

**REQUEST FOR STATEMENTS OF INTEREST
WITHIN THE COOPERATIVE ECOSYSTEMS STUDIES UNITS,
Number N62473-21-2-0002**

Project Title: INVASIVE ALGAE SURVEY TO BENEFIT RARE AND ENDANGERED SPECIES ON NAVAL OUTLYING FIELD, SAN NICOLAS ISLAND

Responses to this Request for Statements of Interest will be used to identify potential investigators for a project to be funded by the Department of the Navy (DoN) to investigate and identify non-native algal species in waters surrounding at Naval Outlying Field San Nicolas Island (SNI), Naval Base Ventura County (NBVC). The authority for this Cooperative Agreement is 16 USC §670c-1 (Sikes Act). Approximately \$56,637.00 to \$59,600.00 is expected to be available to support the base requirements of this project. Approximately \$111,965.00 to \$124,200.00 is expected to be available to support the option periods.

Type of Assistance Instrument Anticipated: Cooperative Agreement

Authority: Cooperative Agreement under 16 USC §670c-1

Eligible Applicants: Any Cooperative Ecosystem Studies Unit Californian cooperative partner who qualifies under the DoDGARS Part 34 or 2 Code of Federal Regulations 200 is eligible to apply.

Cost Sharing: Not required

Background:

Naval Base Ventura County (NBVC) provides site operation support services to the military defense complex that encompasses all military activities at NBVC Port Hueneme, Point Mugu, Naval Outlying Field San Nicolas Island (SNI), and Special Areas. Through this effort, the Installation supports more than 40 tenant commands (including US Coast Guard, US Air Force, US Marines, and US Army) with diverse DoD missions ranging from Seabee support to test and evaluation of air and shipboard weapons systems within the Point Mugu Sea Range and beyond. Biological and ecological studies and analyses support environmental documentation and regulatory consultations (Army Corps of Engineers permits and USFWS consultations) and NEPA, as well as, Range Complex Management Plans and Integrated Natural Resources Plans (INRMP). The Environmental Division of NBVC is responsible for ensuring compliance with all county, state, and federal environmental laws, rules and regulations that impact operations at NBVC SNI. A crucial part of that work involves the management and monitoring of island flora and fauna.

This project supports the Endangered Species Act (ESA), Section 7(a)(1), to implement Conservation Programs for the endangered black abalone and under Section 4 of the ESA for critical habitat exemption: Final Rulemaking To Designate Critical Habitat for Black Abalone (76 FR 66806; 27 Oct 2011) as NMFS identified non-native species to have a potential effect on black abalone Primary Constituent Elements such as habitat and food resources on SNI.

This project helps maintain the health of Essential Fish Habitat (EFH) in the nearshore waters of SNI which supports EFH Assessments and consultations required under the Magnuson-Stevens Fishery Conservation and Management Act for all Navy in-water and near-shore activities.

This project also supports the implementation of the SNI Integrated Natural Resources Management Plan (INRMP), a requirement of the Sikes Act (16 USCA Section 670a), as the identification and management of marine invasive species is detailed in the INRMP as crucial to the continued health of the intertidal ecosystem. The Cooperative Agreement meets the requirements of the Sikes Act through implementation of the INRMP. This Cooperative Agreement supports the following INRMP objectives:

- **Special Status Species:** Minimize the potential for adverse effects on special status species and their associated ecosystems while protecting the operational functionality of the installation mission by using an ecosystem-based management approach.
- **Data Integration, Access, and Reporting:** Ensure the technically sound, practical and appropriate use of library and computer technology to organize, analyze, and communicate natural resource information in support of management decisions.

Brief Description of Anticipated Work:

The purpose of this Cooperative Agreement is to collect soil samples from super-tidal areas and sea spray zones around SNI and one reference sample from Santa Barbara Island in an effort to isolate and identify green algae, diatoms and cyanobacteria species. Each species will be sequenced for use in DNA barcode analysis. Once identified, each species will be analyzed to detect which species are invasive to the island. All species will also be inputted in a DNA barcode library for future reference.

Soil samples from 14 sites on San Nicolas Island and one reference site from Santa Barbara Island (15 sites total) will be analyzed for green algae, diatoms, and cyanobacteria. Of the SNI samples, 12 will be in upland environments and 2 will be from the super-tidal in the sea spray zone. Each sample will be grown on media to isolate, then cultured into aqueous medium strains, then identified and sequenced for use in barcode DNA analysis and used in creation of a voucher specimen. PI will visit SNI to become acquainted with habitat and make collections, (if not possible due to COVID or seasonal timing, Navy installation representative will provide soil samples and site visit by PI will be delayed).

DNA barcode markers are short, easily amplified regions of DNA, standardized for specific taxonomic groups of organisms. They are invaluable for understanding species boundaries, community ecology, functional trait evolution, trophic interactions, and the conservation and management of biodiversity through studies such as diet analysis. An essential first step in any barcoding study is to sequence tissues of known provenance with corresponding vouchered material for which identifications can be verified. Tissues collected under task 1 will be extracted, and sequenced for universal barcoding markers. Sequences will be deposited into publicly available databases for researchers to use for a wide variety of studies in evolution or ecology. The genomic DNA will be stored at Santa Barbara Botanical Gardens (SBBG) for any and all future studies of algae on the islands in the SBBG DNA bank, and made publicly available, with permission of the US Navy. Further, these high quality genomic DNAs, while only used for Sanger seq now, can be used for high throughput methods at any time.

Period of Performance. The proposed period of performance for the Cooperative Agreement consists of an 18-month base period, and five (5) Option Items. A modification to add one or more option items shall extend the period of performance by 12 months; however each Option Item does not inherently add 12 months. For example, a modification to add Option Items 1 and 2 would extend the Base Period of Performance by 12 months only. Each exercise of one or more options will add a total of 12 months to the period of performance. The total duration of the Base Period plus all Option Items will not exceed 60 months.

The end date is the anticipated date that the final report is accepted by the Government. However, the parties may extend the term of the Cooperative Agreement by written modification. As stated above, the total duration of this Agreement, including any option periods shall not exceed 60 months. The exercise of any option item is subject to the availability of funds and may be awarded unilaterally.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: Kevin Magennis (kevin.magennis@navy.mil).

- 1) SF 424 (Enclosure 3)
- 2) Research & Related Senior/Key Personnel Form (Enclosure 4). Please see Factor 1 for additional submittal requirements.
- 3) Research and Related Budget Form (Enclosure 5)
- 4) SF-LLL Disclosure of Lobbying Activities (Enclosure 6). If applicable, complete SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."

Reimbursement of pre-award costs will not be allowed.

Please note, that some of the forms' functionality may be lost. Please visit <https://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1> to retrieve the forms directly from the Grants.gov website.

Review of Statements Received: Proposals will be evaluated based on the following three factors: 1) Credentials of Key Personnel, 2) Scientific Approach and 3) Reasonableness of Cost

NOTE: All requirements listed are minimum requirements. Offerors will be assessed on their ability to adhere to the listed requirements, fully complete responses, follow directions, comply with restrictions and provide quality control on their submittals. All page limits refer to 12 point font and single spaced pages.

Factor 1 - Credentials of Key Personnel:

A. Principal Investigator. The Recipient shall designate a person(s) as responsible for ensuring that provisions are in place, project and personnel supervision, quality control and meeting of reporting requirements are met on a daily basis. This person(s) shall have, at minimum:

1. A PhD in Systematic Botany or related science.
2. Experience and knowledge of micro-algal taxonomy, as demonstrated by at least 10 years of previous work or research experience.
3. Specific knowledge of Channel Islands micro algae taxonomy, as demonstrated by at least one peer-reviewed research paper on soil inhabiting micro-algae on Channel Islands.

B. Research Associates. The person(s) shall have, at the minimum:

1. A minimum of a Bachelor's of Science degree in Biology or related science disciplines.

With the Research & Related Senior/Key Personnel Form, the Applicant shall provide typed written resumes, not to exceed 3 pages (per key personnel), single spaced with 12 pt font for the Principal Investigator and Technical Staff. Resumes must state qualifications and experience with this type of project, and provide photocopies of required permits.

Factor 2 –Scientific Approach – The Offeror shall develop and submit a proposal (maximum 10 pages, single-spaced, 12 pt. font), addressing the proposed project actions and goals. The Offeror will be evaluated as to the soundness of the overall approach and the use of any innovative techniques that can be adopted for management efficiency. The project proposal shall include timelines across the base period and the four (4) 12-month Option periods, roles and responsibilities of personnel, specific tasks to be conducted, and deliverables. Please be as specific as possible.

Factor 3 – Reasonableness of Cost – After technical evaluation of the proposal, the offers will be analyzed to determine whether they are balanced with respect to prices or separately priced items, and for fair and reasonable pricing. Evaluations will include an analysis to determine the Offeror's comprehension of the requirements of the solicitation as well as to assess the validity of the Offeror's approach. Please submit the proposed budget for the option years on a separate research and related budget forms. One year per form is required.

Please provide your proposed budget on the provided pdf titled, "Research and Related Budget" form*(Enclosure 5).

***Form: RESEARCH AND RELATED BUDGET**

Complete a Research and Related Budget form for the Base Period and each Option Period, in accordance with the instructions on the form. You must provide a detailed cost breakdown of all costs, by cost category, by the funding periods described below, and by task/sub-task corresponding to the task number in the proposed Statement of Work. You may request funds under any of the categories listed as long as the item and amount are necessary to perform the proposed work and meet all the criteria for allowability under the applicable Federal cost principles. The budget should adhere to the following guidelines:

The budget should be driven by program requirements. Elements of the budget shall include:

- Direct Labor - Individual labor category or person, with associated labor hours and unburdened direct labor rates.
- Indirect Costs - Fringe benefits, overhead, G&A, COM, etc. (must show base amount and rate). Justify in Field K.
- Travel - Number of trips, destination, duration, etc. Justify in Field K (on the form).

- Subcontract - A cost proposal as detailed as the applicant's cost proposal will be required to be submitted by the subcontractor. If applicable, include in Research & Related Subaward Budget Attachment Form.
- Consultant - Provide consultant agreement or other document that verifies the proposed loaded daily/hourly rate. Include a description of the nature of and the need for any consultant's participation. Strong justification must be provided, and consultants are to be used only under exceptional circumstances where no equivalent expertise can be found at a participating university. Provide budget justification in Field K.
- Materials - Specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify in Field K.
- Other Directs Costs - Particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the cooperator/recipient (justifications must be provided when Government funding for such items is sought). Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify in Field K.

Budget Justification (Field K on the form): Provide the required supporting information for the cost elements as shown above (see Research & Related Budget instructions) and listed as follows: indirect cost, travel, consultant, materials, and other direct costs. Provide any other information you wish to submit to justify your budget request.

NOTE: Every deviation from the scope of work requirement must be identified. Proposer must identify the paragraph in the scope of work that is applicable and provide sufficient information to justify why the deviation is in the best interest of the government.

RELATIVE IMPORTANCE OF EVALUATION FACTORS – Factor 1, 2 and 3 are of equal importance.

Timeline for Review of Statements of Interest:

We request that Statements of Interest be submitted by September 10, 2021 2:00 PM local standard time. This Request for Statements of Interest will remain open until an investigator team is selected. Statements of Interest received after September 10, 2021 2:00 PM local standard time is considered “late” and may not be considered. Please submit requests for information/questions no later than September 6, 2021 2:00 PM local standard time.

Please send electronic responses and questions to:

Mr. Kevin Magennis, Contract Specialist Environmental Acquisition Core
kevin.magennis@navy.mil

Point of Contact Information:

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