The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

61

April 18, 2025

Her Excellency, Governor Kelly A. Ayotte
and the Honorable Council
State House
Concord, NH 03301

REQUESTED ACTION

Authorize the Department of Environmental Services (NHDES) to amend a **SOLE SOURCE** contract (PO# 1092927 and 7003247) with the Woods Hole Group, Inc. (VC# 388987-B001), Bourne, MA, to conduct education and outreach for the use and understanding of the New Hampshire Coastal Flood Risk Model by 1) increasing the contract award amount by $225,293 to $597,714 from $372,421 and 2) extending the project expiration from June 30, 2025 to February 28, 2027, effective upon Governor and Council approval. The original agreement was approved by Governor and Council (G&C) on February 16, 2022, Item #94, amended on May 31, 2023, Item #103, and amended on June 12, 2024, Item #5K. 100% Federal Funds.

Funding is available in the accounts as follows:

	FY 2025
03-44-44-442010-1209-102-500731	$225,293

Dept. Environmental Services, Coastal Resilience, Contracts for Program Services

EXPLANATION

NHDES requests approval of this **SOLE SOURCE** amendment to complete Phase II of the New Hampshire Coastal Flood Risk Model (NHCFRM) project. Woods Hole Group (WHG) will complete the initial development of the hydrodynamic model "Phase I" no later than March 31, 2025. In November 2024, the National Fish & Wildlife Foundation approved a time extension and additional funds in order to complete Phase II. Phase II includes education and outreach materials for the use and understanding of the completed flood risk model. This contract amendment is **SOLE SOURCE** for Phase II because WHG was the group selected to develop the NHCFRM and are integral to training and implementing it. A time extension is requested as NHDES received funds to complete Phase II from NFWF in November 2024 that added significantly to the contract beyond the original timeframe.

The WHG has actively participated in a local Advisory Committee to assist in the development of a science-based approach to identify coastal flood risk for NH's 17 Coastal Zone communities. NHDES issued a Request for Proposals (RFP) on August 16, 2021 for the development of a hydrodynamic model for NH's coast and estuaries: the NHCFRM. The goal of the NHCFRM and its data is to help state and local decision-makers and stakeholders in New Hampshire's Coastal Zone examine the flood risk of tidal flooding, storm surge, and present and future sea-level rise on assets, infrastructure and natural resources.

This agreement will enable WHG to work with NHDES to use the NHCFRM to advance planning and develop best practices for the identification and evaluation of transportation and land use adaptation

options to prioritize projects that are low impact and nature-based, are resilient to future flood risks, and reduce community vulnerability. Phase II will include WHG assisting with the solicitation and selection of New Hampshire-specific case studies to be used for vulnerability assessment and alternative analysis sites to identify adaptation alternatives for the New Hampshire Coastal Flood Risk Model. WHG will also support the 2025 update of the New Hampshire Coastal Flood Risk Summary, including the Part I: Science Report, focusing on the chapter on coastal storms, and the Part II: Guidance for Using Scientific Projections.

To date, $95,725.50 of the original total $372,421 has been spent. NHDES will provide additional federal funds of $225,293 to the project costs. A budget breakdown is provided in Attachment A.

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

We respectfully request your approval.

Robert R. Scott, Commissioner

Agreement for Services with Woods Hole Group
Amendment No. 3

This Agreement (hereinafter called the "Amendment") dated this 27th day of January, 2025, is by and between the State of New Hampshire, acting by and through its Department of Environmental Services (hereinafter referred to as the "State") and the Woods Hole Group, Inc., acting by and through its President, Robert P. Hamilton, Jr. (hereinafter referred to as the "Grantee").

WHEREAS, pursuant to an Agreement (hereinafter called the "Agreement") approved by the Governor and Council on February 16, 2022, Item #94, and its first amendment (hereinafter called "Amendment 1") approved by the Governor and Council on May 31, 2023, Item #103, and its second amendment (hereinafter called "Amendment 2") approved by the Governor and Council on June 12, 2024, Item #5K, the Grantee agreed to perform certain services upon the terms and conditions specified in the Agreement and in consideration of payment by the State of certain sums as specified therein; and

WHEREAS, The Grantee and the State have agreed to amend the Agreement in certain respects;

NOW THEREFORE, in consideration of the foregoing, and the covenants and conditions contained in the Agreement and Amendment 1 and set forth herein, the parties hereto do hereby agree as follows:

1. Amendment and Modification of Agreement: The Agreement is hereby amended as follows:

   (A) The completion date as set forth in Paragraph 1.7 of the Agreement shall be changed from June 30, 2025 to February 28, 2027.
   (B) The price limitation as set forth in sub-paragraph 1.8 of the Agreement shall be increased by $225,293 from $372,421 to $597,714.
   (C) Exhibit B (Scope of Services) of the Agreement shall be replaced with Exhibit B-1 as follows.

Exhibit B-1
Scope of Services

Phase I

Task #	Task Description	Deliverables/Outcomes	Completion Date
Task 1: Model Development and Simulations			
1.1	Develop New Hampshire	a) Numerical model domain that covers the NH coastal flood region, extending up to approximately the 30- to 35-foot NAVD88 elevation across the state, encompassing coastlines, salt marshes, wetlands, estuaries, and tidal rivers.	5/31/2024

Initials: RPH
Date: 1/27/25

		b) High-resolution (on the order of 5-10 meters (16-33 feet), with some areas consisting of node spacing as close as 5-10 feet) overland grid/mesh for New Hampshire representing the landscape and upland areas of the New Hampshire coastline and surrounding areas.	
1.2	Determine Riverine Conditions	a) Future discharge conditions identified based on the results of the USGS study entitled "Simulated Hydrologic Response to Climate Change During the 21st Century in New Hampshire." b) Sensitivity analysis determining the relative importance of the magnitude of the discharge conditions (storm versus mean), as well as the upstream extent when discharge conditions may have a greater influence on flooding.	8/31/2023 Completed
1.3	Develop Boundary Conditions, Storm Sets, etc.	a) Model boundary conditions established and calibrated specifically for New Hampshire. b) Storm set developed specifically for New Hampshire, consisting of tropical and extra tropical conditions that evolve under changing climate conditions in the ocean. c) Selection of sea level rise projections input into the model. d) Other boundary conditions, including astronomical and meteorological forcing conditions established.	8/31/2023 Completed
1.4	Integration of Tidal Crossings	a) Technical memorandum and presentation to NHDES and the AC on WHG's proposed methodology to identify and incorporate high priority tidal crossings (bridges and culverts) dynamically into the model.	5/31/2024 Completed
1.5	Model Calibration and Validation	a) Individual storm events selected for model calibration and validation. b) Calibrated model based on normal tidal conditions and representative storm events for the northeast, as well as validated to another storm event to ensure accuracy.	6/30/2024 Completed
1.6	Monte Carlo Simulations (present day & 4 climate scenarios)	a) Robust distribution of expected water levels and flooding risk for the entire model domain provided by model simulations for extra-tropical and tropical storms developed specifically for New Hampshire.	10/31/2024
1.7	Overtopping Simulations	a) Wave runup and overtopping sub-model for assessing these hazards at structure locations over the course of a storm.	11/30/2024
1.8	Model Management Plan	a) Model management plan that provides technical details on the model components, input datasets, and model boundary conditions, as well as the limitations of those datasets and components. The model management plan will also identify a timeframe for when certain model aspects should be reviewed	11/15/2024

Initials: RAT

Date: 1/27/25

		for potential updates and include a suggested timeline for model maintenance activities.	
1.9	Project Management/ Meetings	a) Four (4) meetings convened with NHDES and the AC, one of which will be in person at NHDES.	6/30/2025
Task 2: Mapping Products/Deliverables			
2.1	Post-processing, Raster Generation, and Mapping	a) ARC-GIS compatible raster data, as well as associated high-resolution maps, for annual exceedance probability flood risk (present day & 4 climate scenarios) provided on a town-by-town basis. This milestone will be completed by 2/28/2025. b) ARC-GIS compatible raster data, as well as associated high-resolution maps for depth of inundation or water surface elevation (present day & four climate scenarios) corresponding to three (3) selected annual exceedance probability levels provided on a town-by-town basis. *This milestone will be completed by 2/28/2025.* c) NH-CFRM metadata and readme files provided with the data deliverables listed above. *Data will be publicly available for download on the Woods Hole Group, Inc. webpage. This milestone will be completed by 2/28/2025.*	2/28/2025
2.2	Non-standard Data Production (waves, tidal benchmarks)	a) Wave heights at three (3) annual exceedance probabilities for four (4) sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance. This milestone will be completed by 2/28/2025. b) Five (5) tidal benchmarks for four (4) sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance. This milestone will be completed by 2/28/2025.	2/28/2025
2.3	Reporting	a) Final report adhering to the NHDES publication guidelines that describes the development of the model and the output data. This will include, but not be limited to, discussion on the existing data used to develop the NH-CFRM, description of the model development and input parameters, and discussion of the results. This milestone will be completed by 3/21/2025. b) Comment/response document pertaining to NHDES comments on the draft report. This milestone will be completed by 1/31/2025. c) Fact sheet that gives an overview of the model, data used in the model, and the different output products that are available. This milestone will be completed by 2/14/2025.	6/30/2025

Initials: RAH

Date: 1/27/25

		d) Fact sheet that provides answers to Frequently Asked Questions about NH-CFRM. This milestone will be completed by 2/14/2025.	
2.4	Project Management/ Meetings	a) Three (3) meetings convened with NHDES and the AC to review the final model results, draft example GIS products and maps, draft fact sheets, and the draft technical report. This milestone will be completed by 3/21/2025. b) Half-day training session to NHDES and other stakeholders on the development of the model, how to best interpret the model output, it's potential uses, and strategies for communicating to a larger stakeholder group working within the State to give users a consistent message and guidance. This milestone will be completed by 3/31/2025.	3/31/2025
2.5	NH Coastal Flood Risk Summary Advising	a) Provide advisory assistance to NHDES via communications and data sharing during the five-year update of the New Hampshire Coastal Flood Risk Summary.	6/30/2025

Phase II Project Scope and Tasks:

The Woods Hole Group, Inc. (WHG) shall perform the tasks and complete the deliverables outlined below for Phase II of the New Hampshire Coastal Flood Risk Model contingent on National Fish & Wildlife Fund (NFWF) National Coastal Resilience Fund (NCRF) (EasyGrantsID: 72430) approval of a no cost extension to February 28, 2027. Additional partners include: NH Department of Environmental Services Coastal Program (NHCP), the Technical Advisory Committee, Rockingham Planning Commission (RPC), and Strafford Regional Planning Commission (SRPC).

Task 1: Implement Outreach and Training Program

Woods Hole Group will provide the following services in support of an outreach and training program for the target audience / users of NH-CFRM output data products:

Task #	Task Description	Deliverables/Outcomes	Completion Date
1.1	Support an Outreach and Training Program for Target Audiences/Users of NH-CFRM	Assist NHDES with compiling a stakeholder tracking spreadsheet with contact information for target audiences. This will include Advisory Committee agency staff, municipal staff, Planning Boards, Conservation Commissions, and professional consultants.	March 2025 – December 2026
1.2		Prepare draft and final presentation content for three training modules, to be conducted in October, November, and December 2026, respectively. a) Module 1 will provide an overview of the modeled output data products and how to use them for non-technical audiences.	March 2025 – December 2026

Initials: RAT

Date: 1/27/25

		b) Module 2 will provide a more in-depth explanation of how to use the modeled data products to support alternatives analysis for technical audiences. c) Module 3 will provide a walkthrough of case studies for vulnerability assessments and alternative analysis decision making for sites selected in Task 3. d) Both modules will include case study examples to illustrate uses.	
1.3		Prepare participatory elements (e.g., before/after quiz polls) for each training module.	March 2025 – December 2026
1.4		Prepare a training session announcement flyer for NHDES to use in digital and print outreach	March 2025 – December 2026
1.5		Provide NHDES with recommended fields, to include in registration forms, for tracking purposes.	March 2025 – December 2026
1.6		Attend two preparatory meetings with NHDES staff to confirm content (one prior to each live training session).	March 2025 – December 2026
1.7		Attend two virtual, recorded, training sessions (one session for each module). a) Serve as the co-instructor, with NHDES staff, of Module 1 and Module 2 training sessions. b) Provide two additional support staff to assist with answering questions and taking notes during each training session.	March 2025 – December 2026
1.8		Update the tracking spreadsheet after each training session using registration/attendance data.	March 2025 – December 2026
1.9		Edit the recorded training sessions and deliver recordings to NHDES for publishing online.	March 2025 – December 2026
1.10		At completion, provide a summary report describing the outreach and training program, number of participants trained by stakeholder group, and results of before/after quiz polls to demonstrate impact.	March 2025 – December 2026

Initials: RPH

Date: 1/27/25

Task 1 Deliverables:

1. Stakeholder tracking spreadsheet (working document until final).
2. Presentations and interactive elements for two training modules.
3. Training announcement flyer to be distributed by NHCP.
4. Outreach and training program summary report.

Assumptions:

1. NHDES will contribute to the target contact list.
2. NHDES will be responsible for sending notifications and invitations for training sessions.
3. All meetings will be virtual.
4. NHDES will host the training sessions using its own virtual platform (e.g., Microsoft Teams) and be responsible for recording the sessions and providing Woods Hole Group with registrant and attendee information.
5. NHDES will be responsible for publishing the training session videos to its online platform of choice (e.g., YouTube).
6. NHDES will be responsible for printing all physical collateral (flyers, etc.). For planning purposes, this is assumed to include a 1-page flyer, and two 5-page fact sheets. Color preferred, subject to budgetary constraints.

Task 2: Solicit Twenty Alternative Analysis Project Sites

Woods Hole Group will provide the following services in support of soliciting and summarizing candidate transportation and land use project sites:

Task #	Deliverables/Outcomes	Completion Date
2.1	Review and provide input on the solicitation narrative and/or form to be developed and issued by NHDES with assistance from partners including the AC, RPC, and SRPC.	March – July 2025
2.2	Confirm with NHDES and its partners the list of twenty candidate sites for further prioritization that would benefit from more detailed alternatives analysis using results from the NH-CFRM. The shortlist will be resolved with partners by email correspondence, then for final selection in one meeting per below.	March – July 2025
2.3	Prepare concise site profiles that summarize a subset of key social and physical characteristics, current understanding of flood risk (e.g., from prior bathtub modeling, vulnerability assessments and related plans), and desired outcome(s) for up to twenty sites on a common template.	March – July 2025
2.4	Prepare for and participate in one meeting coordinated by NHDES and its partners to select up to twenty sites for prioritization and review site profiles.	March – July 2025

Task 2 Deliverables:

Initials: RAK

Date: 1/27/25

1. Input on solicitation narrative.
2. Meeting notes.
3. Confirmed list of up to twenty candidate project sites for further prioritization.
4. Site profiles (PowerPoint or Word format) for up to twenty candidate project sites.

Assumptions:

1. NHDES will lead the preparation of a solicitation narrative and/or form to be developed and issued.
2. NHDES will provide the recommended list of twenty sites.
3. Site profiles will utilize existing publicly available data such as project reports (to be provided by NHDES or proponents) and State/Federal GIS data. Field data collection is not included.
4. All meetings will be virtual.
5. NHDES will be responsible for the coordination and hosting of meetings.

Task 3: Determine Analysis Sites

Woods Hole Group will provide the following services in support of evaluating and prioritizing candidate transportation and land use project sites:

Task #	Task Description/Outcomes	Completion Date
3.1	Create a prioritization tool with evaluation criteria to be developed in collaboration with NHDES and its partners, including AC, RPC and SRPC, that will be used for site scoring and selection. a) Criteria will include a combination of objective (empirically-based) and subjective factors. These may include but not be limited to site conditions, site owners, potential for varied solutions, and consideration of accessibility factors (e.g., public access, average household income, renter-occupied housing rates, disability rates).	August – November 2025
3.2	Evaluate up to twenty candidate project sites identified in Task 2 using the objective evaluation criteria.	August – November 2025
3.3	Attend and help facilitate up to two decision-making meetings with NHDES and its partners to agree on prioritization criteria, score up to twenty sites for prioritization, and select up to five sites for further alternatives analysis (at least one transportation and one land use).	August – November 2025

Task 3 Deliverables:

1. Prioritization tool and evaluation criteria (Excel format).
2. Draft project scoring based on objective criteria.
3. Final project scoring and recommended five sites for further alternatives analysis.

Initials: BPH

Date: 1/27/2025

Assumptions:

1. All meetings will be virtual.
2. NHDES will be responsible for the coordination and hosting of meetings held with its partners and Woods Hole Group.
3. NHDES and partners will provide input on the scoring and criteria.
4. NHDES will be responsible for final decision-making on the selection of five sites.

Task 4: Analyze Project Sites

Woods Hole Group will provide the following services in support of vulnerability assessments, and alternatives performance modeling and analyses for the pilot project sites selected in Task 3:

Task 4-A: Vulnerability Assessments

Task #	Task Description/Outcomes	Completion Date
A 4.1	Create GIS basemaps for each pilot site, including features such as topography/bathymetry and the locations of buildings, property lines, infrastructure, critical facilities, and wetlands.	December 2025 – July 2026
A 4.2	Create site-specific updated GIS flood maps using NH-CFRM model outputs. These will be compiled into a slide deck (PowerPoint) with a comprehensive set of NH-CFRM output data product maps for each pilot site, highlighting key findings. Depending on the site, key parameters derived from NH-CFRM may include flood probability of occurrence, flooding pathways, inundation depth, wave conditions, and water surface elevation for each sea-level rise scenario. Other complementary information if relevant and available from existing sources may include information about flood volumes and geomorphic change.	December 2025 – July 2026
A 4.3	Visit pilot sites and collect field observations, including site photos and, if needed, specific topographic points to confirm key elevations. For purposes of this proposal, the 2 sites are expected to require a total of 3 days in the field to collect supplemental elevation data.	December 2025 – July 2026
A 4.4	Process field photos and notes.	December 2025 – July 2026
A 4.5	Update site-specific maps and slide deck based on field observations.	December 2025 – July 2026

Task 4-A Deliverables:

A. Project Site Vulnerability Assessments
   1. Draft and updated slide deck (PowerPoint) with GIS basemaps, NH-CFRM maps, field observations, and key findings.
   2. Site photos package (zip file).

Initials: BPH

Date: 1/27/2025

Assumptions:

A. Project Site Vulnerability Assessments
   1. GIS data and basemaps will be based on existing publicly available State/federal data.
   2. Woods Hole Group staff will independently complete site visits over three days. It is understood that NHDES personnel may attend, but it is unlikely that partners, or pilot site stakeholders would attend. Findings from the site visits will be shared with partners at subsequent meetings.
   3. Sites will be publicly accessible and NHDES personnel would arrange any access agreements needed in Task 3.
   4. New geomorphic change and/or flood volume calculations are not included in this scope of work; rather, where relevant and available, this information can be included from existing sources.

Task 4-B: Alternatives Performance Modeling and Analysis

Performance modeling will be completed for each of the five pilot sites to help project stakeholders understand potential outcomes possibly resulting from the conceptual adaptations identified.

Task #	Task Description/Outcomes	Completion Date
B 4.1	Develop conceptual design alignments/layouts, design flood elevations, and other design parameters for five alternatives per site, as selected by WHG, NHCP, RPC, and SRPC.	January – August 2026
B 4.2	Perform up to 20 total model simulations (four per pilot site) using the NH-CFRM or other site-specific analysis using NH-CFRM model output data, to evaluate flood impact mitigation effectiveness. Up to two alternative adaptation concepts per pilot site will be modeled. a) Example 1: one alternative modeled in four return-period/time horizon combinations (e.g., alternative 1 in 100-year present, 2030, 2050, 2070 sea-level rise conditions). b) Example 2: two alternatives modeled in two return-period/time horizon combinations (e.g., alternative 1 in 10-year 2030 and 2050 sea-level rise conditions, and alternative 2 in 10-year 2030 and 2050 sea-level rise conditions).	January – August 2026
B 4.3	Evaluate each conceptual alternative using the CFR Guidance framework, including the following criteria: effectiveness at mitigating flood impacts; cost; impacts to different populations, natural/cultural/historic resources, and public access; and permitting feasibility.	January – August 2026
B 4.4	Update site profile for each pilot site to include a summary of the vulnerability assessment, conceptual alternatives, performance modeling, and alternatives analysis results.	January – August 2026

Initials: BPH

Date: 1/27/2025

B 4.5	Attend two meetings with NHDES and its partners to review progress on performance modeling and alternatives analysis methods and results.	January – August 2026

Task 4-B Deliverables:

B. Alternatives Performance Modeling and Analysis

1. Update site profiles summarizing vulnerability assessment and alternatives analyses results for each pilot site.

Assumptions:

B. Alternatives Performance Modeling and Analysis

1. All review meetings will be virtual.
2. NH-CFRM will be used directly to simulate elevation-based flood mitigation options, including nature-based and traditional grey infrastructure solutions that are expected to withstand flood events or interrupt flood pathways (e.g., vegetated berms, dunes, flood walls, modular/adaptable seawalls, raised roads, or raised seawalls). NH-CFRM output data products may also be used as inputs to other complementary analyses.
3. Effectiveness at mitigating flood impacts; rough order of magnitude relative cost considerations; impacts to different populations, natural/cultural/historic resources, and public access; and permitting feasibility will be rated on a scale (e.g., low, medium, high) based on engineering judgement and analysis of modeling results relative to assets/resource identified in the pilot site basemaps.

Task 5: Develop Resilience Alternatives Analysis Primer

Woods Hole Group will provide the following services in support of developing a coastal resilience alternative analysis guidance document:

Task #	Task Description/Outcomes	Completion Date
5.1	Develop a draft and final Resilience Alternatives Analysis Primer for transportation and land use decision-makers, highlighting best practices for conducting robust alternatives analysis considering future coastal flood conditions and impacts on natural resources.	January – November 2026
5.2	Participate in two meetings with NHDES and its partners to review the outline and draft primers.	January – November 2026

Task 5 Deliverables:

1. Meeting notes.
2. Draft and final Resilience Alternatives Analysis Primer in digital form.

Assumptions:

1. All review meetings will be virtual.
2. The Primer will include a focus on how to incorporate NH-CFRM outputs into the process.

Initials: RPH

Date: 1/27/2025

3. The Primer will include perspective on data-, community-, and nature-driven project designs that avoid and minimize present-day and future tidal wetland impacts, while affording flexibility to consider a full suite of traditional grey and adaptive nature-based solutions considering the changing climate.
4. Specific cost estimates (e.g., preliminary engineering opinions of cost) and economic analysis of avoided damage/loss impacts, required for benefit cost analysis, are not included.
5. NHDES input on the considerations not derived from NH-CFRM (e.g., impacts to different populations, natural/cultural/historic resources, and public access; and permitting feasibility) will be particularly valuable. NHDES guidance will also be needed regarding CFR. Narratives on these topics will be added to the Primer based on consultations with NHDES during the two meetings.
6. After submission of a full draft of the primer, Woods Hole Group will complete one final round of revisions in response to NHDES comments/edits.
7. NHDES will provide Woods Hole Group with consolidated review comments and edits on the draft primer.
8. Where reviewer edits/comments conflict, the NHDES project manager will provide final direction to Woods Hole Group.

Task 6: Participate on the Science Team to Update the *NH Coastal Flood Risk Summary, Part I: Science* – focus on Coastal Storms chapter

Woods Hole Group will participate as a member of the Science Team, including two, 2-hour Science Team meetings (one at the NHDES Coastal Program's office and one through virtual attendance); review the 2019 Science Report and rewrite the existing chapter on Coastal Storms using a NHDES provided chapter outline/template, with focus on incorporating latest hydrodynamic modeling results and other relevant sources; offer comments on other sections of the report as needed to ensure consistency with newly rewritten chapter on Coastal Storms; attend monthly check-in meetings to update on progress; prepare and present information on the updated Coastal Storms chapter during Steering Committee #2 (per Task 8.1 below); and address and respond to the Steering Committee's comments and external reviewers' comments on the draft Science report and revise the chapter as needed.

Task 6 Schedule:

Task #	Task Description/Outcomes	Completion Date
6.1	Review the 2019 Science Report, rewrite updated Coastal Storms chapter, and offer comments on other sections of the document as needed for consistency.	December 2024 – February 2025
6.2	Prepare for and present at Steering Committee meeting #2 (attendance included in Task 8.1 below). Review other updated chapters of the Science report. Address and respond to Steering Committee comments on the draft Science report and revise as needed.	February 2025
6.3	Science Team Meeting #2 – Review and approve the draft Science report.	March 2025

Initials: RPH

Date: 1/27/2025

6.5	Address and respond to the external reviewers' comments on the draft Science report and revise report as needed.	April – May 2025
6.6	Science team Meeting #3 – Review and approve final Science report.	May 2025
6.7	Prepare for and present at Steering Committee meeting #3 (attendance included in Task 8.2 below).	May 2025

Assumptions for Task 6:

Meeting Participation: Approximately 3 hours for one person to participate in six, 0.5-hour virtual monthly meetings with project leads throughout the Science Update process. Approximately 4 hours for two people to participate in two, 2-hour Science Team meetings + travel time to and from meeting location (assuming one at NHDES offices and one virtual) + preparation time for reviewing meeting materials and presenting information. Addressing two rounds of comments: (1) Steering Committee comments after meeting #2; and (2) External reviewer comments.

Task 7: Review and Provide Feedback to Update the *NH Coastal Flood Risk Summary, Part II: Guidance for Using Scientific Projections*

Woods Hole Group will provide input on and information for the draft Guidance section on identifying and assessing coastal storms through a focused meeting with the Guidance development team (in-person); provide written comments on the draft Guidance document with focus on the identifying and assessing coastal storms section. Also provide written general comments, if needed, on the overall draft Guidance document. Since the New Hampshire Coastal Flood Risk Model will be available, it is anticipated there will be an opportunity to offer comments throughout the document to reference this tool and information where relevant; provide input on public comments received regarding the coastal storms section of the Guidance.

Proposed Task 7 Schedule:

Task #	Task Description/Outcomes	Completion Date
7.1	Meet with Guidance Development team to review and provide input on development of the Guidance document.	May to June 2025
7.2	Review and provide section-specific or general comments on the draft Guidance document, presented at Steering Committee meeting #4 (attendance included in Task 8.3 below).	September 2025
7.3	Provide input needed to address public comments on coastal storms section and related content.	November 2025
7.4	Review and provide section-specific or general comments on final Guidance document, presented at Steering Committee meeting #5 (attendance included in Task 8.4 below).	December 2025

Assumptions for Task 7:

- One in-person meeting for one person at NHDES offices. One round of public comments.

Task 8: Steering Committee Meetings

Initials: RAH

Date: 1/27/25

Woods Hole Group will participate in four, two-hour Steering Committee meetings as a Science Team member (two at the NHDES Coastal Program's office and two virtual). One person at two meetings and two people at two meetings.

Proposed Schedule:

Task #	Task Description/Outcomes	Completion Date
8.1	Steering Committee Meeting #2 – Science Team will present the draft updated Coastal Flood Risk Summary (CFR) Science report and request feedback. Comments are expected from the Steering Committee on the Science Document Coastal Storms Chapter, which Woods Hole Group will address as part of Task 6.2 above.	February 2025
8.2	Steering Committee Meeting #3 – Science Team will present summary of external review comments, how they were addressed, and any revisions made to the final Science report. Discuss priorities for the Guidance update report.	May 2025
8.3	Steering Committee Meeting #4 – Guidance Update team to present draft Guidance update and request comments. Comments are expected from the Steering Committee on the Guidance Document, which Woods Hole Group will address as part of Task 7.2 above.	September 2025
8.4	Steering Committee Meeting #5 – Guidance Update team to present final Guidance update. Approval of final Guidance report. Learn proposed plans for training and engagement about the Guidance document.	December 2025

Assumptions for Task 8:

8 hours to participate in four 2-hour Steering Committee meetings + travel time to and from meeting location for three meetings + preparation time reviewing meeting materials and presenting information. One person virtual at two meetings and two people at two meetings (one in person and one virtual).

Task 9: Project Management/ Meetings

Woods Hole Group will provide the services outlined below in support of project management and reporting. It is assumed that some combination of the meetings with NHDES staff can also be used for the quarterly meetings requested in this Project Manage task. Thus, the scope of work for this task includes up to three additional supplemental meetings focused on Project Management.

With this assumption, Project Management Meetings will include:

Task #	Task Description/Outcomes	Completion Date
9.1	Attend kickoff and monthly project management meetings. These assumes three additional meetings separate from the tasks-specific meetings and other outreach events identified in Tasks 1-8.	February 2027
9.2	Submit monthly invoices.	February 2027

Initials: RBH

Date: 1/27/2025

9.3	Prepare and submit three (3) semi-annual progress reports to NHDES including deliverables, every June and December until the final report.	February 2027
9.4	Prepare a final report summarizing activities throughout the entire project.	February 2027

Task 9 Deliverables:

1. Project management meeting agendas/notes.
2. Three semi-annual progress reports.
3. Final report by February 15, 2027.

Assumptions:

1. To inform the final report, NHDES will provide Woods Hole Group with summaries of project activities conducted by NHDES and its partners that are not within Woods Hole Group's scope.
2. Deliverables specified by NHDES include three semi-annual progress reports and one final report.
    a. Semi-annual report #1 will cover the period of the project start date through the first six months, and will be due during month 7.
    b. Semi-annual report #2 will cover the subsequent 6-month period (months 7-12), with report due in month 13.
    c. Semi-annual report #3 will cover the 6-month period including months 13-18 with report due in month 19.
    d. The final report will focus on the final 6-months, and will compile materials for the entire 24-month project duration. The final report will be due no later than February 15, 2027, and will include grant reporting requirements and payment requests.

Schedule

Estimated completion dates for each task are as follows:

- Task 1: March 2025 – December 2026
- Task 2: March 2025 – July 2025
- Task 3: August 2025- November 2025
- Task 4:
    - Task 4A: December 2025 – July 2026
    - Task 4B: January 2026 – August 2026
- Task 5: January 2026 - November 2026
- Task 6: December 2024 – May 2025
- Task 7: May – December 2025
- Task 8: February 2025 – December 2025
- Task 9: March 2026

Initials: RPA

Date: 1/27/25

Budget by Task Description

Task Name	Original Budget Amount	Amendment Amount	New Total
1.1 Develop New Hampshire Model Domain	$20,490	-	$20,490
1.2 Determine Riverine Conditions	$12,760	-	$12,760
1.3 Develop Boundary Conditions, Storm Sets, Etc	$26,520	-	$26,520
Integration of Tidal Crossings	$17,400	-	$17,400
1.5 Model Calibration and Validation	$13,780	-	$13,780
Monte Carlo Simulations (present day & 4 climate scenarios)	$74,850	-	$74,850
1.7 Overtopping Simulations	$27,540	-	$27,540
1.8 Model Management Plan	$4,080	-	$4,080
1.9 Project Management/ Meetings	$13,700	-	$13,700
2.1 Post-processing, Raster generation, and Mapping	$116,070	-	$116,070
2.2 Non-standard data production (waves, tidal Benchmarks)	$13,250	-	$13,250
2.3 Reporting	$14,560	-	$14,560
2.4/ Phase II Task 9: Project Management/ Meetings	$17,421	$19,035	$36,456
Phase II			
1: Implement Outreach and Training Program	-	$39,767	$39,767
2: Solicit Twenty Alternative Analysis Project Sites	-	$16,500	$16,500
3: Determine Analysis Sites	-	$10,100	$10,100
4A: Project Site Vulnerability Assessments	-	$30,523	$30,523
4B: Alternatives Performance Modeling and Analysis	-	$53,288	$53,288
5: Develop Resilience Alternatives Analysis Primer	-	$9,530	$9,530
6: Science Team for NH Coastal Flood Risk Summary- Coastal Storms Chapter	-	$28,202	$28,202
7: Review NH Coastal Flood Risk Summary Guidance	-	$12,736	$12,736
8: Steering Committee Meetings	-	$5,612	$5,612
TOTAL	**$372,421**	**$225,293**	**$597,714**

Initials: BPH

Date: 1/27/25

State of New Hampshire

Department of State

CERTIFICATE

I, David M. Scanlan, Secretary of State of the State of New Hampshire, do hereby certify that THE WOODS HOLE GROUP, INC. is a Massachusetts Profit Corporation registered to transact business in New Hampshire on November 23, 2021. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: **886710**

Certificate Number: **0007173269**

IN TESTIMONY WHEREOF,

I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 2nd day of May A.D. 2025.

David M. Scanlan

Secretary of State

Commonwealth of Massachusetts
Department of Revenue
Geoffrey E. Snyder, Commissioner

mass.gov/dor

Letter ID: L1349750176
Notice Date: December 31, 2024
Case ID: 0-002-749-604

CERTIFICATE OF GOOD STANDING AND/OR TAX COMPLIANCE

THE WOODS HOLE GROUP, INC.
107 WATERHOUSE RD
BOURNE MA 02532-3890

Why did I receive this notice?

The Commissioner of Revenue certifies that, as of the date of this certificate, THE WOODS HOLE GROUP, INC. is in compliance with its tax obligations under Chapter 62C of the Massachusetts General Laws.

This certificate doesn't certify that the taxpayer is compliant in taxes such as unemployment insurance administered by agencies other than the Department of Revenue, or taxes under any other provisions of law.

This is not a waiver of lien issued under Chapter 62C, section 52 of the Massachusetts General Laws.

What if I have questions?

If you have questions, call us at (617) 887-6400, Monday through Friday, 9:00 a.m. to 4:00 p.m.

Visit us online!

Visit mass.gov/dor to learn more about Massachusetts tax laws and DOR policies and procedures, including your Taxpayer Bill of Rights, and MassTaxConnect for easy access to your account:

- Review or update your account
- Contact us using e-message
- Sign up for e-billing to save paper
- Make payments or set up autopay

Edward W. Coyle, Jr., Chief
Collections Bureau

IN WITNESS WHEREOF, the parties have hereunto set their hands as of the day and year first above written.

Click here to add text

By _____
Click here to add text (company signatory)

STATE OF MASSACHUSETTS
COUNTY OF __BARNSTABLE_____

On this Click or tap here to enter text. 27th th day of Click or tap here to enter text. JANUARY, Click or tap here to enter text. 2025, before the undersigned officer, personally appeared Click here to add text (company signatory) who acknowledged him/herself to be the person who executed the foregoing instrument for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires: AMALIA T. RAFTELIS
Notary Public
Commonwealth of Massachusetts
My Commission Expires December 26, 2025

THE STATE OF NEW HAMPSHIRE
Department of Environmental Services

By _____
Robert R. Scott, Commissioner

Approved by Attorney General this 7 day of May, 2025

OFFICE OF ATTORNEY GENERAL

By _____ Keely Lovato

On 5/7/2025

Initials: RPK

Date: 1/27/25

CERTIFICATE OF AUTHORITY

I, Carine Foulquier, Secretary of the Woods Hole Group, Inc., do hereby certify that:

(l) I am the duly elected Treasurer and Secretary;

(2) at the meeting held on November 30, 2021, the Woods Hole Group, Inc. voted to accept DES funds and to enter into a contract with the Department of Environmental Services;

(3) the Woods Hole Group, Inc. further authorized the President to execute any documents which may be necessary for this contract;

(4) this authorization has not been revoked, annulled, or amended in any manner whatsoever, and remains in full force and effect as of the date hereof; and

(5) the following person has been appointed to and now occupies the office indicated in (3) above:

Robert P. Hamilton, Jr.

IN WITNESS WHEREOF, I have hereunto set my hand as the Secretary of the Woods Hole Group, Inc., this 8 day of January, 2025.

Signature

STATE OF MARYLAND
County of Anne Arundel

On this the 8 day of January, 2025, before me the undersigned officer, personally appeared Carine Foulquier who acknowledged him/herself to be the Secretary of the Woods Hole Group, Inc. being authorized so to do, executed the foregoing instrument for the purpose therein contained.

In witness whereof, I have set my hand and official seal.

(Notary Public Signature)

Commission Expiration Date:
(Seal) 4/16/20

HANNAH SCOTT NOTARY PUBLIC ANNE ARUNDEL COUNTY

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 1/3/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Arthur J. Gallagher Risk Management Services, LLC
300 Madison Avenue
28th Floor
New York NY 10017

CONTACT NAME: Anilia Wallace Pierre-Louis
PHONE (A/C, No, Ext): 212-763-3420 FAX (A/C, No):
E-MAIL ADDRESS: Anilia_WallacePierreLouis@ajg.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : XL Specialty Insurance Company	37885
INSURER B : Indian Harbor Insurance Company	36940
INSURER C : Federal Insurance Company	20281
INSURER D :	
INSURER E :	
INSURER F :	

INSURED WOODHOL-05
Woods Hole Group, Inc.
107 Waterhouse Road
Bourne MA 02532

COVERAGES CERTIFICATE NUMBER: 1083599591 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			UM00044627MA25A	1/1/2025	1/1/2026	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 50,000
	X Marine Liability						MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
C	AUTOMOBILE LIABILITY			(25) 73638443	1/1/2025	1/1/2026	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	UMBRELLA LIAB X OCCUR			UM00044626MA25A	1/1/2025	1/1/2026	EACH OCCURRENCE	$ 10,000,000
	X EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 10,000,000
	DED RETENTION $							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			(26) 71837639	1/1/2025	1/1/2026	X PER STATUTE OTH-ER	
	ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N	N/A					E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
B	Professional Liability			PEC005532505	7/30/2024	7/30/2025	Aggregate Limit	$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
NHDES CFRM – Develop Coastal Flood Risk Model. Certificate holder is additional insured where required by written contract subject to policy terms and conditions.

CERTIFICATE HOLDER

New Hampshire Dept of Environmental Services
29 Hazen Drive
Concord NH 03302-0095

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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Attachment A
Budget Estimate

Budget Item	Original Total	Amended Total	New Total
Personnel	$339,350	$218,583	$557,933
Fringe Benefits	-		
Travel	$215	$3,710	$3,925
Equipment	$11,500	$3,000	$14,500
Supplies	-		
Contractual	$21,356		$21,356
Construction	-		
Other	-		
Total Direct Charges	-		
Indirect Charges	-		
TOTALS	**$372,421**	**$225,293**	**$597,714**

Becca Katz

The State of New Hampshire

Department of Environmental Services

Robert R. Scott, Commissioner

May 17, 2024

APPROVED G & C
DATE 6/12/2024
ITEM # 5K

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

REQUESTED ACTION

Authorize the Department of Environmental Services (NHDES) to amend a contract (PO #7003247) with the Woods Hole Group, Inc., (VC# 388987-B001), Bourne, MA for the development of the NH Coastal Flood Risk Model, by extending the end date to June 30, 2025, from June 30, 2024, effective upon Governor and Council approval. The original agreement was approved by Governor and Council on February 16, 2022, Item #94 and amended on May 31, 2023, Item #103. 94% Capital (General) Funds, 6% Federal Funds. This is a no cost time extension.

EXPLANATION

NHDES requests approval of this amendment to provide additional time to complete the hydrodynamic model for NH's coast and estuaries: the NH Coastal Flood Risk Model (NH-CFRM). Woods Hole Group, (WHG) completed initial development of the hydrodynamic model. However, during the simulation and calibrations of numerous storm scenarios, WHG experienced a computer failure that required the contractor to replace and rerun a significant portion of the model, thus delaying the output of the model by approximately nine months to one year. Additional time for project completion is requested so the contractor may successfully complete the NH-CFRM and resulting products.

NHDES issued a Request for Proposal on August 16, 2021, for the development of the NH-CFRM. The goal of the NH-CFRM and its data is to help state and local decision-makers and stakeholders in New Hampshire's Coastal Zone examine the flood risk of tidal flooding, storm surge, and present and future sea-level rise (SLR) on assets, infrastructure, and natural resources. Currently, statewide maps of water levels during coastal storm events and under potential SLR scenarios provide a rudimentary "bathtub" approach to depicting flood risk that does not account for ocean conditions such as waves and winds or for physical features on the landscape that dynamically interact with tidal floodwaters. This grant will enable WHG to work with NHDES and an Advisory Committee to develop a science-based approach to identifying coastal flood risk for NH's 17 Coastal Zone communities. To date, $95,725.50 has been spent of the contract total of $372,421.

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

We respectfully request your approval.

Robert R. Scott, Commissioner

www.des.nh.gov
29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: 271-5171 • TDD Access: Relay NH 1-800-735-2964

Agreement for Services with the Woods Hole Group, Inc.
Amendment No. 2

This Agreement (hereinafter called the "Amendment") dated this 2 day of May, 2024, is by and between the State of New Hampshire, acting by and through its Department of Environmental Services (hereinafter referred to as the "State") and the Woods Hole Group, Inc. acting by and through the President, Robert P. Hamilton, Jr. (hereinafter referred to as the "Contractor").

WHEREAS, pursuant to an Agreement (hereinafter called the "Agreement") approved by the Governor and Council on February 16, 2022, and its first Amendment (hereinafter called "Amendment 1") approved by the Governor and Council on May 31, 2023, the Contractor agreed to perform certain services upon the terms and conditions specified in the Agreement and in consideration of payment by the State of certain sums as specified therein;

WHEREAS, The Contractor and the State have agreed to amend the Agreement in certain respects;

NOW THEREFORE, in consideration of the foregoing, and the covenants and conditions contained in the Agreement set forth herein, the parties hereto do hereby agree as follows:

1. Amendment and Modification of Agreement: The Agreement is hereby amended as follows:

   (A) The completion date as set forth in Paragraph 1.7 of the Agreement shall be changed from June 30, 2024 to June 30, 2025.

   (B) Exhibit B of the Agreement (Scope of Services) shall be amended as follows and noted with strikethrough (deletion) and italics (addition):

Task #	Task Description	Deliverables/Outcomes	Completion Date
Task 1: Model Development and Simulations			
1.1	Develop New Hampshire Model Domain	a) Numerical model domain that covers the NH coastal flood region, extending up to approximately the 30- to 35-foot NAVD88 elevation across the state, encompassing coastlines, salt marshes, wetlands, estuaries, and tidal rivers. b) High-resolution (on the order of 5-10 meters (16-33 feet), with some areas consisting of node spacing as close as 5-10 feet) overland grid/mesh for New Hampshire representing the landscape and upland areas of the New Hampshire coastline and surrounding areas.	~~8/31/2023~~ *5/31/2024*
1.2	Determine Riverine Conditions	a) Future discharge conditions identified based on the results of the USGS study entitled "Simulated Hydrologic Response to Climate Change During the 21st Century in New Hampshire." b) Sensitivity analysis determining the relative importance of the magnitude of the discharge conditions (storm versus mean), as well as the upstream extent when discharge conditions may have a greater influence on flooding.	8/31/2023 *Completed*
1.3	Develop Boundary Conditions, Storm Sets,	a) Model boundary conditions established and calibrated specifically for New Hampshire. b) Storm set developed specifically for New Hampshire, consisting of	8/31/2023 *Completed*

Contractor Initials: RPH
Date: 5/2/24

	etc.	tropical and extra tropical conditions that evolve under changing climate conditions in the ocean. c) Selection of sea level rise projections input into the model. d) Other boundary conditions, including astronomical and meteorological forcing conditions established.	
1.4	Integration of Tidal Crossings	a) Technical memorandum and presentation to NHDES and the AC on WHG's proposed methodology to identify and incorporate high priority tidal crossings (bridges and culverts) dynamically into the model.	~~8/31/2023~~ *5/31/2024*
1.5	Model Calibration and Validation	a) Individual storm events selected for model calibration and validation. b) Calibrated model based on normal tidal conditions and representative storm events for the northeast, as well as validated to another storm event to ensure accuracy.	~~8/31/2023~~ *6/30/2024*
1.6	Monte Carlo Simulations (present day & ~~3~~ *4* climate scenarios)	a) Robust distribution of expected water levels and flooding risk for the entire model domain provided by model simulations for extra-tropical and tropical storms developed specifically for New Hampshire.	~~12/31/2023~~ *10/31/2024*
1.7	Overtopping Simulations	a) Wave runup and overtopping sub-model for assessing these hazards at structure locations over the course of a storm.	~~1/13/2024~~ *11/30/2024*
1.8	Model Management Plan	a) Model management plan that provides technical details on the model components, input datasets, and model boundary conditions, as well as the limitations of those datasets and components. The model management plan will also identify a timeframe for when certain model aspects should be reviewed for potential updates and include a suggested timeline for model maintenance activities.	~~2/28/2024~~ *11/15/2024*
1.9	Project Management/ Meetings	a) Four (4) meetings convened with NHDES and the AC, one of which will be in person at NHDES.	~~3/26/24~~ *6/30/2025*
Task 2: Mapping Products/Deliverables			
2.1	Post-processing, Raster Generation, and Mapping	a) ARC-GIS compatible raster data, as well as associated high-resolution maps, for annual exceedance probability flood risk (present day & ~~3~~ 4 climate scenarios) provided on a town-by-town basis. *This milestone will be completed by 2/28/2025.* b) ARC-GIS compatible raster data, as well as associated high-resolution maps for depth of inundation or water surface elevation (present day & four climate scenarios) corresponding to three (3) selected annual exceedance probability levels provided on a town-by-town basis. *This milestone will be completed by 2/28/2025.* c) NH-CFRM metadata and readme files provided with the data deliverables listed above. *Data will be publicly available for download on the Woods Hole Group, Inc. webpage. This milestone will be completed by 2/28/2025.*	~~5/5/2024~~ *2/28/2025*
2.2	Non-standard Data Production (waves, tidal benchmarks)	a) Wave heights at three (3) annual exceedance probabilities for four (4) sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance. *This milestone will be completed by 2/28/2025.* b) Five (5) tidal benchmarks for four (4) sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance. *This milestone will*	~~6/16/2024~~ *2/28/2025*

Contractor Initials: RAH
Date: 5/2/24

		be completed by 2/28/2025.	
2.3	Reporting	a) Final report adhering to the NHDES publication guidelines that describes the development of the model and the output data. This will include, but not be limited to, discussion on the existing data used to develop the NH-CFRM, description of the model development and input parameters, and discussion of the results. *This milestone will be completed by 3/21/2025.* b) Comment/response document pertaining to NHDES comments on the draft report. *This milestone will be completed by 1/31/2025.* c) Fact sheet that gives an overview of the model, data used in the model, and the different output products that are available. *This milestone will be completed by 2/14/2025.* d) Fact sheet that provides answers to Frequently Asked Questions about NH-CFRM. *This milestone will be completed by 2/14/2025.*	~~5/19/2024~~ *6/30/2025*
2.4	Project Management/ Meetings	a) Three (3) meetings convened with NHDES and the AC to review the final model results, draft example GIS products and maps, draft fact sheets, and the draft technical report. *This milestone will be completed by 3/21/2025.* b) Half-day training session to NHDES and other stakeholders on the development of the model, how to best interpret the model output, it's potential uses, and strategies for communicating to a larger stakeholder group working within the State to give users a consistent message and guidance. *This milestone will be completed by 3/31/2025.*	~~6/30/2024~~ *3/31/2025*
2.5	*NH Coastal Flood Risk Summary Advising*	*a) Provide advisory assistance to NHDES via communications and data sharing during the five-year update of the New Hampshire Coastal Flood Risk Summary.*	*6/30/2025*

2. Effective Date of Amendment: This Amendment shall take effect upon the date of approval of this Amendment by the Governor and Executive Council of the State of New Hampshire.

3. Continuance of Agreement: Except as specifically amended and modified by the terms and conditions of this Amendment, the Agreement, and the obligations of the parties thereunder, shall remain in full force and effect in accordance with the terms and conditions set forth therein.

Contractor Initials: RPH
Date: 5/2/24

IN WITNESS WHEREOF, the parties have hereunto set their hands as of the day and year first above written.

The Woods Hole Group, Inc.

By _____
Robert P. Hamilton, Jr., President

STATE OF Massachusetts
COUNTY OF Barnstable

On this the 2nd day of May, 2024 before the undersigned officer, personally appeared Robert P. Hamilton, Jr., President, who acknowledged him/herself to be the person who executed the foregoing instrument for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Dawnmarie Guthrie
Name:
Notary Public/ Justice of the Peace
My Commission Expires: 2.7.31

THE STATE OF NEW HAMPSHIRE
Department of Environmental Services

By _____
Robert R. Scott, Commissioner

Approved by Attorney General this 21st day of May 2024

OFFICE OF ATTORNEY GENERAL

By _____, Melissa Fales, AAG

Contractor Initials: RPH
Date: 5/2/24

State of New Hampshire
Department of State

CERTIFICATE

I, David M. Scanlan, Secretary of State of the State of New Hampshire, do hereby certify that THE WOODS HOLE GROUP, INC. is a Massachusetts Profit Corporation registered to transact business in New Hampshire on November 23, 2021. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: **886710**
Certificate Number: **0006684771**

IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 8th day of May A.D. 2024.

David M. Scanlan
Secretary of State

CERTIFICATE OF AUTHORITY

I, Carine Foulquier, CFO of the Woods Hole Group, Inc., do hereby certify that:

(I) I am the duly elected Secretary ;

(2) at the meeting held on April 25, 2024, the Organization voted to accept DES funds and to enter into a contract with the Department of Environmental Services;

(3) the Organization further authorized the President, Robert P. Hamilton, Jr. to execute any documents which may be necessary for this contract;

(4) this authorization has not been revoked, annulled, or amended in any manner whatsoever, and remains in full force and effect as of the date hereof; and

(5) the following person has been appointed to and now occupies the office indicated in (3) above:

Robert P. Hamilton, Jr.

IN WITNESS WHEREOF, I have hereunto set my hand as the Secretary of
(Office of Certifying Officer)
the Organization, this 26 day of April, 20 24.

Signature

STATE OF ~~NEW HAMPSHIRE~~ MARYLAND
County of Anne Arundel
On this the 26 day of April, 20 24 before me Hannah Scott the undersigned officer, personally appeared Carine Foulquier who acknowledged him/herself to be the Secretary of the Organization being authorized so to do, executed the foregoing instrument for the purpose therein contained.

In witness whereof, I have set my hand and official seal.

Hannah Scott
(Notary Public Signature)

Commission Expiration Date: 4/16/26
(Seal)

HANNAH SCOTT
NOTARY
PUBLIC
ANNE ARUNDEL COUNTY, MD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 5/3/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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PRODUCER
Arthur J. Gallagher Risk Management Services, LLC
300 Madison Avenue
28th Floor
New York NY 10017

CONTACT NAME:
PHONE (A/C, No, Ext): 212-994-7100 FAX (A/C, No): 212-994-7047
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : XL Specialty Insurance Company	37885
INSURER B : Indian Harbor Insurance Company	36940
INSURER C : Federal Insurance Company	20281
INSURER D :	
INSURER E :	
INSURER F :	

INSURED WOODHOL-05
Woods Hole Group, Inc.
107 Waterhouse Road
Bourne MA 02532

COVERAGES CERTIFICATE NUMBER: 2033110943 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY	Y		UM00044627MA24A	1/1/2024	1/1/2025	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 50,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	X OTHER: Sudden/Accidents						Pollution	$ 1,000,000
C	AUTOMOBILE LIABILITY			73638443	1/1/2024	1/1/2025	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB X OCCUR			UM00044627MA24A	1/1/2024	1/1/2025	EACH OCCURRENCE	$ 10,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 10,000,000
	DED RETENTION $							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			71837639	1/1/2024	1/1/2025	X PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N (Mandatory in NH)	N/A					E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
B	Professional Liability			PEC005532504	7/30/2023	7/30/2024	Aggregate Limit	$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: Agreement for Services with the Woods Hole Group, Inc.

New Hampshire Department of Environmental Services is included as Additional Insured as respects to General Liability policy, pursuant to and subject to the policy's terms, definitions, conditions and exclusions.

CERTIFICATE HOLDER

New Hampshire Department of Environmental Services
P.O. Box 95
Concord, NH 03302

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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The State of New Hampshire

Department of Environmental Services

Robert R. Scott, Commissioner

Ben Chiesley
Aidan Barry

April 19, 2023

APPROVED G & C
DATE 5/31/2023
ITEM # 103

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

REQUESTED ACTION

Authorize the Department of Environmental Services (NHDES) to amend a contract (PO #7003247) with the Woods Hole Group, Inc., (VC# 388987-B001), Bourne, MA for the development of a coastal flood risk model, by increasing the contract award amount by $22,500 to $372,421 from $349,921 and by extending the project expiration date to June 30, 2024 from June 30, 2023, effective upon Governor and Council approval. The original agreement was approved by Governor and Council on February 16, 2022, Item #94. 100% Federal Funds.

Funding is available in the accounts as follows:

	FY 2023
03-44-44-442010-1209-102-500731 Dept. Environmental Services, Coastal Resilience, Contracts for Program Services	$22,500

EXPLANATION

NHDES requests approval of this amendment to provide additional time and funds to complete the hydrodynamic model for NH's coast and estuaries: the NH Coastal Flood Risk Model (NH-CFRM). This amendment is necessary due to delays associated with the NH Seacoast LiDAR (light detection and ranging) data set. It is critical that the NH-CFRM model uses the most up-to-date data available to ensure an accurate and reliable assessment of flood risk. LiDAR elevation data is a critical dataset to evaluate coastal elevations and the seacoast 2020 LiDAR release was delayed approximately 6 months due to the COVID-19 pandemic. Additional time for project completion is requested so the contractor may incorporate the new information into the watershed planning process and resulting products.

This amendment also includes additional funds for the analysis of an additional sea level rise (SLR) scenario that was not included in the original agreement. The amendment proposes funds for the analysis of SLR conditions in the year 2090 to be included in the NH-CFRM. The additional SLR scenario will allow the model to demonstrate predicted sea level and flooding conditions at baseline, and the following years: 2030, 2050, 2070, as well as the addition of 2090. The 2090 scenario enables a more complete understanding of predicted sea levels throughout the 21st century at consistent timeframes. The additional scenario of 2090 will also provide critical information to long term planning efforts such as transportation and infrastructure.

www.des.nh.gov
29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095
(603) 271-3503 • Fax: 271-5171 • TDD Access: Relay NH 1-800-735-2964

NHDES issued a Request for Proposals (RFP) on August 16, 2021 for the development of a hydrodynamic model for NH's coast and estuaries: the NH Coastal Flood Risk Model (NH-CFRM). The goal of the NH-CFRM and its data is to help state and local decision-makers and stakeholders in New Hampshire's Coastal Zone examine the flood risk of tidal flooding, storm surge, and present and future sea-level rise (SLR) on assets, infrastructure and natural resources. Currently, statewide maps of water levels during coastal storm events and under potential SLR scenarios provide a rudimentary "bathtub" approach to depicting flood risk that does not account for ocean conditions such as waves and winds or for physical features on the landscape that dynamically interact with tidal floodwaters.

Consequently, existing maps predict inundation in areas where flooding will not occur, while, also misidentifying some areas as remaining dry that would be inundated. This agreement will enable Woods Hole Group, Inc. (WHG) to work with NHDES and a local Advisory Committee to develop a science-based approach to identifying coastal flood risk for NH's 17 Coastal Zone communities. The results of the NH-CFRM will be publicly available for municipalities, state agencies, residents, and other stakeholders to understand flood risk on a parcel level scale for a variety of storm conditions and SLR scenarios. The WHG has met with the project Advisory Committee to present progress on model inputs including sea level rise projections, culvert and crossings analysis, riverine discharge analysis, and influence of historic storm events. However, WHG has yet to invoice work completed. To date, $0 has been spent of the original contract of $349,921.

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

We respectfully request your approval.

Robert R. Scott, Commissioner

Agreement for Services with the Woods Hole Group, Inc.
Amendment No. 1

This Agreement (hereinafter called the "Amendment") dated this 28 day of March, 2023, is by and between the State of New Hampshire, acting by and through its Department of Environmental Services (hereinafter referred to as the "State") and the Woods Hole Group, Inc. acting by and through the President, Robert P. Hamilton, Jr. (hereinafter referred to as the "Contractor").

WHEREAS, pursuant to an Agreement (hereinafter called the "Agreement") approved by the Governor and Council on February 16, 2022, the Grantee agreed to perform certain services upon the terms and conditions specified in the Agreement and in consideration of payment by the State of certain sums as specified therein; and

WHEREAS, The Grantee and the State have agreed to amend the Agreement in certain respects;

NOW THEREFORE, in consideration of the foregoing, and the covenants and conditions contained in the Agreement set forth herein, the parties hereto do hereby agree as follows:

1. Amendment and Modification of Agreement: The Agreement is hereby amended as follows:

   (A) The completion date as set forth in Paragraph 1.7 of the Agreement shall be changed from June 30, 2023 to June 30, 2024.

   (B) The price limitation as set forth in sub-paragraph 1.8 of the Agreement shall be increased by $22,500 from $349,921 to $372,421.

   (C) Exhibit B of the Agreement (Scope of Services) shall be amended as follows and noted with strikethrough (deletion) and italics (addition):

Task #	Task Description	Activities/Deliverables	Completion Date
Task 1: Model Development and Simulations			
1.1	Develop New Hampshire Model Domain	a) Numerical model domain that covers the NH coastal flood region, extending up to approximately the 30- to 35-foot NAVD88 elevation across the state, encompassing coastlines, salt marshes, wetlands, estuaries, and tidal rivers. b) High-resolution (on the order of 5-10 meters (16-33 feet), with some areas consisting of node spacing as close as 5-10 feet) overland grid/mesh for New Hampshire representing the landscape and upland areas of the New Hampshire coastline and surrounding areas.	~~3/18/22~~ *8/31/2023*
1.2	Determine Riverine Conditions	a) Future discharge conditions identified based on the results of the USGS study entitled "Simulated Hydrologic Response to Climate Change During the 21st Century in New Hampshire." b) Sensitivity analysis determining the relative importance of the magnitude of the discharge conditions (storm versus mean), as well as the upstream extent when discharge conditions may have a greater influence on flooding.	~~3/31/22~~ *8/31/2023*
1.3	Develop Boundary Conditions,	a) Model boundary conditions established and calibrated specifically for New Hampshire.	~~4/30/22~~ *8/31/2023*

Contractor Initials: RPH
Date: 4/13/23

	Storm Sets, etc.	b) Storm set developed specifically for New Hampshire, consisting of tropical and extra tropical conditions that evolve under changing climate conditions in the ocean. c) Selection of sea level rise projections input into the model. d) Other boundary conditions, including astronomical and meteorological forcing conditions established.	
1.4	Integration of Tidal Crossings	a) Technical memorandum and presentation to NHDES and the AC on WHG's proposed methodology to identify and incorporate high priority tidal crossings (bridges and culverts) dynamically into the model.	~~5/31/22~~ *8/31/2023*
1.5	Model Calibration and Validation	a) Individual storm events selected for model calibration and validation. b) Calibrated model based on normal tidal conditions and representative storm events for the northeast, as well as validated to another storm event to ensure accuracy.	~~7/31/22~~ *8/31/2023*
1.6	Monte Carlo Simulations (present day & ~~3~~ *4* climate scenarios)	a) Robust distribution of expected water levels and flooding risk for the entire model domain provided by model simulations for extra-tropical and tropical storms developed specifically for New Hampshire.	~~12/31/23~~ *12/31/2023*
1.7	Overtopping Simulations	a) Wave runup and overtopping sub-model for assessing these hazards at structure locations over the course of a storm.	~~1/13/23~~ *1/13/2024*
1.8	Model Management Plan	a) Model management plan that provides technical details on the model components, input datasets, and model boundary conditions, as well as the limitations of those datasets and components. The model management plan will also identify a timeframe for when certain model aspects should be reviewed for potential updates, and include a suggested timeline for model maintenance activities.	~~2/28/23~~ *2/28/2024*
1.9	Project Management/ Meetings	a) Four (4) meetings convened with NHDES and the AC, one of which will be in person at NHDES.	~~1/13/23~~ *3/26/24*
Task 2: Mapping Products/Deliverables			
2.1	Post-processing, Raster Generation, and Mapping	a) ARC-GIS compatible raster data, as well as associated high-resolution maps, for annual exceedance probability flood risk (present day & ~~3~~ *4* climate scenarios) provided on a town-by-town basis. b) ARC-GIS compatible raster data, as well as associated high-resolution maps for depth of inundation or water surface elevation (present day & ~~three~~ *four* climate scenarios) corresponding to three (3) selected annual exceedance probability levels provided on a town-by-town basis. c) NH-CFRM metadata and readme files provided with the data deliverables listed above.	~~5/5/23~~ *5/5/2024*
2.2	Non-standard Data Production (waves, tidal benchmarks)	a) Wave heights at three (3) annual exceedance probabilities for ~~three (3)~~ *four (4)* sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance. b) Five (5) tidal benchmarks for ~~three (3)~~ *four (4)* sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance.	~~6/16/23~~ *6/16/2024*
2.3	Reporting	a) Final report adhering to the NHDES publication guidelines that describes the development of the model and the output data. This will include, but not be limited to, discussion on the existing data used to	~~5/19/23~~ *5/19/2024*

Contractor Initials: RPA
Date: 4/13/23

		develop the NH-CFRM, description of the model development and input parameters, and discussion of the results. b) Comment/response document pertaining to NHDES comments on the draft report. c) Fact sheet that gives an overview of the model, data used in the model, and the different output products that are available. d) Fact sheet that provides answers to Frequently Asked Questions about NH-CFRM.	
2.4	Project Management/ Meetings	a) Three (3) meetings convened with NHDES and the AC to review the final model results, draft example GIS products and maps, draft fact sheets, and the draft technical report. b) Half-day training session to NHDES and other stakeholders on the development of the model, how to best interpret the model output, it's potential uses, and strategies for communicating to a larger stakeholder group working within the State to give users a consistent message and guidance.	~~6/30/23~~ *6/30/2024*

(D) Attachment A of the Agreement (Budget Estimate) shall be amended as follows and noted with strikethrough (deletion) and italics (addition):

Task	Personnel	Travel	Equipment	Sub-contractual	Task Subtotals
1.1 Develop New Hampshire Model Domain	$13,360	-	-	$7,130	$20,490
1.2 Determine Riverine Conditions	$8,160	-	-	$4,600	$12,760
1.3 Develop Boundary Conditions, Storm Sets, etc.	$10,420	-	$11,500	$4,600	$26,520
1.4 Integration of Tidal Crossings	$17,400	-	-	-	$17,400
1.5 Model Calibration and Validation	$13,780	-	-	-	$13,780
1.6 Monte Carlo Simulations (present day & ~~3~~ *4* climate scenarios)	Original ~~$59,880~~ Amendment (+$14,970) *Revised $74,850*	-	-	-	Original ~~$59,880~~ Amendment (+$14,970) *Revised $74,850*
1.7 Overtopping Simulations	Original ~~$21,540~~ Amendment (+$6,000) *Revised $27,540*	-	-	-	Original ~~$21,540~~ Amendment (+$6,000) *Budget $27,540*

Contractor Initials: RCH
Date: 4/13/23

Task	Personnel	Travel	Equipment	Sub-contractual	Task Subtotals
1.8 Model Management Plan	$4,080	-	-	-	$4,080
1.9 Project Management/ Meetings	$11,760	$215	-	$1,725	$13,700
2.1 Prost-processing, Raster Generation, and Mapping	$116,070	-	-	-	$116,070
2.2 Non-standard Data Production (waves, tidal benchmarks)	Original ~~$11,720~~ Amendment (+$1,530) *Revised $13,250*	-	-	-	Original ~~$11,720~~ Amendment (+$1,530) *Revised $13,250*
2.3 Reporting	$14,560	-	-	-	$14,560
2.4 Project Management/ Meetings	$14,120	-	-	$3,301	$17,421
Sub Totals	**Original ~~$316,850~~ Amendment (+$22,500) *Revised $339,350***	**$215**	**$11,500**	**$21,356**	**Original ~~$349,921~~ Amendment (+$22,500) *Revised $372,421***
Totals	**Original Price Limitation**				**$349,921**
	Amendment Amount				**$22,500**
	Revised Price Limitation				**$372,421**

2. Effective Date of Amendment: This Amendment shall take effect upon the date of approval of this Amendment by the Governor and Executive Council of the State of New Hampshire.

3. Continuance of Agreement: Except as specifically amended and modified by the terms and conditions of this Amendment, the Agreement, and the obligations of the parties thereunder, shall remain in full force and effect in accordance with the terms and conditions set forth therein.

Contractor Initials: RPH
Date: 4/13/23

IN WITNESS WHEREOF, the parties have hereunto set their hands as of the day and year first above written.

The Woods Hole Group, Inc.

By _____
Robert P. Hamilton, Jr., President

STATE OF Massachusetts
COUNTY OF Barnstable

On this the 13th day of April, 2023 before the undersigned officer, personally appeared Robert P. Hamilton, Jr., President, who acknowledged him/herself to be the person who executed the foregoing instrument for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Catherine A. Baker
My Commission Expires January 18, 2030
NOTARY PUBLIC
COMMONWEALTH OF MASSACHUSETTS

Name:
Notary Public/ Justice of the Peace
My Commission Expires: 1-18-30

THE STATE OF NEW HAMPSHIRE
Department of Environmental Services

By _____
Robert R. Scott, Commissioner

Approved by Attorney General this 5th day of ~~April~~ May, 2023

OFFICE OF ATTORNEY GENERAL

By _____

Contractor Initials: _____
Date: 4/13/23

Certificate of Authority

I, Carine Foulquier, Chief Financial Officer of Woods Hole Group, Inc. do
Printed Name of Certifying Officer *Title* *Name of Company*

hereby certify that Robert P. Hamilton, Jr. is authorized to execute any documents
Printed Name of Person Authorized to sign
that may be necessary to enter into a contract with the State of New Hampshire.

In witness whereof, I have hereunto set my hand as the Corporate Clerk
Office/Position of Certifying Officer
of Woods Hole Group, Inc., this 12 day of April, 2023
Name of Company

Signature of Certifying Officer

Notarization

State of
County of
On 4.12.23, before me, Kelly M Malloy
Date *Name of Notary or Justice of the Peace*

the undersigned officer, personally appeared Carine Foulquier, who
Printed Name of Certifying Officer
acknowledged him/herself to be the CFO, of Woods Hole Group
Office/Position *Name of Company*
and that she/he, being authorized to do so, executed the foregoing instrument for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public or Justice of the Peace

(affix seal)

Commission Expires: 6.22.24

State of New Hampshire

Department of State

CERTIFICATE

I, David M. Scanlan, Secretary of State of the State of New Hampshire, do hereby certify that THE WOODS HOLE GROUP, INC. is a Massachusetts Profit Corporation registered to transact business in New Hampshire on November 23, 2021. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 886710
Certificate Number: 0006196962

IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 5th day of April A.D. 2023.

David M. Scanlan
Secretary of State

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 2/1/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Arthur J. Gallagher Risk Management Services, LLC
300 Madison Avenue
28th Floor
New York NY 10017

CONTACT NAME:
PHONE (A/C, No, Ext): 212-994-7100 | FAX (A/C, No): 212-994-7047
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: XL Specialty Insurance Company	37885
INSURER B: Transportation Insurance Company	20494
INSURER C: ACE American Insurance Company	22667
INSURER D: Indian Harbor Insurance Company	36940
INSURER E:	
INSURER F:	

INSURED
Woods Hole Group, Inc.
107 Waterhouse Road
Bourne MA 02532

WOOCHOL-CS

COVERAGES

CERTIFICATE NUMBER: 292038271

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [ ] OCCUR [X] GEN'L AGGREGATE LIMIT APPLIES PER: POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:			UM00044627MA23A	1/1/2023	1/1/2024	EACH OCCURRENCE	$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 50,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
							GENERAL AGGREGATE	$ 2,000,000
							PRODUCTS - COMP/OP AGG	$ 2,000,000
								$
B	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY			7012097849	1/1/2023	1/1/2024	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
							BODILY INJURY (Per person)	$
							BODILY INJURY (Per accident)	$
							PROPERTY DAMAGE (Per accident)	$
								$
A	[X] UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED RETENTION $			UM00044628MA23A	1/1/2023	1/1/2024	EACH OCCURRENCE	$ 10,000,000
							AGGREGATE	$ 10,000,000
								$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N [ ] N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			PHFD38352659 010	1/1/2023	1/1/2024	[X] PER STATUTE [ ] OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
D	Professional Liability			PEC005532503	7/30/2022	7/30/2023	Aggregate Limit	$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
NHDES CFRM – Develop Coastal Flood Risk Model.
Certificate holder is additional insured where required by written contract subject to policy terms and conditions.

CERTIFICATE HOLDER

New Hampshire Dept of Environmental Services
29 Hazen Drive
Concord NH 03302-0095

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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S Couture

The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

January 11, 2022

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

APPROVED G & C
DATE 16 February 2022
ITEM # 94

REQUESTED ACTION

Authorize the Department of Environmental Services (NHDES) to enter into a contract agreement with The Woods Hole Group, Inc. (VC # 388987-B001), Bourne, MA, in the amount of $349,921 to develop a coastal flood risk model, effective upon Governor and Council approval through June 30, 2023. 100% Capital (General) Funds.

Funding is available in the accounts as follows:

	FY 2022
03-44-44-440030-9312-034-500155 Dept Environmental Services, L21:1 V5-Coastal Flooding Mdln, Capital Projects	$188,110
03-44-44-440030-9357-034-500155 Dept Environmental Services, L21:14 IV-Coastal Flood Model, Capital Projects	$161,811
TOTAL:	$349,921

EXPLANATION

NHDES issued a Request for Proposals (RFP) on August 16, 2021 for the development of a hydrodynamic model for NH's coast and estuaries: the NH Coastal Flood Risk Model (NH-CFRM). The goal of the NH-CFRM and its data is to help state and local decision-makers and stakeholders in New Hampshire's Coastal Zone examine the flood risk of tidal flooding, storm surge, and present and future sea-level rise (SLR) on assets, infrastructure and natural resources. Five eligible proposals were received and ranked according to selection criteria and selection committee discussion. The Woods Hole Group, Inc. (WHG) was the top ranked proposal. A scoring matrix that includes a list of the staff who participated in proposal review is provided in Attachment B.

Currently, statewide maps of water levels during coastal storm events and under potential SLR scenarios provide a rudimentary "bathtub" approach to depicting flood risk that does not account for ocean conditions such as waves and winds or for physical features on the landscape that dynamically interact with tidal floodwaters. Consequently, existing maps predict inundation in some areas where flooding is unlikely, while also misidentifying other areas as remaining dry that could be inundated. This agreement will enable WHG to work with NHDES and a local Advisory Committee to develop a science-based

approach to identifying coastal flood risk for NH's 17 Coastal Zone communities. The results of the NH-CFRM will be publicly available for municipalities, state agencies, residents, and other stakeholders to understand flood risk on a parcel level scale for a variety of storm conditions and SLR scenarios.

Total project costs are budgeted at $349,921. NHDES will provide $349,921 of the project costs through Capital (General) funds. A budget breakdown is provided in Attachment A.

This agreement has been approved by the Department of Justice as to form, substance and execution.

We respectfully request your approval.

Robert R. Scott, Commissioner

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name New Hampshire Department of Environmental Services		1.2 State Agency Address 29 Hazen Drive, Concord, NH 03302-0095	
1.3 Contractor Name The Woods Hole Group, Inc.		1.4 Contractor Address 107 Waterhouse Road Bourne, MA 02532	
1.5 Contractor Phone Number 508-540-8080	1.6 Account Number 03-44-44-440030-9312-034-500155 03-44-44-440030-9357-034-500155	1.7 Completion Date June 30, 2023	1.8 Price Limitation $349,921.00
1.9 Contracting Officer for State Agency Steve Couture, Coastal Program		1.10 State Agency Telephone Number 603-848-2489	
1.11 Contractor Signature R.P. Hamilton Date: 12-22-21		1.12 Name and Title of Contractor Signatory Robert P. Hamilton, Jr. President	
1.13 State Agency Signature Date: 1/11/21		1.14 Name and Title of State Agency Signatory Robert R. Scott, Commissioner, NHDES	
1.15 Approval by the N.H. Department of Administration, Division of Personnel *(if applicable)* By: Director. On:			
1.16 Approval by the Attorney General (Form, Substance and Execution) *(if applicable)* By: On: 1/12/22			
1.17 Approval by the Governor and Executive Council *(if applicable)* G&C Item number: G&C Meeting Date:			

Contractor Initials RPH
Date 12-22-21

2. SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.
3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.17, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date").
3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.
Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds affected by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.
5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.
5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.
5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.
5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.
6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.
6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.
6.3. The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.
7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.
7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.
7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

Contractor Initials RAH
Date 12-22-2

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

8.3. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT B. In addition, at the State's discretion, the Contractor shall, within 15 days of notice of early termination, develop and submit to the State a Transition Plan for services under the Agreement.

10. DATA/ACCESS/CONFIDENTIALITY/ PRESERVATION.

10.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

12.1 The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice, which shall be provided to the State at least fifteen (15) days prior to the assignment, and a written consent of the State. For purposes of this paragraph, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.2 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State. The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. INDEMNIFICATION. Unless otherwise exempted by law, the Contractor shall indemnify and hold harmless the State, its officers and employees, from and against any and all claims, liabilities and costs for any personal injury or property damages, patent or copyright infringement, or other claims asserted against the State, its officers or employees, which arise out of (or which may be claimed to arise out of) the acts or omission of the

Contractor Initials RAK

Date 12-22-2

Contractor, or subcontractors, including but not limited to the negligence, reckless or intentional conduct. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than $1,000,000 per occurrence and $2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than ten (10) days prior to the expiration date of each insurance policy. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A *("Workers' Compensation")*.

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

17. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

18. CHOICE OF LAW AND FORUM. This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party. Any actions arising out of this Agreement shall be brought and maintained in New Hampshire Superior Court which shall have exclusive jurisdiction thereof.

19. CONFLICTING TERMS. In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and/or attachments and amendment thereof, the terms of the P-37 (as modified in EXHIBIT A) shall control.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.

Contractor Initials RAK

Date 12-22-21

Exhibit A
Special Provisions

No special provisions.

Contractor Initials RAH
Date 12-22-21

Exhibit B
Scope of Services

The Woods Hole Group, Inc. (WHG) shall perform the tasks and complete the deliverables outlined below and specifically described in their proposal, entitled "New Hampshire Coastal Flood Risk Model (NH-CFRM)," as well as their proposal addendum, entitled "Addendum to Proposal for the New Hampshire Coastal Flood Risk Model." Data products and model outputs shall be consistent with the NH Coastal Flood Risk Guidance. Sea level rise scenarios used in the NH-CFRM shall be selected in consultation with NHDES and the project Advisory Committee (AC).

Task #	Task Description	Deliverables/Outcomes	Completion Date
Task 1: Model Development and Simulations			
1.1	Develop New Hampshire Model Domain	a) Numerical model domain that covers the NH coastal flood region, extending up to approximately the 30- to 35-foot NAVD88 elevation across the state, encompassing coastlines, salt marshes, wetlands, estuaries, and tidal rivers. b) High-resolution (on the order of 5-10 meters (16-33 feet), with some areas consisting of node spacing as close as 5-10 feet) overland grid/mesh for New Hampshire representing the landscape and upland areas of the New Hampshire coastline and surrounding areas.	3/18/22
1.2	Determine Riverine Conditions	a) Future discharge conditions identified based on the results of the USGS study entitled "Simulated Hydrologic Response to Climate Change During the 21st Century in New Hampshire." b) Sensitivity analysis determining the relative importance of the magnitude of the discharge conditions (storm versus mean), as well as the upstream extent when discharge conditions may have a greater influence on flooding.	3/31/22
1.3	Develop Boundary Conditions, Storm Sets, etc.	a) Model boundary conditions established and calibrated specifically for New Hampshire. b) Storm set developed specifically for New Hampshire, consisting of tropical and extra tropical conditions that evolve under changing climate conditions in the ocean. c) Selection of sea level rise projections input into the model. d) Other boundary conditions, including astronomical and meteorological forcing conditions established.	4/30/22
1.4	Integration of Tidal Crossings	a) Technical memorandum and presentation to NHDES and the AC on WHG's proposed methodology to identify and incorporate high priority tidal crossings (bridges and culverts) dynamically into the model.	5/31/22
1.5	Model Calibration and Validation	a) Individual storm events selected for model calibration and validation. b) Calibrated model based on normal tidal conditions and representative storm events for the northeast, as well as validated to another storm event to ensure accuracy.	7/31/22
1.6	Monte Carlo Simulations (present day & 3 climate scenarios)	a) Robust distribution of expected water levels and flooding risk for the entire model domain provided by model simulations for extra-tropical and tropical storms developed specifically for New Hampshire.	12/31/22

Contractor Initials RDK
Date 12-22-2

1.7	Overtopping Simulations	a) Wave runup and overtopping sub-model for assessing these hazards at structure locations over the course of a storm.	1/13/23
1.8	Model Management Plan	a) Model management plan that provides technical details on the model components, input datasets, and model boundary conditions, as well as the limitations of those datasets and components. The model management plan will also identify a timeframe for when certain model aspects should be reviewed for potential updates, and include a suggested timeline for model maintenance activities.	2/28/23
1.9	Project Management/ Meetings	a) Four (4) meetings convened with NHDES and the AC, one of which will be in person at NHDES.	1/13/23
Task 2: Mapping Products/Deliverables			
2.1	Post-processing, Raster Generation, and Mapping	a) ARC-GIS compatible raster data, as well as associated high-resolution maps, for annual exceedance probability flood risk (present day & 3 climate scenarios) provided on a town-by-town basis. b) ARC-GIS compatible raster data, as well as associated high-resolution maps for depth of inundation or water surface elevation (present day & three climate scenarios) corresponding to three (3) selected annual exceedance probability levels provided on a town-by-town basis. c) NH-CFRM metadata and readme files provided with the data deliverables listed above.	5/5/23
2.2	Non-standard Data Production (waves, tidal benchmarks)	a) Wave heights at three (3) annual exceedance probabilities for three (3) sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance. b) Five (5) tidal benchmarks for three (3) sea level rise scenarios, which will be selected in consultation with NHDES and the AC to ensure consistency with the NH Coastal Flood Risk Guidance.	6/16/23
2.3	Reporting	a) Final report adhering to the NHDES publication guidelines that describes the development of the model and the output data. This will include, but not be limited to, discussion on the existing data used to develop the NH-CFRM, description of the model development and input parameters, and discussion of the results. b) Comment/response document pertaining to NHDES comments on the draft report. c) Fact sheet that gives an overview of the model, data used in the model, and the different output products that are available. d) Fact sheet that provides answers to Frequently Asked Questions about NH-CFRM.	5/19/23
2.4	Project Management/ Meetings	a) Three (3) meetings convened with NHDES and the AC to review the final model results, draft example GIS products and maps, draft fact sheets, and the draft technical report. b) Half-day training session to NHDES and other stakeholders on the development of the model, how to best interpret the model output, it's potential uses, and strategies for communicating to a larger stakeholder group working within the State to give users a consistent message and guidance.	6/30/23

Contractor Initials RPM
Date 12-22-21

Exhibit C
Method of Payment and Contract Price

The State shall pay to the Contractor the total reimbursable program costs in accordance with the following requirements:

Reimbursement requests for program costs shall be made by the Contractor using a payment request form as supplied by the State, which shall be completed and signed by the Contractor. The payment request form shall be accompanied by proper supporting documentation, including costs incurred per task and any relevant deliverables. Documentation of reimbursable costs may include invoices for supplies, equipment, services, contractual services, and a report of personnel, travel and indirect costs. Payments shall be made to the Contractor no more frequently than monthly.

The total reimbursement shall not exceed $349,921.00.

Contractor Initials RDA
Date 12-22-21

Certificate of Authority

I, ROBERT SMITH, MR of WOODS HOLE GROUP INC do
Printed Name of Certifying Officer *Title* *Name of Company*

hereby certify that ROBERT P HAMILTON JR is authorized to execute any documents
Printed Name of Person Authorized to sign
that may be necessary to enter into a contract with the State of New Hampshire.

In witness whereof, I have hereunto set my hand as the VP ENERGIES AND INFRASTRUCTURES BU
Office/Position of Certifying Officer
of WOODS HOLE GROUP INC, this 22 day of DECEMBER, 2021
Name of Company

Signature of Certifying Officer

State of MA, County of Barnstable
Signed before me on this 22nd day
of December 2022 by Robert Smith
Notary Public Catherine A Morey

CATHERINE A. MOREY
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
January 6, 2023

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/31/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Arthur J Gallagher Risk Management Services, Inc.
250 Park Avenue, 5th Floor
NEW YORK NY 10007

Licenses: 88-72[illegible]
WOOCHO-[illegible]

CONTACT NAME: Liz Steele
PHONE (A/C, No, Ext): 212-994-7100 FAX (A/C, No): 212-994-7047
E-MAIL ADDRESS: liz_steele@ajg.com

INSURER(S) AFFORDING COVERAGE — NAIC #

INSURER A: XL Specialty Insurance Company — 37885
INSURER B: Transportation Insurance Company — 20494
INSURER C: Everest National Insurance Company — 10120
INSURER D: Indian Harbor Insurance Company — 36940
INSURER E:
INSURER F:

INSURED
Woods Hole Group, Inc.
107 Waterhouse Road
Bourne MA 02532

COVERAGES

CERTIFICATE NUMBER: 1729495014 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X Marine Liability GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			UM00044627MA22A	1/1/2023	1/1/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 50,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			7012097549	1/1/2022	1/1/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $ $
A	UMBRELLA LIAB X OCCUR X EXCESS LIAB CLAIMS-MADE DED X RETENTION $ 25,000			UM00044626MA22A	1/1/2022	1/1/2023	EACH OCCURRENCE AGGREGATE	$ $ $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		9700000409-221	1/1/2022	1/1/2023	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Professional Liability			PEC005532502	7/30/2021	7/30/2022	Occurrence Aggregate	$1,000,000 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Certificate holder is additional insured where required by written contract subject to policy terms and conditions

CERTIFICATE HOLDER

New Hampshire Dept of Environmental Services
29 Hazen Drive
Concord NH 03302-0095

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that THE WOODS HOLE GROUP, INC. is a Massachusetts Profit Corporation registered to transact business in New Hampshire on November 23, 2021. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: 886710
Certificate Number: 0005471185

IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed
the Seal of the State of New Hampshire,
this 23rd day of November A.D. 2021.

William M. Gardner
Secretary of State

Attachment A
Budget Estimate

Task	Personnel	Travel	Equipment	Sub-contractual	Task Subtotals
1.1. Develop New Hampshire Model Domain	$13,360	-	-	$7,130	$20,490
1.2. Determine Riverine Conditions	$ 8,160	-	-	$4,600	$12,760
1.3. Develop Boundary Conditions, Storm Sets, etc.	$10,420	-	$11,500	$4,600	$26,520
1.4. Integration of Tidal Crossings	$17,400	-	-	-	$17,400
1.5. Model Calibration and Validation	$13,780	-	-	-	$13,780
1.6. Monte Carlo Simulations (present day & 3 climate scenarios)	$59,880	-	-	-	$59,880
1.7. Overtopping Simulations	$21,540	-	-	-	$21,540
1.8. Model Management Plan	$4,080	-	-	-	$4,080
1.9. Project Management/ Meetings	$11,760	$215	-	$1,725	$13,700
2.1. Post-processing, Raster Generation, and Mapping	$116,070	-	-	-	$116,070
2.2. Non-standard Data Production (waves, tidal benchmarks)	$11,720	-	-	-	$11,720
2.3. Reporting	$14,560	-	-	-	$14,560
2.4. Project Management/ Meetings	$14,120	-	-	$3,301	$17,421
Totals	**$316,850**	**$215**	**$11,500**	**$21,356**	**$349,921**

Attachment B
Proposal Scoring Matrix

	The Woods Hole Group, Inc.	Deltares USA, Inc.	Ransom Consulting, LLC	Arcadis US, Inc.	GZA GeoEnvironmental, Inc.
Reviewer "A"	91	90	84	78	82
Reviewer "B"	93	87	80	70	66
Reviewer "C"	81	76	68	69	70
Reviewer "D"	91	88	82	80	79
Reviewer "E"	87	85	84	83	83
Reviewer "F"	88	80	75	87	84
Reviewer "G"	90	88	85	82	81
AVERAGE	88.7	84.9	79.7	78.4	77.9
RANK	1	2	3	4	5

Review Team Members:

- Steve Couture, Coastal Program Administrator, New Hampshire Department of Environmental Services
- Kevin Lucey, Habitat Coordinator, New Hampshire Department of Environmental Services
- Ben Sweeney, Watershed Management Specialist, New Hampshire Department of Environmental Services
- Roger Appleton, Assistant District Six Engineer, New Hampshire Department of Transportation
- Tom Ballestero, Associate Professor, University of New Hampshire
- Jamie Carter, Northeast Region Geospatial Coordinator, National Oceanic and Atmospheric Administration Office for Coastal Management
- Tim Roache, Executive Director, Rockingham Planning Commission