**Profiles of selected pollutants in Bayou Chico, Pensacola, FL**

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| Assessment of Environmental Pollution and Community Health in Northwest Florida |
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Bayou Chico is an industrialized waterway situated in southwestern Pensacola. It extends north from Pensacola Bay and is fed by three streams that include Jones Creek, Jackson's Branch Creek, and Northeast Branch Tributary. In addition to its industrial base, Bayou Chico provides an attractive waterfront for adjacent residential areas and is used for water sports and fishing. The Bayou is known to be affected by episodes of fecal pollution, and it also suffers from degraded water/sediment quality due to pollution from multiple sources. Current and past activities on the shores of this bayou include barge transport, wastewater treatment plants, dredging, chemical manufacture, shipyards, scrap and metal working yards, petroleum storage and transfer, sawmills, other diverse businesses, and residential neighborhoods. Additionally there are two hazardous waste sites that could be impacting the bayou, its creeks, and nearby Sanders Beach. The American Creosote Works (ACW) Superfund Site is currently an abandoned 18-acre wood preserving plant site. During its operation the ACW released coal tar creosote, pentachlorophenol (PCP), and dioxins to air, to groundwater, and to Sanders Beach via a stormwater ditch. Activities and releases to Bayou Chico have been associated with fish kills, algal blooms, odors, contaminated fish tissues, oil sheens, sewage-contaminated sediments, and degraded benthic fauna and flora. Fish and shellfish (oysters and blue crabs) collected from Bayou Chico contain substantially elevated levels of several contaminants of concern, including dioxins, PCBs, and arsenic.

This study is aimed to determine the profiles of selected pollutants--PCBs, dioxins, PAHs, metals, and PCP--in the sediments of Bayou Chico. Samples from Sanders Beach were also be tested for selected contaminants. The results have been incorporated into a GIS database to provide spatial correlation of environmental data and for follow-up evaluations of potential exposure to COCs via diverse routes. The results will also enable identification of any continuing impacts of the ACW Superfund site and other pollution sources.