

Segment 1007A - Vince Bayou

sediment toxicity

Segment Description

Vince Bayou is a tidal tributary to the Houston Ship Channel/ Buffalo Bayou system, located in Harris County, Texas. Discharges to Vince Bayou are primarily from municipal and industrial facilities plus nonpoint source runoff.

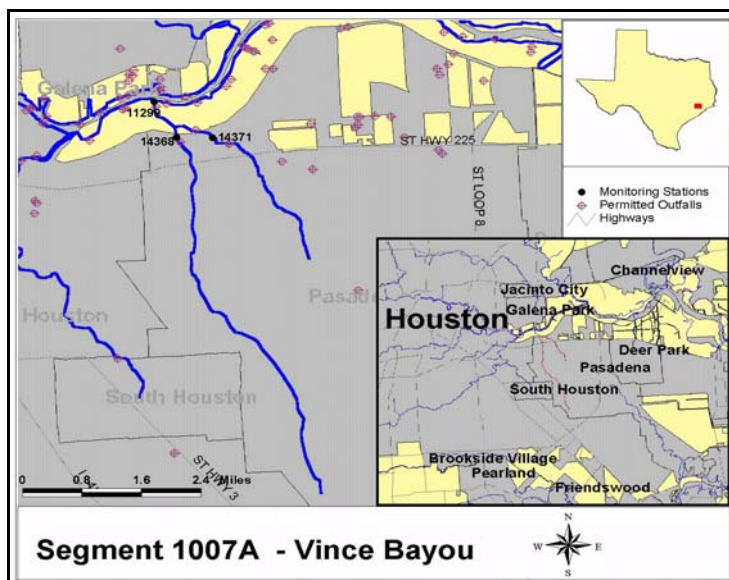
Listing Status

Vince Bayou was identified as partially supporting the aquatic life use, due to ambient toxicity in sediment, on the state's 303(d) Lists for 1999 and 2000. Toxicity was found in sediment in samples from Station 11299 on three separate occasions from October 1992 through August 1993.

Test Results and Toxicity Identification

Significant sediment toxicity was found to occur at Station 14368 during the first two sampling events. As a result, Toxicity identification evaluation (TIE) procedures were conducted on samples from this station. Toxicity was not found at any of the other stations (11299 or 14371) during the course of this study.

The initial TIE procedures indicate that organics (petroleum hydrocarbons) may be the cause of contamination. This conclusion is supported by the detection of several polyaromatic hydrocarbons in the sediment at concentrations well above acceptable toxicity screening levels. Additional TIE procedures are currently being performed to further characterize the cause of the toxicity.



Test Results

Station	<i>Leptochirus</i>		<i>Neanthes</i>	
	# toxic	# tests	# toxic	# tests
11299	0	3	0	3
14368	6	9	1	9
14371	0	2	0	2

Segment Recommendations:

Sediment toxicity tests indicate significant levels of toxicity to invertebrates. The initial identification procedures indicate that an organic (petroleum hydrocarbon) is responsible for the observed toxicity. Additional sampling should be conducted to obtain samples in order to better define the causative agent.