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CPRG IMPLEMENTATION GRANTS COMPETITION

COVER PAGE FOR APPLICATION

APPLICANT INFORMATION

Organization: Washington Suburban Sanitary Commission (WSSC Water)

Primary Contact Name: Fred Lees

Phone Number: 301.206.7294

Email Address Frederick.Lees@wsscwater.com

TYPE OF APPLICATION: Individual Applicant

FUNDING REQUESTED: \$49,888,092

APPLICATION TITLE: Maryland National Capital Region One Water Cycle Decarbonization and GHG Reduction.

BRIEF DESCRIPTION OF GHG MEASURES: Describe each GHG reduction measure contained in the application (1-2 sentences each).

- Advanced Aeration Control for Water Resource Recovery Facilities (WRRF) [Western Branch and Seneca]: Optimizing aeration rates at Water Resource Recovery Facilities (WRRF) based on real-time demand to reduce energy and methanol consumption which ultimately results in lower GHG emissions.
- Microgrid: On-site Generation of electricity and carbon sequestration at the Potomac Water Filtration Plant to reduce GHG emissions and provide system resiliency.
- Anacostia Depot Sewer (Wastewater) Thermal and Solar: Implementing Sewer thermal exchange technology that harnesses the thermal energy stored in wastewater to provide heating and cooling and installation of solar panels at the Anacostia Depot.
- Asset Health and Monitoring: Pump Optimization: Adding a pump monitoring system to the larger and more critical pumps to continuously check pump health and reduce energy consumption and provide actionable information related to servicing and maintenance.

SECTORS: Buildings and Clean Energy and Waste

EXPECTED TOTAL CUMULATIVE GHG EMISSION REDUCTIONS

For all proposed measures combined, provide the estimated cumulative GHG reductions:

Estimated cumulative GHG reductions for 2025-2030 (in metric tons) 94,511

Estimated cumulative GHG reductions from 2025-2050 (in metric tons) 969,693

LOCATIONS: Prince George's and Montgomery counties, Maryland, which is all of the Maryland section of the National Capital Region as defined by the Federal government

APPLICABLE PRIORITY CLIMATE ACTION PLAN(S) (PCAP) ON WHICH MEASURES ARE BASED

PCAP Lead Organization(s): Metropolitan Washington Council of Governments (COG)

PCAP Title(s): PRIORITY CLIMATE ACTION PLAN. Washington-Arlington-Alexandria. DC-VA-MD-WV Metropolitan Statistical Area

PCAP Website link(s) (if applicable): <https://www.epa.gov/system/files/documents/2024-03/dc-cog-pcap.pdf>

List of GHG reduction measures and PCAP page reference for each measure:

- Advanced Aeration Control for Water Resource Recovery Facilities (WRRF) [Western Branch and Seneca]: Waste- Reduce GHG Emissions from Waste and Wastewater Treatment. PCAP pages 43-47
- Microgrid: Buildings and Clean Energy - Study, Plan for, and Deploy District Energy and Microgrid Opportunities. PCAP pages 30-33
- Anacostia Depot Sewer (Wastewater) Thermal and Solar: Buildings and Clean Energy - Accelerate the Deployment of Clean and Renewable Energy and Study, Plan for, and Deploy District Energy and Microgrid Opportunities. PCAP pages 27-33
- Asset Health and Monitoring: Pump Optimization: Waste- Reduce GHG Emissions from Waste and Wastewater Treatment. PCAP pages 43-47