



## District of Columbia Water and Sewer Authority Board of Directors

**Audit and Risk Committee** April 24, 2025 / 11:00am

**Microsoft Teams meeting**

[Click here to join the meeting](#)

Meeting ID: 263 146 126 692

Passcode: ri3R6B38

Call in (audio only) [202-753-6714](tel:202-753-6714), [255071887](tel:255071887)#

Phone Conference ID: 255 071 887#

1. **Call to Order** \_\_\_\_\_ Christopher Herrington, Chairperson
2. **Roll Call** \_\_\_\_\_ Michelle Rhodd, Board Secretary
3. [Enterprise Risk Management Update](#) \_\_\_\_\_ Francis Cooper, Director EPMO and  
Janai Pinkney, Manager EPMO
4. [Internal Audit Update](#) \_\_\_\_\_ Cherry Bekaert, Internal Audit
  - A. FY 2025 Internal Audit Plan Status Update
  - B. Status Update on Prior Audit Findings
  - C. Hotline Update
5. **Executive Session\*** \_\_\_\_\_ Christopher Herrington
6. **Adjournment** \_\_\_\_\_ Christopher Herrington

This meeting is governed by the Open Meetings Act. Please address any questions or complaints arising under this meeting to the Office of Open Government at [opengovoffice@dc.gov](mailto:opengovoffice@dc.gov).

1The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who constitute a quorum to discuss certain matters, including but not limited to: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); terms for negotiating a contract, including an employment contract, under D.C. Official Code § 2-575(b)(2); obtain legal advice and preserve attorney-client privilege or settlement terms under D.C. Official Code § 2-575(b)(4)(A); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security matters under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10); third-party proprietary matters under D.C. Official Code § 2-575(b)(11); train and develop Board members and staff under D.C. Official Codes § 2-575(b)(12); adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters or violations of laws or regulations where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14); and other matters provided under the Act.



# Enterprise Risk Management

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# dc Today's Agenda



Timeline of Bottoms-Up Approach

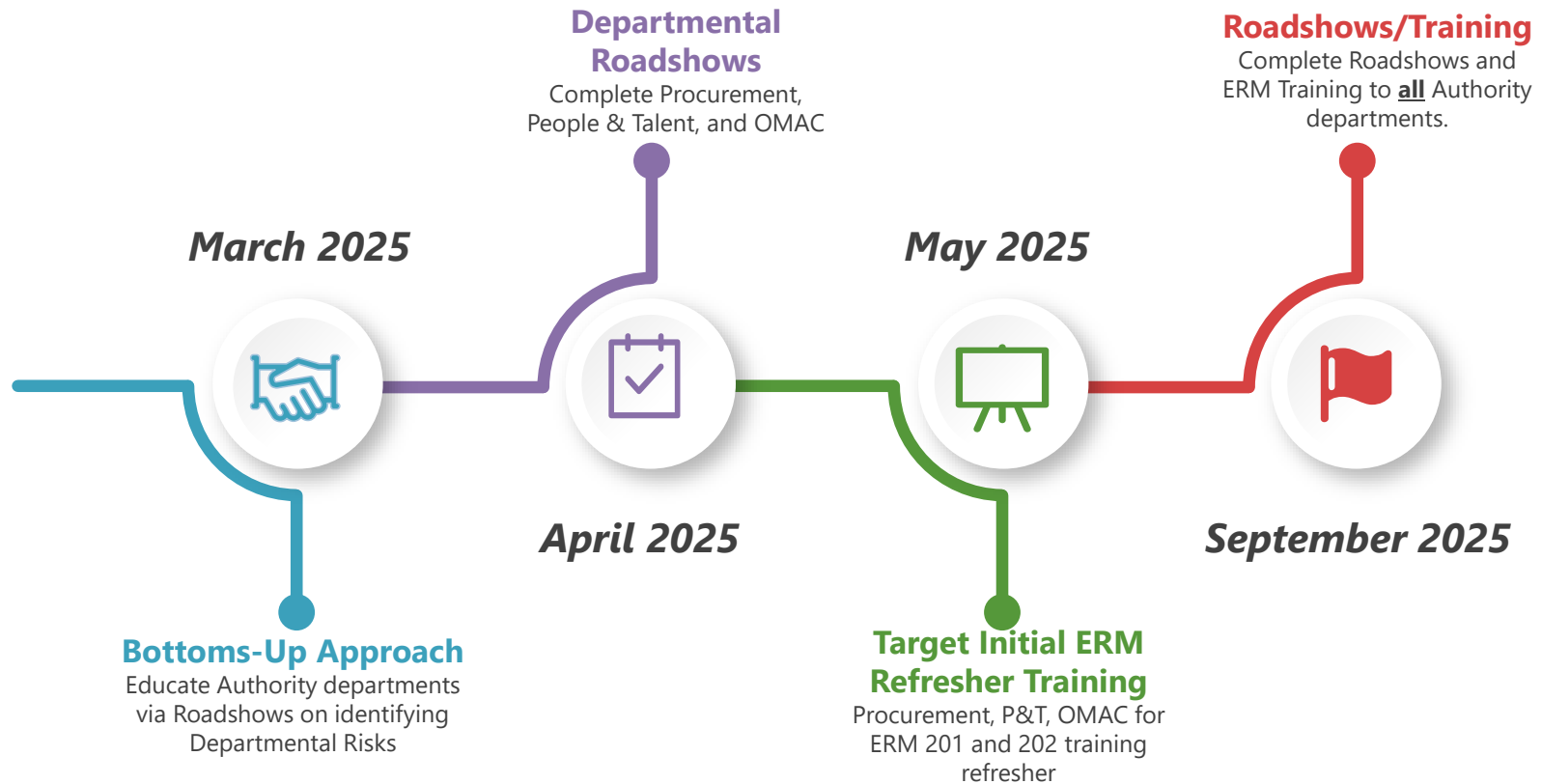


Road Shows

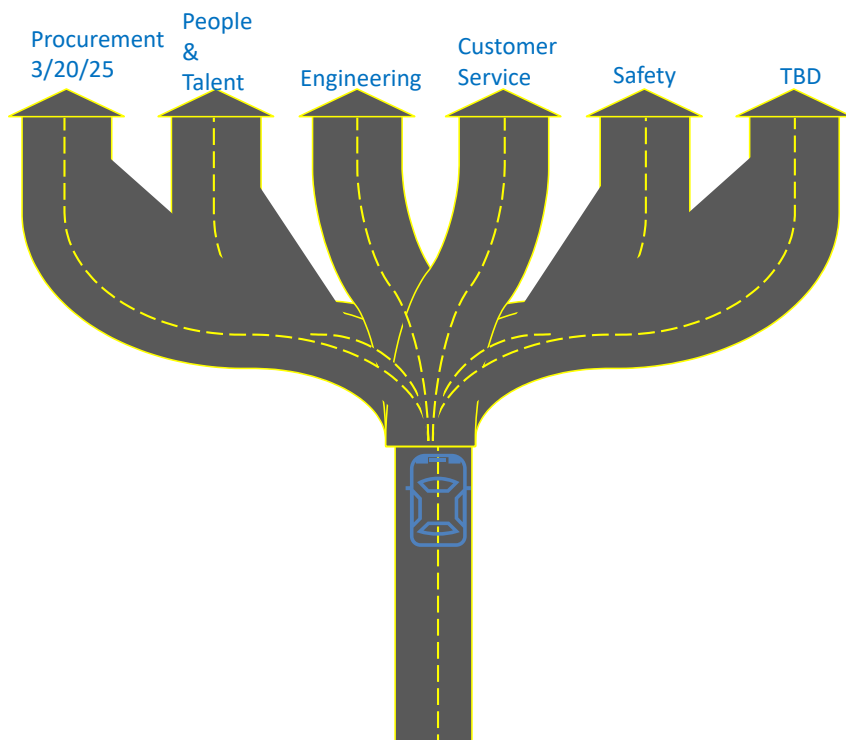


ERM Reengagement Plan

# dc Proposed Timeline for Bottoms-Up Approach



# dc Bottoms Up Approach Roadshows



## Value of Roadshows

- ☐ Deeper understanding of departmental risks and ability to identify and evaluate risks in your area of responsibility.
- ☐ More effective risk-informed decisions
- ☐ Continued efforts to drive a risk-aware culture
- ☐ Reduces silos by fostering collaboration between departments.
- ☐ Creates opportunities for employees to ask questions, share concerns, and feel heard.

# dc Reengagement ERM 201 & 202 Trainings



## Compliance Suite Training- ERM101

- All non-union DC Water Employees must complete.
- The purpose of this training is to promote **better, faster, risk-informed** decisions and support a **risk-aware culture** across the Authority
- Specifically in 2023, we advanced **ERM 101** foundational training to all employees to provide the building blocks for risk management.
- Last year, we had a **100%** completion rate.



## ERM 201

- Focus on Steps 1) **Identify & Assess** and 2) **Prioritize** of the Risk Management process.
- Identify & Assess process helps us define potential risks and understand their impact and vulnerability to DC Water's strategic goals
- Prioritization part of the process that helps us determine the most urgent and important risks.
- In August 2023, we delivered an interactive and engaging **ERM 201** training to approximately **140 senior leaders** across the Authority.



## ERM 202

- Focus on Steps 3) **Treat** and 4) **Monitor & Report**, leveraging the same case study we discussed in the first training session.
- Understand the differences between **departmental** risks and **enterprise** risks.
- In September 2023, we facilitated **ERM 202** training for **126 senior leaders** to build on these risk concepts.



# FY 2025 Internal Audit Plan

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Audit and Risk Committee Report April 24, 2025



# Internal Audit Plan FY 2025 Timeline & Status

	Oct – 24	Nov – 24	Dec – 24	Jan – 25	Feb – 25	Mar – 25	Apr – 25	May – 25	Jun – 25	Jul – 25	Aug – 25	Sept – 25	Oct – 25	Status
•Work Order Management Audit - Facilities														Completed
•AI Policy Governance Assessment														Completed
•Safety Audit														In - Process
•Strategic Plan Monitoring Audit														In - Process
•SCADA Penetration Testing (in-person)														In - Process
•Data Governance and Reporting Assessment														In - Process
•Budget Monitoring Audit														Not Started
•Contract Compliance Audit														Not Started
•Third-party Vendor Management Audit														Not Started
•Cloud Security Audit														Not Started
•FY 2026 Risk Assessment														Not Started
•Ongoing Follow-up Procedures														Ongoing
•Ongoing Hotline Monitoring														Ongoing



# **FY 2025 Internal Audit Plan - Completed**

## **Work Order Management – Facilities Services Audit**

Based upon the DC Water FY2025 Risk Assessment results, we conducted an audit to evaluate the current facilities services work order workflow and controls. The data examined ranged from January 1, 2023, through December 10, 2024. The audit scope included the following objectives:

1. Review all work order management policies and procedures to determine whether they are in alignment with DC Water practices and any required laws and regulations.
2. Evaluate the effectiveness of the Maximo system for the asset management lifecycle.
3. Assess the system workflow to determine whether requests are being received, processed, monitored and tracked at a level necessary to improve productivity, reduce inefficiencies/bottlenecks and ensure that DC Water goals and objectives are being met.
5. Evaluate the third-party provider services.

# dc FY 2025 Internal Audit Plan - Completed

## Work Order Management – Facilities Audit

Audit results are included in the table. However, only details related to high-risk findings are presented in this report.

Findings (Total: 14)	Risk Rating		
Audit Themes	HIGH	MEDIUM	LOW
Governance and Oversight	2	2	1
Policies and Procedures	1	1	0
Training and Awareness	0	1	0
Key Performance Indicators ("KPI's") and Monitoring	1	3	0
Communication and Reporting	0	1	0
Vendor Management	1	0	0
Totals	5	8	1

# dc FY 2025 Internal Audit Plan - Completed

## Work Order Management – Facilities Audit

**Objective 1:** Review all work order management policies and procedures to determine whether they are in alignment with DC Water practices and any required laws and regulations.

**Finding 1 Rating (High):** As of 12/2024, there are 55 employee names listed on Maximo's 19 Facilities employee person groups. Six (11%) employee names were not listed within the FY25 Q1 Employee Database. Five (9%) employee names appear to have the incorrect level access or appear to not be within the Facilities Services scope.

**Recommendation:** We recommend adding the review of each user's employment status, access, and permission levels to the user access review process.

# dc FY 2025 Internal Audit Plan - Completed

## Work Order Management – Facilities Audit

**Objective 2:** Evaluate the effectiveness of the Maximo system for the asset management lifecycle.

**Finding 3 Rating (High):** The review of the current asset management framework revealed the lack of documentation of procedures for asset retirement and asset disposal.

**Recommendation:** We recommend developing and implementing comprehensive procedures that clearly define the steps and responsibilities involved in the retirement and disposal of assets.

# dc FY 2025 Internal Audit Plan - Completed

## Work Order Management – Facilities Audit

**Objective 3:** Assess the system workflow to determine whether requests are being received, processed, monitored and tracked at a level necessary to improve productivity, reduce inefficiencies/bottlenecks and ensure that DC Water goals and objectives are being met.

**Finding 5 Rating (High):** The audit has identified instances of non-compliance with Standard Operating Procedures (SOPs) by leaving required fields empty.

**Recommendation:** We recommend ensuring critical fields be required and entered. This will support reporting on key performance indicators and metrics such as schedule compliance, asset availability and usage, work order backlog, and labor hours.

# dc FY 2025 Internal Audit Plan - Completed

## Work Order Management – Facilities Audit

**Objective 3:** Assess the system workflow to determine whether requests are being received, processed, monitored and tracked at a level necessary to improve productivity, reduce inefficiencies/bottlenecks and ensure that DC Water goals and objectives are being met.

**Finding 6 Rating (High):** Upon evaluating the practices of the Material Management team, we identified a gap in the monitoring and documentation of defective batches of parts and their corresponding suppliers.

**Recommendation:** We recommend incorporating an option to identify defective or low-quality parts, materials, or tools. This feature would enable the facilities and materials management departments to select higher-quality supplies and vendors, optimize resource allocation, and enhance the efficiency of work tasks.

# dc FY 2025 Internal Audit Plan - Completed

## Work Order Management – Facilities Audit

**Objective 5:** Evaluate the third-party provider services.

**Finding 14 Rating (High):** We were unable to obtain policies pertaining to vendor management or procurement or review DC Water's contract with Maximo.

**Recommendation:** We recommend conducting an initial risk or criticality assessment prior to the procurement and implementation of a new system. Additionally, we recommend performing on-going contract compliance and system performance monitoring for all third-party vendors.

# dc FY 2025 Internal Audit Plan - Completed

## AI Policy Governance Assessment

The management assessment was provided to Management on April 7, 2025.

The assessment resulted in recommendations for implementation over 0 -12+ months in the areas of Data Preparation, Strategy & Planning, Data Security, Awareness & Training, Optimization and Maintenance & Improvement.



# dc FY 2025 Internal Audit Plan - Fieldwork (In Process)

Safety Audit

External IP Block  
SCADA Environment  
Penetration Testing  
Audit

Internal Production  
SCADA Environment  
Penetration Testing  
Management  
Assessment



## FY 2025 Internal Audit Plan – Information Gathering (In Process)

Strategic Plan  
Monitoring  
Audit

Data  
Governance  
and Reporting



## **PRIOR AUDIT FINDINGS- FOLLOW UP STATUS**

## dc Quarterly Progress Highlights

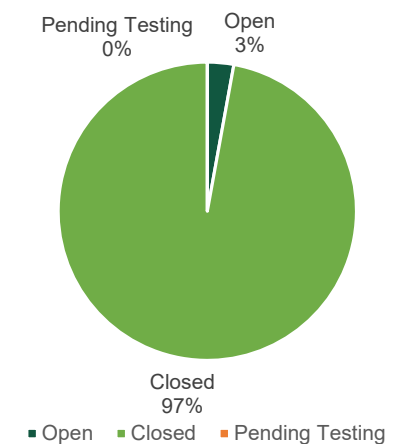
- We have now transitioned from tracking quarters to the number of months from audit finding issuance to closure to show management's efforts to achieve timelier audit finding closures.
- 13 total prior audit findings were moved to "closed" or "pending validation" including the following:
  - Two FY22 Strategic Plan Monitoring Audit Findings were validated and closed as of 1/6.
  - One FY24 Training and Recruiting Audit Finding was validated and closed as of 1/28.
  - The last FY24 Genesys ITGC Review Finding is now closed as of 2/20 and the final two FY24 DPSO Work Order Management Audit Findings were validated and closed as of 2/26. Both closing meeting were held with key stakeholders on 3/4.
  - Four FY24 Internal/External Network Penetration Testing findings and one FY24 Application Penetration Testing finding were validated and closed as of 2/26. Closing meetings will be combined with the FY24 Internal/External Network Audit.
  - One FY23 Fleet Management Audit Finding was validated and closed as of 3/31.
  - One FY24 P-Card Audit Finding was changed to pending-validation as of 4/1.
- Open and pending validation findings were updated based on responses received from the responsible parties, specifics are detailed on their respective slides.



# Status Update on FY17-FY23 Prior Audit Findings

Audit Report/Subject	Report Issue Date	Corrective Actions			
		Total	Open	Closed	Pending Testing
Prior to FY 2023 Audit Findings					
Entity Level Review	10/26/2017	7	1	6	0
Occupational Safety and Health	4/25/2019	4	1	3	0
Payroll & Timekeeping Audit	7/23/2023	7	1	6	0
Work Order Management Audit-DWO	7/23/2023	3	1	2	0
Fleet Management Audit	10/27/2023	6	2	4	0
Total Closed Audit Findings		183	0	183	0
	Total	210	6	204	0

FY17-FY23 Prior Audit Findings Status



- Entity Level Review: Policies are currently waiting compliance review by responsible collaborators. Finding was reopened on 2/20\*.
- Occupational Safety and Health: The final draft has been submitted, awaiting Legal Sufficiency Memo and final CEO approval. Est. completion date updated to **4/30/25**. This finding was reopened on 2/26\*.
- Payroll & Timekeeping Audit: Completion date extended to 9/30/25. Finding was reopened on 2/20 as the Management Action Plan has not been fully implemented.
- Work Order Management Audit-DWO: Management Action Plan will not be fully implemented until 2028.
- Fleet Management Audit: Open finding regarding policies and procedures has an extended, estimated completion date of 9/30/2025. Waiting on an update from the Senior Program Manager of Compliance Programs for the Manual tracking of employee credentials open finding.

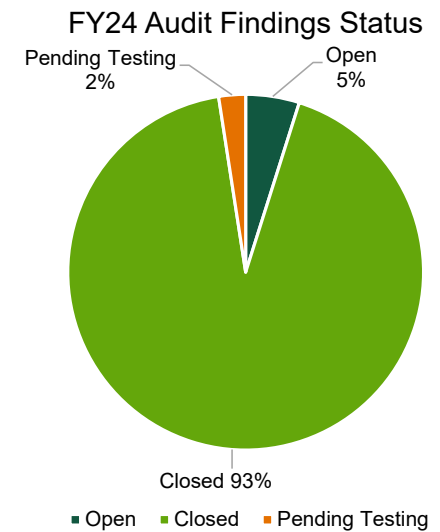
**\* The remediation of the management action plans are not complete and pending testing, as the policies are not fully approved. To be consistent with other findings these findings were reopened. \*Data before FY2023 was provided by RSM**



# Status Update on FY24 Audit Findings

Audit Report/Subject	Report Issue Date	Corrective Actions			
		Total	Open	Closed	Pending Testing
FY 2024 Audit Findings					
External and Internal Penetration Testing	7/18/2024	19	1	18	0
P-Card Audit	1/1/2024	3	0	2	1
Training and Recruiting Audit	9/1/2024	2	1	1	0
Total Closed Audit Findings		17	0	17	0
	Total	41	2	38	1

- External and Internal Penetration Testing: One open finding extended to 4/1/25.
- P-Card Audit: Final documented process has been approved, pending-validation prior to closing finding.
- Training and Recruiting Audit: One open finding, waiting on management updates for an estimated completion timeframe.



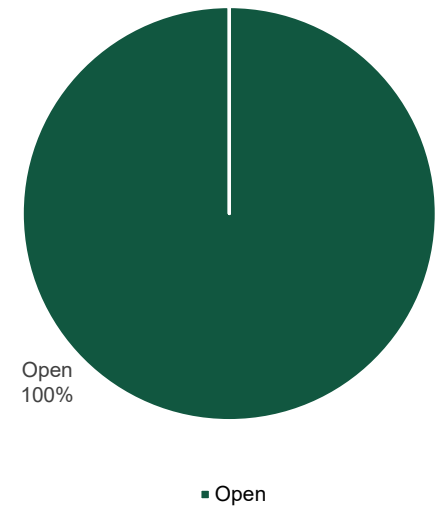


# Status Update on FY25 Audit Findings

FY25 Audit Findings Status

Audit Report/Subject	Draft Report Issue Date	Corrective Actions			
		Total	Open	Closed	Pending Testing
FY 2025 Audit Findings					
Work Order Management-Facilities Audit	4/11/2025	14	14	0	0
	Total	14	14	0	0

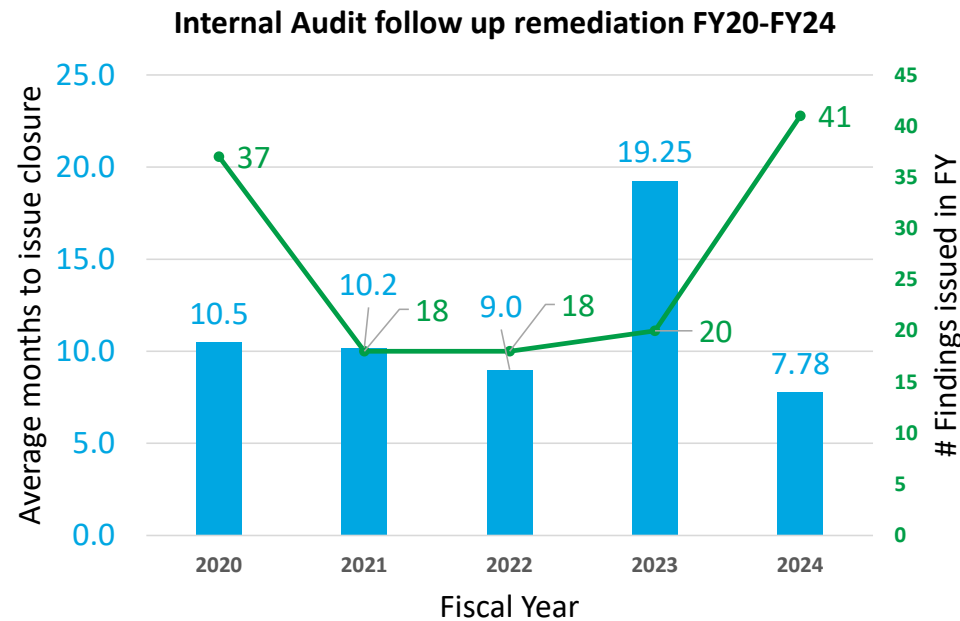
- Work Order Management - Facilities Audit: Management is working to develop the management action plans and completion dates TBD.





## Time to closure by fiscal year

The below graph illustrates the average number of months from audit finding issuance to audit finding closure year-over-year as of April 2025. Management has made significant improvements to achieve timelier audit finding closure as illustrated by the decline from FY23 to FY24. Management's target time to closure is 8 months.



*\*Data before FY2023 was provided by RSM*





# Allegations Update



## Allegations Update

Below is a summary of the cases received in FY25 as of April 15, 2025. There are two open cases.

FY 25 Allegation Summary	
FY 25 Allegations Received	7
FY 25 Cases Closed	5
FY 25 Allegations Open	2
FY 25 Open Allegation Breakdown	
Two cases are being investigated. One of the above cases was logged as two calls.	
Allegation Source	
Hotline	6
Management Alert	1
Employee Email	0
Personal Conversation	0

### Total Allegations by Fiscal Year:

Year	FY 20	FY 21	FY 22	FY 23	FY 24
# of Cases	10	7	18	15	25
Action Taken	0	0	2	2	1

FY 25 Closed Allegation Breakdown	
Fraud, Waste, and Abuse Related Allegations:	
Theft of Time	0
Theft or Misuse of Company Assets	1
Non-Fraud, Waste, and Abuse Related Allegations:	
Policy Issues	1
Employee Relations	1
Sexual Harassment	1
Substance Abuse	0
Wage/Hour Issues	0
Workplace Violence/Threats	1

### FY25 Allegations by Quarter:

Year	Q1	Q2	Q3	Q4	Total
# of Cases	4	3	0	0	7
Action Taken	1	2	0	0	3

Calls that do not pertain to fraud, waste, or abuse are automatically referred to the appropriate department head and closed by Internal Audit.  
These calls will never result in corrective action by Internal Audit.



# Appendix



# Illustrative 5 Year Audit Plan

Year 1	Year 2	Year 3	Year 4	Year 5	Frequency	Legend:
<b>Administration</b>						Business Cycle Process Audit
	Physical Security- Blue Plains		Physical Security-Location TBD		Every 2 years (rotating locations)	IT Cycle Audit
Work Order Management- Facilities	Physical Security- Bryant Street		Physical Security-Location TBD		Every 2 years (rotating locations)	Business Process Ad Hoc Audit
	Billing and Collections			Billing and Collections	Every 1 year (rotating depts-other depts in Engineering & Ops)	IT Ad Hoc Audit
Strategic Plan Monitoring					Every 3 years	Ongoing IA Activity
Safety		Business Continuity Assessment (DEM)	ESG Management Assessment	Fleet Management Audit	Every 3 years	
			Customer Complaints Assessment		Ad Hoc	
<b>Finance, Procurement &amp; Compliance</b>						
	Payroll & Timekeeping			Payroll & Timekeeping	Every 3 years	
	Accounts Payable			Accounts Payable	Every 3 years	
Contract Compliance	Contract Compliance	Purchasing Card	Contract Compliance	Contract Compliance	Every 3 years	
		Contract Compliance	Contract Compliance	Contract Compliance	Every 1 year	
Third-Party Vendor Risk Management		Procurement		Procurement	Every 2 years (FY25 scope to evaluate broader vendor risk based on risk assessment themes)	
Budget Monitoring	Materials Management		Grant Administration	Annual Budget Process Audit	Ad Hoc	
<b>People &amp; Talent</b>						
		Training and Recruiting		Succession Planning	Every 3 years	
					Ad Hoc	
<b>Information Technology</b>						
Data Governance & Reporting Assessment	Applications Inventory and Mapping Assessment	IT Contract Management & Service Provider Assessment	Oracle ITGC and SOO Audit	Data Governance and Strategy	Ad Hoc	
AI Policy Governance Assessment		Records Management Audit			Ad Hoc	
Cloud Security Audit					Ad Hoc	
SCADA Penetration Testing	Internal and External Network Pen Testing	PCS Penetration Testing	Internal and External Network Pen Testing	External W/L/FI Penetration Testing	Every 2 years (Inv/Ext pen testing in off years, rotating systems)	
<b>Operations &amp; Engineering</b>						
	Work Order Management- DMS	Work Order Management- DSO	Work Order Management- DWO	Work Order Management- DPSO	Every 2 year (rotating departments)	
			Construction Design and Asset Management		Ad Hoc	
			Business Development Plan Subcontractor Assessment		Ad Hoc	
<b>Government &amp; Legal Affairs</b>						
	Compliance Monitoring Assessment	Legal Operations Case Management Audit			Ad Hoc	
<b>Ongoing Internal Audit Activity</b>						
Remediation of Open Findings	Remediation of Open Findings	Remediation of Open Findings	Remediation of Open Findings	Remediation of Open Findings	Ongoing	
Hotline Monitoring	Hotline Monitoring	Hotline Monitoring	Hotline Monitoring	Hotline Monitoring	Ongoing	
Risk Assessment	Risk Assessment	Risk Assessment	Risk Assessment	Risk Assessment	Every 1 year	



# Prior Audits Performed by RSM

## FY 2015

Intellectual Property  
SCADA/PCS Review  
Procurement Pre-Award Selection Process  
Retail Rates Pre-Implementation Monitoring  
Engineering - Vendor/Contractor Monitoring & Project Administration- Phase 1  
  
Timekeeping  
IT Vendor Risk Management/Compliance and Monitoring  
Information Security Policy Review  
  
Network Penetration Testing (Corp/SCADA/Wi-Fi)

## FY 2016

Blue Horizons - Strategic Monitoring  
Contract Monitoring & Compliance Review  
Business Development Plan  
Customer Billing & Collections  
  
Retail Rates Post-Implementation Monitoring  
Training, Certification and Licensing  
Engineering - Construction Management Phase 2  
  
Overtime  
Annual Budgeting & Planning  
Rolling Owner Controlled Insurance Program (ROCIP)  
IT Incident Management & Response Review  
Enterprise Project Governance Maturity Assessment

## FY 2017

Contract Monitoring & Compliance Review  
Entity-Level Assessment  
Work Order Management (Maintenance Services)  
Materials Management Operations and Inventory  
  
Purchasing Cards (Pcard Program)  
  
Automated Meter Reading (AMR) Implementation  
MTU Implementation Review  
Fleet - Accident and Incident Reporting  
  
Engineering - Construction Management Phase 3  
Intermunicipal Agreement  
IT Human Resource/Employee Data Privacy Review  
Vulnerability Management Review and Platform Technical Audit (Windows/UNIX)

## FY 2018

Recruiting, Selection, and On-Boarding  
Automated Meter Replacement (AMR) Implementation  
Progress Update  
Office of Emergency Management Review  
DB/OS Privileged User  
  
Network Penetration Testing  
Affordability Programs  
Contract Monitoring & Compliance Review  
Crisis Management/Business Continuity  
Integrated Work Order Management (DWS, DSS, DDCS)  
CIS Post-Implementation Review  
Payroll & Timekeeping  
Accounts Payable

## FY 2019

Permit Operations - Reimbursable Projects  
Mail Room Procedures  
Fleet Management  
Legal Operations  
  
Occupational Safety and Health  
Automated Meter Reading Implementation  
Progress Update  
Cloud Security Rapid Assessment  
Active Directory Cloud Migration Security Review  
  
Purchasing Card Internal Audit  
Severance Assessment  
Wi-Fi Security Testing  
CIS Application Security Segregation of Duties (SOD) Review  
Contractual Services  
Asset Management Assessment  
Physical Security and Social Engineering

## FY 2020

Work Order Planning Assessment  
  
Phase 2: Physical Security Penetration Testing  
Facilities Management Audit  
Benefits and Compensation Audit  
Engineering Change Order Assessment  
Industrial Control System (ICS) Review  
Customer Billing and Collections Audit  
Oracle Embedded Risk Assurance Phase 1



# Prior Audits Performed by RSM (Continued)

## FY 2021

Department of Maintenance Services  
(DMS) Work Order Management  
Remote Workforce Assessment  
Succession Planning  
Procurement PreAward Selection

Contract Compliance

Materials Management  
PCS Review

## FY 2022

Contract Compliance  
Accounts Payable

Expenditure Analytics Assessment  
Work Order Management - DSO  
Supply Chain Assessment  
Employee Retention Assessment

Strategic Plan Monitoring  
Physical Security Audits  
Incident Response Tabletop

CTI Program Development

## FY 2023

Fleet Management  
Business Continuity Assessment (OEM)  
Payroll & Timekeeping  
Work Order Management - DWO

Contract Compliance - CIP Scope

Procurement - CIP Scope  
Metering, Billing, and Collections  
Oracle ITGC Assessment (CM & CO)  
Oracle Identity & Access Management  
Review  
Penetration Testing- Wi-Fi

## FY 2024

Physical Security - Fleet Facility  
Physical Security - HQO  
Purchasing Card

Contract Compliance  
Training and Recruiting  
Genesys ITGC Review  
Penetration Testing - Internal and External  
Network  
Penetration Testing - Mobile Applications  
Work Order Management - DPSO  
Permit Operations



# Questions & Answers



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