

NOAA Hazardous Waste Site Report

Brick Township Landfill (II-73)  
Brick Township, New Jersey  
April 13, 1984

Location and Nature of Site:

The Brick Township Landfill is an inactive, 25-year old, 50-acre landfill with five 10,000-gallon storage tanks and four liquid waste lagoons situated on a marshy area near Saw Mill Creek (Figure 1). It is estimated that over 1.5 million gallons of bulk liquid (wastes equivalent to 10,000 55-gallon drums) plus 1,900 55-gallon drums of waste are contained within the site. Monitoring wells on-site indicate high concentrations of organic solvents (e.g., benzene, chloroform, 1,2-dichloroethane, chlordane, heptachlor), as well as high concentrations of heavy metals and the presence of volatile organics and pesticides.

A proposed school across from the site was not built due to health concerns about hazards from this site. Ground- and surface waters on site have been condemned.

Proximity of Chemical Hazard to Marine Resources:

The Brick Township Landfill is located in a marsh drainage area which forms Sawmill Creek 0.5 miles to the east. Sawmill Creek runs into the Manasquan River, a coastal wetland two miles to the east. EPA Region II Files do not indicate that sampling of Sawmill Creek or the marsh have been taken. Groundwater and lagoon samples indicate the presence of volatile organic solvents and pesticides and high concentrations of heavy metals.

Marine Resources at Risk:

The site is within 5,000 feet of the Manasquan Wildlife Management Area and impacts the Manasquan River via sheet flow through a freshwater marsh area (Saw Mill Creek). The Manasquan River discharges into the Atlantic Ocean five miles downstream from the site.

Anadromous fish migrate past the Manasquan Inlet 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. The Manasquan River does not support any confirmed runs of anadromous fish (5) (Table 1).

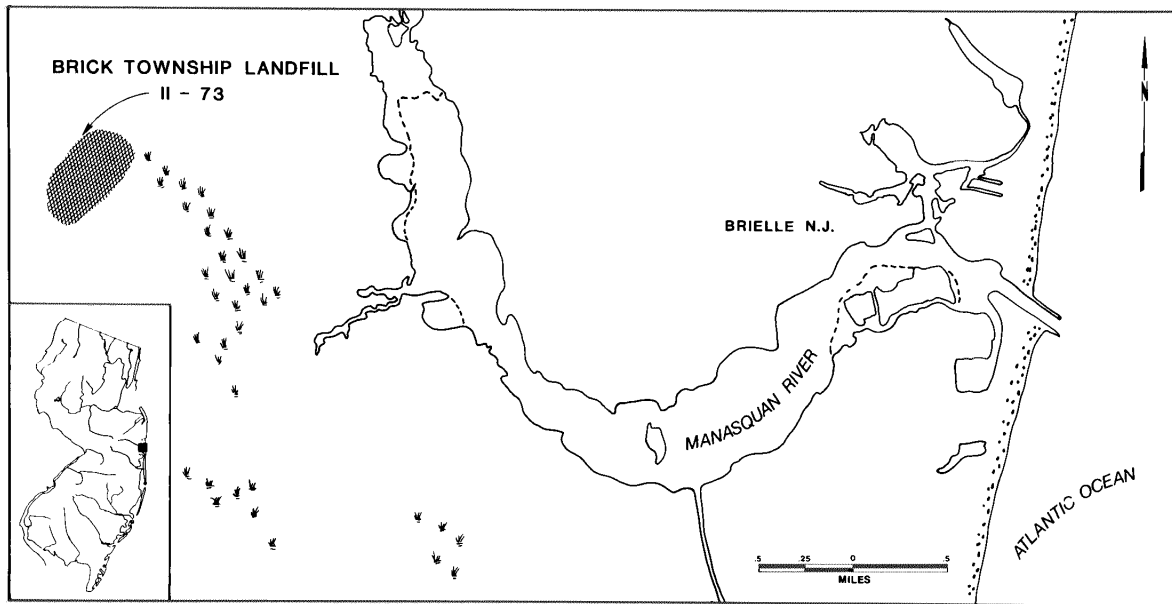


FIGURE 1. Site location.

Table 1. Fishery Resources of the Nearshore Waters  
in the Vicinity of Manasquan Inlet (1,2,4).

Finfish Species	Adult Habitat	Spawning Area	Nursery Area	Comm. Fish.	Rec. Fish.	Migr. Route
<u>Anadromous</u>						
Alewife	X					X
Blueback herring	X					X
Atlantic sturgeon						X
Striped bass	X				X	X
Gizzard shad	X					X
<u>Non-anadromous</u>						
Atlantic menhaden	X					
White perch	X				X	X
Flounder	X		X		X	
Bluefish	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	
Spot	X				X	
<u>Shellfish</u>						
Blue crab	X	X	X		X	
Hard clam	X	X	X		X	
Eastern oyster	X	X	X		X	

The Manasquan River supports recreational fishing and is probably a nursery area for marine fish and shellfish. This area is adjacent to two nesting sites of the bald eagle.

#### Summary of Site-Related Actions

In 1982, a New Jersey Department of Environmental Protection (DEP) Consent Order permanently closed the facility. A Preliminary Closure Plan is being reviewed by DEP. The Township has complied with the order by filling in the open pits, installing a passive gas venting system and drilling an off-site monitoring well on the proposed school site.

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References:

1. National Marine Fishery Service, 1974. Anglers Guide to the United States 2. Atlantic Coast.
2. U.S. Fish and Wildlife Service, 1980. Atlantic Coast Ecological Inventory
3. Breder, C.M., and D.E. Rosen, 1966. Modes of Reproduction in Fishes, TEH Publications.
4. Research Planning Institute. Environmental Sensitivity Index - New Jersey. Unpublished.
7. 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.
8. U.S. Environmental Protection Agency, 1983. Site File Report. May 12, 1983.
- 9 . New Jersey Department of Environmental Protection, 1983. Hazardous Waste Site Report. August 1983.