

**REQUEST FOR STATEMENTS OF INTEREST WITHIN THE
COOPERATIVE ECOSYSTEM STUDIES UNIT
INTEREST #N62473-16-2-0012
PROJECT TO BE INITIATED IN 2016**

Project Title: Passive Acoustic Monitoring of Marine Mammals in the Southern California Range Complex

Responses to this Request for Statements of Interest (RSOI) will address measures included in The U.S. Navy conducts training and testing activities in the study areas described in the Hawaii-Southern California Training and Testing (HSTT) Environmental Impact Statement (EIS). To authorize these actions, the National Marine Fisheries Service (NMFS) under the Marine Mammal Protection Act (MMPA) issued a 5-year Final Rule Letter of Authorization (LOA) to Commander, U.S. Pacific Fleet and Commander. The U.S. Navy is required by the LOAs to implement marine species monitoring. Approximately \$570,000.00 is expected to be available to support this project.

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:

The Navy's Southern California (SOCAL) Range Complex is located in the HSTT Study Area in the Southern California Bight. This region has a highly productive marine ecosystem owing to the southward flowing California Current, and associated coastal current system. A diverse array of marine mammals is found here, including baleen whales, beaked whales and other toothed whales and pinnipeds. In January 2009, the Navy initiated a passive acoustic monitoring effort within the SOCAL Range Complex to characterize the vocalizations of marine mammal species present in the area, to determine their seasonal presence patterns, and to evaluate the potential for impact from naval operations. Continued monitoring efforts are required to support marine mammal studies in the offshore waters of the SOCAL Range Complex portion of the HSTT Study Area, in compliance with the most recent LOA.

Brief Description of the Anticipated Work:

The Department of the Navy (DoN) is seeking statements of interest that address the Navy's passive acoustic monitoring requirements for marine mammals in the SOCAL Range Complex. Generally, the Navy's passive acoustic monitoring requirements include: (1) collect and analyze passive acoustic monitoring data for one year; (2) estimate population density for Cuvier's beaked whales; (3) evaluate the potential impact of sonar on marine mammals; (4) perform shipboard visual and acoustic surveys for marine mammals on California Cooperative Fisheries (CalCOFI)

cruises in the southern California Bight region; and (5) produce a report of each effort. The specific requirements for each task are described below.

1. Collect and Analyze Passive Acoustic Monitoring Data:

- Deployment of High-frequency Acoustic Package (HARPs) sampling at 200 kHz at two sites in and near SOCAL Range Complex (H, N, or P; see Figure 1[enclosure 2]) or similar acoustic recording technology at the same frequency with a battery time of at least one year
- Deployment of two 4-channel HARPs at remaining site to allow 3-D tracking of vocalizing whales or similar acoustic recording technology at the same frequency with a battery time of at least one year
- Analysis include presence of species of interest (blue and fin whales and beaked, presence of Mid-Frequency Active (MFA) sonar, as well as calculations of movement tracks for selected calling animals.

2. Estimate Population Density for Cuvier's Beaked Whales:

Cuvier's beaked whales produce characteristic echolocation sounds during foraging that are consistent across and between ocean basins (Zimmer et al. 2005, Baumann-Pickering et al. 2013). Cuvier's beaked whale typical echolocation sounds sweep up in frequency from 25 to 60 kHz over a 500 μ s duration with a characteristic inter pulse interval of about 0.5 s and a peak frequency near 40 kHz. Beaked whales also produce buzzes in which the individual pulses are closer together in time, of shorter duration and do not sweep up in frequency. These buzzes are produced during the prey approach phase of feeding activity and are of lower source level than the regular echolocation pulses, making them more difficult to detect.

Passive acoustic monitoring can provide temporal and spatial distributions of beaked whales from recorded echolocation sounds over long periods at various locations. In this agreement, the Cooperator shall evaluate Cuvier's beaked whale echolocation clicks from recordings at multiple sites within the Southern California Bight from data collected between 2006 and 2015 to provide a better understanding of beaked whale density and distribution. The Cooperator shall provide density estimates over temporal and spatial scales based on group and click counting techniques.

3. Evaluate Impact of Sonar on Marine Mammals:

The potential for anthropogenic sound to disrupt the normal activities of marine mammals is an issue of concern to the Navy, particularly with regard to MFA sonar. The Cooperator shall conduct a detailed analysis on the presence of anthropogenic sources of sound for the study of sonar impact on blue whales and beaked whales. The Cooperator shall also develop methods to compare and statistically analyze these data to presence of these species' calls to investigate the potential impacts of sonar and other anthropogenic activities on calling animals.

4. Participate in CalCOFI Cruises:

CalCOFI cruises provide detailed, long-term surveys for marine mammals in the Southern California Bight. The Cooperator shall provide personnel and maintain visual and acoustic surveys for marine mammals during four upcoming CalCOFI cruises (fall 2016, winter 2016, spring 2017 and summer 2017). The Cooperator shall collaborate with the Southwest Fisheries Science Center on the development of habitat models for Southern California.

5. Reporting:

Tasks 1-4 shall be summarized in individual reports as detailed in the statement of work.

Please see enclosure 1 for full scope of work and enclosure 2 for applicable terms and conditions.

Period of Performance:

The period of performance covered by this agreement is 18 months upon award. The exact period of work performance will be determined upon award, and will be subject to the Anti-Deficiency Act (31 U.S.C. § 1341). The end date is the anticipated date that the Final Report is accepted by the Government.

Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to: Reagan Pablo (reagan.s.pablo@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.

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, completeness of responses, follow directions, comply with restrictions and provide quality control on their submittals. All page limits refer to 12 point font and single spaced one-sided pages.

Factor 1 - Credentials of Key Personnel

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

- i. A PhD in Physics or related science.

ii. Experience and knowledge of underwater acoustics in relation to marine mammal impacts, and populations, as demonstrated by at least 10 years of previous work or research experience.

iii. Specific knowledge of underwater sounds produced by marine mammals along the U.S. West Coast, as demonstrated by at least 10 years of previous work or research experience.

B. Research Associates: The person(s) shall have, or have immediate access to personnel that have, at the minimum:

i. A PhD in Physics, Oceanography, Physiology, or related science.

ii. At least 3 years of experience with passive acoustic monitoring of marine mammals in the U.S. West Coast. Must have the ability to identify U.S. West Coast marine mammals with acoustics, determine densities of marine mammals with acoustics, evaluate impacts of noise to marine mammals.

With the Research & Related Senior/Key Personnel Form, the Applicant shall provide type written resumes, not to exceed 3 pages, single spaced with 12pt font for the Principal Investigator and Research Associates. Resumes must state qualifications, experience with this type of project, professional registration and certificates.

Factor 2 – Scientific Approach

Not to exceed 3 pages, the Offeror shall develop an outline for their approach to addressing the anticipated work stated above. The Offeror may only propose additional geographic and environmental variables to consider, not mentioned in the RSOI, but pertinent to the study issues. The Offeror shall be evaluated as to the soundness of the overall approach and use of any innovative techniques to accomplish project objectives.

Factor 3 - Reasonableness of Cost

After technical evaluation of the proposal, 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. A clear cost breakdown of work elements to be accomplished detailing quantities for the various work items, unit, unit prices and extended prices will be required and will be evaluated. Evaluation will include an analysis to determine the Offeror's comprehension of the requirements of the proposed agreement as well as to assess the validity of the Offeror's approach. Please be sure to provide a proposal for the optional work years as listed within the statement of work.

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

***Form: RESEARCH AND RELATED BUDGET**

Complete the Research and Related Budget form 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 July 06, 2016 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 July 06, 2016 2:00 PM local standard time is considered “late” and may not be considered.

Please send electronic responses and questions to:

Mr. Reagan Pablo, Contract Specialist Environmental Acquisition Core
Reagan.s.pablo@navy.mil

Point of Contact Information:

Mr. Reagan Pablo, Contract Specialist Environmental Acquisition Core
Naval Facilities Engineering Command Southwest
1220 Pacific Highway
San Diego, CA 92132
619.532.2090