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B Sharon Meeker

Ann S. Reid

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GBCW Support for Shellfish Activities 2003



Submitted by: B Sharon Meeker and Ann S. Reid
New Hampshire Sea Grant Extension
University of New Hampshire, Durham, N.H. 03824
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Cain's Brook Sampling Site



UNIVERSITY of NEW HAMPSHIRE
COOPERATIVE EXTENSION

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Introduction

The Great Bay Coast Watch (GBCW) is a volunteer estuarine monitoring program established in 1989 that includes teachers, students, and local citizens with a diversity of backgrounds. Volunteers participate in a variety of training programs that enable them to monitor water quality parameters in Great Bay and coastal areas, sample for marine phytoplankton blooms and conduct shoreline surveys and habitat evaluations.

Since 1997 the New Hampshire Estuaries Project (NHEP) has relied on the ability of GBCW to recruit and train volunteers to assist with the implementation of its plan to protect, restore and manage the states estuarine systems. This year GBCW again participated in plan implementation by assisting the NH Department of Environmental Services (NHDES) Shellfish Program. Volunteers completed a variety of work tasks, including mussel collection, sample collection and transport and general field assistance.

Goals and Objectives

The purpose of this project was to assist NHDES/Shellfish Program with its management plan activities. GBCW assisted with a variety of work tasks. Specific goals were:

- Recruit, train and organize volunteers for project tasks
- Sample collection and transportation activities for Star Island.
- Sampling site documentation and sample transportation for Little Harbor.
- Wet weather sampling, site documentation and sample transportation,
- Provide miscellaneous field assistance as needed
- Ambient sampling and transportation of samples for the DES Shellfish Program
- Data quality assurance to the DES Shellfish Program
- Shellfish meat sampling and transportation for the DES Shellfish Program

Methods and Accomplishments

Sample Collection and Transportation for Star Island

During this grant, UNH Great Bay Coast Watch assisted NHDES Shellfish with maintaining a Paralytic Shellfish Poisoning (PSP) monitoring station at Star Island, Isles of Shoals. Volunteers collected mussels from Hampton Harbor, placed them in mesh bags then transported them via the Isles of Shoals Steamship Line Ferry to Star Island to hang from the Star Island Corporation docks. Volunteers then returned weekly, collected one bag of mussels and transport the mussels to the state lab in Concord for PSP testing. Volunteers collected and bagged mussels in Hampton Harbor four times, traveled to Star Island to service the PSP sampling station thirteen times and made eighteen trips to Concord to deliver mussels to the NHDHHS Laboratory for testing.

An additional activity conducted by volunteers, which is not supported by this grant, is public education and outreach. On return trips from the Isles of Shoals, trained volunteers would process phytoplankton samples collected from Star Island waters. Interested passengers onboard the ferry were frequently engaged in conversations about coastal issues, and encouraged to examine plankton samples under a microscope and assist with water quality tests.

Wet weather and ambient water quality sampling:

GBCW supplied trained volunteers and NHDES Shellfish Program conducted training on site locations, equipment use, sampling methods and data collection and sample transport.

NHDES notified GBCW of potential sampling days and GBCW subsequently organized volunteer teams for sampling. Sample dates included both pre-scheduled events as well as storm sampling to assist NHDES with storm events, GBCW developed a list of trained volunteers that could be called for unscheduled sampling events. Volunteers assisted with sampling storm water in the *Cains Brook* study area four times. Volunteers also assisted with ambient sampling in Little Bay, Hampton Harbor and Great Bay. Samples were transported to the

DES lab in Concord. All data collected by GBCW volunteers was turned over to NHDES after collection.

Samplings, site documentation, and sample transportation for Little Harbor

GBCW assistance was not requested for this task.

Wet weather sampling, site documentation, and sample transportation

This was postponed although potential volunteers were trained by GBCW during the *Dover Storm Water* training series.

Miscellaneous field assistance

GBCW volunteers assisted with transport, ambient sampling, storm water collection and tidal studies.

Data quality assurance assistance to the DES Shellfish Program

GBCW volunteer Bill Wetzel assisted with data QA on two occasions during the grant period.

Shellfish meat sampling and transportation for the DES Shellfish Program

GBCW volunteers were recruited but never requested to assist with clam digging. They did however transport shellfish samples and assist with the Gulf Watch Mussel Program measuring and shucking mussels.

Discussion and Recommendations

Great Bay Coast Watch continues to provide a valuable trained and flexible workforce of volunteers who can be accessed to accommodate unscheduled sampling during storm events, carry out sample delivery and assist with data verification. GBCW involvement with NHDES Shellfish Program continues to assist the program with significant data collection and public outreach.

- Continue to involve GBCW volunteers in estuary projects – GBCW is skilled at recruiting and training volunteer teams and these projects build a local citizenry educated on coastal issues.
- Continue to allow for project flexibility to accommodate changing DES Shellfish Program needs that arise from time to time. For example,

weather conditions that make it impossible to complete sampling plans or adjustments in project focus.

- Continue to involve GBCW in projects that involve public outreach and education in support of NHDES program goals.
- Continue to allow NHDES Shellfish staff to share the outcome of findings supported by GBCW volunteer involvement.