Camden’s Use of State Revolving Funds to Build Green Infrastructure, Eliminate CSO’s, Create Jobs and Become More Resilient

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The Clean Water Utility of the Past

- Permit compliance is the ceiling of aspirations

- Minimal interaction with Community and Regulatory Agencies
The Clean Water Utility of the Future

• Permit compliance is the floor

• The Utility of the Future is a proactive environmental and community service partner
  ✓ Effluent optimization
  ✓ Water reuse
  ✓ Cost efficiency
  ✓ Asset management
  ✓ Reducing carbon footprint/Green energy
  ✓ Green Infrastructure
  ✓ Community service
  ✓ Organizational culture/workforce development
Four Levels/Stages of Utility Investment in Their Communities

• Indifference

• Do No Harm

• Be a Good Neighbor

• Be a Proactive Advocate and Anchor Institution that is Invested in the Quality of Life of our Community
Camden County Municipal Utilities Authority
Camden, NJ

- Services 500,000 customers in Southern NJ
- Design Flow: 80 MGD
- Average Flow: 58 MGD
- Secondary, pure oxygen activated sludge treatment
- Discharges to Delaware River
Using the SRF to Sustain Infrastructure, Environment and User Rates

• CCMUA replaced and upgraded all of the major process units of its treatment plant through the SRF
• Replacing under performing process units results in improved operational performance and reduced O&M costs
• Rate increases avoided by:
  1. Choosing projects for which operating cost savings exceed marginal debt service
  2. Benefitting from lower cost state revolving funds which significantly reduce debt service requirements
Environmental & Economic Benefits Realized Through Use of SRF

• Effluent Quality Improved by 40-50%

• 11,000 dry tons captured in 1999 to 16,000 dry tons in 2018

• Annual User Fee goes up only 4% from $337 to $352 per household, from 1996 to 2019; 40% rate cut in inflation adjusted dollars
Localized Flooding in Camden from a 1-inch rain event
CCMUA’s Resiliency Goals for Camden City

• Eliminate Combined Sewage flooding, for up to the one-inch storm, by December 2020

• Operate the Wastewater Treatment Plant on solar energy and biogas by June 2020

• Create a resilient microgrid for Camden’s hospitals, drinking water plant, schools, fire, police, etc. by December 2022
Camden City Green & Grey Infrastructure Program

• Creation of Phoenix Park, Gateway Park & Cramer Hill Nature Preserve- 3 abandoned brownfields sites converted into riverfront parks for an environmental justice community
• Daylighting of Baldwins Run, an abandoned stream paved over in the 1920’s
• 60 rain gardens planted throughout Camden
• 125 greened acres created and preserved to date
• Replacement of Camden’s worst combined sewer lines
• Expansion of CCMUA’s wastewater treatment plant to receive more stormwater

Total Cost- $60 million
SRF Funding Utilized for Green & Grey Infrastructure Program

• $6M in principal forgiveness

• $54M in low interest (<1%) 30 year loans

• No rate increases required

• Flooding to be eliminated for up to the 1-inch storm by December 2020
Phoenix Park Project - Before...
Phoenix Park Project- After...
Baldwin’s Run Stream Daylighting Project-
Before....
Baldwin’s Run Stream Daylighting Project-

After...
Green Job Opportunities

- **Power Corps** - partnership with AmeriCorps to provide green infrastructure maintenance jobs and life skills training to 180 at-risk young men & women over 3 years.

- **Green Ambassadors** - partnership with EPA, NPS and others to provide green jobs over the summer for Camden high school students with an interest in environmental science.
Conclusions

You must be the change you wish to see in the world.

M. Gandhi

• Clean water utilities can, and should, use their resources to become environmental champions and anchor institutions in the community we serve
• Green Infrastructure provides important triple bottom line benefits and should be part of any CSO mitigation solution
• SRF’s, especially when utilized in innovative, progressive ways, are of invaluable assistance to clean water utilities’ efforts to protect the environment & the public health
Thanks for Listening!

If you would like more information, please contact:

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