

NOAA Hazardous Waste Site Report

Williams Property (II-24)
Cape May County, New Jersey
April 13, 1984

Location and Nature of Site:

The Williams Property site is a 5.6-acre, abandoned toxic waste dump site located in a rural-agricultural region (Figure 1). In 1979, 250 drums of solvents and other hazardous waste (e.g., chloroform, benzene, methyl isobutyl ketone, tetra-chloroethylene, dichlorobenzene, and mercury) were discovered dumped and leaking on the site (Figure 1). The liquid chemicals drained into the underlying sandy soil resulting in high levels of contamination in the shallow Holly Beach aquifer. The extensively contaminated soil denuded the area of vegetation. All of the drums and 1200 cubic yards of contaminated soil were removed by actions taken by of the New Jersey Department of Environmental Protection (DEP).

Proximity of Chemical Hazard to Marine Resources:

This site is within 400 feet of a fresh water wetland known as the Timber Beaver Swamp Fish and Wildlife Management Area, and within 3500 feet of a coastal wetland in the Great Sound. The contamination of the Holly Beach aquifer six feet below ground level is feared to have contaminated the low Cohausey aquifer, a major aquifer recharge area serving potable water sources for about 60% of Cape May County. The Cape May County Park complex is within 1.1 miles of the site, and annually serves over 12,500 people with its fishing, swimming, camping, and boating resources.

Marine Resources at Risk:

The fresh and saltwater marshlands in this area contribute to the productivity of the nearshore fisheries of the region (Table 1). Anadromous fish migrate through the Great Sound/Intracoastal Waterway system during the early spring on their way to freshwater spawning grounds. The adults return to the more saline estuarine and marine areas. Juvenile fish, hatched in the spring, remain in the freshwater areas of the rivers until the late summer and early fall when they also migrate back into the estuaries and ocean.

Great Sound is an important recreational and commercial fishery area for many finfish and shellfish species, and is a nursery area for shellfish and non-anadromous finfish. Hard clams are especially important in this area.

Wading birds, shorebirds, and wintering waterfowl are found in the Intracoastal Water north of Great Sound.

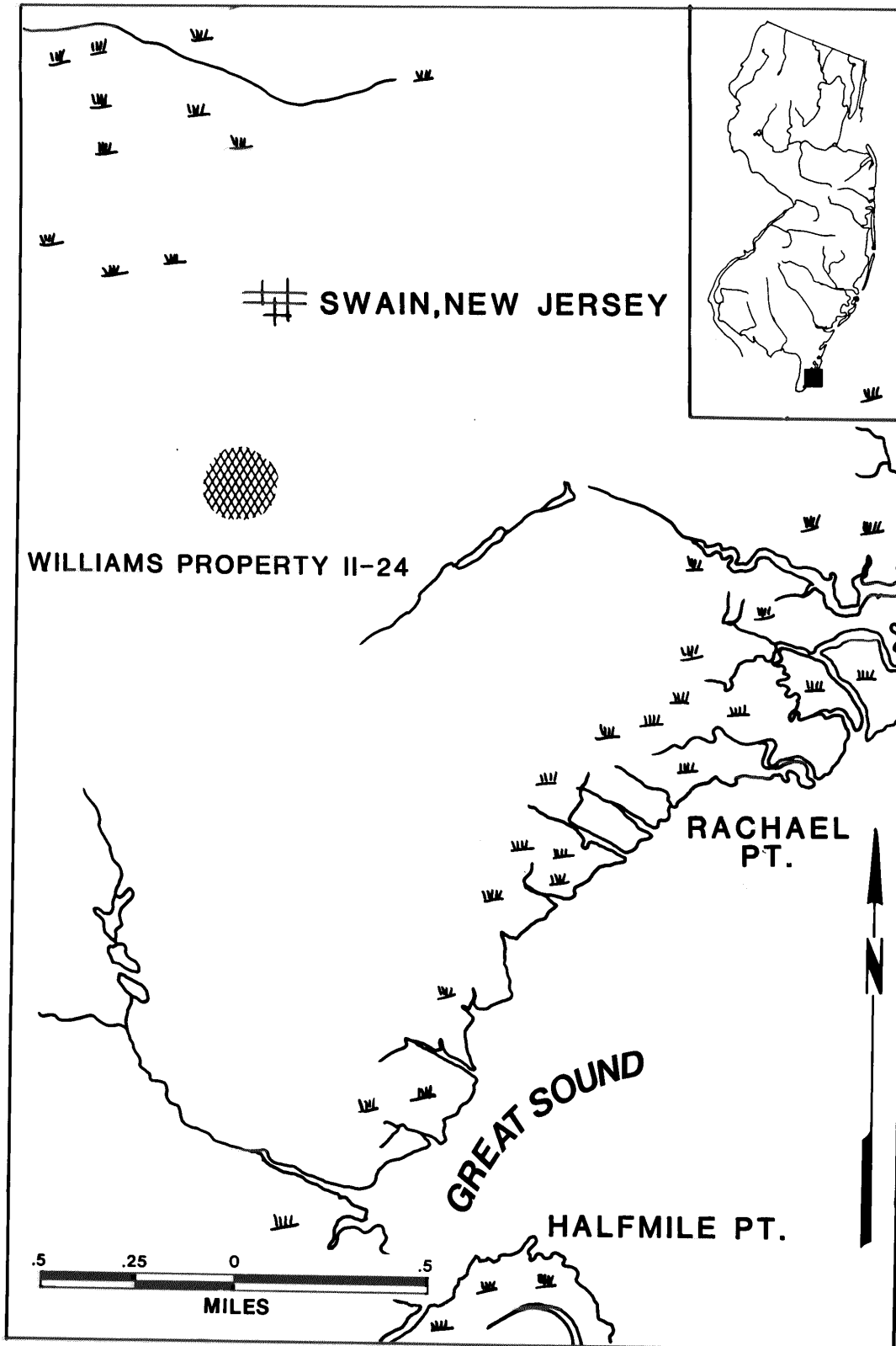


FIGURE 1. Site location.

The Marmora Coastal Wetlands are located to the north and south of Great Sound, within three to six miles, respectively.

Table 1. Fishery resources of Great Sound (1,2,4).

Finfish Species	Adult Habitat	Spawning Area	Nursery Area	Commer. Fish.	Rec. Fish.	Migr. Route
<u>Anadromous</u>						
Alewife	x					x
Blueback herring	x					x
Shortnose sturgeon						x
Atlantic sturgeon						x
Striped bass	x			x	x	x
Gizzard shad	x					x
<u>Non-anadromous</u>						
<u>Atlantic</u>						
menhaden	x			x		
White perch	x			x	x	x
Flounder	x		x	x	x	
Bluefish	x			x	x	
Atlantic croaker	x		x			
Spotted seatrout	x	x				x
Black Drum		x				x
Silver perch		x	x			x
Bay anchovy	x	x				
Hake	x				x	x
Spot	x					x
<u>Shellfish</u>						
Blue crab	x	x	x	x	x	
Hard clam	x	x	x	x	x	
Eastern oyster	x	x	x	x	x	

This site is within wintering range of the bald eagle which nests in Cumberland County.

Summary of Site-Related Actions:

Analysis of groundwater samples show high concentrations of various organic and non-organic chemicals. The State of New Jersey has conducted drum and soil removal operations at the site. A Remedial Action Master Plan is being prepared by the U.S. Environmental Protection Agency to consider future cleanup alternatives.

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References:

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5. Zich, H. E., 1977. The Collection of Existing Information and Field Investigation of Anadromous Clupeid Spawning in New Jersey. New Jersey Department of Environmental Protection Misc. Report No. 41.
6. U.S. Environmental Protection Agency, 1983. Site Data Report. May 12, 1983.
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