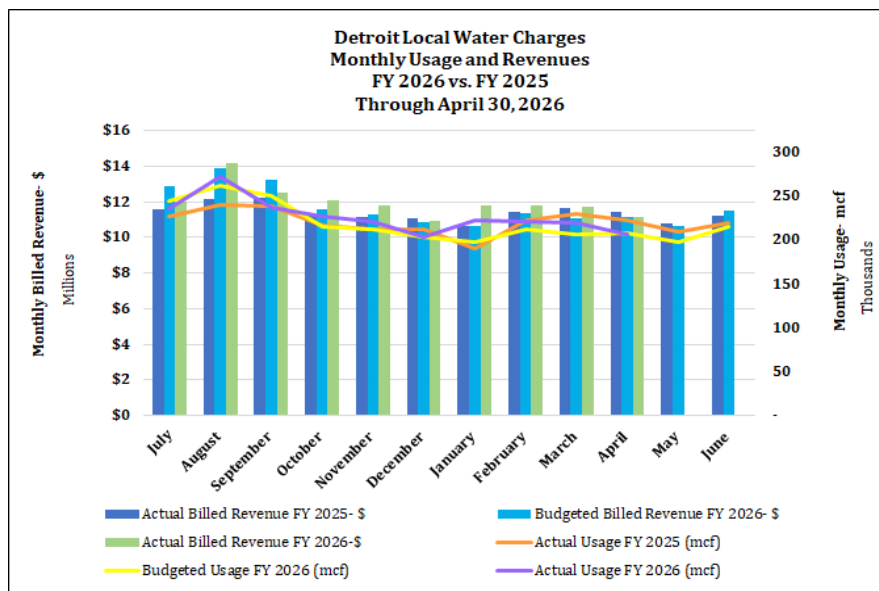


Regional Water System net receipts for the month of April 2026 fell short of required MBO disbursements by \$165 thousand. This results in net monthly receipts over required disbursements of 6% or a \$19.2 million year-to-date.

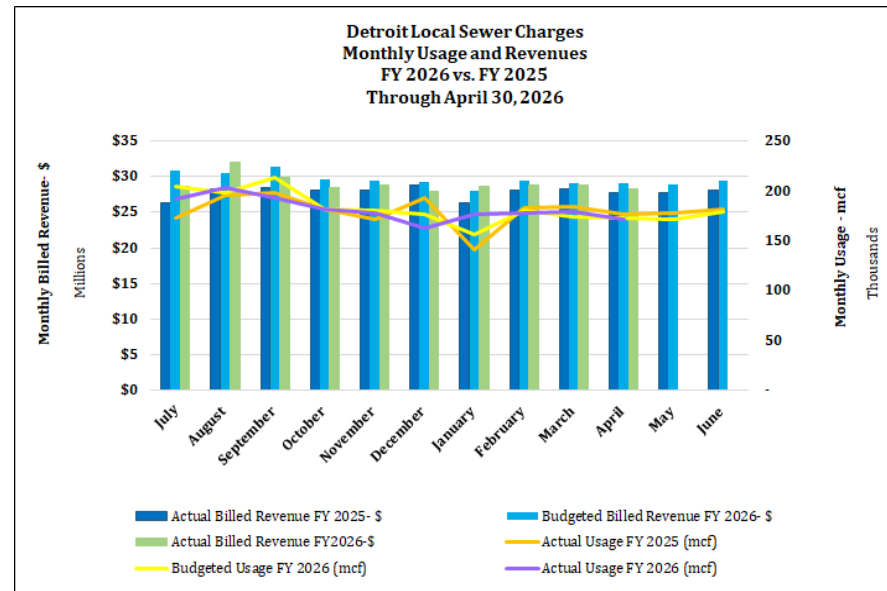


Regional Sewer System net receipts for the month of April 2026 exceeded required MBO disbursements by \$7.2 million. This results in net monthly receipts over required disbursements of 11% or a \$44.0 million year-to-date.

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



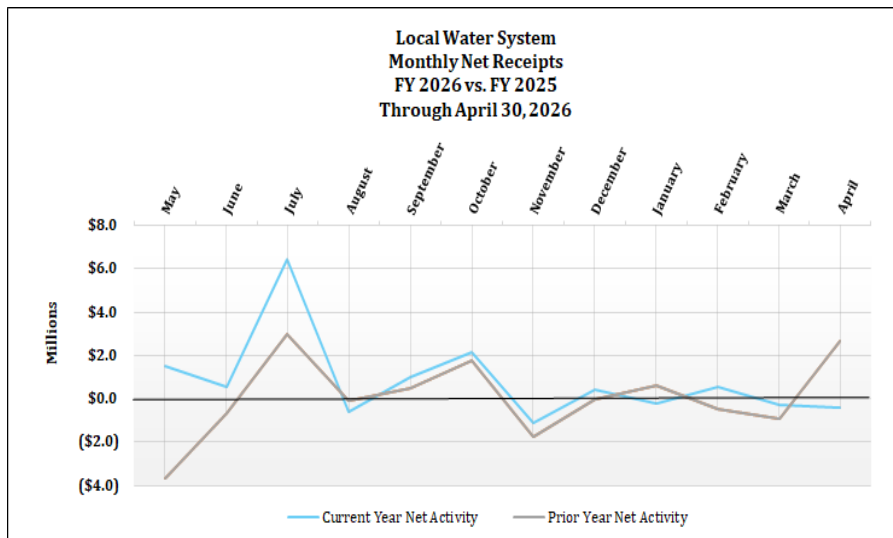
Detroit Local Water System billed revenues for FY 2026 are at 101.67% of budget and actual usage at 102.47% of budget through April 2026. Billed revenue for FY 2026 is 4.7% higher compared to the same period in FY 2025.



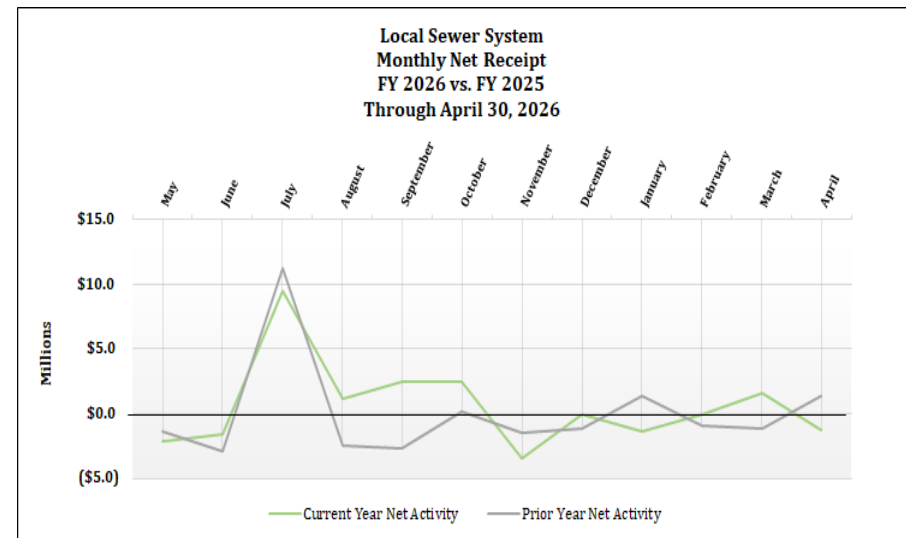
Detroit Local Sewer System billed revenues for FY 2026 are at 97.71% of budget and actual usage at 98.86% of budget through April 2026. Billed revenue for FY 2026 is 4.1% higher compared to the same period in FY 2025.

Financial Viability – DWSD Local System Net Receipts

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

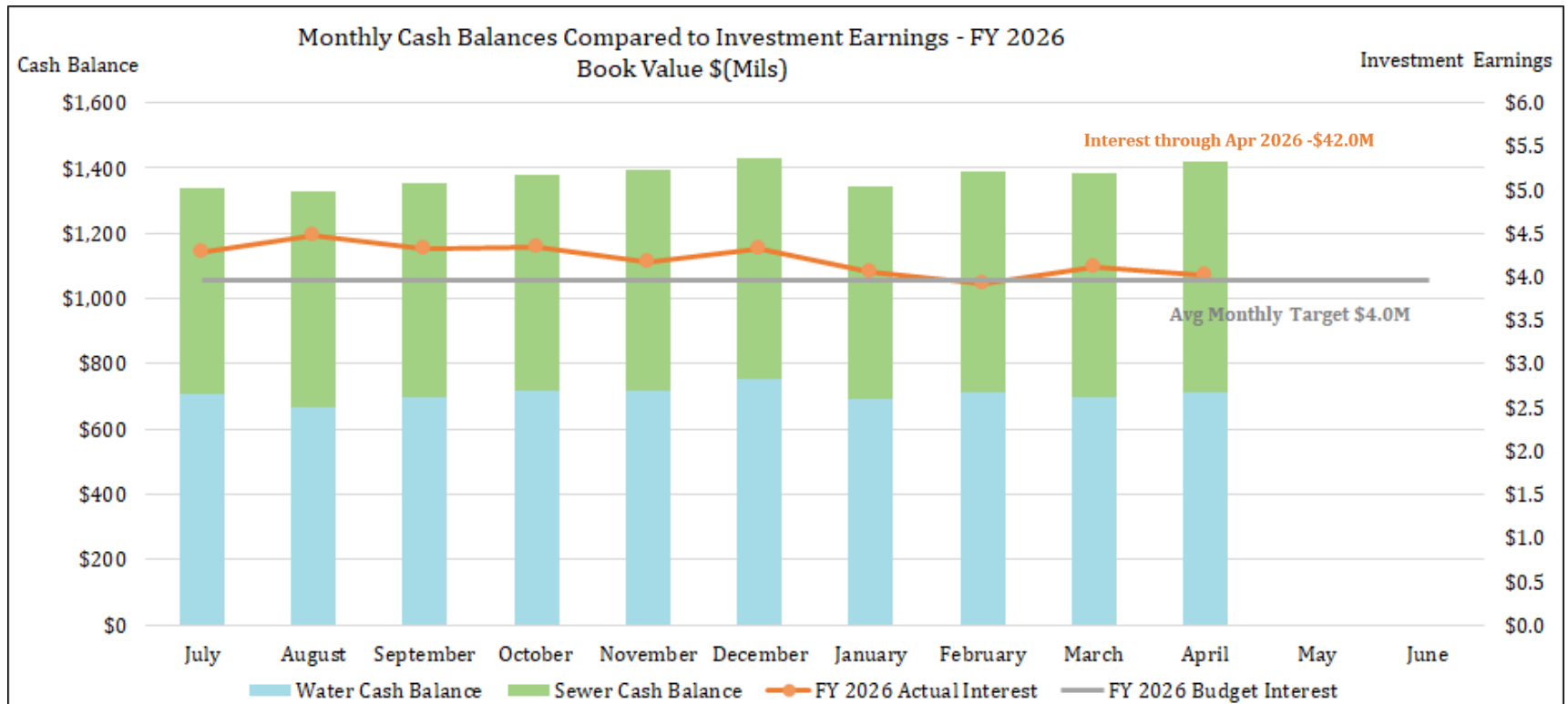


Local Water System net receipts for the month of April 2026 fell short of required MBO disbursements by \$424 thousand. This results in net monthly receipts over required disbursements of 7% or \$7.9 million year-to-date.



Local Sewer System net receipts for the month of April 2026 fell short of required MBO disbursements by \$1.2 million. This results in net monthly receipts over required disbursements of 4% or \$10.9 million 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 \$4.0 million is based on an annual forecast of \$47.5 million for interest earnings.
- For the month of April 2026, GLWA had investment earnings of \$4.0 million and cumulative FY 2026 earnings of \$42.0 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

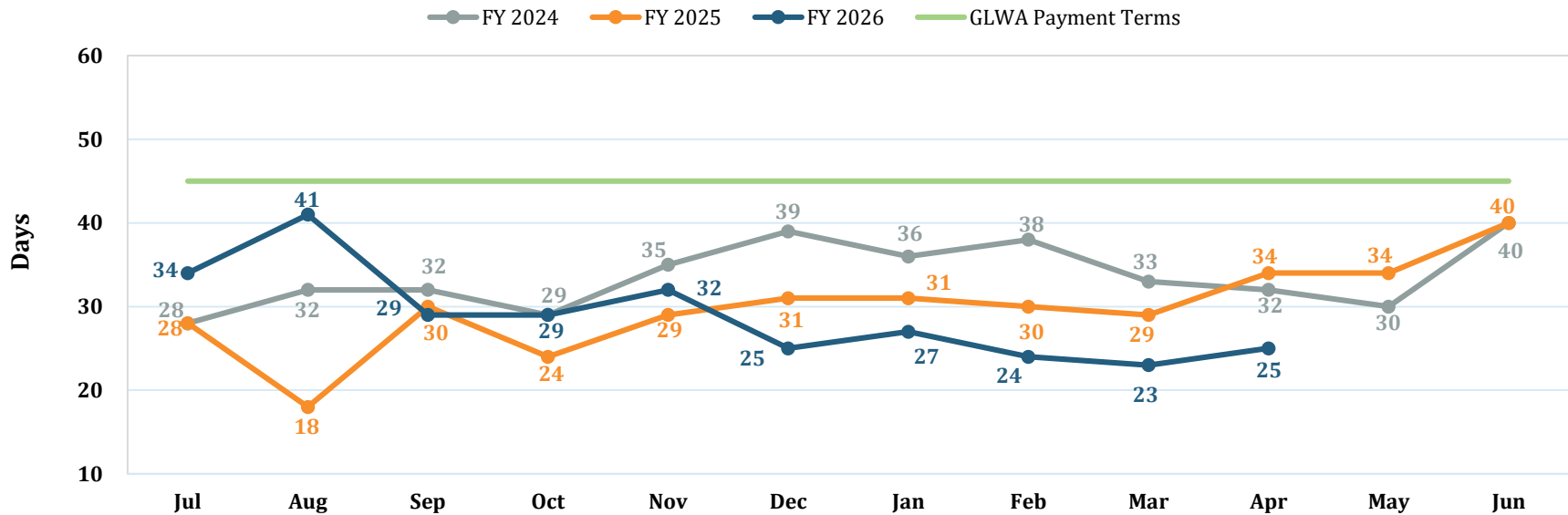


Green = 30 days or less
Yellow = >30 to <35 days
Red = >35 days

The current 12-month average days to pay is within the desired target.

Average Days To Payment FY Comparison

Payment Terms are 45 Days



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	30

The FY 2026 average days to pay aligns 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.

A dynamic splash of water in shades of blue, with bubbles and droplets visible, creating a sense of movement and freshness. The water is splashing from the bottom left towards the top right, with a horizontal band of lighter blue across the middle where the text is located.

EUM Attribute: Product Quality

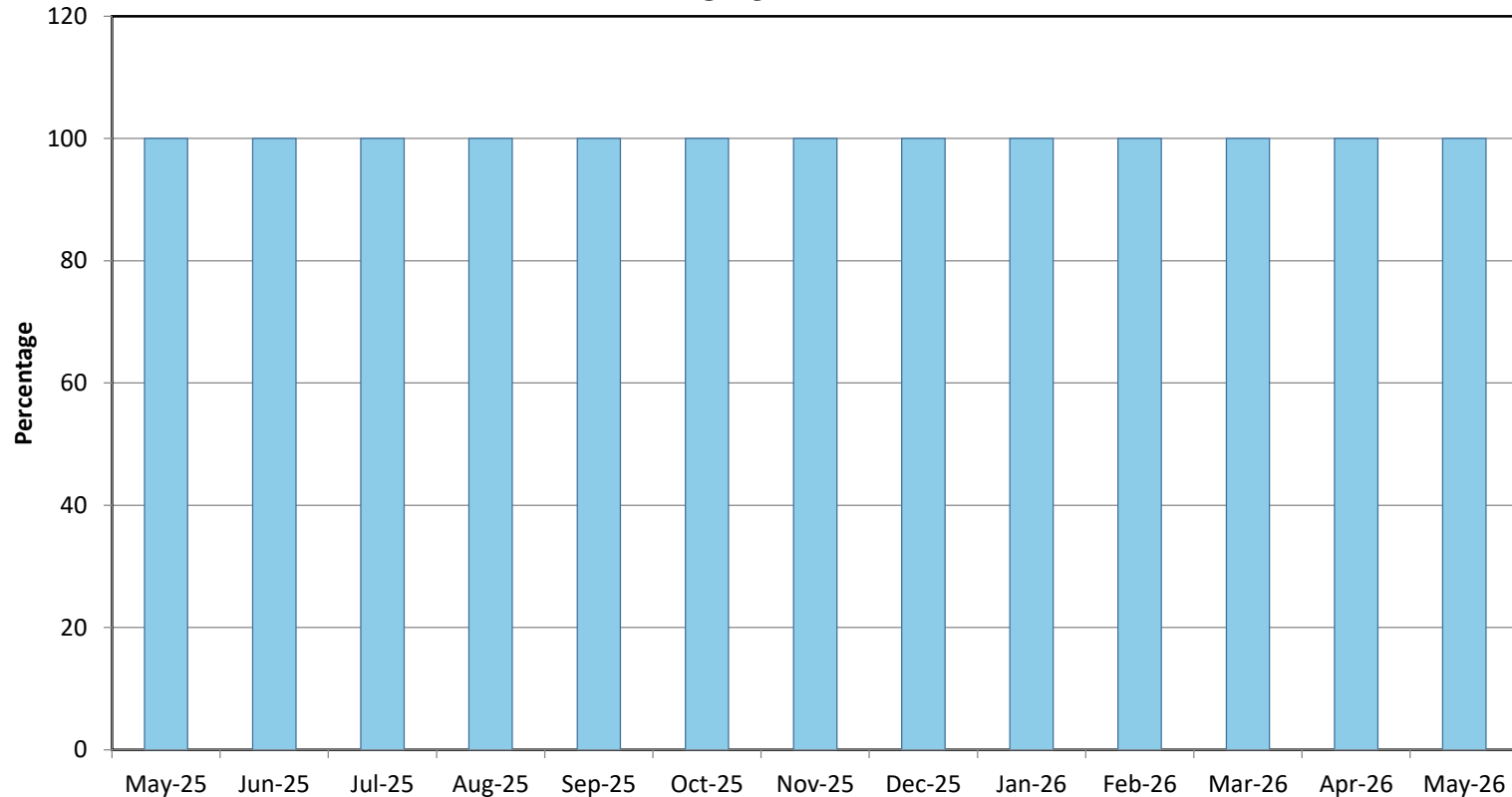
Product Quality – SDWA Compliance



GLWA maintained 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.

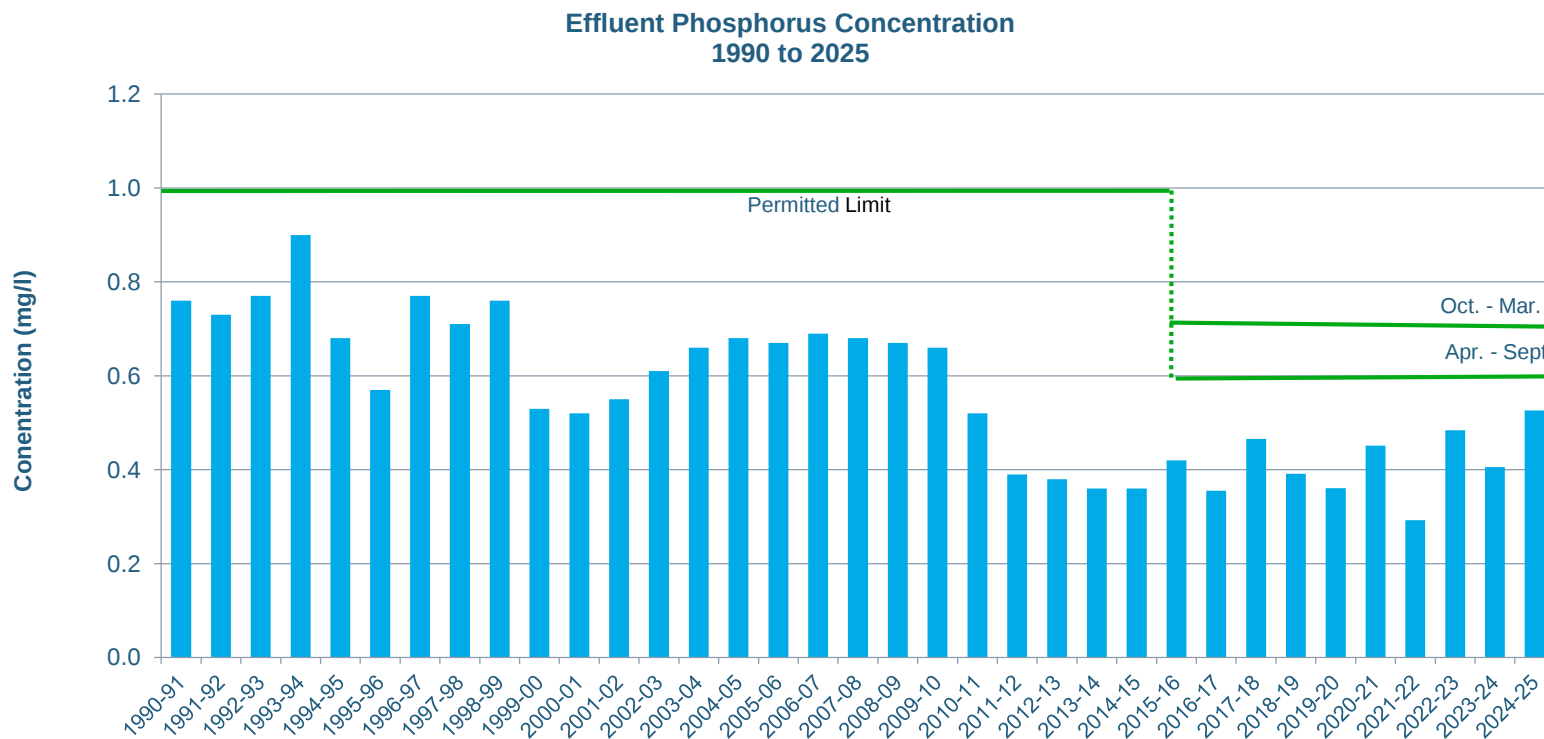
Product Quality

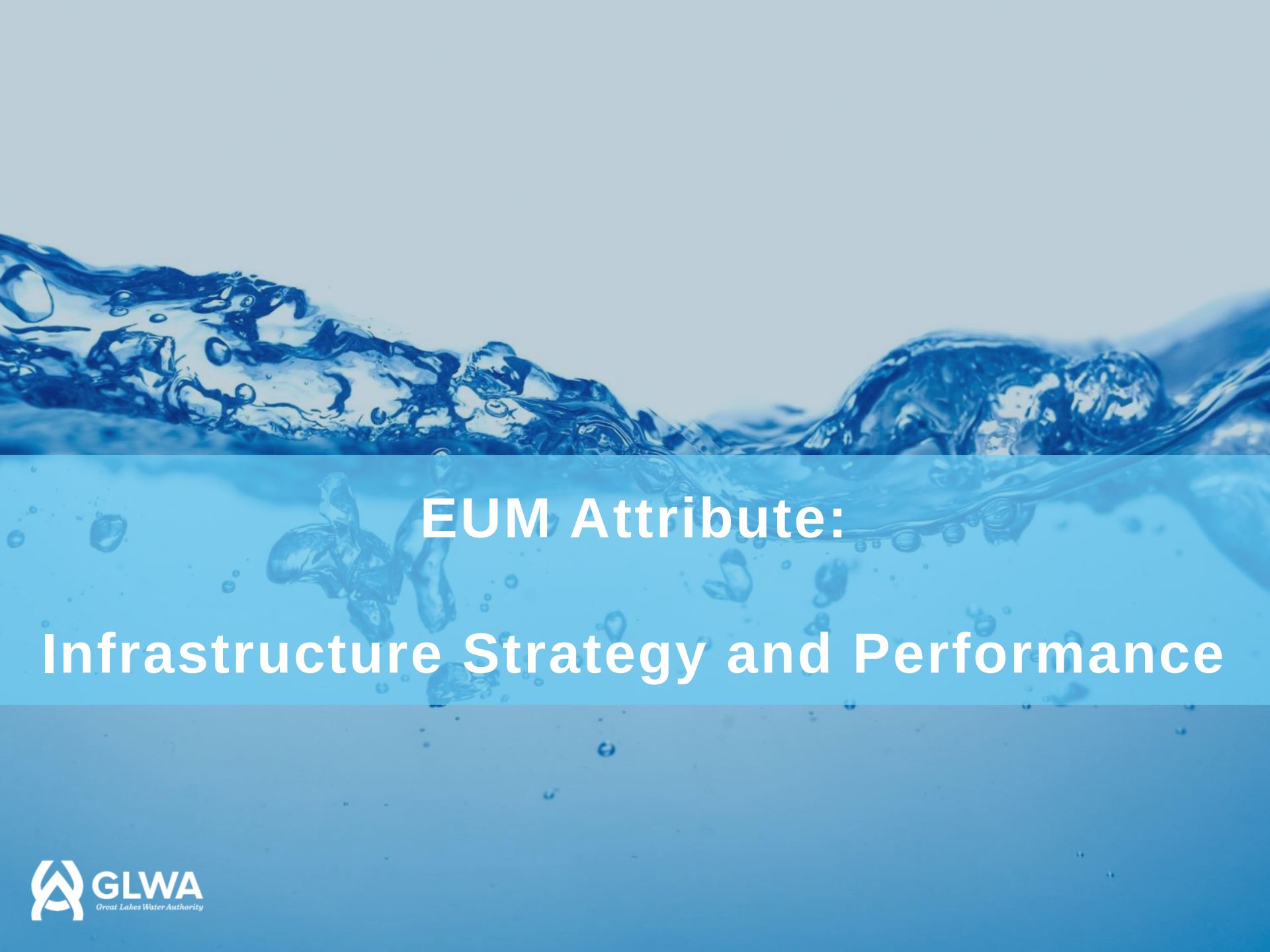
Regulatory Compliance – Effluent Phosphorous Concentration



Phosphorus levels are in regulatory compliance but above internal targets. Contributors to high phosphorus include low system flows and increased phosphate addition to drinking water.

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



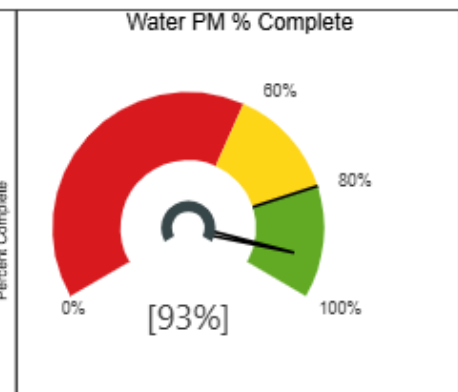
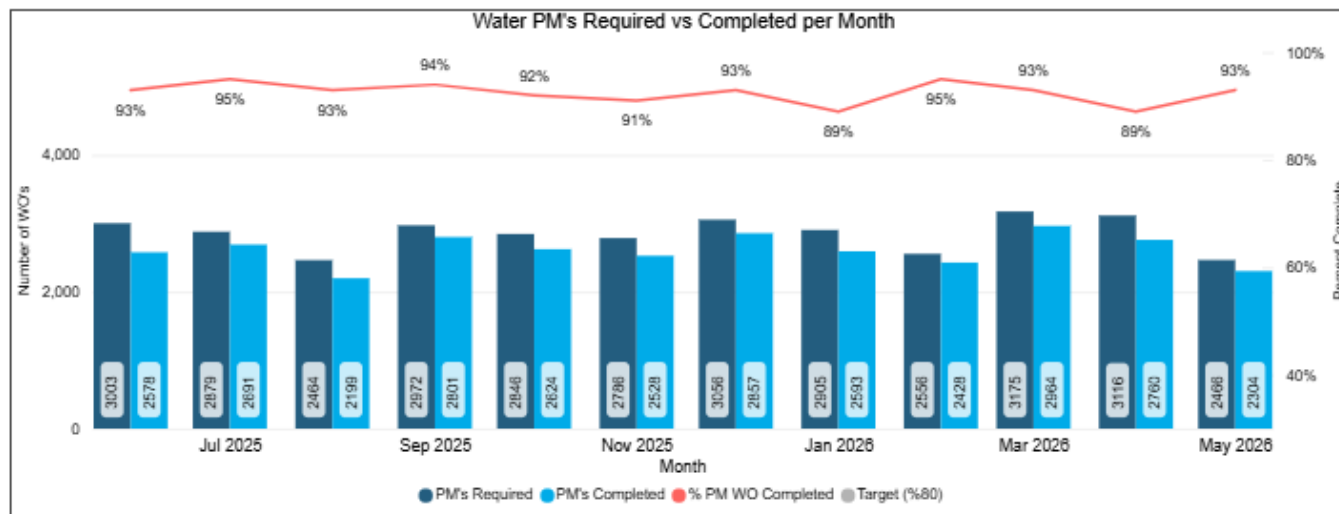
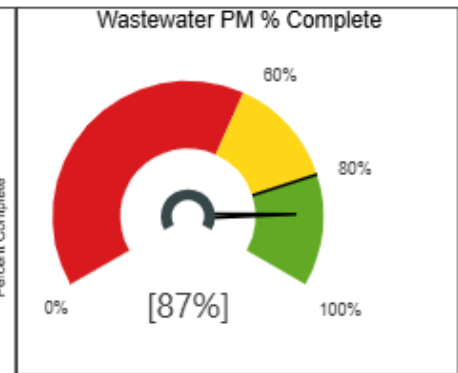
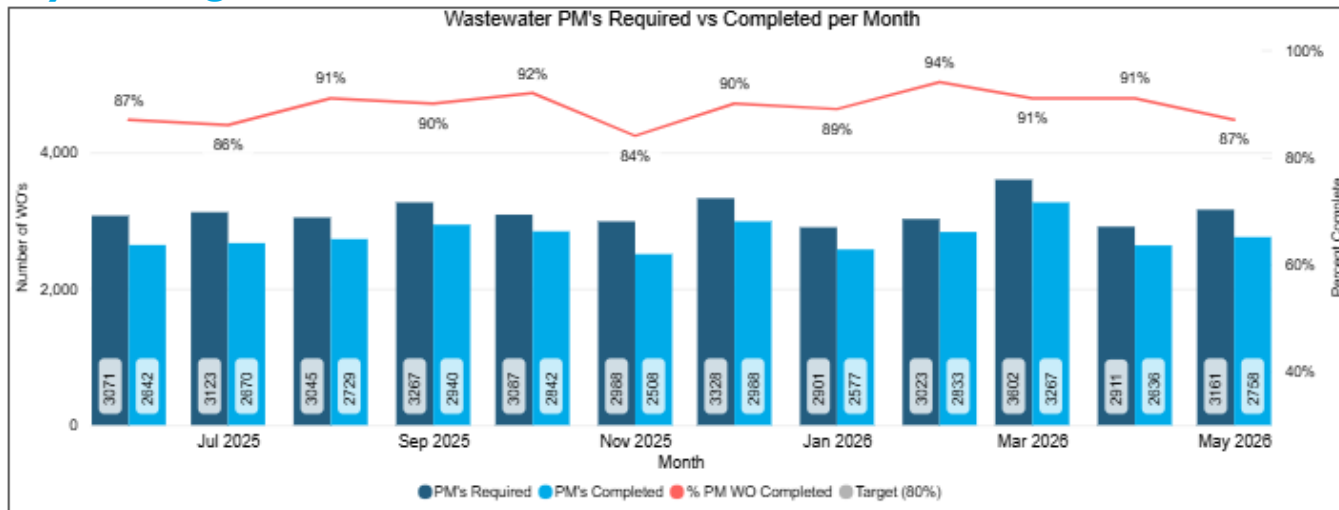
A dynamic splash of water in shades of blue, with bubbles and droplets visible, creating a sense of movement and freshness.

EUM Attribute: Infrastructure Strategy and Performance

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



Results were in line with targets

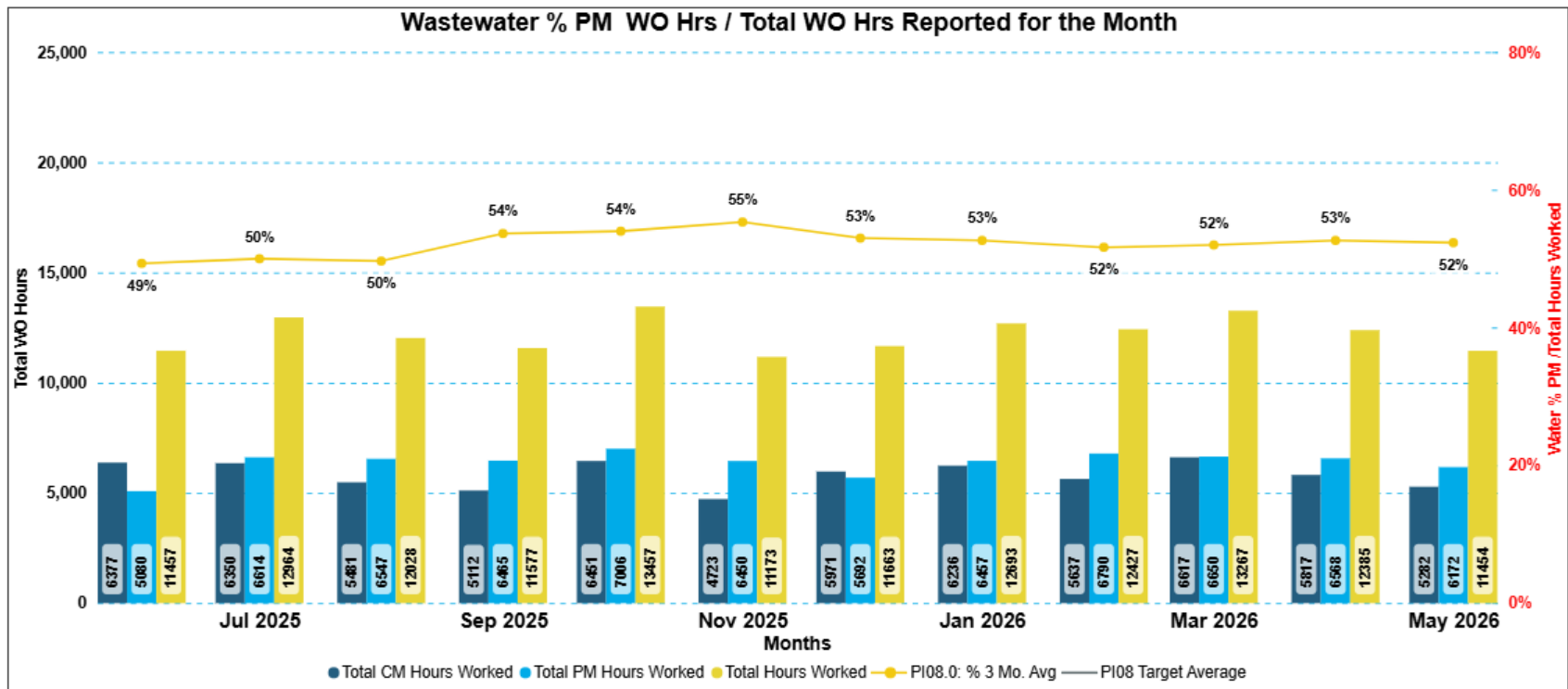


Infrastructure Strategy and Performance – Wastewater Preventative & Corrective Maintenance Management

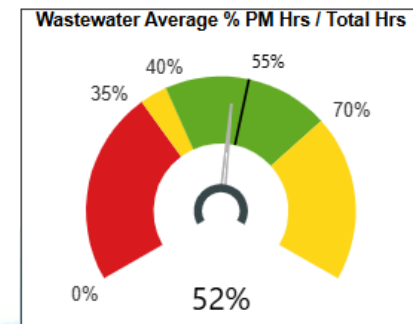


Results were in line with targets

May 2026



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.

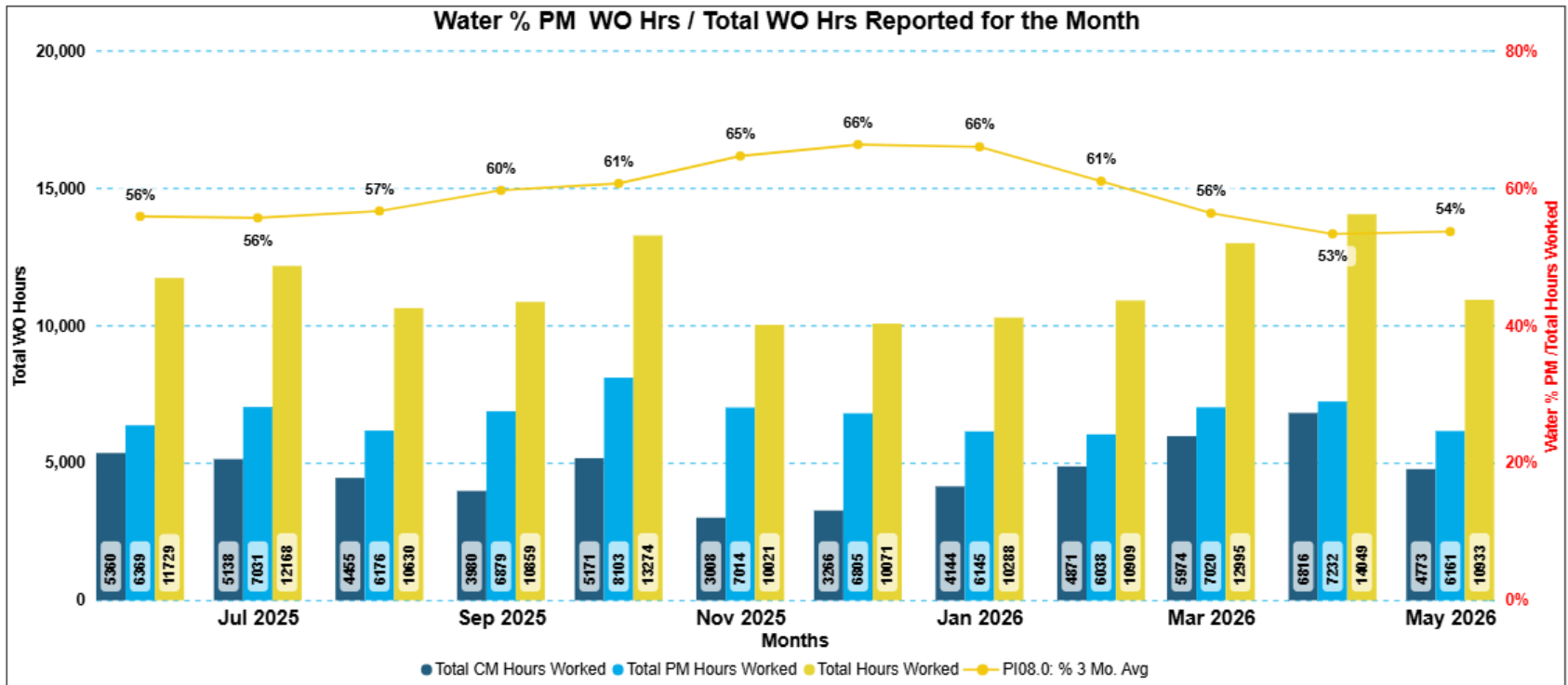


Infrastructure Strategy and Performance – Water Preventative & Corrective Maintenance Management



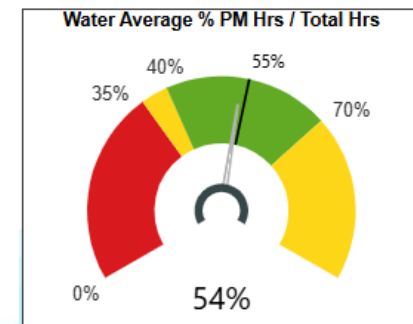
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May 2026



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.

PM = Preventative Maintenance
CM = Corrective Maintenance



A dynamic splash of water in shades of blue, with bubbles and droplets visible, creating a sense of movement and freshness. The water is splashing from the bottom left towards the top right, with a large, central splash that dominates the middle of the frame. The background is a solid light blue, providing a clean contrast for the white text.

EUM Attribute: Operational Optimization

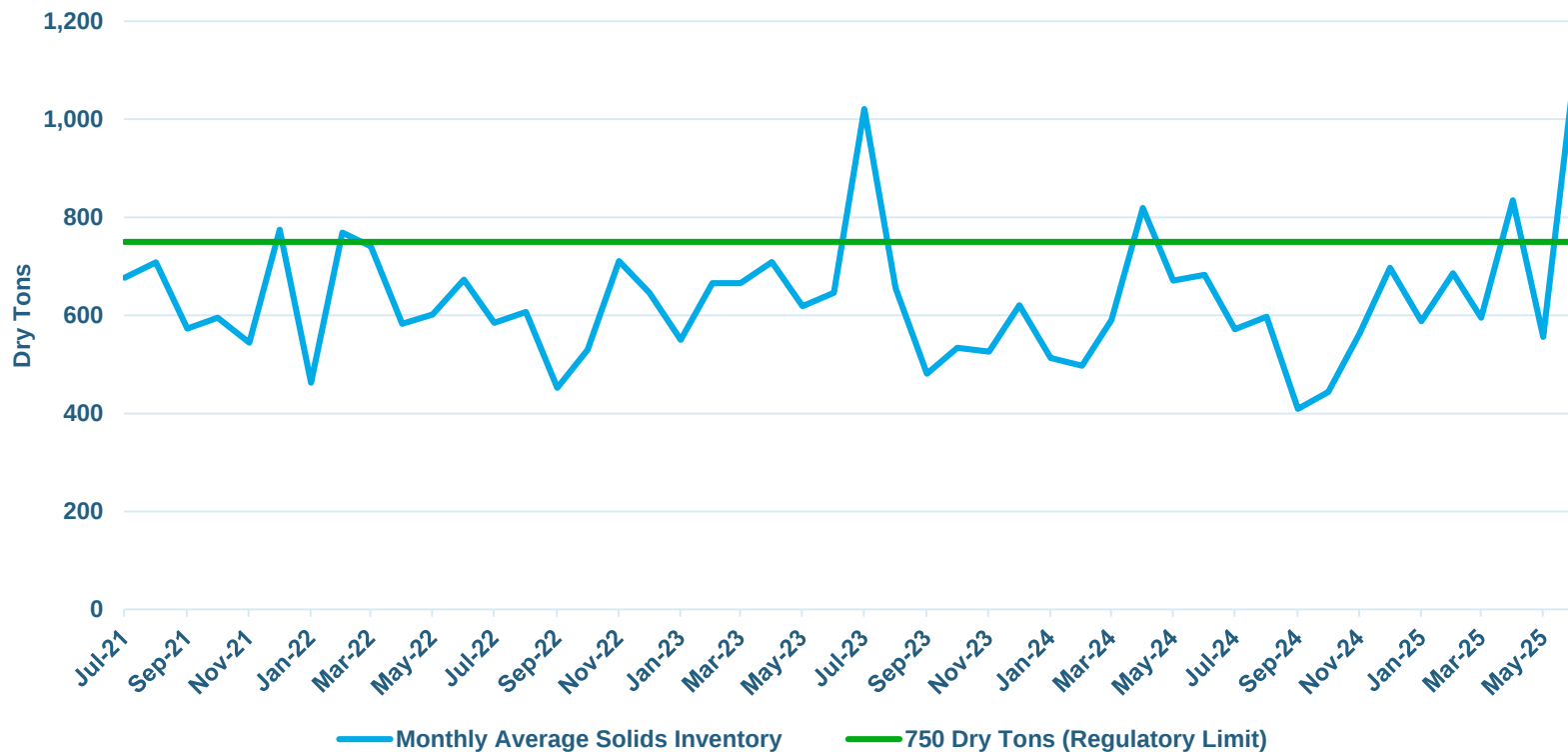
Operational Optimization Regulatory Compliance – Monthly Solids Inventory



Regulatory limit was waived for May. Recycling occurred but was below reportable amounts.

- 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.

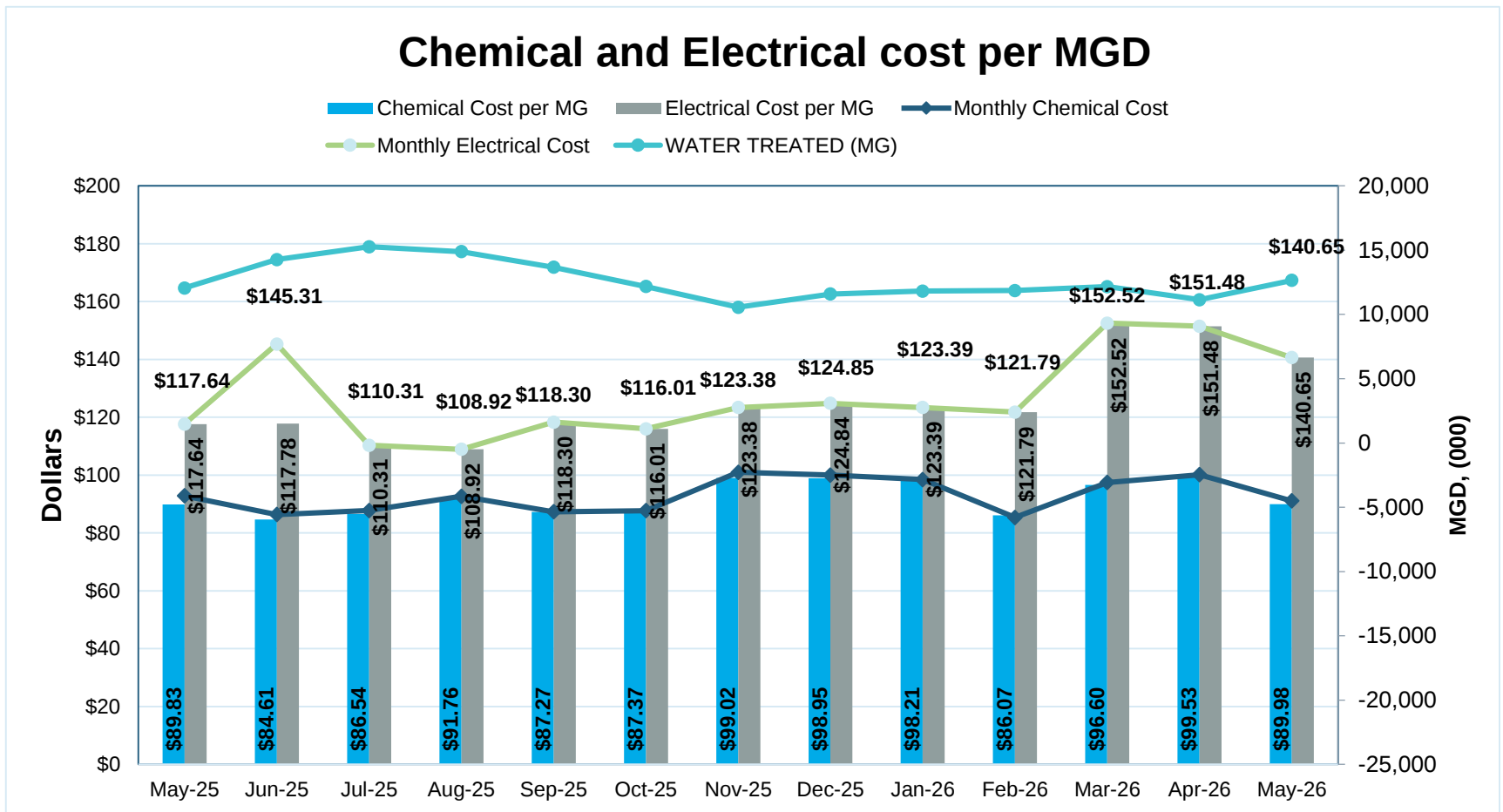
Monthly Solids Inventory July 2021 to June 2025



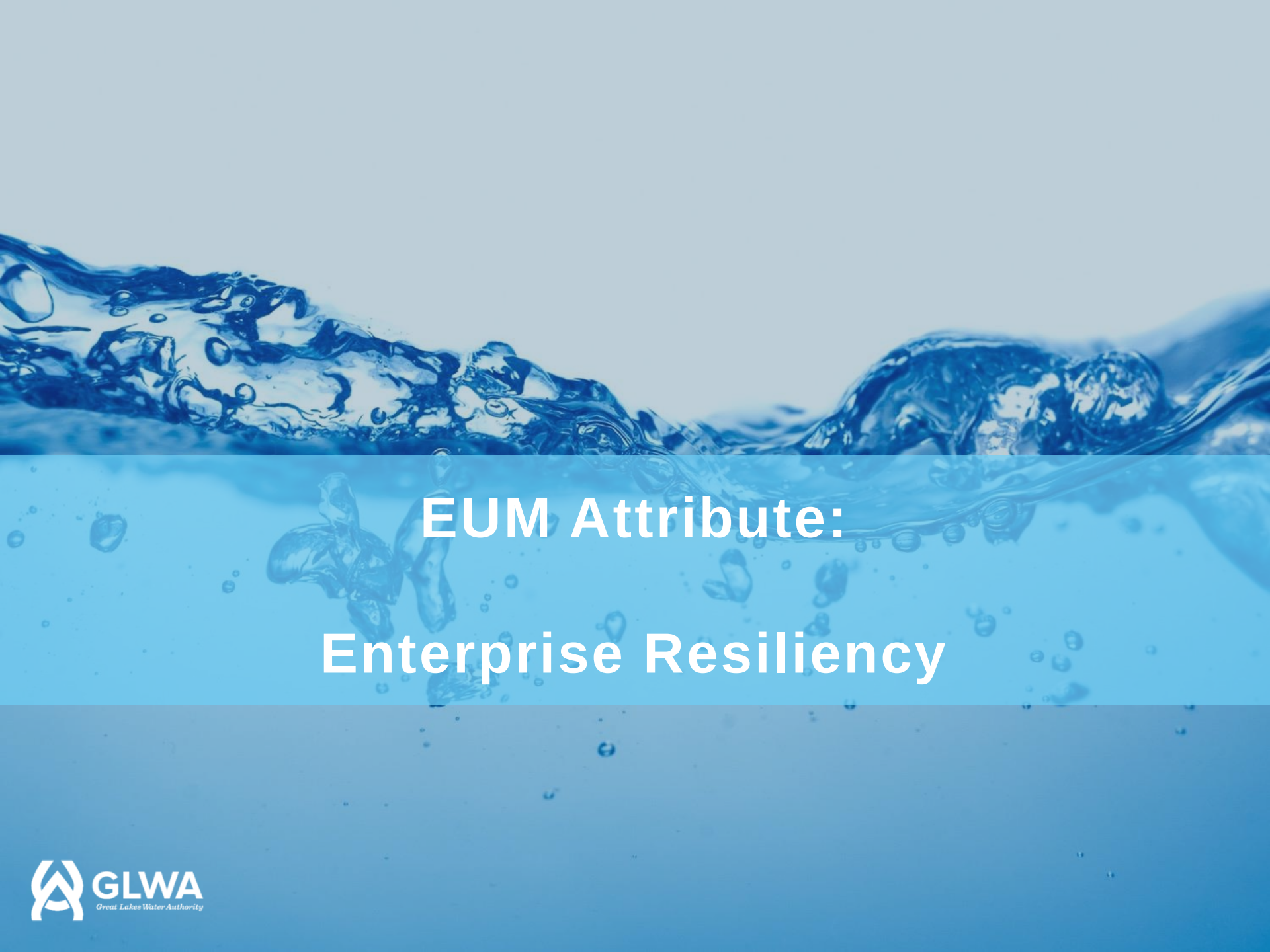
Note: No violation occurred in December 2021, February 2022, July 2023, April 2024, April 2025, or June 2025: the limit did not apply in those months due to the number of days on which Primary Effluent discharge occurred.

Operational Optimization

Chemical & Electrical Costs

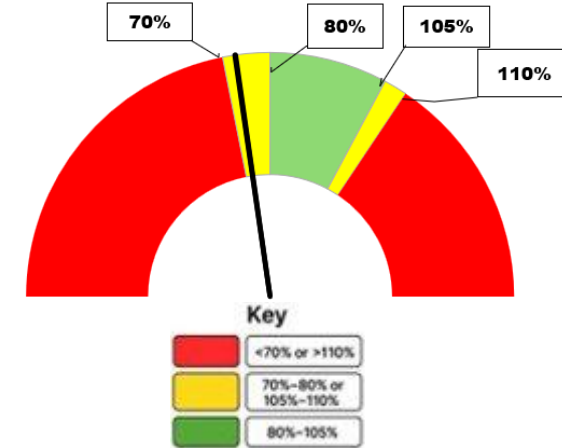
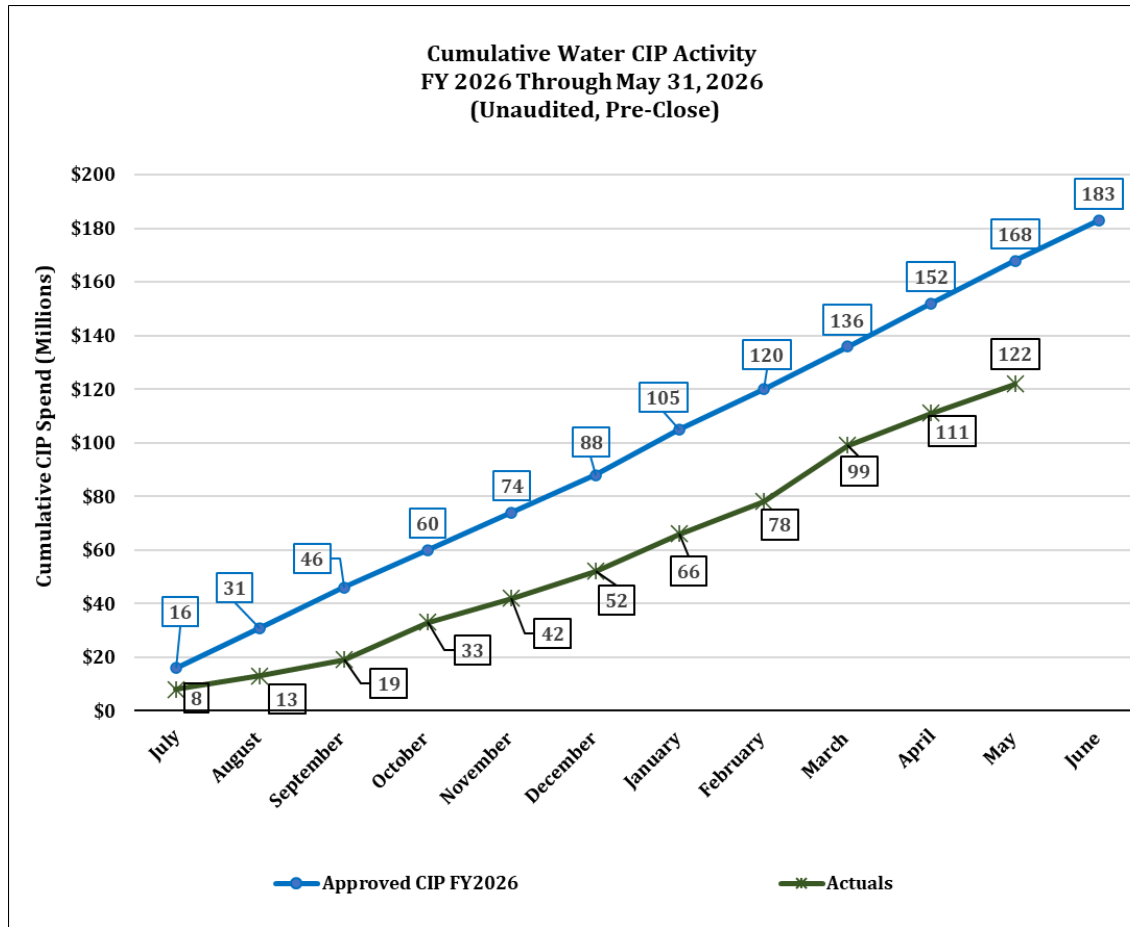


Operational Optimization: Being able to identify ongoing performance improvements for chemical and electrical usage per MG of water pumped is a key metric in managing operational cost. This slide is under development to include tracking of total costs per MG.

A dynamic splash of water in shades of blue, with bubbles and ripples, creating a sense of movement and freshness. The water is captured in mid-splash, with droplets and air bubbles visible throughout the frame.

EUM Attribute: Enterprise Resiliency

Enterprise Resiliency FY 2026 Total Water CIP Spend



Current Status:

The water system incurred \$122 million of CIP costs through May 2026.

This is 73% 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

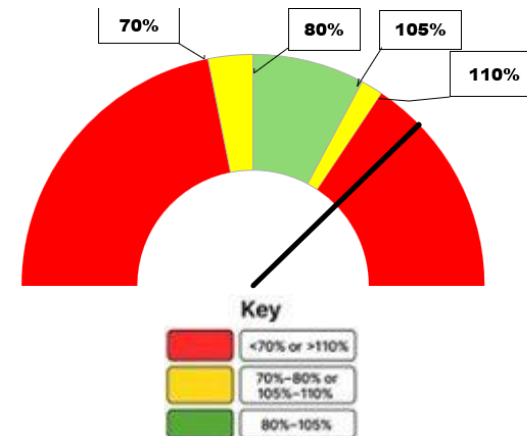
111001: Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Improvements - Delayed Construction Phase

114002: Springwell Water Treatment Plant, Low-Lift and High-Lift Pumping Station Improvements – Design & Submittal Issues

Notes:

The Original Capital Spend Ratio (CSR) for FY 2026 CIP is 100% of Board Approved (BA)
Adjusted FY 2026 CSR as of February 2026 Financial Plan is 88% of BA
Financial Plan=Board approved CIP X CSR

Enterprise Resiliency FY 2026 Total Wastewater CIP Spend



Current Status:

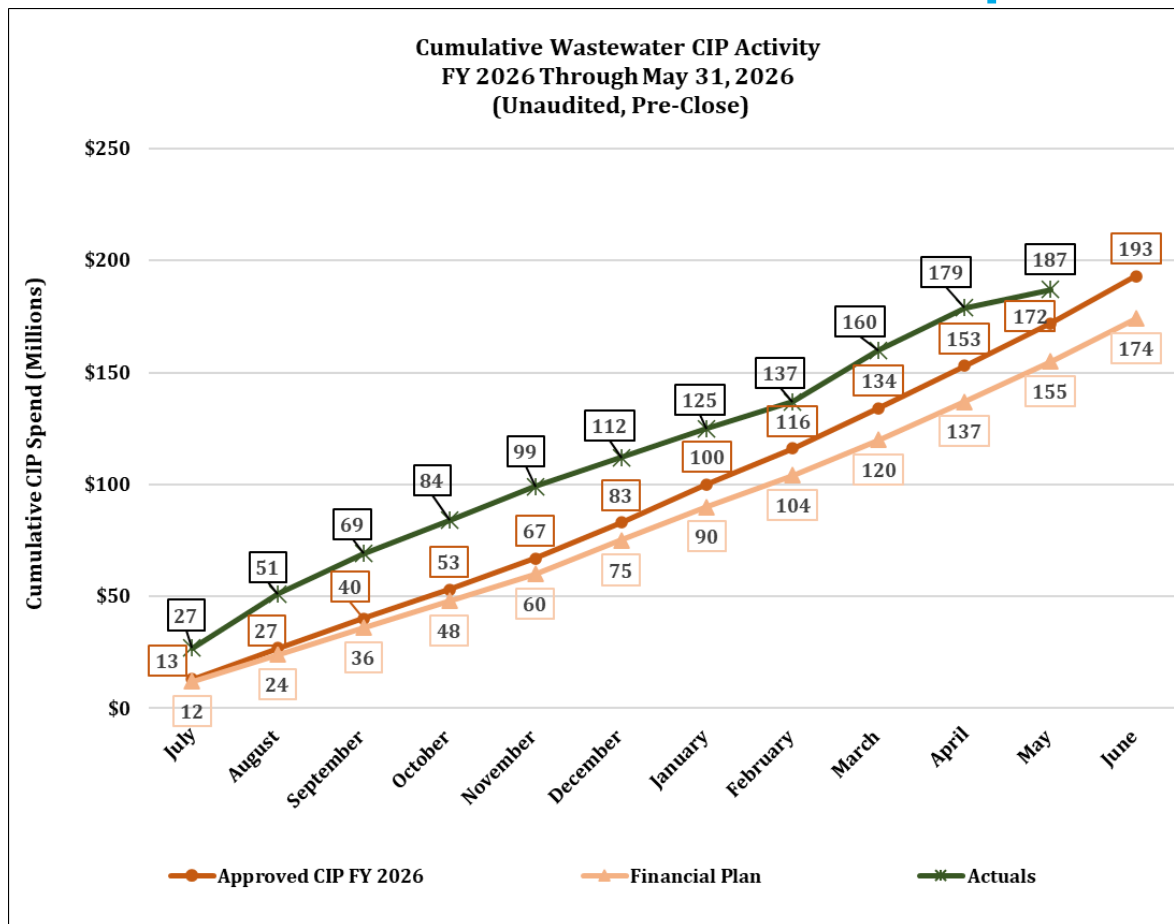
The wastewater system incurred \$187 million of CIP costs through May 2026.

This is 121% of the FY 2026 monthly Board *Approved with CSR CIP2026-2030*.

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



Notes:

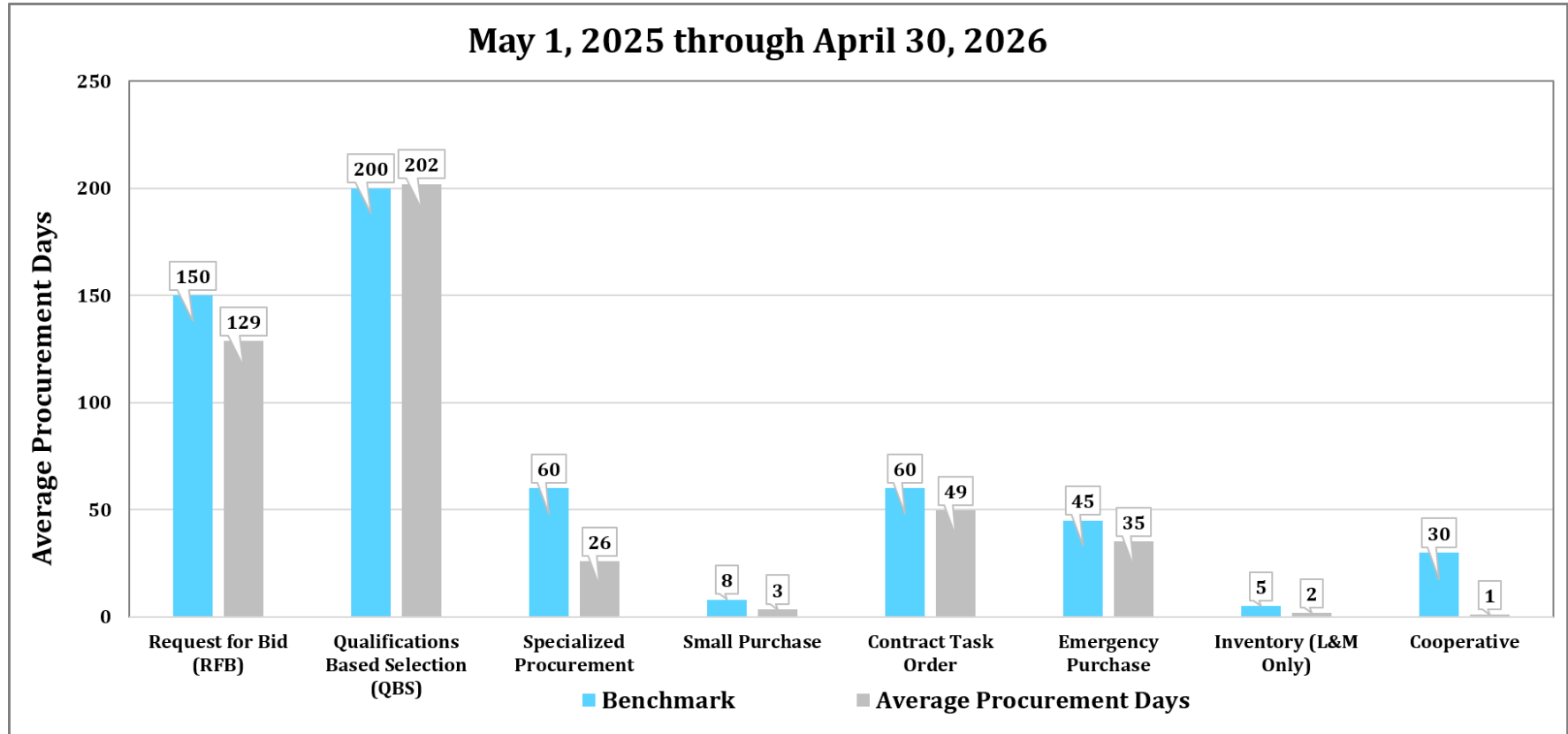
Capital Spend Ratio (CSR) for FY 2026 CIP is 90% of Board Approved (BA)

Amended FY 2026 Financial Plan as of February 2026 is \$240M

Financial Plan=Board approved CIP X CSR

Enterprise Resiliency – Procurement Cycle

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



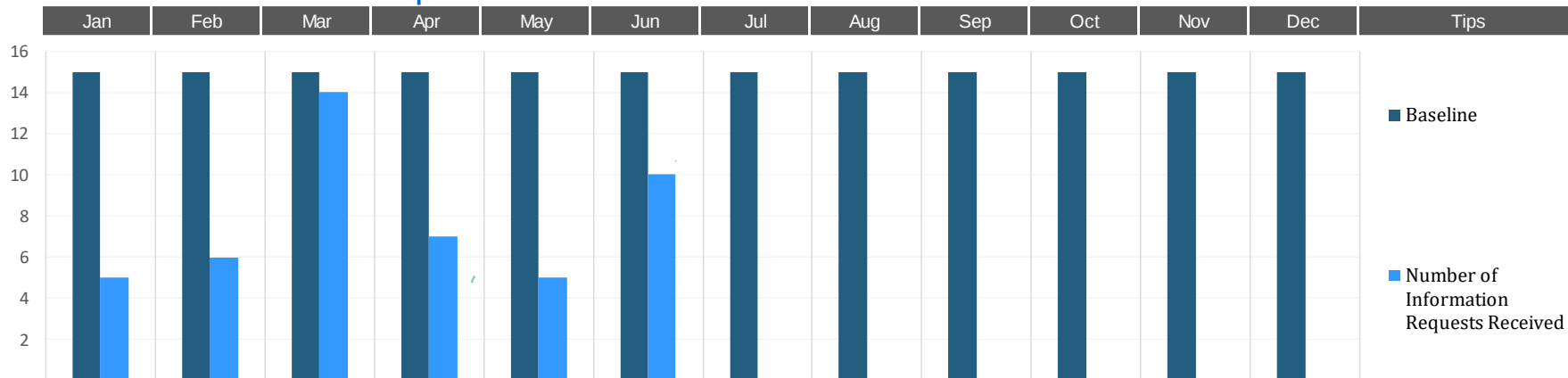
- Average Procurement Days reflects performance over the most recent twelve-month period.
- During this time, GLWA awarded \$680.2 million in contracts and completed 5,286 purchase requests.
- Procurement partners with GLWA teams to establish the most effective strategies for acquiring goods and services.
- GLWA is strengthening KPI reporting and performance benchmarking by leveraging Workday data to improve accuracy, ensure consistency, and enhance organizational visibility.

Enterprise Resiliency – General Counsel Information Requests Received



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

General Counsel Information Request 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	5.00	6.00	14.00	7.00	5.00	10.00							47.00	

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.

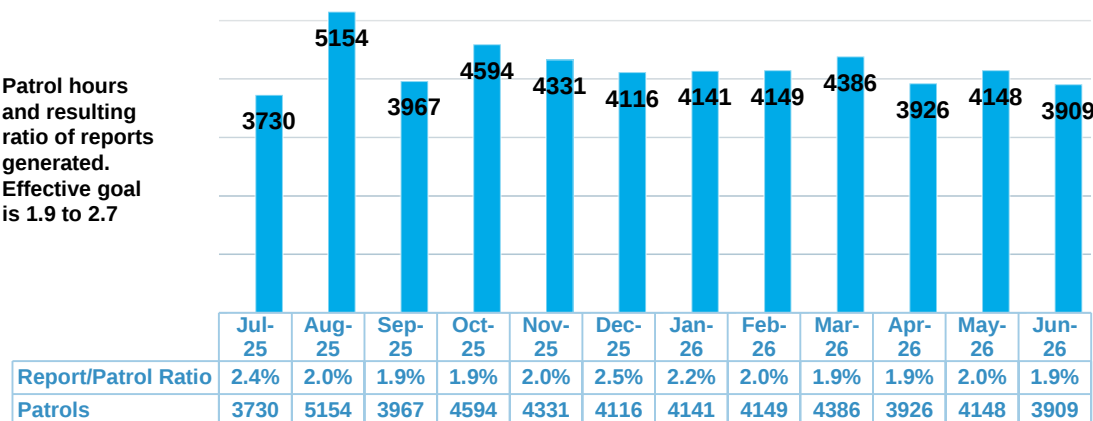
Enterprise Resiliency – Security & Integrity



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



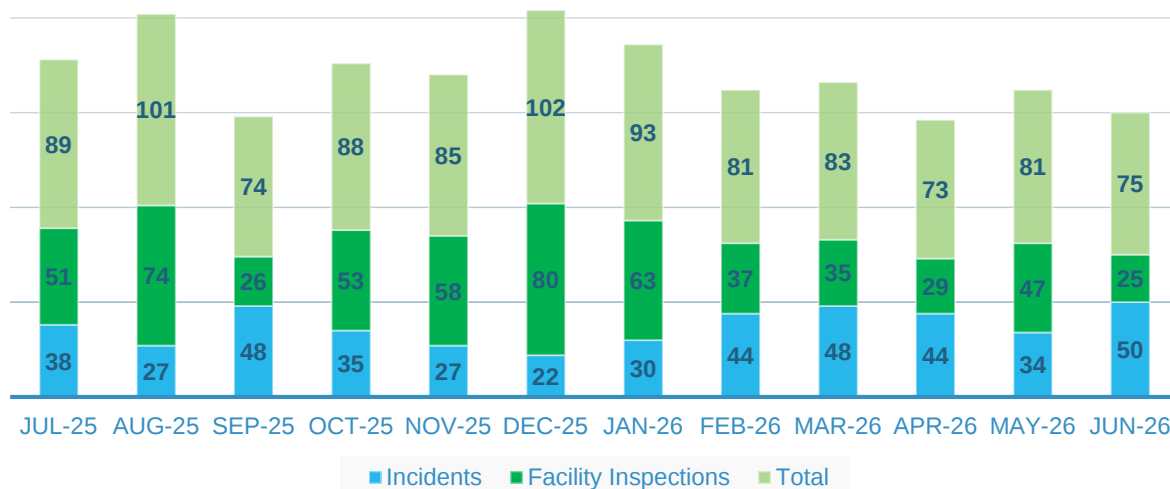
- Patrols are an indication of the level of services rendered by the staff of the Security & Integrity Group.

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



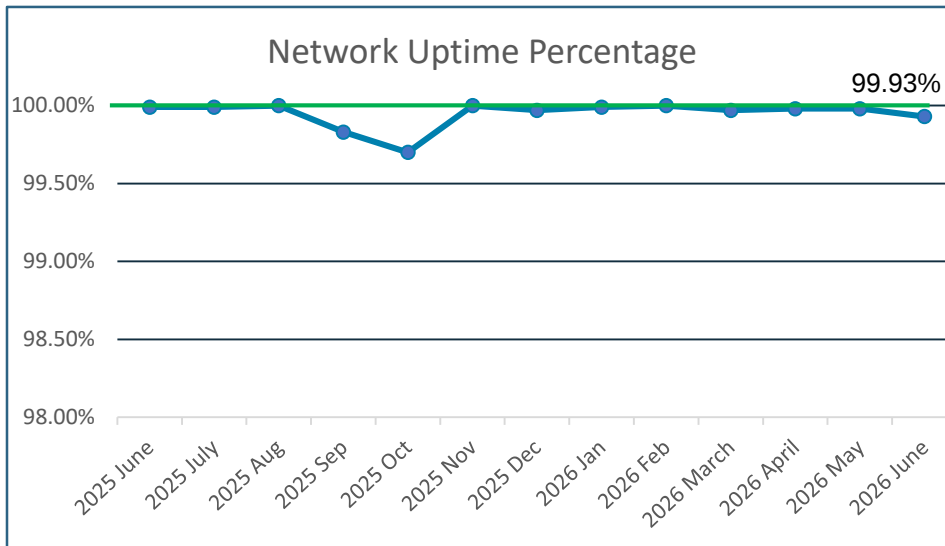
- Security reports are an indication of the effectiveness of security programs (less is better).

Enterprise Resiliency – Information Technology



Network is yellow due to power related issues incurred during inclement weather.

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

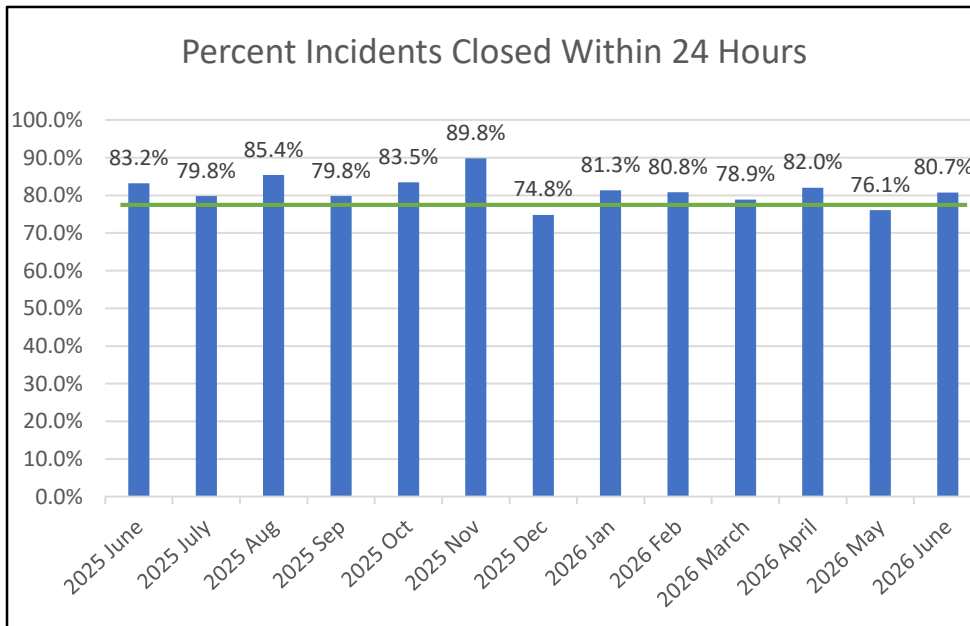


- GLWA has 42 monitored, network-connected sites, including offices, plants, pump stations, and other facilities.
- Network connectivity allows employees to access the applications needed to do their work and connects plants and pump stations to the intranet to report operational data

Enterprise Resiliency – Information Technology



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

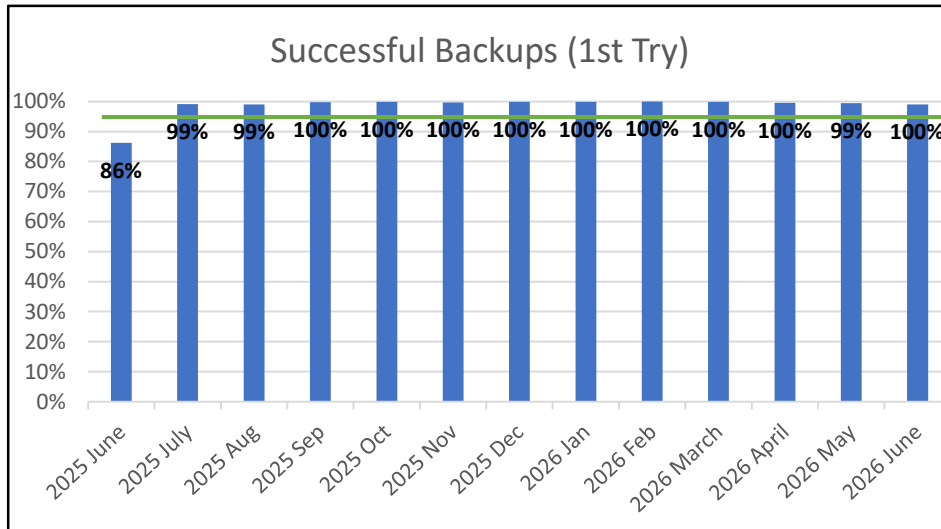


- An Incident is a technology issue that is preventing an employee from performing some part of their job duties
- Quick resolution of incidents increases employee productivity.
- The industry standard for 24-hour resolution is 68%

Enterprise Resiliency – Information Technology



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

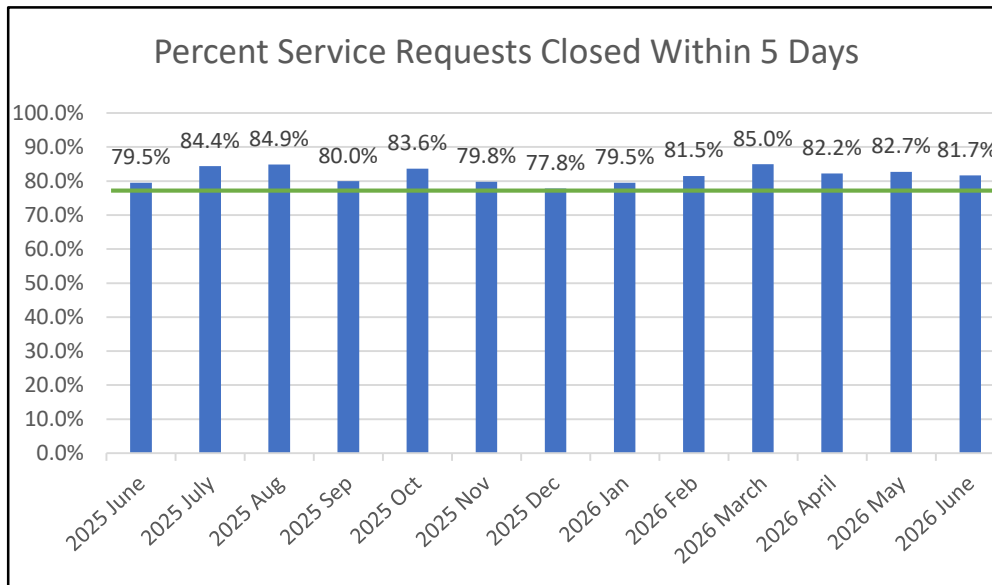


- Backups ensure that GLWA's information is safe in case of unexpected disruptions.
- Successfully backing up on the first try streamlines operations and frees up resources for other tasks.

Enterprise Resiliency – Information Technology



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

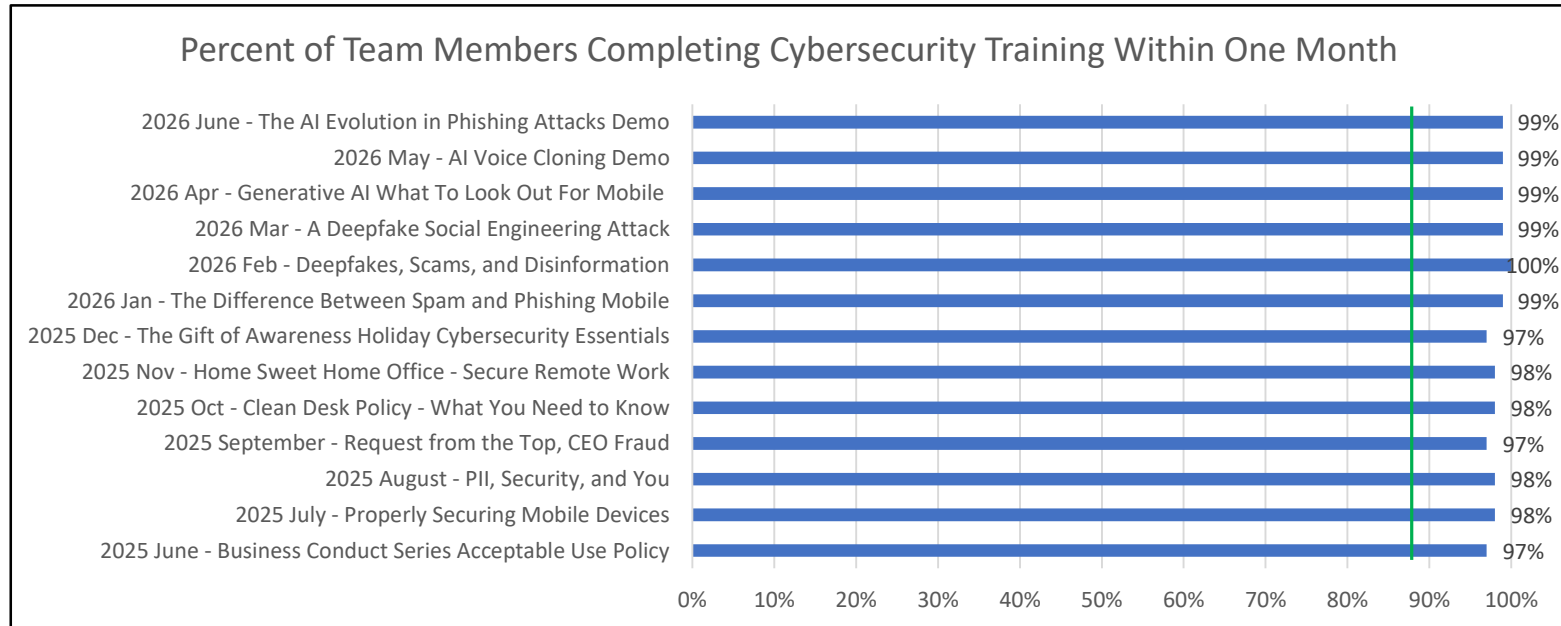


- A service request is a request for IT work that is not preventing an employee from performing their work.
- Timely fulfilment of service requests ensure that employees have the technology resources needed to do their jobs and increases job satisfaction.

Enterprise Resiliency – Information Technology



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



- 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

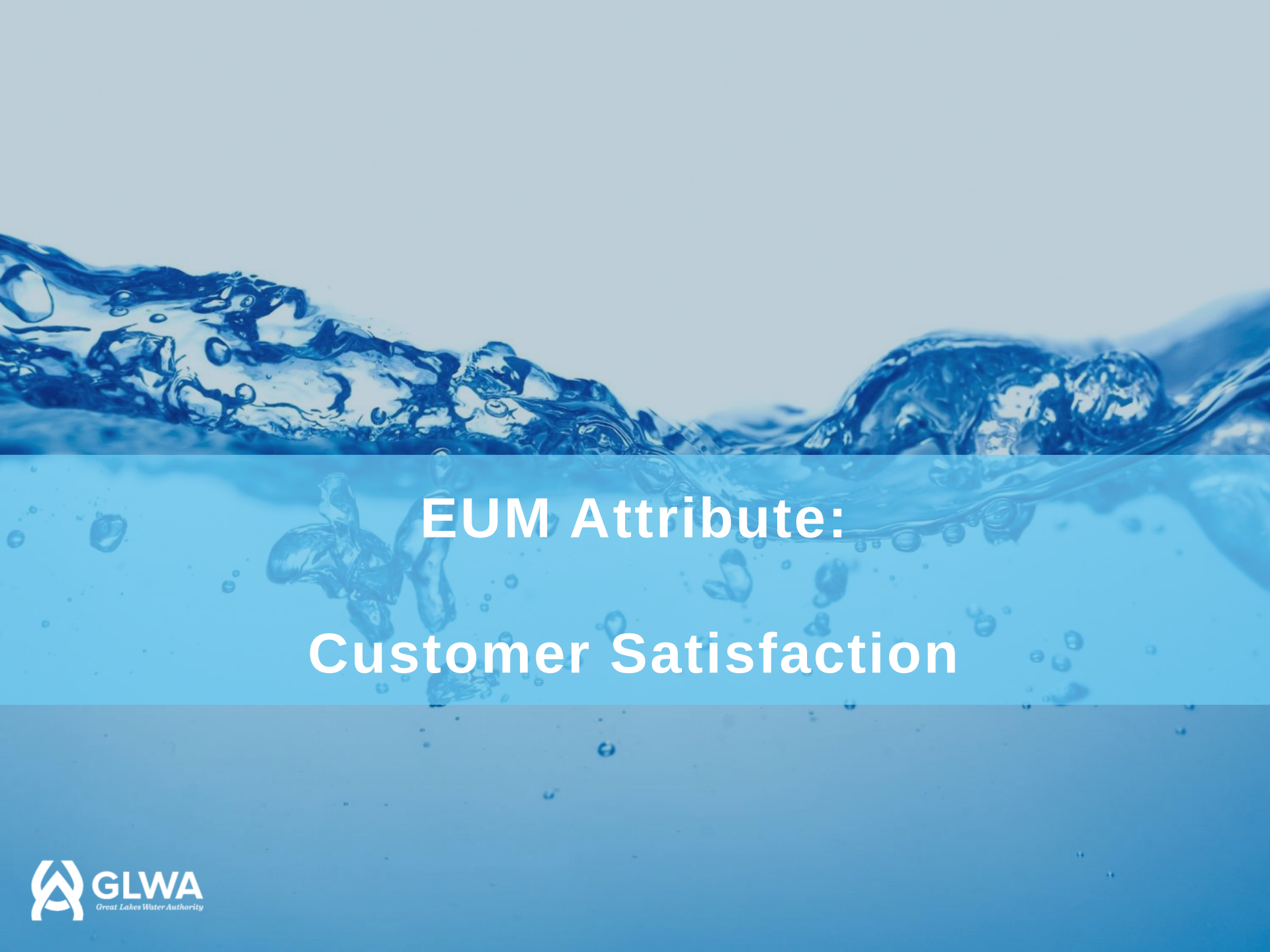
Current number of days without
a GLWA team member having
an OSHA recordable accident event.

4

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

48

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

A dynamic splash of water in shades of blue, with bubbles and droplets visible, creating a sense of movement and freshness. The water is splashing from the bottom left towards the top right, with a horizontal band of lighter blue across the middle where the text is located.

EUM Attribute: Customer Satisfaction

Customer Satisfaction – Water & Field Services



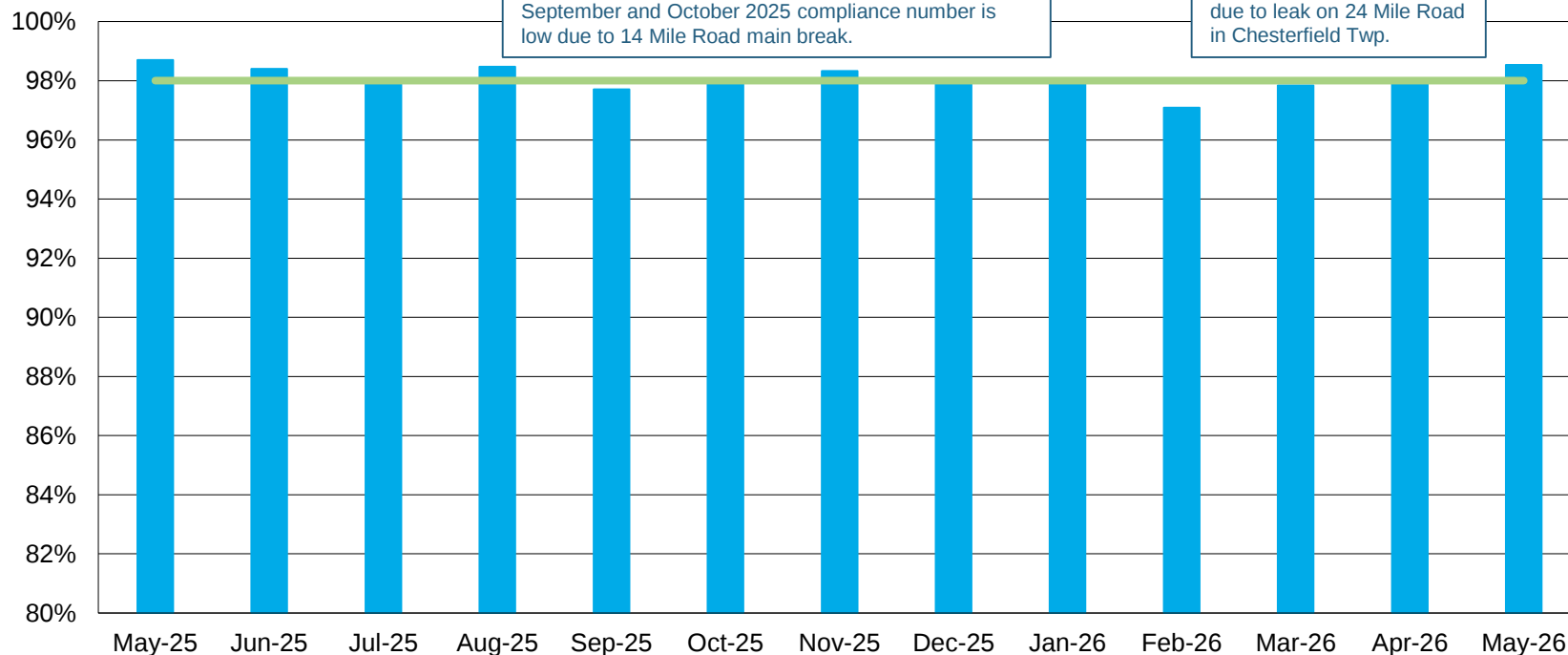
Green= 98-100%
Yellow = 95-<98%
Red = <95%

Customer Pressure Compliance %

Compliance % 98% Target

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

February and March 2026 compliance number is low due to leak on 24 Mile Road in Chesterfield Twp.



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

A dynamic splash of water in shades of blue, with bubbles and droplets visible, creating a sense of movement and freshness. The water is splashing from the bottom left towards the top right, with a large, central splash that dominates the middle of the frame. The background is a solid light blue, providing a clean contrast for the white text.

EUM Attribute: Community Sustainability

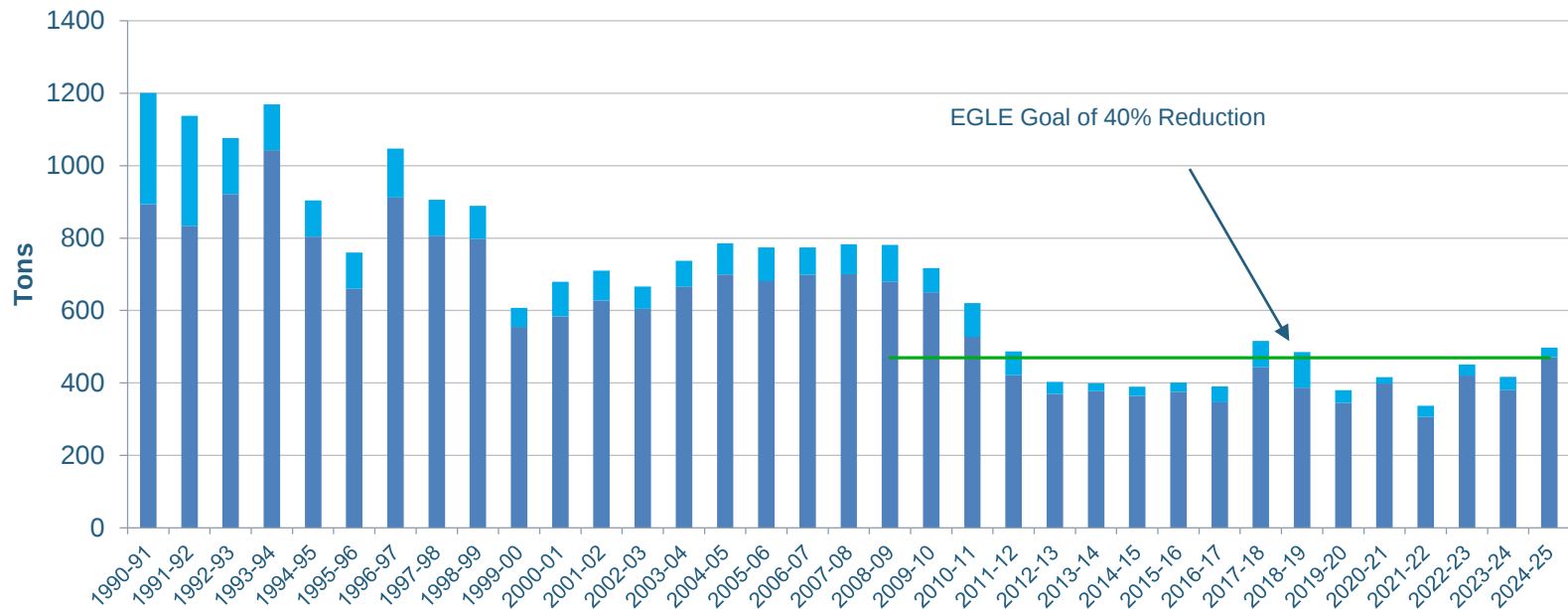
Community Sustainability – Watershed Health

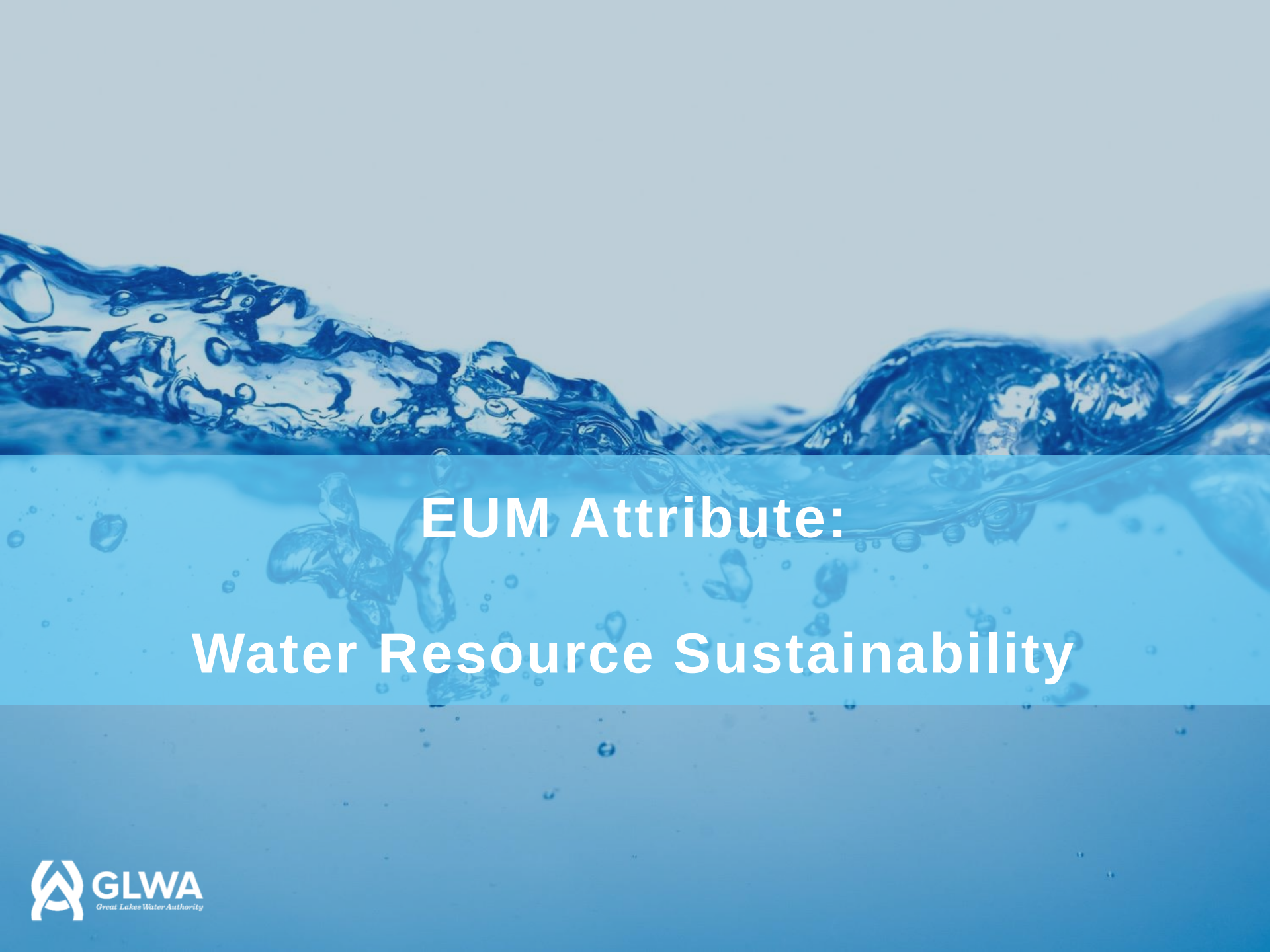


The 2024-25 loading exceeded the goal by 28 tons (6%) due to increased dosing of orthophosphate to the water distribution system.

- 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.

Effluent Phosphorus Loading
July 1990 to June 2025



A dynamic splash of water in shades of blue, with bubbles and droplets visible, creating a sense of movement and freshness. The water is splashing from the bottom left towards the top right, with a large, central splash that dominates the middle of the frame. The background is a solid light blue, providing a clean contrast for the white text.

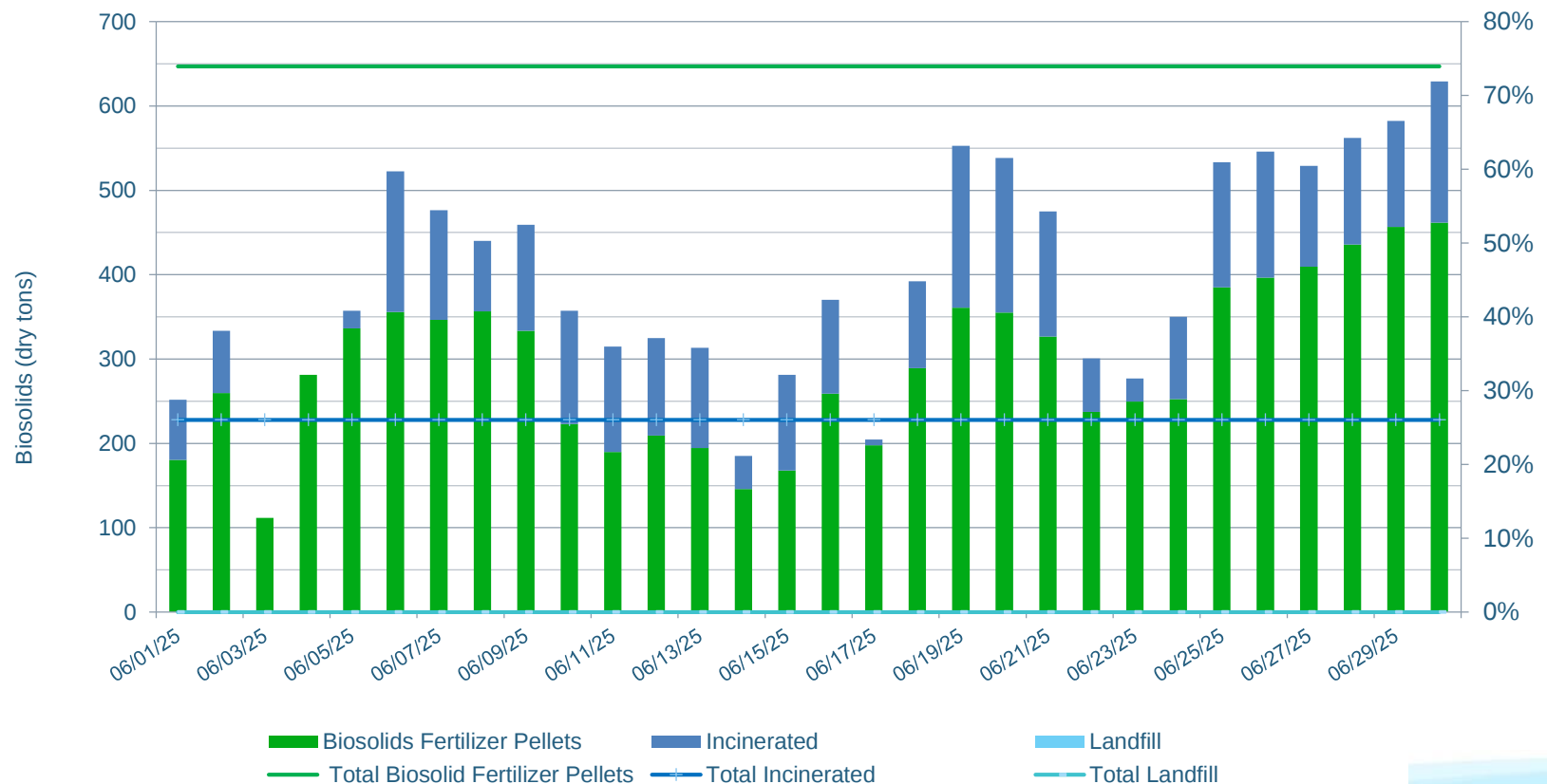
EUM Attribute: Water Resource Sustainability

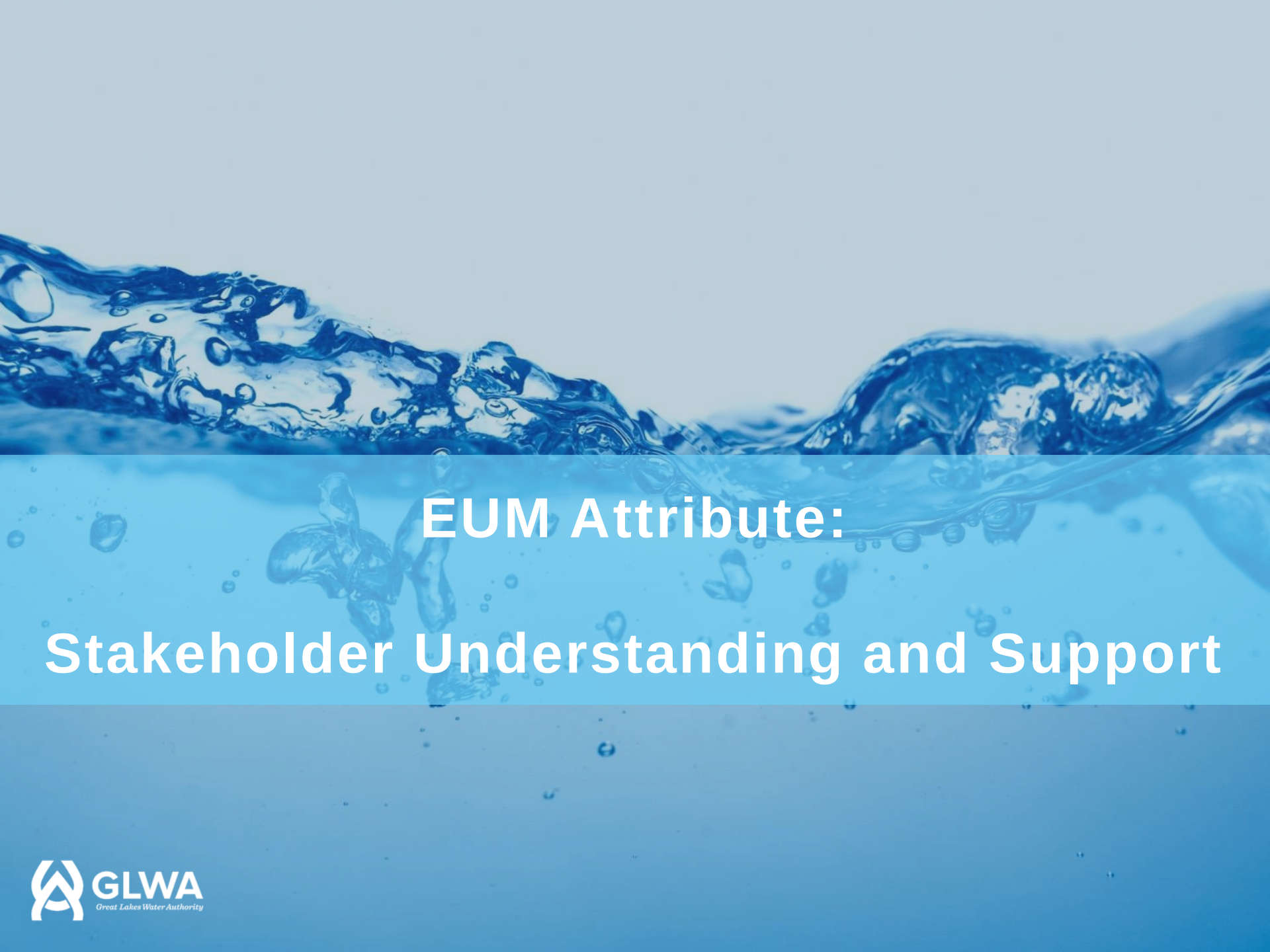
Water Resource Sustainability – Biosolids Handling by Method



Biosolids Dryer Facility handled 74% of solids production for June 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.



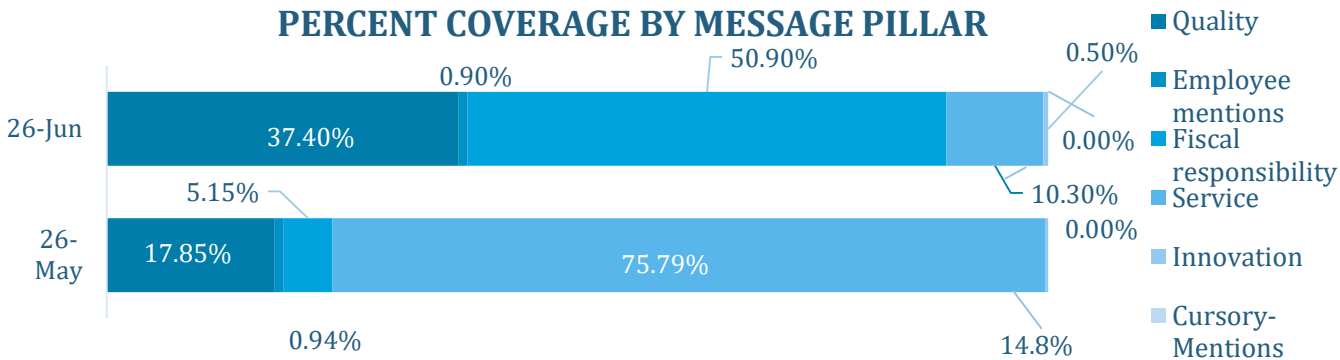
A dynamic splash of water in shades of blue, with bubbles and ripples, serving as the background for the slide.

EUM Attribute: Stakeholder Understanding and Support

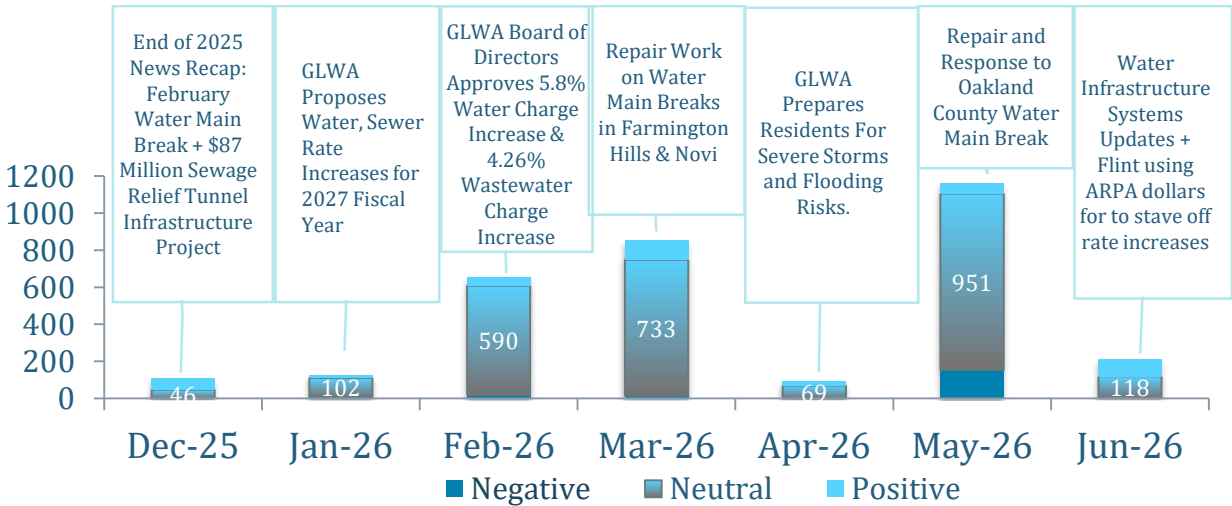
TRADITIONAL MEDIA SUMMARY



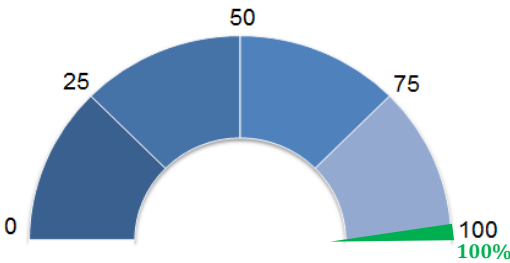
Traditional media coverage was mostly neutral, reflecting the broader news cycle. Most coverage was around the water infrastructure systems updates GLWA is planning to do and Flint’s use of American Rescue Plan Act funding for to offset increases to its charges and not raise end user rates. Of this month’s media coverage, 100 percent included non-cursory mentions. Of the stories with non-cursory mentions, 100 percent included a GLWA quote or message.



MEDIA MENTIONS + SENTIMENT



MESSAGE PULL-THROUGH*

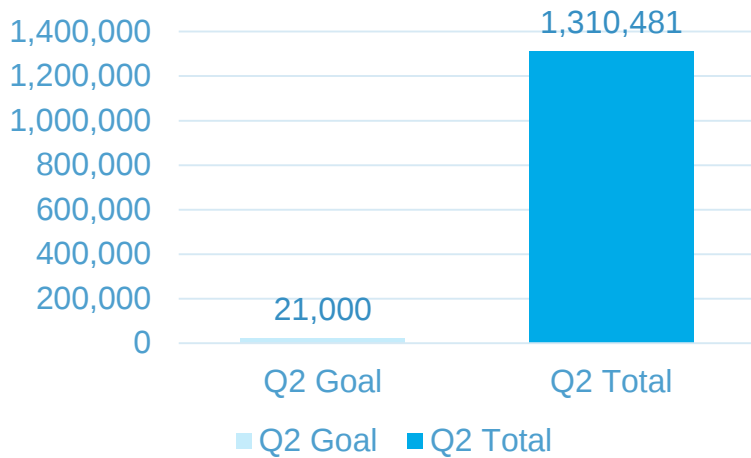


MEDIA VOLUME: 214
CURSORY OR FLINT MENTIONS: 0
INCLUDED GLWA MESSAGE: 214

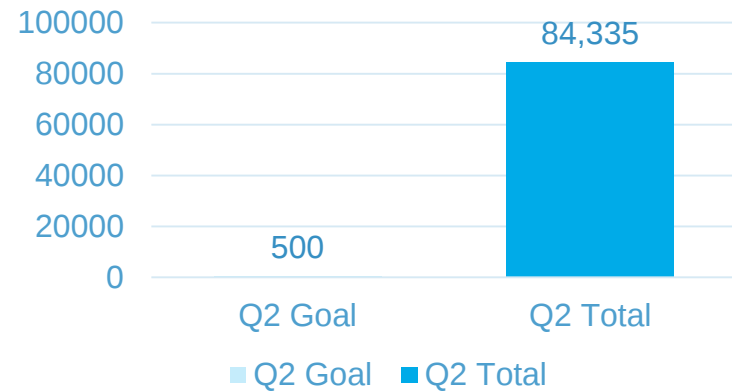
**Message pull-through includes quotes or comments from a GLWA spokesperson, a quote from a GLWA press release or underlying theme of GLWA providing safe and clean water.

FACEBOOK Q2 2026 REVIEW

Facebook Impressions

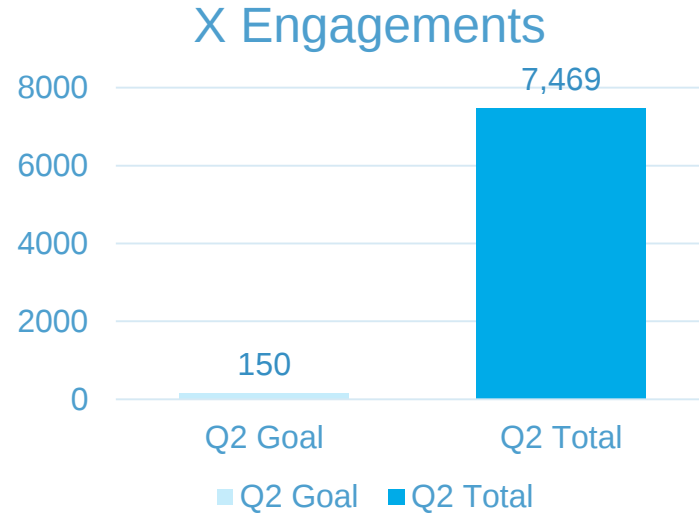
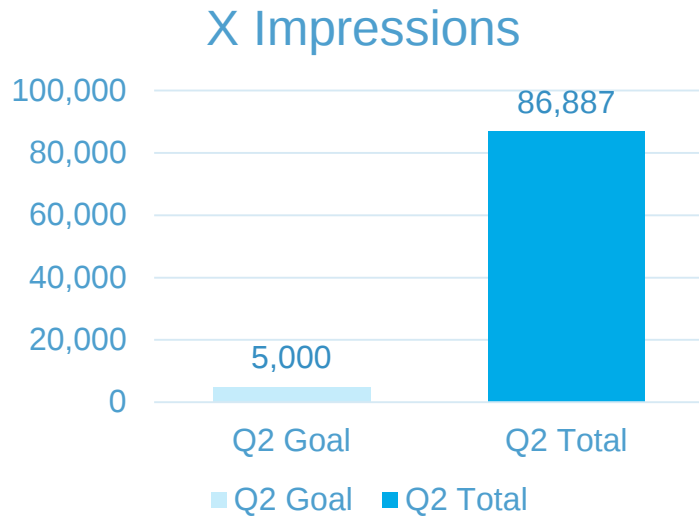


Facebook Post Engagements



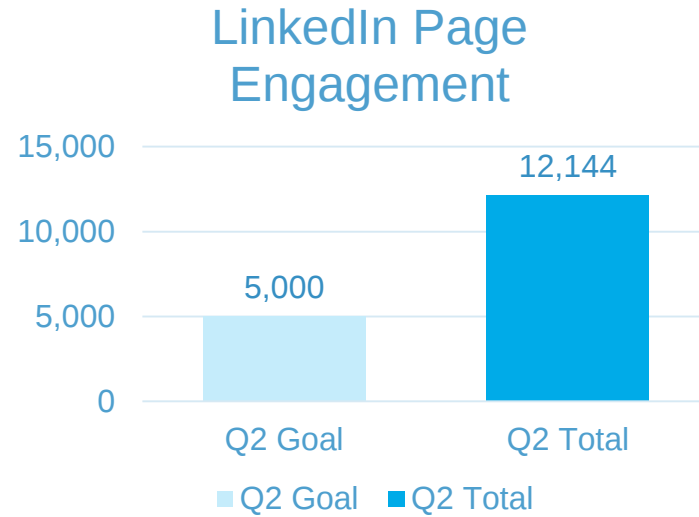
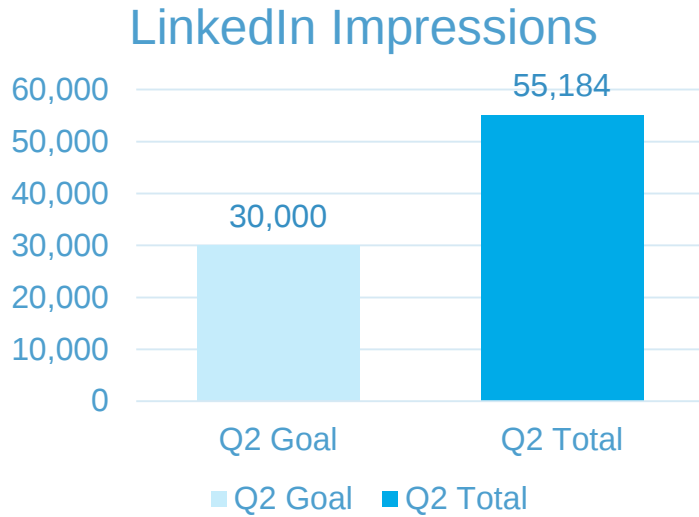
- 💧 In Q2, the highest-performing content was around the **42-inch main break in Auburn Hills**. Because the break affected so many residents and businesses, it was **picked up by the media**, local politicians, and other local businesses online.
- 💧 Top content includes information around **team member events**, ongoing **construction work in Novi**, and the **42-inch main break in Auburn Hills**.

X Q2 2026 REVIEW

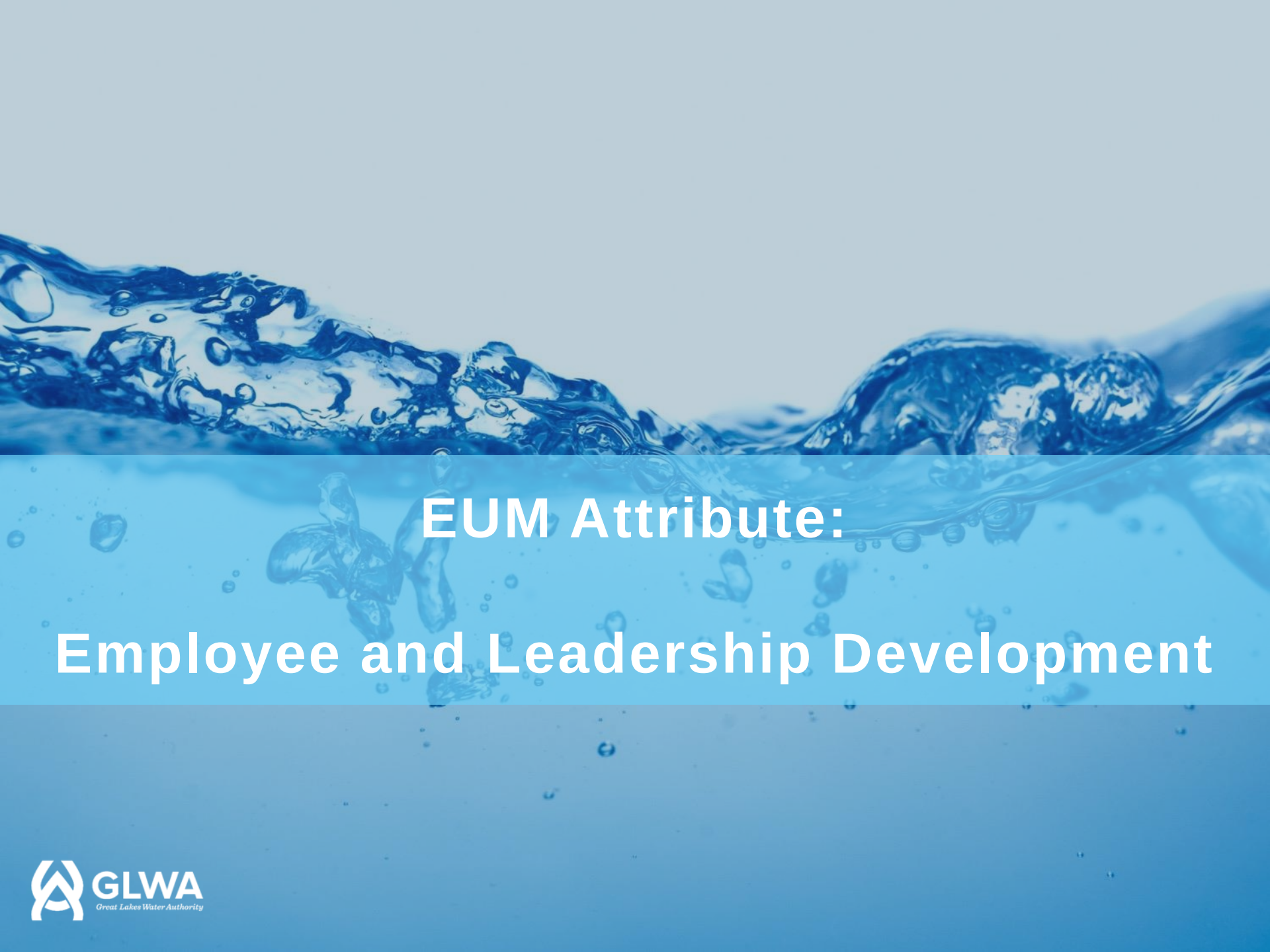


- 💧 This quarter's X content includes updates around the **42-inch main break in Auburn Hills** and status updates on the **42-inch restoration in Novi**.
- 💧 Top content includes posts around **the 42-inch main break in Auburn Hills**.

LINKEDIN Q2 2026 REVIEW



- ◆ Top content includes **team member spotlights (both written and in video format)**, **regional infrastructure information**, and **team member events**.

A dynamic splash of water in shades of blue, with bubbles and ripples, serving as the background for the slide.

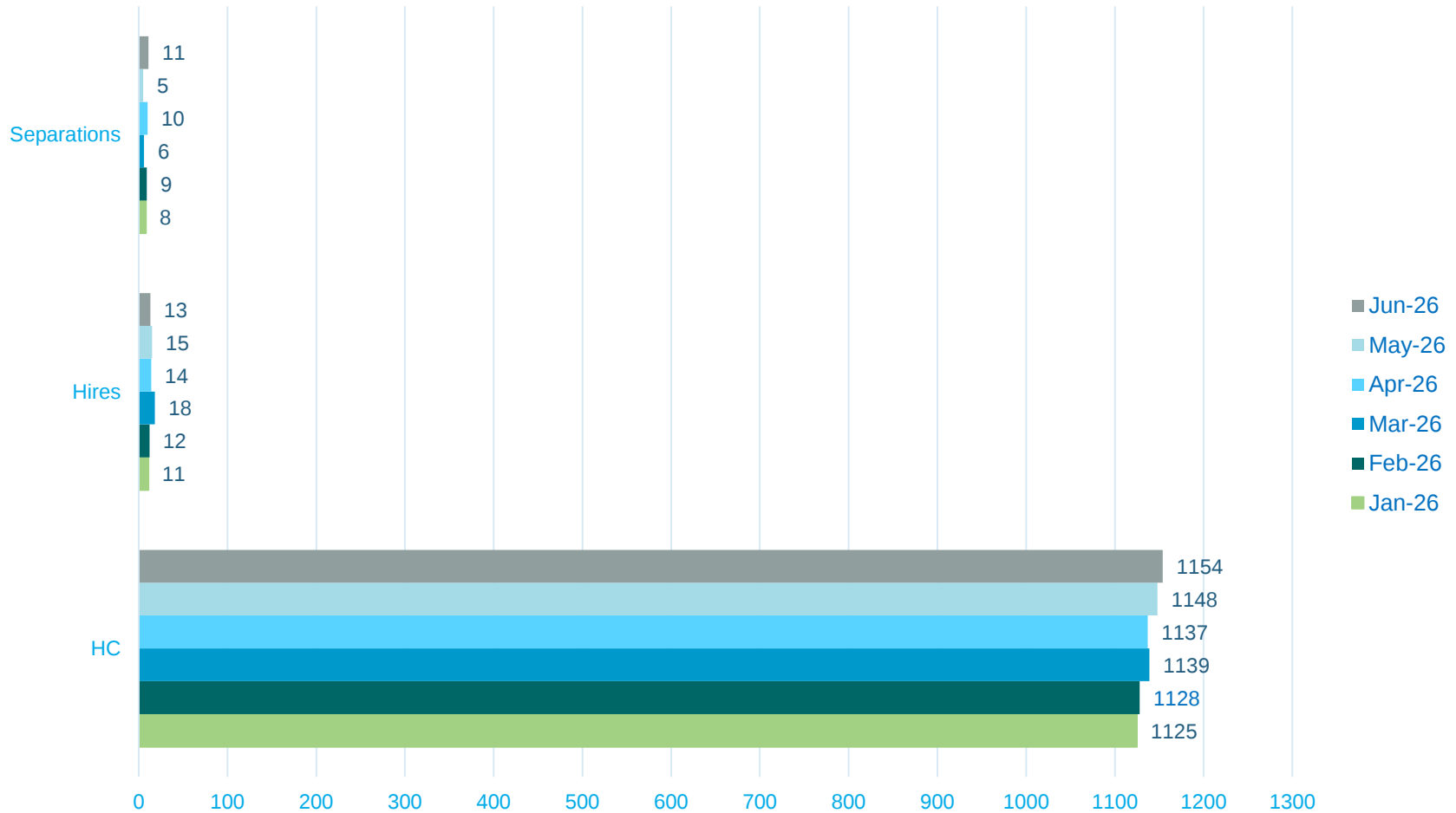
EUM Attribute:

Employee and Leadership Development

Organizational Development



GLWA Jan 2026 - June 2026 Headcount, Hires, & Separations

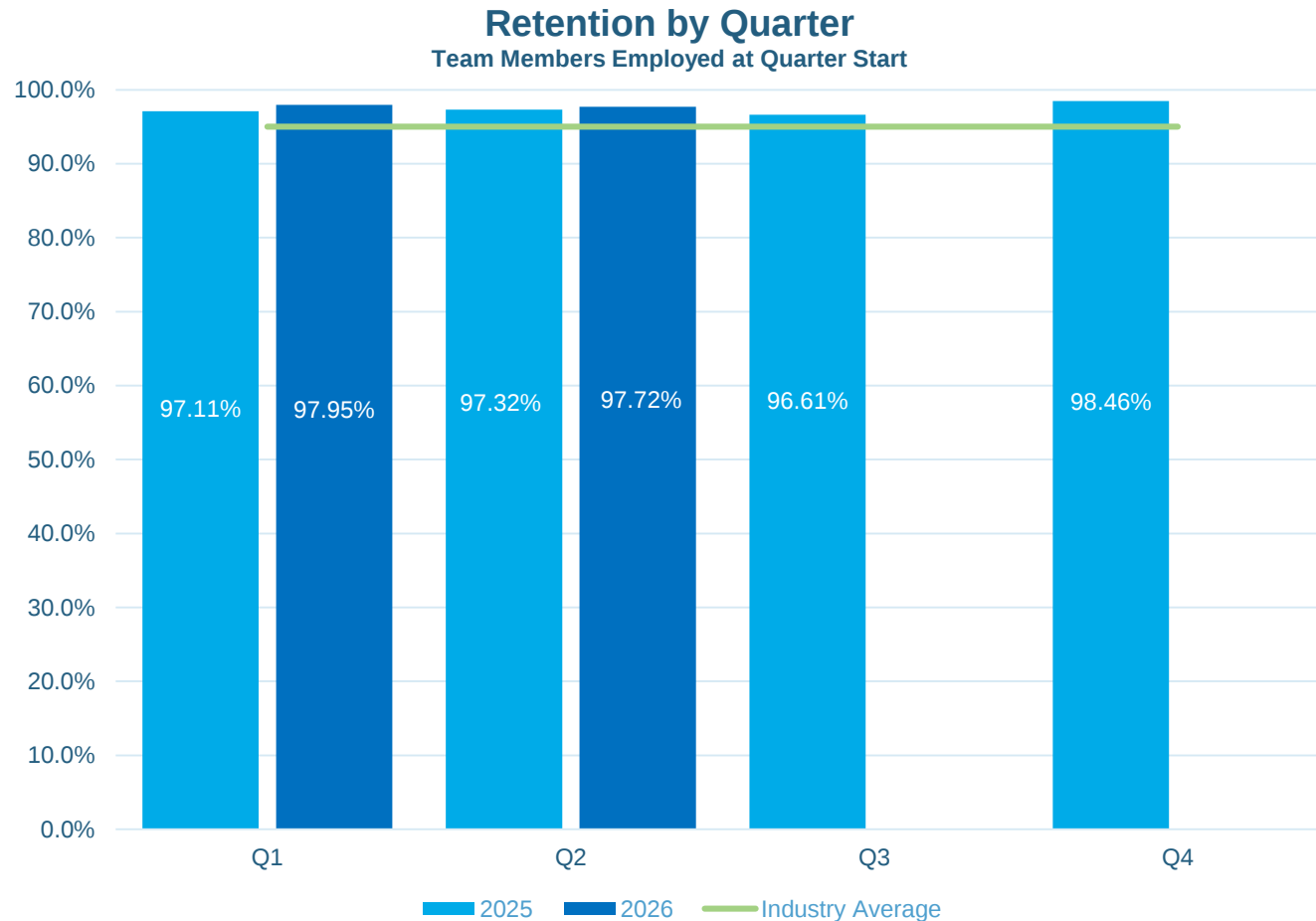


**Headcount is as of month end*

Organizational Development



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



Above retention rates are reflected in percentages

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."