EPA United States Environmental Protection Agency

Site Redevelopment Profile

New Bedford Harbor

Acushnet River Estuary, New Bedford, Acushnet, Fairhaven and Dartmouth, Massachusetts

Property Overview

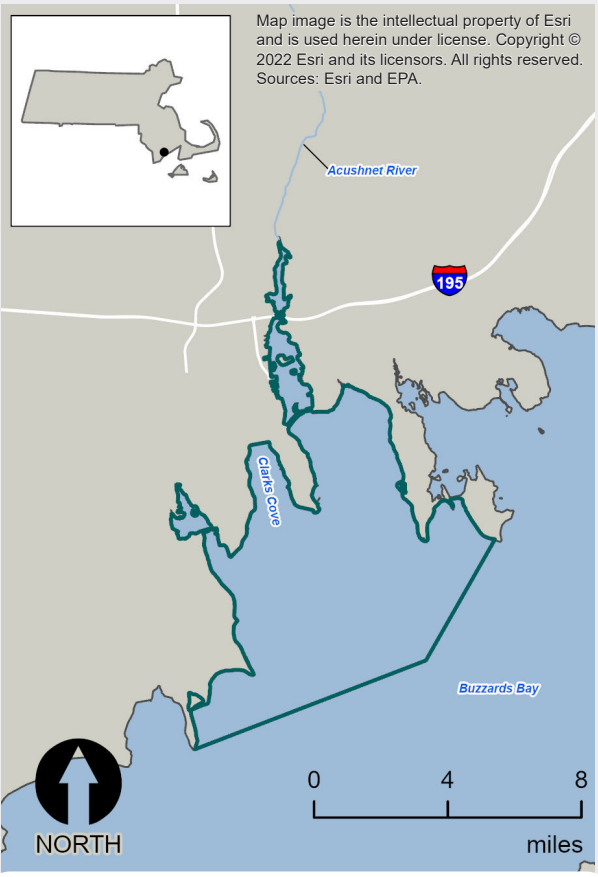

Figure 1. The location of the New Bedford Harbor site in Massachusetts

Size
18,000 acres

Current Site Uses
- Acushnet River and Buzzards Bay
- New Bedford Marine Commerce Terminal and port activities such as industrial fishing, seafood processing, ferry services and cruise ship docking
- Recreational rowing and boating
- Residential uses

Use Restrictions
- State regulations prohibit consumption of fish, shellfish and lobster in and around the harbor until contaminant levels decrease.
- Shoreline ordinances have been implemented to ensure redevelopment is protective of the site's remedy.
- A regulated navigational area is in place to prohibit activities that could disturb the cap in the Outer Harbor.
- Navigation restrictions will be established to prevent disturbance of the cap to be established on the confined aquatic disposal cell in the Lower Harbor.
- Use restrictions will be established to protect a shoreline debris disposal area cap to be established along the Harbor shoreline at Sawyer Street.

Surrounding Population

28,149	104,071	139,020
1 MILE	3 MILES	5 MILES

Within a 1-mile radius of the site, 50% of the population are people of color, compared to the state average of 28%, and 45% are considered low income compared to the state average of 22%.

Site History and Redevelopment Timeline

1940s-1970s
Two shoreline facilities produced electric devices, using polychlorinated biphenyls (PCBs) in manufacturing processes.

1976-1982
Widespread contamination of PCBs and heavy metals was found in sediment in the Acushnet River and Buzzards Bay, as well as in marine life throughout New Bedford Harbor.

1983
EPA added the site to the Superfund program's National Priorities List (NPL).

1988-1998
EPA performed a pilot dredging and disposal study at the site. The study informed the site's first cleanup plan, which EPA released in 1990. EPA continued to conduct site investigations and selected a second cleanup plan in 1998.

2011
AVX completed demolition of the Aerovox mill under EPA oversight.

2015
The state of Massachusetts finished construction of the 28-acre New Bedford Marine Commerce Terminal.

2020-2021
EPA transferred its former dewatering facility to the city of New Bedford in December 2020. The city later transformed the facility into a temporary COVID-19 vaccination center for the working waterfront and surrounding community.

Present
Use of the site for industrial and commercial port activities as well as recreational and residential uses is ongoing. The New Bedford Marine Commerce Terminal continues to operate on site. Cleanup of the site is is 97.5% complete by volume, and is expected to be complete by December 2025.

History and Cleanup

The 18,000-acre New Bedford Harbor Superfund site is in New Bedford, Acushnet, Fairhaven and Dartmouth, Massachusetts, and consists of New Bedford Harbor, the Acushnet River Estuary and 17,000 abutting acres of Buzzards Bay. At two shoreline facilities next to the site, companies produced capacitors and other electronics containing PCBs from 1940 to the late 1970s. Operations from these two facilities discharged industrial wastes into the harbor, resulting in sediment contamination of the estuary from the upper Acushnet River into Buzzards Bay. EPA added the site to the NPL in 1983.

EPA began pilot dredging and disposal studies in the late 1980s. After initial studies, EPA selected cleanup plans for the site in 1990 and 1998. As a result of working at the site and gathering additional information, EPA issued several updates to the cleanup plans to refine cleanup strategies from 1999 to 2017. Ongoing cleanup activities include the removal and disposal of contaminated shoreline sediments from saltmarshes and mudflats to approved off-site facilities, and replanting of impacted saltmarsh areas with native grasses, shrubs and trees. In 2003, to aid in cleanup activities, EPA built a 5-acre shoreline sediment dewatering facility on the waterfront to help process dredged material. Dredging has taken place at the site since the 1990s, and annually since 2004. In some areas, dredging and off-site removal of all contaminated sediments was not practicable at the time. To address this, EPA worked with the U.S. Army Corps of Engineers to install interim underwater sediment caps, including one in the Outer Harbor. A final remedy decision for the capped areas will be made in a future decision document. Subtidal dredging (below the low tide line) finished in March 2020, at which time the dewatering facility was no longer needed for cleanup.

Cleanup of the site is ongoing. With additional funding received from the Bipartisan Infrastructure Law in 2022, EPA expects cleanup to be complete by 2025. To ensure surrounding communities and the site's remedy are protected during the ongoing cleanup, EPA requires institutional controls on parts of the site. To prevent consumption of PCB-contaminated seafood, state restrictions limit consumption of fish, shellfish and lobster in and around the harbor until contaminant levels decrease. EPA worked with the U.S. Coast Guard and the National Oceanic and Atmospheric Administration to establish a regulated navigational area prohibiting activities that could impact the protectiveness of the Outer Harbor cap area. EPA also coordinates with the cities of Fairhaven, New Bedford and Acushnet through the municipalities' wetland coastal permitting process to identify proposed development that may conflict with the remedy. Further institutional controls will be put in place as cleanup is completed.

1,000,000+
cubic yards of sediment dredged and disposed of

Figure 2. Former dewatering facility used as a COVID-19 vaccination center

Figure 3. Dredging of New Bedford Harbor

Bipartisan Infrastructure Law Accelerates Cleanup

EPA's decades-long work to address PCBs in New Bedford Harbor sediments is now on track to be completed in around three years due primarily to a $72.2 million allocation from the Bipartisan Infrastructure Law.

Passed by Congress in 2022, the Bipartisan Infrastructure Law provides the funding to initiate cleanup and clear the backlog of 49 previously unfunded Superfund sites across the nation, particularly in disadvantaged communities.

The federal government's new Climate and Economic Justice Screen Tool (CEJST) identifies disadvantaged areas across the United States. Due to its status and location in a disadvantaged community, EPA received funding to continue cleanup activities on the site.

Redevelopment

The New Bedford Harbor is an important resource for the local community. In addition to providing jobs, residents use the harbor for recreation activities such as rowing and boating. Redevelopment along the river is ongoing. Projects include the repurposing of many former mills for apartments and commercial space. For example, in 2011, as part of a separate Superfund removal action, AVX completed demolition of the 11-acre Aerovox mill located along the river under EPA oversight. Once the ongoing state-led cleanup of the upland portion of the former Aerovox mill is completed, the property will provide the city of New Bedford with space for potential future shoreline redevelopment. Plans also include a riverwalk along the Upper Harbor and habitat restoration, which will draw residents back to the waterfront for recreation activities. EPA's cleanup will address contamination along the shoreline prior to construction of the riverwalk.

EPA's innovative cleanup plan also allows for navigational dredging efforts by local and state stakeholders. Navigational dredging of the harbor overseen by the Commonwealth of Massachusetts is part of a state-enhanced remedy authorized under the site's Superfund cleanup. The state enhancement has removed hundreds of thousands of cubic yards of less-contaminated sediment from the environment, beyond the scope of EPA's cleanup, resulting in private investments in the commercial port. For example, state cleanup efforts paved the way for construction of the New Bedford Marine Commerce Terminal, a 28-acre state-funded marine terminal designed to support development of offshore wind energy. The $133 million project was completed in 2015 and is the first U.S. port facility designed for the offshore wind industry.

In December 2020, after extensive decontamination, EPA transferred its former dewatering facility to the city of New Bedford. To provide COVID-19 vaccinations for seafood industry workers and community members during the COVID-19 public health emergency, the city partnered with the Greater New Bedford Community Health Center in April 2021 to temporarily transform the facility into a COVID-19 vaccination site. The vaccination site vaccinated 800 to 1,000 people per day, providing a vital community resource for the more than 28,000 people living within a mile of the site. In 2022, the city used the facility to temporarily protect various Buttonwood Park Zoo waterfowl and endangered species from highly pathogenic avian influenza H5N1. The city ultimately plans to use the former dewatering facility as a heavy-duty, multi-purpose port facility, including potentially offshore wind. With a 55,000-square-foot warehouse, berthing space for freighters and commercial fishing vessels, and a rail spur that connects to the city's rail yard, it will serve as an important port facility in the heart of the city's working waterfront.

EPA's continued efforts to clean up the New Bedford Superfund site and strong partnerships with the state, local and private stakeholders are paving the way for further redevelopment and repurposing of buildings along the shoreline. The sustainable transformation of the heavily industrial port into a mixed-use community asset will continue to bring people together to live, work and recreate for years to come.

Figure 4. Saltmarsh plantings on the restored shoreline

Contacts

For more information, please contact:

Chelsea Sebetich
EPA Superfund Redevelopment Program
(202) 566-1151
sebetich.chelsea@epa.gov

Joe LeMay
EPA Region 1 Redevelopment Coordinator
(617) 918-1323
lemay.joe@epa.gov

For more information, please visit www.epa.gov/superfund-redevelopment.

Figure 5. Native wetland grasses on the restored riverbank