REQUEST FOR STATEMENTS OF INTEREST
NUMBER N40192-25-2-8011
PROJECT TO BE INITIATED IN FISCAL YEAR 2025

Project Title: *EX-SITU* CONSERVATION OF *CYCAS MICRONESICA* SOURCED FROM DOD LANDS, JOINT REGION MARIANAS AREA OF RESPONSIBILITY

Responses to this Request for Statements of Interest will be used to identify potential projects to be funded by the Department of the Navy (DON) in support of propagating and managing *Cycas micronesica* sourced from U.S. Navy-administered lands within Joint Region Marianas (JRM) Area of Responsibility (AOR).

Approximately $308,784 expected to be available to support this project (contingent upon availability of funds). The 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.

Competition: It is the Government's intent to use a Cooperative Agreement to award this requirement and it will be solicited via the South Florida and Caribbean CESU to any potential Recipient who qualifies under the DoDGARS 32 (Institutions of Higher Education, Hospitals, and Non-Profit Organizations).

Background: The legislative purposes of the Sikes Act (P.L. 86-797, as amended, 16 USC§ 670), include the requirement that the Secretary of each military department manage the natural resources of each military installation under their jurisdiction "so as to provide multipurpose uses of those resources." Compliance with this legal mandate for stewardship of natural resources can be truly accomplished only through a multi-disciplinary approach in assembling the natural resources professionals and projects essential to the well-being of the natural resources and support of the military mission.

Cycas micronesica, or the Micronesian cycad (Chamorro name: Fadang), is an endemic plant found on the islands of Guam, Rota, Palau and Yap. It was the dominant plant and the most abundant 'tree' in Guam's forests in 2000. The invasion of the cycad aulacaspis scale (CAS) *Aulacaspis yasumatsui* in 2003 and the butterfly *Luthrodes pandava* (formerly known as *Chilades pandava*) in 2005 initiated an epidemic mortality of plant populations such that *C. micronesica* was Red-listed by the International Union for Conservation of Nature as endangered in 2006 and listed as threatened under the United States (US) Endangered Species Act by the US Fish & Wildlife Service (USFWS) in 2015.

Anticipating potential extirpation of the species on Guam, in 2005 ~1,000 plants were propagated and outplanted on the Tinian Military Lease Area (MLA) to provide an assurance

population secure from the CAS threat. Germplasm was sourced from many populations across Guam to conserve the full range of genetic diversity. Unfortunately, in 2019, CAS was discovered within the Tinian MLA cycad population. Treatment of infected plants began, but due to travel restrictions during the COVID-19 pandemic and other management challenges, mortality on Tinian MLA was similar to that experienced on Guam. The population trend has stabilized but fewer than 200 cycads remain on Tinian MLA. The range and importance of genetic diversity conserved in remaining Tinian cycads is unknown.

Currently, major *in-situ* threats to *C. micronesica* survival include:

1. Chronic herbivory by CAS and the butterfly *Luthrodes pandava* (formerly known as *Chilades pandava*).
2. Loss of resistance to typhoon stress due to long-term scale infestation on individual plants.
3. Added damage by the leafminer *Erechthias* sp. and the stem borer *Dihammus marianarum*.
4. Secondary damage to trees, seedlings, and seeds on the forest floor by feral pigs and Philippine deer.
5. Loss of seed production due to long-term effects of CAS pressure.
6. Lack of recruitment and complete loss of seedlings and juvenile plants from the population.
7. Competition by exotic/invasive plant species.

Despite these threats, *C. micronesica* has persisted on Guam and is still relatively common on DoD lands, resulting in conflicts with military mission goals. Currently available management tools such as outplanting, transplanting, and weed/pest control are costly and do not improve the long-term status of *in-situ* populations on Guam DoD lands in the face of the ongoing CAS threat. To reduce conflicts with the military mission, a long-term conservation strategy to address species recovery is urgently needed. This strategy includes developing and implementing biocontrol tools for mitigating the CAS threat. While resource partners are working to develop an effective CAS biocontrol program, it will be many years before benefits to *in-situ* Guam cycad populations are realized. Meanwhile, cycad mortality without recruitment into Guam populations continues to erode species genetic diversity, putting the long-term survival and recovery potential of the species at risk. An *ex-situ* conservation strategy is needed to conserve genetic diversity that can be reintroduced to Guam once effective CAS biocontrol is achieved

Brief Description of Anticipated Work:

The DON is seeking a statement of interest from interested applicants that address *ex-situ* conservation of *Cycas micronesica* sourced from JRM AOR lands.

Proposals should address the following technical requirements and tasks (see Statement of Work; SOW):

i. Develop and submit a Work Plan, HACCP Plan, and AHA/APP pursuant to tasks 1&2 below for the performance of the Statement of Work (SOW) that will accomplish the following technical requirements;
ii. Manage the *ex-situ* conservation of *C. micronesica* to maximize redundancy, resilience, and representation of *ex-situ* populations.
iii. Collaborate and coordinate with *ex-situ* population managers to promote effective *ex-situ* conservation of *C. micronesica.*

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

Required Qualifications of the Project Team shall include:

A. Principal Investigator (PI): Throughout performance of the Agreement, the Recipient shall provide the required natural resources services required by this Agreement.

The Principal Investigator shall have at a minimum:

- A master's degree in biology, botany, natural resources, conservation biology or similar field with three (3) years of experience managing projects as a senior scientist or project manager working with biological studies and any other environmental related work;
- At least three (3) years of experience working in a botanical garden or other institution with the purpose of maintaining living plant collections;
- At least two (2) years of experience propagating and maintaining *Cycas* plants in a nursery;
- Experience ensuring compliance with the Agreement terms and conditions; review of project documents to ensure product consistency, assigning personnel consistent with Agreement requirements and performing as the Agreement's representative;
- Experience ensuring management of natural resources with all federal and local regulations, their state counterparts, and other applicable or relevant and appropriate requirements; and
- A valid recovery permit from the USFWS to collect, manage, propagate, and outplant *C. micronesica* sourced from Guam. If the PI does not have an existing valid Section 10(a)(1)(A) recovery permit upon contract award, the PI must submit a request to USFWS be added to a list of authorized individuals on a Section 10(a)(1)(A) recovery permit within two weeks after contract award.

B. Project Manager (PM): The Recipient shall assign an appropriate number of PMs for this Agreement, who shall be responsible for overseeing the necessary activities of the project on a day-to-day basis.

The PM's oversight of the project includes:

- Apprising the PI of progress and issues regarding project goals and objectives
- Monitoring and controlling project costs;
- Understanding and assuring compliance with all applicable local, Federal, DoD, and Navy/Air Force natural resource and environmental laws, policies, regulations, and other requirements;
- Being the first in line of control in ensuring that information/data obtained for the project are of high quality and accuracy;
- Being responsible in keeping quality control and assurance inspections activities and record keeping of these inspections;
- Coordinating with other botanical gardens to collaborate on *ex-situ* conservation of *C. micronesica*.

The PM shall have, at a minimum:

- Bachelor's degree in biological sciences, natural resources management, forestry, botany, horticulture, wildlife biology, zoology or similar science related field from an accredited four (4) year college or university; and
- At least two (2) years' experience propagating and maintaining plants in a nursery or living plant collection.

C. Field Technicians: The Recipient shall assign an appropriate number of PMs for this Agreement, who under the oversight of the PI/MP shall be responsible for:

- Provide field support services; conduct scientific review of literatures; assist in the preparation of field activities, logistics and field equipment; manage the project's files, including field notes and database; assist in the preparation of materials for project meetings; and other duties as assigned.
- Assist in the preparation of *C. micronesica* genetic samples and genetic analysis data output.

Minimum requirements for a Field Technician include:

- At least one (1) year of experience working on native plant projects, preferably with native plants in the CNMI/Guam or other Pacific islands.
- Is or can be added to the list of authorized individuals on a Section 10(a)(1)(A) recovery permit from the USFWS to collect, manage, propagate, and outplant native federally listed plants in Guam. If the technician is not on a list of authorized individuals on a Section 10(a)(1)(A) recovery permit upon contract award, the technician must submit a request to USFWS be added to a list of authorized individuals on a Section 10(a)(1)(A) recovery permit within two weeks after contract award.

D. Field Support Technicians:
Field Support Technicians shall work under the direct supervision of qualified Field Technicians, a PM, or PI on preparation of field activities, logistics and field

equipment; manage the project's files, including field notes and database; assist in the preparation of materials for project meetings; and other duties as assigned. There are no specific minimum requirements for a Field Support Technician.

E. GIS Specialist:

The Recipient may assign a GIS specialist to work with the PM and PI to map field sites for plans and reports. GIS Specialists shall have at a minimum:

- At least one (1) year of experience working with GPS equipment and GIS software, preferably with experience collecting data from the field and preparing maps that portray this data in a usable form.

The recipient shall provide the Grants Officer (GO) and Cooperative Agreement Contract Specialist via the Cooperative Agreement Technical Representative (CATR) the names of persons and copies of their resumes being considered for work under this Agreement. After resume submission, the Recipient shall not replace or substitute any submitted personnel member without requesting to substitute, providing name and copy of resume for proposed substitute and receiving prior written approval by the Cooperative Agreement Contract Specialist.

Department of Navy Responsibilities: In reference to this Agreement, substantial involvement is required between DON and Recipient during the period of performance based on the work prescriptions. The anticipated involvement between the Government and the Recipient is deemed appropriate to carry out a public purpose of support to include a direct benefit to the Government, which shall among other things:

1) Review and support development of the Plan of Action and Milestones (POAM);
2) Provide relevant maps and information pertaining to study sites, to include data and literature generated from *ex-situ* conservation of *C. micronesica* work on JRM AOR lands;
3) Assist with field activities (as appropriate) and coordination with appropriate CATR staff to ensure safety procedures are achieved;
4) Facilitate access to JRM AOR lands and facilitate required passes;
5) Conduct meetings with Recipient to track deliverables, manage project implementation, and determine if milestones are met; and,
6) Advise Recipient, as needed, in preparing scientific articles destined for peer-reviewed journals.

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 twelve (12) months starting from the date of award. After completion of the initial period of performance, the total performance period can include four (4) option periods of twelve (12) months, each dependent upon the availability of funds and the unilateral election of the Government to exercise an option. The total duration of this CA, including the Option Years and any cost modifications shall not exceed 60 months. The end date is the anticipated date that the annual Final Report is accepted by the Government.

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

1. Name, Organization and Contact Information
2. Statement of Qualifications (including):
    - Curriculum vita of Principal Investigator
    - Curriculum vita of Project Manager
    - Curriculum vita of Field Technicians/Technical Field Support Technicians
    - Principal Investigator Biographical Sketch
    - Relevant past projects and clients with brief descriptions of these projects
    - Staff and faculty 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, existing datasets, etc.).
5. A proposed detailed budget of the costs to implement the proposed project.

Review of Statements Received: Statements will be evaluated based on the specific experience and capabilities in areas related to the project requirements for the Principal Investigator, Project Manager, and Field Technicians/Technical Field Support Technicians.

Factor 1 – Credentials of the Principal Investigator, Project Manager, and Field Technicians/ Field Support Technicians – The Offeror shall identify the Principal Investigator, Project Manager, and Field Technicians/ Field Support Technicians proposed 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 Approach – The Recipient shall develop a Statement of Interest to manage the total work effort and assure fully adequate and timely completion of technical requirements and tasks 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, and quality control for meeting professional industry standards for conducting and successfully executing those requirements outlined in the SOW.

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 – The combination of Factor 1, "Credentials of the Principal Investigator, Project Manager, and Field Technicians/ Field Support

Technicians", and Factor 2, "Scientific Approach", is significantly more important than Factor 3, "Reasonableness of Cost".

Please Send Responses or Direct Questions to: Mr. Thelman Fontenot, Contract Specialist NAVFAC Marianas; Tel: (671) 349-4119; e-mail: thelman.m.fontenot.civ@us.navy.mil

Timeline for Review of Statements of Interest: DON intends to use fiscal year 2025 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 21 April 2025.