



The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

August 16, 2023

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

REQUESTED ACTION

Authorize the New Hampshire Department of Environmental Services (NHDES) to enter into an agreement with the University of New Hampshire, Sponsored Programs Administration, Durham, NH, (VC #315187-B083) in the amount of \$75,000 to complete the *Great Bay Waterbody/Watershed Nitrogen Non-Point Source Study Implementation: Phase 4 – Dover Retrofits to Reduce Nitrogen* project, effective upon Governor and Council approval through December 31, 2025. 100% Federal Funds.

Funding is available in the following account:

03-44-44-442010-2035-072-500575

Dept. Environmental Services, NPS Restoration Program, Grants-Federal

FY 2024

\$75,000

EXPLANATION

NHDES requests approval to enter into a grant agreement for \$75,000 with the University of New Hampshire (UNH) to complete the *Great Bay Waterbody/Watershed Nitrogen Non-Point Source Study Implementation: Phase 4 – Dover Retrofits to Reduce Nitrogen* project. NHDES issued a Request for Proposals (RFP) for the 2023 Watershed Assistance Grants program in June 2022. The fifteen 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; consideration of the project's impact on communities with environmental justice concerns; the project's incorporation of changing environmental conditions; and general quality and thoroughness of the proposal. Based on the results of the selection process and available federal grant funding levels, seven implementation projects were selected to receive funding. Please see Attachment B for a list of project rankings and NHDES review team members.

Watershed Assistance Grants focus on the reduction of nonpoint source (NPS) pollution. NPS pollution occurs when rainfall, snowmelt, or irrigation waters travel through the ground or across land, transporting materials that are then introduced into groundwater or deposited into rivers, lakes, and coastal waters. Pollutants can include chemicals, sediments, nutrients, and toxins that 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

www.des.nh.gov

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: 271-2867 TDD Access: Relay NH 1-800-735-2964

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Grants address NPS pollution by promoting responsible land use practices through the installation of best management practices, restoration of habitats, and reduction of nutrient loading on the watershed scale.

Great Bay is on the NHDES 303(d) list as impaired for Aquatic Life Integrity due to excess nitrogen. Nitrogen from stormwater transport pathways have been identified by the Great Bay Nitrogen Non-Point Source Study as 34-percent of the nonpoint source nitrogen load to Great Bay. Reducing nitrogen inputs by treating stormwater runoff is needed to improve water quality and restore ecosystems and aquatic resources. Older stormwater systems were designed with the objective of managing stormwater peak flows and do little to no nitrogen removal. A lack of maintenance often leaves the legacy of old stormwater infrastructure as a liability as opposed to a solution.

This project addresses water quality impairments associated with stormwater runoff from highly urbanized areas: specifically, the uncontrolled runoff from large expanses of impervious cover that were once treated with retention ponds that have become dysfunctional due to sedimentation and lack of maintenance. Large expanses of impervious cover with inadequately managed stormwater create water quality impacts from both the pollutant loads and the increases in flow, velocities, and volumes. This project will retrofit two coastal stormwater ponds in disrepair with innovative subsurface gravel wetland systems to treat nitrogen in runoff and improve nitrogen pollution control.

The project costs are budgeted at \$125,025. NHDES will provide \$75,000 (60%) of the project costs through a federal grant, and UNH will provide the remaining costs through cash and in-kind services. A budget estimate 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 of this item.



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 **12/31/2025**. 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 Non-Point Source Study Implementation: Phase 4 – Dover Retrofits 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, PO Box 95

Concord, NH 03302

Phone: (603) 271-2969

Campus Project Administrator

Name: Randy Brown

Address: University of New Hampshire

Sponsored Programs Administration

51 College Rd. Rm 116

Durham, NH 03824

Phone: (603) 717-1800

- 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

Campus Project Director

Name: James Houle

Address: NHDES
222 International Drive
Portsmouth, NH 03801

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

Phone: (603) 559-0032

Phone: (603) 862-6706

- 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: Click or tap here to enter text.

- 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 Jensen

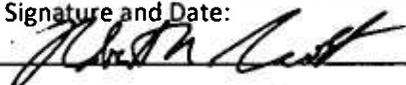
Title: Director, Pre-Award Compliance

Signature and Date: Karen Jensen Digitally signed by Karen Jensen
Date: 2023.07.21 10:15:38
-04'00'

By An Authorized Official of:
Department of Environmental Services

Name: Robert R. Scott

Title: Commissioner

Signature and Date:  8/10/23

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

Name: Joshua Harrison

Title: Assistant Attorney General

Signature and Date:  8/25/2023

AS to form, substance, and
execution.

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 Non-Point Source Study Implementation: Phase 4 – Dover Retrofits to Reduce Nitrogen.

B. Project Period: Upon G&C approval through December 31, 2025.

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 and the City of Dover to implement two to three best management practices (BMPs) that will innovate and retrofit outdated retention ponds into subsurface gravel wetland systems, all designed with internal water storage volumes for nitrogen removal. The GBNNPSS identified stormwater as a significant source of the non-point source nitrogen load (34 percent) to the Great Bay. Nitrogen from stormwater transport pathways have been identified by GBNNPSS as a significant source of the non-point source nitrogen load (34 percent) to the Great Bay. Phase 4 of this project will focus on management of 8.92 acres of impervious cover. The retrofit of these unmaintained and dilapidated stormwater structures will result in estimated annual pollutant reduction of 134 pounds of total nitrogen, 20 pounds of total phosphorus, and 5,300 pounds of sediment load generated from the drainage area.

D. Scope of Work:

Objective 1: Conduct site assessments at two failed retention ponds.

Measures of Success: Both sites will be surveyed and evaluated to develop retrofit concept designs.

Deliverables: Survey information for both sites are compiled.

Task 1.1 An assessment is conducted at Site 1 and site information is collected to develop concept designs for retrofitted best management practices (BMPs).

Task 1.2 An assessment is conducted at Site 2 and site information is collected to develop concept designs for retrofitted BMPs.

Objective 2: Develop a Site-Specific Project Plan (SSPP) that is reviewed and approved by New Hampshire Department of Environmental Services (NHDES).

Measures of Success: The project's SSPP is approved by NHDES. The final SSPP is sent to project partners.

Deliverables: Draft and approved versions of the SSPP provided to NHDES.

Task 2.1 Develop a SSPP covering all data collection and manipulation tasks included in this project following NHDES guidance for developing SSPPs; submit the draft SSPP to NHDES for review.

Task 2.2 Revise the draft SSPP to address comments from NHDES and resubmit for final review and approval. Obtain signatures for the final SSPP and distribute to project partners.

Objective 3: Designs for both retrofit BMP sites are developed in collaboration with City of Dover staff.
Measures of Success: Designs for retrofit BMPs are developed and on file with NHDES.

Deliverables: The retrofit design plans for Sites 1 and 2 are developed, submitted to, and approved by NHDES and the City of Dover.

Task 3.1 UNHSC generates the retrofitted BMP design and installation plans based on the final conceptual designs; as well as construction and maintenance cost estimates. Submit the draft plans to the City and NHDES for review and approval. UNHSC will recommend additional project phases if necessary.

Objective 4: Install Site 1 retrofitted BMPs.

Measures of Success: Site 1 retrofitted BMP designs are implemented in accordance with the approved design plans.

Deliverables: The Site 1 photo documentation, installation summary, operation and maintenance (O&M) guidelines, and Pollutants Controlled Report (PCR) are on file with NHDES.

Task 4.1 Work in collaboration with the City of Dover to implement the retrofit BMP designs according to the approved plans.

Task 4.2 Oversee the installation of the retrofitted BMPs.

Task 4.3 Develop photo documentation and the installation summary for Site 1.

Task 4.4 Prepare and submit O&M guidelines and PCR for final BMPs to NHDES. Provide the final O&M guidelines to the City of Dover.

Objective 5: Install Site 2 retrofit BMPs.

Measures of Success: Site 2 retrofitted BMP designs are implemented in accordance with the approved design plans.

Deliverables: The Site 2 photo documentation, installation summary, operation and maintenance (O&M) guidelines, and Pollutants Controlled Report (PCR) are on file with NHDES.

Task 5.1 Work in collaboration with the City of Dover to implement the retrofit BMP designs according to the approved plans.

Task 5.2 Oversee the installation of the retrofitted BMPs.

Task 5.3 Develop photo documentation and the installation summary for Site 1.

Task 5.4 Prepare and submit O&M guidelines and PCR for final BMPs to NHDES. Provide the final O&M guidelines to the City of Dover.

Objective 6: Conduct project management and submit all required reports to NHDES.

Measures of Success: Project management activities are conducted, and reports are submitted to NHDES.

Deliverables: Financial documentation, semi-annual progress reports, and final report are submitted to NHDES.

- Task 6.1 Conduct project management including submittal of financial documents such as payment requests and match and procurement documentation and procurement; communicate with NHDES and other project partners as needed; conduct other activities required for grant management.
- Task 6.2 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
- If 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 6.3 Submit a comprehensive final report to NHDES on or before the project completion date. The final report shall include documentation for procurement of construction services, photo-documentation of constructed project components, proof that the project was constructed according to permits and conditions (photos, as-built plans, and other documentation required by the permit and grant agreement) additionally, the final report will comply with NHDES and USEPA requirements found in the final report guidance document, including ADA compliance on the NHDES Watershed Assistance Section webpage.

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:

Reimbursement requests for program costs shall be made by the Grantee using a payment request form as supplied by the State, which shall be completed and signed by the Grantee. The payment request form shall be accompanied by proper supporting documentation in the amount of each requested disbursement and required matching funds. Documentation of reimbursable and matching costs may include invoices for supplies, equipment, services, contractual services, and a report of personnel, travel, and indirect costs. For projects that demonstrate progress solely through the submission of interim progress reports, payments shall be made upon receipt, review and approval of the interim progress report and accompanying payment request form. Payments shall be made to the Grantee no more frequently than monthly.

The total reimbursement shall not exceed the grant award of \$75,000. The cumulative match value for the project shall meet or exceed the amount of grant funds received multiplied by 0.667 (e.g. \$75,000 grant X 0.667 = \$50,025 minimum match required) of non-federal cash and in-kind services.

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

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

**Attachment A
Budget Estimate**

Budget Item	s319 Grant Funding	Non-Federal Matching Funds	Totals
Salaries & Wages	\$47,768	\$9,025	\$56,793
Travel and Training	\$0	\$0	\$0
Contractual	\$0	\$0	\$0
Equipment and Supplies	\$0	\$0	\$0
Construction	\$20,457	\$0	\$20,457
Indirect Cost	\$6,775	\$41,000	\$47,775
Total Project Cost	\$75,000	\$50,025	\$125,025

Attachment B:

2023 Watershed Assistance and Restoration Grant Ranking

Organization	Project Name	Reviewer					AVG	RANK by avg
		A	B	C	D	E		
Town of Durham	Restoration of the Oyster River Herring Run through Removal of the Mill Pond Head-of-Tide Dam and Installation of Fish Passage on the Oyster Reservoir Dam, Durham NH	84	78	83.5	88	80	82.7	1
University of New Hampshire	Great Bay Waterbody/Watershed Nitrogen Non-Point Source Study Implementation: Phase 4 – Dover Retrofits to Reduce Nitrogen	79	85	81	82	85	82.4	2
Nippo Lake Association	Nippo Lake Association Watershed Management Plan: Implementation of Land Conservation/Protection of Road, Residential and In-lake BMPs	77	85	78	85	86	82.2	3
Lake Sunapee Protective Association	Lake Sunapee Watershed Plan Implementation Phase 3: Kidder Brook Bank Stabilization BMPs	79	90	79	76	85	81.8	4
Green Mountain Conservation Group	Danforth Ponds, Ossipee Lake Watershed Management Plan Phase 2: BMPs & Community Engagement	82	90	77	75	83	81.4	5
Partridge Lake Property Owners Association	Partridge Lake Watershed Restoration Plan Preparation for In-lake Phosphorous Treatment and North Shore Culverts BMP	78	82	82	80	83	81.0	6
Town of Wolfeboro	Rust Pond- North Inlet Subwatershed Implementation Phase 2 and Dredging Feasibility Study	70	81	74.5	85	90	80.1	7
Town of Wolfeboro	Lake Wentworth-Crescent Lake Watershed Management Plan, Phase 5: Stormwater BMPs	77	85.5	72	79	85	79.7	8
Tucker Pond Improvement Association	Tucker Pond Watershed-Based Management Plan Implementation Phase I: Quimby Road BMPs and Septic System Upgrades	73	80	76.5	80	78	77.5	9
Town of Alton	Mill Pond, Mill Pond supplement to the Merrymeeting River Watershed Management Plan Implementation, Phase 2: Route 140 (Alton) BMPs for drainage areas MPI, MPIO, and the parking lot included in MP12	73	65	80	80	88	77.2	10

Newfound Lake Region Association	Newfound Watershed Management Plan Implementation Phase 5: Streambank Restoration in Atwell Brook	79	75	76.5	76	74	76.1	11
Strafford Regional Planning Commission	Sunrise Lake Watershed Management Plan Implementation Phase I: Structural BMPs	73	74	79	75	77	75.6	12
Southwest Regional Planning Commission	Lake Warren Watershed BMP Implementation Phase II	58	82	69	67	85	72.2	13
Lake Kanasatka Watershed Association	Lake Kanasatka Watershed-Based Management Plan Implementation Phase I: Watershed and Shorefront BMPs	70	55	68	76	70	67.8	14
Squam Lakes Association	Squam Watershed Management Plan, Phase 1: Remediation and BMPs for Cotton Cove and Sandwich Town Beach.	70	66	71	47	74	65.6	15

Review Team Members

Name	Qualifications
Steve Landry	29 years experience, Watershed Assistance Section Supervisor, project management, Merrimack watershed and fluvial geomorphology expertise
Jeff Marcoux	18 years experience, Watershed Coordinator, project management, grant and contract expertise
Sally Soule	24 years experience, Coastal Watershed Coordinator, project management, Coastal watershed expertise
Andrea Bejtlich	4 years experience, Watershed Specialist, surface and drinking water sampling, grant management expertise.
Katie Zink	11 years experience, Watershed Assistance Specialist, surface and drinking water sampling, microbial expertise