

NATIONAL PRIORITIES LIST (NPL)

Proposed NPL Site

September 2021

LOWER NEPONSET RIVER | Boston/Milton, Massachusetts Suffolk/Norfolk Counties

Site Location:

The Lower Neponset River site is in a 3.7-mile segment of the Neponset River from the confluence of Mother Brook, a tributary of the Neponset River located upstream of Dana Avenue, Hyde Park, and extending downstream to the Walter Baker Dam located upstream of Adams Street, Dorchester/Milton.

Site History:

The approximately 3.7-mile riverbed segment contains several areas where polychlorinated biphenyl (PCB)-contaminated sediments have accumulated from both suspected and unknown sources. Contamination is the result of industrialization of the urbanization of the greater Boston area. Historically, numerous mills were established along the Lower Neponset River in the towns of Dorchester, Milton, Hyde Park, and Mattapan, utilizing dams to generate power initially to turn mill grinding wheels and later to operate the large industrial mills.

Site Contamination/Contaminants:

Surface water and bottom sediments are contaminated with PCBs, specifically Aroclor-1221, Aroclor-1232, Aroclor-1248 and Aroclor-1254.

Potential Impacts on Surrounding Community/Environment:

Nearly 60,000 cubic yards of PCB-contaminated sediments reside along the Lower Neponset River, behind the dams, in the Braided Channel area and near the confluence of Mother Brook. The contamination threatens the groundwater which is a potential source of public drinking water for more than 40,000 people within four miles of the site. The Neponset River is a fishery. Although the state has issued a fish advisory due to the presence of PCBs and dichlorodiphenyltrichloroethane (DDT), there is evidence that fishing and human consumption is still taking place. The state has also classified this portion of the river as impaired for recreational use due to the presence of PCBs, *Escherichia Coli* (*E. Coli*), and *Enterococcus*.

Response Activities (to date):

From 2002 through 2006, the United States Geological Survey (USGS), in cooperation with the Massachusetts Executive Office of Environmental Affairs Riverways Program and the EPA, conducted studies which included the Lower Neponset River in Boston and Milton. According to the USGS report, the PCB concentrations substantially increased in sediment core samples collected downstream of the Mother Brook confluence. In 2006 and 2007, Massachusetts Department of Environmental Protection (MassDEP) oversaw a large removal of contaminated sediments in Mother Brook, which feeds into the Neponset River. In 2013, MassDEP conducted sediment core sampling to further evaluate PCBs in Neponset River sediments at four areas along the Neponset River.

Need for NPL Listing:

The state of Massachusetts referred the site to the EPA because of the extent of contamination, the complexity of the site and the large number of potentially responsible parties (PRPs). Other federal and state cleanup programs were evaluated but are not viable at this time. The EPA received a letter of support for placing this site on the NPL from the state.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. [ATSDR ToxFAQs](https://www.atsdr.cdc.gov/toxFAQs/index.asp) can be found on the Internet at <https://www.atsdr.cdc.gov/toxFAQs/index.asp> or by telephone at 1-800-CDC-INFO or 1-800-232-4636.