

# COASTAL COMMUNITY GRANTS: Water Quality

# Town of Georgetown - KELT Clean Water for Clams: Citizen Science Water Quality Project

"Being a water sampler in Georgetown was a great opportunity to be more connected with this beautiful place. As I revisited collection sites every two weeks during the summer, I was constantly reminded of the magnificence of the natural places of Georgetown and of how vital and fragile our natural resources are. Our coastal waters make Georgetown the community that it is. I am thankful that the Town of Georgetown has been able to undertake this initiative to monitor and understand our waters."

Kathy Gravino
Georgetown Conservation Commission



## **PARTNERS**

Town of Georgetown Shellfish Committee, Conservation Commission, Code Enforcement Officer and Shellfish Warden; Maine DEP, Maine DMR

The Kennebec Estuary Land Trust is committed to conserving land and wildlife habitat of the Lower Kennebec and Sheepscot River estuaries. It is community based membership organization serving the towns of Arrowsic, Bath, Bowdoinham, Dresden, West Bath, Georgetown, Westport Island and Woolwich.

### **ISSUE AREA**

The Kennebec Estuary is where the fresh waters that flow into Merrymeeting Bay and out along the lower Kennebec River meet and mix with the salty water of the Gulf of Maine. A rich and diverse habitat, it is important to understand natural and human-made impacts on this environment, especially as the estuary supports various fishing and tourism industries in the region.

Since 2012, more than 20 volunteers have helped to collect 526 water samples from 19 sites in the Kennebec Estuary for KELT's volunteer sampling program. <a href="http://kennebecestuary.org/water">http://kennebecestuary.org/water</a>

# **PROJECT DESCRIPTION (completed December 2013)**

The Georgetown Water Resources Project targeted water quality in Georgetown, bringing together volunteers, research and outreach to increase knowledge and awareness of the surrounding natural resources. The lack of water quality data for the Kennebec Estuary was highlighted in the 2010 report *The Kennebec Estuary: Restoration Challenges and Opportunities*, Outreach included providing: information to the community about shellfish harvesting in Georgetown, information to private landowners about management of septic systems and Overboard discharges (OBDs), and encourage best management practices for protecting the Town's water resources. As a coastal community, Georgetown depends upon clean water to support the clamming and fishing industries that are the backbone of its heritage and provides livelihoods for its citizens.

### **APPROACH**

Through this project, we developed a volunteer water quality monitoring program for Georgetown. We also provided education and research opportunities for students in local schools and colleges through the Officer SALTY program for 4th graders, green crab population monitoring with 7th graders, high school and middle school education programs and clam flat acidification testing with Bowdoin College students. Press releases, engaging local volunteers, community clamming events, and presentations at a town fair and the Maine Beaches Conference helped to raise awareness about water resources in the community.

#### **RESULTS**

The protocol and equipment for a volunteer water quality sampling program was established and Volunteer Manual and Quality Assurance Project Plan developed using examples from Casco Bay Estuary Partnership and Georges River Tidewater Association. Using the research gathered by college students and volunteers, a final report assessing Georgetown's water quality was compiled and published. A large number of students from local middle and high schools as well as adult members of the community participated in the water resource awareness activities organized by this project. The education programs offered in the community and in the classroom highlighted the importance of water quality to commercial fisheries and public health and identified actions residents can take to protect the water resources in their town.



# COASTAL COMMUNITY GRANTS: Coastal Habitat Restoration

### **NEXT STEPS AND OPPORTUNITIES**

The expansion of Officer SALTY and other school programming to more schools. Informing the community of the results of this project through a presentation on water quality and septic systems and a newsletter sent to residents. Continuation and expansion of the volunteer water quality sampling to new sites as well as the initiation of a green crab trapping and research program.

#### **NEEDS**

This project has identified the need for continued work to protect and share information about Georgetown's water resources. Continuing outreach to more volunteers to continue water quality sampling as well as outreach emphasizing overboard discharge and septic systems is also needed.

### **LESSONS LEARNED**

Outreach programs that are held between July and August when seasonal Georgetown resident are in Maine are most effective. The most enjoyable outreach programs were those held outside on the clam flats. Volunteers enjoyed water quality sampling and the connection it made them feel to their community and environment. Consistent meetings of the conservation commission and shellfish committees are the most effective way to focus on issues deemed important by citizens.

### **APPLICABILITY FOR OTHER MUNICIPALITIES**

This approach to water resource conservation that combines education and outreach with research and on-the-ground projects serves as a model for other towns seeking to rally their citizens around local water quality. This multifaceted approach raises awareness about the project and works with local people to ensure that the project meets the needs of the community.

# **CONTACT**

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

Kate MacKay, Georgetown Conservation Commission <a href="mackay@myfairpoint.net">kfmackay@myfairpoint.net</a>

FY13-13 3.10.17.

Financial assistance provided by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce Grant CZM NA12NOS4190084 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.

