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

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| Assessment of Environmental Pollution and Community Health in Northwest Florida |
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At 1063 acres, Bayou Grande is the largest of three urban bayous of southern Escambia County, FL and extends in a westerly direction for about 5.5 miles. Bayou Grande has an unusual pattern of development in that it is bounded on much of its southern bank by Naval Air Station (NAS), Pensacola, and predominantly on the northern bank by residential areas. This basin is the least developed of the three urbanized bayous in Pensacola and contains significant wetlands. Screening level assessment of contaminants in blue crabs (Callinectes sapidus) and oysters (Crassostrea virginica) indicated elevated levels of dioxins and dioxin-like PCBs.

Due to non-representative sampling in Bayou Grande (done mostly on the southern bank owned by NAS, Pensacola) and a limited spectrum of analyses for PCB congeners and none for dioxin/furans, there is incomplete information relative to the geographical extent and degree of toxic chemicals in this bayou. Such information is essential for assessing potential exposure of human populations to toxic chemicals and possible environmental impacts to Pensacola Bay. This project will determine profiles of selected contaminants-PCBs, dioxins, PAHs, and metals--in the sediments of Bayou Grande. The results will be incorporated into a GIS database to provide spatial correlation of environmental data and for follow-up assessments of potential exposure to COCs via diverse routes. The results will aid in a better understanding of the extent and nature of pollution in Bayou Grande, which could guide any future remediation efforts.