DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT, CORPS OF ENGINEERS
P.O. BOX 17300
FORT WORTH, TX 76102-0300

July 9, 2024

REQUEST FOR STATEMENT OF INTEREST
W9126G-22-2-SOI-3586

Applicants must be a member in one of the following Cooperative Ecosystem Studies Units Regions: **Hawaii Pacific Islands / Californian / Pacific Northwest CESU Regions**

Project Title: Comprehensive Stranding Investigations for High Priority Marine Mammal Species in the Hawaiian and Mariana Archipelagos, Navy US Pacific Fleet, located at Pearl Harbor, HI.

A cooperative agreement is being offerred ONLY to members of the Cooperative Ecosystem Studies Units (CESU) Program Region(s) identified above. Award will be made upon mutual agreement and acceptance of the terms and conditions contained in the request for proposal and the of the recipient's CESU Master Agreement. Note the established CESU Program indirect rate is 17.5%.

Responses to this Request for Statements of Interest will be used to identify potential organizations for this project. Approximately **$250,335.00** is expected to be available to support this project for the **Base period**. Additional funding may be available to the successful recipient for optional tasks and/or follow on work in subsequent years.

NOTE: This project will be awarded under the authority of 10 USC 670c-1, **Sikes Act**: For projects for the implementation and enforcement of integrated natural resources management plans, priority shall be given to award to Federal and State agencies having responsibility for the conservation or management of fish or wildlife.

Period of Performance: The Base period of this agreement will extend 12 months from date of award. There may be up to four 12-month follow-on periods based on availability of funding.

Description of Anticipated Work: See attached Statement of Objectives

NOTE: At this time we are only requesting that you demonstrate available qualifications and capabaility for performing similar or same type of work by submitting a Statement of Interest. A full proposal and budget are NOT requested at this time.

Preparation of your Statement of Interest: Provide the following (Maximum length: 2 pages, single-spaced, 12 pt. font):

1. Name, Organization, Cage Code, Unique Entity ID, and Contact Information (Email)
2. Brief Statement of Qualifications (including):

a. Biographical sketch of the Principal Investigator, to include specific experience and capabilities in areas related to this project's requirements

b. Relevant past projects and clients with brief descriptions of these projects

c. Staff, faculty or students available to work on this project and their areas of expertise

d. Brief description of other capabilities to successfully complete the project: (e.g. equipment, laboratory facilities, greenhouse facilities, field facilities, etc.)

Submission of Your Statement of Interest

1. Statements of Interest are due **NLT 5:00 P.M. CDT**, on **Thursday August 8, 2024**.

2. Submit your Statement of Interest via e-mail attachments or direct questions to:
   Nicholas A. Aprea
   Grants Specialist
   USACE, Fort Worth District
   Email: Nicholas.a.aprea@usace.army.mil
   Kathy S. Mitchell
   Project Manager
   USACE, Fort Worth District
   Email: kathy.s.mitchell@usace.army.mil

Review of Statements Received: All statements of interest received from a member of the CESU Region(s) identified above will be evaluated by a board comprised of one or more people at the receiving installation or activity, who will determine which statement(s) best meet the program objectives: offer the most highly qualified Principal Investigator, have the most relevant experience and the highest capability to successfully meet the program objectives. Submitters whose statements are determined to best meet the program objectives will be invited to submit a full proposal.

Timeline for Review of Statements of Interest: RSOI's are required to be posted on www.Grants.gov for 30 days prior to the Government making a decision and requesting full proposals.

Thank you for your interest in our Cooperative Agreements Program.

Paige E. Poorman
PAIGE E. POORMAN
Grants Officer

Attachment: Statement of Objectives

STATEMENT OF OBJECTIVES

for

COMPREHENSIVE STRANDING INVESTIGATIONS FOR HIGH PRIORITY MARINE MAMMAL SPECIES IN THE HAWAIIAN AND MARIANA ARCHIPELAGOS

for

US PACIFIC FLEET ENVIRONMENTAL READINESS DIVISION, PEARL HARBOR, HI

1.0 PURPOSE

1.1 The Commander, U.S. Pacific Fleet (PACFLT) Environmental Readiness Division environmental program ensures military mission activities are conducted in compliance with all applicable environmental laws, regulations and policies. Article I B of the master agreement states the objectives of the CESU are to: provide research, technical assistance and education to federal land management, environmental and research agencies and their potential partners; develop a program of research, technical assistance and education that involves the biological, physical, social sciences needed to address resource issues and interdisciplinary problem-solving at multiple scales and in an ecosystem context at the local, regional, and national level; and place special emphasis on the working collaboration among federal agencies and universities and their related partner institutions.

1.2 This work requires that the performer work independently at their facility in support of mutual objectives. This work shall involve labor and travel, as required to perform the work, throughout the Hawaiian and Mariana Archipelagos.

1.3 This project is in support of the Marine Mammal Protection Act and the Endangered Species Act authorizations for training and testing in the Mariana and Hawaiian Islands.

2.0 AUTHORITY

2.1 This cooperative agreement will be awarded using the following authority:

16 U.S.C. § 670(c) (1) – (SIKES ACT)

In agreement with the above stated goals, the recipient agrees to provide the necessary personnel, equipment, and materials required to implement, activities to support PACFLTs commitment toward environmental stewardship to manage natural and cultural resources in a responsible way that has the least impact on military missions and is beneficial to the region. In addition, the activities performed by the recipient must be completed in a manner conducive to guidelines outlined in the Endangered Species Act (16 USC 1531 et seq.), the Migratory Bird Treaty Act (16 USC 1361 et seq.),

National Historic Preservation Act (54 U.S.C. 300101 et seq.), Native American Graves Protection and Repatriation Act (25 U.S.C. 3001 et seq.), the Archaeological Resources Protection Act (16 U.S.C. 470 et seq.), the National Environmental Policy Act (42 U.S.C. 4321 et seq.), applicable implementing regulations, Army Regulations 200-1, and any other applicable regulatory guidelines. In general, cooperative agreements must carry out a public purpose of support or stimulation, however under the authority of the Sikes Act (16 USC 670c-1 (c) (2)), notwithstanding chapter 63 of Title 31 (31 U.S.C. § 6301 et seq), a cooperative agreement under this section may be used to acquire property or services for the direct benefit or use of the United States Government.

Examples of carrying out a public purpose may include, but are not limited to, the following:

- Project results are made available to a wide audience (including nonfederal entities)
- Project results/outputs add to the scientific literature/knowledge base, with applicability and utility beyond the scope of the project footprint/study area
- Academic and other nonfederal partner institutions (and their personnel) gain professional experience, increase knowledge, and develop skills and abilities
- Students benefit from direct interaction with federal scientists, program and technical staff, and field unit managers

2.2 In accordance with section *6305 – Using cooperative agreements* of the *Federal Grant and Cooperative Agreements Act of 1977* (31 U.S.C. § 6301 et seq.), substantial involvement is expected between the Department of Defense and the recipient when carrying out the activity contemplated by the cooperative agreement. The DoD agrees to participate at a national level in support of the CESU program as accepted in the Master MOU for the establishment and continuation of the CESU program Article II 1-4 and Article VI 1-7.

The installation further (hence DoD) agrees to provide substantial involvement as directed under the appropriate master agreement to include, but are not limited to, the following:

- PACFLT actively participates and collaborates in carrying out the project plan of work and reviews and approves activities
- PACFLT personnel incur in-kind or direct expenditures in carrying out the activities specified in the project agreement. These in-kind expenditures include:
    - providing staff time to collaborate and work on the project.

3.0

DESCRIPTION OF OBJECTIVES

3.1 SUMMARY

Comprehensive stranding investigations for priority species such as beaked whales, false killer whales and pygmy killer whales as well as secondary priority species such as dwarf and pygmy sperm whales, melon-headed whales, pilot whales and humpback whales are needed by Navy. This critical information is required for environmental

compliance documents, consultations, and public education and outreach. This requires mounting an immediate response to each newly reported stranding event that occurs over the project duration and conducting extensive necropsy examinations, including histopathology, disease surveillance, and tissue sampling in support of numerous research efforts aimed at better understanding Hawaiian and Mariana cetaceans.

A number of pathogens are now known to affect Hawaiian and Mariana cetaceans. Morbillivirus was first identified in a Longman's beaked whale that stranded in Maui in 2010, which is the first report of this virus in any marine mammal from the central Pacific (West et al., 2013). *Cryptococcus gatti* has also been described as cause of death in a Hawaiian spinner dolphin (Rotstein et al., 2010). The first identification of *Brucella* in a Hawaiian cetacean was reported in a rough-toothed dolphin (Chernov, 2010) and other *Brucella* cases including a neonate sperm whale co-infected with morbillivirus have been confirmed (West et al., 2015). Recently, beaked whale circovirus has been detected in 10 cetacean species throughout the Pacific (Clifton et al., 2023). Due to the discovery of a number of diseases that can cause mortality or morbidity in cetaceans, targeted disease testing is needed for high profile stranded species in Hawaiian and Mariana waters and increased diagnostic capability would greatly increase our understanding of health and disease in cetaceans.

3.1.1 Task 1: Respond to strandings, conduct necropsies, and conduct comprehensive stranding investigations when high profile marine mammal species strand during the project duration.

Task 1 will require mounting an immediate response by a highly trained team to each newly reported stranding of high priority species (e.g., beaked whales, false killer whales and pygmy killer whales) as well as secondary priority species (e.g. dwarf and pygmy sperm whales, pilot whales, melon-headed whales and humpback whales) in Hawaii and Mariana archipelagos. Stranding responses involve carcass recovery, conducting extensive necropsy examinations, including histopathology analysis, disease surveillance, and tissue sampling. This task will require a high level of effort specifically for stranding response and coordination logistics such as the organization of air transport for carcasses and samples as well as potential necropsy and sampling direction via virtual meeting platforms outside of normal working hours. Targeted public outreach efforts are also included in this task that involve the preparation of stranding investigative content (development of messaging and obtaining video footage and photographs) for the Navy, media and social media release.

3.1.2 Task 2: Generate summaries to describe the current case status of past strandings of high priority stranding events for consideration of additional laboratory analyses of archived tissues.

Task 2 will involve generating summaries to prioritize cases for targeted laboratory analyses still required in order to complete comprehensive stranding investigations from past strandings of high priority species. Based on health, disease and other laboratory findings obtained to date for each case that will be summarized, a ranked priority list of additional analyses for consideration such as viral pathogen discovery and contaminants testing will be generated for each case and discussed with Navy.

3.1.3 Task 3: Conduct additional laboratory analyses on archived tissues (e.g. viral pathogen discovery and contaminants testing) from prioritized past stranding cases.

Task 3 will involve conducting additional laboratory analyses (e.g. viral pathogen discovery and contaminants testing) in order to complete comprehensive stranding investigations from high priority species. According to budgetary availability, and with the consideration of cost savings associated with bulk versus individual sample analyses, additional laboratory work will be conducted using archived tissues from past stranding events.

3.1.4 Task 4: Conduct additional laboratory analyses beyond initial histopathology and basic disease surveillance for new stranding events occurring over the project duration.

Task 4 will involve conducting additional laboratory analyses (e.g. viral pathogen discovery and/or contaminants testing) for select new stranding cases that occur over the project duration. Prioritized cases will be based on initial health findings obtained from necropsy, histopathology and basic disease surveillance carried out as part of cause of death investigations. Select cases for additional laboratory analyses that will allow for a comprehensive interpretation of the overall investigative findings will be discussed with Navy.

3.1.5 Task 5: Conduct marine debris analysis that includes describing marine debris ingestion in new stranding cases over the project duration and chemical and/or physical analyses from past cases.

Task 5 will involve conducting descriptive marine debris analyses from new marine debris ingestion cases in Pacific Island cetaceans that are identified over the project duration. Chemical and/or physical analyses will be conducted for past stranding cases of marine debris ingestion to develop biomarkers of exposure and/or better understand the impact of microplastics on cetaceans.

3.1.6 Task 6: Generate annual report and extensive case reports and summary findings for strandings when comprehensive stranding investigations are complete.

Task 6 will include generating an annual report, extensive case reports for new strandings of high profile species and for each past stranding event where newly generated laboratory findings become available to contribute to the overall interpretation of findings. Summary reports will also be written for each case that can be shared publicly.

3.2 OPTIONAL TASK A: FECAL ANALYSES IN PACIFIC ISLAND CETACEANS – COLLECTION, VALIDATION AND INTERPRETATION FROM STRANDED ANIMAL FECES

Fecal analyses have the potential to provide a wealth of health data from collections obtained from live cetaceans. For example, fecal hormones can be used to measure physiological response to anthropogenic injury or mortality. Fecal samples also have the potential for screening for the presence of pathogens, prey DNA from feces may inform animal diet and fecal microbiome is another potential indicator of individual cetacean health Informative fecal analyses from live collections as a measure of health can be developed through validation and testing of stranded animal feces.

3.2.1 Task A1: Collect fecal material from all stranded cetaceans.

Collect fecal material from all stranded cetaceans where feces are present in the colon during necropsies. Maintain frozen inventories of both stranded and live animal fecal material, and curate frozen gastrointestinal tracts and fecal sample inventories.

3.2.2 Task A2: Conduct technical validation for fecal health measures such as fecal hormones in targeted cetaceans.

This could involve conducting technical validations for the fecal hormones cortisol, corticosterone, triiodothyronine, progesterone and testosterone in targeted cetaceans using pooled fecal samples from stranded individuals. Expand fecal hormone technical validations to additional cetacean species based on the success of other regional efforts.

3.2.3 Task A3: Measure fecal hormones in archived fecal material for fecal health measures such as stress and reproductive hormones.

This could involve measuring the fecal hormones cortisol, corticosterone, triiodothyronine, progesterone and testosterone in archived fecal material that has been stored and curated from individually stranded animals where technical validations have been completed. This data would be used to provide ranges of anticipated hormone concentrations for each species and provide measurements from stressed individuals (select live stranded animals) for interpretation of fecal hormone concentrations obtained from free-ranging cetaceans.

3.2.4 Task A4: Analyze fecal hormone concentrations.

This could involve analyses of fecal hormone concentrations from fecal material collected and archived from free-ranging cetaceans in Hawaiian and Mariana waters where technical validations have been completed. Interpret findings from free-ranging animals according to fecal hormone data obtained from individually stranded animals of the same species.

4.0 QUALIFICATIONS

The recipient is expected to have the following qualifications and experience: (1) A PhD advanced degree related to biomedical sciences, pathology, physiology, animal sciences or equivalent; (2) a minimum of 15 years of experience conducting necropsies and cause of death investigations for cetaceans in the Pacific Islands region; (3) a minimum of 15 years of research productivity demonstrated by extramural funding support, scientific reports, peer-reviewed publications or equivalent evidence; (4) international recognition for cetacean stranding expertise. Applicant will have access to necropsy and research facilities, and specialized laboratory equipment to perform the tasks outlined above; (5) possess the necessary federal and state permits prior to award to execute the above tasks.

5.0 GOVERNMENT FURNISHED MATERIALS OR PROPERTY

5.1 Physical Data: NA

5.2 Facility: NA

5.3 Equipment: NA

Government furnished materials or property is governed by 2 C.F.R. Part 200.312 which states that a) Title to federally owned property remains vested in the Federal government. The non-Federal entity must submit annually an inventory listing of federally owned property in its custody to the Federal awarding agency. Upon completion of the Federal award or when the property is no longer needed, the non-Federal entity must return the property to the Federal awarding agency for further Federal agency utilization.

6.0 BASE TASKS and OPTIONAL TASK

This project consists of 6 basic tasks and will have a base period and 4 follow-on periods that are anticipated based on project conditions, project needs and availability of funds.

This project will have one Optional Task A that includes 4 tasks and maybe awarded once during each period of performance.

7.0 PERIOD OF PERFORMANCE

7.1 Base Effort – The base effort will begin on the date of award and extend for 12 months.

7.2 Follow-On Periods – Each of the follow-on periods will begin at the end of previous period of performance. For example, the first follow-on period effort will begin at the end of the base period and extend for 12 months.

7.3 Optional Task A – The effort for Optional Task A will begin on the date of award and extend for 12 months and maybe awarded once during each period of performance.

8.0 COORDINATION

- USACE Fort Worth District POC
  Kathy Mitchell
  817 886-1709
  kathy.s.mitchell@usace.army.mil

- Designated Navy Representatives. Collectively, the representatives specified in this section are referred to as "Designated Navy Representatives." All work done under Section 3.0 of this agreement is to be coordinated with the Commander Pacific Fleet Conservation Program Managers, Kimberly O'Connor (808-864-5938, kimberly.a.oconnor16.civ@us.navy.mil) and Chip Johnson, (808-478-7341), harry.d.johnson12.civ@us.navy.mil). All reports and deliverables are to be provided to the Designated Navy Representatives.

9.0 Post Award & Invoice Processes

9.1. Payment Requests and Progress Reports (Invoice Package) - Submit Payment Request and additional required documents to: swf-cesu-invoice@usace.army.mil. Carbon Copy the

assigned USACE Project Manager as well as your organization's point of contacts (POCs) for the additional required documents and for delinquent accounts.

9.1.1. Frequency: Quarterly plus 30-day grace period (except for the final invoice package noted below). If the coverage dates are not quarterly or preapproved by the PM (or the first/last submittal), the invoice package will be **rejected**.

Quarters	**Invoice pkgs due No Later Than (NLT):**
Q1: Oct-Dec	Q1: 31 Jan
Q2: Jan-Mar	Q2: 30 Apr
Q3: Apr-Jun	Q3: 30 Jul
Q4: Jul-Sep	Q4: 31 Oct

9.1.2. Payment Requests **must** be submitted on form SF270 Request for Advance or Reimbursement **with the accompanying Standard Form-Performance Progress Report (SF-PPR), otherwise the SF270 will be rejected.**

9.1.3. SF270 Request for Advance or Reimbursement

9.1.3.1 Block 9, Recipient Organization**. For successful set up of Electronic Transfer of Funds (EFT), the Recipient's name and address shall reflect the exact name and physical address that appears in the System for Award Management (SAM),** https://sam.gov/.

9.1.3.2. Blocks 11, (a), (b), & (c) are for the description of funds. Preferred description is: CLIN/POP Type, POP start and end dates, amount awarded (see example below); at minimum include the CLIN. If the description or the minimum CLIN information is missing, the **SF270 and SF-PPR will be rejected**.

Example:
CLIN 0001 / Base
22SEP23 – 21SEP24
$100,000.00

Funding must be separated as specified on the Award document. Sub-CLINs that specify "*for funding only*" (e.g., numbered 000101, 000102, etc.) may be rolled into the primary CLIN (e.g., 0001) unless otherwise instructed. All others required PM approval.

The SF270 may have multiple pages. An SF270 in Excel format may be requested at: swf-cesu-invoice@usace.army.mil**,** however, **must be submitted in pdf format otherwise will be rejected.**

9.1.4. SF-PPR Standard Form-Performance Progress Report : The Recipient shall tailor the SF-PPR to include, at minimum, the following information:

- Separate details by CLIN as applicable
- Achievements (must detail work during quarter associated with the invoice)
- Percent Completion
- Project Status
- Problems encountered and impact of activities and personnel on schedule.
- Anticipated work in next reporting period.

If the SF-PPR is incomplete, the SF-PPR and SF270 will be rejected.

A tailored SF-PPR form may be requested at: swf-cesu-invoice@usace.army.mil.

9.2. The **Final** invoice package is due no later than 90 days from final (funded/exercised) POP end date and must include the following documents: If any of the required information below is missing, the final invoice package will be **rejected**.

Final SF270
SF-PPR
Final SF425
DD882
SF428 plus attachment B (C&S if applicable)
SF298
Final Report

Forms may be requested from the district office at swf-cesu-invoice@usace.army.mil or found at: https://www.grants.gov/forms.

9.3 Draft Annual Report

All work performed under this agreement will be summarized in a draft annual report submitted electronically in Microsoft Word format not later than 2 January 2025 (for Option Periods 1, 2, 3, and 4, the draft reports will be submitted in 2026, 2027, 2028, and 2029, respectively). The annual report will cover the previous calendar year. The report will summarize all work conducted during the reporting period, describe methods used in data collection and task implementation, describe methods used to analyze data, present results of task implementation and a discussion of the significance. A template for will be provided by PACFLT.

9.4 Final Annual Report

The Navy will review and comment on the draft annual report and the final annual report is expected to be submitted no later than 31 February 2025 (for Option Periods 1, 2, 3, and 4, the final annual report will be submitted in 2026, 2027, 2028, and 2029, respectively). The final report will be delivered to the Navy Representatives and USACE POC in MS Word and PDF formats.

9.5 Annual Marine Species Monitoring presentations: as scheduled by Navy. At least one oral presentation will be given at the Marine Species Monitoring Annual Review meeting. A presentation template (e.g., Microsoft PowerPoint) will be provided. Travel funding for the Monitoring Annual Review meeting will be covered by the Navy separately from this agreement.

10.0 This cooperative agreement may be administered through a CESU only upon mutual agreement and official authorization by both parties of the acceptance of the application of the CESU Network IDC rate (17.5%).

Any resulting cooperative agreement will be subject to and recipient/cooperator shall comply with 2 CFR 200.313 “Equipment”, 200.314 “Supplies”, and 200.315 “Intangible Property” which includes use of research data.

11.0 REFERENCES

Bachman, M., Keller, J., West, K.L. and B.A. Jensen. 2014. Persistent organic pollutant concentrations in blubber of 16 species of cetaceans stranded in the Pacific Islands from 1997 through 2011. *Science of the Total Environment.* 488-489:115-123.

Bachman, M., Foltz, K., Keller, J., West, K.L. and B.A. Jensen. 2015. Using cytochrome p4501A1 expression in liver and blubber to understand effects of persistent organic pollutant exposure in stranded Pacific Island cetaceans. *Environmental Toxicology and Chemistry*. 34(9):1989-1995.

Barbieri, M., Littnan, D.L., West, K.L. and A. Amlin. 2017. *Toxoplasma gondii* infections in Hawaii's marine mammals. Hawaii Conservation Conference, July 2017, Abstracts.

Bradford A. and E. Oleson. 2017. False killer whale mark-recapture estimates. Pacific Scientific Review Group Meeting. Honolulu, February 13-15.

Chernov, A. 2010. Identification of *Brucella ceti* in a Hawaiian Cetacean. M.S. Marine Science. Hawaii Pacific University. Master's Thesis.

Clifton, C. W., Silva-Krott, I., Marsik, M. G., and West, K. L., 2023. Targeted surveillance detected novel beaked whale circovirus in ten new host cetacean species across the Pacific basin. Frontiers, 9, https://doi.org/10.3389/fmars.2022.945289

Hansen, A.M.K., Bryan, C.E., West, K.L. and B.A. Jensen. 2016. Trace element concentrations in liver of 16 species of cetaceans stranded on Pacific Islands from 1997 through 2013. *Archives of Environmental Contamination and Toxicology*. 70(1): 75-95. doi: 10.1007/s00244-015-0204-1.

Kurtz, A., Reiner, J., West, K. and B. Jensen. Perflorinated alkyl acids in Hawaiian cetaceans and potential biomarkers of effect: Peroxisome proliferator-activated receptor alpha and cytochrome P450 4A. *Environmental Science and Technology*. Submitted.

Landrau-Giovannetti, N., Subramaniam, K., Fei Fan Ng, T., West K.L. and T. B. Waltzek. 2017. Characterization of a novel circovirus from a stranded Longman's beaked whale (*Indopacetus pacificus*). International Association for Aquatic Animal Medicine 48th Annual Conference Proceedings. Cancun, Mexico.

Rotstein, D., West, K.L., Levine, G., Lockhart, S., Raverty, S., Morshed, M. and T. Rowles. 2010. *Cryptococcus gattii* VG1 in a spinner dolphin (*Stenella longirostris*) from Hawaii. *Journal of Zoo and Wildlife Medicine*. 41:181-183.

West, K.L., Levine, G.A., Jacob, J., Jensen, B.A., Sanchez, S., Colegrove, K. and D. Rotstein. 2015. Co-infection and vertical transmission of *Brucella* and morbillivirus in a neonatal sperm whale. *Journal of Wildlife Diseases.* 51(1):227-232.

West, K.L., Sanchez, S. Rotstein, D., Robertson, K.M., Dennison, S., Levine, G., Davis, N., Schofield, T.D., Potter, C.W. and B.A. Jensen. 2013. A Longman's beaked whale (*Indopacetus pacificus*) strands in Maui, Hawaii with first case of morbillivirus in the Central Pacific. *Marine Mammal Science.* 29(4):767-776.