

State of Maine Procurement Justification Form

This form must accompany all contract requests and sole source requisitions (RQS) over \$5,000 submitted to the Division of Procurement Services.

INSTRUCTIONS: Please provide the requested information in the white spaces below. All responses (except signatures) must be typed; no hand-written forms will be accepted. See the guidance document posted with this form on the Division of Procurement Services website (Forms page) for additional instructions.

PART I: OVERVIEW

Department Office/Division/Program:		DEP, Water Bureau, Div. of Water Quality Management			
Department Contract Administrator or Grant Coordinator:		John True			
(If applicable) Department Reference #:					
Amount: (Contract/Amendment/Grant)	\$ 50,442	Advantage CT / RQS #:	06A 20201119*1572		
CONTRACT	Proposed Start Date:	1/1/2021	Proposed End Date:	6/30/2022	
AMENDMENT	Original Start Date:		Effective Date:		
	Previous End Date:		New End Date:		
GRANT	Project Start Date:		Grant Start Date:		
	Project End Date:		Grant End Date:		
Vendor/Provider/Grantee Name, City, State:		University of Maine, Office of Research Administration 5717 Corbett Hall Room 404 Orono, Maine 04469-5717			
Brief Description of Goods/Services/Grant:		hydrographic modeling services			

PART II: JUSTIFICATION FOR VENDOR SELECTION

Mark an "X" before the justification(s) that applies to this request. (Check all that apply.)

	A. Competitive Process		G. Grant
	B. Amendment		H. State Statute/Agency Directed
X	C. Single Source/Unique Vendor		I. Federal Agency Directed
	D. Proprietary/Copyright/Patents		J. Willing and Qualified
	E. Emergency		K. Client Choice
	F. University Cooperative Project		L. Other Authorization

PART III: SUPPLEMENTAL INFORMATION

Please respond to ALL of the following:

- 1. Provide a more detailed description and explain the need for the goods, services or grant to supplement the response in Part I.**

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PART III: SUPPLEMENTAL INFORMATION

Shellfish yields are often limited in critical harvesting areas because of closures due to bacterial pollution and a lack of understanding of the scope and residence time of effluent from municipal wastewater treatment plants (WWTP) in the affected area. The cost associated with closures is particularly significant in regions of the state Downeast that are highly dependent upon marine resources. The University of Maine has developed a FVCOM fine mesh hydrographic model for Downeast coastal Maine. The services provided will be focus on using the FVCOM model in significant shellfish areas to evaluate the impact of wastewater treatment plant effluent on the water quality of the receiving waters. This effort will aid in determining if harvest areas can be reopened now or in the future as wastewater infrastructure improves throughout the state and will support management decisions to open shellfish flats that are not impacted during normal operations of WWTPs.

2. Provide a brief justification for the selected vendor to supplement the response in Part II.

Drs. Kelly Cole and Damian Brady are coastal oceanographers that are proficient in the design and application of numerical models such as FVCOM and are uniquely qualified for this project. Kelly Cole of UMaine Department of Civil and Environmental Engineering (Research Assistant Professor) is a physical oceanographer. Her expertise is numerical modeling of coastal ocean dynamics. Damian Brady of UMaine School of Marine Sciences (Associate Professor) has directed numerous modeling projects. His expertise is estuarine modeling that links physics to ecosystems and integration of science in decision-making. Along with development of a FVCOM fine mesh hydrographic model for Downeast coastal Maine, Cole and Brady have developed numerical models for several other areas on the Maine coast and will be the most efficient individuals to apply this model. Any other approach will require significant training and development time to get started as well as access to a supercomputer. A total of \$70,000 was invested in development of these unique hydrographic models and a new vendor would require significant funding for model development before meaningful work could begin.

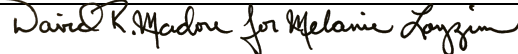
3. Explain how the negotiated costs or rates are fair and reasonable; or how the funding was allocated to grantee.

The cost was determined based on the time required for an experienced hydrographic modeler to expand the FVCOM model into new areas and model the requested parameters. The provider estimates this will take 5.25 months of time and a minimum of twelve individual WWTP outfalls using the FVCOM fine mesh hydrographic model they have developed can be completed. The model results will be provided as a comprehensive report showing four different release durations (6, 12, 18 and 24 hours) and two dilutions (300:1 and 1000:1) with final positions of the dilution line at seven and 21 days for each WWTP. The monthly cost for the modeler's time is \$9,608 with salary and benefits, the totally contract is for \$50,442.

4. Describe the plan for future competition for the goods or services.

As additional hydrographic models are developed for the coast of Maine new providers will be sought to see if their models can provide results that will inform shellfish management.

PART IV: APPROVALS

Signature of requesting Department's Commissioner (or designee):	<i>By signing below, I signify that I approve of this procurement request.</i>		
			
Printed Name:	Melanie Loyzim, Acting Commissioner	Date:	Dec 7, 2020

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Signature of DAFS Procurement Official:	DocuSigned by: <i>William Allen</i> 2D5B6E39F57E44A...		
	Printed Name:	william Allen	Date:

NOI 1220201082 12/08/2020 - 12/14/2020