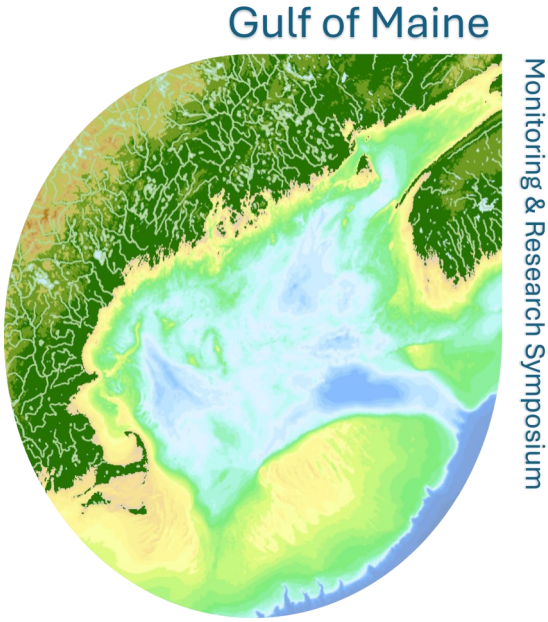

Gulf of Maine
Monitoring & Research Symposium

April 8-9, 2025

Haverhill, MA

PROGRAM

Tuesday, April 8

8:15 Breakfast and Networking

8:50 Welcome: Pam DiBona, MassBays, & David Wu, MWRA

9:00 Keynote: Janet Duffy-Anderson, Ph.D., Gulf of Maine Research Institute

Session 1: Water Quality Monitoring
9:30—11:15 am

David Wu, Massachusetts Water Resources Authority
MWRA monitoring programs in Massachusetts Bay

Jeremy Miller, Wells National Estuarine Research Reserve
Using continuous environmental monitoring data to inform biological changes in a rapidly warming Gulf of Maine: NOAA's System Wide Monitoring Program

Reese LeVea, University of New Hampshire
Water quality monitoring program in the Ipswich and Parker River watersheds

Amy Costa, Center for Coastal Studies
A collaborative approach to monitoring the coastal waters of Cape Cod

Ryan Joyce, MA Division of Marine Fisheries
Water quality monitoring for shellfish classification

Shan Zuidema, University of New Hampshire
Understanding controls of watershed exports to Gulf of Maine as land use and climate changes

Austin Pugh, Northeastern Regional Association of Coastal Ocean Observing Systems
NECAN's Ocean Acidification Monitoring Plan

11:00 PANEL DISCUSSION

11:15 BREAK

Session 2: Biological Monitoring
11:30 am —12:45 pm

Melissa Campbell, MA Division of Marine Fisheries
Massachusetts Biotoxin Monitoring Program

Cameron Thompson, Northeastern Regional Association of Coastal Ocean Observing Systems
Zooplankton indicators of ecosystem change in the western Gulf of Maine

Lucy Lockwood, University of Massachusetts Boston, & Marc Albert, National Park Service
Development of an intertidal biodiversity monitoring framework to support climate adaptation of the Boston Harbor Islands National and State Park

Adam Kozlowski, National Parks Service
Long-term rocky intertidal monitoring - program overview and preliminary results

Lyra Brennan, Mass Audubon
Coastal birds in Massachusetts: trends, challenges, and the future

12:30 PANEL DISCUSSION

12:45 LUNCH & NETWORKING

Session 3: Aquatic Species Monitoring
1:30—3:00 pm

Anne Zegers, Manomet Conservation Sciences
Community engaged conservation in action: supporting river herring recovery in the Gulf of Maine

Brad Chase, MA Division of Marine Fisheries
River herring spawning and nursery habitat assessment

Graham Sherwood, Gulf of Maine Research Institute
The Casco Bay Aquatic Systems Survey (CBASS)

Jessie Batchelder, Manomet Conservation Sciences
A crabby coast: monitoring green and blue crabs in the Gulf of Maine

Lauren Jaramillo, National Oceanic and Atmospheric Administration
NOAA NCCOS Mussel Watch Program in the Gulf of Maine

Robert Jarrett, University of Maine
Habitat-specific monitoring documents dramatic changes in habitat use and ecology of a data-rich fisheries species, American lobster

2:45 PANEL DISCUSSION

3:00 BREAK

Session 4: Habitat Monitoring
3:15 —4:30 pm

Nate Corcoran, MA Department of Environmental Protection & Katie Kahl, UMass Amherst
MassMarsh: Massachusetts long-term salt marsh resilient research and monitoring program

Cheyenne Adams, ME Department of Environmental Protection
Restoring a regular seagrass mapping program in Maine

Tay Evans, MA Department of Environmental Protection
Status and trends of eelgrass in Massachusetts and MassDEP's Eelgrass Mapping Program

Trevor Mattera, Piscataqua River Estuary Partnership and University of New Hampshire
The many facets of eelgrass monitoring in the Great Bay Estuary, NH

Lexie Neffinger, MA Office of Coastal Zone Management
Monitoring introduced marine fouling species in the Gulf of Maine

4:15 PANEL DISCUSSION

4:30 SUMMARY AND WRAP UP OF Day 1

5:00 NETWORKING EVENT! ***Evening at the Tap Brewing Company in Haverhill. Join us for food, drinks, and conversation.***

Wednesday, April 9

8:15 Breakfast and Networking

8:50 Welcome: Pam DiBona, MassBays & David Wu, MWRA

9:00 Keynote: Damian Brady, Ph.D., University of Maine

Session 5: Water Quality Research

9:30— 10:45 am

Kara Law, Sea Education Association
Plastic pollution in the Gulf of Maine

Anne Giblin, Marine Biological Laboratory
Long-Term research and monitoring in the Plum Island marshes and estuaries

Brianna Group, The Nature Conservancy
Leveraging aquaculture for restoration: an overview of the supporting oyster aquaculture for restoration program

Rainer Lohmann, University of Rhode Island
Results of the 2020 study measuring PFAs and CECs in Massachusetts Bay surface water

10:30 PANEL DISCUSSION

10:45 BREAK

Session 6: Habitat and Biological Research

11:00 am — 12:30 pm

Adrienne Kovach, University of New Hampshire
Insights from tidal marsh birds to inform salt marsh restoration practices

Neil Ganju, U.S. Geological Survey
Geospatial analysis to support salt marsh management and restoration

James McKown, University of New Hampshire
Evaluation of drainage enhancement for vegetation recovery in salt marshes in New England using public aerial imagery

Alyssa Goncalvez, University of Massachusetts Boston
Molecular monitoring of multiple stressors impacts on the blue mussel, Mytilus edulis

Lexi Wilkes, University of Massachusetts Boston
Mapping kelp dynamics: uncovering Saccharina latissima *distribution in the Gulf of Maine*

12:15 PANEL DISCUSSION

12:30 LUNCH & NETWORKING

Session 7: Modeling and Oceanography

1:30 — 2:45 pm

Jaime Palter, University of Rhode Island
Large scale oceanographic context for rapid warming of the Northeast US continental shelf

Jake Kritzer, Northeast Regional Association of Coastal Ocean Observing Systems
Overview of NERACOOS data resources

Changsheng Chen, University of Massachusetts Dartmouth (SMAST)
Northeast Coastal Ocean Forecast System (NECOFS): a tool for assessing marine environmental conditions

Laura Brothers, U.S. Geological Survey
What lies beneath? The Gulf of Maine's seafloor and its implications for benthic habitat and development

Gabriel Venegas, University of New Hampshire
Physics-based Bayesian inversion of seafloor properties in the Gulf of Maine using calibrated water column sonar data

2:30 PANEL DISCUSSION

Closing: Bringing it all together

2:45 Keynote: Jon Witman, Ph.D., Brown University

3:30 SYMPOSIUM WRAP UP

GOM Symposium Evaluation

We hope you enjoyed the Symposium! At the end, please take a few minutes to provide feedback that will help us in future meetings, by filling out and submitting this program evaluation. Use the QR code above or this link: https://umassboston.co1.qualtrics.com/jfe/form/SV_beCwmgVG7x2TIA6

Tools for Environmental Monitoring Programs

MassBays has built several tools to help monitoring coordinators at each stage of a program. Click the QR code for access to AquaQAPP, MassWateR, Ecohealth Tracking. More tools are others coming soon! Link: https://massbays.org/tools-for-programs

Map of Gulf of Maine programs

Click the QR code to access this interactive Google map that displays where monitoring is happening, as presented in this Symposium. Feel free to add your locations from your laptop with this link https://www.google.com/maps/d/edit?mid=1SOh1AcZcqYd7lUZCZorHaaybF