

Community Meeting

Introduction to Penobscot Estuary Mercury Remediation Trust



Greenfield Penobscot Estuary Remediation Trust LLC
Trustee of the Penobscot Estuary Mercury Remediation Trust

August 1, 2024
Frankfort, Maine

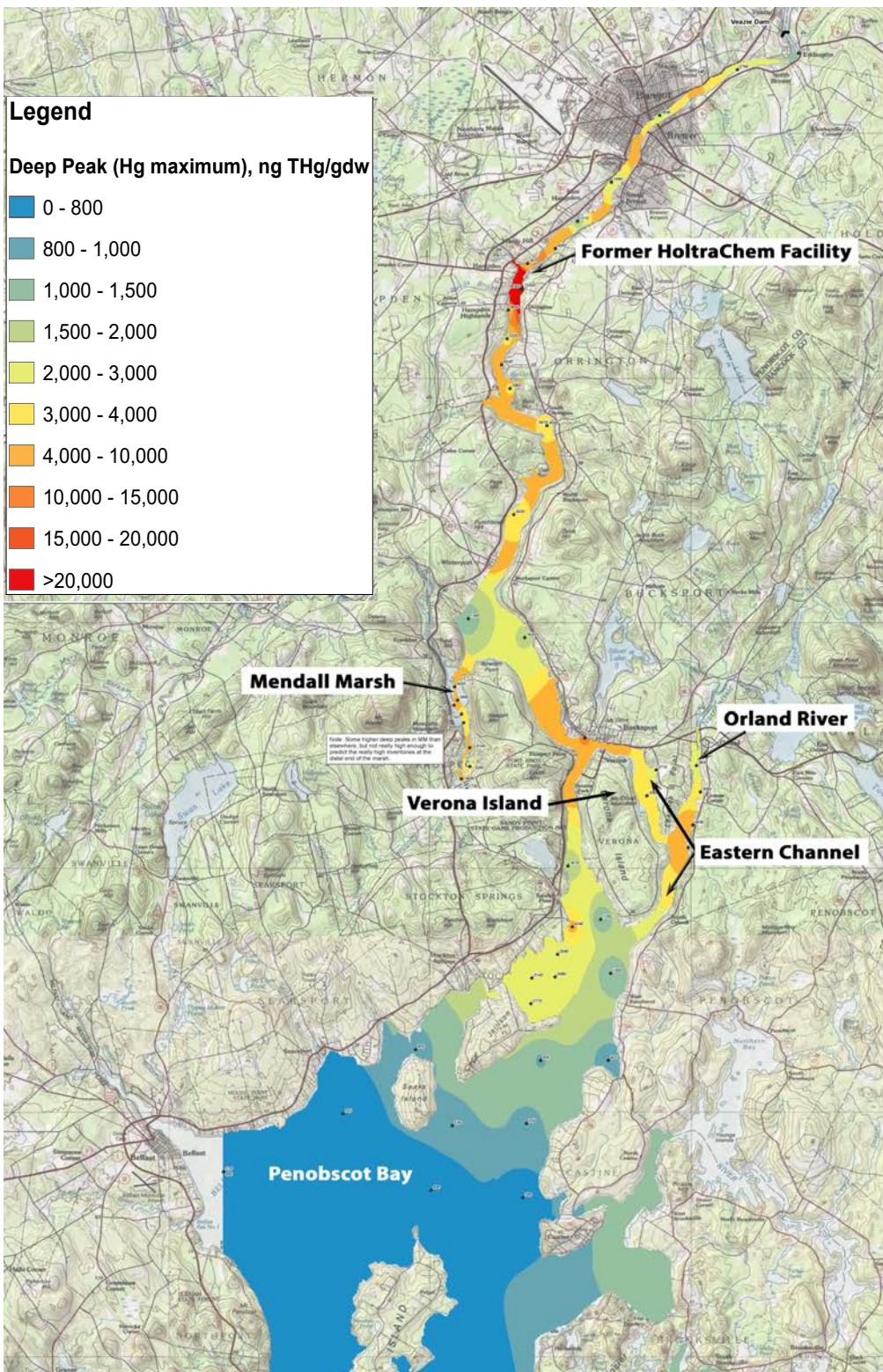


Greenfield Penobscot Estuary Remediation Trust LLC
Trustee of the Penobscot Estuary Mercury Remediation Trust

Welcome

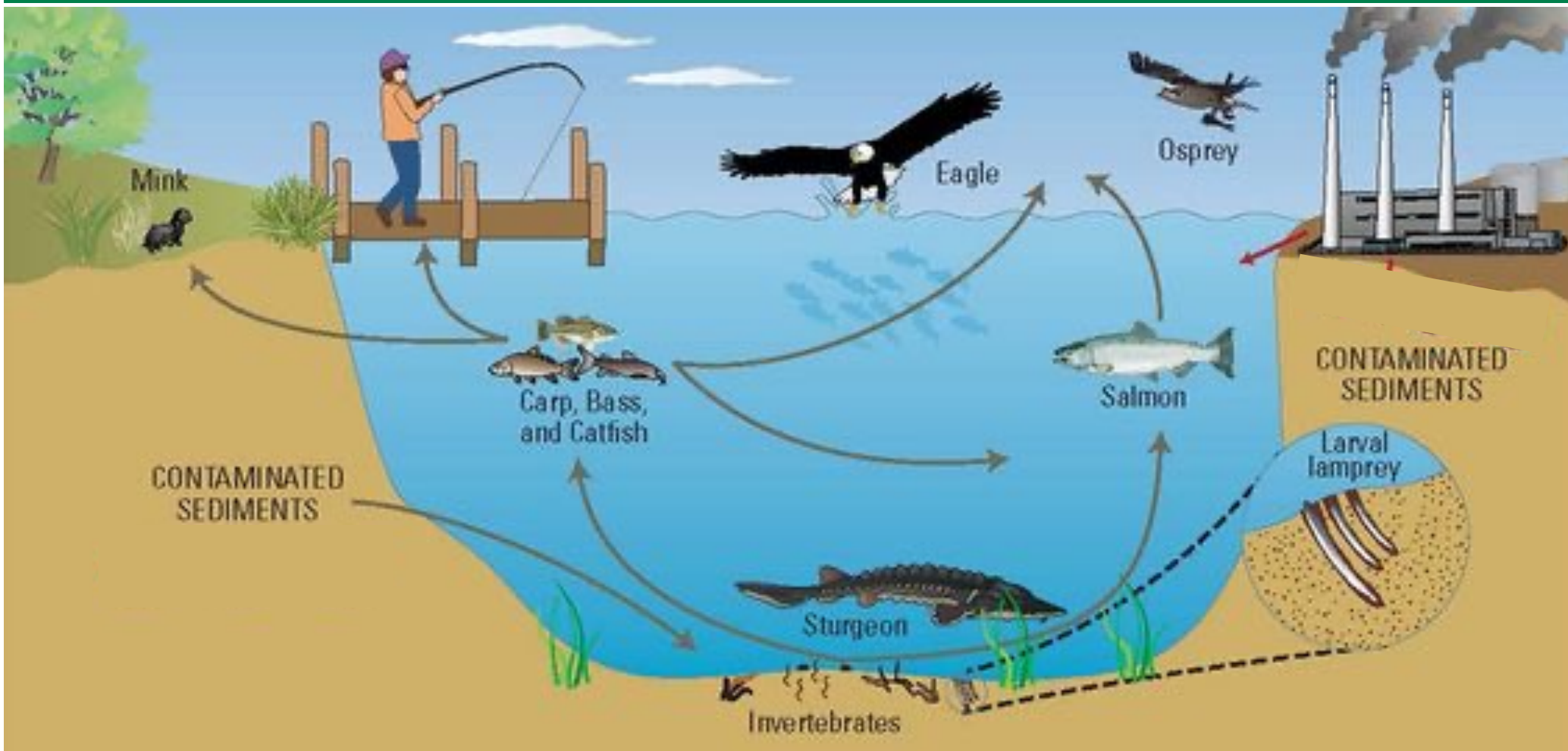
- ✓ Introductions
- ✓ Background
- ✓ Overview of Consent Decree Remedies
- ✓ Questions and Discussion





Mercury discharged from HoltraChem in late 1960s and early 1970s contaminated sediment throughout Penobscot River Estuary

Mercury found in food chain can affect health of fish, wildlife, and people



Natural recovery of estuary may take more than 100 years



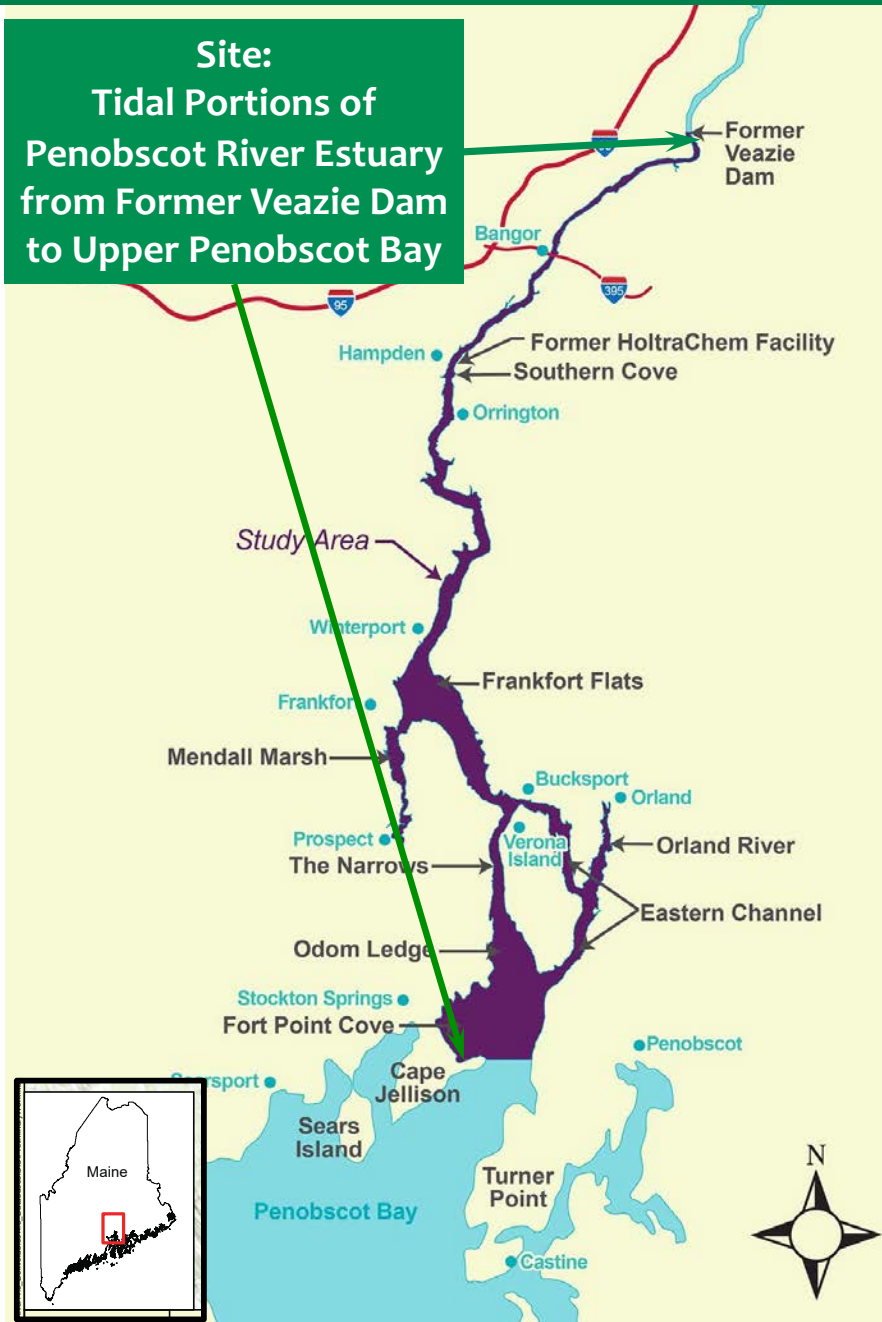
Mercury Facts*

- Mercury in environment
 - Small amount occurs naturally
 - Discharged by industry to air and rivers
 - Does not completely degrade
- Microscopic organisms can turn mercury to methylmercury
- Methylmercury is highly toxic
 - Enters living tissue and bioaccumulates
 - Can cause neurological and reproductive disorders in humans and wildlife
- Mercury levels in Maine fish, loons, and eagles are among highest in North America
- Maine Department of Health and Human Services issued statewide advisory recommending limits on consuming certain types of fish

* <https://www.maine.gov/dep/mercury/> provides additional information



Consent Decree Specifies Remedies to Reduce Mercury Exposure and Accelerate Recovery



- ✓ Mallinckrodt to provide:
 - \$187 million for remedies and monitoring
 - Additional \$80 million in potential, contingent funds
 - Total funding: \$267 million
- ✓ Remedies include targeted removal, capping, beneficial projects, and long-term monitoring
- ✓ Creates two independent trusts
 - Remediation Trust
 - Beneficial Projects Trust
- ✓ Named Beneficiaries:
NRDC/MPA and Mallinckrodt
- ✓ Larger Beneficiaries: Public, Citizens of Maine, and Penobscot River Estuary

Greenfield Penobscot Estuary Remediation Trust LLC

- ✓ Independent Trustee for Remediation Trust
- ✓ Responsible for overseeing, managing, and performing Work required by Consent Decree
- ✓ Greenfield has 35 years of experience
 - Serving as court-approved environmental response and custodial trustee
 - Managing complex environmental cleanups around country



An aerial photograph of a wide river winding through a lush, green forest. The sky is filled with dramatic, grey clouds, and the sun is low on the horizon, casting a warm glow over the scene. The river's surface reflects the sky and the surrounding trees. The banks are lined with dense vegetation, and some buildings are visible in the distance on the right side.

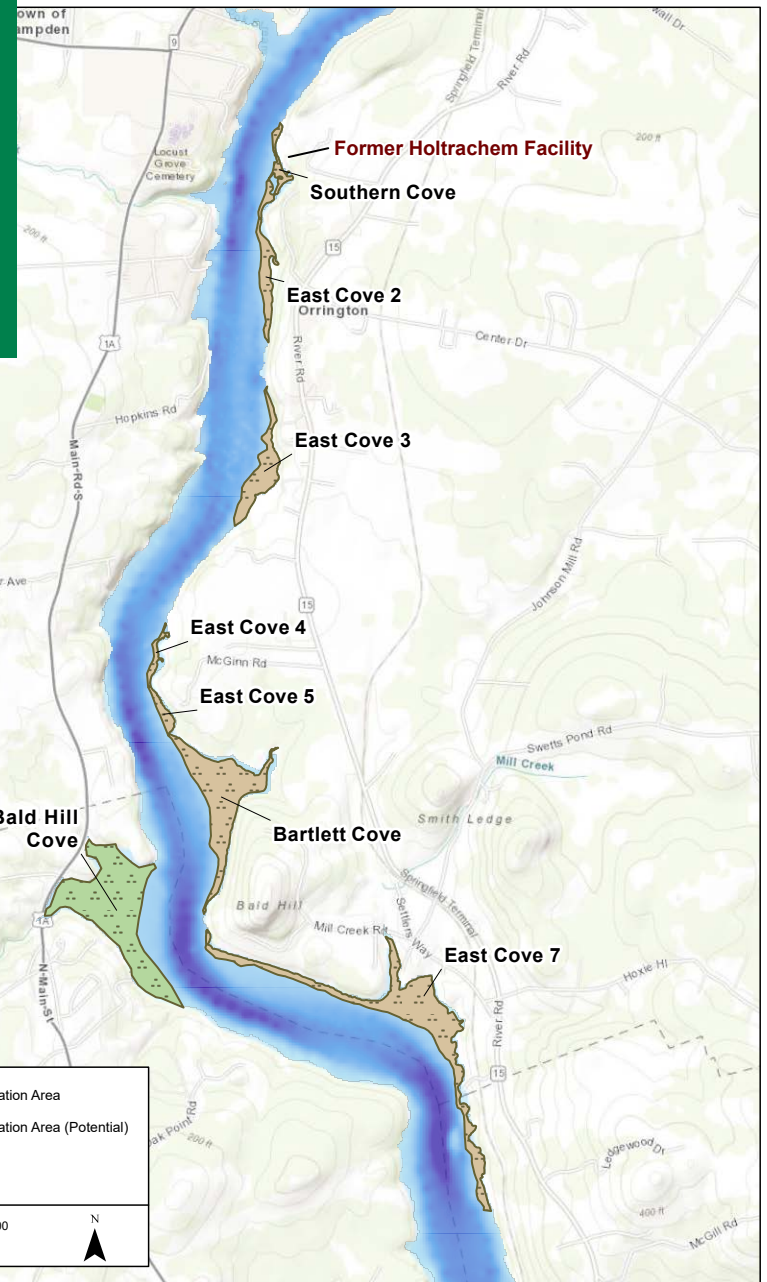
Remediation Objectives

- Reduce exposure to mercury
 - Accelerate recovery

Orrington Reach Remedy

\$50 Million for Capping ±130 Acres of Intertidal Flats

\$10 Million in Contingent Funding



Greenfield Penobscot Estuary Remediation Trust LLC,
Trustee of the Penobscot Estuary Mercury Remediation Trust

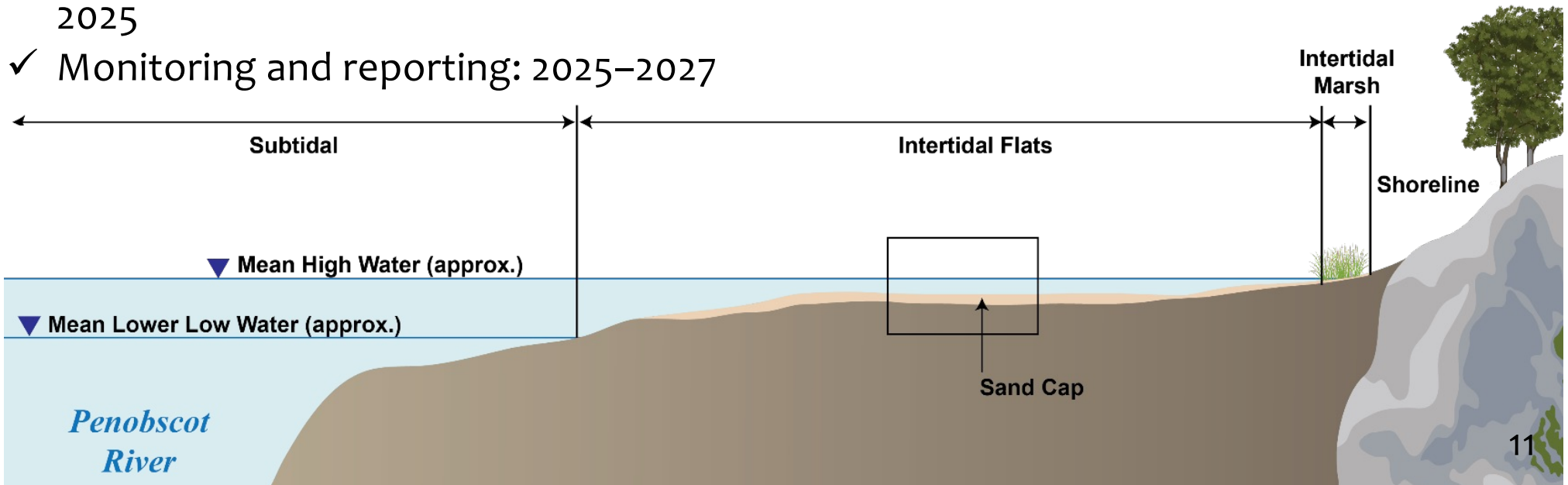
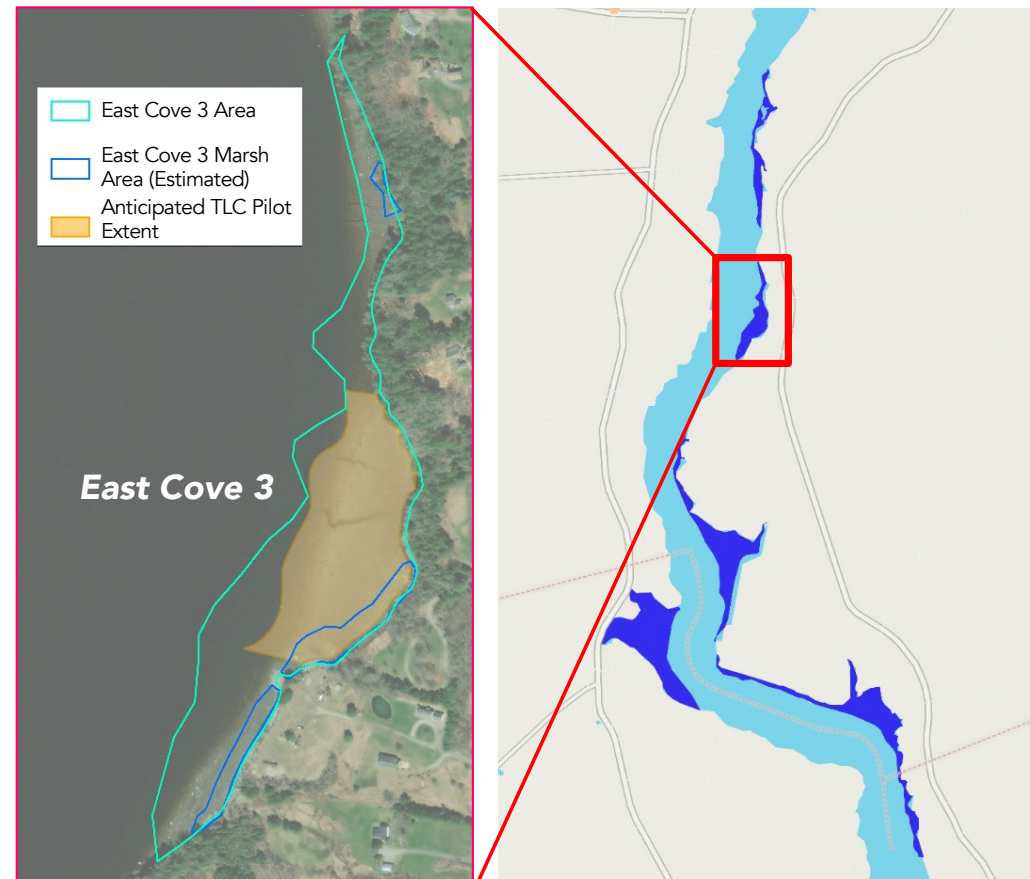
Thin Layer Cap Will Accelerate Natural Recovery

- ✓ Studies show natural recovery is slow
- ✓ Natural processes add ± 0.2 inch of new sediment a year
- ✓ TLC will immediately add ± 4 inches of clean sand
- ✓ New sediment will accumulate on cap surface over time



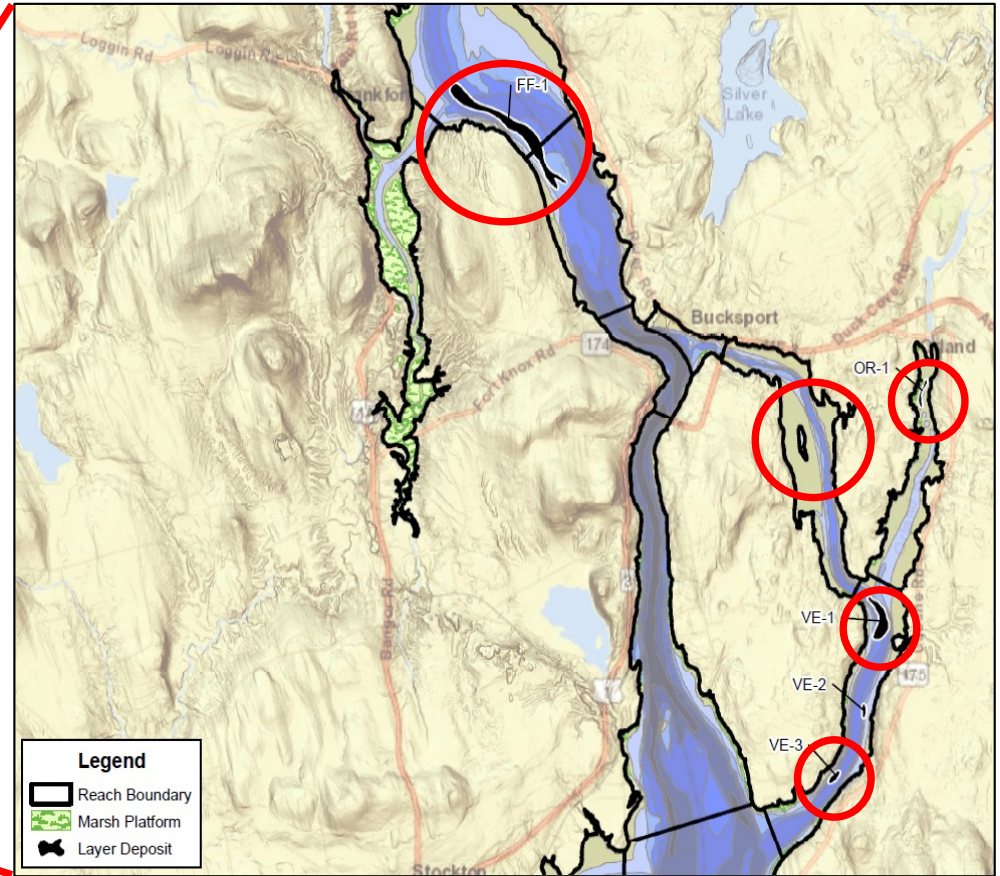
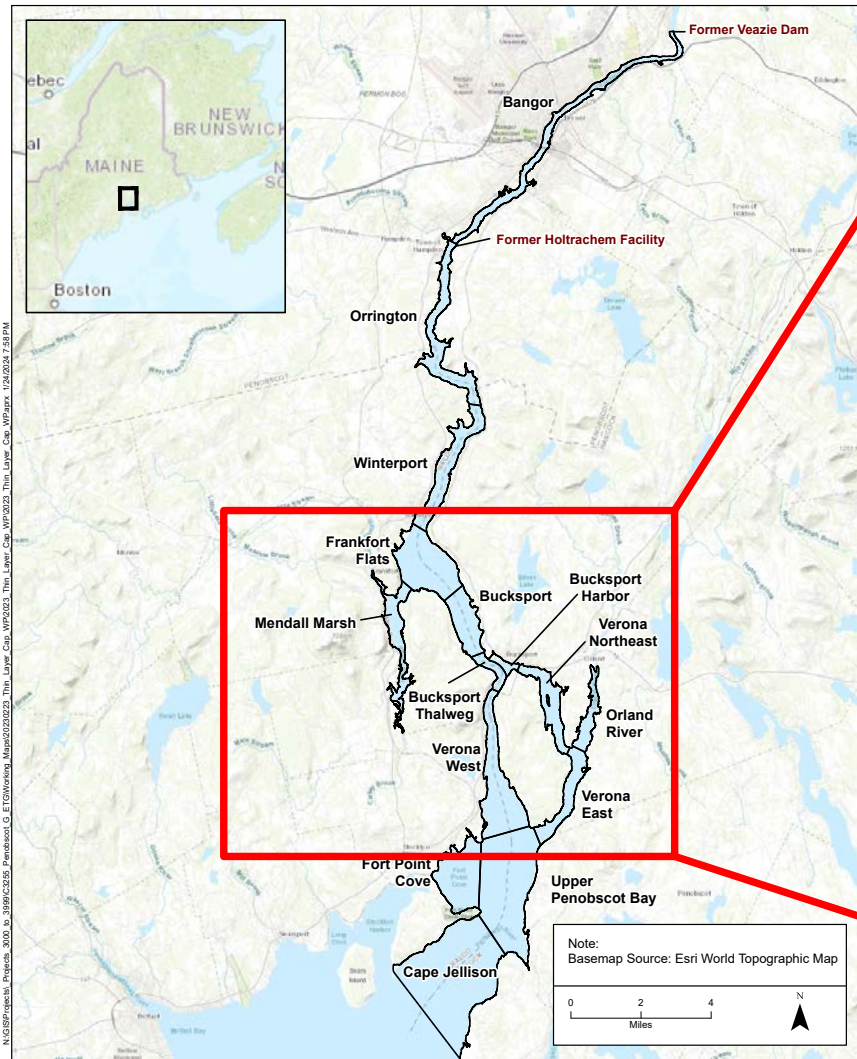
Pilot Test Will Show TLC is Protective and Effective

- ✓ Located on 6 acres in East Cove 3
- ✓ Pilot cap: ± 4 inches of clean sand
- ✓ Monitored for at least 2 years
 - Cap stability
 - Effects on wildlife and organisms in sediment
- ✓ Natural Resources Protection Act (NRPA) permit application submitted: late 2024
- ✓ Permit approvals and construction: 2025
- ✓ Monitoring and reporting: 2025–2027



Mobile Sediment and Surface Deposits Remedy

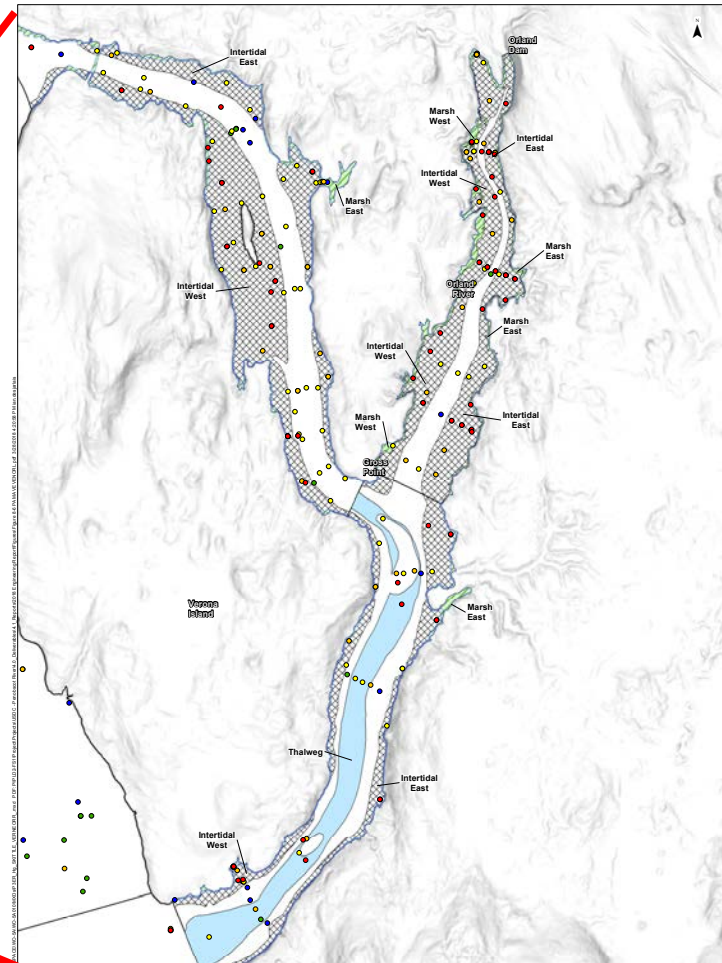
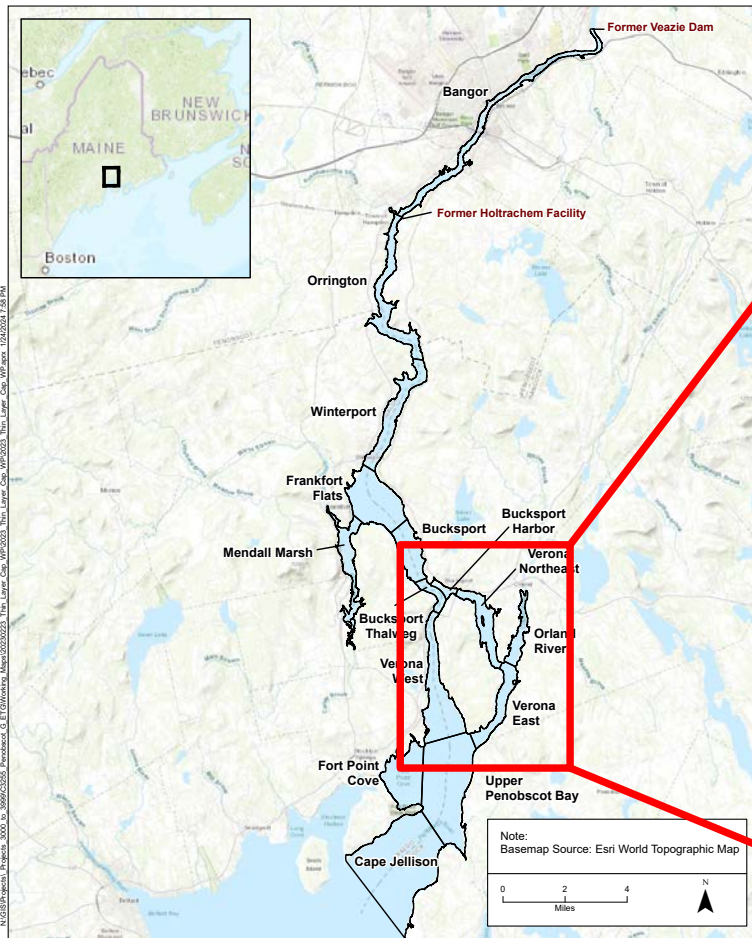
\$70 Million for Dredging and Beneficial Reuse
\$50 Million in Contingent Funds for Disposal



Greenfield Penobscot Estuary Remediation Trust LLC,
Trustee of the Penobscot Estuary Mercury Remediation Trust

Orland River and East Channel Around Verona Island Remedy

\$30 Million to Select and Implement Remedy



Capping and removal of contaminated sediment are being evaluated.



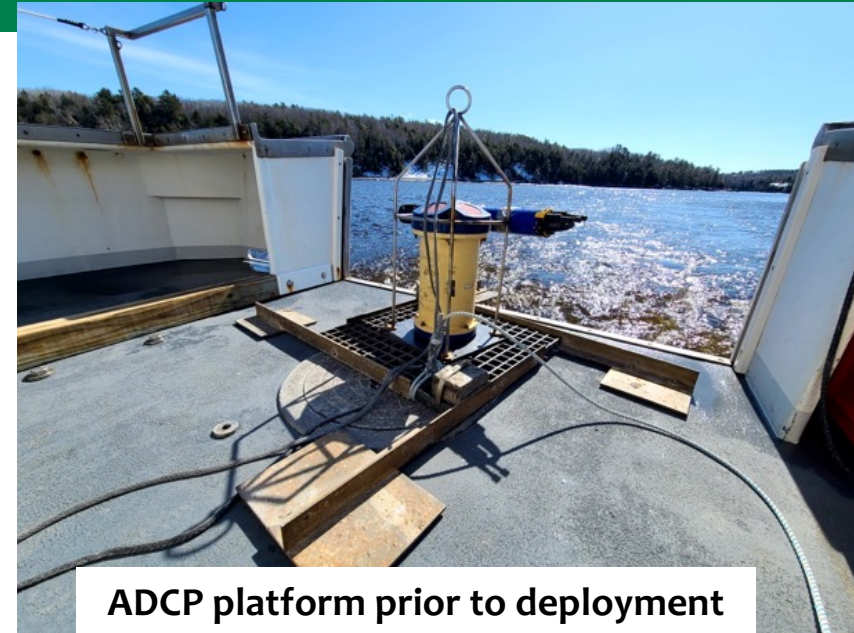
Investigations Completed to Date

✓ Estuary-wide

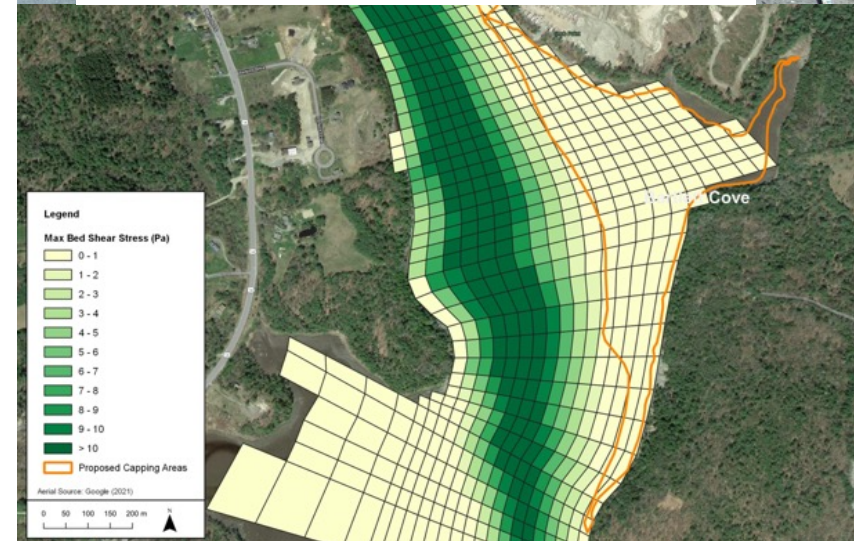
- River Flow Velocity Monitoring
- Bathymetric Survey
- 2023-24 Long-Term Monitoring

✓ Orrington Reach

- Coastal Wetland Assessment
- Two Sediment Pre-design Investigations
- Ice Scour Monitoring



ADCP platform prior to deployment



State and Federal Permitting Process Ensures Remedies Are Reviewed and Protective

- ✓ Natural Resources Protection Act (NRPA) permit
 - ✓ Primary permit
 - ✓ Issued by Maine DEP
 - ✓ Incorporates U.S. Army Corps of Engineers regulations
 - ✓ Reviewed by multiple state and federal agencies

- ✓ Other Regulations
 - Stormwater Management Rules
 - Solid Waste Rules, Beneficial Reuse

- ✓ Community Permits
 - Planning Board/Select Board
 - Shoreland Zoning



Long-Term Monitoring

\$10 Million to Monitor Fish and Wildlife for 30–45 Years

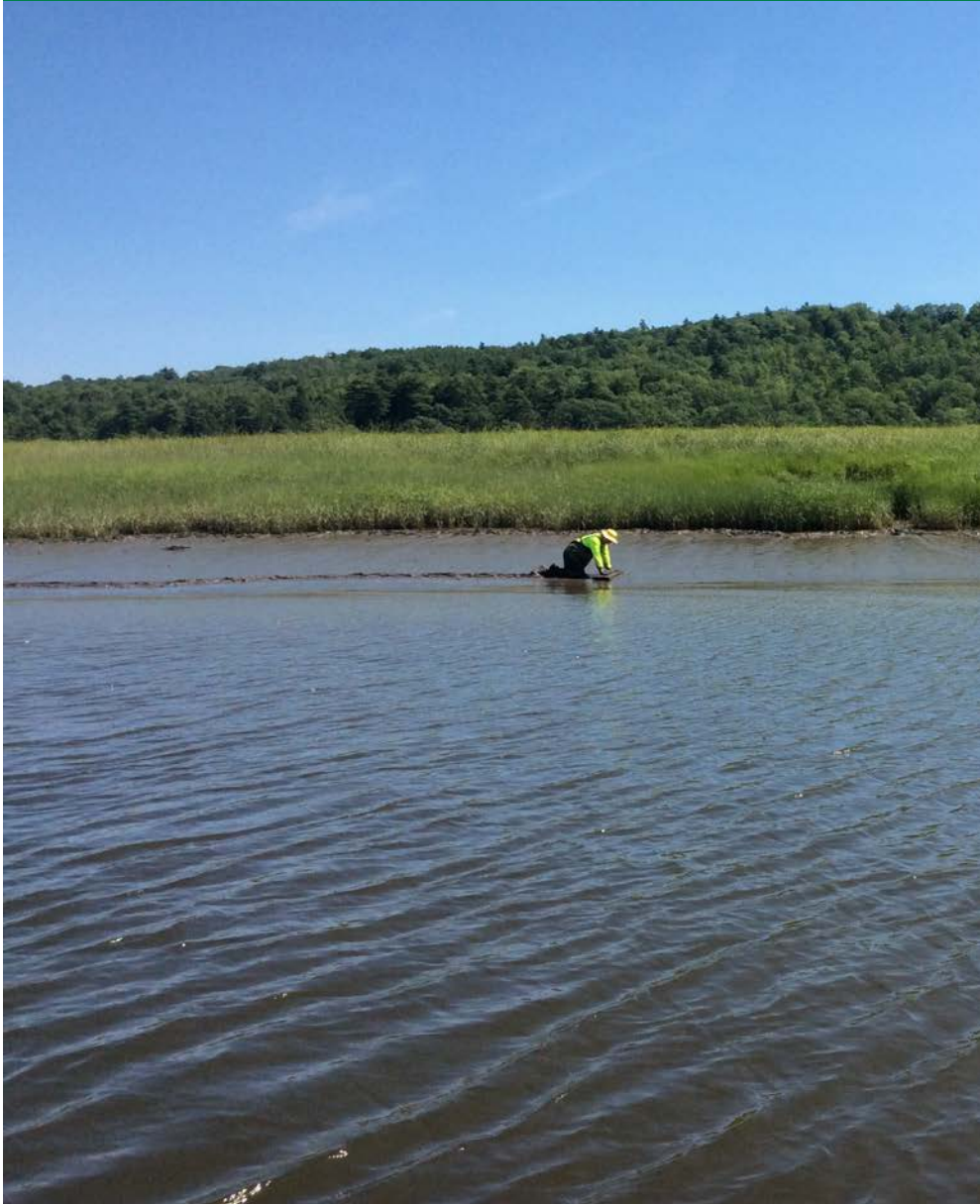
\$10 Million in Contingent Funding



Beneficial Environmental
Projects
\$20 Million to Offset Harm
Caused By Mercury



Access to Flats is Needed for Long-Term Monitoring, Sediment Sampling, and Wetlands Evaluation



Remediation Trust Contacts

- ✓ Lauri Gorton, Remediation Trust Program Manager
414-732-4514
lg@g-etg.com
- ✓ Christine Amrhine, Community Involvement Coordinator
540-846-3163
ca@g-etg.com
- ✓ Cindy Brooks, Managing Principal
617-448-9762
cb@g-etg.com
- ✓ See: <https://www.penobscotrивerremediation.com>



Questions?

We have the honor, and the once-in-a-generation opportunity, to enhance recovery of the Penobscot River Estuary...