

**Potter's Septic Tank Services Pits
Maco, North Carolina
Region 4
NCD981023260**

Site Exposure Potential

Potter's Septic Tank Services pits occupy 0.2 hectares in a residential area near Maco, North Carolina (Figure 1). From 1969 through 1976, Potter's Septic Tank Services used four on-site pits for the disposal of liquid, solid, and semi-solid wastes, including waste oil from spills, creosote, and sludge.

In August 1976, the U.S. Coast Guard was notified of an oil spill on Rattlesnake Branch, a small tributary stream of Hood Creek near Maco. This spill was traced back to the Potter's Septic Tank Services pits. Approximately 75,000 liters of waste oil had spilled from one of the pits into Rattlesnake Branch and the surrounding wetlands. Another 75,000 liters of waste oil were removed from this pit, and unknown amounts of oils, sludges, and contaminated soils were removed from the other pits. In 1983, trace metals and VOCs were detected in on-site soil, sludge, and groundwater. In the spring of 1984, 1,400 metric tons of contaminated soil were removed from the site for disposal at an approved hazardous waste disposal facility (EPA 1986).

The area surrounding the town of Maco is flat and dominated by extensive wetland areas. The site is 0.9 km east of Rattlesnake Branch and 1.8 km west of Hood Creek. Rattlesnake Branch drains into Hood Creek 4 km north of the site. Hood Creek flows north another 5 km before it joins the Cape Fear River, which flows into the Atlantic Ocean 55 km southeast of the site (USFWS 1980; EPA 1986).

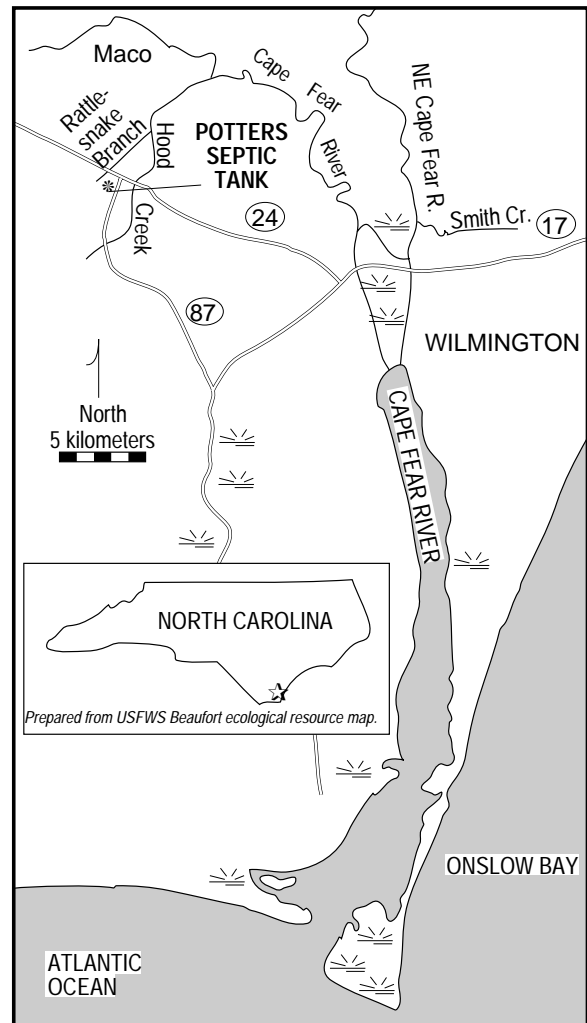


Figure 1. The Potters Septic Tank site in Maco, North Carolina.

Potential contaminant migration pathways to NOAA trust resources are surface water runoff and groundwater flow to Hood Creek and the Cape Fear River.

Site-Related Contamination

The contaminants of concern to NOAA are trace metals and VOCs. Several trace metals have been detected in on-site soil and groundwater samples, including arsenic, chromium, mercury, cadmium, and cyanide. In addition, benzene, toluene, ethylbenzene, and other VOCs were detected in on-site soil and groundwater (EPA 1986). Sample locations, matrix types, and contaminant concentrations were not available in the documents reviewed.

NOAA Trust Habitats and Species in Site Vicinity

Hood Creek is a continuously flowing, low-gradient stream that averages eight meters wide and 1.5 meters deep. The substrate consists of sandy silt. The water quality is fair and slightly acidic; pH ranges from 4 to 5. No information was available on the aquatic habitats of Rattlesnake Branch. The Cape Fear River is the largest watershed in North Carolina. The stretch of the river at the confluence of Hood Creek is tidally influenced, with a salinity ranging from 0.5 to 5 ppt and average width of 90 meters and depth 1 to 5 meters. The river's substrate consists of sandy silt. Water quality in the lower reaches of the Cape Fear River is fair (USFWS 1980; Ashley 1989).

Several NOAA trust resources, including alewife, American shad, and Atlantic sturgeon, use Hood Creek and the Cape Fear River as spawning and nursery areas and as a migratory route (Table 1) (USFWS 1980). A number of euryhaline species use the tidal portion of the Cape Fear River (Allison 1989). Atlantic sturgeon and American shad, two species protected by North Carolina law, occur in the Cape Fear River system. There are recreational fisheries on Hood Creek and extensive commercial and recreational fisheries on the Cape Fear River (USFWS 1980; Allison 1989).

Table 1. NOAA trust resource use of Hood Creek and the Cape Fear River above the confluence with the Northeast Cape Fear River (USFWS 1980; Allison 1989).

Species	Hood Creek	Cape Fear River
INVERTEBRATES		
blue crab		S,N,A
shrimp		S,N,A,R,C
FISH		
alewife	S,N,A,M,R	S,N,A,M,R,C
American eel	A	A
American shad	S,N,A,M,R	S,N,A,M,R,C
Atlantic sturgeon	S,N,M	S,N,M
blueback herring	S,N,A,M,R	S,N,A,M,R,C
croaker		N,A,R,C
flounder		N,A,R,C
hickory shad	S,N,A,M,R	S,N,A,M,R
red drum		N,A,R,C
spot		N,A,R,C
striped bass	S,N,A,M,R	S,N,A,M,R,C
white perch	S,N,M,R	S,N,M,R,C
S: Spawning area; N: Nursery area; M: Migratory route; A: Adult habitat; C: Commercial fishery; R: Recreational fishery		

Response Category: Federal Fund

Current Stage of Site Action: RI/FS Workplan

EPA Site Manager

Barbara Benoy 404-257-7791

NOAA Coastal Resource Coordinator

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References

Allison, North Carolina Department of Natural Resources, Division of Marine Fisheries, Morehead, North Carolina, personal communication, January 20, 1989.

Ashley, North Carolina Department of Natural Resources, Department of Wildlife, Raleigh, North Carolina, personal communication, January 20, 1989.

EPA. 1986. Hazardous ranking system package, Potter's Septic Tank Services Pits, Maco, North Carolina. Atlanta: U.S. Environmental Protection Agency, Region 4.

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