ACWA 2020 Annual Meeting
Integrated Planning in Atlanta

August 5, 2020
Delivers 100 MG of drinking water per day
Treats 188 MG of wastewater per day

<table>
<thead>
<tr>
<th>WATER SYSTEM</th>
<th>WASTEWATER SYSTEM</th>
<th>WATERSHED PROTECTION</th>
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</thead>
<tbody>
<tr>
<td>3,028 miles of pipeline</td>
<td>1,900 miles of pipeline</td>
<td>603 miles of pipe</td>
</tr>
<tr>
<td>62,204 valves</td>
<td>47,327 manholes</td>
<td>47,351 inlets</td>
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<tr>
<td>24,385 fire hydrants</td>
<td>22 pump stations</td>
<td>2,349 culverts</td>
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<tr>
<td>18 pump stations</td>
<td>4 water reclamation centers</td>
<td>6,175 outlets</td>
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<tr>
<td>3 water treatment plants</td>
<td>2 water quality control facilities</td>
<td>14 drainage basins</td>
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1.2M Customers Served
$609M Annual Operating Budget
$1.26B 5-YR Capital Improvement Program

1.2M Customers Served
No Stormwater Utility Fee

- Damaged Infrastructure
- Street Flooding
- Water Quality Issues

DWM receives about 1,300 complaints about stormwater issues every year.

Issues are city-wide.
Regulatory Drivers

Consent Decrees
- CSO Consent Decree (Sep 1998) - Project completion by 2008 (achieved)
  - Reduce CSOs from 100/yr. at each of 6 facilities to 4/yr.
  - Achieve water quality standards at point of discharge
- SSO Consent Decree (Dec 1999) - Project completion by 2027 (per amendment approved 2012)
  - Stop 1000+ annual sewer spills
  - Achieve a reliable sewer system
  - Implement MOMS plan

NPDES Permits
- MS4 (Green Infrastructure)
- CSO (Integrated Plan, Green Infrastructure)
- Wastewater - Watershed Protection Plan
- WW & SW--(Metro District Water Resources Plans)
Historic Fourth Ward Park

• In 17-acre park setting
• CD solution saved $15M over the grey infrastructure solution (tunnel and underground storage)
• Brownfield clean-up
• $475M in economic investment followed
Green Infrastructure Strategic Action Plan

- GI Task Force created in 2012
- GI Task Force leverages multiple stakeholders
- Highlighted Atlanta as leader in GI Implementation
- Four action areas including sustainable funding and policy development

Green Infrastructure Goal:

- 225 Million Gallon Reduction of Runoff Annually
  (Annual 5% reduction in volume of runoff from a 1-in rain storm)
Urban Waters Federal Partnership

- Atlanta’s Proctor Creek Watershed one of 19 designated Urban Waters in the US
- Connecting 35 neighborhoods
- Over $100M investment needed to restore watershed and improve water quality
- Opportunity to introduce innovative financing approach
- At least 27 GI and Stream Restoration project opportunities identified
SUMMARY: This project restores a degraded segment of Proctor Creek channelized in concrete in the 1980's. By restoring a natural stream channel and floodplain access, this project will be able to increase storage by over 5 million gallons of water during rain events, protecting downstream communities from flash flooding while also improving water quality and aquatic habitat. In addition, the restored green space will be a community asset providing other ecosystem services for the adjacent community including cleaner air and temperature regulation, as well as proven health benefits associated with proximity to green space and walking trails.
Capacity Relief Ponds at Rodney Cook Sr. Park (Rendering)
The WSP reflects Atlanta’s $350 million investment to address aging infrastructure and create a more sustainable water future by creating a five-mile tunnel to repurpose an old rock quarry as a new raw water reservoir to hold 2.4 billion gallons, increasing the City’s water reserves from 3 to 30 days or more and protecting $100M a day in economic output.
Integrated Water Resources Plan (2020)

Water, Wastewater, & Stormwater Master Plans

- Assess system
- Identify deficiencies
- Regulatory compliance
- Recommend improvements (2070)
Gray-Green Integration

RMR Plan based on 2-yr level storm

- Projects were mainly upsizing or replacing existing gray infrastructure
- Costs developed for each project

Question?? How to incorporate more GI projects to offset some of the gray projects

- Optimize the projects and come up with a combination of both Gray/Green options at a lower cost
Integrated planning approach

- evaluate sustainable solutions (TBL)
- combine both traditional gray infrastructure with green infrastructure
- leverage infrastructure improvements for multiple benefit
- supplement the investments being made in the separate and combined sewer systems
Atlanta Water Equity Task Force

**THE PILLARS OF WATER EQUITY:**

- **WORKFORCE DEVELOPMENT** - Streamline communications and opportunities to reach vulnerable communities.

- **COMMUNITY ENGAGEMENT** - Authentically engage communities in the project planning process.

- **AFFORDABILITY** - Develop DWM’s affordability strategy that balances need to invest in infrastructure with economic impact to customers.

- **CLIMATE RESILIENCE** - Assess the vulnerability and potential effects of climate-related disturbances, while taking steps to better cope with these impacts.
Contact

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