



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Robert R. Scott, Commissioner

August 29, 2018

His Excellency, Governor Christopher T. Sununu
 and The Honorable Council
 State House
 Concord, NH 03301

REQUESTED ACTION

Authorize the Department of Environmental Services to enter into an agreement with the University of New Hampshire Stormwater Center, (VC# 177867) in the amount of \$75,000 to complete the *Great Bay Waterbody/Watershed Nitrogen Nonpoint Source Study Implementation: Phase 3: University of New Hampshire BMPs to Reduce Nitrogen*, effective upon Governor and Council approval through December 31, 2020. 100 % Federal Funds.

Funding is available in the account as follows:

03-44-44-442010-2035-072-500575	<u>FY 2019</u>
Dept. Environmental Services, NPS Restoration Program, Grants-Federal	\$75,000

EXPLANATION

The Department of Environmental Services (NHDES) issued a Request for Proposals (RFP) for the 2017/2018 Watershed Assistance Grants program. The twenty-one proposals received were ranked based on the criteria included in the RFP: water quality improvement or protection; cost/benefit ratio; local capacity to complete the project; relative value or significance of the water body; and, general quality and thoroughness of the proposal. Based on the results of the selection process and available federal grant funding levels, the six highest ranked implementation projects were selected to receive funding. Please see Attachment B for a list of project rankings and review team members.

Watershed Assistance grants focus on the reduction of nonpoint source (NPS) pollution. NPS pollution occurs when rainfall, snowmelt, or irrigation water runs over land or through the ground, transporting materials which are then deposited into rivers, lakes, and coastal waters, or introduced into the groundwater. Pollutants can include chemicals, sediments, nutrients, and toxics which often have harmful effects on drinking water supplies, recreation, fisheries, and wildlife. Land development or changes in land use can also cause NPS pollution by disrupting the natural hydrology of a water body, increasing impervious surfaces, and contributing to the loss of aquatic habitat. Watershed Assistance programs address NPS pollution by promoting good land use practices on a watershed scale.

UNH facilities will partner with the UNH Stormwater Center to implement best management practices (BMPs) that disconnect impervious cover at nitrogen loading hotspots in the Great Bay watershed. *The*

Great Bay Nitrogen Non-Point Source Study (GBNNPSS) identified stormwater as a significant source of the nonpoint source nitrogen load (34%) to the Great Bay. Nitrogen from stormwater has been identified by GBNNPSS as a significant source of the nonpoint source nitrogen load (34%) to the Great Bay. The project focuses on a 16.2 acre area along the southeastern portion of UNH Durham campus. This phase will focus on management of a 14.7 acre area which includes 12.5 acres of effective impervious cover (EIC). The project will disconnect and treat runoff through the implementation of an innovative subsurface gravel wetland prior to discharging to receiving waters. Disconnection of this EIC will lead to the overall annual reduction of 112 pounds of total nitrogen, 16 pounds of total phosphorus, and 7,800 pounds of sediment from the drainage area.

The improvements realized through this project will address stormwater quality and quantity, and are based on nitrogen loads from stormwater transport pathways, identified, modeled and reported in the GBNNPSS.

The total project costs are budgeted at \$125,025. NHDES will provide \$75,000 (60%) of the project costs through a Section 319 of the Clean Water Act, federal grant. 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 this program.

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

We respectfully request your approval.



Robert R. Scott, 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 **12/31/2020**. 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: Great Bay Waterbody/Watershed Nitrogen Nonpoint Source Study Implementation: Phase 3: University of New Hampshire BMPs to Reduce Nitrogen.

- 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: Stephen C. Landry
 Address: NHDES
29 Hazen Drive
Concord, NH 03302

Phone: (603) 271-2969

Campus Project Administrator

Name: Cheryl Moore
 Address: University of New Hampshire
51 College Road
Service Building
Durham, NH 03824

Phone: (603) 862-1992

- 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: Sally Soule
 Address: NHDES
222 International Drive
Portsmouth, NH 03801

Campus Project Director

Name: James Houle
 Address: University of New Hampshire
Stormwater Center
35 Colovos Road
Durham, NH 03824

F. Total State funds in the amount of \$75,000 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 40 % (\$50,025) 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. C9-98132418 from the Environmental Protection Agency under CFDA #66.460. 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: Louise G. Griffin

Title: Sr. Director, Research, SPA, Dir. EOS BSC

Signature and Date:

Louise G. Griffin 8/2/18

By An Authorized Official of: the New Hampshire Office of the Attorney General

Name: Gordon Landrigan

Title: Ass. S. Att. General

Signature and Date:

Gordon Landrigan 9/12/18

By An Authorized Official of:

Department of Environmental Services

Name: Robert R. Scott

Title: Commissioner

Signature and Date:

Robert R. Scott 9/5/18

By An Authorized Official of: the New Hampshire Governor & Executive Council

Name:

Title:

Signature and Date:

EXHIBIT A

A. Project Title: Great Bay Waterbody/Watershed Nitrogen Nonpoint Source Study Implementation: Phase 3: University of New Hampshire BMPs to Reduce Nitrogen

B. Project Period: Upon G&C approval through December 31, 2020

C. Objectives: The improvements in this project will address stormwater quality and quantity, and are based on nitrogen loads from stormwater transport pathways, identified, modeled and reported in the Great Bay Nitrogen Non-Point Source Study (GBNNPSS).

University of New Hampshire (UNH) facilities will partner with the UNH Stormwater Center to implement two to three best management practices (BMPs) that disconnect impervious cover at nitrogen hotspots identified by the Municipal Bioretention Program. The GBNNPSS identified stormwater as a significant source of the nonpoint source nitrogen load (34%) to the Great Bay. Nitrogen from stormwater transport pathways have been identified by GBNNPSS as a significant source of the nonpoint source nitrogen load (34%) to the Great Bay. Phase 3 of this project will focus on management of 12.5 acres of impervious cover. Through the implementation of an innovative subsurface gravel wetland the project will disconnect and treat runoff prior to discharging to receiving waters. Treatment of this impervious cover will lead to the overall annual reduction of 112 pounds of total nitrogen, 16 pounds of total phosphorus, and 7,800 pounds of sediment from the drainage area.

D. Scope of Work:

Objective 1: Develop an approved Site Specific Project Plan (SSPP) for impervious cover and pollutant load reduction calculations.

Measures of Success: An SSPP is developed and approved.

Deliverables: Final, approved SSPP is submitted to NHDES.

Task 1.1 The SSPP is developed and reviewed.

Task 1.2 Final SSPP is approved, signed, and submitted to NHDES.

Objective 2: Implement low impact development (LID) BMPs to treat stormwater runoff and pollution from two to three locations at a university parking lot, and provide construction oversight.

Measures of Success: Successful installation of LID treatments.

Deliverables: LID designs

Task 2.1 Conduct site assessment for LID installations and select final locations.

Task 2.2 Design two to three LID installations.

Task 2.3 Develop a request for bids from contractors to construct LID stormwater improvements. Submit bid documents and solicitation to DES for review and approval. Review bid results and select the contractor to complete the work. Prepare contract documents and send them to DES for review and approval prior to execution. Execute documents to enter into a contract to complete construction.

- Task 2.4 Order materials.
Task 2.5 Install LID at two to three locations.
Task 2.6 Provide construction oversight for installations.

Objective 3: Calculate pollutant load and impervious cover reductions for LID installations.
Measures of Success: Calculations are completed.

Deliverables: A report of pollutant load and impervious cover reductions is submitted to NHDES.

- Task 3.1 Calculate impervious cover and pollutant load reductions for installed BMPs.
Task 3.2 Prepare report documenting impervious cover and pollutant load reductions and submit report to NHDES.

Objective 4: Document project and installation progress.

Measures of Success: Photo-documentation (pre- and post-construction) and design summaries prepared.

Deliverables: Documentation report with design summaries and photo-documentation.

- Task 4.1 Collect data for report to document project progress including pre- and post-construction photos, design summaries, and other material as needed.
Task 4.2 Develop report documenting project progress and submit report to NHDES.

Objective 5: Develop Operation and Maintenance (O & M) plans for installed BMPs.

Measures of Success: The O & M plans are developed and delivered to BMP owners (UNH Facilities Services) and NHDES.

Deliverables: Final O & M plan.

- Task 5.1 Develop O & M plans for installed BMPs.
Task 5.2 Provide O & M plans to BMP owners (UNH Facilities Services) and NHDES.

Objective 6: Complete project administration.

Measures of Success: Project administration tasks are carried out and completed.

Deliverables: Semi-annual reports, final report, payment requests, and match documentation are submitted to NHDES – Watershed Assistance Section.

Task 6.1 Submit electronic semi-annual reports documenting all work performed during the project periods as follows:

- Work completed April 1 – September 30, report is due by October 31
- Work completed October 1 – March 31, report is due by April 30

A Pollutants Controlled Report must be completed and received by NHDES within one month following BMP implementation. In the event that the grantee has not completed a timely submittal of the progress reports, all further payments will be suspended until the overdue reports are submitted, and approved by NHDES.

Task 6.2 Submit Payment Requests, Match Documentation, and Procurement Documentation to NHDES.

Task 6.3 Submit a comprehensive final report to NHDES on or before the project completion date. The final report shall include load reduction estimates, photo-documentation of installed system components when applicable, and comply with the NHDES and U.S.

Environmental Protection Agency requirements found in the final report guidance document on the NHDES Watershed Assistance Section webpage.

Task 6.4 Conduct project and contract management and coordination.

E. Budget and Invoicing Instructions: Using standard Campus invoices, Campus shall submit requests for payment and documentation of the completion of Tasks as detailed in Attachment A: Scope of Work and Deliverables. Upon receipt and approval by the State Project Director of the Tasks and Deliverables specified within Attachment A and associated invoices, State will issue payment within 30 days to Campus in accordance with the payment schedule as follows:

Upon completion and NHDES approval of Task 1.1	\$500
Upon completion and NHDES approval of Task 1.2	\$500
Upon completion and NHDES approval of Task 2.1	\$11,875
Upon completion and NHDES approval of Task 2.2	\$23,750
Upon completion and NHDES approval of Task 2.3	\$10,500
Upon completion and NHDES approval of Task 2.4	\$5,875
Upon completion and NHDES approval of Tasks 2.5 and 2.6	\$6,000
Upon completion and NHDES approval of Task 3.1	\$1,000
Upon completion and NHDES approval of Task 3.2	\$1,000
Upon completion and NHDES approval of Task 4.1	\$500
Upon completion and NHDES approval of Task 4.2	\$500
Upon completion and NHDES approval of Task 5.1 and 5.2	\$500
Upon completion and NHDES approval of Task 6.1	\$2,000
Upon completion and NHDES approval of Task 6.2	\$3,000
Upon completion and NHDES approval of Task 6.3	\$3,000
Upon completion and NHDES approval of Task 6.4	\$4,500
Total	\$75,000

The total reimbursement shall not exceed the grant award of \$75,000.

F. Funding Credit: All materials produced for public distribution shall be reviewed and approved by State Project Director prior to distribution and when appropriate shall include a the NHDES logo and the following citation: "Funding for this project was provided in part by a Watershed Assistance Grant from the NH Department of Environmental Services with Clean Water Act Section 319 fund from the U.S. Environmental Protection Agency".

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 **Uniform Guidance issued by the Office of Management and Budget (OMB) in lieu of Circulars listed in paragraph above.**

Attachment B: Watershed Assistance and Restoration Grant Ranking

Projects Implementing Watershed Plans												
Organization	Project Name	Amount requested	Reviewer 'A'	Reviewer 'B'	Reviewer 'C'	Reviewer 'D'	Reviewer 'E'	Reviewer 'F'	Reviewer 'G'	Average Score	Rank	
NH DES Dam Bureau	Sawyer Mill Dam Removal Project Phase 3: Construction	\$100,000	96	92	97	88	95	95	66	89.9	1	
Cobbett's Pond Improvement Association	Cobbett's Pond Restoration Plan Implementation IV - Bella Vista Area	\$100,000	82	64	78	76	82	88	60	78.6	2	
Town of Durham	Little Hale Pond -Dam Removal and Stream Restoration Project	\$75,000	76	65	89	71	66	71	56	73.4	3	
Green Mountain Conservation Group	Ossipee Lake Watershed Management Plan Phase 3: A Watershed Plan for the Bearcamp River Subwatershed	\$50,000	76	72	73	74	82	60	69	72.3	4	
UNH Stormwater Center	Great Bay Waterbody/Watershed Nitrogen Non-Point Source Study Implementation: Phase 3: University of New Hampshire BMPs to Reduce Nitrogen	\$75,000	70	62	78	65	75	74	50	70.6	5	
Strafford Regional Planning Commission	Implementation, Phase I- Permeable Reactive Barrier Installations Project	\$50,000	76	78	74	61	82	72	47	70.0	6	
Town of Wolfeboro	Lake Wentworth/ Crescent Lake WMP Implementation Phase 3: Route 109 Roadside and Camp Bernadette Shoreline BMPs	\$50,000	77	79	76	58	84	66	75	73.6	Selected for 2017*	
Messer Pond Protective Association	Messer Pond Watershed-Based Implementation Plan - Phase 1: County Road BMPs	\$10,000	75	68	64	66	80	75	74	71.7	Selected for 2017*	
Pleasant Lake Protective Association	Pleasant Lake Watershed Plan Implementation, Phase II	\$75,000	69	71	65	66	80	83	55	69.9	Not selected	
Spofford Lake Protective Association	Spofford Lake Watershed Management Development and Implementation, Demonstration BMPs	\$50,000	73	77	74	58	81	75	46	69.1	Not selected	
Southwest Region Planning Commission	Lake Warren Watershed Implementation Project, Phase 2	\$100,000	77	61	76	63	83	44	59	66.1	Not selected	

Projects Developing Watershed Plans												
Organization	Project Name	Amount requested	Reviewer 'A'	Reviewer 'B'	Reviewer 'C'	Reviewer 'D'	Reviewer 'E'	Reviewer 'F'	Reviewer 'G'	Average Score	Rank	
Nippo Lake Association	Nippo Lake Watershed Management Plan Phases 3 and 4: Additional Watershed Planning and Implementation of BMPs	\$75,000	89	83	83	78	91	82	74	82.9	Selected for 2017*	
Gregg Lake Association	Gregg Lake Watershed Management Plan Development	\$25,000	82	65	80	67	84	85	64	79.6	Selected for 2017*	
Lake Winnepesaukee Association	Moultonborough Bay Watershed Plan Development	\$65,000	76	84	78	78	82	88	70	79.6	Selected for 2017*	
Lakes Region Planning Commission	Winnisquam Watershed Plan Phase I Groundwork for a Watershed Planning Process	\$10,000	72	83	73	67	80	86	60	74.4	Selected for 2017*	
Squam Lakes Association	Squam Lakes Watershed Plan Development—Phase 1	\$50,000	81	74	82	62	75	70	72	73.7	Selected for 2017*	
Lake Sunapee Protective Association	Sunapee Watershed Management Plan Development, 2017	\$50,000	89	81	80	66	82	82	73	73.3	Selected for 2017*	
Upper Merrimack Watershed Association	Turkey River Watershed Restoration and Management Plan	\$50,000	90	74	67	59	85		61	72.7	Selected for 2017*	
Jenness Pond Shore Owner's Association	Jenness Pond Watershed Development Plan	\$25,000	72	64	73	55	77	31	57	61.3	Not selected	
UNH Stormwater Center	Pollutant Hot Spot Mapping for New Hampshire Coastal Communities: Identifying Critical Area for Nonpoint Source Management	\$75,000	65	68	56	60	75	50	45	59.9	Not selected	
Town of Newmarket	Moonlight Brook Watershed Based Planning for Water Quality and Climate Resiliency	\$100,000	58	70	67	48	43	64	63	59.0	Not selected	

*Funding for planning projects was available in 2017 and development of watershed-based plan projects were prioritized accordingly. Implementation projects scoring 70 points or greater but requesting more than \$50,000 will be funded in FFY2018 pending available funding. Partial funding for construction projects is not allowed.

Review Team Members

Name	Qualifications
Steve Landry	20 years experience, Watershed Assistance Section Supervisor, project management, Merrimack watershed and fluvial geomorphology expertise
Jeff Marcoux	14 years experience, Watershed Coordinator, project management, grant and contract expertise
Barbara McMillan	15 years Watershed Assistance Outreach Coordinator, outreach and education and stormwater expertise.
Sally Soule	20 years experience, Coastal Watershed Coordinator, project management, Coastal watershed expertise
Wendy Waskin	15+ years experience, Grants Specialist, budgeting, planning, project assistance expertise
Katie Zink	7 years experience, Watershed Assistance Specialist, surface and drinking water sampling, microbial expertise
Rob Livingston	29 years experience, Watershed pollution specialist, BMP, pollution source investigation expertise, Field training of local municipalities in watershed pollution source tracking and identification, Environmental complaints field investigator.