



Atlanta Drinking Water Renewal and Replacement (ADWRR) Program

City Utilities Committee Meeting

Chief Strategy Officer Peter Aman and Department of Watershed Management Commissioner Al Wiggins

Tuesday, October 28, 2024



Agenda

1. OCSO Major Project Definition
2. Program Scope, Charter
3. Governance
4. Atlanta Water Advisory Group (AWAG)
5. AWAG Initial Key Messages
6. Program elements



Office of Chief Strategy Officer: Major Project Definition

Characteristics of a Major Project of the Chief Strategy Officer (examples)

- Designated by the Mayor, with input from the Mayor's Senior Team
- Highly critical, often time-sensitive initiative, sometimes extremely high risk
- Requires significantly accelerated results, new or expanded scope
- Requires above average coordination across departments of the city and/or external partners or advisory groups
- May require significantly more resources (human, financial, etc.)

Current OCSO Special Project Portfolio

1. Rapid improvement of the RM Clayton Water Reclamation Plant
2. Strategy and program to restore, replace, and increase the resilience of DWM's drinking water infrastructure and better prepare Atlanta for water and other emergencies
3. Significant acceleration of the Moving Atlanta Forward infrastructure program (both horizontal and vertical infrastructure bond projects)



Atlanta Drinking Water Renewal and Replacement (ADWRR): Program Scope

1. Program Management
2. Emergency Preparedness and Resilience (water and other emergencies)
3. Communications
4. Assessment and Planning
 - Drinking Water Treatment Plants
 - Distribution System Valves and Pipes: Medium <16" and Large ≥16"
 - Distribution System Equipment, Technology
 - Overall Technology, including SCADA and Cybersecurity
 - New Capital Improvement Plan
5. Procurement
 - Program, Project Management
 - A&E, Construction, Technology, and Other Firms
6. Installation and Construction, including Restoration and Improvements
7. Testing
 - Water Quality
 - Leak Detection
8. Operations Review and Improvements (Maintenance)

Atlanta Drinking Water Renewal and Replacement (ADWRR): Program Charter

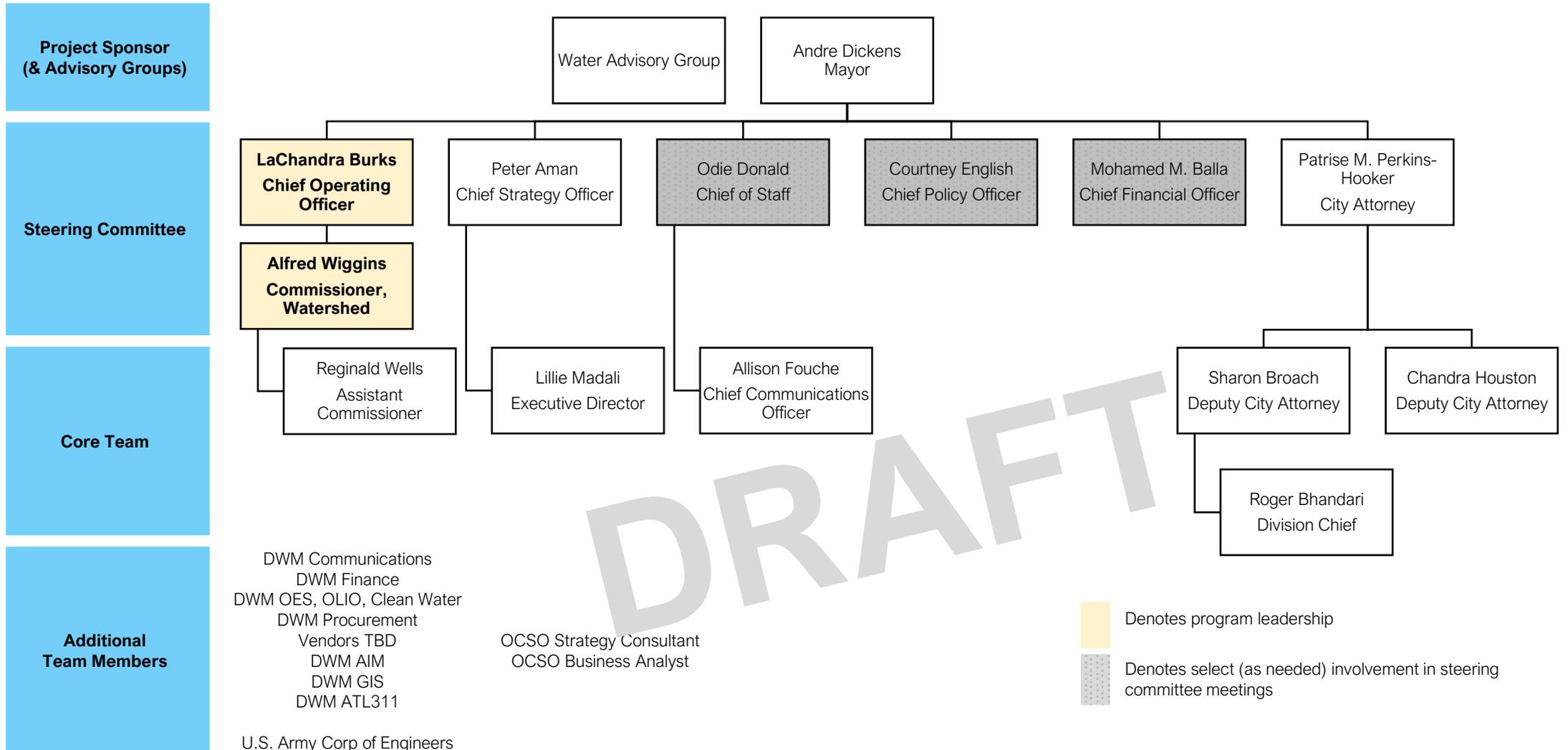


Objectives	To develop and execute a strategy and program to restore, replace, and increase the resilience of DWM's drinking water infrastructure (including funding approaches) and better prepare Atlanta for water (and other) emergencies		
Initiative Sponsor	Mayor Andre Dickens		
Steering Committee	Chief Operating Officer LaChandra Burks, Chief Strategy Officer Peter Aman, City Attorney Patrise M. Perkins-Hooker <i>As Needed:</i> Chief Financial Officer Mohamed M. Balla, Chief Policy Officer Courtney English, Chief of Staff Odie Donald		
Core Team	Alfred Wiggins, Commissioner, Water and Sewerage; Regina Wells, Assistant Commissioner; Lillie Madali, Executive Director, Strategy; Allison Fouche, Chief Communications Officer; Brandon H. ... Deputy City Attorney; Shannon Broach, Deputy City Attorney; Roger Bhandari, Division Chief, Deputy Commissioner OES, Deputy Commissioner OLIO		
Additional Support Required	DWM Communications + ATL311, DWM Finance, DWM CUS, OLIO, Clean Water, DWM Procurement, DWM GIS, AIM, Additional Vendors TBD, U.S. Army Corp of Engineers, OCSO Strategy Consultant, OOS Business Analyst, Outside Vendors		
Outputs	<ul style="list-style-type: none"> Plan for New Drinking Water System Restored or replaced pipes, valves, control systems, telemetry, drinking water treatment plants, etc. Communications updates Procurements Job postings and hiring Legal research and recommendations 	<ul style="list-style-type: none"> Progress Reports Creation of SOPs, Process Maps, documentation, etc. Assessments ready for assignment and resource provision Assessments ready for provision of CIP Implementation of Water System Digital Twin Implementation of Sensors Etc. (this list incomplete) 	
In Scope	The analysis of current assets, processes, operations, and performance metrics. The identification of areas for improvement and recommendation of solutions to enhance efficiency, effectiveness, and overall performance.		
Out of Scope	Operational management of DWM		
Interdependencies	Working with US ACE, multiple vendors, etc.	Risks	
Budget/Resources Required	Cost analysis in progress	Targets	



Governance

Atlanta Drinking Water Renewal and Replacement Program





Atlanta Water Advisory Group (AWAG)

Immediately following the major water main breaks this summer, Mayor Andre Dickens asked former Mayor Shirley Franklin to lead a small advisory group of experts on water and city infrastructure. The goal is to learn from past initiatives, like the sewer consent decree program started by Mayor Franklin, and to incorporate best practices from across the country and world.

The Atlanta Water Advisory Group (AWAG) has already met three times. They are giving us valuable advice on how to tackle the significant task of renewing and replacing our aging drinking water treatment and distribution system.



**Mayor Shirley Franklin
(Retired)**
Mayor of the City of Atlanta
(2002-2010)



Dr. Raheem Beyah
Dean, Georgia Institute of
Technology College of
Engineering



Mr. Cleve Fann
VP of Strategy and Support,
Georgia Power



**MG Ronald Johnson
(Retired)**
Former Deputy Commanding
General, U.S. Army Corps of
Engineers
Chief of Staff to President,
Georgia Tech



Katie Kirkpatrick, P.E.
CEO, Metro Atlanta Chamber of
Commerce
Former water engineer



Atlanta Water Advisory Group: Early Key Messages

- **Planning for 100+ years**
 - Recognize the scope and magnitude of the time, effort, and funding required (e.g., 20+ years and billions of dollars) and plan accordingly
 - Growth and change of the city, region, and human behaviors
 - Organizational structure and capability requirements for DWM and this program
 - Program management
 - Funding
- **The drinking water system is just one part of a whole, complex integrated network including wastewater and stormwater**
- **Atlanta's DWM is a differentiator for the city/service area**
- **Serving the region**
 - Consider the implications of our multi-jurisdictional system (includes wholesale and/or retail service to Fairburn, Decatur, Chattahoochee Hills, Sandy Springs, South Fulton, Union City, and Fulton County)
- **Lessons from Sewer Consent Decree program**
 - Up-front approach, structure, embedded capabilities, processes, metrics, accountability, personnel, program/project management, vendor management all critical
 - Critical to sub-divide and prioritize the program correctly
 - This program is different—no consent decree or Federal judge force progress
- **Proactive and prepared**
 - Consider long term strategy for maintenance
 - Increase preparation and proactivity of communications efforts around incidents and major projects and initiatives
 - Think broadly about required actions and network of possible assistance for emergencies
- **Importance of leak detection and other technology**
 - Focus on technology that creates objective, data-driven decision-making for the prioritization of the renewal program (e.g., leak detection), benefiting not just the renewal of infrastructure but the saving of treated water and cyber protection of the system



Atlanta Drinking Water Renewal and Replacement Program: Major Program Elements

- Overall program establishment
- Reporting protocols for leaks and water main breaks
- Leak detection sensor pilot program
- DWM command center for leaks AND other operations
- Internal team to address post recovery of incidents
- Initial drinking water distribution system overall analysis
- Immediate pipe replacement and increased valve maintenance
- Critical infrastructure supply review
- Drinking water plant assessments
- Program and project manager procurement
- Large ($\geq 16''$) main assessment (with U.S. Army Corps of Engineers)
- Medium ($< 16''$) main assessment
- Operations review and improvement

Thank you!

Questions?



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