

Memo



To: Municipal Shellfish Programs in Maine
From: Coastal Access Strategy Exchange
Date: March 12, 2025
Subject: PFAS Risk and Shellfish Growing Areas

Highlights

- A spill of firefighting foam, which contained PFAS (per- and polyfluoroalkyl substances),¹ occurred at the former Naval Air Station in Brunswick on August 19, 2024. This resulted in an extension of the existing seasonal shellfish closure (July 1-October 1), in shellfish growing area (WK) Harpswell Cove. This area remains closed.
- Unlike surface water PFAS testing, which is a relatively quick turnaround, testing and analyzing shellfish meats can take the laboratory up to three months to analyze a batch of samples.
- After two rounds of meat testing for PFAS, the mudflats remain closed to harvesting; however, the second round of meat samples showed declining toxicity, and results from subsequent tests are pending.²
- The Coastal Access Strategy Exchange (CASE) is sharing information from this incident with the hopes of reducing risk of additional mudflat closures from future contamination from PFAS.

¹ Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are part of a large group of lab-made chemicals known as perfluoroalkyl and polyfluoroalkyl substances (PFAS). For more information on PFAS, <https://www.epa.gov/pfas/pfas-explained>

² <https://content.govdelivery.com/accounts/MEDEP/bulletins/3cd16d0>

Following the firefighting foam spill (which contained PFAS) in August 2024, the Maine Department of Environmental Protection (DEP) conducted initial sampling of soft-shell clams, blue mussels, and wild American oysters in Harpswell Cove on two separate occasions. Then DEP collaborated with the Town of Brunswick Coastal Resource Office and the Maine Department of Marine Resources (DMR) to collect samples of more commercially viable shellfish, including soft-shell clams, quahogs, and mussels in October and November. The November samples were sent to the lab, and results are pending at this time.

Should a PFAS spill occur in your coastal community, you may consider taking the following steps:

- Conduct a shellfish inventory survey of the quantity and species of shellfish in the affected mudflats. This gives a municipality a better understanding of the status of the shellfish population(s) and financial impact to local clam harvesters.
 - It is important to coordinate with your local fire department and the Maine DEP concerning any personal protective equipment to wear while conducting surveys or collecting samples.
- Coordinate with Maine DEP and the Maine DMR:
 - Apprise them of locations of shellfish populations in relation to the location of the spill.
 - Establish sample stations.
 - Retrieve at least six samples of each species being harvested. Samples must be properly stored in a freezer until they are sent to the labs.
 - Establish dates to resample.
- Samples can take months to process, and can cost up to \$541 per shellfish meat sample to analyze. Multiple species need to be sampled over the course of a certain period (e.g., bi-monthly, quarterly, etc.). This estimated cost is from a specific lab the DEP utilizes and includes testing for PFAS by EPA method #1633, which includes 40 compounds, as well as sample preparation and disposal.
- Work with DMR to understand ongoing shellfish growing area implications once levels return to tolerable standards. Is there ongoing PFAS sampling required for the area to return to open approved or conditionally approved shellfish harvesting status?

Proactive recommendations to municipal and regional shellfish programs include:

- Work with the local fire department and learn what firefighting chemicals they utilize, where and how they are utilized, where they are stored, and how they are cleaned up once deployed. Also, ask about past use of PFAS-containing materials.
- Contact your local code enforcement office to learn of any other large fire suppression systems in your community, their locations, and any overland pathways to shellfish growing areas, i.e., creeks, streams, drainage ravines, etc.
- Contact coastal businesses and learn about their fire suppression systems and what risks are associated.
- Contact your local solid waste officials and ask whether any capped landfills are being monitored for PFAS, and if so, ask for results of any monitoring.
- Make information available to local leaders, including legislators, on what actions the shellfishing community has taken.
- Have a shellfish committee member attend meetings to learn about PFAS. Ensure there are clear lines of communication between the shellfish community, the Town Council and your local delegations.
- Support and advocate for mitigation, remediation, and/or abatement of known sources of PFAS.
- Collaborate with first responders, ensuring they are using best management practices when using fire suppression chemicals near streams, wetlands, and water bodies.

The persistence of PFAS in the environment and along Maine’s coast poses a significant threat to water quality and the State’s renowned seafood industry. To safeguard these vital resources, it is crucial to work collaboratively with local and State leaders to identify potential areas of contamination and implement effective monitoring and mitigation strategies. DEP’s Surface Water Ambient Toxics Monitoring (SWAT) program samples tissues of marine shellfish in waters throughout the State.³ Proactive measures will help protect public health, preserve marine ecosystems, and maintain Maine’s high standards for seafood quality.

DEP’s SWAT program is available to advise municipal programs in proper sample site selection (along with DMR), collection methods, sample storage, and lab requirements, if municipally funded testing is of interest. DEP’s SWAT program has limited funds

³ <https://www.maine.gov/dep/water/monitoring/toxics/swat/>

available annually for lab analysis, but we prioritize each year and complete what is most pressing for sampling and lab analyses. For more information contact Jim Stahlnecker at the DEP SWAT program, james.stahlnecker@maine.gov, 207-215-6954.

For more up to date information on the continued testing in Brunswick, visit the DEP webpage: <https://www.maine.gov/dep/projects/bnas/index.html>

The Coastal Access Strategy Exchange, or CASE, is a community of practice working to: *preserve and expand the footpaths, wharves, piers, and other working waterfront locations that provide essential access points to coastal fisheries and waters of the Gulf of Maine, supporting the economic well-being of fishing families, water-dependent businesses, and coastal communities.* As the Brunswick PFAS spill resulted in a harvesting closure in the adjacent mudflats, this is a loss of access to the shellfish resources. Through this memo, CASE hopes other shellfish programs can reduce the risk of similar closures in their coastal communities.

Sincerely,

Jessica Gribbon Joyce

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