District of Columbia Intended Use Plan for

Bipartisan Infrastructure Law

Safe Drinking Water Act Funds Federal Fiscal Years 2023 and 2024

EMERGING CONTAMINANTS

The recent passage of the Public Law 117-58, the "Bipartisan Infrastructure Law" (BIL), also known as the "Infrastructure Investment and Jobs Act", provided significant funding for the modernization and maintenance of an aging infrastructure drinking water system.

The BIL provided a Supplemental Base allotment, a Lead Service Line Replacement allotment, and an Emerging Contaminant allotment to the Safe Drinking Water SRF Program. This document is submitted for fiscal years 2023 and 2024 to identify the projects intended for the Emerging Contaminant allotment.

DC Water proposes to replace unlined cast iron water mains with EPA funding under the emerging contaminant need. Unlined cast iron water mains are known to harbor microorganisms and deplete chlorine residual, thereby allowing accelerated microbial growth. (See reference) The EPA Candidate Contaminant List 5 includes twelve microorganisms. (See reference) Both legionella and mycobacterium have been detected at low levels in some portions of the water distribution system. Although these do not constitute a health risk at these low levels, it is prudent to eliminate any surfaces, e.g., pipe surfaces, that may provide habitat for microbial growth.

The Safe Drinking Water Act (SDWA) Amendments of 1996 (Public Law 104-182) authorize a Drinking Water State Revolving Fund (DWSRF) program to assist public water systems to finance improvements needed to achieve or maintain compliance with SDWA requirements and to protect public health. Although the District of Columbia ("the District") is defined as a State for the purposes of SDWA, Section 1452(j) exempts the District from establishing a State Revolving Fund program. Therefore, the U.S. Environmental Protection Agency (EPA) provides the District's allotment of Federal funds in the form of grants. The District of Columbia Water and Sewer Authority (DC Water) is the grantee for project grants while the DC Department of the Environment (DDOE) and its agent, the U.S. Army Corps of Engineers Office at Blue Plains, can receive funds for oversight and management of these projects.

EPA, DDOE, and DC Water have agreed to this combined Fiscal Year (FY) 2023 - FY 2024 Intended Use Plan. This Intended Use Plan outlines how the combined amount of Federal funding and required matching funds will be apportioned among program and project uses. The Federal Fiscal Year 2023 runs from October 1, 2022 to September 30, 2023; and the Federal Fiscal Year 2024 runs from October 1, 2023 to September 30, 2024.

LONG AND SHORT-TERM GOALS FOR THE USE OF DC GRANT FUNDS

Long-Term Goals

- 1. Eliminate potential habitat for "emerging microbial contaminants" as listed by the US Environmental Protection Agency.
- 2. Provide safe and adequate supplies of potable water by replacing aging small diameter water mains in the distribution system. Equity was part of the prioritization model to emphasis small diameter water main replacement in disadvantaged neighborhoods.
- 3. Maintain compliance with SDWA drinking water standards or other requirements of the SDWA.

Short-Term Goals

- 1. Replacing unlined cast iron small-diameter water main could have following improvements to the system:
 - Improve fire flows through the removal of corrosion by-products from the inside of the pipe.
 - Eliminate lead service by replacing the service connections along with the small diameter water mains
 - Improve water quality
 - Reduce main break
 - Reduce O&M costs
 - Increase system reliability to respond to emergencies

AVAILABLE FUNDS

As there was not an approved FY 2022 BIL SDW PPL/IUP, this document includes funding for the fiscal years of 2022, 2023, and 2024. For purposes of planning, we have assumed FY 2024 DWSRF allotment of approximately \$7,640,000.

DISTRIBUTION OF FUNDS

For FY 2022, 2023 and FY 2024, the available funding and expected usage is as follows:

Available Federal Funds		Grant Dollars
FY 2022 DWSRF Emerging Contaminants (Carryover)		\$7,555,000
FY 2023 DWSRF Emerging Contaminants		\$7,640,000
FY 2024 DWSRF Emerging Contaminants (Estimated Allotment)		\$7,640,000
Total Estimated Federal Funds (FY 2022 – 2024)		\$22,835,000
Project Pool that may be submitted for grants during	FY 2023 & FY 2024	
Small Diameter Water Main Renewal 18A	[FY'23]	\$11,805,000
Small Diameter Water Main Renewal 18B	[FY'24]	\$11,160,000
Small Diameter Water Main Renewal 18C	[FY'24]	\$12,997,000
Small Diameter Water Main Renewal 19A	[FY'24]	\$12,848,000

Small Diameter Water Main Renewal 19B	[FY'24]	\$17,952,000
Small Diameter Water Main Renewal 19C	[FY'24]	\$16,903,000
Total Grant Project Pool		\$83,665,000
Grant awards may not exceed estimated, recovered,	and available grant funds	

Total Estimated Federal and Local Funds Available for FY 2022 – FY 2024	Funds
Estimated Federal Funds for DC Water Projects (100% grant)	\$22,835,000
Estimated Local Funds for DC Water Projects (0% match)	\$0
Total Available Funds for FY 2022, FY 2023, and FY 2024	\$22,835,000

The BIL provides a 0% match for the five years of the enactment.

SELECTION OF PROJECTS TO BE FUNDED

In 1999, EPA in conjunction with DC Water developed a Project Priority Rating System. The Project Priority Rating System uses a system to numerically score drinking water projects based upon their contribution to protecting public health, improving compliance with regulatory standards, and maintaining drinking water reliability, safety and environment. The ranking system includes a provision allowing for funding of lower ranked projects (i.e. for by-passing higher ranked projects) based on exigent circumstances and implementability of the lower ranked projects relative to the higher ranked projects proposed to be by-passed.

The plan identifies expected projects to be funded during the FY 2023 – FY 2024 period. Projects are displayed on the PPL in priority order. The project with the highest priority rating score (i.e., the most important) is listed first. The remaining projects are listed in order of descending score.

A more detailed description of these and future water projects can be found online at DC Water's website under "District of Columbia Water and Sewer Authority: Capital Improvement Program, Approved FY2018–2027, Section V, Capital Programs".

The White House's Justice 40 initiative goals have been factored in and attained. Several of the projects listed have been identified in Disadvantaged Communities as defined by CEJST. Please see attached map.

<u>REFERENCES</u>

Debbie Lee, Calendo Gennaro, Kopec Kristin, Henry, Rebekah, Coutts, Scott, McCarthy David, Murphy Heather. (2021), "<u>The Impact of Pipe Material on the Diversity of Microbial Communities in Drinking Water Distribution Systems</u>" Microbiotechnology, Volume 12 – 2021, doi.org/10.3389/fmicb.2021.779016.

US Environmental Protection Agency, "Contaminant Candidate List (CCL) and Regulatory Determination - CCL 5 Microbial Contaminants" Website https://www.epa.gov/ccl/ccl-5-microbial-contaminants

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