

2017 Beaches Conference

Summary of Coastal Monitoring Field Trip to Wells Harbor:

Notes: Beth Bisson

Jeremy Miller, Wells National Estuarine Research Reserve

Jeremy provided an overview of monitoring efforts undertaken by the Reserve in the area, which include the [System-Wide Monitoring Program](#) run by the Reserve (biological monitoring, and abiotic – water quality, tides, and sea level rise), and the [Marine Invasive Monitoring and Information Collaborative](#) (MIMIC) program, which keeps track of marine invasive species presence along the coast, from Massachusetts to Maine.

Some key points:

- Blue crab larvae in Wells Harbor
- Black sea bass larvae (1st recorded)
 - Fish larvae density are recorded/unit volume of water
- There is a NOAA water level gauge at Wells Harbor
- Miller, in partnership with the northeastern aquatic invasive species rapid assessment survey has documented several 1st recorded sightings, including European rock shrimp in 2012
- Wells Harbor is also a long term site for looking at Sea Level Rise and shoreline change – have been looking at peat cores in the adjacent marsh (D. Belknap)
- Harbor infrastructure is built on dredge spoils
- Has been dredged twice in the past 14 years, as it's an area of sand accretion

Keri Kaczor and Meghan Sims, Maine Healthy Beaches Program

Keri and Meghan provided an overview of the goals, structure and protocols of the Maine Healthy Beaches Program, and led an interactive demonstration of some of the water quality measurements and sample-gathering protocols. Participants learned how to collect salinity measurements using a refractometer, take water temperature data, and collect water samples for bacteria testing. Keri described a series of common sources of bacteria pollution, and the program's protocols for taking samples after storm events and posting advisories after repeated samples show bacteria levels are higher than EPA standards. They discussed recent coastal circulation studies and bacterial source tracking initiatives that have helped beach managers and coastal communities better understand and mitigate bacteria pollution sources, and ways that the public can help keep beach water clean and protect their families from bacteria pollution. For more information, please visit the [Maine Healthy Beaches Program](#) on the web.