



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

May 9, 2023

**REQUEST FOR STATEMENT OF INTEREST
W9126G-23-2-SOI-2164**

Applicants must be a member in one of the following Cooperative Ecosystem Studies Units

Regions:

Californian/Great Basin CESU Regions

Project Title: Invasive Species and Post Fire Rehab at Travis AFB, CA

A cooperative agreement is being offered 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 **\$136,000.00** is expected to be available to support this project for the **base period**. Additional funding in the amount of \$60,500 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 agreement will extend 15 months from date of award. There may be up to one 15-month follow-on period for optional tasks 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 capability 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 by 5:00 P.M., Central Time, on **11 June 2023**.
2. Submit your Statement of Interest via e-mail attachments or direct questions to:

Sandy Justman
Grants Specialist
USACE, Fort Worth District
Email: Sandra.justman@usace.army.mil
Office: 817-886-1073

David Leptien
Project Manager
USACE, Fort Worth District
Email: david.b.leptien@usace.army.mil
Office: 402-889-5570

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.

AUSTIN.ALICE.MILNER.
1076269790

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AUSTIN.ALICE.MILNER.1076269790
Date: 2023.05.10 13:04:01 -05'00'

ALICE AUSTIN
Contracting Officer

Attachment: Statement of Objectives

STATEMENT OF OBJECTIVES
for
POST-FIRE HABITAT RESTORATION and INVASIVE SPECIES MANAGEMENT
for
NATURAL RESOURCES PROGRAM, TRAVIS AIR FORCE BASE, CALIFORNIA

Article III, (D) of the California Cooperative Ecosystems Studies Unit (CESU)

March 2023

1.0 PURPOSE

1.1 The Travis Air Force Base (Travis AFB) 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 does not require a full-time onsite support person located at Travis AFB; however, it does require field work in the summer, spring, and fall. The work shall involve invasive species monitoring and control, reporting, travel to and from Travis AFB, attendance at meetings, project management, post-fire natural resource assessment, post-fire restoration activities (erosion control, weed control, habitat restoration), and GIS data management.

2.0 AUTHORITY

2.1 In agreement with the above stated goals, the recipient/cooperator agrees to provide the necessary personnel, equipment, and materials required to implement, in part, the Travis AFB responsibilities pursuant to the Endangered Species Act (16 USC 1531 et seq.), the Sikes Act Improvement Act, the Migratory Bird Treaty Act (16 USC 1361 et seq.), the National Environmental Policy Act (42 U.S.C. 4321 et seq.), applicable implementing regulations, such as Air Force Instruction 32-7003.

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.), all CESU projects must carry out a public purpose of support or stimulation, instead of acquiring goods or services for the exclusive direct benefit 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

2.3 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 Article II (A) California CESU Master Agreement to include, but are not limited to, the following:

- Travis AFB is involved in development of study methodology, data gathering, analysis, and/or report writing
- Travis AFB actively participates and collaborates in carrying out the project plan of work, reviews and approves activities, helps train or select project staff or trainees
- Travis AFB incurs in-kind or direct expenditures in carrying out the activities specified in the project agreement. Examples include, but are not limited to, the following:
 - Providing staff time to work on the project

3.0 DESCRIPTION OF OBJECTIVES

Conduct tasks in accordance with this Description of Objectives, as prioritized by AFCEC ISS PM and Base NRM. Only work aligned with the original AF RAM programming and approved by the AFCEC ISS PM should be completed as part of this TO.

Task #	Project Number	Title	Location
3.1	XDATA53236119	MGT, HABITAT (POST FIRE REHAB)	TRAVIS AFB
3.2	XDATA53236121	MGT, INVASIVE SPECIES	TRAVIS AFB
3.3	OPTION 1	FEASABILITY STUDY	TRAVIS AFB

3.1 Base Task 1: MANAGEMENT, HABITAT (POST FIRE REHAB)

Complete a 2023 Post Fire analysis that reports on wildfire or prescribed fire affects to natural and cultural resources. Implement recommendations from previous year Post Fire/BAER reports to minimize the effects of wildland fire to important natural resources (listed species, species of concern, wetlands, rare and native plants, water quality, cultural resources, etc.). Types of post-fire restoration work include follow-up treatments on previous wildland fires as prescribed by previous Post Fire/BAER reports, invasive plant or erosion control to reduce immediate and/or long-term damage, and native restoration plantings. Type of restoration is site dependent. Note that weed or erosion control measures may need to be implemented prior to the wet season as early as August. Task includes pre/post fire habitat assessment and monitoring related to planned prescribed burn activities completed by the Travis Fire Department and/or the AFCEC Wildland Fire Center.

Task may also implement the following Travis INRMP (2022) projects and other INRMP projects as added or amended in during the INRMP Annual Review process:

PROJECT 1.2.1. Develop prescribed burn wildlife habitat priorities and coordinate with Wildland Fire Management Program.

PROJECT 1.2.2. Identify and prioritize projects according to the Invasive Species Management Plan in conjunction with Agricultural Outleasing and Wildland Fire Management Program.

PROJECT 6.3.6. Develop prescribed burn projects with wildland fire management to control invasive plants and manage native plant communities.

PROJECT 6.3.8. Perform post fire analysis for natural resources prescribed fires if needed. A Burned Area Emergency Response would only be done for fires that are so severe that the habitat could not be restored without human intervention.

Specific tasks to be accomplished in FY23:

- Visit all wildfire sites to perform the Post Fire/BAER analysis
- Reconnaissance visits to prescribed burn sites
- Implement any Post Fire/BAER analysis recommendations, such as erosion control, weed treatments, and restoration of sensitive resources

Travel: Provide transportation and fuel. Retain current proof of insurance and current registration for all modes of transportation.

Coordination: Coordinate concurrently with the Base NRM, AFCEC Travis ISS, and USACE PM. All work shall be approved by the AFCEC and be consistent with the Project Schedule & Work Plan (Deliverable 8.5) approved by the Base NRM. Schedule changes can be made; trade-off decisions will be jointly made by the USACE-PM, Base NRM and AFCEC Travis ISS and align with the Sikes Act compliant INRMP and original budget programming. Any changes in scope or cost must be approved by the USACE Grants Officer. All coordination with state and federal regulators will be by the Base NRM or AFCEC ISS only.

Meetings: Attend monthly project coordination meeting and one (1) other base meeting (Fire & Emergency Services, Grounds Maintenance, TBD) quarterly.

Level of Effort: Requires approximately 300 hours, 750 miles, as well as weed control equipment (herbicide, supplies and materials).

Outreach / Education / Training: Prepare pamphlets and fliers as requested to help educate the base residents and public about prescribed fire and use of fire as an important natural resources management tool. Provide training to base personnel as requested. No Cooperator training is anticipated (see Qualifications Section 4.0).

Materials, Supplies, & Equipment: Provide all materials required to conduct post fire restoration operations including herbicides, erosion control supplies, personal protective equipment, materials, mowers, weed whackers, etc.

Resource Management Goals & Outcomes: Assess wildfire (or prescribed fire, if applicable) impacts to natural resources, report on those effects and any associated management opportunities, and perform control and maintenance activities to address adverse effects and/or conduct restoration to capitalize on opportunities provided by fire. Resource outcomes include healthier annual grasslands that provide improved habitat for federally listed species.

Deliverables (see Section 8.0): Draft and Final versions required in .pdf and .doc versions with responses to government comments:

1. 2023 Fire Season Post Fire Report (analysis and recommended actions; important for base permitting – TRIRIGA Work Request, NEPA, Work Clearance Requests, ESA Section 7)
2. 2023 Post Fire/BAER Implementation Report (describes actions taken post-fire)
3. GIS geodatabase (templates available, See Section 8.8)

References:

- 2018-2022 BAER Reports
- 2022 INRMP
- 2018 Wildland Fire Management Plan

3.2 Base Task 2: MANAGEMENT, INVASIVE SPECIES

Control the presence and spread of invasive species (noxious weeds) base wide, along Union Creek, two Conservation Areas (Castle Terrace Conservation Area (north & south) & Hangar Goldfields Conservation Area), cattle and horse pastures, and the Northeast Undeveloped Area where federally listed species are affected. Target species may include barbed goatgrass, giant reed, Himalayan blackberry, treasure flower, fennel, perennial pepperweed, medusahead, and other surveillance species that may become problematic as described in the Invasive Species Management Plan (ManTech, 2017). Current control methods include timed mowing, cutting, hand pulling, herbicide application, and prescribed grazing. Work should include follow-up treatment of all weed populations treated beginning in 2015 as reported in annual reports. Reduce/eliminate use of chemical treatment options unless there is a verified ecosystem benefit. Work should include monitoring as prescribed by the Invasive Species Management Plan (ISMP)

(2017) and be conducted in accordance with the Travis AFB Invasive Species Environmental Assessment (2022).

Task may also implement the following Travis INRMP (2022) projects and other INRMP projects as added or amended during the INRMP Annual Review process:

PROJECT 2.3.1. *Manage vegetation using mowing, grazing, and/or prescribed burning in the conservation areas, to enhance T&E species habitat by coordinating with the Fire Department and Grounds Maintenance contract.*

PROJECT 3.3.2. *Implement management plan for controlling vegetation in Union Creek to reduce BASH hazards.*

PROJECT 4.2.1. *Monitor and control the spread of invasive species with Travis GIS survey data and work to reduce populations of treasure flower, barbed goatgrass, medusahead, black mustard, perennial pepperweed, bamboo, fennel, purple star thistle, yellow star thistle and Italian thistle to prevent habitat type conversion of wetland and grassland habitat.*

PROJECT 4.2.2. *Evaluate various methods of control including mowing activities, pesticide application, and controlled burns to control non-native, invasive species.*

PROJECT 4.2.3. *Develop a Predator Reduction Plan to reduce CTS predators (e.g., bullfrogs, fish) from the ponds in Castle Terrace Conservation Area to include a monitoring plan that details monitoring activities and thresholds for additional treatment.*

PROJECT 4.2.4. *Implement a Predator Reduction Plan to reduce CTS predators (e.g., bullfrogs, fish) from the ponds in Castle Terrace Conservation Area. Monitor activities and thresholds for additional treatments.*

PROJECT 4.2.5. *Ensure all invasive species treatment projects include plans to remove residual invasive plant material and restore area with native plants and weed free certified soil.*

PROJECT 4.2.6. *Develop strategy to set priority areas for habitat restoration in improved, semi-improved and unimproved landscapes and then conduct restoration and reduction of weed infestation according to priority level.*

PROJECT 4.2.7. *Conduct restoration in areas already treated with herbicide to allow for faster habitat recovery.*

PROJECT 4.2.8. *Evaluate measurable objectives for each area on Travis AFB in the Invasive Species Management Plan in reducing, controlling and eliminating invasive species and revise when necessary to maintain relevancy and incorporate new science.*

PROJECT 4.3.1. *Develop a Travis AFB Biosecurity Plan with the Pest Management Shop that addresses potential biosecurity risks identified in inventory, monitoring and reporting processes for critical control points of inbound and outbound cargo and associated training materials.*

PROJECT 4.3.2. *Implement the Travis AFB Biosecurity Plan through recurring training for all personnel involved in the movement of cargo.*

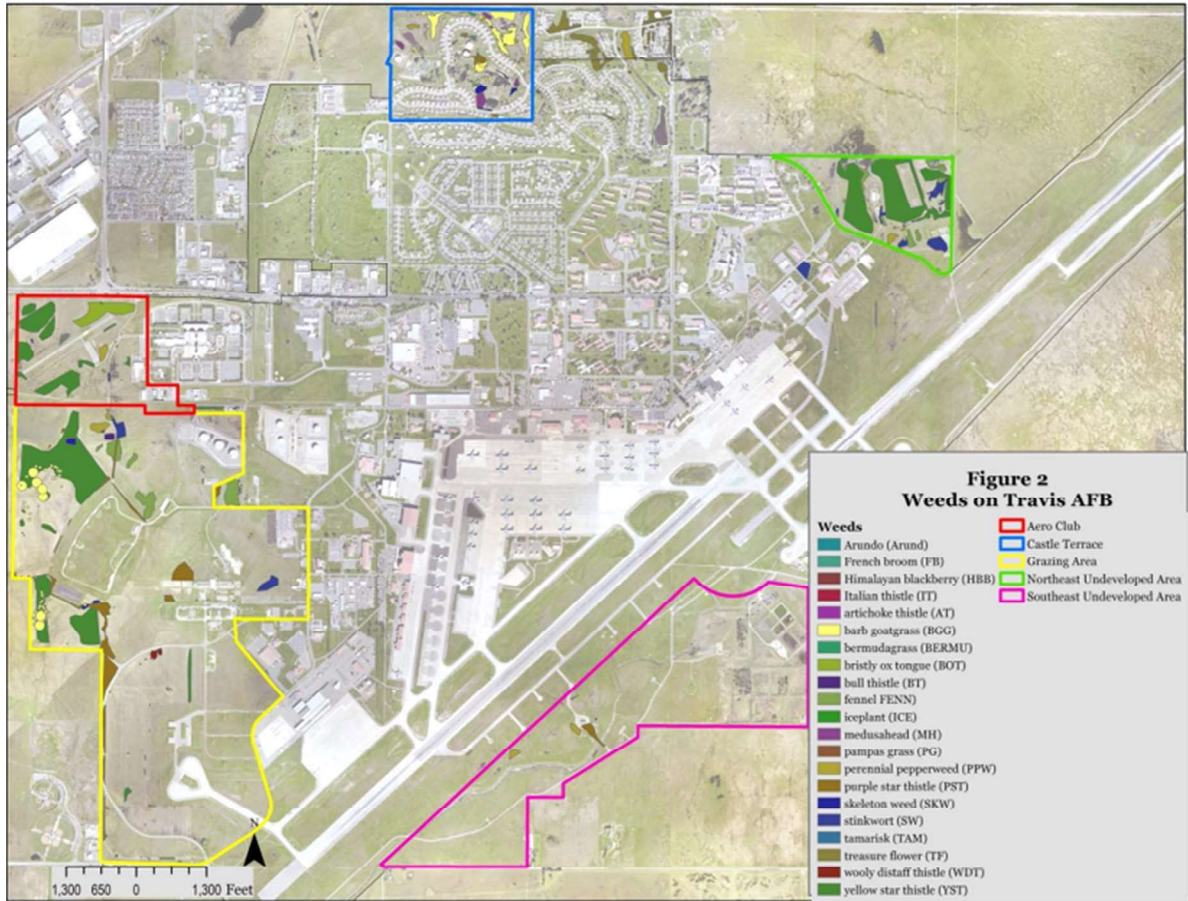
PROJECT 5.2.3. *Increase awareness of base residents, personnel, and retirees regarding proper management of native vegetation and the need to avoid the introduction and spread of non-native plant species.*

Specific tasks to be accomplished in FY23:

- Goat/sheep grazing in Conservation Areas– Continue sheep/goat grazing at Castle Terrace South Conservation Area (18.4 acres), Castle Terrace North Conservation Area (36.6 acres), and Three Tanks East (Hangar Goldfields) (9.5 acres). Grazing must occur during April and May to target the focus species in the ISMP. Coordination of grazing work clearance and base access for herders should begin no less than 90 days before implementation is required. Coordination should occur with 60 CES Operations Flight to verify no mowing is scheduled to occur in the Conservation Areas prior to goat/sheep grazing.
- Monitor grazed areas in spring to determine any vegetation benefits and to determine whether grazing should continue.
- Update weed geodatabase to accommodate historical occurrences as well as current weed extent.
- Reconnaissance monitoring of other areas of the Base (driving) to identify major infestations that may be source populations for the NRMUs
- Monitor and control the spread of invasive species utilizing Travis NR geodatabase GIS invasive species survey data. See Figure 1 for locations surveyed.
 - Target species include (the 2022 acreage of surveyed invasives is in parenthesis): treasure flower (10 ac.), barbed goatgrass (17 ac.), medusahead (1.6), perennial pepperweed (7 ac.), fennel (16 ac.), purple star thistle (22 ac), yellow star thistle (84 ac.), stinkwort (9 ac.), skeleton weed (2 ac.), bristly ox tongue (5.5 ac.), as well as bamboo, black mustard, and Italian thistle. Monitor and control invasives to prevent type conversion of wetland and grassland habitat. Reduce/eliminate use of chemical treatment options unless verified ecosystem benefit. For any herbicide treatment on TAFB, follow Base approval process prior to starting work (see Coordination section)
- Management and maintenance of the Native pollinator garden at the Golf Course that was installed in 2022
- Add new treatments (weed string trimmer, hand pulling, fire) to address the following priorities:
 - Hangar Goldfields Conservation Area (purple star thistle and perennial pepperweed)
 - Stinkwort throughout the installation
 - Barb goatgrass in Pastures 1 and 4

Figure 1.

Invasive Species Survey Areas on Travis AFB (Aero Club, Castle Terrace, Grazing Pasture Areas, Northeast Undeveloped Area, Southeast Undeveloped Area)



Travel: Provide transportation and fuel. Retain current proof of insurance and current registration for all modes of transportation.

Coordination: Coordinate concurrently with the Base NRM, AFCEC Travis ISS, and USACE PM. All work shall be IAW the SOO and be consistent with the Project Schedule & Work Plan (Deliverable 8.5) approved by the Base NRM. Schedule changes can be made; trade-off decisions will be jointly made by the USACE-PM, Base NRM and AFCEC Travis ISS and align with the Sikes Act compliant INRMP and original budget programming. Any changes in scope or cost must be approved by the USACE Grants Officer. All coordination with state and federal regulators will be by the Base NRM or AFCEC ISS only.

Coordination for herbicide treatments on Travis AFB: Prepare description of herbicide treatment work (with maps) and submit for approval to the IMPC at Travis who will then supply to MAJCOM Pest Management Consultant (Armando Rosales;

armando.rosales.1@us.af.mil), as well as provide the contractor's herbicide application certifications to the Travis AFB Pest Shop.

Meetings: Attend monthly project coordination meeting and one (1) other base meeting (Pride, Balfour Beatty, Base Grounds Maintenance, TBD) quarterly.

Level of Effort: Project requires approximately 900 hours, 1850 miles of travel, and 65 acres of goat/sheep grazing management as well as weed control equipment (herbicide, mowers, weed string trimmers, supplies and materials).

Outreach / Education / Training: Prepare pamphlets and fliers as requested to help educate the base residents and public about invasive weed issues and activities. Provide training to base personnel as requested. No Cooperator training is anticipated (see Qualifications Section 4.0).

Materials, Supplies, & Equipment: Provide all materials required to conduct weed control operations including herbicides, supplies, materials, mowers, weed whackers, etc.

Resource Management Outcomes: Perform weed control work and provide evidence of successful control of invasive species and associated benefits federally listed species. Resource outcome includes healthier rangelands that support improved habitat for federally listed species.

Deliverables (see Section 8.0): Draft and Final versions required in .pdf and .doc versions with responses to government comments if government comments are provided in a comment matrix or tracked changes:

1. 2023 Annual Invasive Species Control Work Plan (important for base permitting – TRIRIGA Work Request, NEPA, Work Clearance Requests, ESA Section 7)
2. 2023 Invasive Species Treatment Report & Monitoring Results
3. GIS geodatabase (templates available, See Section 8.8)

References:

- 2018-2022 Annual Work Plans
- 2015-2022 Invasive Species Activity Reports (Solano RCD & California Assoc of RCDs)
- 2017 Travis AFB Updated Invasive Plant Species Management Plan (ManTech Feb 2017)
- 2017 Travis AFB Grazing Management Plan
- 2022 INRMP (and associated annual updates)

3.3 OPTION 1: Feasibility Study to Establish and Perpetually Maintain a Goat or Sheep Herd on Travis AFB

Description of Objectives

Research and conduct a feasibility study to investigate the funding required to establish and perpetually maintain a goat or sheep herd on TAFB property. The herd would be used

for on-demand grazing for fuel reduction in wildfire vulnerable areas, management of invasive species and threatened and endangered species habitat. The purpose of the feasibility study is to provide information for decision making by TAFB leadership. The study should include the potential impacts to TAFB special-status species from goat/sheep grazing practices, as well as the identification of personnel and facilities required along with a detailed breakdown of costs and associated funding.

The project is intended to meet portions of ongoing efforts towards the following Goals and Objectives of the Travis AFB Integrated Natural Resources Management Plan (INRMP 2022):

- **GOAL 6: RANGELAND, RECREATIONAL AREAS, AND OTHER MAN-MADE OR NATURAL LANDSCAPES ENHANCED OR EXPANDED TO CONSERVE NATURAL RESOURCES AND SUSTAIN MISSION INTEGRITY.**
 - **OBJECTIVE 6.4** *Protect and enhance the desirable natural and man-made features in the landscape while supporting the military mission.*
 - **Project 6.4.4** *Investigate options and benefits of establishing permanent goat/sheep herd on the installation for continuous fuel reduction in wildfire vulnerable areas; includes establishing a full-time shepherd and goat/sheep herds in a self-sustainable effort. Research and conduct a feasibility study (includes analysis of effects) that includes an assessment of potential impacts to special-status species from grazing practices and associated facilities in year 1 and/or 2. Year 2 and/or 3, establish design. Year 3 and/or up to 6 years to implement the project.*

Specific tasks to be accomplished:

- Prepare feasibility study report that includes a review of industry standards related to the operations and maintenance, detailed forecast of annual funding levels required to sustain a herd, identification of staff expertise required to successfully operate and maintain grazing operations, potential obstacles to establishing and maintaining a permanent sheep herd on the Base, and analysis of potential effects on TAFB natural resources. At a minimum the report should include the following elements:
 - Initial costs: purchase of sheep, full time shepherd, equipment, vehicles, machinery
 - Annual costs: feed, water, energy, medical, maintenance of housing, equipment, and vehicles,
 - Size of herd: sheep per acre needed to manage fire prone areas of the Base
 - Detailed description of required permanent and temporary facilities: siting, description and size of facility, space requirements for improvements, space requirements for animals, other requirements needed to maintain health and safety of herd
 - Management of operation: security, onsite shepherd housing, guard dog, shearing flock

- ESA analysis effects to threatened and endangered species of the footprint of the permanent and temporary facilities and any ingress/egress for access to permanent and temporary facilities

Travel: One (1) site visit. Provide transportation and fuel. Retain current proof of insurance and current registration for all modes of transportation.

Qualifications: Individual with experience in California grassland rangeland management practices including goat/sheep grazing and an individual with experience to prepare an ESA analysis of effects of the project on the threatened and endangered species on TAFB.

Coordination: Coordinate concurrently with the Base NRM, AFCEC Travis ISS, and USACE PM. All work shall be IAW this SOO and be consistent with the Project Schedule & Work Plan (Deliverable 8.5) approved by the Base NRM. Schedule changes can be made; trade-off decisions will be jointly made by the USACE-PM, Base NRM and AFCEC Travis ISS and align with the Sikes Act compliant INRMP and original budget programming. Any changes in scope or cost must be approved by the USACE Grants Officer. All coordination with state and federal regulators will be by the Base NRM or AFCEC ISS only.

Meetings: Attend monthly project coordination meeting

Level of Effort: Requires approximately 350 hours

Materials, Supplies, & Equipment: Provide all materials, supplies and equipment required to conduct and prepare feasibility study report.

Resource Management Goals & Outcomes: Resource management outcomes include healthier annual grasslands that provide improved habitat for federally listed species and a reduction of wildfire occurrences on the Base.

Deliverables: Draft and Final versions of feasibility study report required in .pdf and .doc versions with responses to government comments.

References:

- 2018-2022 BAER Reports
- 2022 INRMP
- 2022 Draft Travis Invasive Species EA
- 2018 Wildland Fire Management Plan
- TAFB CTS Monitoring Reports

4.0 QUALIFICATIONS

- 4.1 Project manager and field staff should have prior experience with problematic Central Valley weeds, state licenses for herbicide application, approved by the IPMC, and professional and educational experience related to invasive species control and habitat restoration. Prior experience avoiding impacts to federally listed species is also required by the project manager. Experience identifying California wetland and upland plants required. (See Section 6.3 for specific qualifications for Option 1)
- 4.2 **HERBICIDE APPLICATION REQUIREMENTS:** The Non-Federal Entity (NFE) shall provide all labor, tools, equipment, test equipment, personal protective equipment and clothing, material and parts, transportation, and other incidentals necessary to implement herbicide application IAW the Site-Specific work plan.
- 4.2.1 All herbicides and herbicide application shall comply with Department of Defense Instruction (DoDI) 4150.07 DoD Pest Management Program; AFI 32-1053 Integrated Pest Management Program; the Travis Integrated Pest Management Plan; Armed Forces Pest Management Board (AFPMB) list of Approved herbicides; and the State of California Pesticide Regulations, and be registered for use in the State of California. Only pesticides approved for use on the applicable base may be applied.
- 4.2.2 A list of those herbicides requested to be used must be submitted to the AFCEC ESCA Administrator no later than (NLT) thirty (30) calendar days after agreement is signed and must be coordinated through the HazMart at the applicable Base. A list of all herbicides to be applied is to be provided, with Safety Data Sheet (SDS) and labels, to the IPMC (Integrated Pest Management Coordinator) fifteen (15) calendar days prior to application. If non-approved herbicide is preferred, the NFE shall submit an AF Approval Request Form for Non-Standard Pesticides to the IPMC thirty (30) calendar days prior to application. Any non-standard herbicides need to have AFCEC/COSC Command Entomologist approval prior to use and will require a longer approval period.
- 4.2.3 Only personnel licensed/certified by the State of California shall apply herbicides. Copies of all herbicide application certifications shall be provided to the AFCEC ESCA Administrator and IPMC on the applicable base within 30 calendar days. All licenses/certifications must be in the proper category of the type of work being performed. Qualified Applicator Certificate, Qualified Applicator License, and Pest Control business license copies are to be provided.
- 4.2.4 Before any herbicide application is to begin, provide description of herbicide treatment work (with maps) to the Travis IPMC TSgt. Ty Rekart (ty.rekart@us.af.mil). for approval. It will include the pest to be controlled (grass and weed control), a map identifying the location pesticides are to be applied, the number of acres of application, the pesticides that will be applied, and copies of the SDS. The summary of work should be comprehensive of total effort thus only one would be done per year under this agreement.
- 4.2.5 Pesticide Mixing, Storage and Disposal: All pesticides shall be stored off-base. All unused pesticides, empty pesticide containers and residue shall

be disposed of properly at an approved off-base disposal area. **Chemical mixing for immediate application may be accomplished at the site of application/treatment and only state certified applicators may mix or apply pesticides.** NFE/Sub-NFE shall provide a spill container at mixing areas to ensure that no chemicals impact an area that is not being treated. The NFE/Sub-NFE shall have an operational emergency eyewash kit available at each mixing location. In the event the NFE/Sub-NFE spills or releases any hazardous substances (example, substances listed in 40 Code of Federal Regulations (CFR) 302), the NFE/Sub-NFE shall immediately notify the Fire Department, ESCA PM, CES/CEIEC, and IPMC.

- 4.2.6 Safety: The NFE/Sub-NFE shall comply with all applicable parts of Title 29 CFR, *Occupational Safety and Health Standards*, Part 1910; Title 29, CFR, *Safety and Health Standards for Federal Service Contracts*, Part 1925; Title 40, CFR, Parts 150-189, and Title 49, CFR, *Hazardous Materials Regulations*, Part 171, while on an AF installation, to ensure safe working conditions for NFE/Sub-NFE personnel and a safe environment for the occupants of AF facilities.
- 4.2.7 The NFE/Sub-NFE shall establish an AF Integrated Pest Management Information System (IPMIS) account to enter and document state pesticide applicator certification categories and expiration dates.
- 4.2.8 Provide pesticide use data to the IPMC monthly (not later than 10 days after close of month) for input into the IPMIS pesticide management database.
- 4.2.9 IPMC for Travis AFB is TSgt. Ty Rekart (ty.rekart@us.af.mil). Following award, the NFE may submit questions to Travis IPMC but shall cc Ms. Leslie Pena (leslie.pena.1@us.af.mil) and Ms. Deanne Weber (deanne.weber.1@us.af.mil).

5.0 GOVERNMENT FURNISHED MATERIALS OR PROPERTY

- 5.1 Physical Data: Prior weed control and post-fire restoration reporting. Applicable GIS information for natural resources and base boundary and roads files.
- 5.2 Facility: CE can provide water for herbicide mixing or grazing. No other facility use is anticipated.
- 5.3 Equipment: None provided. Cooperator should supply all GIS/GPS equipment and software (including ArcMap licensing) needed to accomplish the field work and manage GIS data for all tasks.

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 NFE 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 NFE must return the property to the Federal awarding agency for further Federal agency utilization.

6.0 PERIOD OF PERFORMANCE

6.1 BASE TASKS: The base period of performance is anticipated to be 15 months from the date of award. The work will occur within a 12-month period, but administrative time will be allowed at the end of 12-months for preparation and government review of reports.

6.2 OPTIONAL TASKS: Options may be executed all at once or separately as funds become available. The period of performance for Option periods are as follows:

- Option 1: anticipated to be 15 months from date of award.

7.0 COORDINATION

USACE Fort Worth District POC
David Leptien
402-889-5570
david.b.leptien@usace.army.mil

AFCEC Travis Installation Support Section (ISS), Natural Resources, AFCEC/CZOW
Primary: Deanne Weber, 707-424-8627, deanne.weber.1@us.af.mil
Alternate: Kirsten Christopherson, 707-424-8622, kirsten.christopherson@us.af.mil

Travis Air Force Base, Natural Resources Manager (NRM), 60 CES/CEIEC
Primary: Leslie Pena, 707-424-8354, leslie.pena.1@us.af.mil
Alternate: Emily Rosa, 707-424-2532, emily.rosa.1@us.af.mil

8.0 DELIVERABLES

8.1 Progress Reports. One (1) typed letter report describing progress on task 1 and 2 (and Option 1 if awarded). The report shall be due as of the last day of the third month (**quarterly**) and shall be transmitted via electronic mail, facsimile, or regular mail no later than the 10th calendar day following the end of the reporting period. Invoices for partial payment shall be submitted to coincide with receipt of the quarterly progress reports. No partial payment will be approved unless the government has received all progress reports which are due.

8.2 Monthly Progress Agenda, Reports & Meeting Minutes. One (1) typed report describing progress on both tasks (and Option 1 if awarded). The report shall be due two days before the scheduled monthly meeting and shall be transmitted via electronic mail.

8.3 Annual Inventory. Federally owned property - an annual inventory listing Federal property (to include description of the property, a serial number or other identification number) that is in the custody of the recipient; Copies to be sent to USACE – SWF and the Travis AFB NRM and AFCEC Travis ISS.

8.4 Annual Inventory. Acquired Property purchased with funding from award - property records must be maintained that includes description of the property, serial number or other identification number, source of funding, who holds title, acquisition date, cost of property, percentage of Federal participation in project costs, location, use and

- condition of property, and ultimate disposition including date of disposal and sale price. A physical inventory must be taken and results reconciled every two years. Copies of the inventory to be sent annually to USACE – SWF and the Travis AFB and AFCEC/CZOW Natural Resource Managers.
- 8.5 Project Schedule and Work Plan. Within 45 days of award, provide an electronic copy of a work plan and project schedule for each task. Should be concise yet communicate what will be performed and when. The schedule should break down the work into sections with associated timetables. Document shall be reviewed at the monthly meetings to ensure we are on schedule.
- 8.6 Draft Final Project Report (2). Electronic copies of draft (word) and final (pdf) reports should be submitted no later than one month before end of the project, one report for each task. At a minimum, the reports shall contain an executive summary, introduction, methods, results, discussion, and recommendations sections. Each report, shall summarize work accomplished for the Task. Travis AFB NRM and AFCEC Travis ISS staff will review and provide comments, if any, within 21 calendar days after receipt.
- 8.7 Final Project Report (2). Electronic copies of the final report, incorporating Travis AFB NRM and AFCEC Travis ISS review comments on the draft, if any, and shall be submitted no later than fifteen (15) days after receipt of comments.
- 8.8 GIS Geodatabase. Tasks 3.1 and 3.2 and Option 1 (if awarded) shall have at least one and likely several GIS deliverables that include all data layers used to create any and all maps within submitted deliverables. GIS deliverables shall include all new data collected throughout the course of the project. Draft GIS deliverables shall be submitted with draft reports that include their data, with final reports and GIS info submitted together. GIS deliverables must follow Air Force geospatial data standards, an adaptation of the SDSFIE 3.1x data model, as described in the data layer specifications (DLS)). Deliverables must comply with the latest version which are updated annually. All metadata associated with data layers must meet the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) revised in June 1998. Metadata must also include all content stated in the metadata section of each layer’s DLS, which includes layer specific verbiage for attribute fields and definitions. Additional requirements include:
- 8.8.1 All submitted data must use at least one of the pre-defined 52 Natural Resource DLS listed below and most likely at least two. NFE shall review the complete list before field work begins to identify which layers are needed and identify them in the Annual Work Plan. Note that the collection of “negative” data is as important as “positive” data. Survey areas are a key part of the data set even if target species are not detected. A =area, L = line, P = point.
 - 8.8.1.1 AgricultrlAndGrazingOutlease
 - 8.8.1.2 CoastalZoneMgtArea_A
 - 8.8.1.3 DispersedRecBoundary_A
 - 8.8.1.4 EssentialFishHabitat_A
 - 8.8.1.5 FaunaIncidentPoint_P
 - 8.8.1.6 WildlandFire_A
 - 8.8.1.7 FireBreakLine_L

8.8.1.8 Inundation_A
8.8.1.9 ForestCompartment_A
8.8.1.10 ForestManagementArea_A
8.8.1.11 ForestProductHarvest_A
8.8.1.12 ForestStand_A
8.8.1.13 HabitatDisturbance_A
8.8.1.14 HabitatProtectiveZone_A
8.8.1.15 HazardousSuppressionArea_A
8.8.1.16 HistoricRiverAlignment_L
8.8.1.17 HuntingFeature_P
8.8.1.18 LandCover_A
8.8.1.19 NatResRecFeature_P
8.8.1.20 NaturalResourceResRecProject_A
8.8.1.21 NaturalResourceResRecProject_P
8.8.1.22 NaturalResourceSurvey_A
8.8.1.23 NaturalResourceSurvey_L
8.8.1.24 NaturalResourceSurvey_P
8.8.1.25 NoxiousOrInvasiveSpecies_A
8.8.1.26 NoxiousOrInvasiveSpecies_L
8.8.1.27 NoxiousOrInvasiveSpecies_P
8.8.1.28 ObservationLookout_P
8.8.1.29 PrescribedBurnUnit_A
8.8.1.30 RecNatureTrailFeature_P
8.8.1.31 RecreationNatureTrail_L
8.8.1.32 RiparianArea_A
8.8.1.33 SoilMapUnit_A
8.8.1.34 SpecialManagementArea_A
8.8.1.35 SpecialStatusSpecies_A
8.8.1.36 SpecialStatusSpecies_L
8.8.1.37 SpecialStatusSpecies_P
8.8.1.38 SpeciesLocation_A
8.8.1.39 SpeciesLocation_P
8.8.1.40 SpeciesSpecificHabitat_A
8.8.1.41 SpeciesSpecificHabitat_L
8.8.1.42 SpeciesSpecificHabitat_P
8.8.1.43 SurfaceRiparianArea_A
8.8.1.44 Vegetation_A
8.8.1.45 WaterFeature_L
8.8.1.46 WaterFeature_P
8.8.1.47 Watershed_A
8.8.1.48 Wetland_A
8.8.1.49 Wetland_L
8.8.1.50 Wetland_P
8.8.1.51 WildlandUrbanInterfaceArea_A
8.8.1.52 WildlifeManagementArea_A
8.8.1.53 WildlifeManagementArea_P

- 8.8.2 An empty, SDSFIE 4.0.3.1 compliant ArcGIS geodatabase is available for use as is an excel data dictionary. Absolutely no changes may be made to the structure. All formatting and attributes must align with the current template in order to be accepted by the AF and transferred to the official geodatabase. NFE shall discuss any concerns with the Base Geodatabase Manager and Travis ISS before work begins to find work-arounds where fields aren't available to collect needed data.
 - 8.8.3 NFE shall submit a geodatabase that includes only new data rows or existing data rows that have been changed so that they may easily be added to the official geodatabase.
 - 8.8.4 NFE shall populate all fields within the tables. All data should comply with the DLS which often includes tables of available choices for each field. An excel data dictionary is also available.
 - 8.8.5 NFE shall identify data errors for any DLS that they use and submit them with the final deliverables so that the AFCEC Travis ISS may work to change them in the next standards update. This shall include formatting restrictions that limited usefulness of existing fields or missing fields.
 - 8.8.6 NFE shall ensure that any interrelated data layers are updated for any newly created data. For instance, if new wetlands are identified (Wetland_A) and suitability for listed branchiopods is determined during the survey, the corresponding data needs to be updated in the species layer as well (SpecialStatusSpecies_A). Even if suitability is not determined, the new wetland needs to be added to the species layer and noted as unknown suitability.
- 9.0 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.

[End of SOO]