

**New Hampshire Coastal Program
Performance Progress Report for State Cooperative Agreement No.
NA15NOS4190089
For the period from July 1, 2015 to December 31, 2015**

Section A – Progress and Status of Award Tasks

Section 306

TASK 306-1: PROGRAM ADMINISTRATION

Activity 1: Agency Interaction

Status: In Progress

The New Hampshire Coastal Program has continued to serve an important inter and intra-agency communication role. NHCP staff continues to participate in quarterly Watershed Management Bureau (WMB) staff meetings; NHCP hosted the November WMB meeting which included a presentation by Simone Barley-Greenfield on her NOAA Coastal Fellowship. In addition, during the reporting period, Steve Couture participated in the agency's CLEANR (Climate, Energy, Air and Natural Resources) strategic planning group. CLEANR has focused on an agency wide assessment of programmatic efforts that are currently or could address climate change impacts. Through NHCP's participation, the Watershed Management Bureau has been the leading Bureau in this effort. CLEANR developed a report outlining the NHDES progress on its climate initiative, with Steve Couture, Kirsten Howard, and Cathy Coletti contributing to and editing its content. Finally, Steve participated in the four meetings of the NHDES Wetlands Rules Workgroup which included representatives from other state agencies and stakeholder groups. The intent of the workgroup is to improve permitting efficiency by clarifying definitions, focusing on ecosystem integrity, and providing guidance to aid applicants.

NHDOT Natural Resource Agency Coordination Meetings

Chris Williams continues to participate in NH Department of Transportation (NHDOT) Natural Resource Agency coordination. The coordination meetings, hosted by NHDOT, provide an opportunity for state and federal resource agency staff, including the U.S. Army Corps of Engineers, EPA, the National Marine Fisheries Service, the U.S. Fish & Wildlife Service, NHCP, the NH Fish & Game Department and the DES Wetlands Bureau, to review and comment on proposed NHDOT projects. There were five meetings held during the reporting period. Chris did not participate in any of the meetings, primarily due to the lack of proposed projects located in the coastal zone.

Activity 2: Program Administration

Status: In Progress

Staff submitted semiannual progress and financial reports. Staff maintained financial records which sufficiently document program budget allocations and expenditures to meet the Office for Coastal Management and DES audit requirements. Program Manager Steve Couture coordinated

the implementation of sections 306/306A and 309. FFY14 Cooperative Agreement rebudget request was developed and approved. The FFY15 PSM was rebudgeted and approved.

Steve worked with the Watershed Management Bureau Administrator to develop a reorganization of the NHCP. The reorganization includes upgrading and reclassifying existing positions from the planner to the environmentalist job classification scheme. Under the reorganization, the NHCP Program Manager will also have responsibility for the NHDES Shellfish Program. NHDES Leadership has approved the reorganization of the NHCP. The next step is of the NH Division of Personnel to review the request.

Activity 3: Program Supervision

Status: In Progress

Steve Couture participated in three monthly Section Supervisor meetings (October, November, December), and led four monthly NHCP staff meetings (July, September, November, December). Steve Couture coordinated the creation and hiring for a part-time coastal resilience position.

Activity 4: Performance Measurement System

Status: Completed

Cathy Coletti submitted NHCP's performance measurement system data and documentation into the national Coastal Zone Management Act Performance Measurement System database in August.

Activity 5: Section 312 program evaluation

Status: In progress

NHCP staff completed the 312 program evaluation information request and submitted to NOAA two weeks ahead of schedule. Steve Couture participated in a 312 initial scoping call with NOAA staff.

Activity 6: Oil Spill Response Incident Command Center

Status: In progress

The NHDES Oil Spill Response conducted the following activities during the reporting period.

1. Coordinated the initial meeting for the updating and improvements to the NOAA's coastal Environmental Sensitivity Maps.
2. Regional Response Team (Regional spill planning committee formed under OPA 90)
 - a. Participated in Fall 2015 RRT meeting
3. Maine/NH Area Committee (the local spill planning committee formed under OPA 90)
 - a. Participated in two quarterly meetings.
 - b. Participated in one Executive Steering Committee.
 - c. Attended two day training on US Coast Guard Incident Action Plan software
4. Attended and hosted one Port Safety Forum meeting.
5. Hosted a meeting for the NH Guard Civil Support Team to present their emergency response capabilities to new management staff.
6. Meet with NH Homeland Security and Emergency Management new local liaison for oil spills to identify issues that the agencies can/should be working on regarding coastal spill response.

7. One meeting with Division leadership to define and clarify DES roles for USCG interaction.
8. Conducted 2 regular training sessions for the NH DES GIS Coastal Spill Response team, including one table top exercise.
 - a. Updated software, GIS components on server and printing equipment.
9. Portsmouth Oil Spill Response Workgroup
 - a. Conducted two Quarterly Meetings.
 - b. Conducted several Incident Command Post Committee meetings; update response section containers.
 - i. Upgraded internet capability for the Incident Command Post.
 - ii. Repaired Generator and the Incident Command Post.
 - c. Conducted multiple Geographic Response Plan Committee meetings
 - i. Reviewed all existing GRPs. Determined which needed updating and/or testing.
 - ii. On-water tour of a number of GRPs to clarify questions, update photo log and educate new members of the committee.
 - d. Conducted a Multiagency Spill exercise.
 - i. Conducted 5 exercise table top planning meetings, including Initial, Mid and final Planning Conferences.
 - ii. Conducted 3 exercise field deployment planning meetings.
 - iii. One day of ICS training refresher
 - iv. Exercised operation of the DES command post and ICS structure.
 - v. Field deployment of three Boom strategies.
 - vi. Conducted the exercise After Action Report initial meeting.
10. Oiled Wildlife
 - a. Reviewed and tasks under the contract and developed a new schedule for 2015-2016.
 - b. Visited and evaluated Rehabilitation facilities with Tri-State Bird Rescue, DES' contracted Oiled Wildlife Response organization.
11. Performed maintenance on DES spill response fleet of vessels to maintain readiness.
12. Great Bay Protection boom strategy:
 - a. Replaced the three season mooring buoys with winter mooring balls, verified all lines are in place and secure.
 - b. Moved barges with boom for the strategy from their three season boat moorings back to the winter boat moorings.
 - c. Provided education on spill response and boom deployment to the members of the Marine Mammal Stranding team.
13. Conducted Spill Responses:
 - a. Investigated numerous reports of sheen in the coastal area.
 - b. Responded to numerous smaller spills that could have impact to the coastal navigable waters; home heating oil, vehicle accidents and gasoline overfills.
 - c. Conducted initial briefing of the US Coast Guard's Sector Northern New England's new Captain of the Port.
14. Conducted two day Boom deployment exercise
 - a. One Day skills practice.
 - b. Deployment of the Great Bay Strategy.
 - c. Observation of the Oyster river strategy deployment.

15. Attended the Area maritime Security Sub-Committee Meeting
16. Attended EPA's meeting to develop inland GRPs (some of which will protect estuarine waters from oil spills) on the Lamprey and Exeter/Squamscott Rivers.
 - a. Performed aerial photography search (both commercially available and DES photos) to identify potential locations for strategy development.
17. Conducted training to educate local Fire Departments on coastal spill response capabilities, risks, response and notification.
18. Conducted 3 meetings and one field visit to design an improved security system for the coastal incident command post/DES office.

Activity 7: Coastal Fellow

Status: In progress

Steve Couture serves as the mentor for Simone Barley-Greenfield, the NOAA Coastal Fellow for the NHCP. Steve coordinated the purchase of necessary equipment (laptop, monitor) for Simone and holds biweekly mentor meetings with Simone. Simone has made excellent progress on the fellowship, conducting a series of interviews, holding three steering committee meetings and now focusing on a suite of social indicators to consider for detailed analysis. Simone is also conducting policy research in support of a GBNERR led science collaborative project focused on buffers.

TASK 306-2: GRANTS MANAGEMENT

Activity 1: NOAA Grant Application and Reporting

Status: In progress

The annual grant application to NOAA for this Cooperative Agreement was initiated July 1, 2015 and is underway. This is the first performance report to be submitted under this grant. All tasks outlined in the application are being reported here.

Activity 2: General Grant Administration

Status: In Progress

Grant management and oversight is being provided for all grants administered by NHCP.

Activity 3: Manage pass-through grants.

Status: In Progress

Staff is overseeing the technical assistance pass-through grants awarded to the Rockingham Planning Commission (RPC), Strafford Regional Planning Commission (SRPC), and the Natural Resources Outreach Coalition (NROC). Progress reports on work activity by these three technical assistance partners are included in this report (Tasks 306-08, 306-09 and 306-10).

Activity 4: Maintain the Grant Tracking Database

Status: In Progress

Grantee and project information was entered into the grant tracking database for grantees after their grant agreements were approved by the Governor and Council. Grant payments made during the report period, and associated matching funds, have been recorded in the database.

TASK 306-3: COMMUNICATION

Activity 1: Publicize NHCP's work and success stories

Status: In Progress

Cathy Coletti develops articles, press releases and other communications materials for the NHCP, including working with the DES Public Information Office on the content, organization and distribution of press releases highlighting newsworthy activities. In addition, the NHCP continues to utilize DES and partner communications' pieces to get the word out about NHCP announcements and news. These pieces include the Watershed Assistance Program blog, DES Environmental News, the DES Municipal EcoLink Newsletter, and the Piscataqua Region Estuaries Partnership e-newsletter.

Examples of this work:

- Wrote and released press release on NH Gulf of Maine Council Award winners, July.
- Hampton-Seabrook Estuary Dune Restoration Photo and extended caption, published in July/August issue of NHDES News.
- Oyster Conservationists Success Story, published in Sept./Oct. issue of NHDES News.
- Published Shoreline Management Story on oysters as living shorelines on the NHCAW blog in October. This story was shared by several partner organizations.

Activity 2: Maintain Coastal Program website.

Status: In Progress

Cathy maintains the NHCP website. Cathy regularly posted announcements, events, and new links for public consumption, including updating adding links to new NHCP funded projects, including Soak up the Rain and the PTAPP project.

Activity 3: Communications Technical Assistance

Status: In Progress

Cathy provided technical assistance, including editing outreach materials. She also helped amplify program partner announcements. Below are examples of this work:

- Amplified Surfrider Foundation announcement on reviewing recreational user ocean survey data on Twitter and using targeted distribution lists– July 2015.
- Watershed Management Bureau Instream Flow Program Assistance:
 - Edited press release: NHDES requests voluntary water conservation in the Lamprey River Watershed, July.
 - Reviewed and provided edits on ISF Report Executive Summary, August 2015.

TASK 306-4 FEDERAL CONSISTENCY AND POLICY – See Section B of this report

TASK 306-5 PERMITTING AND ENFORCEMENT – See Section B of this report

TASK 306-6: COORDINATION ACTIVITIES

Activity 1: Assistance to Regional and National Coastal Management Efforts

Status: In Progress

CSO: Steve Couture participated in the September meeting of the Coastal States Organization. Steve also participated in two NOAA/ CSO 306A Guidance Team calls.

NERACOOS: Steve serves on the Board of Directors (BOD) and Finance Committee for NERACOOS, and participated in the December BOD meeting. Steve also provided input for NERACOOS's FY15 Coastal Resilience proposal. Steve represented NHDES and participated in NERACOOS Great Bay nutrient monitoring QA/QC call. Steve Couture and Chris Williams provided input and participated in NERACOOS's NECAN Policy Committee calls.

GOMC: Steve Couture represented NHDES as the GOMC Working Group Chair and coordinated a request to NOAA (accepted) to serve as Co-Chair. Steve participated in several Secretariat and Co-Chair calls. Working with the NOAA Co-Chair, NHCP served a satellite host for a joint Working Group and Council meeting in December. Steve also serves on the Executive Committee of GOMA BOD and participated in several calls relevant to the transition to a limited role Executive Director. Steve also participated in the GOMA BOD conference call in December. Finally, Kevin Lucey led the NHCP effort to coordinate a Tidal Crossings workshop with NALCC and NROC as partners. The Tidal Crossings workshop has participants from all the New England states, NY, New Brunswick, Nova Scotia, Washington and federal agencies from both countries.

NROC: Steve Couture and Kirsten Howard coordinated and drafted the NH input for the NROC living shoreline section of the NERACOOS NOAA Coastal Resilience Proposal. NHCP hosted the November NROC meeting. Steve Couture, Chris Williams and Kirsten Howard participated in the NROC/NALCC Coastal Resilience proposal review. Chris Williams also participated in the December 3 NROC Executive Committee call.

RPB: Chris Williams participated in the Northeast Regional Planning Body (RPB) Interagency Workshop in Boston, MA on September 10 & 11, the RPB Stakeholder Workshop in Durham, NH on October 20 and the RPB meeting in Portland, ME on November 16 & 17. Chris also participated in numerous RPB related calls during the reporting period.

Activity 2: Piscataqua Region Estuaries Partnership (PREP)

Status: In Progress

Steve Couture coordinated with PREP staff to develop a state capital budget request to support improved coastal water quality and habitat monitoring. Steve participated in a Land Acquisition review panel to select proposals to fund under PREP's Land Acquisition Grant Program. Steve participated in PREP's December Management Committee meeting, provided input to EPA during EPAs in state performance review of PREP, and participated in PREP's ad hoc membership committee.

Activity 3: Shellfish Harvest Area Management

Status: In Progress

Chris Williams continues to assist the DES Shellfish Program with on-call coverage when Shellfish Program staff is unavailable. Chris provided on-call coverage from July 1 through July 6 and from October 22 through October 30.

Activity 4: State legislation, rulemaking and policy

Status: In progress

Steve Couture worked with coastal state legislators to develop draft language for three bills to be considered in the 2016 legislative session:

2016-2723 SB

Title: requiring certain state agencies to conduct an audit of laws governing coastal regions to enable authorities to take appropriate actions.

2016-2724 SB

Title: requiring NHDES to update coastal flooding trends.

2016-2736 SB

Title: establishing the coastal marine natural resources and environment commission.

TASK 306-7: COASTAL RESTORATION PROGRAM

Activity 1: Dam Removal Project Management:

Status: In Progress

Gonic and Gonic Sawmill Dam: Design and Engineering – Rochester

Kevin Lucey continues to advance the Gonic and Gonic Sawmill Dam Removal Project. Kevin has worked with the NHDES Dam Bureau to prepare a Request for Opinion from the NH Attorney General's Office (AGO) regarding the unresolved ownership of the Gonic Sawmill Property and Gonic Sawmill Dam. During this reporting period, the AGO has agreed to allocate resources toward resolving ownership. Also during this reporting period, the DES Hazardous Waste Remediation Bureau provided their opinion on the Phase I & II Environmental Site Assessment (ESA) of Lot 3. A remedial action plan is recommended by DES HWRB pending results of a limited groundwater investigation. NHCP will work with the City of Rochester in upcoming months to implement a limited groundwater investigation.

Sawyers Mill Dam, Dover

After a prolonged negotiation, the Design, Permitting, and Engineering contract was signed on September 11, 2015. A kick-off meeting with the project team was held on September 25, 2015. The kick-off meeting detailed the complex analysis that Gomez and Sullivan Engineers will undertake over the next 18 months in order to remove both dams by fall of 2017. During this reporting period, Kevin Lucey facilitated all agency coordination and project administration including, but not limited to: meeting coordination, submittal review, grant management, and contract management.

Great Dam, Exeter River

The Town of Exeter is entering the final phases of design and engineering for the removal of the Great Dam. Due to steep bedrock contours beneath the dam, a roughened ramp is being constructed at the site of the removed dam to moderate stream bed elevations throughout the

reach. Kevin Lucey participates in the agency committee that provides technical review of the project design. The Great Dam is projected for removal in Summer 2016.

Activity 2: Salt Marsh Restoration, Management and Planning

Status: In Progress

- Activity 2 was created in the FFY15 workplan to capture as-needed technical assistance focusing on salt marsh that is regularly provided through the NHCP Restoration Program. One of the primary goals of Activity 2 was to evaluate the possibility of re-starting the New Hampshire Marsh Monitoring Program at salt marsh restoration sites after a 10 year hiatus. During this reporting period, Kevin Lucey reached out to regional partners to determine whether there is interest/need for the monitoring data. NHCP will continue to evaluate the interest and level of effort required to implement the program.
- The NHCP has been asked by a NH State Senator to provide technical assistance to a complex habitat management project at the Philbrick Pond Salt Marsh, an Atlantic facing estuary in North Hampton. A degraded culvert associated with an abandoned electric trolley prevents tidal inundation of upstream salt marsh. Further, the degraded culvert prevents floodwater from effectively draining to the Atlantic. Kevin Lucey convened and facilitated two meetings (10/30/15 & 12/18/15) with the Town of North Hampton, NH Department of Transportation, NHDES Wetlands Bureau, and local residents. NHCP staff Kirsten Howard and Chris Williams have been involved with the project as it relates to their expertise. While the outcome is currently unresolved, the NHCP will facilitate an outcome that balances flood risk while maximizing ecosystem benefits.

Activity 3: Early Detection rapid response on perennial pepperweed (*Lepidium latifolium*)

Status: In Progress

- Kevin Lucey attended the Mass to Maine Invasive Plant Partnership meeting on November 16, 2015 to discuss pepperweed activities and accomplishments during the 2015 season. The MA-to-ME partnership includes: Park River Wildlife Refuge, Audubon, Gulf of Maine Institute, Mass Bays, Rachel Carson Wildlife Refuge, NHCP, etc.

Activity 4: Community Supported Invasive Plant Control at Odiorne Point State Park

Status: In Progress

- On August 12, 2015 Kevin Lucey met with staff from the Rockingham County Conservation District (RCCD) to discuss next steps and funding opportunities at Odiorne.
- On October 28, 2015, Kevin Lucey assisted the RCCD with a service learning curriculum at Odiorne Point State Park. Students spent the morning learning about invasive plants and restoration activities at the Park and spent the afternoon using Weed Wrenches to clear buckthorn from the Park.

Activity 5: Interagency and Cross Boundary Coordination

Status: In Progress

- See 306-7 Activity 3 (above)
- See 309-1- Tidal Culverts (below)

TASK 306-08: ROCKINGHAM PLANNING COMMISSION – TECHNICAL ASSISTANCE GRANT

Status: In Progress

The NHCP grant allows RPC to provide planning technical assistance to municipalities on climate adaption work as well as staff support to the N.H. Coastal Adaptation Workgroup and the Coastal Risks and Hazards Commission.

A progress report summarizing activity during the project is attached to this report.

TASK 306-09: STRAFFORD REGIONAL PLANNING COMMISISON – TECHINCAL ASSISTANCE GRANT

Status: In progress

The NHCP grant will allow SRPC to provide planning technical assistance to a coastal community on stormwater and inland flooding challenges as well as participating in the N.H. Coastal Adaptation Workgroup and the Coastal Risks and Hazards Commission.

A progress report summarizing activity during the reporting period is attached to this report.

TASK 306-10: NATURAL RESOURCES OUTREACH COALITION (NROC) – TECHNICAL ASSISTANCE GRANT

Status: In progress

The NHCP grant allows NROC to provide education, outreach and technical assistance that supports climate adaptation planning and increases community capacity to deal with the effects of climate change.

A progress report summarizing activity during the reporting period is attached to this report.

TASK 306-11: GUNDALOW EDUCATION AND OUTREACH PROGRAM – THE GUNDALOW COMPANY

Status: Not started

This project will begin on January 1, 2016.

TASK 306-12: MARINE DEBRIS CLEANUP AND EDUATION – BLUE OCEAN SOCIETY

Status: Not started

This project will begin on January 1, 2016.

TASK 306-13: PISCATAQUA REGION MONITORING COLLABORATIVE – PISCATAQUA REGION ESTUARIES

Status: In progress

The Piscataqua Region Monitoring Collaborative is a shared initiative by the University of New Hampshire, NHDES, Maine DEP, GBNERR and a number of municipalities to collect data relative to the health of the Great Bay estuary. The PRMC has an emphasis on identifying new,

high priority data needs in addition to sustaining the baseline monitoring program, and securing resources to collect the data. The PRMC is administered by the Piscataqua Region Estuaries Partnership (PREP) at UNH.

A progress report summarizing activity during the reporting period is attached to this report.

TASK 306-14: GULF OF MAINE COUNCIL COORDINATION

Status: Complete

This NHCP grant supports the Gulf of Maine Council Coordinator for the Gulf of Maine Council on the Marine Environment, a U.S.-Canadian partnership of government and non-government organizations formed to maintain and enhance environmental quality in the Gulf of Maine to allow for sustainable resource use by existing and future generations.

A final report summarizing activity is attached to this report.

Section 309

TASK 309-1: TIDAL CULVERTS

Activity 1: Draft tidal culvert field assessment protocol

Status: In Progress

The goal of this strategy is to improve design and permitting outcomes of the replacement and/or construction of new road crossings in tidal environments in New Hampshire's Coastal Zone through non-regulatory approaches. NHCP plans to achieve this strategy by conducting in-depth field assessments of tidal crossings in New Hampshire's Coastal Zone followed by evaluating field data to determine whether road crossings are restrictive of existing and predicted tide elevations. This approach will achieve program change by providing guidelines in the form of environmental targets and hydrological needs for selected tidal areas. This will allow engineers and permitting agencies to have a standard upon which to measure suitability of a proposed action for the site in question.

NHCP is contracted with the New Hampshire Chapter of The Nature Conservancy (TNC) to develop recommendations for a field-based tidal crossing assessment protocol to assess the functionality of tidal crossing structures. On July 28, 2015, TNC convened a field day to discuss applicable field parameters for a tidal crossing assessment. Participants included NH Department of Transportation, NH Fish and Game Department, NHCP, NH Geological Survey and UNH Jackson Laboratory.

On September 10, 2015, approximately 45 regional partners attended a Tidal Crossing Assessment workshop in Portsmouth NH. The workshop was convened by partners including Northeast Regional Ocean Council, Gulf of Maine Council on the Marine Environment, North Atlantic Landscape Conservation Cooperative, TNC and the NHCP. The purpose of the workshop was to share information regarding jurisdictional efforts on developing protocols for assessing tidal crossings and to enhance understanding of how management questions can be addressed through tidal crossing assessments. The workshop included: overview of management questions, roundtable of tidal crossing initiatives underway, overview and discussion of potential evaluation criteria and their relevant assessment parameters. Workshop participants also

provided input in breakout groups on the draft protocol developed by The Nature Conservancy and the NHCP.

TASK 309-2: COASTAL RISKS AND HAZARDS COMMISSION

Goal: To support development of the recommendations of the legislative New Hampshire Coastal Risks and Hazards Commission and assist with communication and outreach about the effort and draft recommendations.

Activity 1: Support the NH Coastal Risks and Hazards Commission

Status: In Progress

Clerk duties: Kirsten took charge of Commission Clerk duties immediately prior to the reporting period. Duties for full Commission and Steering Committee meetings included taking attendance, drafting and finalizing meeting minutes, keeping electronic and hard copy records, and responding to questions from the public, as needed.

Alternate duties: Steve Couture served as the alternate for the NH Department of Environmental Services. Steve also served on the Steering Committee, report writing working group, and provided expert state agency input on legislation drafting efforts by the Commission Co-chairs (see Task 306-6 Activity 4).

Full Commission meetings: Over the course of the reporting period, NHCP staff attended and participated in three full Commission meetings in July, September, and November. Kirsten participated as Commission Clerk and Steve participated as NHDES alternate. Kirsten presented an update and facilitated discussion about the draft report and recommendations progress at all three Commission meetings. At the November meeting, the draft recommendations were approved for public use at focused discussion groups to be held with municipal officials. Steve also attended the Rockingham Planning Commission Legislative Forum focused on the Coastal Risks and Hazards Commission work.

Steering Committee meetings: Two Steering Committee meetings were held during the reporting period in October and November. Kirsten attended and served as Clerk at both meetings.

Discussion groups: The Commission partnered with NHCAW to hold three municipal Discussion Groups with 35 participants from 14 coastal communities. Nathalie Morison, Kirsten Howard, and Steve Couture participated in the Discussion Group facilitator training led by UNH Cooperative Extension on December 3. At the December 8 Discussion Group meeting, Kirsten facilitated and Nathalie took notes for one breakout group and compiled summary notes after the meeting.

Website: Kirsten posted all meeting announcements for the full Commission and Steering Committee to the Commission website. Kirsten also posted meeting materials and minutes following meetings.

Recommendations edits and report coordination: Kirsten coordinated seven working group meetings to draft the Coastal Risks and Hazards Commission Final Report and organize the draft recommendations. Steve participated in several of these meetings. Kirsten spent a significant

amount of time coordinating the draft report group, providing assignments, compiling the report, and editing the document. Additionally, Kirsten spent significant time refining and editing the draft recommendations based on Commission input following each meeting.

TASK 309-3: COASTAL RESILIENCE TECHNICAL ASSISTANCE PROGRAM

Goal: To develop a coastal resilience program with a dedicated NHCP staff person that provides technical assistance and outreach to coastal zone communities and state agencies, resulting in plans and policies that better address the coastal risks and hazards that are exacerbated by climate change in New Hampshire.

Activity 1: Coastal resilience technical assistance program.

Status: In Progress

NHCAW: NHCP staff continued to participate actively on the New Hampshire Coastal Adaptation Workgroup (NHCAW). Meetings have recently focused on providing outreach and support for the NH Coastal Risks and Hazards Commission, sharing technical assistance approaches for improving resilience in coastal communities, and designing workshops and other outreach events. Kirsten Howard and Steve Couture attended almost all of the monthly meetings. Kirsten Howard attended all but one of the monthly NHCAW Outreach working group meetings. NHCP intern Hannah Blondin attended both the full NHCAW and Outreach working group meetings until her internship ended in November. Hannah and Kirsten worked together to develop a nearly comprehensive list of CAW-related projects as both a communication and coordination tool for partners. The project list was posted to the NHCAW website.

Kirsten continued to manage the NHCAW website and Twitter account. During the reporting period, Kirsten wrote or edited and posted seven blog entries. Three of the blog entries were part of the NH Shoreline Management Stories Series. Kirsten also coordinated a website subcommittee meeting to scope ideas for a new Coastal Resilience Portal that would house all coastal resilience information in one place.

Kirsten helped plan and attended two public Water, Weather, Climate, and Community workshops during the reporting period. On July 30, NHCAW sponsored a workshop with the New Hampshire Department of Cultural Resources called “Keeping New Hampshire’s History Above Water.” In October, NHCAW sponsored a hands-on workshop and planting effort to showcase the NHCP/NOAA-funded dune restoration project at Hampton Beach State Park. Both workshops were well-attended by members of coastal communities. The dune restoration workshop was featured in local news outlets. NHCP intern Hannah Blondin also attended both workshops.

October 2015 Gulf of Maine King Tide Photo Contest: Kirsten and Hannah participated on the planning team for the King Tide photo contest in partnership with the Piscataqua Region Estuaries Partnership and the Gulf of Maine King Tides Project. They participated in one planning meeting, edited the communications plan, and assisted with publicity and outreach before and on the day of the King Tide through Twitter and the NHCAW website. Kirsten published a NHCAW blog post announcing the photo contest winners in December.

TASK 309-4: ADVANCING SHORELINE MANAGEMENT

Goal: To develop and provide guidance for shoreline protection strategies that consider climate

change impacts and protect ecosystem services, including natural flood protection and habitat, and identify potential demonstration sites for living or soft shorelines.

Activity 1: Support Integrated Shoreline Management

Status: In Progress

In October, Kirsten and Steve met with University of New Hampshire Assistant Professor Cat Ashcraft and her graduate student Trevor Mattera to scope Trevor's capstone/thesis project that will result in a white paper assessment of regulatory barriers and opportunities specific to implementing living shorelines in coastal New Hampshire. Kirsten reviewed and provided input to Trevor's written research proposal in December.

Kirsten and NHCP intern Hannah Blondin completed a draft spatial inventory of existing shoreline structures and natural shorelines in the Coastal Zone. Kirsten and Hannah organized an advisory committee that met twice over the course of the reporting period. In the first meeting, Hannah proposed a methodology for the inventory. In the second meeting Hannah presented draft results. The inventory was developed using a desktop analysis of aerial orthophotography, LiDAR, and National Wetlands Inventory maps. Hannah and Kirsten conducted significant field verification of the shoreline structures around the Coastal Zone. Hannah completed the ArcMap shapefile of the inventory and a draft final report of the inventory prior to the conclusion of her internship in November. Kirsten and Nathalie are completing the necessary NH Department of Environmental Services quality assurance and quality control with the intention of publishing the dataset on the NH Coastal Viewer.

In July, Hannah and Kirsten submitted a proposal for a University of New Hampshire undergraduate engineering capstone project and the project was awarded in early fall. The group of students will use the Shoreline Inventory together with other sources to develop a Shoreline Structure Condition Rating System and apply the rating system to several shoreline protection structures around the Coastal Zone. The group will also submit design recommendations for at least one structure. Kirsten and Hannah coordinated one kick-off meeting and a field trip site visit for the group of students. The project team submitted a literature review of existing methodologies in December. The project will continue through May 2016.

Kirsten and Nathalie attended the Living Shorelines National Technology Transfer Meeting and Regional Workshop on December 1 and 2 in Hartford, Connecticut. They documented lessons learned and presented a summary of the conference to the NH Coastal Adaptation Workgroup on December 10.

In December, Kirsten, Chris, and Kevin participated in a planning meeting for a 'living shoreline' project in Portsmouth, New Hampshire, and provided advice about project design to ensure maximum benefits. The project is partially funded by the New Hampshire Department of Environmental Services Aquatic Resource Mitigation Fund.

TASK 309-5: ASSESSMENT & STRATEGY ADMINISTRATION

Activity 1: Assessment and Tracking of 309 Assessment and Strategy

Status: In Progress

NHCP staff continues to make significant progress in transitioning from the current 309

Assessment & Strategy to the 2016-2020 Assessment and Strategy. NHCP staff worked diligently to submit two PSM applications to begin the implementation of the 2016-2020 Assessment and Strategy.

Section B – Status of Section 312 Evaluation Progress, State Permits, Federal Consistency and Program Changes

B.1: Section 312 Evaluation Progress

B.1a

The Section 312 Review took place on September 20-22, 2006. NOAA identified no necessary actions and four program suggestions which are listed below with updates on progress in implementing those suggestions.

1. OCRM strongly recommends that NHCP and DES work together to ensure that NHCP continues to maintain its structure, distinct identity, visibility and ability to coordinate among other programs throughout DES.

Progress – We continue to be granted special status within the agency.

2. NHCP and OCRM should cooperatively explore options for addressing the program's desire to provide funding to projects that it views as relevant and valuable to coastal management, but that fall outside the program boundary. Options should include potential expansion of the program boundary.

Progress – Complete

3. NHCP should develop reporting guidelines for recipients of its Competitive Grants Program. Final project reports should contain standard information such as total project cost. NHCP should also explore mechanisms other than the grants process for providing annual technical assistance funds to the Rockingham and Strafford Regional Planning Commissions.

Progress – Complete.

4. NHCP and OCRM should work together to identify options, including a regional approach, for improving cooperation among federal agencies regarding federal consistency implementation.

Progress – Ongoing.

B.1b

Status and progress toward meeting the three Section 312 Evaluation Metrics identified by the New Hampshire Coastal Program are included in a separate report annually as recommended in Section A of OCRM's "Reporting Guidance for Recommendation and Evaluation Metrics," dated June 2013.

B.2: Federal Consistency

TASK 306-4: FEDERAL CONSISTENCY AND POLICY

Activity 1: Federal Consistency Implementation

Status: In Progress

Direct Federal Agency Activities:

See attached Table, Section I - Direct Federal Agency Activities - Section 307 (c) (1) and (2).

Licenses and Permits

See attached Table, Section II - Federal Licenses and Permits - Section 307 (c) (3) (A).

Federal Financial Assistance/Intergovernmental Reviews

See attached Table, Section III - Federal Financial Assistance/NHIRP - Section 307(d)

Activity 2: Dredge Management

Status: In Progress

Serve as Chairperson of the NH Dredge Management Task Force

During the reporting period, the New Hampshire Dredge Management Task Force (DMTF) met in regular session on September 16. The DMTF continues to review a number of existing and proposed dredging projects, including expansion of the uppermost turning basin in the Piscataqua River, and maintenance of Sagamore Creek in Portsmouth. The DMTF also continues to work on the development of a Regional Dredge Material Management Plan, which includes identification of onshore and offshore dredge material disposal sites to accommodate NH's future dredge material disposal needs. Chris Williams serves as chairman of the DMTF.

Activity 3: New England Regional Dredging Team

Status: In Progress

New England Regional Dredging Team (a.k.a. Sudbury Group)

As chairman of the New Hampshire Dredge Management Task Force, Chris Williams represents New Hampshire on the New England Regional Dredging Team (NERDT). NERDT, which is comprised of federal and state resource agency staff from around New England, meets two to three times a year to discuss policy and regulatory issues associated with dredging and dredge material management activities in New England. The NERDT met once during the reporting period on October 27. Chris participated in the October 27 meeting which was held in Portsmouth, NH.

Maine & Massachusetts Dredging Teams

Chris Williams continues to periodically participate in both Maine and Massachusetts Dredging Team meetings. The Maine Dredging Team met on November 2, however Chris was unable to attend the meeting. The Massachusetts Dredging Team did not meet during the reporting period.

B.3: Program Changes

There were no program amendments or routine program changes submitted to NOAA-OCM during the reporting period. Chris Williams does, however, continue to track legislative changes to the state statutes that constitute the legal basis for NHCP's enforceable policies.

B.4: Permit Administration, Monitoring and Enforcement

Chris

TASK 306-5: COASTAL PERMITTING AND ENFORCEMENT

Status: In Progress

Four Wetlands Bureau inspectors, based in the New Hampshire Seacoast region, are responsible for all wetlands permitting and enforcement activities, including monitoring and enforcement of the state's sedimentation and erosion control regulations, as well as implementation of the state's Surface Water Quality Protection Act. A detailed listing of Wetlands Bureau permitting and enforcement activities is kept current and is available upon request. During the report period the four wetlands inspectors conducted 49 inspections, 22 enforcement actions, and 52 permit actions within the coastal zone. One of the four wetlands inspectors is grant-funded while the other three are state-funded.

Section C – Success Story

Volunteers Raise Baby Oysters to Help Great Bay

During its 2015 season, the Oyster Conservationist Program- a volunteer-based restoration effort run by The Nature Conservancy together with the University of New Hampshire-expanded to 71 sites in N.H., the most active sites in its ten year history.

The program recruits and trains local volunteers how to raise oysters on their private docks that are later used to help restore oyster reefs in Great Bay. Its value was recently recognized by the Gulf of Maine Council, a U.S.-Canadian partnership dedicated to protecting environmental quality in the Gulf of Maine, which awarded the Oyster Conservationist Program with a Visionary Award for its innovation, creativity, and commitment to marine protection last June.

“I think that the best part of the program is how it enables homeowners to take a more active role in protecting the water body that is in their backyards,” said Jessie Batchelder, The Nature Conservancy's Oyster Conservationist Volunteer Program Coordinator.

The oyster conservationists each receive a cage full of shells with the baby oysters, called spat, on them in mid-July, and host the spat until they are big enough to be moved in September. Some of the shells in the cages are clean—without spat—and help researchers learn valuable information about where in the Bay wild baby oysters are coming in to use the shells all on their own. Another volunteer element of the project is that the shells have been collected and recycled from area restaurants, an initiative begun and coordinated by the N.H. Coastal Conservation Association. Oysters prefer to grow on shells, and stay in the same place throughout their lives.

Oyster conservationists help keep the baby oysters alive by monitoring their cages weekly to clean any fouling off and to remove predators like green crabs. They also measure the growth of the oysters biweekly. This year's N.H. crop of oysters will be used as part of a 2.5 acre restoration project in the southwest part of Great Bay near Greenland.

Oysters help bring the Bay, which is currently over-dominated by mudflat habitat, to a more natural and healthy state. Oysters are especially important to the water quality of Great Bay because they clean and filter the water, as many as 20 gallons a day. Clearer water favors eelgrass growth, which is in itself a rock star habitat provider and has also been in severe decline in the Bay. And yet another role oysters play in the environment is that they provide habitat for

animals like fish and shrimp.

“You’ll see the fish in there, you’ll see the eelgrass in there coming. It’s breathing pockets of life,” said The Nature Conservancy Director of Marine Science & Conservation Ray Konisky, about oyster reefs.

Once widespread and dense in Great Bay Estuary, adult oyster populations plummeted with 90 percent losses by the year 2000 following disease outbreak in the 1990s. Disease has unfortunately continued to reduce the life span of adult oysters, going from 10-20 years pre-disease to a current mere 3-5 years. And to top that off, during their short life spans they are under constant threat of being killed from sediment movement and harvest, according to Ray Grizzle, University of New Hampshire Research Professor of Zoology and operator of a local commercial oyster farm, who has been working with oysters since 2000.

Currently in the Great Bay Estuary, there are about 125 acres of natural oyster reef, 50 acres of oyster farms, and 20 acres of restored reef compared to 500 or more acres of reef historically. Additionally, today’s oyster beds are 10-20 percent less dense than what they were even in the 1990s.

Something that researchers have discovered during the last five years of restoration work is that the restoration sites need to be located close to native oyster reefs to have the highest probability of attracting spat, said Grizzle.

Grizzle sees lots of value in the Oyster Conservationist Program, including that it contributes to restoration efforts, gets people involved, and provides information to researchers.

“It’s more than a feel good program; it’s providing data and educating people,” he said.

The Oyster Conservationist program is funded, in part, by the NH Department of Environmental Services Coastal Program with a grant from NOAA’s Office for Coastal Management under the Coastal Zone Management Act.

**ROCKINGHAM PLANNING COMMISSION
NH COASTAL PROGRAM**

**PROGRESS REPORT
LOCAL TECHNICAL ASSISTANCE PROGRAM
July 1, 2015 -December 31, 2015**

The following summarizes the work effort of the Rockingham Planning Commission over the first half of the contract period and serves as progress report for the current grant. Specific work for each task is outlined under each task below:

1. **Staff Participation in the Coastal Adaptation Workgroup (CAW):** RPC will provide staff support for the CAW through meeting attendance, outreach efforts and other assistance. The CAW coordinates efforts to assist communities in responding to climate change risks, and RPC's role as one of the CAW partners is important for its success, especially with respect to the delivery of technical assistance to communities in the areas of land use planning and hazard mitigation planning.

Status: Staff completed the following activities in support of Task 1:

Prepared for and attended Natural Resources Outreach Coalition meeting to discuss buffer and regional coastal watershed initiatives.

Participated in a telephone interview with NPR reporter.

Attended NH-ME Climate Adaptation Exchange workshop in York, ME.

Prepared for climate change panel session and attended 2015 NNECAPA Conference in Portland, ME.

Scheduled and attended coordination meeting to discuss content for Cam Wake's AGU climate change presentation.

Staff prepared for and attended CAW meetings on July 23rd, August 27th, October 20th, and December 10th.

Staff prepared for and attended CAW Outreach Team meetings on September 16th, October 14th, November 16th, and December 16th.

2. **Staff participation in the NH Coastal Risk and Hazards Commission (CRHC):** RPC will provide staff support through meeting participation and other assistance. The CRHC was established under RSA 483-E in 2013 for the purpose of recommending legislation, rules, and other actions to prepare for projected sea level rise and other coastal and coastal watershed hazards such as storms, increased river flooding, and storm water runoff, and the risks such hazards pose to municipalities and state assets in New Hampshire. The Commission has limited access to technical assistance and staff support, except that provided by members and their represented agencies. The RPC will provide staff support to the CRHC by participating in meetings, preparing agendas, and providing technical planning assistance and general support.

Status: Staff completed the following activities in support of Task 2:

Prepared list of coastal municipal contacts for CRHC Discussion Groups for Sherry Godlewski and Steve Miller.

Attended several meetings with CRHC Report writing members, and submitted several rounds of comments on draft recommendations for Goals 2 and 3.
Prepared Tides to Storms Executive Summary for CRHC draft report.
Attended CRHC report writing workgroup meetings on July 10th, July 23rd, August 3rd, August 13th, September 21st, and October 20th.
Coordinated with DRED staff on data for historical and cultural resources section of CRHC draft report.
Prepared Tides to Storms presentation for RPC Legislative Forum.
Attended facilitation training for CRHC Discussion Groups. Prepared for and facilitated CRHC discussion group meeting on December 8th. Edited CRHC Discussion Group notes from Dec. 8th and discussed CRHC results with Sherry Godlewski.
Prepared presentation to Gulf of Maine Council workgroup and attended meeting on December 7th.
Reviewed and edited draft CRHC Recommendations and cross-referenced with Tides to Storms recommendations.

Executive Director completed the following activities to support Task 2:

Researched procedures for appointment of alternates to the CRHC.
Prepared and distributed agendas and materials for CRHC and CRHC Steering Committee meetings.
Communicated with UNH Pres. Office regarding CRHC representative and received confirmation letter.
Coordinated revisions to CRHC draft report.
Commented on preparations and format for Discussion Groups to review CRHC recommendations.
Prepared letters of support for three NOAA PSM proposals on behalf of RPC and /or CRHC.
Coordinated panel on CRHC and climate adaptation for RPC Legislative Forum.

3. **Local technical assistance program for municipalities in the RPC region focused on climate adaptation and resiliency:** The RPC will provide technical assistance to municipalities to support, prepare and implement a wide range of actions, assessments and engagement designed to incorporate climate adaptation and resiliency in local plans, policies and procedures, and raise awareness of climate change impacts and issues within the community. Technical assistance may include but is not limited to: assisting municipalities with adopting the Southeast Watershed Alliance model stormwater standards; preparing applications to the FEMA Community Rating System program; incorporating climate change recommendations and strategies in hazard mitigation plans; preparing recommended revisions to zoning ordinances and land development regulations; preparing a Coastal Hazards Chapter for Master Plans; and training on use and application of the Coastal Viewer. To the extent possible, this work will be planned and coordinated with other NHCP partners to avoid duplication and maximize benefit.

Status: Staff completed the following activities in support of Task 3:

Printed Tides to Storms Regional Assessment report and maps, and delivered Vulnerability Assessment reports and maps to Seabrook, Hampton, Hampton Falls, North Hampton, Rye and New Castle.
Prepared and submitted grant proposal to Northeast Region Ocean Council for Tides to Storms 2 project.
Coordinated with Semra Aytur, UNH on her project components involving coastal towns and data.
Coordinated with CAW Outreach and PREP on how to support for Kim Reed, Planning and Zoning Administrator for Rye.
Attended FEMA Risk Map Discovery meeting in Lee to discuss local flooding issues for inland coastal towns.
Conference calls and meetings to prepare content and review budget for NOAA Project of Special Merit Resiliency proposal, coordinated with SRPC to revise budget, and prepared draft scope of work.
Prepared content, budget and work plan for 2016 NOAA Project of Special Merit Green Infrastructure proposal.
Responded to requests for review and comment by Tracy Degnan, RCCD, on draft amendments to existing buffer ordinance for the Town of Rye.

New Hampshire Coastal Program Semi-Annual Progress Report

July 1, 2015 through December 31, 2015

Strafford Regional Planning Commission

Technical Assistance Grant
New Hampshire Coastal Program
January 11, 2016

This project was funded under the Coastal Zone Management Act by NOAA's Office of Ocean and Coastal Resource Management in conjunction with the New Hampshire Coastal Program



This is the semi-annual progress report for the Coastal Zone Management Grant with Strafford Regional Planning Commission for State Fiscal Year 2016/2017 funding from July 1, 2015 through December, 2016 for planning technical assistance to member coastal communities.

1. **Activity 1: Provide local technical assistance on stormwater and inland flooding challenges.** Provide local technical assistance to at least one coastal community to 1) review existing stormwater regulations to ensure design criteria meet current best management practices and 2) assist in integrating new floodplain data into existing zoning. The stormwater review may use the Southeast Watershed Alliance's "Model Stormwater Standards" document as a guide to provide updates and develop recommendations. New floodplain data may include the updated FEMA maps or other scientific study, such as the Lamprey River Watershed assessment report.
 - a. **Status:** SRPC staff has worked with the Town of Rollinsford to ensure NFIP compliance. Staff met with members of the Planning Board and Select Board to provide technical assistance in drafting a resolution authorizing the Selectmen to adopt the newly approved FEMA maps (effective September 30, 2015) in order to avoid requiring a special town meeting. Staff worked with the Planning Board to ensure that necessary changes were made to the Town's Flood Hazard District zoning ordinance. Rollinsford will vote on the map amendments at its 2016 Town Meeting. Staff also developed a separate scope of work to update the Town's existing stormwater regulations. By leveraging grant funds received from PREP, SRPC staff will update Rollinsford's stormwater regulations next year.
2. **Activity 2: Collaborate with the Natural Resources Outreach Coalition (NROC) to raise public awareness on PREPA recommendations.** Partner with the Natural Resources Outreach Coalition (NROC) to increase public awareness on the data and recommended action activities developed during the PREPA update. SRPC will participate in training sessions to learn more about the PREPA project, main points, and overall messages. Afterwards, the message will be shared with residents and municipal staff through facilitated discussions and presentations.
 - a. **Status:** This scope of work has been slightly modified for a different audience due to the timing of the PREPA recommendations. SRPC staff has begun work with NROC to engage Oyster River Middle School students on the impacts of climate change. Staff met with two teachers on November 20th to discuss ideas and resources. A preliminary framework for activities include:
 - i. A classroom component to teach students to distinguish between weather and climate. Students will be tasked with creating a "show and tell" project detailing what they learned in order to have a wider discussion with parents.
 - ii. A follow-up community workshop at the Durham Public Library with parents and municipal officials to learn from student presentations.
3. **Activity 3: Support SRPC staff participation in the Coastal Adaptation Workgroup.** The Coastal Adaptation Workgroup (CAW) plays a central role in the SRPC region in coordinating efforts to assist communities to respond to climate change risk. Both through the development of CAW sponsored projects as well as through the coordination of efforts of other partners such as New Hampshire Homeland Security and Emergency Management and Granite State Future, CAW coordinates the work of multiple agencies in educating and assisting communities to address these issues. SRPC's role as one of the CAW partners is important for its success, especially with respect to the delivery of technical assistance to communities in the areas

of land use planning and hazard mitigation planning. SRPC staff will provide support to CAW by participating in most full NHCAW meetings and will commit to participating in at least four CAW outreach meetings throughout the reporting period.

- a. **Status:** SRPC staff has attended CAW meetings and participated with the workgroup on project updates and community projects, provided feedback on climate planning developments, and attended climate and sea level workshops. Staff has also participated, when appropriate, in CAW Outreach meetings and discussions.

4. **Activity 4: Support SRPC staff participation in the Coastal Risks and Hazards Commission.** Members of the Coastal Risks and Hazards Commission are tasked with recommending legislation to prepare for projected sea level rise and other coastal and coastal watershed hazards, including increased river flooding and stormwater runoff. SRPC's membership is important for its success, especially with respect to the delivery of technical assistance to communities in the areas of projected coastal storm inundation and flood risk. SRPC's participation has assisted in determining the appropriate information, data, and property risks to be included as recommendations for proposed legislation. SRPC staff will provide support to the Commission and other sub-working groups, and will document the assistance provided.

- a. **Status:** SRPC staff has attended each of the scheduled Coastal Risks and Hazards Commission's meetings and has participated in discussions to develop final recommendations and actions for the Commission's final report. Staff worked with the Writing Team to ensure consistency and improve readability of the developed draft goals, recommendations, and actions. Local information on climate related projects in the Great Bay (inland) communities was provided, when appropriate, for inclusion in the Commission's report. This included data gathered during the development of the Newmarket Vision and Future Land Use Chapters of the Master Plan, which was funded through SRPC's 2015-2016 Coastal Grant. In-kind match overages from Newmarket volunteers were allocated to Activity 4 to assist SRPC and the Writing Team in completing the Commissioner's final report.

5. **Activity 5: Outreach.** SRPC shall work with the New Hampshire Coastal Program (NHCP) to develop at least one outreach product describing various components of the project. Examples of outreach products include press releases, newsletter articles, website updates and links to new website content distributed through social media channels. All outreach materials shall include the NOAA, NHCP and DES logos. All outreach products shall state that "This project was funded, in part, by NOAA's Office for Coastal Management under the Coastal Zone Management Act in conjunction with the NH Department of Environmental Services Coastal Program."

- a. **Status:** No work has been completed thus far.

PROGRESS REPORT to NH Coastal Program

Project Title: **Natural Resources Outreach Coalition (NROC) Program Coordination and Delivery**

NROC Grant Period:
July 1, 2015 – December 31, 2016

Contact Name: Amanda Stone/Chris Keeley

Organization: UNH Cooperative Extension

Phone: 603-862-1067

Address: 220 Nesmith Hall, 131 Main Street, Nesmith Hall, Durham NH 03824-3597

Date of Report: 12/31/2015

Covering the Period: 07/01/15 – 12/31/2015

Task 2: Planning and Preparing for Climate Change – Outreach Activities

During the reporting period, NROC staff spent time doing initial planning for the new program, *A Community Conversation about Climate*, in partnership with the Oyster River Middle School and the Durham Public Library. NROC staff are working collaboratively with Strafford Regional Planning Commission (SRPC) to plan this program. The NROC team held an initial discussion with the Durham Public Library and held three internal team meetings to develop the program structure. In November, 2015, the NROC team met with two 5th grade science teachers to discuss the concept of working with students in the classroom, and developing a project where the students would deliver an oral presentation focused on their concerns about climate change to municipal decision makers, parents and community members at the Durham Public Library. The concept was very well received by the teachers. Following an investigation of how to integrate climate change into their spring curriculum, the student objectives drawn up by the NROC team and the teachers are:

- Students will understand how the earth's climate is changing, and how this is related to human activities (fossil fuels; greenhouse effect; etc.)
- Students will explore the impacts of climate change (melting glaciers, sea level rise, changing rain and snow patterns, stronger storms, etc.)
- Students will understand the difference between weather and climate
- Students will learn ways to take action to slow climate change

In addition, potential science content and skills have been identified to borrow from the *Next Generation Science Standards*, such as:

- Through the development of a model using an example, students are able to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact. (the teachers have explored this standard in fall, 2015 with their students, but they felt it seemed perfectly suited to a discussion of climate change as well)
- Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. (As part of this standard: "Human activities

in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments.")

- Students will observe how the Earth's rotation and tilt on its axis cause day and night while influencing seasonal changes

At least two members of the CAW Outreach Team have volunteered their time to support the community event at the library, which will serve to engage municipal decision makers as well as parents of the students. This is of significance as this is an audience that has been particularly challenging to reach (parents of young children) through traditional education and outreach around climate adaptation, such as the popular CAW Workshop Series.

This program will be incorporated into the 5th grade curriculum in Spring, 2016, with the Durham Public Library presentations during the same time frame.

TASK 306-13: PISCATAQUA REGION MONITORING COLLABORATIVE – PISCATAQUA REGION ESTUARIES

Status: In progress

The Piscataqua Region Monitoring Collaborative is a shared initiative by the University of New Hampshire, NHDES, Maine DEP, GBNERR and a number of municipalities to collect data relative to the health of the Great Bay estuary. The PRMC has an emphasis on identifying new, high priority data needs in addition to sustaining the baseline monitoring program, and securing resources to collect the data. The PRMC is administered by the Piscataqua Region Estuaries Partnership (PREP) at UNH.

Macroalgal monitoring: Between July and September 2015, Dr. David Burdick led an effort to collect macroalgae samples at five locations in Great Bay, including data on the presence/absence, percent cover and cover types. The final report will provide a fifth year of data on this high priority emerging issue as identified in the 2013 State of Our Estuaries report, and help to establish a new annual program for macroalgal monitoring in the system. **Monitoring is complete. The data report is in progress. Anticipated completion date for the report is June 10, 2016.**

Eelgrass condition surveys: Dr. Fred Short, Founder of Seagrassnet, will complete an eelgrass condition survey in Great Bay to build on a 20+ year data set for eelgrass presence/absence and percent cover (biomass). This is a highest priority monitoring effort, as eelgrass in the Bay continues to be a concern. The final report will be used to add to the long term data set and also to consider how annual eelgrass monitoring is accomplished in Great Bay. In addition to assessing aerial coverage of seagrass habitat (percent cover), Dr. Short will also use SeagrassNet protocols and data to calculate eelgrass biomass within Great Bay. **Field work has been completed and lab analysis and data reporting is underway. Anticipated completion date for the report is June 10, 2016.**

**Association of US Delegates to the Gulf of Maine Council on the Marine Environment
(USGOMA)**

**Final Report on Gulf of Maine Council Services provided to NH DES NHCP
For: NH Department of Environmental Sole Source Grant Agreement with June 30, 2016
Completion Date**

Grant Amount \$9,000

For: Council Coordination:

- Organize four international Working Group and one Council meeting including webinars and provide decision items;
- Assist the Secretariat in developing and implementing the GOMC work plan; and
- Coordinate Secretariat meetings as needed and provide decision items.

Final Report:

The Gulf of Maine Association contracted with Joan LeBlanc to provide Council Coordinator services. This has been a busy year due to the fact that the organization carried out an organization assessment in the prior year and began implementing it this year. Due to the fact that we have met the anticipated deliverables in this first six-month time period and have spent the full amount of the contract of \$9000, this report is a final report instead of an interim progress report. From July 1, 2015 – December 31, 2015 Ms. LeBlanc completed the following deliverables:

1. *Organized two international Working Group and one Council meetings including webinars and provide decision items Organized two international Working Group and one Council meetings/calls/webinars.*

Additional working group meetings will be scheduled in the next six months and services paid with matching funds (as this report shows two less meetings than expected). Meeting organization included organizing meeting dates, webinars as needed, preparing and distributing briefing materials and providing decision items after meetings.

- Developed and distributed key decisions/action items from the June 2015 Council and Working Group meetings – August 2015
 - Working Group Meetings: Held October 14, 2015 informal Working Group networking session after the Regional Association for Research on the Gulf of Maine meeting; held December 7, 2015 Working Group/Council virtual meeting held with locations in Portsmouth, NH and Dartmouth, Nova Scotia.
 - Council Meetings: Held December 7, 2015 Council virtual meeting described above (held jointly with Working Group).
2. *Assist the Secretariat in in developing and implementing the GOMC work plan:*
 - Sent out template and timeline for GOMC work plan additions/updates for the 2015-2016 secretariat year, gathered and prepared compilation of work plans.
 - Presented updated “Draft GOMC 2015-2017 Work Plan” at the December 7, 2015 Working Group and Council meeting. To view the work plan please go to:
<http://www.gulfofmaine.org/2/gomc-home/council-meetings/>

3. *Coordinated Secretariat meetings as needed and provided decision items:*

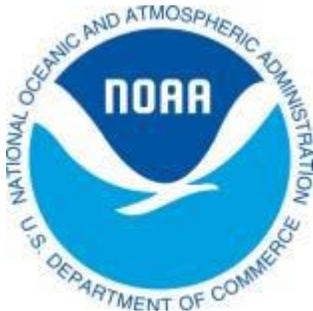
- Secretariat Team calls were held July 22, September 16, October 21, and November 24, 2015 and decision items were provided.

Matching Funds:

The USGOMA, a 501 (c) 3 non-profit organization provided \$10,000 USD in non-federal matching funds for task 1 of this report. The source of this match was Canadian GOMC member agency dues from New Brunswick and Nova Scotia.

Funding Credit:

This project was funded, in part, by NOAA's Office for Coastal Management under the Coastal Zone Management Act in conjunction with the NH Department of Environmental Services Coastal Program.



NHCP Federal Consistency Decisions - July 1 through December 31, 2015:

I. Direct Federal Agency Activities – Section 307 (c) (1) and (2)

DES #	Federal Agency	Description of Activity or Project	Date Federal Agency Notification Received	Proximity to Coastal Zone (Within, seaward, landward)	Date of Concurrence	<u>Date of</u> Insufficient Information	<u>Nonconcurrence</u> Inconsistent w/ State policies	Date Concurrence After Modification	Time of Review/Status
2015-11	NMFS	Modification to the American Lobster Conservation Management Area 4 Seasonal Closure	18 June 2015	seaward	10 Aug 2015				
2015-12	NMFS	Amendment 7 to the FMP for the Dolphin and Wahoo Fishery of the Atlantic and Amendment 33 to the FMP for the Snapper Grouper Fishery of the South Atlantic Region.	17 July 2015	within	10 Aug 2015				

II. Federal Licenses and Permits – Section 307 (c)(3)(A)

DES #	Applicant	Federal Licensing Or Permit Agency	Type of Permit	Date Notification Received	Proximity to Coastal Zone (Within, seaward, landward)	Date of Concurrence	<u>Date of</u> Insufficient Information	<u>Nonconcurrence</u> Inconsistent w/ State policies	Date Concurrence After Modification	Time of Review/ Status
2015-p-2	Exeter Mill Apartments	EPA	NPDES Permit (Permit# NH0023559)	24 Aug 2015	within	23 Sept 2015				

III. Federal Financial Assistance/NH Intergovernmental Review Process - Section 307 (d)

DES #	Applicant	Program/ Project	Date of Request	Proximity to Coastal Zone (Within, seaward, landward)	Date of Concurrence	Date of Insufficient Information	<u>Nonconcurrence</u> Inconsistent w/ State policies	Date Concurrence After Modification
2015-IRP-11	NH Fish & Game Dept.	Sport Fish Restoration Program – Operation, Maintenance, Inspection, Management, Enforcement, Research and Planning of Public Boating & Fishing Water Access Facilities	29 June 2015	within	2 July 2015			
2015-IRP-12	NH Dept of Resources & Economic Development	Outdoor Recreation: Acquisition, Development and Planning – Develop Boating and Support Facilities at Cocheco River Park	5 Aug 2015	within	10 Aug 2015			
2015-IRP-13	NH Department of Transportation	Highway Planning and Construction – Installation of Centerline and Shoulder Rumble Strips Along State Roadways	8 Oct 2015	within	13 Oct 2015			
2015-IRP-14	University of New Hampshire	Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program – Responding to Uncertainty in the New England Fisheries: Supporting Adaptation to Changing Environments	4 Nov 2015	within	9 Nov 2015			
2015-IRP-15	University of New Hampshire	Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program – An Automatic Feeder and Harvesting Platform for Integrated Multi-Trophic Aquaculture	4 Nov 2015	within	9 Nov 2015			
2015-IRP-16	University of New Hampshire	Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program – Reducing Uncertainty in the Data-Poor Assessment of Atlantic Wolffish	10 Nov 2015	within	13 Nov 2015			
2015-IRP-17	University of New Hampshire	Fisheries Development and Utilization Research and Development Grants and Cooperative Agreements Program – Investigating the Twin Roles of Ocean Temperature and Acidification on Shellfish Aquaculture in the Gulf of Maine	10 Nov 2015	within	13 Nov 2015			