



# Surface Water Ambient Toxics (SWAT) Monitoring in Casco Bay – Recent Work

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*Protecting Maine's Air, Land and Water*

# Casco Bay Blue Mussel Sites Tested for Metals

- Back Cove, Portland
- Long Island, Fuel Terminal
- Royal River, Yarmouth
- **Back Cove lead** concentration was  $0.52 \mu\text{g/g}$  wet wt., the highest of nine coastwide mussel sites tested in 2019. Still lower than the expired **MCDC  $0.6 \mu\text{g/g}$  wet wt. lead FTAL**



# Casco Bay Blue Mussel Sites Tested for Perfluorinated Compounds (PFAS)

- Portland Harbor
- Fore River, Middle
- Fore River, Inner
- East End Beach
- Back Cove
- Presumpscot River
- Long Island, Fuel Terminal
- Cousins Island
- Royal River



# PFAS Results in Bivalves

- Softshell clam edible tissue (not in Casco Bay)
  - 3 sites (non-detect for 33 PFAS compounds)
- Blue mussel tissue
  - 9 CB sites (7 PFAS compounds detected just above reporting limits; PFOSA, PFTrDA, PFTeDA, EtFOSAA, PFDS, N-EtFOSE in *some* Casco Bay sites)
  - PFOS at Inner Fore River only. Range 0.24 – 0.45 ng/g wet wt. (RL 0.18 – 0.2)



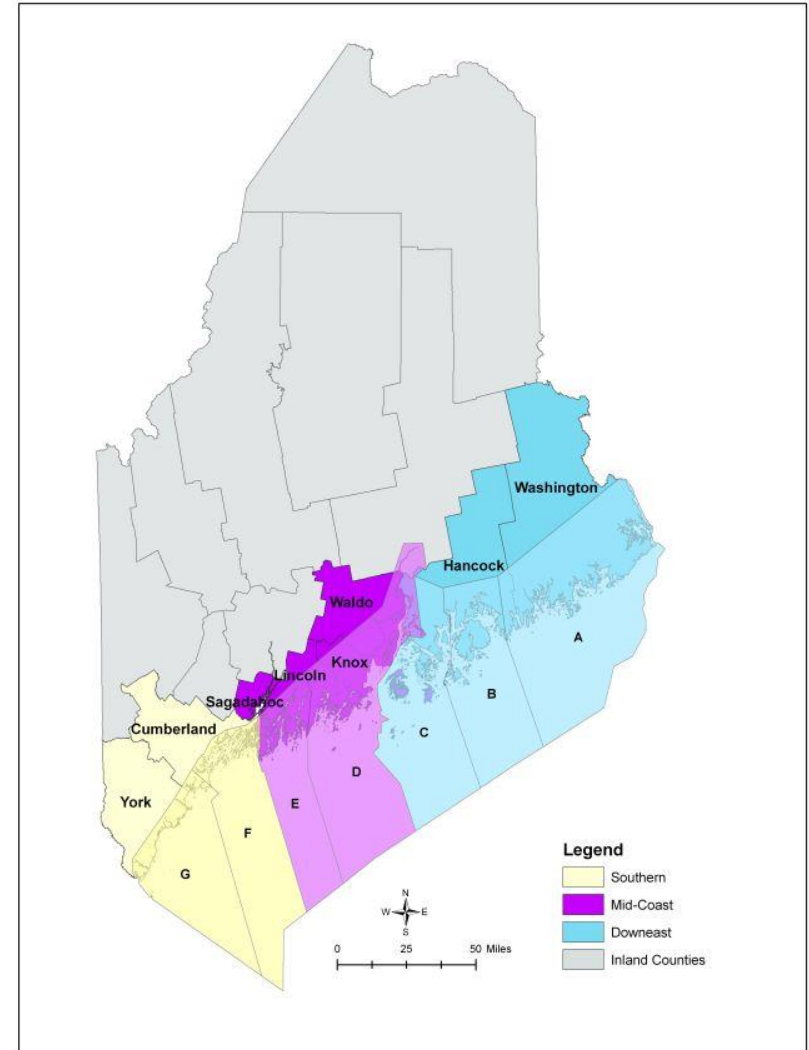
# PFAS Freshwater River Fish Tissue Sampling in 2020

- **Presumpscot River below Westbrook:**
  - PFOS exceeded the MeCDC FTAL for recreationally caught finfish
  - Presumpscot results = 35.7 ppb (mean)



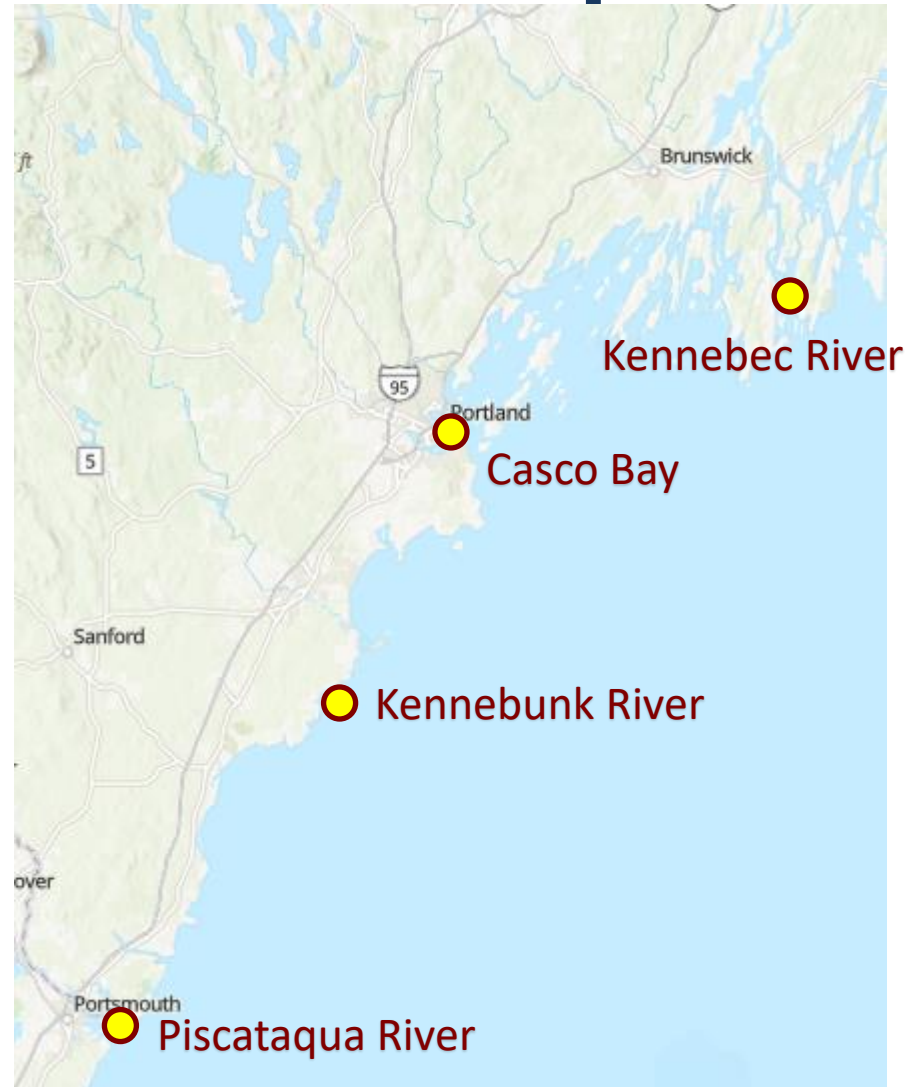
# 2021 Lobster Samples

- Lobster Meat Coastwide in DMR Lobster Management Zones A – G
  - 18 sites:
    - 3 each in A – D (highest landings)
    - 2 each in E – G
  - 2 replicate composites per site, 5 lobsters per composite (180 total)
- Preliminary PFOS results in lobster muscle tissue look encouraging (QA has not yet been completed)



# 2021 Marine PFAS Fish Samples

- Pollock, Atlantic silversides, striped bass, bluefish (muscle tissue)
- Preliminary PFOS results look encouraging (QA has not yet been completed)
- Winter flounder? More bluefish, legal striped bass needed.





Maine Dept. of Environmental Protection

[www.maine.gov/dep/water/publications/index.html](http://www.maine.gov/dep/water/publications/index.html)

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