

ANACOSTIA RIVER SEDIMENT PROJECT

BACKGROUND

FOR A CLEANER ANACOSTIA RIVER

The Anacostia River and the land area that drains to the river have a long history of urbanization, industrialization, and agriculture, which has resulted in pollution, poor water quality, and contaminated sediments. Progress has been made on trash reduction by installing trash traps and securing regional agreements that reduce upstream sources. Water quality is expected to improve considerably now that DC Water's Anacostia River Tunnel is in operation (online since March 2018). The tunnel is designed to reduce combined sewer discharges to the Anacostia by 81% during phase 1 and by 98% once phase 2 is completed in 2023.

Cleanup of the river sediments is the focus of the Anacostia River Sediment Project (ARSP) that is being implemented by the Department of Energy & Environment (DOEE). The project is currently on track for a 2019 Interim Record of Decision (ROD) that will identify the cleanup remedy for the river and outline the process for implementation.

OBJECTIVES

- Determine the nature and extent of sediment contamination in the Anacostia River (also known as a Remedial Investigation)
- Evaluate potential human health and ecological risks
- Study the best method(s) to clean up the river sediment (also known as a Feasibility Study)
- Present a proposed cleanup approach for public comment
- Make a final decision on the best sediment cleanup method(s)

BASIC FINDINGS

- The main contaminant of concern is PCBs (polychlorinated biphenyls)
- In most of the river, higher levels of contaminants are found in its deeper sediments, suggesting river pollution came from historic industrial activities that occurred decades ago.
- In some regions of the river, higher levels of contaminants are found close to the surface of the river bottom, suggesting recent and/or ongoing activities have led to contamination.
- Potential ongoing sources of contamination include: releases from contaminated land near the river, stormwater outfalls, sewage overflows, stormwater runoff, and creeks and streams.



COMMUNITY INVOLVEMENT

Public input is essential for developing a comprehensive cleanup remedy and restoration strategy for the river. Throughout this project, DOEE will provide the public with accurate, timely, and understandable information. Residents and stakeholders are encouraged to attend informational meetings and provide feedback on project documents during public comment periods which will occur each time a major project milestone is achieved.

Learn more: doee.dc.gov/anacostiasediment

PROJECT TIMELINE



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HUMAN & ECOLOGICAL IMPACTS

Studies have identified several primary contaminants of concern, including PCBs, pesticides, and dioxins. These contaminants have been identified as possibly harmful to humans and other organisms.

- The Human Health Risk Assessment confirmed that increased fish consumption presents an unacceptable cancer risk. In addition, there is limited risk associated with direct contact with the river bottom.
- The Ecological Risk Assessment found that these contaminants harm benthic invertebrates across the study area, as well as larval fish in several regions of the river. Certain contaminants also bioaccumulate and biomagnify, causing higher concentrations in fish at the top of the food chain.

INTERIM ROD

DOEE intends to release a Feasibility Study (FS) to support an Interim ROD approach, which will:

- Describe interim/early action(s) that address the greatest contaminant areas and exposure potential.
- Specify interim numerical cleanup goals for chemicals of concern.
- Use monitoring and an adaptive management framework that assesses measurable attainment of risk reduction expectations following interim actions.
- Consider lessons learned to design a future remedy and final ROD.

POSSIBLE EARLY ACTIONS

- Early-action remediation (hot spot removal), baseline and long-term monitoring in Main Stem, Kingman Lake, and Washington Channel
- Limit PCBs from Lower Beaverdam Creek (a Maryland stream discharging to the Anacostia River)
- Pilot tests for innovative in-situ technologies/methods (benched river banks, carbon additions/bio amendments).