NOAA Hazardous Waste Site Report

Sayreville Landfill (II-59) Sayreville, New Jersey April 13. 1984

Location and Nature of Site:

The Sayreville Landfill site is an inactive landfill situated on a five to eight degree slope draining into brackwish water wetlands which feed the South River, a tributary of the Raritan River (Figure 1). The runoff collection system for this site is not maintained. Over 500 drums are allegedly stored on site. Thirty drums were sampled prior to 1982 and were found to contain para-ethyl toluene and pentachlorophenol. These particular drums were removed by the generators of those wastes. The Sayreville and Perth Amboy well fields are located within three miles of this site and serve over 65,000 people. These wastes are clearly contaminating nearby wetlands.

Proximity of Chemical Hazard to Marine Resources:

The landfill is in a wetlands bordered on three sides by the South River, a tributary of the Raritan River. The predominant contamination of the South River at this location would be from municipal landfill leachate. The topography of the Sayreville Landfill site allows contaminated surface water and groundwaters to flow directly into the brackish wetlands of the tidally-influenced South River. Wastes disposed of eight to ten feet below the seasonal groundwater table which is five feet from the ground surface are contaminating tidal waters.

Marine Resources at Risk:

The Raritan River and nearby estuaries support commercial and recreational fisheries, and are spawning and nursery areas for many marine organisms.

The southern shores of Raritan Bay and Sandy Hook Bay are important commercial and recreation harvesting areas for shellfish and finfish.

The Raritan River is a spawning area for alewife and blueback herring and, at one time, also was a striped bass and American shad spawning area (6). The Raritan Bay area is a nursery area for many fish and shellfish.

Tidal wetlands are present throughout the lower parts of Raritan River and in some areas of the southern shore of Raritan Bay.

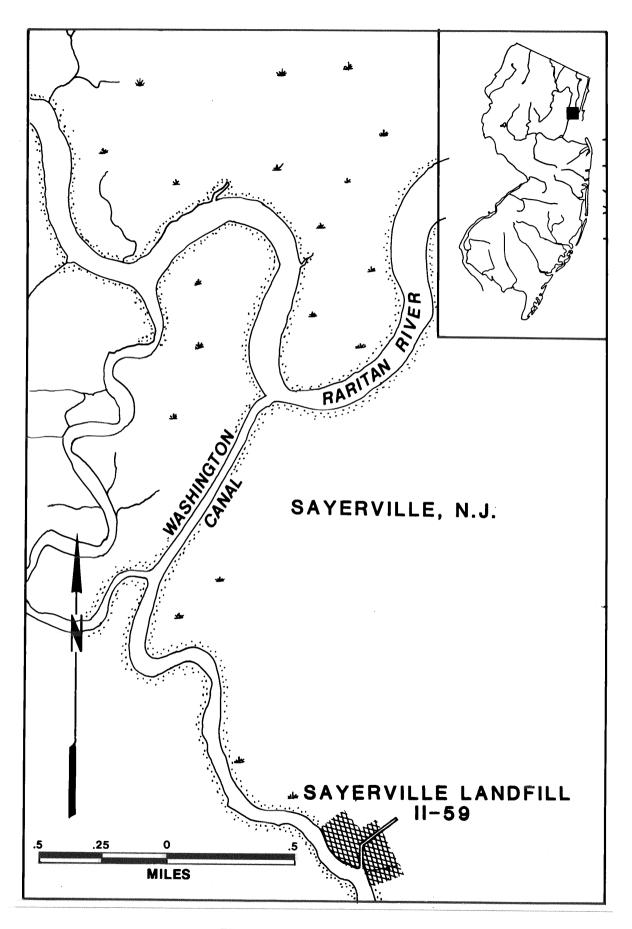


FIGURE 1. Site location.

Table 1. Fishery Resources of the Raritan River and Raritan Bay (1, 2, 3, 5)

Finfish						
Species	Adu1t	Spawning	Nursery	Comm.	Rec.	Migr.
	Habitat	Area	Area	Fish.	Fish.	Route
Anadromous						
Alewife	x	x	x	x	x	
Blueback herring	x	x	x	x	x	x
American shad	x					x
Striped bass	x			x	x	
Non-anadromous						
White perch		x	x	x	x	x
Flounder	x					
Northern kingfish	x					•
Weakfish	x				x	
Bluefish	x				x	
Shellfish						
Hard clam	x	x	x	x	x	x
Soft shell clam	x	x	x	x	x	x
Blue crab	x	x	х	X	x	x

Great blue herons and ospreys nest at Gateway National Recreational Area.

The following State and Federal Management Areas are located on Raritan Bay near this site:

Cheesequake State Park Gateway National Recreation Area

7 miles downstream 15 miles downstream

Summary of Site-Related Actions:

The New Jersey Division of Criminal Justice indicted two persons in connection with dumping of hazardous wastes at this site. The New Jersey Department of Environmental Protection (DEP), as of May 1983, was continuing its investigation of other parties associated with dumping hazardous wastes at this site. Sampling of the site in 1981 by the DEP confirmed that the landfill had contributed to contamination of the South River.

NOAA Reviewer: Gary Ott, SSC - U.S. Coast Guard District III

(212)668-7152 FTS 664-7152

EPA Contact: Ray Basso

(212) 264-2598

References:

- 1. National Marine Fisheries Service, 1974. Anglers Guide to the United States 2. Atlantic Coast.
- 2. U.S. Fish and Wildlife Service, 1980. Atlantic Coast Ecological Inventory.
- 3. Berg, D.L., and J.S. Levinton, 1984. The biology of the Hudson-Raritan estuary, with emphasis on fishes. Department of Ecological Evolution, State University of New York.
- 4. Breder, C.M. and D.E. Rosen, 1966. Modes of Reproduction in Fishes. TFH Publications.
- 5. Research Planning Institute. Environmental Sensitivity Index New Jersey. Unpublished.
- 6. 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.