ACEC/MW
Water Infrastructure Committee
Annual Water/Wastewater Luncheon
August 20, 2019

Mike Harmer, P.E.
Chief Engineer
Theon Grojean, P.E.
Facility Design & Construction Division Manager
WSSC Water
Agenda

- WSSC in Review
- Who’s New?
- Mike’s Corner
- Project Success
- Upcoming Projects
Water System

- 3 Dams / Reservoirs
- 2 Water Filtration Plants
- 14 Water Pumping Stations
- 62 Water Storage Tanks
- 5,600 miles Transmission & Distribution Lines
Sewer System

- 6 Water Resource Recovery Facilities
- 54 Wastewater Pumping Stations
- 5,400 miles Collection Lines
- >60% Wastewater Conveyed to Blue Plains
New logo and tagline

WSSC WATER
DELIVERING THE ESSENTIAL
Who’s New?
James "Jay" A. Price, Jr.  
Deputy General Manager for Operations

Caprecia Poole-Williams  
Chief Procurement Officer

Courtney Edmonds  
Office of Supplier Diversity & Inclusion Director

Mike Harmer  
Chief Engineer

James "Jay" A. Price, Jr.  
Deputy General Manager for Operations
Mike’s Corner

- Contract Compliance
- OSDI Utilization
- Performance – We need your “A” Team
- Initiative – Don’t drop the ball
- QA/QC
- We need you as a partner
Project Success
Patuxent WFP Phase II Expansion
Patuxent WFP Phase II Expansion

- Started construction December 2014
- Substantial completion October 2018
- Increased plant capacity from 56 to 72 MGD
- Replaced Electrical Substation
- Added UV Disinfection System
- New Orthophosphate Building
- New Residuals Handling Facility
- New Carbon Feed System
- $43M
Brighton Dam Office Facility
Brighton Dam Office Facility

- Started construction September 2017
- Substantial completion November 2018
- $3.7M
- Office building, Visitors Center, Permit Room
  4,800 sf
- Educational display areas
- New Remote Fuel Island for service vehicles
Water Storage Facilities
<table>
<thead>
<tr>
<th>Location</th>
<th>Capacity (MG)</th>
<th>Design Firm</th>
<th>Cost (M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clarksburg</td>
<td>1.0</td>
<td>JMT/Landmark</td>
<td>$4.3</td>
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<tr>
<td>Onley</td>
<td>1.5</td>
<td>Gannett Fleming/CBI</td>
<td>$5.0</td>
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<tr>
<td>Shady Grove</td>
<td>3.0</td>
<td>Whitman Requardt/CBI</td>
<td>$9.2</td>
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<tr>
<td>St. Barnabas</td>
<td>2.5</td>
<td>Mott MacDonald/Landmark</td>
<td>$8.9</td>
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<tr>
<td>Brandywine</td>
<td>2.0</td>
<td>Gannett Fleming/CBI</td>
<td>$6.6</td>
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<tr>
<td>Rosaryville</td>
<td>2.0</td>
<td>(FY 2026)</td>
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Broad Creek WWPS

- Six new 750 hp pumps
- New variable frequency drives, motor controls
- Valve vaults and yard piping, force main connection
- New electric building annex
- $32M
- NTP January 2017
  Substantial completion April 2020
Upcoming Projects
Central Lab Expansion
Central Lab Expansion

- RFP for Design Services advertised July 19, 2019
- Original building constructed in 2001
- Performs over 500,000 tests annually
- Existing – 25,680 s.f.
- Expansion – 11,745 s.f. including lab and office space
Parkway Effluent Channel
Parkway Effluent Channel

- Applicable Discharge Permits
  - 12 SW NPDES Industrial Stormwater Permit
  - NPDES Discharge Permit to Surface Waters

- MDE Inspection Findings
  - No violation observed on stormwater permit
  - “Overflows” occurrence on NPDES Surface Waters Permit

- Evaluations Performed
  - Raise channel banks
  - Widen existing effluent channel
  - Install new enclosed channel
  - Directional drill new forcemains
Others

- Western Branch BOA
  - Upgrade and Repairs to Denitrification System
  - Repairs to Clarifier Structures and Internals
  - Air Diffuser Piping and Membrane Replacement
  - Potable Water System Upgrade
  - Plant Water System

- Western Branch Main Substation
  - Design/Build?

- Forensics BOA

- GIS and ECM Services BOA
Questions