

# PENOBSCOT REMEDIATION TRUST

## Cleanup Progress Update, February 2024

This fact sheet was prepared by the Trustee of the Penobscot Estuary Mercury Remediation Trust

### Penobscot Remediation Trust

The Penobscot Estuary Mercury Remediation Trust is responsible for implementing the following remedies specified in the Consent Decree to address mercury-contaminated sediment in the Estuary:

- capping intertidal flats between Orrington and North Bucksport with clean material
- targeted removal of surface deposits and mobile sediments
- identifying a remedy for contaminated sediment in Orland River and the East Channel around Verona Island

In 2023, the Remediation Trust planned and implemented the investigations summarized below to update the understanding of the Estuary and develop information needed to evaluate the feasibility of the remedies, prepare preliminary designs, and support permit applications.



A crew collects sediment samples in Orrington Reach, 2023.

**Measuring River Flow Velocity:** Instruments were placed on the riverbed between March and June 2023 to measure water speed during the spring when snowmelt typically creates the strongest downstream flow. This information will be used to update a hydrodynamic model of the Estuary. The model will support designing a cap for intertidal flats by providing data on areas most suitable for capping; ways to ensure cap stability; and potential impacts to habitat and flood risk.

**Sampling Intertidal Flat Sediment:** Sediment samples were collected from several coves between Orrington and North Bucksport to update information on mercury levels and sediment characteristics. The final results from the 2023 sediment sampling will be posted to the website [at this link](#) in 2024.

**Mapping Riverbed Surface:** A bathymetric survey of the Estuary was completed to map riverbed channels and elevations in the Estuary using a multibeam sonar instrument.

**Assessing Coastal Wetland Areas:** Intertidal flats in Orrington Reach were surveyed to identify marsh and habitat areas, assess conditions, and identify protected and endangered species and important habitat that may be affected by capping.

**Evaluating Effects of Ice Scour:** Two coves in Orrington Reach are being monitored from January through March 2024 to observe whether ice blocks are disturbing the surface of intertidal flats. This information will be used to evaluate the potential effects that ice could have on the stability of a cap.

### Consent Decree

In 2022, the U.S. District Court in Maine approved a major settlement for the cleanup of mercury contamination in the Penobscot River Estuary and the creation of two independent environmental response trusts to accelerate the recovery of the Estuary.

The [Consent Decree](#) requires Mallinckrodt US LLC to pay \$187 million for cleanup and other beneficial environmental projects and up to \$80 million in additional, contingent funding.



A camera (right) monitors ice blocks in a cove to help determine how ice could affect a cap, 2024.

## Long-Term Monitoring

In addition to implementing remedies to address mercury-contaminated sediment, the Consent Decree requires the Remediation Trust to monitor mercury levels in surface water, sediment, fish, birds, and other organisms every three years for at least 30 years.

Species sampled in 2023 included mummichog, polychaete, Red-winged Blackbird, American Black Duck, American Eel, Atlantic Tomcod, Rainbow Smelt, and lobster. Field work was completed in January 2024 with the collection of blood samples from American Black Duck.

Details regarding the sampling were presented in the 2023 Long-Term Monitoring (LTM) Plan [at this link](#). The 2023–2024 LTM Report will be finalized later in 2024 and posted on the website [at this link](#). These data will be compared to data from sampling performed in 2017 and 2020 and will be used to evaluate recovery of the Estuary.



Eel, 2023

## Thanks for Supporting Our Work

As the independent Trustee of the Remediation Trust, Greenfield Penobscot Estuary Remediation Trust would like to thank the many landowners who granted the access we needed to complete our sediment sampling and wetlands surveys. We also want to thank the Town officials from communities on the Estuary that supported our efforts throughout 2023.

## Greenfield Appointed Trustee

Greenfield has 35 years of experience as a court-appointed trustee for environmental response trusts managing complex cleanups of contaminated sites nationwide. Greenfield has received international, national, regional, and state awards from governmental agencies and professional groups. Visit [greenfieldenvironmental.com](https://www.greenfieldenvironmental.com).



Polychaete, 2023



Lobster, 2023



Nelson's sparrow, 2023

## For more information

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