



The State of New Hampshire  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

**Thomas S. Burack, Commissioner**



January 7, 2016

Her Excellency, Governor Margaret Wood Hassan  
and The Honorable Council  
State House  
Concord, NH 03301

**REQUESTED ACTION**

Authorize the Department of Environmental Services to enter into a **SOLE SOURCE** agreement with the University of New Hampshire, Sponsored Programs Administration (VC #177867-B046), Durham, NH, in the amount of \$49,000 to provide data access and conduct maintenance of the NH Coastal Viewer tool, effective upon approval of Governor and Council through June 30, 2017. The funding source is 100% Federal Funds.

Funding is available in the account as follows.

	<u>FY 2016</u>
03-44-44-442010-3642-072-500573	\$49,000
Dept. Environmental Services, Coastal Zone Management, Grants – Federal	

**EXPLANATION**

This agreement is **SOLE SOURCE** because the NH GRANIT project at the University of New Hampshire (UNH) Earth Systems Research Center is recognized as New Hampshire's Statewide Geographic Information System (GIS) Clearinghouse and GRANIT staff currently maintain the NH Coastal Viewer, which is the only tool that provides accessible visualization and assessment tools for geospatial coastal data in the state. The NH Coastal Viewer (<http://www.granit.unh.edu/nhcoastalviewer>) is an on-line mapping and screening tool that provides access to geospatial data about coastal resources and hazards for NH's 42 coastal watershed communities. It was developed by the NH GRANIT project staff at UNH, working in close collaboration with the New Hampshire Department of Environmental Services Coastal Program (NHCP), and as part of a larger project team engaged in a NOAA Project of Special Merit from late 2013 through September 2015. The NHCP annual program budget has allocated funds specifically focused on improving access to data and tools that empower municipalities to plan to address coastal risks and hazards.

This project will ensure that the NH Coastal Viewer is able to continue operating to support municipal officials and other users. Funds provided will cover approximately 18 months of maintenance, new tool development, training resources, and user evaluation for the NH Coastal Viewer. The goal of the proposed project is to maintain, enhance, and promote the NH Coastal Viewer to 1) build community resilience to impacts of coastal erosion, flooding, and storms, and 2) enhance collaborative actions on coastal ecosystem planning. To achieve this goal, project objectives include the following:

- Provide access to current, decision-relevant geospatial data related to coastal community and ecosystem resilience assessment and planning activities;
- Locate, assemble, and facilitate access to emerging geospatial data, model results/analyses, and data collection tools addressing coastal resiliency issues;
- Promote, enhance, and increase the use of these data sets and decision support tools by delivering training and technical assistance to a variety of appropriate audiences, including communities, land trusts, and other targeted sectors;
- Collaborate with project partners to assess, document, and demonstrate effective applications of the data sets and tools to inform decision-making; and ultimately
- Enhance the ability of communities and other stakeholders to address resilience planning and management.

The total projected cost for the project is \$49,000. A budget breakdown is provided in Attachment A. In the event that Federal funds become no longer available, General funds will not be requested to support the project.

The agreement has been approved as to form, substance, and execution by the Office of the Attorney General.

We respectfully request your approval.

  
Thomas S. Burack, Commissioner

**COOPERATIVE PROJECT AGREEMENT**

between the

STATE OF NEW HAMPSHIRE, **Department of Environmental Services**

and the

**University of New Hampshire** of the UNIVERSITY SYSTEM OF NEW HAMPSHIRE

- A. This Cooperative Project Agreement (hereinafter "Project Agreement") is entered into by the State of New Hampshire, **Department of Environmental Services**, (hereinafter "State"), and the University System of New Hampshire, acting through **University of New Hampshire**, (hereinafter "Campus"), for the purpose of undertaking a project of mutual interest. This Cooperative Project shall be carried out under the terms and conditions of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, except as may be modified herein.
- B. This Project Agreement and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire approve this Project Agreement ("Effective date") and shall end on **6/30/17**. If the provision of services by Campus precedes the Effective date, all services performed by Campus shall be performed at the sole risk of Campus and in the event that this Project Agreement does not become effective, State shall be under no obligation to pay Campus for costs incurred or services performed; however, if this Project Agreement becomes effective, all costs incurred prior to the Effective date that would otherwise be allowable shall be paid under the terms of this Project Agreement.
- C. The work to be performed under the terms of this Project Agreement is described in the proposal identified below and attached to this document as Exhibit A, the content of which is incorporated herein as a part of this Project Agreement.

Project Title: **Enhancing the NH Coastal Viewer**

- D. The Following Individuals are designated as Project Administrators. These Project Administrators shall be responsible for the business aspects of this Project Agreement and all invoices, payments, project amendments and related correspondence shall be directed to the individuals so designated.

**State Project Administrator**

Name: Kirsten Howard  
 Address: NH Coastal Program  
 Dept. of Environmental Services  
 222 International Drive, Suite 175  
 Portsmouth, NH 03801  
 Phone: 559-0020

**Campus Project Administrator**

Name: Dianne Hall  
 Address: University of New Hampshire  
 Sponsored Programs Administration  
 Service Building/51 College Road  
 Durham, NH 03824  
 Phone: 862-1942

- E. The Following Individuals are designated as Project Directors. These Project Directors shall be responsible for the technical leadership and conduct of the project. All progress reports, completion reports and related correspondence shall be directed to the individuals so designated.

**State Project Director**

Name: Steven Couture  
 Address: NH Coastal Program  
 Dept. of Environmental Services  
 222 International Drive, Suite 175  
 Portsmouth, NH 03801  
 Phone: 559-0027

**Campus Project Director**

Name: Fay Rubin  
 Address: University of New Hampshire  
 NH GRANIT  
 8 College Road  
 Durham, NH 03824  
 Phone: 862-4240

Campus Authorized Official *KS*  
 Date *10/7/15*

F. Total State funds in the amount of \$49,000 have been allotted and are available for payment of allowable costs incurred under this Project Agreement. State will not reimburse Campus for costs exceeding the amount specified in this paragraph.

Check if applicable

Campus will cost-share \_\_\_\_\_ % of total costs during the term of this Project Agreement.

Federal funds paid to Campus under this Project Agreement are from Grant/Contract/Cooperative Agreement No. **NA14NOS4190067** from **National Oceanic and Atmospheric Administration (NOAA)** under CFDA# **11.419**. Federal regulations required to be passed through to Campus as part of this Project Agreement, and in accordance with the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, are attached to this document as Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

G. Check if applicable

Article(s) \_\_\_\_\_ of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002 is/are hereby amended to read:

H.  State has chosen **not to take** possession of equipment purchased under this Project Agreement.  
 State has chosen **to take** possession of equipment purchased under this Project Agreement and will issue instructions for the disposition of such equipment within 90 days of the Project Agreement's end-date. Any expenses incurred by Campus in carrying out State's requested disposition will be fully reimbursed by State.

This Project Agreement and the Master Agreement constitute the entire agreement between State and Campus regarding this Cooperative Project, and supersede and replace any previously existing arrangements, oral or written; all changes herein must be made by written amendment and executed for the parties by their authorized officials.

IN WITNESS WHEREOF, the University System of New Hampshire, acting through the **University of New Hampshire** and the State of New Hampshire, **Department of Environmental Services** have executed this Project Agreement.

**By An Authorized Official of:**

**University of New Hampshire**

Name: Karen M. Jensen

Title: Manager, Sponsored Programs Administration

Signature and Date:

*[Handwritten Signature]* 10/7/15

*Reviewed to firm contract execution*  
**By An Authorized Official of: the New**

**Hampshire Office of the Attorney General**

Name: *Lauren J. Neeth*

Title: *Sr. Assistant Attorney General*

Signature and Date:

*[Handwritten Signature]* 1/14/2015

**By An Authorized Official of:**

**Department of Environmental Services**

Name: Thomas S. Burack

Title: Commissioner

Signature and Date:

*[Handwritten Signature]* 1/2/2015

**By An Authorized Official of: the New**

**Hampshire Governor & Executive Council**

Name:

Title:

Signature and Date:

## EXHIBIT A

- A. Project Title:** Enhancing the NH Coastal Viewer
- B. Project Period:** Date of Governor and Council approval through June 30, 2017
- C. Objectives:** The goal of the proposed project is to maintain, enhance, and promote the NH Coastal Viewer – a web-based, publicly-accessible mapping tool that helps to 1) build community resilience to impacts of coastal erosion, flooding, storms, and climate change, and 2) enhance collaborative actions on coastal ecosystem planning. To achieve this goal, project objectives include the following:
- Provide access to current, decision-relevant geospatial data related to coastal community and ecosystem resilience assessment and planning activities;
  - Locate, assemble, and facilitate access to emerging geospatial data, model results/analyses, and data collection tools addressing coastal resiliency issues;
  - Promote, enhance, and increase the use of these data sets and decision support tools by delivering training and technical assistance to a variety of appropriate audiences, including communities, land trusts, and other targeted sectors;
  - Collaborate with project partners to assess, document, and demonstrate effective applications of the data sets and tools to inform decision-making; and ultimately
  - Enhance the ability of communities and other stakeholders to address resilience planning and management.
- D. Scope of Work:**

The NH Coastal Viewer (<http://www.granit.unh.edu/nhcoastalviewer>) is an on-line mapping and screening tool that provides access to geospatial data about coastal resources and hazards for NH's 42 coastal watershed communities. It was developed by the NH GRANIT project staff at the University of New Hampshire (UNH) Earth Systems Research Center, working in close collaboration with the New Hampshire Department of Environmental Services Coastal Program (NHCP), and as part of a larger project team engaged in a NOAA Project of Special Merit.

Launched in March of 2015, the Viewer currently hosts over 150 geospatial data sets that are organized into a series of functional categories and themes, and that either directly address coastal planning and resiliency issues or provide reference data to support viewing and interpreting the planning and resiliency data. Among the data sets disseminated via the Viewer are key descriptors of current conditions (wetlands, dunes, soils, impervious surfaces, conservation lands, floodplains, land use, etc.), as well as a suite of data sets that model possible future conditions (SLAMM marsh migration model output, sea level rise, etc.). The Viewer also hosts selected Web Mapping Services, including services published by NOAA, the National Park Service, and NH Department of Environmental Services. Further, the Viewer provides access to tools that allow users to easily navigate, query, and analyze the data as well as produce custom maps at a variety of scales and formats suitable for local applications. Other key capabilities of the Viewer include tools for users to add data via uploading local data sets (in shapefile and/or CSV format), accessing external Web Mapping Services, or sketching data on-screen, and the ability to save user session settings for future use and/or collaborating with others.

Project activities under this agreement will focus on three task categories that are designed to support, enhance, and promote the NH Coastal Viewer. Categories and associated tasks are described further below.

- 1) Maintain and support the Viewer environment and data sets:
  - a. **Maintenance:** Maintain the Viewer operating environment and install upgrades to the core Viewer software packages (ArcGIS Server from ESRI, and Geocortex Essentials from Latitude Geographics Group).
  - b. **Update data sets:** Update data sets and corresponding metadata as revisions become available. Expected updates will include the recently released 2014 coastal LiDAR dataset, 2015 aerial imagery, revised FEMA floodplain data for Rockingham and Strafford Counties, updated conservation lands (published semiannually by NH GRANIT), 2015 eelgrass data, 2014 and 2015 oyster restoration and aquaculture sites, and others.
  - c. **Usage statistics:** Monitor viewer usage and report statistics in the scheduled project status reports.
  - d. **Technical user support:** Provide technical support to Viewer users as needed.
  
- 2) Enhance the Viewer to introduce emerging resources:
  - a. **Incorporate new data:** Work with data developers to incorporate a number of relevant data sets currently under development that will serve to enhance the utility of the Viewer by providing important decision-relevant information to our targeted user base. Of particular note, the results of a project by NHDES Geological Survey to map shoreline change from current data and historic aerial photography will be incorporated when available. Additionally, the NHDES Coastal Program expects to provide a map of existing coastal shoreline structures to be added to the Viewer within the grant period.
  
  - b. **Clipping tool:** Develop a “clipping” tool, which will allow users to select a feature of interest from one data set and summarize features that are mapped within the feature from a second data set. For example, the tool will allow a user to summarize the acres of wetlands within a particular watershed, or to report the total length of roadways within a selected town. This tool is envisioned as the first phase of a more comprehensive capability to generate, on a dynamic basis, a “vulnerability and resiliency profile” of a town or watershed, and will be developed in a manner that is scalable in the future to support that vision.
  
- 3) Expand Viewer training resources, deliver workshops, research and document innovative and effective uses of the Viewer by the user community, and engage in other means of promoting the Viewer:
  - a. **User Survey & Case Studies:** Design and execute a web-based survey to qualitatively assess how the Viewer is being used. The survey will be designed to collect data on how people and organizations are utilizing the tool on a regular basis, as well as to screen for interesting and creative Viewer applications. Results will be presented through the Viewer interface as case studies and thereby serve as a readily accessible resource for users, and will also be incorporated into training workshops.
  - b. **Training materials:** Enhance and update training materials. The current training program comprises approximately 20 minutes of introductory material, followed by a 2-hour program of sequenced exercises. Program materials and exercises will be updated to incorporate new data sets, resources (including the case studies), and tools.
  - c. **Trainings:** Deliver 3 to 4 hands-on training sessions. Community decision-makers will be the prioritized target audience, but the sessions will be open to stakeholders from all sectors throughout coastal New Hampshire.
  - d. **Resilience Portal:** Participate in NH Coastal Adaptation Workgroup resilience portal discussion(s) as they relate to the landing page for the Coastal Viewer.

**E. Deliverables Schedule:** Reports: Campus Project Director shall provide two (2) semi-annual progress reports and one (1) final report that summarizes the project activities. The first semi-annual report will cover the period of the project start date through June 30, 2016 and will be due on July 11, 2016. The second semi-annual report will cover the period of July 1, 2016 through December 31, 2016 and will be due on January 10, 2017. The final report will be due July 10, 2017.

**F. Budget and Invoicing Instructions:** Campus will submit invoices to State on regular Campus invoice forms no more frequently than monthly and no less frequently than quarterly. Invoices will be based on actual project expenses incurred during the invoicing period, and shall show current and cumulative expenses by major cost categories as shown below. State will pay Campus within 30 days of receipt of each invoice. Campus will submit its final invoice not later than 60 days after the Project Period end date.

Budget Items	State Funding	Cost Sharing	Total
1. Salaries & Wages	\$22,673	\$ -	\$22,673
2. Fringe Benefits	\$ 8,457		\$ 8,457
3. Travel	-	-	-
4. Supplies and Services	\$ 5,113	-	\$ 5,113
5. Other (IT support)		-	
6. Facilities and Admin.	\$12,757		\$12,757
Subtotals:	\$49,000	\$ -	\$49,000
Total Project Costs: \$49,000			

**G. Other**

**Funding Credit:** Funding credit requirement on final work products and outreach materials: All final work products above shall include the NOAA, NHCP and DES logos. All work products and outreach materials 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." Examples of final work products and outreach materials include, but are not limited to, final reports, press releases, newsletter articles, website pages, and signage.

## EXHIBIT B

This Project Agreement is funded under a Grant/Contract/Cooperative Agreement to State from the Federal sponsor specified in Project Agreement article F. All applicable requirements, regulations, provisions, terms and conditions of this Federal Grant/Contract/Cooperative Agreement are hereby adopted in full force and effect to the relationship between State and Campus, except that wherever such requirements, regulations, provisions and terms and conditions differ for INSTITUTIONS OF HIGHER EDUCATION, the appropriate requirements should be substituted (e.g., OMB Circulars A-21 and A-110, rather than OMB Circulars A-87 and A-102). References to Contractor or Recipient in the Federal language will be taken to mean Campus; references to the Government or Federal Awarding Agency will be taken to mean Government/Federal Awarding Agency or State or both, as appropriate.

Special Federal provisions are listed here:  None or .

**Attachment A  
Budget Estimate**

**Budget Item**

<b>Budget Item</b>	<b>State Funding</b>	<b>Match</b>	<b>Total</b>
Salaries & Wages	\$22,673.00	\$0.00	\$22,673.00
Employee Fringe Benefits	\$8,457.00	\$0.00	\$8,457.00
Travel	\$0.00	\$0.00	\$0.00
Supplies	\$5,113.00	\$0.00	\$5,113.00
Equipment	\$0.00	\$0.00	\$0.00
Facilities and Administrative Costs	\$12,757.00	\$0.00	\$12,757.00
<b>Subtotals</b>	<b>\$49,000.00</b>	<b>\$0.00</b>	<b>\$49,000.00</b>
In-Kind Contribution			\$0.00
<b>Total Project Cost</b>			<b>\$49,000.00</b>