



Miami-Dade Water & Sewer Department

State of the WASD CIP



Opening Remarks

Leadership Vision



Jay J. Fink, P.E.
Director



Key Leadership Change

Daniella Levine Cava
Mayor

Roy Coley
Chief Utilities and Regulatory Services Officer
WASD, RER, DERM, PROS, DSWM

Jay J. Fink, P.E.
WASD Director

Marisela Aranguiz-Cueto, P.E.
Deputy Director

Amanda Kinnick, P.E.
Assistant Director, Utility Engineering

NEW



Amanda Kinnick, P.E.
Assistant Director
Utility Engineering



Carlos Baro III
*Chief of Utility
Construction - Pipeline*



Daniel Lizarazo, P.E.
AMI
Program Manager



Eli Gutierrez
Permitting and
Compliance Manager



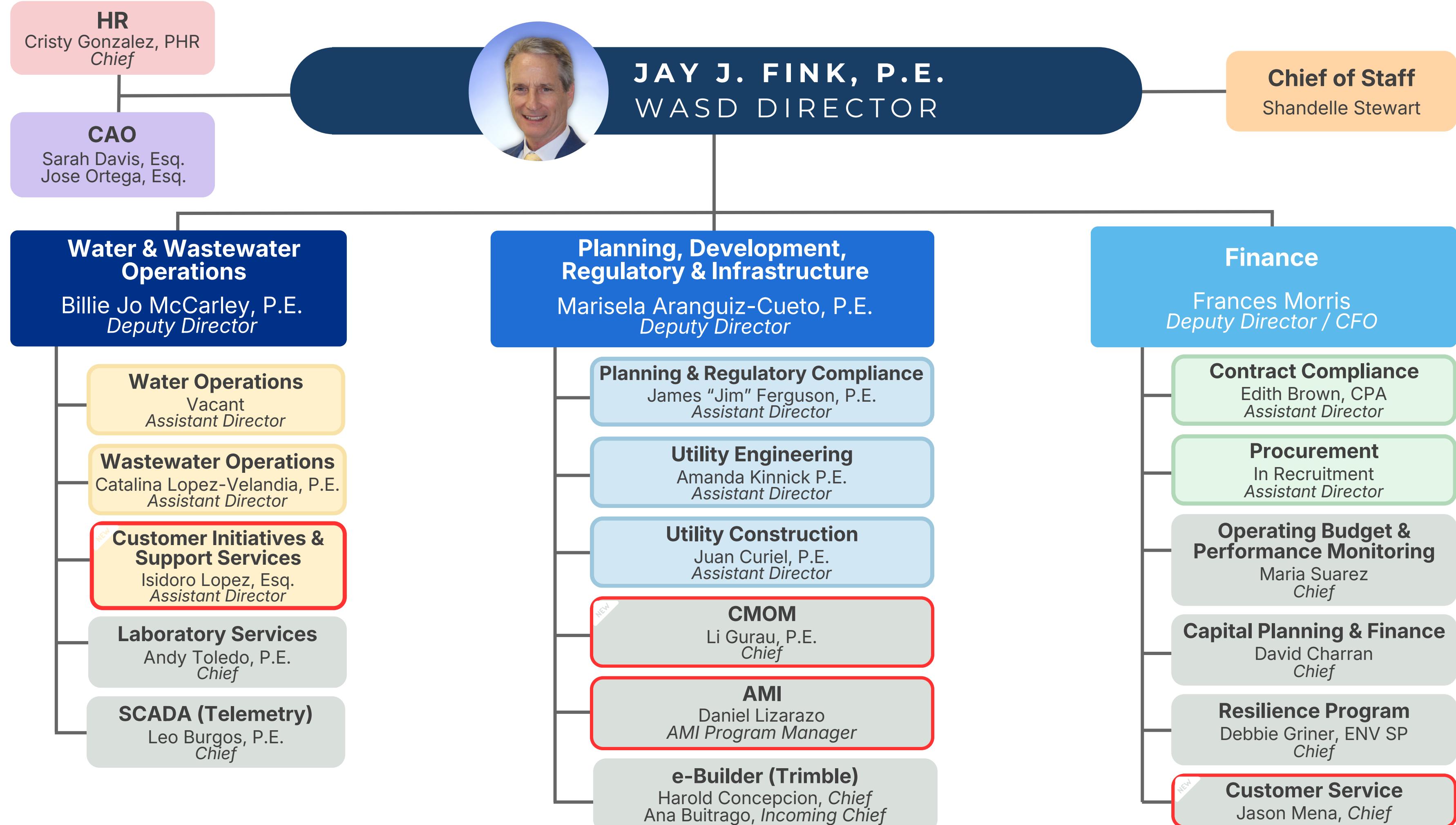
Carlos Pezzotti
Lead Specialist, CIP Strategic
Messaging & Project Coordination



Jeanette Gorgas
Manager, CIP Strategic Messaging
& Project Coordination



Ana Buitrago
Incoming Chief
Project Management Office



400
Total Staff



MARISELA ARANGUIZ-CUETO, P.E.
DEPUTY DIRECTOR

Planning, Development & Regulatory

Jim Ferguson, P.E.
Assistant Director

Planning & Modeling

Rolando Roque, P.E.
Chief

Utilities Development

Sandra Alvarez
Chief

Regulatory Compliance

Ana Caveda, P.E., CSM
Chief

Hydrogeology

Virginia Walsh, PhD
Chief

Utility Engineering

Amanda Kinnick, P.E.
Assistant Director

Treatment Plants

Victor Delgado, P.E.
Chief

Pipeline & Pump Stations

Daniel Lizarazo, P.E.
Outgoing Chief

Surveying

Juan Cordero, PLS
Chief

Utility Construction

Juan Curiel, P.E.
Assistant Director

Treatment Plants

Marcelino Torres, P.E.
Chief

Pipeline & Pump Stations

Carlos Baro III
Chief

Infrastructure Manager

In Recruitment
Chief

Office of the Deputy Director

Alana Fernandez, J.D., LL.M.
Grethel Aguiar, MPA
Jeanette Gorgas
Carlos Pezzotti

AMI

Daniel Lizarazo, P.E.
AMI Program Manager

PMO

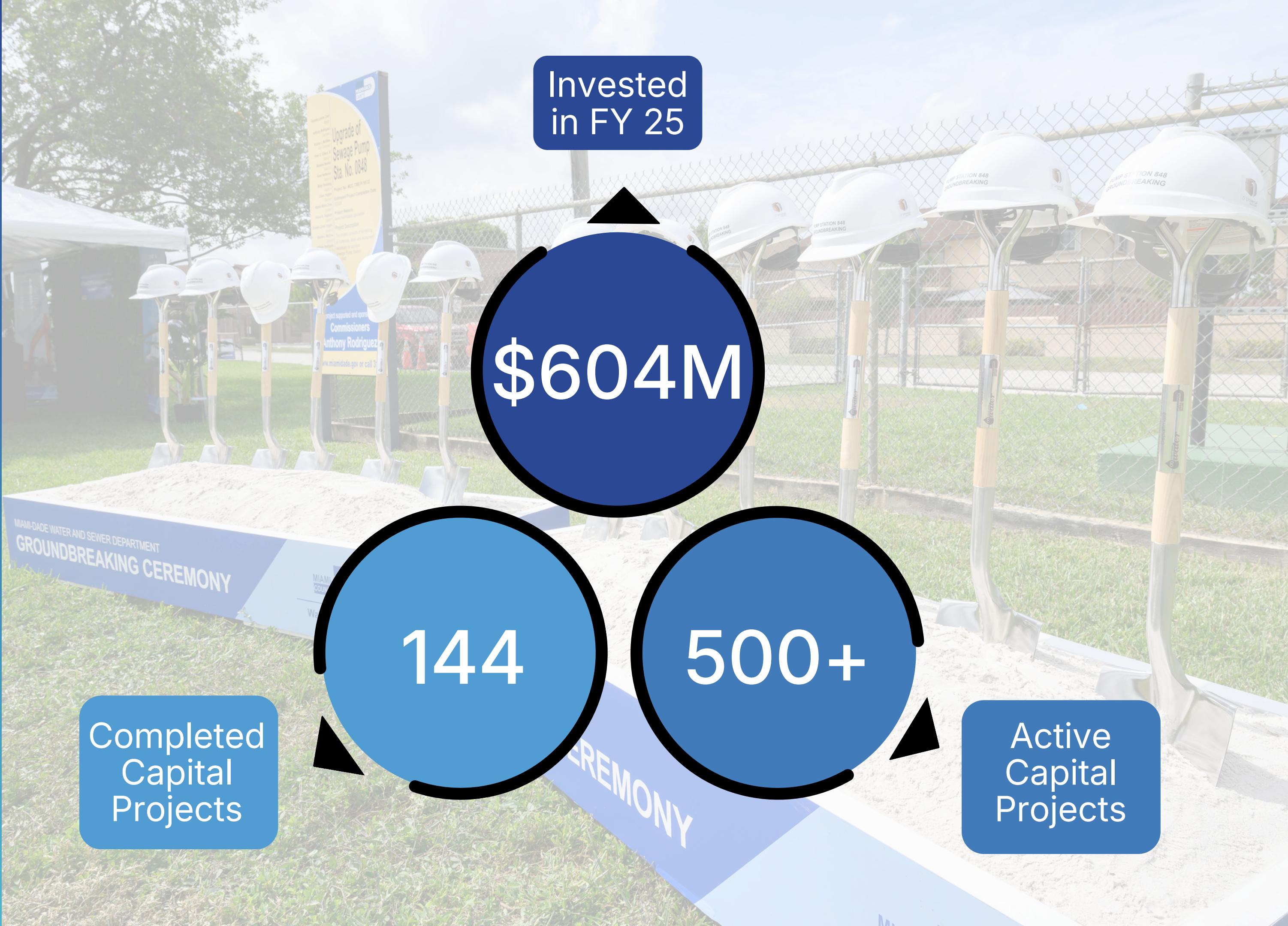
Harold Concepcion, *Chief*
Ana Buitrago, *Incoming Chief*

CMOM/Consent Orders

Li Gurau, P.E.
Chief

CIP Success

FY 2025

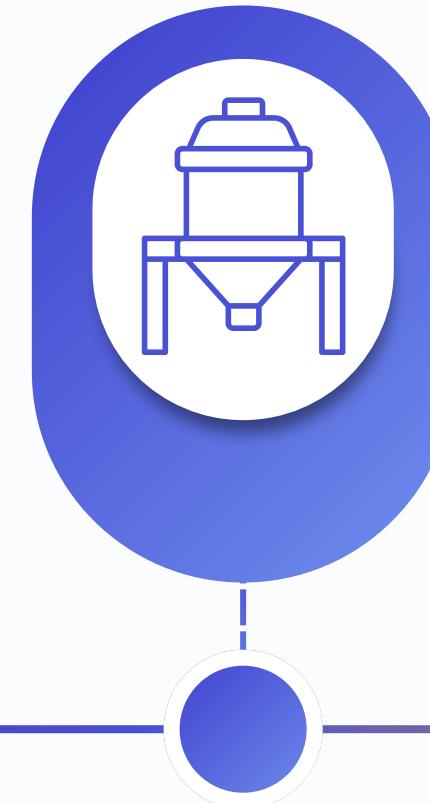


2025 Accomplishments



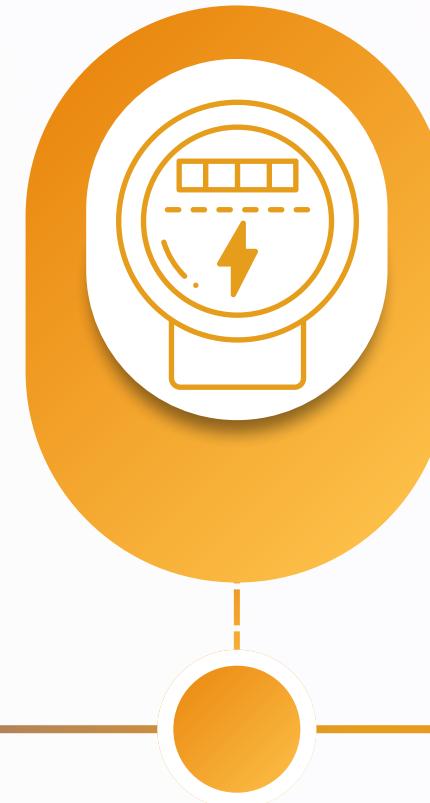
OOL Compliance Extension

Held successful negotiations with FDEP to extend compliance deadline for Ocean Outfall Legislation



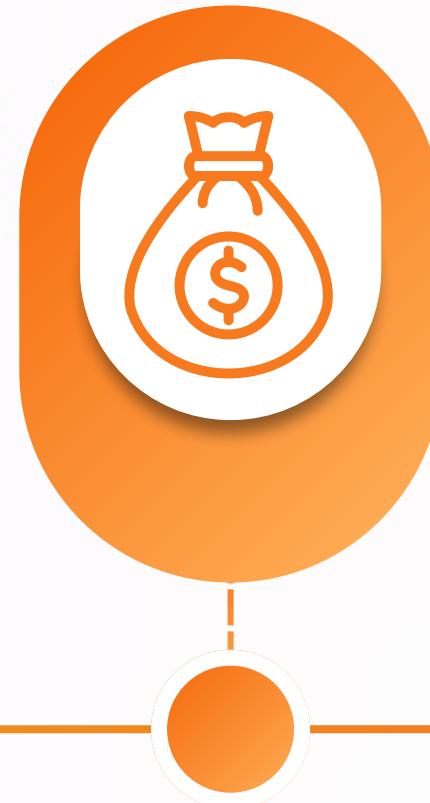
Thickening & Dewatering Facility

Successfully reached beneficial use of the Thickening & Dewatering Facility, the largest project ever undertaken in WASD history



Advanced Metering Infrastructure (AMI)

Received board approval and successfully awarded the contract for AMI to Core & Main



Excellent Fiscal Strength and Ratings

Reached a \$1B bond deal and received AA ratings from all four major credit agencies



Technical “Tech” Talks

New Series

- **WASD Tech Talks** provide a forum for consultants to engage WASD staff through focused technical discussions and to showcase subject-matter expertise relevant to our CIP.
- **Interested in presenting?**
Contact us!

MAJOR MANDATES & FLAGSHIP PROGRAMS



Federal Consent Decree & State Consent Orders

Mandated wastewater upgrades to reduce overflows, eliminate illegal connections, and ensure compliance



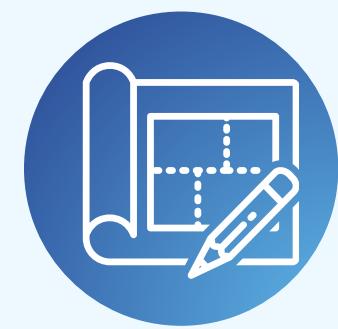
Ocean Outfall Legislation (OOL)

State-mandated elimination of ocean discharges via \$2B in deep injection, reuse, and plant upgrades



Connect 2 Protect

Countywide septic-to-sewer conversions supporting environmental resilience



South District Expansion

Provides infrastructure necessary to support population and economic growth, by augmenting capacity by 16%.



Water Reset

Reinvestment into the water system to address critical needs across treatment plants & the distribution network



Ops Centers

Modernizing operations via new storm-hardened centers to enhance security, reliability, and readiness

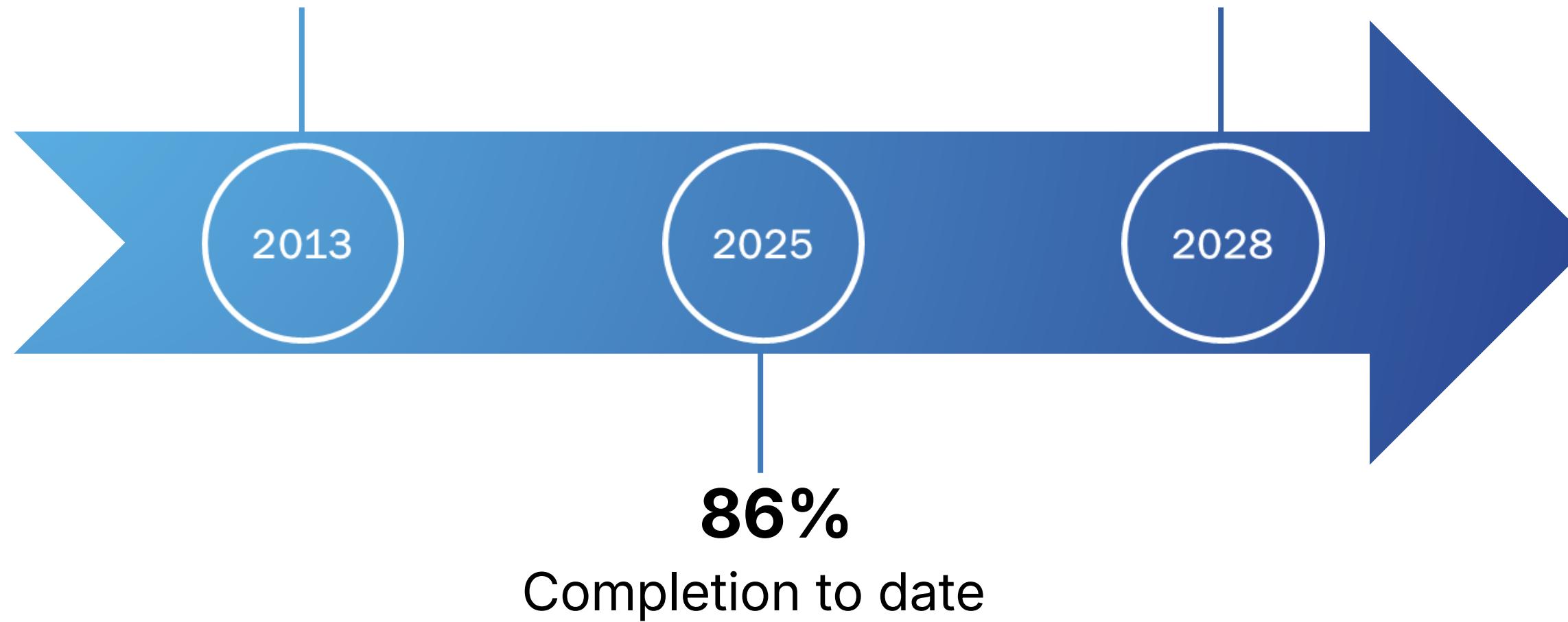
CONSENT DECREE (FEDERAL)

Federally Mandated Consent Decree to

address **Clean Water Act Violations**.

Lodged by U.S. Department of Justice
and authorized by Miami-Dade BCC.

Required to complete **100%**
of Consent Decree Projects



Miami-Dade
County meets its
regulatory, legal,
and **environmental**
obligations

CONSENT DECREE (FEDERAL)

11 Projects



North District
Treatment Plant

29 Projects



Central District
Treatment Plant

12 Projects



South District
Treatment Plant

10 Projects



Collection and
Transmission
System

19 Projects



Pump Station
System

8 Projects
Complete

17 Projects
Complete

8 Projects
Complete

9 Projects
Complete

19 Projects
Complete

FDEP CONSENT ORDERS (STATE)

Central District

Effective April 2, 2025

- **Required plans:** I&I, Effluent Compliance, Spill Prevention
- **Pollution** Prevention Projects offset civil penalties
- **Focus** on proactive system planning and spill prevention

North District

Effective January 5, 2026

- **Pollution** Prevention Projects offset civil penalties
- **FDEP** recognized SSOs as isolated incidents
- **Facility** is in operational condition

South District

Effective January 5, 2026

- **Required plan:** Effluent Compliance
- **Pollution** Prevention Projects instead of penalties
- **Permit** compliance focus

OCEAN OUTFALL LEGISLATION (OOL)

The program stems from a 2008 Florida law designed to protect coastal waters by requiring utilities in southeast Florida to phase out routine ocean discharges of treated wastewater

The initiative includes three major mandates:



Overall Program – **48% Complete**
Total Investment of **\$2.7 Billion**
distributed in 25 projects



Nutrient diversion goals:

- 2,900,000 lbs. of total Phosphorus – **145.1% achieved**
- 59,900,000 lbs. of total Nitrogen – **93% achieved**



Effluent Energy Recovery
Systems to provide **more than**
100 MGD of reuse.

CONNECT 2 PROTECT (C2P)

C2P is Miami-Dade's targeted sewer connection initiative focused on converting properties from **septic systems to sanitary sewer**, reducing pollution and enhancing public health and resilience.



Program Impact

- **9,000+** properties in various stages of design, permitting, or construction
- **1,000+** parcels are now eligible to connect due to public lateral installation

Active Projects

- Little River Sewer Expansion
- Lateral Expansion Program
- El Portal
- D1 C2P Grant Program
- D2 Commercial Corridors
- Schenley Park

Funding Sources

- State Appropriations Grants, such as the FDEP Biscayne Bay Water Quality Improvement Grant
- Building Better Communities General Obligation Bond

SOUTH DISTRICT EXPANSION

16%

Capacity Increase

- Increase in permitted treatment capacity
- Secures support for future population growth

\$740M

Total Investment

- Major capital allocated for plant modernization
- Enhances operational efficiency and reliability

80%

Construction Status

- 6 of 8 sub-projects fully completed
- Final 2 phases are currently underway

WATER RESET PROGRAM



Treatment Plants

- Generator Replacements
- Overhaul of Filters
- Thickener Mechanism Replacement
- Stormwater and Hardening Projects



Transmission + Distribution

- Replacement of aged transmission mains
- Replacement of undersized watermain
- Replacement of Pumps and Motors



Automation + Training

- Automation of Processes
- Employee Training Program
- Certification by Regulatory Agencies



Operations Center: Alexander Orr Water Treatment Plant



Operations Center: Hialeah Water Treatment Plant



Operations Center: Central District Wastewater Treatment Plant



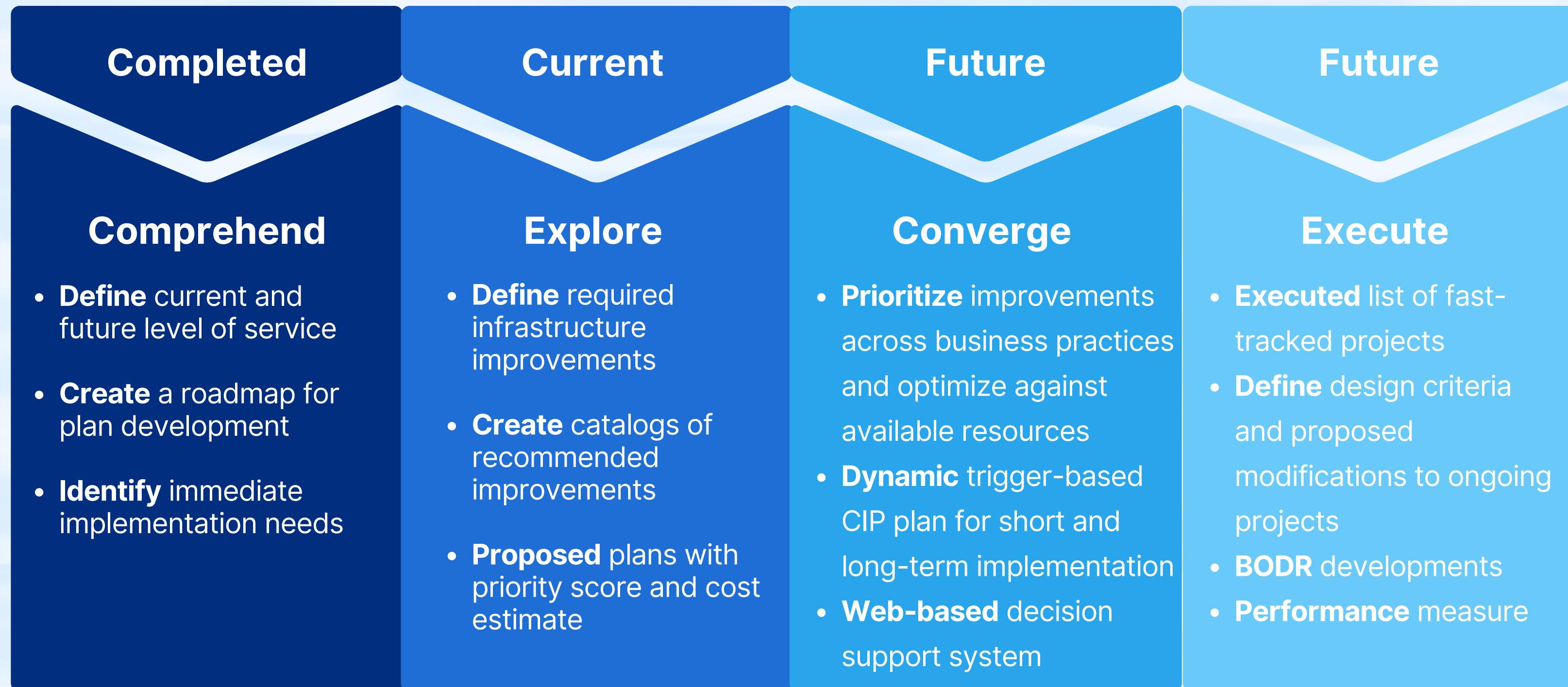
Operations Center: South District Wastewater Treatment Plant



Jacobs

INTEGRATED MASTER PLAN

The master plan will define the capital improvement program
for Miami-Dade County Water and Sewer through 2050



PFAS COMPLIANCE



Bench Testing Complete



Demonstration Testing

- **Preston-Hialeah** GAC, IX, FS, Membranes, Particulate/TOC Pre-treatment
- **Alex Orr** GAC, IX, FS, Membranes, Pre-Treatment



Life Cycle Cost Assessment

- **OPEX** (Media replacement costs, membrane cleaning, etc.)
- **CAPEX** (Vessels, contactors, plant rehabilitation, etc.)



Assessment of Alternative Approaches

- **Preston-Hialeah** GAC, IX, FS, Membranes, GAC Reactivation, Onsite and Offsite
- **Alex Orr** GAC, IX, FS, Membranes, GAC Reactivation
- **South Dade** GAC, IX, Decommissioning



Multi-Criteria Decision Analysis

- **Est. Late 2026-2027**
- **Multi-Criteria Decision Analysis Tech Memo** to be released to the industry
- **Industry Day** to be held to discuss findings

STANDARDS & SPECS

Implementing updated standards that align both CIP and Developer-driven projects with industry best practices

Specification Updates

Status: Project is 60% Complete

Modernization: Adopting CSI MasterFormat 2020 to replace legacy formats

Goal: Aligning technical specs with industry best practices

Industry Consistency

Consolidation: Merging "Capital" and "Developer" standards into a single manual

Uniformity: Applying identical requirements to public and private infrastructure

Clarity: Eliminating conflicting criteria for a smoother design process

Expected Release

Timeline: Full publication within 6–12 months

Deliverables: Updated Design Guidelines, Product Lists, and Drawings

Launch: Immediate release for industry-wide use

Key Takeaway: We invite our consultants to **partner with us** for a successful transition to these new standards

CAD TO GIS

Accelerating Project Closeouts through Digital Integration

Current Capabilities

Standardized templates and workflows

Active consultant training

National standard alignment

Contractor Advantages

Accelerated approvals

Reduced closeout rework

Transparent requirements

What's Next

Adoption on all pipeline projects

Hands-on technical workshops

ArcGIS Pro pre-validation

Key Takeaway: Delivering GIS-ready data is the fastest path to project approval and final closeout

E-BUILDER UPDATES

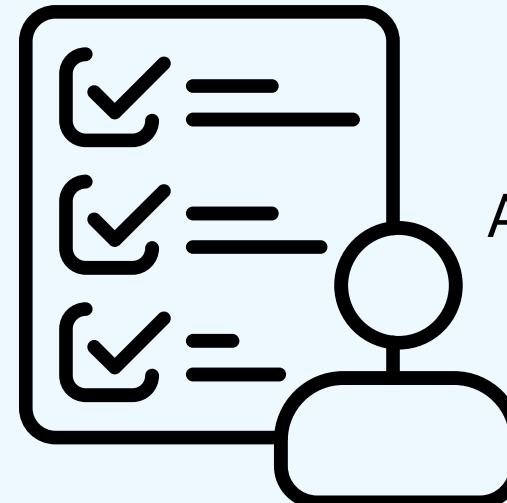
Optimizing workflows and improving user experience

Current Initiative

- **Strategic Review:** With the incoming Chief, we are reviewing all processes to streamline operations
- **System Optimization:** Updates will focus on speed, usability, and reducing manual steps

Share Your Feedback

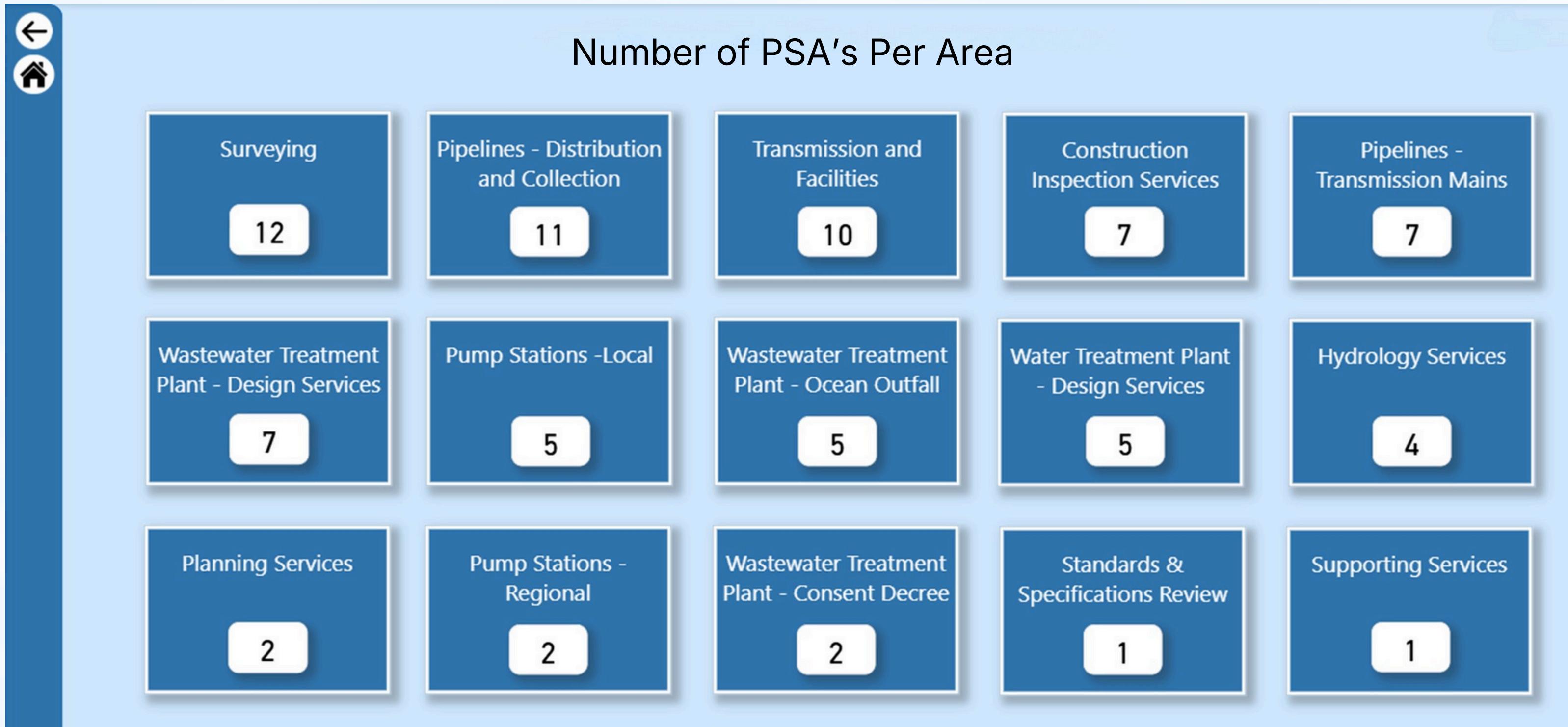
We need your input to drive these changes



A feedback survey will be sent out following this forum

Key Takeaway: Your feedback is critical as we streamline operations under new leadership

PSA CONTRACT CAPACITY DASHBOARD



This is not just a reporting tool; it's a foundation for better alignment, predictability, and collaboration between WASD and our consultant partners.



PARTNERSHIP EXPECTATIONS

Quality & Timeliness

- On-time delivery of submittals
- Complete, coordinated, and biddable document



Expertise

- Strong technical leadership aligned with project complexity
- Value-added recommendations beyond minimum requirements



Escalation

- Timely elevation of issues affecting scope, schedule, or cost
- Solutions-oriented approach with defined paths to resolution



Constructability

- Early and continuous constructability reviews
- Designs informed by field conditions, sequencing, and safety



Key Takeaway: working as one team with shared accountability for outcomes.

Current Challenges



Cost Estimating & Market Alignment



Minimum Qualifications & Procurement Integrity



Professional Judgement & Technical Recommendations

BUDGET CONSTRAINTS

Funding Impacts

- **Reduced FY26 rate increase,** requiring CIP reprioritization
- **Increased consultant fees** affecting available capital

Projects to be Deferred

- **Small Diameter Water Main Replacement**
 - Atlas Q16 A&D
 - Atlas P16 A, B & D
 - Atlas R26 A & B
- **Redundant 16-inch DIP Water Main** Along NW 137th Ave
- **Redundant 48-inch Force Main** Along Biscayne Blvd

Looking Ahead: 2026 —

Enhancing Staff Knowledge & Processes

- **Launch of Tech Talks** to advance technical knowledge-sharing and collaboration
- **Streamlining e-Builder** workflows to improve efficiency and consistency
- **Expanded project management training** to strengthen delivery and oversight

Project Delivery & Portfolio Focus

- **AMI Program** first-year implementation and operational rollout
- **CIP reprioritization** to align projects with strategic, regulatory, and operational needs



UPCOMING PSAs

3

WATER TREATMENT PLANTS

- \$20M Each
- 6 Year Term
- February 2026

Estimated
Advertisement

3

GEOTECH

- \$1-2M Each
- 6 Year Term
- June 2026

Estimated
Advertisement

2+

PFAS

- \$TBA Each
- 6 Year Term
- September 2026

Estimated
Advertisement

3

SURVEY

- \$1M Each
- 5 Year Term
- 2027

Estimated
Advertisement



Thank You

Miami-Dade Water & Sewer Department

State of the WASD CIP
