

**REQUEST FOR STATEMENTS OF INTEREST
NUMBER N40192-21-R-8007
PROJECT TO BE INITIATED IN FISCAL YEAR 2021**

Project Title: Coral Bleaching and COTS Monitoring on Joint Region Marianas Submerged Lands

Responses to this Request for Statements of Interest will be used to identify potential projects to be funded by the Department of the Navy (herein, Navy) in support of coral bleaching and COTS monitoring on Joint Region Marianas (JRM) submerged lands. Approximately \$134,665 is expected to be available to support this project (contingent upon availability of funds). DON's obligation to pay or reimburse any costs hereunder is subject to the availability of appropriated funds and limited by funds obligated and nothing in this Agreement will be interpreted to require obligations or payments by the Federal Government in violation of the Anti-Deficiency Act, 31 U.S.C. §1341. Thus, funds have not yet been appropriated for this project and there is considerable uncertainty regarding the level of available funding for FY2021.

Background

Joint Region Marianas is responsible for the conservation and management of natural resources within the Department of Navy (herein, Navy) lands in Guam, including the Navy submerged lands around the island. The nearshore waters within Navy areas of responsibility in Apra Harbor, Haputo and Orote Peninsula Ecological Reserve Areas (ERAs), and Naval Support Activity Andersen Air Force Base (AAFB) form a unique ecosystem for diverse marine organisms, and other marine resources. One method used to gauge the health of the marine ecosystem involves quantifying the magnitude of coral bleaching and crown of thorns starfish (COTS) outbreaks, especially during peak seasons. Quantitatively assessing coral bleaching and COTS outbreaks, therefore, can help maintain the biological diversity as it relates to the conservation and management of marine natural resources within these areas.

The Endangered Species Act (ESA) serves as the federal statute regulating the protection of the nation's ESA-listed corals. The nearshore waters within the Navy area of responsibility fall within the "significant nexus" and "navigable waters" of the United States; and therefore, corals are afforded protection under the ESA. Identification and abundance surveys for endangered corals have been conducted within JRM submerged lands; however, coral bleaching and COTS monitoring has only recently been initiated due to the 2017 bleaching event that resulted in approximately 70% mortality across Guam and the Commonwealth of the Northern Mariana Islands. Many ESA-listed corals

are susceptible to bleaching, paling, scarring, or predation by COTS and mitigating these stressors as they arise is one way to adaptively manage coral resources.

This project aims to provide the Navy with coral bleaching and COTS monitoring data for Apra Harbor, Haputo and Orote ERAs, and Naval Support Activity Andersen Air Force Base in order to assess the effects to the marine resources, either associated with coral bleaching or COTS outbreaks in, and around, these areas. Additionally, this project aligns with the conservation and management actions identified in the Integrated Natural Resources Management Plan (INRMP), and compliance with federal requirements (e.g., Sikes Act, Clean Water Act, Endangered Species Act, Coastal Zone Management Act, and the National Environmental Policy Act).

Brief Description of Anticipated Work

This Cooperative Agreement (Agreement) includes the following requirements:

This project will implement INRMP action strategies to establish a coral bleaching and COTS monitoring program in Apra Harbor, Haputo and Orote Peninsula ecological reserve areas (ERAs), and Naval Support Activity Andersen Air Force Base (AAFB) submerged lands. Several baseline questions relative to water quality assessment guide the tasks outlined in this SOW:

- 1) What is the magnitude of coral bleaching, paling, or scarring in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and AAFB?
- 2) When is the peak season for coral bleaching in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and AAFB?
- 3) What is the abundance and distribution of COTS in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and AAFB?
- 4) When is the peak season for COTS outbreaks in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and AAFB?
- 5) What is the health of the reef with respect to coral bleaching, paling or scarring in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and AAFB?
- 6) What is the health of the reef with respect to COTS outbreaks in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and AAFB?
- 7) What is the best method to physically remove COTS during outbreaks?

The locations for the performance of this Agreement are located on Department of Navy submerged lands within Apra Harbor, Orote ERA, Haputo ERA, and Naval Support Activity Andersen Air Force Base. These sites are located on Department of Defense (DoD) lands within the Joint Region Marianas (JRM) area of responsibility, which include the installations of Navy Base Guam, NCTS, and AAFB (Figures 1, 2, and 3).



Figure 1. Satellite map of Navy submerged lands in Apra Harbor and Orote Peninsula ERA, Navy Base Guam.

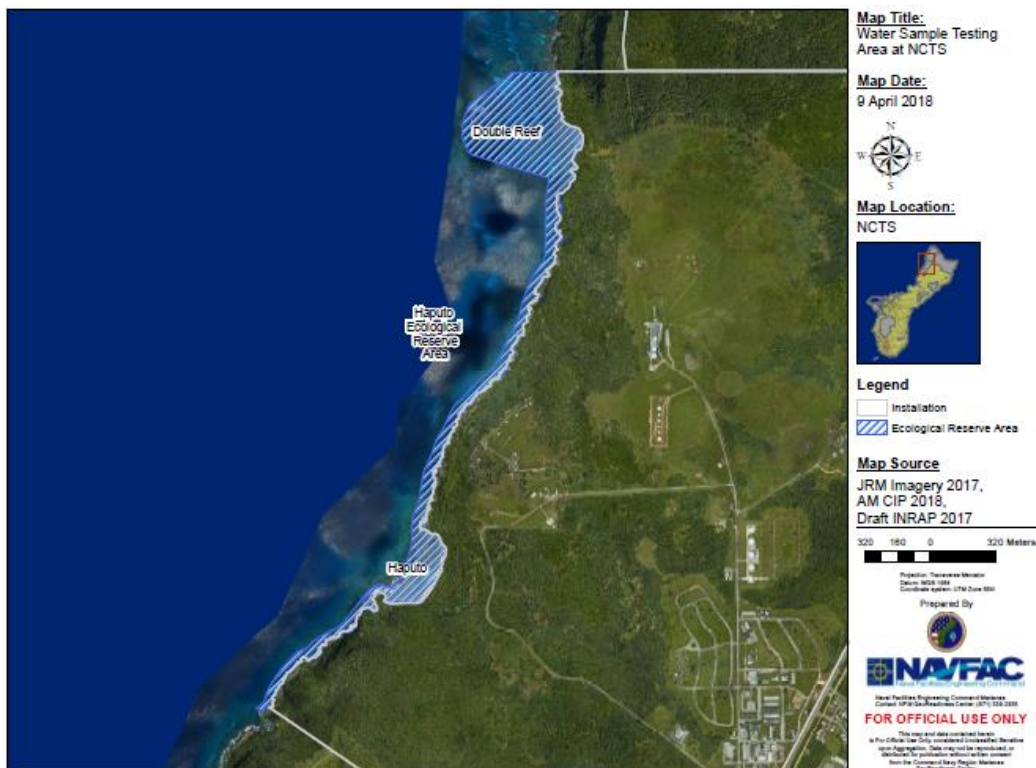


Figure 2. Satellite map of Navy submerged lands in Haputo ERA, Navy Base Guam.



Figure 3. Satellite map of Navy submerged lands in AAFB, Guam.

Note: Please see the **Statement of Work**, provided as a separate document, for a full description of the project and its requirements.

Proposals should address:

This Agreement requires the Recipient to develop and implement five (5) technical requirements and five (5) tasks during the performance period, as follows:

Technical Requirements:

1. Develop and submit a work plan pursuant to task 4 (below) for the performance of the Scope of Work (SOW) that will accomplish technical requirements 1, 2, 3, 4, and 5 (below); and
2. Conduct a training workshop for contractor and Government personnel for the identification and removal of COTS; and
3. Conduct coral surveys in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and Naval Support Activity Andersen Air Force Base to document coral bleaching, paling or scarring and determine the health of the reef using an established monitoring program; and
4. Conduct COTS surveys in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and Naval Support Activity Andersen Air Force Base to document abundance/distribution and removal of COTS if necessary; and

5. Write, and submit draft and final project report on coral bleaching and COTS monitoring in Apra Harbor, Orote Peninsula ERA, Haputo ERA, and Naval support Activity Andersen Air Force Base (see Attachment B).

Tasks:

Task 1: Project Planning - The Recipient shall participate in a kick-off meeting prior to the start of work to become acquainted with the various parties involved with the project; to discuss the statement of the proposed work including scheduling, coordination; and to define channels of communication and points of contact.

1. The Recipient will be responsible for presenting a plan of action and milestones (POAM) for timely completion of the work. The POAM will be provided to the CATR at least 1 week prior to the kick-off meeting. CATR will comment on POAM and Recipient will incorporate comments before POAM is finalized.
2. The Recipient shall ask any questions related to the successful completion of the work.
3. The Recipient shall be responsible for documenting the discussions (meeting minutes). Meeting minutes shall be provided to the CATR within 5 days after the kick-off meeting.

The kickoff meeting will be held on Guam (location to be determined) or via conference call.

The Recipient shall provide project status and schedule updates, and coordinate field work and deliverables throughout the duration of the Agreement.

Task 2: Conduct Training Workshop for Contractor and Government Personnel - Provide COTS training workshops for contractor and Government (e.g., NBG Dive Locker divers, JRM/NBG Natural Resource Marine Specialists, and Guam COTS Response Team partners) lead by a COTS expert. This will involve organizing and hosting one classroom and one in-water skills COTS training workshop to include overview of COTS ecology and history on Guam, pre-culling surveillance methods, culling guidelines, and post-culling monitoring techniques.

Task 3: Conduct Surveys to Monitor Coral Bleaching, COTS Outbreaks, and Removal of COTS – Utilize an existing coral bleaching and COTS monitoring protocol to detect coral stressors and COTS/marine nuisance species control in Apra Harbor, Orote and Haputo ERA, AAFB. Conduct coral bleaching surveys and COTS/marine nuisance species surveys and eradication. The surveys shall follow the methods listed within the Guam

Coral Bleaching Response Plan (Hoot & Burdick 2017) and the Guam Crown-of-Thorns Outbreak Response Plan (Hoot 2017). Conduct COTS removal in Apra Harbor, Orote and Haputo ERA, AAFB.

Task 4: Project Management - The Recipient shall provide project oversight and coordination for all technical requirements and tasks. This will include: maintaining budget coordination, tracking, and reporting, as appropriate.

1. The recipient is responsible for providing monthly updates to the CATR and the updates shall include implementation accomplishments, budget drawdowns, technical aspects (e.g., coral bleaching and COTS monitoring progress, current status of the injector assemblies, analyses, etc.), any project coordination difficulties (e.g., base security staff), safety concerns, adaptive management proposals or actions, agreement's quality control and assurance activities and their successful implementation of the APP, AHA and HACCP (see below).
2. The CATR will inspect all documents that recipient is required to provide, inspect all relevant equipment, interview Recipient's staff to determine which actions were taken, and accompany Recipient during field operations to provide adequate Government oversight.

Task 5: Draft and Final Project Reports - Forty-five (45) days before the end of performance period, the Recipient will submit a draft final project report. Refer to Section J for specific submittal requirements, including content, format, and delivery.

Required Qualifications of the Project Team shall include:

The Recipient shall assign an appropriate number of project managers (PMs) for this Agreement, who shall be responsible for overseeing on a day-to-day basis necessary activities of the project. The PM's oversight of the project includes monitoring and controlling project costs, assigning personnel consistent with the Agreements requirements, understanding and assuring compliance with applicable Federal, DoD, and Navy natural resource and environmental policies and regulations and their state counterparts, and other applicable or relevant and appropriate requirements, shall be the first in line of control in ensuring that information/data obtained for the project are of high quality and accuracy, and shall be responsible in keeping quality control and assurance inspections activities and record keeping of these inspections.

Due to the complexity of the work, the Recipient shall provide the following key personnel with the following minimum qualifications:

- A. **Project Manager (PM):** The PM shall meet the following requirements:
- Possess at least a bachelor's degree in biology, oceanography, marine biology or related field
 - At least two (2) years of professional work experience in Micronesia managing marine natural resources

- At least two (2) years of professional work experience in Micronesia conducting marine natural resources monitoring
- B. **COTS Biologist/Expert:** The COTS biologist/expert shall meet the following requirements:
- Possess at least a PhD in biology, oceanography, marine biology, or related field
 - At least two (2) years of professional work experience in Micronesia monitoring COTS outbreaks and removal of COTS
 - At least two (2) year of experience in conducting coral or marine resources surveys in Micronesia
- C. **GIS Data Technician/Field Biologist:** The GIS data technician/field biologist shall meet the following requirements:
- Possess at least a bachelor's degree in biology, oceanography, marine biology or related field
 - At least two (2) years of professional work experience in Micronesia managing GIS data
 - At least two (2) years of professional work experience in Micronesia conducting marine natural resources monitoring

Department of Navy Responsibilities

In reference to this Agreement, substantial involvement is required between the Navy and Recipient during the period of performance based on the requirements prescribed in the scope of work. The anticipated involvement between the CATR and PM is deemed appropriate to carry out a public purpose of support to include a direct benefit to the Government. The Government's involvement includes:

- a. Advising Recipient, as needed, in preparing scientific articles destined for peer-reviewed journals;
- b. Providing relevant maps and information pertaining to study sites, to include data and literature generated from previous or similar projects;
- c. Assisting with field activities and coordination with installation security to ensure safety procedures are met;
- d. Facilitating access to Navy lands and facilitate any required passes;
- e. Assisting with plan of action and milestones (POAM) development;
- f. Accompanying Recipient during survey operations as often as necessary, to ensure quality control, efficacy of actions;
- g. Conducting meetings with Recipient to determine if milestones are met.

Period of Performance

The period of performance will depend upon the individual proposals received, but the Government anticipates an initial period of performance for the Agreement to be eighteen (18) months starting from the date of award. After completion of the initial period of performance, the total performance period can include two (2) option periods of twelve

(12) months each dependent upon the availability of funds and the unilateral election of the Government to exercise an option.

Materials Requested for Statement of Interest/Qualifications: Please provide the following via e-mail attachment to: thelman.fontenot@fe.navy.mil (3-6 pages, single-spaced 12 pt. font).

1. Name, Organization and Contact Information
2. Statement of Qualifications (including):
 - Curriculum vitae of Project Manager, COTS Biologist/Expert, and GIS Data Technician/Field Biologist
 - Relevant past projects and clients with brief descriptions of these projects
 - Staff, faculty or students available to work on this project and their areas of expertise.
3. Project proposal to include timelines, roles and responsibilities of personnel, specific tasks to be conducted, and deliverables.
4. Any brief description of capabilities to successfully complete the project you may wish to add (e.g., equipment, laboratory facilities, field facilities, etc.).
5. A proposed detailed budget of the costs to implement the proposed project, refer to Microsoft Excel attachment for guidance.

Review of Statements Received: Statements will be evaluated based on the Principal Investigator, Co-Principal Investigator, and Field/Lab Technicians Project Manager, COTS Biologist/Expert, and GIS Data Technician/Field Biologist specific experience and capabilities in areas related to the project requirements.

Factor 1: Credentials of the Project Manager, COTS Biologist/Expert, and GIS Data Technician/Field Biologist – The Offeror shall identify the Project Manager, COTS Biologist/Expert, and GIS Data Technician/Field Biologist for this project, stating their qualifications, experience with this type of project, professional registration and certificates, possession of research permits, and publications.

Factor 2: Scientific Innovative Approach – The Recipient shall develop a Statement of Interest to manage the total work effort and assure fully adequate and timely completion of services required under this Agreement. Included in this function shall be a full range of management duties including, but not limited to, planning, scheduling, inventory, analysis, quality control, and for meeting professional industry standards for coral bleaching and COTS monitoring sampling design; and data analyses.

Factor 3: Reasonableness of Cost – After technical evaluation of the Statements of Interest, the offers shall be analyzed to determine whether they are materially/mathematically balanced with respect to prices or separately priced items, and for fair and reasonable pricing. Evaluation will include an analysis to determine the

Offeror's comprehension of the requirements of the Request for Statements of Interest as well as to assess the validity of the Offeror's approach.

RELATIVE IMPORTANCE OF EVALUATION FACTORS – Factor 1, Credentials of the Project Manager, COTS Biologist/Expert, and GIS Data Technician/Field Biologist and Factor 2, Scientific Innovative Approach combined are significantly more important than Factor 3, Reasonableness of Cost.

Please send responses or direct questions to: Thelman Fontenot, Contract Specialist NAVFAC Marianas Tel: (671) 349-4119, E-mail: thelman.fontenot@fe.navy.mil and Claire Pangelinan, Cooperative Agreement Administrator, Email: claire.pangelinan@fe.navy.mil.

Timeline for Review of Statements of Interest: DON intends to use fiscal year 2021 funds for this project. In order to be considered, Statements of Interest shall be submitted for no later than 0900 Chamorro standard time (local Guam time) on 26 March 2021.