

# ANACOSTIA RIVER SEDIMENT PROJECT

## ANACOSTIA RIVER SEDIMENT PROJECT (ARSP) BACKGROUND

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 in the river bed. The District has made progress reducing polluted stormwater runoff by installing trash traps, adopting innovative policies, and securing regional agreements that reduce upstream sources. Bacteria levels have improved considerably now that DC Water's Anacostia River Tunnel is capturing over 90% of combined sewer overflows to the Anacostia, with further reductions to come.

Cleanup of the river sediments is the focus of the Anacostia River Sediment Project (ARSP) that is being implemented by the District Department of Energy & Environment (DOEE). The project has issued an Interim Record of Decision (ROD) that identifies the early action cleanup remedies for the most contaminated areas in the river and outlines the process for their implementation. The Interim ROD excludes areas where a particular land-based source of pollution has been identified.

## ARSP OBJECTIVES

- Determine the nature and extent of sediment contamination in the Anacostia River (Remedial Investigation)
- Evaluate potential human health and ecological risks (Risk Assessment)
- Study the best method(s) to clean up the river sediment and control ongoing sources (Feasibility Study)
- Present a proposed cleanup approach for public comment (Proposed Plan)
- Make a final decision on the best sediment cleanup method (Record of Decision)

## BASIC FINDINGS

- The Interim ROD focuses on remediating PCB (polychlorinated biphenyl)-contaminated sediments.
- 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 on-going activities have led to contamination.
- Potential on-going upstream sources of contamination include: inputs from tributaries (especially Lower Beaverdam Creek), contaminated land near the river, stormwater outfalls, sewage overflows, and stormwater runoff.
- Removing or containing the most contaminated sediment can substantially reduce risk to human health and wildlife.



The figure above shows the study area and the 11 EAs that are the subject of this Interim ROD.

## HUMAN & ECOLOGICAL IMPACTS

Studies have identified several contaminants of concern, including PCBs, polycyclic aromatic hydrocarbons (PAHs), pesticides, heavy metals, and dioxins. These contaminants have been identified as possibly harmful to humans and other organisms.

- A Human Health Risk Assessment confirmed that increased fish consumption presents an unacceptable cancer risk. In addition, it determined there is limited risk associated with direct contact with the river bottom.
- An Ecological Risk Assessment found that these contaminants harm benthic invertebrates across the study area, as well as larval fish in several areas. PCBs accumulate in the food chain, causing higher concentrations in fish at the top of the food chain.

## INTERIM ROD

DOEE released a Proposed Plan in late 2019 that supports the Interim ROD, which:

- Specifies interim numerical cleanup goals for chemicals of concern.
- Applies an adaptive management approach that encourages continuous re-evaluation and prioritization of activities to account for new information or changing conditions.
- Describes early actions that address the most contaminated PCB “hot spots” in eleven Early Action Areas (EAAs) located in the Main Stem of the Anacostia River, Kingman Lake, and Washington Channel.
- Estimates that cleaning up the 11 EAA “hot spots” and controlling the major ongoing sources will greatly reduce human health risk from PCBs.
- Uses performance monitoring and adaptive management to assess measurable attainment of risk reduction following interim early actions.
- Considers lessons learned to design and implement remedies and issue a final ROD.

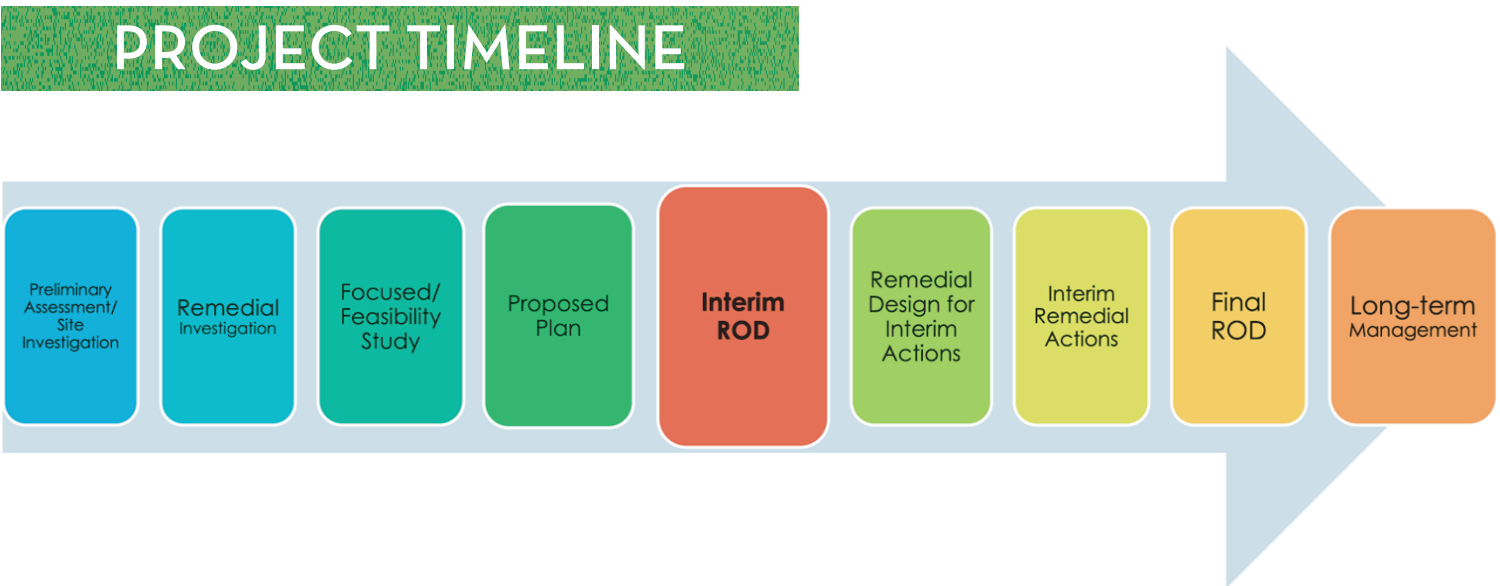
## SELECTED EARLY ACTIONS

- Main Stem: Six EAAs totaling 44 acres, Action – Dredge/Cap PCB hot spots Estimated cost - \$19.5 million.
- Kingman Lake: Three EAAs totaling 6 acres, Action – Dredge/Cap PCB hot spots Estimated cost - \$7.0 million.
- Washington Channel: Two EAAs totaling 27 acres, Action – Cap PCB hot spots Estimated cost - \$9.0 million.
- Baseline and long-term monitoring in the ARSP study area.
- Control sources and eliminate/minimize PCBs from Lower Beaverdam Creek, a Maryland stream discharging to the Anacostia River.

## COMMUNITY INVOLVEMENT GOALS

Public input is essential for developing a comprehensive cleanup and restoration strategy for the River. DOEE will continue to provide the public with accurate, timely, and understandable information. Residents and stakeholders are encouraged to attend informational meetings and remain engaged throughout the process. The complete Interim ROD and supporting documents, including the entire ARSP Administrative Record, can be found at [anacostiasedimentproject.com](http://anacostiasedimentproject.com).

## PROJECT TIMELINE



LEARN MORE:

[anacostiasedimentproject.com](http://anacostiasedimentproject.com)

CONTACT DOEE:

[anacostiariversedimentproject@dc.gov](mailto:anacostiariversedimentproject@dc.gov)