



MidCoast Council of Governments - KELT Improving Water Quality of Shellfish Growing Areas

“KELT has assisted the Georgetown Shellfish Committee in ways that have improved the sustainability of our crop and increased water quality awareness. Their assistance with accelerated water quality samples was key in maintaining open status for both Sagadahoc Bay and the Kennebec River harvesting areas.”

Chad Campbell, Chairman



PARTNERS

Kennebec Estuary Land Trust, Maine Department of Marine Resources, Maine Department of Environmental Protection, Androscoggin Valley Soil and Water Conservation District, and the shellfish conservation committees of Woolwich, Phippsburg, West Bath, Georgetown and Westport Island

PROJECT DESCRIPTION (completed June 2013)

The goal of the Kennebec Estuary Shellfish Area Project is to open shellfish flats in the estuary. Through education and outreach we increased understanding of the sources and movement of fecal pollution on shellfish flats. Through identification and sampling of priority shellfish flats we identified specific sources of pollution and refined shellfish area classifications.

APPROACH

Youth outreach programs worked with schools, afterschool programs, and summer camps. Community outreach programs included presentations about clamming and water quality, a learn-how-to-dig-clams event, and storm drain stenciling. A program for professional Code Enforcement Officers (CEOs) and Licensed Plumbing Inspectors (LPIs) focused on the link between clamming and septic systems and new systems that could replace OBDs. Town shellfish committees identified closed priority shellfish areas or those with limited harvesting. Volunteers were certified by DMR to collect water samples. Sampling focused around rainfall events and high Kennebec River flows. The ME DMR and DEP conducted shoreline surveys of septic systems near the priority areas.

RESULTS

More than 635 people participated in 18 outreach and education programs. Clean Water for Clams programs were brought into 4 schools. Eight new volunteers were certified for water sampling, and volunteers contributed more than 280 hours collecting: 338 water samples over 29 dates, and 91 clam samples over 15 dates. Five of the 9 priority shellfish areas have been reclassified since the beginning of 2012, so new areas are open for clamming and areas are open for clamming for more days each year. These upgrades have occurred on flats in 5 of the 6 towns involved (West Bath, Phippsburg, Arrowsic, Georgetown, and Woolwich).

NEXT STEPS AND OPPORTUNITIES

KELT plans to continue providing youth and community programs that build on the KESAP efforts, expanding outreach to more schools and areas of the local community. With closed shellfish flats no longer the primary threat, shellfish committees can focus on the health of shellfish populations. KELT is working to set up a program that will test the effects of water quality and clam flat sediments on shellfish health throughout the Kennebec Estuary region. The Georgetown Water Resources Project focuses on the town's water quality, and Woolwich wishes to test the effectiveness of conservation measures on their clam flats.

NEEDS

A better understanding of the water quality and clam flat sediment characteristics that impact the health and population of shellfish in the Kennebec Estuary is needed to support sustainable shellfish harvesting. Research focused around clam reseeded projects and conservation methods that encourage and protect the growth of juvenile clams will also benefit clamming in the Kennebec Estuary.

LESSONS LEARNED

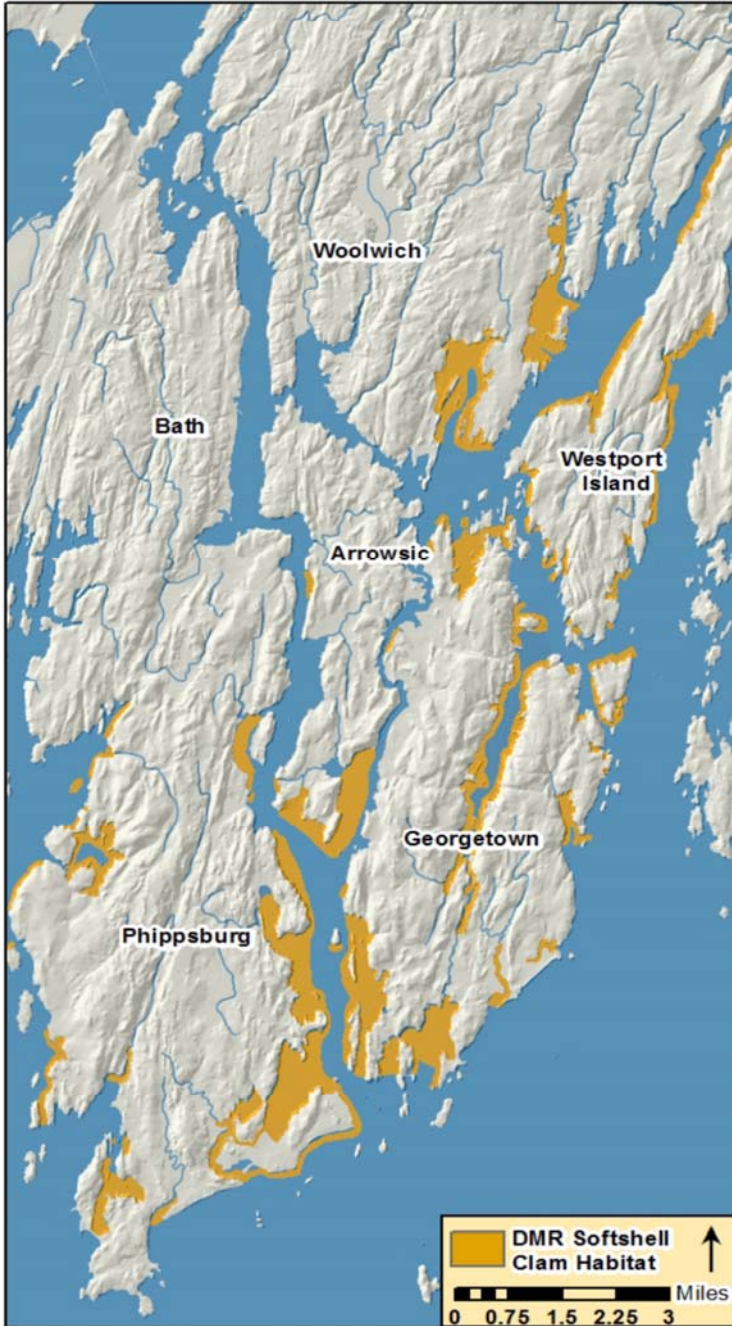
A town-level approach proved more effective than a regional focus that ignored the variability between towns. Timing outreach events for farmers and foresters can be challenging.

APPLICABILITY FOR OTHER MUNICIPALITIES

A broad range of outreach programs were developed. Most of these outreach programs are relatively simple and low cost and are tools other communities could use. Close communication with the DMR and the town shellfish committees was essential for successful and relevant sampling. DMR regulates the flats, and shellfish committees manage the flats. Reliable volunteers who are not commercial Clammers are also needed as volunteer water samplers.

RECOMMENDATIONS

Malfunctioning septic systems are a significant pollution source and can cause closures of valuable shellfish flats. It is suggested that trainings, focused on the relationship between shellfish harvesting, septic systems, and OBDs, be offered for CEOs and LPIs of coastal towns. These trainings would be most valuable if they reviewed specific procedures and forms required by the DMR to document malfunctioning systems that have been identified and fixed or OBDs that are removed.



CONTACT

Ruth Indrick,
Project Coordinator KELT
rindrick@kennebecestuary.org
and 207-442-8400

Jason Bird, Senior Program
Director
Midcoast Council of
Governments (2010 - 2012)

FY12-02
3.7.17.



Financial assistance provided by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce Grant CZM NA10NOS4190188 to the Maine Coastal Program. Coastal Community Grants are awarded and administered by the Maine Department of Agriculture, Conservation and Forestry Municipal Planning Assistance Program.

