

**Higgins Farm**  
**Franklin Township, New Jersey**  
**Region 2**  
**NJD981490261**

**Site Exposure Potential**

The Higgins Farm site covers 30 hectares in Franklin Township, New Jersey (Figure 1) and is currently being used to raise cattle. In 1985, the New Jersey Department of Environmental Protection discovered elevated levels of chlorobenzene in a residential well near the site. Subsequent investigations revealed buried drums at the farm 12 meters from the contaminated well. In 1986, 50 drums were excavated, along with visibly contaminated soil in the area (EPA 1986). Another NPL site, Higgins Disposal Service, is nearby.

The site rests on a plateau that is drained by streams to the northeast, southeast, and southwest. The closest surface water body is Carters Brook, 600 meters east of the site (EPA 1986), which runs for 5 km before discharging into Heathcote Brook. Heathcote Brook flows under the Delaware and Raritan Canal via a culvert and into the Millstone River

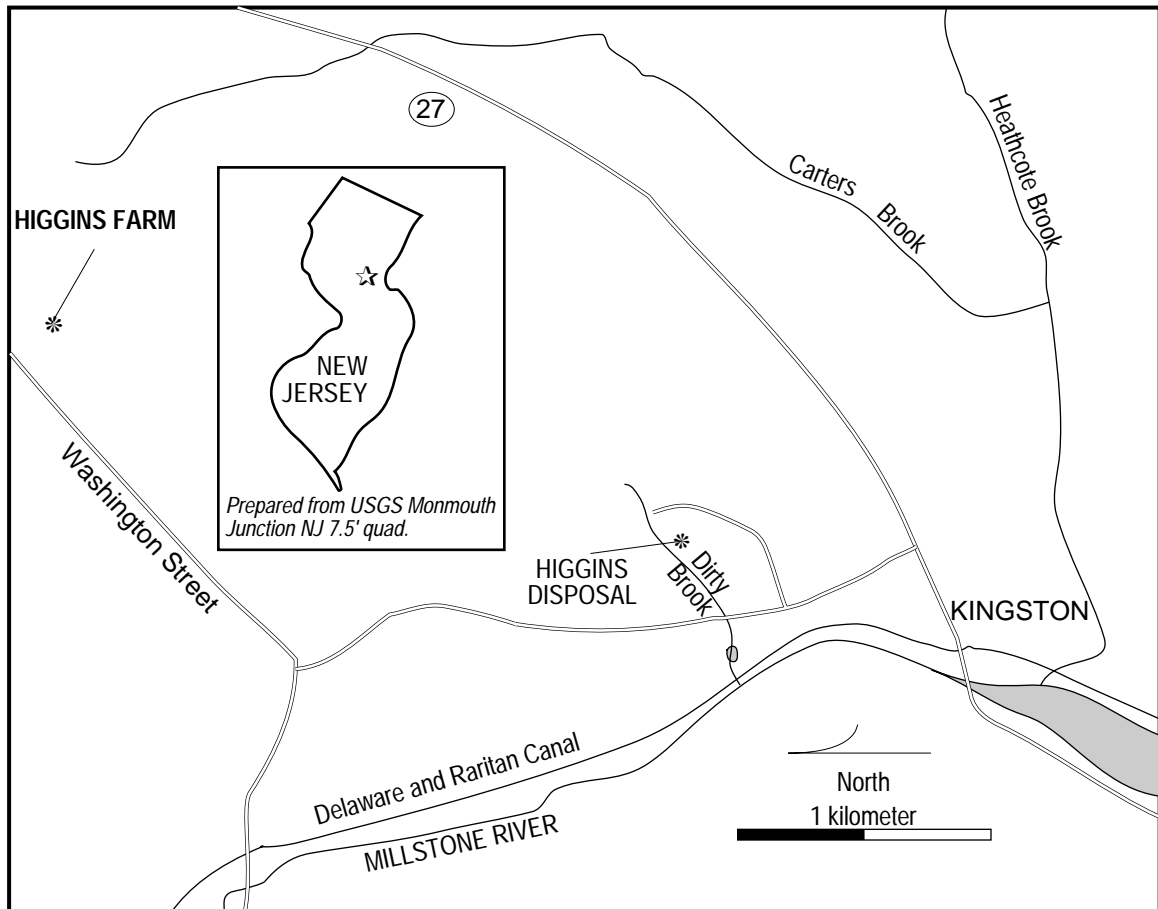


Figure 1. The Higgins Disposal site in Kingston, New Jersey.

7 km below the site. The Millstone River flows for 23 km before it enters the Raritan River, which empties into Raritan Bay 35 km below the confluence with the Millstone (USFWS 1980; USGS 1981a,b).

Possible contaminant migratory pathways to NOAA trust resources are surface water runoff and groundwater discharge to Carters and Heathcote brooks.

**Site-Related Contamination**

The contaminants of concern to NOAA at the site include trace metals, pesticides, dioxins, furans, and volatile and semi-volatile organic compounds. Analyses of soils remaining in the excavation area revealed contamination by dieldrin, endrin, arsenic, dioxins, furans, bis(2-ethylhexyl)phthalate, and pentachlorophenol. In addition, groundwater in the wells near the site has been contaminated by volatile organic compounds. No information was available on contaminant concentrations (EPA 1986).

**NOAA Trust Habitats and Species in Site Vicinity**

Carters Brook and Heathcote Brook are small, continuously flowing, low-gradient streams. Carters Brook is an average of three meters wide and 0.06 meters deep. The substrate is sandy and the water quality is somewhat degraded due to acidic soils. The lower reaches of Heathcote Brook has an average width of 2 meters and depth ranging from 0.3 to 0.6 meter. The substrate consists of sand. The creek has generally low water quality and fish kills in the creek were reported in the late 1970s. The Millstone River is a slow, continuously flowing, low-gradient riverine system. Width and depth range from 12 to 15 m and 0.3 to 2 m, respectively. The substrate consists of silt. Water quality is degraded in the stretch of the river adjacent to the town of Kingston (Stuart 1989).

Millstone River supports runs of blueback herring and alewife and provides both spawning and nursery habitat. Neither species has been documented in Heathcote and Carters brooks and they are not expected to use the streams due to the culvert under the Delaware Raritan Canal. American eels have been documented in the Millstone River and in Carters and Heathcote brooks (Table 1) (Stuart 1989).

Table 1. NOAA trust resource use of the Millstone River and Dirty Brook (Stuart 1989).

Species	Carters Brook	Heathcote Brook	Millstone River
alewife			S,N,M
American eel	A	A	A,M
blueback herring			S,N,M
S : Spawning area; N : Nursery; A: Adult area; M: Migratory route			

**Response Category:** Federal Fund Lead

**Current Stage of Site Action:** RI/FS Workplan

**EPA Site Manager**

Jim Schmidtberger	212-264-6479
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**NOAA Coastal Resources Coordinator**

John Lindsay	404-347-5231
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## References

Stuart, R., biologist, New Jersey Bureau of Freshwater Fisheries, Atlantic City, personal communication, January 12, 1989.

EPA. 1986. Hazardous Ranking Score worksheets and documentation for Higgins Farm, Franklin Township, New Jersey. Edison, New Jersey: U.S. Environmental Protection Agency, Region 2.

USFWS. 1980. Atlantic coast ecological inventory: Newark. Washington, D.C.: U.S. Fish and Wildlife Service. 1:250,000 scale map.

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USGS. 1981b. Monmouth Junction, New Jersey, 7.5 minute series quadrangle. Washington, D.C.: U.S. Geological Survey.