



The State of New Hampshire
Department of Environmental Services



Robert R. Scott, Commissioner

November 14, 2023

His Excellency, Governor Christopher T. Sununu
 And the Honorable Council
 State House
 Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the New Hampshire Department of Environmental Services (NHDES) to enter into a Memorandum of Agreement (MOA) with North Carolina State University (NCSU), Sponsored Programs and Regulatory Compliance Services, Raleigh, NC (VC# 171316 B001), in the amount of \$6,000, to perform concentration-exposure time trials, effective upon Governor and Council approval, through December 31, 2024, 100% Lake Restoration Funds.

Funding is available in the following account:

03-44-44-442010-1430-073-500580	<u>FY 2024</u>
Dept. Environmental Services, Lakes Restoration Program	\$6,000

EXPLANATION

Featherfoil, an invasive aquatic plant, was documented in New Hampshire in spring 2020. Since that time, rapid expansion of the plant has been documented in some of the state's largest lakes (Lake Winnepesaukee, Lake Opechee, Lake Winnisquam), posing a threat to nearby lakes and ponds, as well as to downstream river systems like the Winnepesaukee and Merrimack Rivers. As such, ecological and economic impacts to New Hampshire waters are likely from this plant. There have only been two other documentations of this species in the United States. Formal research on the efficacy of herbicides on the featherfoil is very limited and extremely necessary. This study will consist of a small-scale greenhouse efficacy screening of EPA registered herbicides. The results of this study will be used to inform rapid response protocols and management of this plant in New Hampshire.

The purpose of this research project, outlined in the MOA, is to identify an appropriate herbicide that provides good efficacy for reducing the occurrence of featherfoil. The research will be done in tanks at NCSU laboratories using featherfoil collected from New Hampshire waterbodies and will focus on concentration-time exposures of the plants to various concentrations of different herbicides, to determine the most ideal product, concentration, and exposure time, to maximize featherfoil control, and limit non-target impacts. The attached MOA between NHDES and NCSU will provide for completion of laboratory tasks, as outlined in the MOA, as well as a comprehensive report and recommendations for future management actions in the field. The full project budget, and task budget, is included as Attachment A. While the dollar amount of the contract is below the limit, other contracts with the vendor put this over the threshold, so it is being routed at a G&C item.

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

We respectfully request your approval.

Susan Carlson, COO
 for Robert R. Scott, Commissioner

www.des.nh.gov

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
 (603) 271-3503 • Fax: 271-7894 TDD Access: Relay NH 1-800-735-2964

MEMORANDUM OF AGREEMENT
between the
NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
and
NORTH CAROLINA STATE UNIVERSITY

Title: Evaluation of registered aquatic herbicides across a range of concentrations on featherfoil (*Hottonia palustris*) to inform future management protocols for featherfoil in New Hampshire.

I. Purpose of Agreement:

This Memorandum of Agreement (MOA) describes a project, which has been agreed to between the New Hampshire Department of Environmental Services (NHDES) and the North Carolina State University (NCSU), to evaluate registered aquatic herbicides across a range of concentrations to inform future management protocols for featherfoil in New Hampshire.

II. Timeline of Agreement:

The period of this Agreement shall be from the date of *Governor & Council* approval, through December 31, 2024.

III. Department of Environmental Services:

The Department of Environmental Services will:

1. Collect and submit featherfoil meristems, in the quantity needed by NCSU, for use in the evaluation.
2. Provide water quality conditions typical to New Hampshire waterbodies, including pH, conductivity, alkalinity, and other parameters necessary to replicate water chemistry conditions in the research trials.
3. Review project report drafts and final report, and provide input, upon request by NCSU, on research activities.
4. Provide NCSU up to \$6,000.00 to be used for this research project.

IV. North Carolina State University:

North Carolina State University will:

1. Receive featherfoil from a representative New Hampshire field location and establish a culture for future study use at NCSU. In culture and final trial tanks, adjust basic water quality (pH, hardness, etc.) to typical New Hampshire lake conditions.
2. Develop final details of trial protocols, preparation of definitive study mesocosm tanks, and transfer of culture plants into final mesocosm study tanks in winter-spring 2023, and then conduct Mesocosm Concentration-Exposure Trial including:
 - a. Treatment of actively growing healthy plants
 - b. Pre-treatment harvest of replicate plants at initiation of treatment
 - c. Preliminary treatment protocol (subject to revision). Static exposure, each at max and half max rate
 - i. Untreated control
 - ii. Flumioxazin
 - iii. Diquat
 - iv. Florpyrauxifen-benzyl
 - v. 2,4-D
 - vi. Trichlopyr
 - vii. Penoxsulam
 - viii. Fluridone
 - ix. Imazamox
 - x. Imazapyr
 - d. Bi-weekly injury ratings and representative photography of untreated and treated plants.
 - e. Harvest of replicate sets of featherfoil plants at 6 weeks post application. Only shoot biomass will be harvested for drying and measurement.
3. Conduct analysis of study results and reporting to NHDES, including:
 - a. Graphical and statistical analysis of treatment outcomes
 - b. Summary draft report for NHDES by October 1, 2023. Final report by February 1, 2024.
 - c. Anticipated oral presentation of preliminary or final results at Northeast Aquatic Plant Management Society (NEAPMS) Annual Conference in January 2024 or 2025.

V. Funding, Costs, and Payment:

Funding to NCSU from NHDES for this project is available via this MOA from the Lake Restoration Fund, 03-44-44-442010-1430-073-500580.

BUDGET ESTIMATE

BUDGET ITEM	QUANTITY	RATE	TOTAL	GRANT
EQUIPMENT				
LABOR	160 HOURS	\$14/HR	\$2,240	\$2,240
MATERIALS			\$515	\$515
SALARY				
RESEARCH SPECIALIST	0.5 MONTHS OF TIME	\$55,000	\$2,291 ¹	\$2,291
BENEFITS-HOURLY		8.65%	\$198 ²	\$198
BENEFITS RS		33%	\$756 ³	\$756
SUPPLIES				
OTHER				
TOTALS			\$6,000	\$6,000

¹Salary divided by 12 (months), divided by 2 (for ½ month)

²Salary x 0.0865

³Salary x 0.33

Task-Specific Budget Break-out:

Task (describe)	Grant Funds	Match	Total cost of task
Task 1: Propagation of plant specimens	\$500	\$	\$500
Task 2: Mesocosm studies	\$4,500	\$	\$4,500
Task 3: Data analysis and reporting	\$1000	\$	\$1000

Upon completion of each task outlined above and, in the Task-Specific Budget breakout, NCSU will invoice NHDES for payment for completion of each task.

Invoices will be submitted using NCSU’s standard invoice, and should be paid by NHDES within thirty (30) days of receipt. A final invoice will be provided to NHDES not later than ninety (90) days after Agreement end date, and will constitute NCSU’s final financial report for the Project. NCSU will not provide supporting documentation or justification of expenditures made in the performance of the Project as a condition of payment. Payment not received after thirty (30) days of receipt of an invoice shall be deemed late and may be subject to collections and

of this MOA, should payment be delayed, without cause and/or mutual agreement by both Parties, by more than sixty (60) days from the date of receipt of an invoice.

NCSU shall send NHDES invoices to the following individual using the contact information provided below:

NH Department of Environmental Services
ATTN: Amy Smagula
29 Hazen Drive
Concord, NH 03301

Phone: 603-271-2248
Email: Amy.Smagula@des.nh.gov

For payment by check, NCSU's remittance address is shown below. For payment by electronic funds transfer or financial questions, please contact a Contracts & Grants Authorized Representative using the contact information provided below.

North Carolina State University
Office of Contracts and Grants
Campus Box 7214
2601 Wolf Village Way, Suite 240
Raleigh, NC 27695-7214
United States of America

Phone: 919-515-2153
Email: cnghelpdesk@ncsu.edu

In the performance of the Project, it may be necessary for one party to disclose information that is proprietary and confidential to the disclosing party. All such information must be disclosed in writing and designated as confidential or, if disclosed orally, must be identified as confidential at the time of disclosure and confirmed in writing and designated as confidential within thirty (30) days of such disclosure. Except as otherwise provided herein, for a period of three (3) years following the date of such disclosure, the receiving party agrees to use the confidential information only for purposes of this Agreement and further agrees that it will not disclose or publish such information except that the restrictions of paragraph do not apply to:

- (i) information that is or becomes publicly known through no fault of the receiving party;

- (ii) information learned from a third party entitled to disclose it;
- (iii) information already known to or developed by receiving party before receipt from disclosing party, as shown by receiving party's prior written records;
- (iv) information for which receiving party obtains the disclosing party's prior written permission to publish;
- (v) information required to be disclosed by court order or operation of law, including, but not limited to, the North Carolina Public Records Law; or
- (vi) information that is independently developed by the receiving party's personnel who are not privy to the disclosing party's confidential information.

The receiving party must use a reasonable degree of care to prevent the inadvertent, accidental, unauthorized or mistaken disclosure or use by its employees of confidential information disclosed hereunder.

NCSU has the right to publish any of the results of the Project. NCSU must furnish NHDES with a copy of any proposed publication or public disclosure, at least sixty (60) days in advance of the proposed publication date to allow for the protection of NHDES's proprietary, confidential, or information that if published within sixty (60) days would have an adverse effect on a patent application in which NHDES owns full or part interest, or intends to obtain an interest from NCSU pursuant to this Agreement. In the event that NHDES notifies the NCSU in writing that the proposed publication or presentation contains NHDES confidential information as described herein, the NCSU shall remove the identified NHDES confidential information from the draft prior to such publication or presentation. In the event NHDES requests a delay in publication to file for patent protection, a written request must be submitted to the NCSU's Office of Research Commercialization with a copy to the NCSU's Principal Investigator and the NCSU and the Principal Investigator shall refrain from making such publication or presentation for a maximum of ninety (90) days from the receipt of such request, and NHDES shall indicate with specificity to what manner and degree NCSU may disclose said information during the ninety (90) day period.

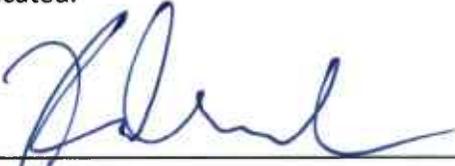
Either party may terminate performance under this MOA at any time upon thirty (30) days written notice to the other party. Upon receipt of notification, NCSU must proceed in an orderly fashion to limit or terminate any outstanding commitments. NHDES agrees to reimburse NCSU for all costs and non-cancelable obligations up to the agreed upon maximum grant award of \$6,000.00.

For purposes of this Agreement the Parties are independent contractors and neither may be considered an agent or an employee of the other at any time or for any purpose. No joint venture, partnership or like relationship is created between the Parties by this Agreement.

This Agreement is binding upon and inures to the benefit of the Parties and may be assigned only to the successors to substantially the entire business and assets of the respective Parties. Any other assignment by either party without the prior written consent of the other party is void.

This Agreement, including appendices, embodies the entire understanding of the Parties for this Project, superseding any prior or contemporaneous representations, either oral or written regarding this matter. Unless otherwise specified herein, written modifications, signed by both Parties will affect changes to this Agreement. IN WITNESS WHEREOF, the respective parties have hereunto set their hands on the dates indicated.

Date 7/20/23

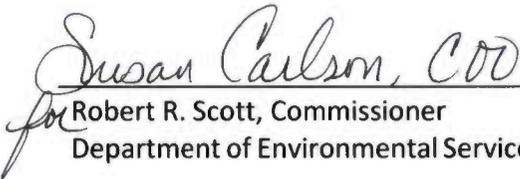


Signature

Kevin Schroeder, Assistant Director
Name and Title of Signor
North Carolina State University

Approved by:

Date 11/8/23



for Robert R. Scott, Commissioner
Department of Environmental Services

Research Administration and Compliance

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Delegated Signatory Authority

NC State University's research administration enterprise is designed to maximize administrative efficiency. Part of the efforts we have undertaken is to delegate signature authority to the most distributed level reasonable. This allows us to ensure that the review, approval and signature process on proposals and agreements is in fact far less bureaucratic and much more value-added. Under this environment, continuing education is absolutely critical – and is mandatory for all signatory delegates.

List of Signatories

All Documents

- › **Marissa Clarkson**, Director of Sponsored Programs
- › **Erin Hammer**, Senior Contract Negotiator
- › **Martina Krzywicki**, Assistant Director, Industry Negotiations
- › **Ginny Moser**, Regional Director of Research Administration
- › **Stefanie Saunders**, Associate Director, Operations
- › **Kevin Schroeder**, Assistant Director, Contract and Subaward Negotiations
- › **Larisa Slark**, Senior Coordinator for Centers and Institutes

Proposals

- › **College of Agriculture and Life Sciences**: Holly Lipkovich, Shirley Rich Patterson, Tayler Gentle
- › **College of Design**: Lenise Sellars
- › **College of Education**: Tish Attayek
- › **College of Engineering**: Patrick Hayes, Laurinda Perez, Gerardo Granillo, Brittane' Jarrell, TraSheka Blackmond
- › **College of Humanities and Social Sciences**: Missy Thomas
- › **College of Natural Resources**: Cherie Anderson, Christine Epps
- › **College of Sciences**: Meghan Kerr, Joanna Jones, Nianyi (Ann) Zhang
- › **Wilson College of Textiles**: Jennifer Clark
- › **College of Veterinary Medicine**: Jeneal Leone
- › **Integrated Support Service Center**: Ginny Moser
- › **North Carolina Sea Grant**: Mary Beth Barrow

- > **North Carolina Space Grant:** Mary Beth Barrow
- > **Poole College of Management:** Brian Thomas
- > **Sponsored Programs:** Monique Burnette
- > **Water Resource Research Institute:** Mary Beth Barrow

Delegated Signature Resources

- > [Signature Authority SOP \(Unity ID required\)](#)
- > [PINS Approval Certifications](#)
- > [FDP Compliant Sponsors and Programs](#)
- > [REG 01.20.02 – Delegation of Authority to Sign Contracts](#)
- > [Temporary De Facto Authorized Approval for Routing Levels within PINS – Bypass Requests](#)

Research Administration and Compliance

Administrative Services III,
Suite 240
2601 Wolf Village Way
Raleigh, NC 27607

CAMPUS MAP



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MIKE CAUSEY
INSURANCE COMMISSIONER & STATE FIRE MARSHAL

BRIAN TAYLOR, CHIEF STATE FIRE MARSHAL

CERTIFICATE OF COVERAGE

Certificate Holder: To Whom This May Concern

Insurer: State of North Carolina

Authorization: Public Officers & Employee Liability Insurance Commission of North Carolina and the General Statutes of North Carolina, Chapter 143, Articles 31 to 31D, Sections §143-291 to §143-300.

Period: February 01, 2023 until February 01, 2024

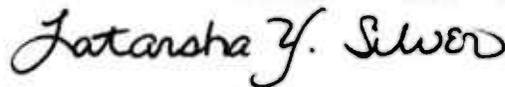
Coverage: A) Tort Claims against Departments, Agencies, and Employees
B) Excess Liability for State Employees
Ambridge Partners, LLC - Policy # PK1035823
Kinsale Insurance Company - Policy # 01000154762-2
C) Workers' Compensation

Limits A) \$1,000,000 for Tort claims against the State
B) \$2,000,000 per employee/\$10,000,000 aggregate for claims against state employees
C) Statutory Limits for Workers' Compensation

Description: NC State University and its employees, officers, agents, as covered by the Defense of State Employees as per NCGS § 143 300.2.

Administrator: Department Insurance - Risk Management Division
Public Officers & Employees Liability Insurance Commission
1202 Mail Service Center, Raleigh, NC 27699-1202

Note: This Certificate is for informational purposes only and does not alter any provision of the Tort Claims or Defense of State Employees General Statutes of the State.



Verified By: _____

Latarsha Y. Silver, CRM
Risk Manager

NCSU

OFFICE OF STATE FIRE MARSHAL • RISK MANAGEMENT

1202 MAIL SERVICE CENTER | RALEIGH, NC 27699-1202 | Tel 919.647.0000 | Fax 919.715.0067