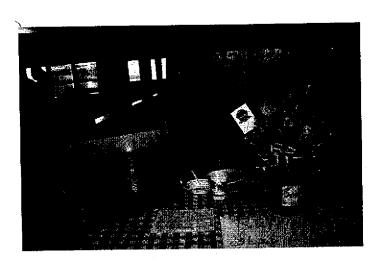


# Great Bay Coast Watch 06-07 NHCP WQ and Phytoplankton Final Report



A Final Report to the New Hampshire Coastal Program Submitted by Mark Wiley and Ann S. Reid

University of New Hampshire Cooperative Extension and New Hampshire Sea Grant
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UNHMP-AR-SG-07- #3

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#### Report Grant Requirements

Project 06-07 NHCP WQ and Phytoplankton First and Second Quarters

Grant Number Project Starts Project Ends

13V086 7/1/2006 6/30/2007

Task ID Tasks

1. Recruit new volunteers and partners. Provide training for both new and existing volunteers. Recruiting will be done primarily using newspaper articles, radio announcements, and the internet. Training will be provided through both workshops and quality assurance monitoring. Expanded training opportunities for volunteers will include apprenticeships with experienced volunteers in the lab and in the field.

New trainees were recruited from; the incoming University of New Hampshire (UNH) Marine Docent class, graduate students working with Dr. Andy Rosenberg, students from the Portsmouth High School Service Learning course.

Larry Gil, Erika Washburn and Joel St Jean, respectively, were trained in sampling methods and practiced at field sites, Dover Foot Bridge, and the Little Harbour School marsh overlook. Larry became an alternate sampler; Ericka used the methods and annual reports to give a presentation about volunteer monitoring in the Netherlands. Joel completed the sampling for Molly Green, a teacher at Little Harbour School's site 22.

 Continue to monitor water quality at sixteen sites around Great Bay and its tributaries. These sites encompass the towns of; Exeter, Stratham, Greenland, Newmarket, Durham, Dover, Portsmouth, Newington, and New Castle, NH, and Eliot, ME. Teams of GBCW volunteers will sample one day per month at both low and high tides from April to November.

Water Quality Monitoring occurred at both low and high tides on July 25, August 24, and September 25 at the sites around Great Bay.

3. Submit all 2006 collected water quality data for submission to the New Hampshire Department of Environmental Services "One Stop Reporting and Information Access Program" database.

At the end of September, data had been verified and accepted through the August data set.

4. Continue to monitor phytoplankton populations at the following four sites in New Hampshire: Hampton Harbor, Parson's Creek (Rye), Coast Guard Station (New Castle), and the Route 1A Bridge (Seacoast Science Center). This task requires that a team of at least two volunteers travel to each site on a weekly basis from April to October make their measurements and observations, and report results to the volunteer coordinator.

GBCW phytoplankton volunteers have continued to monitor phytoplankton populations and the associated water quality at Hampton Harbor, Parson's Creek (Rye), Coast Guard Station (New Castle), and the Route 1A Bridge (Seacoast Science Center) during the first quarter of this grant. As in previous years, the initial spring bloom subsided during July although a short-lived dense bloom of target species Pseudonitzschia was observed during the second week in July at all the sampling sites. Samples of Pseudonitzschia cells were collected by volunteers at the Hampton site and shipped to the Woods Hole Biological Laboratory (WHOI) in Woods Hole, Massachusetts where they were entered into a culture collection. The GBCW

Phytoplankton Program is currently involved in a cooperative effort to characterize the species composition, distribution, abundance, and toxicity of Pseudonitzschia spp. in the Gulf of Maine. This is the first study of its type in the region, and thus is intended to develop the tools, local expertise, and background understanding to respond to outbreaks and provide an assessment of the risk from this group of toxic organisms. Other partners with WHOI are the Maine DMR Phytoplankton Program the Massachusetts Water Resources Authority (MWRA), Massachusetts Division of Marine Fisheries, and NOAA.

In July, a research assistant from the Provincetown Center for Coastal Studies spent a day in the field with the GBCW phytoplankton program coordinator learning the phytoplankton sampling methods. Copies of the GBCW manual, equipment lists, key sheet, and datasheets were provided to the Coastal Studies Center.

5. Write, print, and distribute an annual report on the data collected during the 2006 sampling season. The format will be updated as needed.

This task will be completed according to the schedule.

6. Enlist and support local schools involvement in GBCW activities to foster a continuing connection with young area residents.

Mr. Henry Ndaugiz, environmental science teacher at Marshwood High School (MHS), South Berwick ME, asked Great Bay Coast Watch staff and volunteers to give an interactive demonstration of water quality monitoring techniques for his students. GBCW performed this demonstration at the town boat launch in Eliot ME on September 27. Two other teachers at MHS participate in sampling at Patten Yacht Yard (site-15) and they are looking for more student recruits from the environmental classes.

Working with Portsmouth High School (PHS) Service Learning Coordinator, Joel St Jean, a senior, was trained to monitor water quality parameters and was placed with a fifth grade teacher Molly Green and gave GBCW the opportunity to complete sampling at Little Harbour School marsh overlook, site 22.

Six students from an Intro to Business Course at UNH Whittemore School of Business and Economics (WSBE) have inquired about fulfilling an 8-hour volunteer service requirement with the GBCW.

During September, ninety 6th grade students from Portsmouth Middle School attended a one-hour presentation on phytoplankton as part of their studies of the South Mill Pond ecosystem. Students learned to use field microscopes and the GBCW phytoplankton key to identify cells observed in their samples.

## Report Grant Requirements

Project

06-07 NHCP WQ and Phytoplankton Third Quarter

**Grant Number** 

Project Starts

**Project Ends** 

13V086

7/1/2006

6/30/2007

Task ID

**Tasks** 

Recruit new volunteers and partners. Provide training for both new and existing
volunteers. Recruiting will be done primarily using newspaper articles, radio
announcements, and the internet. Training will be provided through both workshops
and quality assurance monitoring. Expanded training opportunities for volunteers will
include apprenticeships with experienced volunteers in the lab and in the field.

During the 3<sup>rd</sup> quarter of this grant recruiting for new volunteers was done by word of mouth and by news release in the community notes section of Sun Fosters' about the annual meeting and beginning of the sampling season. Two new and one returning volunteers were trained by Karen and Ann in March. One volunteer, new to the lab, requested training in the laboratory procedures: processing of water for the potential of fecal coliform bacteria.

 Continue to monitor water quality at sixteen sites around Great Bay and its tributaries. These sites encompass the towns of; Exeter, Stratham, Greenland, Newmarket, Durham, Dover, Portsmouth, Newington, and New Castle, NH, and Eliot, ME. Teams of GBCW volunteers will sample one day per month at both low and high tides from April to November.

Sampling for this 18<sup>th</sup> Season will begin on April 18<sup>th</sup>. Preparations for monitoring began this quarter with inventory, calibration, kit preparation, and the organization of area leaders. NH Estuaries Project provided \$504.00 for seven new pH meters to replace worn-out pH meters. They were ordered on 3/30/07.

 Submit all 2006 collected water quality data for submission to the New Hampshire Department of Environmental Services "One Stop Reporting and Information Access Program" database.

Completed last quarter.

4. Continue to monitor phytoplankton populations at the following four sites in New Hampshire: Hampton Harbor, Parson's Creek (Rye), Coast Guard Station (New Castle), and the Route 1A Bridge (Seacoast Science Center). This task requires that a team of at least two volunteers travel to each site on a weekly basis from April through October make their measurements and observations, and report results to the volunteer coordinator.

During this report period, plans were made to change the phytoplankton program sampling focus from a qualitative method to a quantitative one. Working along with the Maine Phytoplankton Monitoring program coordinator, discussions were held with scientists from the Woods Hole Biological Laboratory (WHOI) and the University of Maine in order to determine the best way to collect and count samples using the equipment we already had. A decision was made to follow a standard operating method currently used by WHOI that uses filter screens made out of PVC pipe and 20-micron mesh to filter 10-liter samples. Alterations were also made to our counting methods to reflect differences between using a standard bench microscope equipped with a Sedgwick rafter counting slide and our existing capillary tubes. This change in sampling methods will provide more useful information on the presence or absence of toxic cells

in the coastal area and quantitative data on the seasonal succession of the phytoplankton species in our sampling areas. It will also allow the data collected by GBCW volunteers to be compared to offshore data being collected by WHOI scientists and others studying phytoplankton populations around the Gulf of Maine.

5. Write, print, and distribute an annual report on the data collected during the 2006 sampling season. The format will be updated as needed.

The annual report continues to be edited. Some data entry was provided by two new volunteers in January.

6. Enlist and support local schools involvement in GBCW activities to foster a continuing connection with young area residents.

Berwick Academy teachers and students began their search for activities to do with the GBCW, during student volunteer day again this year (April 20).

Retired teacher and GBCW volunteer, Ann Smith, started planning the water quality activities for the 3<sup>rd</sup> graders at New Franklin School. Laura Parsons announced that Oyster River High School plans to continue monitoring site 1.

In addition to these tasks, the GBCW advisory committee was reformed to implement some of the recommendations from the visioning process in 2006. They met once in this quarter. Other meetings were held to inform new/returning volunteers of some changes at GBCW.

## Report Grant Requirements

Project

06-07 NHCP WQ and Phytoplankton Fourth Quarter

Grant Number

Project Starts

**Project Ends** 

13V086

7/1/2006

6/30/2007

Task ID Tasks

1. Recruit new volunteers and partners. Provide training for both new and existing volunteers. Recruiting will be done primarily using newspaper articles, radio announcements, and the internet. Training will be provided through both workshops and quality assurance monitoring. Expanded training opportunities for volunteers will include apprenticeships with experienced volunteers in the lab and in the field.

New Trainees: Erin Baird, Seebe Carver for site 5, Sarah Low for site 13, Jessica Bacon for site 20/21, Joel Kerbrat for alternate, Polly and John Davie for site 15, Lee Sullivan and son for site 15, Emery Hutchins for lab work.

Training date for this year occurred on April 20<sup>th</sup>. Since then other volunteers have come to GBCW, on June 12th we trained a teacher from Berwick Academy and 2 other volunteers who showed keen interest in assisting with GBCW monitoring.

QAQC sessions were held on April 3, 4 and 38 volunteers were certified as water quality monitors.

April 10<sup>th</sup> at the Annual Meeting held at Newick's Restaurant, a waitress asked what it took to do the monitoring; before she knew it, she was training and sampling at site 13 in her hometown, Newmarket.

The preseason training for phytoplankton volunteers included attending the 2007 ECOHAB Symposium at Bowdin College, in Brunswick, Maine on April 3. Seven GBCW Phytoplankton volunteers attended. During the symposium, presentations were given by scientists from WHOI, Bowdin College, the California Department of Health-Biotoxin Program, the Maine Department of Marine Resources, other agencies, and venders. GBCW training specific to the Phytoplankton Monitoring Program was given on April 26 at the Seacoast Science Center (SSC). Twelve volunteers, from both GBCW and the SSC, were trained in the new procedures. The following week volunteers began sampling at stations in Hampton, Parsons Creek, the SSC in Rye and at the UNH Coastal Marine Lab, New Castle. Changing to the quantitative method has been challenging and has required a significant period of field training. Volunteers are now asked to either; identify and record all species in a one ml sample or determine abundance noting the three most common species. The volunteers have been receptive to the change and data collection has been improving.

 Continue to monitor water quality at sixteen sites around Great Bay and its tributaries. These sites encompass the towns of; Exeter, Stratham, Greenland, Newmarket, Durham, Dover, Portsmouth, Newington, and New Castle, NH, and Eliot, ME. Teams of GBCW volunteers will sample one day per month at both low and high tides from April to November.

During the fourth quarter, monitoring occurred at more than 16 sites on April 18, May 17, and June 14. The new trainees enthusiastically joined in at sites 15, 20, 13, and several volunteers filled in at new sites due to vacations or educational trip to Nova Scotia. QAQC field monitoring was completed by a specially trained volunteer with help from the area leaders and Ann Reid. The spring QAQC session was supported by a grant from the Gulf of Maine Council this year. It was conducted in April when 38 monitors were certified.

A separate team of laboratory volunteers processes the water samples for fecal coliform bacteria in the evenings of sampling days. This dedicated group of 8 people work into the night to ensure this important analysis is completed.

3. Submit all 2006 collected water quality data for submission to the New Hampshire Department of Environmental Services "One Stop Reporting and Information Access Program" database.

Data was submitted in the 3<sup>rd</sup> quarter. In the fourth quarter, there were 9 queries for GBCW data, and 17 during this grant period on the OneStop web site. Compared to other data collectors that are not part of NHDES, GBCW data continues to have a significant number of queries, showing that the data continues to have an important impact.

4. Continue to monitor phytoplankton populations at the following four sites in New Hampshire: Hampton Harbor, Parson's Creek (Rye), Coast Guard Station (New Castle), and the Route 1A Bridge (Seacoast Science Center). This task requires that a team of at least two volunteers travel to each site on a weekly basis from April through October make their measurements and observations, and report results to the volunteer coordinator.

Since the program inception in 1999, volunteers have collected phytoplankton data using a qualitative method. This method involved using a 20-micron phytoplankton net to collect samples during a 3-minute tow, pulling a portion of the sample into three capillary tubes and counting the cells observed in six random fields of view. The problem with this method was the extreme variation in the amount of water passing through the net (currents, speed, and net size), differences in the sample volume when concentrating the sample and the likelihood of not seeing a representative sample of cells in the random views. Although this produced information useful for determining the presence or absence of toxic cells, it did not produce a data set, which could be used to identify trends in phytoplankton populations over time. Given the increase in harmful algal bloom (HAB) events over the past several years researchers have been contacting GBCW looking for quantitative data. To resolve these issues the GBCW Coordinator worked with the Maine Phytoplankton Program Coordinator and an advisory group that included scientists from Woods Hole Oceanographic institute (WHOI) to develop a quantitative sampling method. This Standard Operating Procedure (SOP) involving passing a 10 liter volume of collected surface through a PVC 20 micron filter tube was introduced at the beginning of the 2007 season and has since been refined with input from the volunteers themselves. It is currently producing data we feel will be more useful for a variety of applications.

Fortunately, 2007 has been a relatively quiet year, so far, for the red tide producing cell *Alexandrium spp*. Low concentrations of cells were observed at only two stations and there was only one short shellfish harvesting closure in New Hampshire waters.

Star Island continues to be our outpost-monitoring site. Since we no longer have a dedicated ride out to and back from the island, it has been a difficult site to monitor over the past two seasons. This season, the marine education staff person at Star Island agreed to monitor the site as part of her Star Island visitor activities. During the month of June, she was equipped and trained. Unfortunately, due to problems with their occupancy permits the Island is currently closed to the public making it difficult to support her efforts with additional training. It is believed that the Island will be reopened

by August 1st at which time we will have access to the island by way of an agreement with the Newburyport Whale Watch Company which provides a public boat trip to the island and back on Monday afternoons.

5. Write, print, and distribute an annual report on the data collected during the 2006 sampling season. The format will be updated as needed.

Final edits are done and it is at the printer /disc maker. Funding for printing the annual report came from donations accepted in Barbara Baird's memory. See the annual report for the complete dedication. The Annual Meeting was supported by UNH Cooperative Extension.

6. Enlist and support local schools involvement in GBCW activities to foster a continuing connection with young area residents.

During the Sustainability Day at UNH, April 20<sup>th</sup>, students from Berwick Academy set up the GBCW Display and were shown the GBCW mission and sampling protocols. They informed visitors about GBCW and ways to prevent pollution near streams. Before the students left, one of the chaperones/ teachers asked to become a volunteer water quality monitor. Note: the teachers from Berwick Academy are now trained and are sampling regularly.

Oyster River High School students continued to sample at site 1 with their teacher, Laura Parsons. Home schooled student Nikolas Townsend samples at site 6, and due to a change in volunteers, he and his mother have transferred to site 9 in Dover. Ann Smith continues to involve projects about water quality with teachers and students at New Franklin Elementary School.

**Grant Number** 

13V086

Sponsor	Project		Project Starts	Project Ends
NHCP	06-07 NHCP WQ and Phytoplankton	<del></del>	7/1/2006	6/30/2007
Match F	Requirements	•		
Item		Source	Amount	

Match Requirements	•	
Item	Source	Amount
Employee Benefits	Cost Sharing	\$3,080.00
Facilities & Administration	Cost Sharing	\$2,621.00
In Kind Contribution	Cost Sharing	\$27,299.00
Salaries & Wages	Cost Sharing	\$7,000.00
Sum of Cost Share Mate	h Due \$40.000	.00

#### **Matching Funds**

Source	Amount	inkind Match	Comments		
July - September 2006	\$14,482.17	Volunteer Time & Mileage			
Salaries & Wages	\$7,217.39	Cost Sharing	Ann S. Reid		
Employee Benefits	\$2,826.68	Cost Sharing			
Facilities & Administration	\$2,611.45	Cost Sharing			
October - December	\$8,220.84	Volunteer Time & Mileage			
January - March	\$1,899.28	Volunteer Time & Mileage	Volunteer Time & Mileage Vol. Hours = \$18.04/hr Vol. Miles = \$0.485/mile		
April - June	\$13,663.90	Volunteer Time & Mileage			
Total:	\$50,821.71				
Donations					
Amount	Date <b>Cive</b> n	Comments			
\$5.58	3/22/2007	Alligator Clips for Sampling T	ongs		
\$0.00	9/30/2006	None			
Tetal: \$5.58					

**Cost Share Match** Completed

\$50,927.29

**Cost Share** Match Due

(\$10,927.29)

## Time and Mileage Report

Fourth Quarter





UNIVERSITY of NEW HAMPSHIRE COOPERATIVE EXTENSION

Project

06-07 NHCP WQ and Phytoplankton

Sponsor

**NHCP** 



From 4/1/2007

To 6/30/2007

Grant Number 13V086 Project Starts 7/1/2006

Project Ends 6/30/2007

Report Time and Milage

Activity **Annual Meeting** 

Villia motril				
Date	Time (min.)	Miles	FirstName	LastName
4/10/2007	150	30	Sue	McCarthy
4/10/2007	180	30	Lillian (Liz)	Sizemore
4/10/2007	120	10	Nancy	Alcock
4/10/2007	180	0.5	Bob (Rob)	Rowe
4/10/2007	150	50	Erin	Pender
4/10/2007	90	5	Jack	Pare
4/10/2007	120	30	Lyn	Beattie
4/10/2007	90	0	Gail	Pare
4/10/2007	150	32	Nate	Hazen
4/10/2007	120	10	Ann	Smith
4/10/2007	150	40	Don	Chamberland
4/10/2007	150	40	Nancy	Borden
4/10/2007	60	20	Wendy	Harris
4/10/2007	120	26	Angela	Hiley
4/10/2007	150	0	Wesley	Hutton
4/10/2007	300	20	Carolyn	Hutton
4/10/2007	120	30	Wally	Fries
4/10/2007	180	15	Clif	Horrigan ·
4/10/2007	150	0	Olivia	Hutton
4/10/2007	180	60	John	Crandall
4/10/2007	150	46	Tom	Crosby
4/10/2007	120	20	Wes	Tator
4/10/2007	900	95	Public	

Summary for 'Activity' = Annual Meeting (23 detail records)

Sum

ARRO 61

Project Starts 7/1/2006

Project Ends 6/30/2007

Activity Area Leader Support

Date	Time (min.) Miles	FirstName	LastName
4/18/2007	-	Tom	Crosby

Summary for 'Activity' = Area Leader Support (1 detail record)

Sum

Activity Clerical Work

Date	Time (min.)	Miles	FirstName	LastName
6/29/2007	120	60	Jessica	Bacon

Summary for 'Activity' = Clerical Work (1 detail record)

Sum

**21 6**1

Activity Committee Meeting

Security of the second				<u> </u>
Date	Time (min.)	Miles	FirstName	LastName
4/4/2007	120	0	Angela	Hiley
4/4/2007	180	40	Candace	Dolan
4/4/2007	180	35	Steve	Cooper
4/19/2007	210	2 .	Angela	Hiley
4/24/2007	210	26	Angela	Hiley
5/7/2007	180	50	Candace	Dolan
5/7/2007	120	14	Pam	Samson
5/7/2007	240	46	Wally	Fries
5/8/2007	180	26	Angela	Hiley
5/22/2007	120	14	Pam	Samson
5/22/2007	180	26	Angela	Hiley
5/22/2007	150	25	Erin	Baird
5/22/2007	180	40	Candace	Dolan
5/23/2007	270	2	Angela	Hiley
5/30/2007	90	0	Angela	Hiley
6/5/2007	180	14	Pam	Samson
6/5/2007	420	0	Angela	Hiley
6/5/2007	150	25	Erin	Baird

Summary for 'Activity' = Committee Meeting (18 detail records)

Sum

3360

Project Starts 7/1/2006

Project Ends 6/30/2007

Activity **Community Feetival** 

Date	Time (min.)	Miles	FirstName	LastName	
4/20/2007	180	0	Olivia	Hutton	
4/20/2007	360	25	Erin	Baird	
4/20/2007		0	Olivia	Hutton	

Summary for 'Activity' = Community Festival (3 detail records)

Sum

548 25

Activity Kit Care

,				
Date	Time (min.)	Miles	FirstName	LastName
4/13/2007	180	30	Clif	Horrigan
4/13/2007	240	0	Seebe	Carver
4/13/2007	240	25	Erin	Baird
4/15/2007	60	8	Sherri	Townsend
4/15/2007	60	0	Nikolas	Townsend
4/15/2007	60	12	John	Crandall
4/15/2007	60	14	Dick	Ferraro
4/15/2007	60	6	Tom	Crosby
4/15/2007	60	14	Bob (Rob)	Rowe
4/15/2007	90	21	Jane	Harrington
4/15/2007	60	4	Tracy	Wood
4/15/2007	60	15	Dale	Goodwin
4/15/2007	120	26	Angela	Hiley
4/16/2007	90	20	Wendy	Harris
4/17/2007	60	34	Nate	Hazen
4/17/2007	120	30	Ann	Smith
5/16/2007	30	15	Don	Chamberland
6/13/2007	60	21	Tom	Crosby
			<u> </u>	

Summary for 'Activity' = Kit Care (18 detail records)

Sum

1718

Project Starts 7/1/2006

Project Ends 6/30/2007

Activity Laboratory Cleanup

	•			
Date	Time (min.)	Miles	FirstName	LastName
4/22/2007	120	8	Erin	Pender
4/25/2007	120	8	Erin	Pender
4/26/2007	60	0 -	Erin	Pender
5/20/2007	120	8	Erin	Pender
5/22/2007	60	0	Erin	Pender
6/26/2007	120	8	Erin	Pender
6/27/2007	60	0	Erin	Pender

Summary for 'Activity' = Laboratory Cleanup (7 detail records)

Sum

86

32

Activity Laboratory Counts

Date	Time (min.)	Miles	FirstName	LastName
4/19/2007	2	22	Karen	Diamond
4/19/2007	120	2	Olivia	Hutton
5/18/2007	120	6	Karen	Diamond
6/15/2007	90	14	Pam	Samson
6/15/2007	90	12	Karen	Diamond

Summary for 'Activity' = Laboratory Counts (5 detail records)

Sum

**22 56** 

Activity Laboratory Processing

Date	Time (min.)	Miles	FirstName	LastName
4/18/2007	345	19	Karen	Diamond
4/18/2007	240	42	Dave	Bellantone
4/18/2007	210	3	Olivia	Hutton
4/18/2007	300	7	Emery	Hutchins
4/18/2007	300	14	Pam	Samson
5/17/2007	150	20	Amber	Perkins
5/17/2007	<b>300</b> .	20	Melissa	Smith
5/17/2007	150	0	Amber	Perkins
5/17/2007	330	18	Karen	Diamond
5/17/2007	150	0	Amber	Perkins
6/14/2007	240	50	Heather `	Hochuli
6/14/2007	240	6	Karen	Diamond
6/14/2007	240	14	Pam	Samson

Summary for 'Activity' = Laboratory Processing (13 detail records)

Sum

2105

Project Starts 7/1/2006

Project Ends 6/30/2007

Activity Monthly Sampling

Military 25minus				
Date	Time (min.)	Miles	FirstName	LastName
4/18/2007	160	14	Steve	Loos
4/18/2007	150	30	Peggy	Mullin
4/18/2007	210	29	Gail	Pare
4/18/2007	83	16	Eleanor (Muffie)	Hendricks
4/18/2007	110	2	Jane	Harrington
4/18/2007	95	12	Elizabeth (lbby)	Lourie
4/18/2007	120	38	Lillian (Liz)	Sizemore
4/18/2007	120	4	Angela	Hiley
4/18/2007	90	30	Emery	Hutchins
4/18/2007	270	120	Ann	Smith
4/18/2007	80	15	Wes	Tator
4/18/2007	220	17	Sue	McCarthy
4/18/2007	280	15	Dale	Goodwin
4/18/2007	305	160	Laura	Parsons
4/18/2007	215	50	John	Crandall
4/18/2007	120	0	Nancy	Borden
4/18/2007			Tom	Crosby
4/18/2007	130	40	Tracy	Wood
4/18/2007	20	0	Candace	Dolan
4/18/2007	40	0	New Franklin School	
4/18/2007	40	5	New Franklin School	
4/18/2007	180	0	Nikolas	Townsend
4/18/2007		40	Sherri	Townsend
4/18/2007	210	60	Wendy	Harris
4/18/2007	245	65	Don	Chamberland
4/18/2007	250	10	Bev	Brinkman
4/18/2007	7 5	0	Audrey	Fortin ,
4/18/2007	130	5	David	Borden
4/18/2007	7 95	12	Nancy	Alcock
4/18/2007	7 70	3	Public	

Grant Number 13V086	Project 7/1/2006	Starts		Project Ends 6/30/2007
4/18/2007	250	30	Oyster River High School	
5/17/2007	115	18	Victor	Tine
5/17/2007	300	55	Tom	Crosby
5/17/2007	135	18	Tracy	Wood
5/17/2007	120	0	Barbara	Winter
5/17/2007	120	0	Public	
5/17/2007	230	78	David	Borden
5/17/2007	180	20	Sherri	Townsend
5/17/2007	145	33	Steve	Loos
5/17/2007	70	3	Erin	Baird
5/17/2007	180	0	Nikolas	Townsend
5/17/2007	230	55	Don	Chamberland
5/17/2007	70	3	Seebe	Carver
5/17/2007	120	6	Mary	Loughlin
5/17/2007	210	21	Jane	Harrington
5/17/2007	200	36	Steve	Loos
5/17/2007	210	30	Wendy	Harris
5/17/2007	95	15	Wes	Tator
5/17/2007	155	65	Nancy	Borden
5/17/2007	195	42	Peter	Richardson
5/17/2007	200	36	Jennifer	Lee
5/17/2007	120	30	Sarah	Low
5/17/2007	50	0	Audrey	Fortin
5/17/2007	75	15	John	Davie
5/17/2007	90	20	Jeff	Gardner
5/17/2007	170	36	Eleanor (Muffie)	Hendricks
5/17/2007	146	16	Lydia	Scott
5/17/2007	140	24	Dick	Ferraro
5/17/2007	320	100	Ann	Smith
5/17/2007	75	0	Polly	Davie
5/17/2007	7 80	6	Nancy	Alcock
5/17/2007	7 270	39	Sue	McCarthy
5/17/2007	7 120	28	Ron	Morales
5/17/2007	7 90	15	Peggy	Mullin
5/17/2007	7 120	120	Laura	Parsons

Grant Number	Project 7/1/2006	Starts		Project Ends 6/30/2007
5/17/2007	120	0	Public	
5/17/2007	265	15	Dale	Goodwin
6/14/2007	50	0	Audrey	Fortin
6/14/2007	80	0	David	Borden
6/14/2007	110	10	Erin	Baird
6/14/2007	230	15	Bev	Brinkman
6/14/2007	210	50	Wendy	Harris
6/14/2007	350	0	Jessica	Bacon
6/14/2007	80	20	Jeff	Gardner
6/14/2007	225	12	Jane	Harrington
6/14/2007	43	3	Public	
6/14/2007	45		Candace	Dolan
6/14/2007	315	45	Polly	Davie
6/14/2007	110	0	Seebe	Carver
6/14/2007	150	40	Don	Chamberland
6/14/2007	230	42	John	Crandali
6/14/2007	240	44	Tom	Crosby
6/14/2007	200	10	Dale	Goodwin
6/14/2007	80	5	Nancy	Borden
6/14/2007	120	120	Laura	Parsons
6/14/2007	120	38	Lillian (Liz)	Sizemore
6/14/2007	130	32	Eleanor (Muffie)	Hendricks
6/14/2007	60	12	Patty	Warren
6/14/2007	180	20	Nikolas	Townsend
6/14/2007	180	20	Sherri	Townsend
6/14/2007	180	36	Victor	Tine
6/14/2007	43	0	Public	
6/14/2007	230	100	Ann	Smith
6/14/2007	160	72	John	Scott, Jr.
6/14/2007	50	0	Russell	Pope
6/14/2007	210	28	Gail	Pare
6/14/2007	150	30	Peggy	Mullin
6/14/2007	130	20	Mary	Loughlin
6/14/2007	90	20	Emery	Hutchins
6/14/2007	170	62	Joel	Kerbrat
6/14/2007	60	3	Peter	Richardson
6/14/2007	60	0	Steve	Loos

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Grant N 13V086	umber	Projec 7/1/2006		S	Project Ends 6/30/2007	
	6/14/2007	80	36	Elizabeth (Ibby)	Lourie	
	6/14/2007	60	15	Sarah	Low	_

Summary for 'Activity' = Monthly Sampling (104 detail records)

Sum

Project Starts 7/1/2006

Project Ends 6/30/2007

Activity Phytoplankton Sampley

Phytoplankton San	<b>des</b>				
Date	Time (min.)	Miles	FirstName	LastName	
4/30/2007	90	3	Conni	Scully	
4/30/2007	90	5	Lyn	Beattie	
4/30/2007	90	6	Renae	Broderick	
5/4/2007	120	8	Angela	Hiley	
5/4/2007	120	4	Clif	Horrigan	
5/4/2007	120	12	Angela	Hiley	
5/4/2007	120	8	Angela	Hiley	
5/8/2007	135	5	Lyn	Beattie	
5/8/2007	135	6	Renae	Broderick	
5/8/2007	135	3	Conni	Scully	
5/10/2007	120	4	Clif	Horrigan	
5/14/2007	90	3	Beverly	Hollingworth	
5/14/2007	90	2	Lyn	Beattie	
5/14/2007	90	3	Dorothy	Kilcoyne	
5/14/2007	120	27	Peter	Richardson	-
5/14/2007	0	0	Steve	Cooper	
5/14/2007	90	6	Renae	Broderick	
5/14/2007	90	6	Conni	Scully	•
5/21/2007	0	0	Steve	Cooper	
5/21/2007	90	6	Renae	Broderick	
5/21/2007	90	2	Lyn	Beattie	
5/21/2007	90	6	Conni	Scully .	
5/22/2007	120	27	Peter	Richardson	
5/22/2007	90	3	Dorothy	Kilcoyne	
5/27/2007	120	40	Michele	Wensman	
5/28/2007	120	6	Conni	Scully	
5/28/2007	120	2	Lyn	Beattie	
5/28/2007	120	6	Renae	Broderick	
5/28/2007	90	25	Steve	Cooper	
6/6/2007	0	0	Steve	Cooper	•
6/6/2007	120	8	Angela	Hiley	
6/6/2007	90	6	Conni	Scully	
6/6/2007	90	2	Lyn	Beattie	
6/11/2007	120	27	Peter	Richardson	
6/11/2007	7 60	6	Conni	Scully	
6/11/2007		4	Dorothy	Kilcoyne	
+· · ·· — - <del>-</del> ·			=		Dan

Grant Number 13V086	Projec 7/1/200	et Starts 6	3	Project Ends 6/30/2007	
6/11/2007	120	4	Nancy	Donovan	
6/11/2007	60	6	Renae	Broderick	
6/11/2007	120	2	Public		
6/18/2007	60	25	Steve	Cooper	
6/18/2007	150	6	Conni	Scully	
6/18/2007	150	2	Lyn	Beattie	•
6/21/2007	120	8	Angela	Hiley	
6/25/2007	90	6	Conni	Scully	
6/25/2007	60	3	Dorothy	Kilcoyne	
6/25/2007	90	2	Lyn	Beattie	
6/25/2007	60	5	Marcia	McDonald	
6/25/2007	120	27	Peter	Richardson	
6/25/2007	150	25	Steve	Cooper	
6/25/2007	60	3	Public		
6/27/2007	120	70	Wally	Fries	
6/29/2007	180	30	Steve	Cooper	
Summer, for the stinger of Dhystonland			orde)		

Summary for 'Activity' = Phytoplankton Sampling (52 detail records)

Sum

**5285** 

611

Activity W/K Team

40 40	•				
Date	Time (min.)	Miles	FirstName	LastName	
5/15/2007	164	19	Barbara	Trow	
6/14/2007	130	32	Barbara	Trow	

Summary for 'Activity' = QA/QC Team (2 detail records)

Sum

284

Activity Special Function

Date	Time (min.)	Miles	FirstName	LastName	
4/20/2007	720	0	Berwick		
			Academy	·	

Summary for 'Activity' = Special Function (1 detail record)

Sum

Project Starts 7/1/2006

Project Ends 6/30/2007

Activity training \$50

Date	Time (min.)	Miles	FirstName	LastName
5/26/2007	120	32	Nancy	Donovan
5/26/2007	120	12	Renae	Broderick
5/26/2007	120	25	Tony	Bower
5/26/2007	120	12	Clif	Horrigan
5/26/2007	120	10	Conni	Scully
5/26/2007	120	40	Don	Chamberland
5/26/2007	120	40	Ginny	Raub
5/26/2007	120	32	Beverly	Hollingworth
5/26/2007	150	32	Marcia	McDonald
5/26/2007	120	40	Michele	Wensman
5/26/2007	120	23	Public	

Summary for 'Activity' = training SSC (11 detail records)

Sum

356

\$2,578.02

Summary for 'Project' = 06-07 NHCP WQ and Phytoplankton (259 detail records)

Time (Minutes)

\$11,085.88

Miles Time Value: \$

18.04

Sum

36871.00 5315.50

5315.50 Mileage Value: \$

0.485

Value \_\_\_

Total Value \$13,663.90

#### **Matching Funds**

Matching Funds			
Source	Amount	inkind Match	Comments
July - September 2006	\$14,482.17	Volunteer Time & Mileage	
Salaries & Wages	\$7,217.39	Cost Sharing	Ann S. Reid
Employee Benefits	\$2,826.68	Cost Sharing	
Facilities & Administration	\$2,611.45	Cost Sharing	
October - December	\$8,220.84	Volunteer Time & Mileage	
January - March	\$1,899.28	Volunteer Time & Mileage	Vol. Hours = \$18.04/hr Vol. Miles = \$0.485/mile
Total:	\$37,257.81		
Donations			
Amount	Rate Civen	Comments	Contact ID

Amount	Date Given	Comments	Contact ID
\$0.00	9/30/2006	None	0
\$5.58	3/22/2007	Alligator Clips for Sampling Tongs	601

Project Starts 7/1/2006

Project Ends 6/30/2007

Total

\$5.58

**Crand Total Match:** \$37,263.39