



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: 2004DC61B

Title: Identification of PCB and Chlordane sources in the Anacostia River Watershed

Project Type: Research

Focus Categories: Water Quality, Toxic Substances, Non Point Pollution

Keywords: pollutants, tributary, urban, biomonitoring, Corbicula

Start Date: 03/01/2004

End Date: 02/28/2005

Federal Funds: \$13,742

Non-Federal Matching Funds: \$27,484

Congressional District: Washington DC

Principal Investigator:

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Abstract

The heavily contaminated 10 km Anacostia River estuary is the major water body of the District of Columbia. It runs along the lower third of the District and essentially separates Federal buildings and upscale housing from the poorer and mostly minority communities in the south and west districts. There is a high incidence of cancer and other diseases in this minority community, where there is subsistence fishing in the Anacostia in spite of a fishing advisory. Anacostia resident fish have tumors and dangerous tissue levels of PCBs and chlordane, which are associated with cancer (Pinkney e.a. 2000). Fish that yearly migrate into the Anacostia estuary are also contaminated. The purpose of this program is to identify the watershed sources of bioavailable PCB and chlordane and other toxic contaminants that end up in the Anacostia River estuary.

The objectives of the 2004 study are to conduct the biomonitoring needed to focus on the watershed areas contributing PCB and chlordane contamination and the most serious stream PAH contamination, investigation of possible sources, and to publicize the results in the scientific literature and to the appropriate local agencies. Also to continue the involvement and training of UDC undergraduate students in aquatic research on DC's most important water body.