Common Raven Monitoring and Management within California's Desert Tortoise Conservation Areas

2025 Request for Proposals (RFP) Proposals are Due Wednesday, January 08, 2025 (5:00 pm PST)

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Bureau of Land Management (BLM) Contact for Technical Questions: Mark Massar, District Wildlife Biologist, Email <u>mmassar@blm.gov</u>, Office 760-898-5367

Superior-Cronese Critical Habitat Unit (CHU) within Fort Irwin National Training Center Contact for Technical Questions: David H. Davis, Certified Wildlife Biologist-Directorate of Public Works, Email david.h.davis44.civ@army.mil, Office 760-380-6435

Fremont-Kramer CHU within Edwards Air Force Base Contact for Technical Questions: Wes King, Biological Scientist, Email <u>wesley.king.2@us.af.mil</u>, Office 661-277-6298

Ord-Rodman CHU within Barstow Marine Corps Logistics Base Contact for Technical Questions: David Houseman, Environmental Protection Specialist, Email <u>david.c.housman.civ@army.mil</u>, Office 760-380-6435

Joshua Tree National Park Contact for Technical Questions: Michael Vamstad, Wildlife Ecologist, Email michael vamstad@nps.gov, Office 760-367-5562

National Fish and Wildlife Foundation (NFWF) Contact for Administrative Questions: Primary: Anna Beatrice, Manager, Impact-Directed Environmental Accounts, National Fish and Wildlife Foundation, Email <u>Anna.Beatrice@nfwf.org</u>, Office 202-595-2659

Alternate NFWF Contact for Administrative Questions:

Eliza Braendel, Senior Manager, Impact-Directed Environmental Accounts, National Fish and Wildlife Foundation, Email <u>Eliza.Braendel@nfwf.org</u>, Office 415-593-7628

*Proposals will be disqualified and not reviewed if they are either incomplete or not by the specifications detailed below. PROPOSALS NEED TO BE SUBMITTED FOR EACH STRATUM SEPARATELY AND CAN NOT BE COMBINED. If anything in the proposal is optional, it must be specifically noted as an option, with a separate budget; otherwise, if the proposal is selected, all actions detailed in the proposal will be required to fully satisfy the funding agreement. If the proposal references this RFP, the RFP needs to be included as an Appendix and a reference to that Appendix must be added wherever the RFP is mentioned.

Introduction

2025 marks the 13th year of Common Raven (*Corvus corax*; raven) monitoring and management for the benefit of the threatened Mojave desert tortoise (*Gopherus agassizii*; tortoise) within California's Warm Deserts Ecoregion (Level II, Omernik and Griffith 2014). Management is being enacted pursuant and according to the California Deserts Raven Predation Control Environmental Assessment (USFWS, 2008) and adaptive management memo (USFWS 2021). Predation control effort implementation takes place in high-quality, sensitive tortoise habitats, designated critical habitat, and other areas of importance as identified by the Raven Sub-group and Renewable Energy Action Team, collectively known as the California Common Raven Monitoring and Management Area (Map 1).

Since 2022, we have further prioritized monitoring and management actions within Tortoise Recruitment Priority Areas (TRPA). TRPAs include all 10 km² hexagons that contain >0.3 live tortoise observations per kilometer of transect completed in each hexagon between 2001 and 2019, plus a 1.8 km (USFWS unpublished data, Map 1). Prioritizing raven monitoring and management within TRPAs is intended to focus our efforts within the area with the densest contemporary pockets of tortoise occupancy and thus the highest potential to

respond to an ecological release from a subsidized predator like the raven.

Work during 2025 will focus on locating active raven nests, determining the stage of the raven nest, and timing the application of food-grade oil to a target number of raven eggs in each Monitoring and Management Area (Table 1). The goal this year is to addle or recommend to Animal and Plant Health Inspection Service Wildlife Services (WS) all raven nests within Tortoise Recruitment Priority Areas (TRPAs). Fifty point-counts will also be completed in each Common Raven Monitoring and Management Area to estimate raven density trends and monitor our progress towards restoring raven as well as raven-nest density to levels compatible with Mojave desert tortoise recovery. Finally, 22 survival trials (20 tortoise decoy trials, 1 novel object trial, and one camera only trial) in the Fremont-Kramer, Superior-Cronese, Ord-Rodman, and Fenner-Ivanpah-Mojave Monitoring and Management Areas.

Locating active raven nests, determining nest stage, and timing the application of food grade oil (i.e., addle) to a target number of raven eggs must be done as efficiently as possible, in terms of cost per unit effort—i.e., cost per egg oiled. Frugality is necessitated by a limited budget and the likely need to continue this program in perpetuity. As such, the nest stage (aka, phenology) will only be monitored to the extent necessary to synchronize 2025 oiling efforts. As such, all planning efforts should consider nest phenology data collected during previous seasons, which indicates a mean oiling date of May 1, with a standard deviation of 19.49 days. This predicts that 95% of raven nests in our California Common Raven Monitoring and Management Areas are available to be oiled between the last seven days of March and the first seven days of June, according to 2020-2023 oiling records.

Monitoring & Management Areas	Total Non- Wilderness Area (km²)	Non-wilderness Tortoise Recruitment Priority Area (km ²)	2020 Mean Density Estimate (raven km ⁻²)	2024 (or most recent) Mean Density Estimate (raven km ⁻²)	2025 Raven Egg Take Target	
Fremont-Kramer	1,701	1,081	2.44^{3}	0.78^{2}	369	
*Ord-Rodman	702	605	1.08 ³	0.331	67	
Superior-Cronese	2,215	955	1.56 ³	0.94 ³	579	
*Fenner, Ivanpah, MNP	4,041	2,196	0.62^{2}	0.20^{1}	148	
*JTNP, Pinto Mountains	737	433	1.37 ³	0.311	45	
Chemehuevi	2,328	1,838	0.27^{1}	0.18^{1}	0	
Chuckwalla	1,798	1,001	0.70^{2}	0.10^{1}	0	
Total or Average	13,522	8,109	1.15 ³	0.412	1,208	

Table 1. Raven egg take targets for 2025 in each California common raven monitoring and management area, based on a 2024 or the most recent raven density estimate. Please note that on average, each raven nest contains 4 eggs, but egg counts vary as a function of proximity to subsidies, fall-winter precipitation, and spring warming rate (Hanley et al. 2021, Currylow et al. 2021, USFWS unpublished data).

^{*}Raven egg take (via addling and Wildlife Service's referral) in these areas should be largely (≥75%) confined to Tortoise Recruitment Priority Areas, with the primary goal of preventing 95% of raven eggs laid in these areas from hatching. This adaptive change is in response to the most recent mean and upper 95% confidence interval estimates being below the 0.89 raven km⁻² threshold.

¹The mean and upper 95th confidence limit estimates are below the 0.89 ravens km⁻² adaptive management threshold (Holcomb et al. 2021).

²The mean estimate is below but the upper 95th confidence limit estimate is above the threshold.

³The mean and upper 95th confidence limit estimates are above the threshold.

Map 1. California Common Raven Monitoring and Management Areas color-coded to reflect individual areas named in the legend. Tortoise Recruitment Priority Areas, Designated Wilderness, and Department of Defense (DoD) administered lands are also include for planning and reference purposes.



1) Performance Period and Total Survey Effort per Priority Area

Nest surveys, point counts, and oiling will be performed over an approximately two-month period, between March 17 and June 9, 2025, in each Common Raven Monitoring and Management Area or each areas Tortoise Recruitment Priority Areas (*see Table 1 for further details regarding area-by-area "2025 Egg Take Targets"*). Additionally, each crew should include up to three weeks for data curation, camera-trap image classification, report writing, and editing based on comments received on each management area specific report, resulting in a performance period that will not exceed June 30, 2025. Point counts will be performed in all areas. Oiling will be performed in all areas <u>except</u> for Chemehuevi and Chuckwalla. Tortoise decoy "survival" trials will be conducted in Fenner-Ivanpah-Mojave NP, Superior-Cronese, Fremont-Kramer, and Ord-Rodman.

For each management area, the total effort required to locate and oil the target number of eggs will be clearly detailed in the proposal in terms of person-days and the estimated cost per raven egg oiled (partial nests will be oiled and nests will not be monitored for phenology or offending status beyond an initial sweep to calibrate for annual variation in nest phenology). This person-day estimate should also include conducting 50 ten-minute two-kilometer radius point counts (between sunrise and 1400h, with sustained winds of <40km/h, and no more than light precipitation) in Chemehuevi, Fenner-Ivanpah-Mojave National Preserve, Fremont-Kramer, Ord-Rodman, Superior-Cronese, and Joshua Tree-Pinto Mountains, and Chuckwalla monitoring and management areas. Additionally, this person-day estimate should include deployment, retrieval, and analysis of 22 survival trials in the Fremont-Kramer, Superior-Cronese, Ord-Rodman, and Fenner-Ivanpah-Mojave monitoring and management areas.

Project administration and fieldwork efforts will be separated and described clearly by total persondays for each category. Project administration and fieldwork person-days will be further broken down by specific tasks such as but not limited to, database management, tortoise decoy "survival" trial image classification, initial nest monitoring, oiling effort, and point count effort.

2) Budget

The Budget should be organized into cost-type categories. Budget Categories should be further itemized into distinct line items. Budget descriptions need to be estimated clearly and itemized by tasks such as, but not limited to: raven egg oiling, point counts, database management, project administration, deployment and retrieval of 22 tortoise decoy stations at predetermined random points in the Fremont-Kramer, Superior-Cronese, Ord-Rodman, and Fenner-Ivanpah-Mojave management areas, project administration, tortoise decoy station photographic data review, hotel rate (cost per day and number of days, these should be kept to a minimum), camp rate (cost per day and number of days), mileage (cost per mile by the number of estimated miles), equipment/supplies (total cost), and overhead (percent of labor).

Monthly financial reports will be accepted in either one of two formats. The first option that will be accepted is an estimated daily cost per person day with the total person days for that month as well as an estimate of the cost per egg oiled. The first option must include an attached memo each month with a detailed description of how the person-day cost was estimated from expenses and tasks. The memo can be reused each month. The second option that will be accepted is an estimated cost for each task that month such as, but not limited to, fieldwork (days multiplied by a fixed rate per day), accommodation rates (cost per day), mileage (cost per mile by the number of miles), equipment/supplies (total cost), project administration (days multiplied by a fixed rate per day), and overhead (percent of labor).

3) Nest Location and Egg Oiling

Nest searching and egg oiling (i.e., addling) will be conducted during daylight hours by slowly driving established open routes and by walking to monitoring points or known nest points (Maps 3 through 8) while scanning suitable raven nesting substrates with and without binoculars. To the extent possible, point count surveys should be integrated into the nest location and egg oiling process to optimize efficiency. Searches and addling will be conducted by one to two personnel (preference determined by personnel) in a vehicle with the individual(s) observing, navigating, preparing to addle, and driving. **The track logging setting on your GPS device should be left on during all field activities.** Track log data is used to identify the areas covered during annual surveys and provides a robust estimate of effort.

Nests can also be located by watching raven behavior from a vantage point that enables the use of either a rangefinder or compass and map to estimate the location of possible nests throughout Joshua tree forests and boulder gardens. Reaching addling targets may require more intensive searching in hard-to-reach locations during some breeding seasons because of environmental conditions that depress raven reproductive output.

Speeds on dirt roads will not exceed 20 miles per hour. On paved roads, a balance will be made between safety and raven nest search effectiveness but posted speed limits should never be exceeded.

Upon sighting a potential raven nest, the vehicle or pedestrian will stop. The crew member(s) will then take a closer look at the birds/nest in question with a high-power spotting scope. In cases of a raven nest or highly suspected raven nest, surveyors will then use a pole-mounted camera sprayer to determine whether eggs are present in the nest. If eggs are present, oil should be applied to addle the eggs. The basic nest data will be collected on the provided datasheets and according to the provided data dictionary—note that this project's data formats are specific to our analysis process and data not conforming to these supplied data dictionaries will not be accepted (e.g., see Attachment Six).

The vehicle or pedestrian survey will re-commence when the observer's full attention is again on the landscape.

4) Identification of Desert Tortoise Remains

Any observed tortoise remains will be cataloged and photographed on a white background with a standard scale to clearly show the composition of identified remains. Record details on the provided datasheets and according to the provided data dictionary (e.g., number of individuals present and length(s) of carapace; see Attachment Three). Time since death will be based upon a standardized key from Berry and Woodman 1984 (modified in 2000; Attachment Two). Desert tortoise remains will be removed from the sample plot, labeled in separate bags after being dried, and mailed to USFWS contact at end of the season.

5) Desert Tortoise Remains

Surveyors will follow Attachment Three guidelines and provide USFWS with Critical Habitat Unit (CHU), nest ID, substrate, GPS site location (NAD 1983 Zone 11, Easting and Northing in meters), species occupying nest, breeding development stage, number of carcasses, description of remains, age class, time since death, and date remains were found.

Immediately notify USFWS and either the landowner contacts if any desert tortoises are found hit or dead along any of the survey routes. Include the location of remains (UTM coordinates), time since death, age class of tortoise, and any other pertinent information. This information is being used to further the efficiency of USFWS's and BLM's efforts to manage road mortality across the range of the tortoise.

Map 2 Common Raven and other large nests located within the Fremont-Kramer Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPA), track-logs from previous years, wilderness areas, and Department of Defense Lands.



Map 3 Common Raven & other large nests located within the Joshua Tree NP and Pinto Basin Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPAs), BLM Wilderness, and track-log from previous years.



Map 4 Common Raven and other large nests are located within the Ord-Rodman Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPA), track-logs from previous years, wilderness, and Department of Defense Lands.





Map 5 Common Raven and other large nests are located within the Superior-Cronese Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPA), track-logs from previous years, wilderness, and Department of Defense Lands.

Map 6 Common Raven and other large nests located within the Chuckwalla Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPA), track-logs from previous years, wilderness and Department of Defense Lands.



Map 7 Common Raven and other large nests located within the Fenner-Ivanpah-Mojave National Preserve Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPA), track-logs from previous years, BLM wilderness and Department of Defense Lands.



Map 8 Common Raven and other large nests located within the Chemehuevi Common Raven Monitoring and Management Area. In addition to Tortoise Recruitment Priority Areas (TRPA), track-logs from previous years, wilderness, and Department of Defense Lands.



6) Measuring Common Raven Predator Pressure with Tortoise Decoys paired with Passive Infrared Camera Traps

The recipient will deploy and retrieve 20 tortoise decoy stations, 1 camera-only station (camera control), and 1 novel-object station (object control) at 22 predetermined random points in <u>ONLY</u> the Fremont-Kramer, Superior-Cronese, Ord-Rodman, and Fenner-Ivanpah-Mojave monitoring and management areas. The recipient will review images from each survival trial and report raven observations as a time series of the number of ravens observed per calendar day—including all days with zero observations. Additionally, raven observations will be categorized into approach-attack classes and weekly attack rates will be estimated for each area (Sum of 0 or 1 attacks per twelve-hour period divided by the number of twelve-hour periods sampled, times fourteen to account for the cumulative probability of fourteen sample periods per week). Models will be deployed opportunistically during initial nest searching and oiling phase, but before April 10, 2020. Care should be taken to deploy these models when ravens are not visibly present in the area. Models will be left in place for 15 days and no more than 25 days.

7) Deliverables

The recipient will provide the following deliverables (all GPS locations will be in UTM NAD83 datum). All electronic files will be compatible with Adobe Acrobat or Microsoft Office (i.e., Word, Excel), and all electronic data will be compatible with ESRI ArcMap version 10 (e.g., shapefile or geodatabase). Data files will also be mailed via FedEx or USPS to the USFWS contact identified in the funding agreement.

1. Monthly:

- 1. GPS track logs (as ArcGIS shapefile) of all routes driven within the study areas
- 2. GPS locations of all desert tortoise remains that cannot be associated with a specific raven nest orperch
- 3. GPS locations of all desert tortoise sightings (including roadkill)
- 4. See bullet point Item 2 "Budget" for Monthly Financial Requirements

2. At the end of the funding agreement:

- 1. A summary Excel spreadsheet that contains (see Attachment Three):
 - a. Nest ID
 - b. Nesting substrate
 - c. Locations in UTMs (Easting, Northing)
 - d. Breeding status of occupied nest
 - e. Description of desert tortoise remains associated with a nest or nearby perch site
 - f. The estimated time since death for the tortoise remains
 - g. Date found
 - h. Most recent date of observation
 - i. Notification of desert tortoise remains if applicable
- 2. NFWF Final Programmatic Report:
 - a. Executive summary
 - b. Methodology
 - c. Results
 - i. Nest locations in UTMs
 - ii. Dollars per egg oiled
 - iii. Separate maps of:
 - 1. CHU boundary with land ownerships, survey routes, and powerlines

- 2. nest sites (include key indicating active nests, inactive nests, and bird species) and incidental live desert tortoise encounters and carcass locations (include raven predated and roadkill tortoises)
- iv. Summary tables detailing:
 - 1. Desert tortoise carcasses by age class (i.e., adult, sub-adult, juvenile, and hatchling)
 - 2. Oil application actions at Common Raven nest sites and effect on nest success and fledging (optional)
- v. QA/QC process and assurances for data and reports
- d. Discussion
 - i. Compare results to 2024 (or most recent) egg-addling efforts for the respective strata
 - ii. Summary page of recommendations for future raven monitoring and management actions (*Optional*)
- 3. All photographs and recorded details of desert tortoise remains encountered; photographs need to be GPS tagged
- 4. All photographs and recorded details of live desert tortoise observations; photographs need to be GPS tagged
- 5. All photographs and recorded data of nests; photographs need to be GPS tagged
- 6. Scanned field datasheets as pdf's
- 7. ArcGIS shapefile or geodatabase (i.e., shapefile, GPS track-log files) needs to be mailed electronically and physically on a flash drive to the USFWS contact
- 8. NFWF Final Financial Report

8) References

- Hanley, B., Currylow, A., Holcomb, K. L., Shields, T., Boland, S., Boarman, W., and Vaughn, M. 2021.
 StallPOPdV4 Web Interactive: Software to compute population control treatments of a subsidized predator [Online Software: <u>https://cwhl.vet.cornell.edu/tools/stallpopdItemcollapse5</u>].
 DOI: <u>https://doi.org/10.7298/sk2e-0c38.4</u>.
- Currylow, A., Hanley, B., Holcomb, K. L., Shields, T., Boland, S., Boarman, W., and Vaughn, M. 2021. Identifying population management strategies for avian predators: a decision tool. Human-Wildlife Interactions.
- Holcomb, K. L., Coates, P. S., Prochazka, B. G., Shields, T., and Boarman, W. I. 2021. A desert tortoisecommon raven viable conflict threshold. Human-Wildlife Interactions, 15(3).
- Omernik, J.M. and Griffith, G.E., 2014. Ecoregions of the conterminous United States: evolution of a hierarchical spatial framework. Environmental management, 54(6), pp.1249-1266.
- USFWS, 2021. 2008 Common Raven Management Environmental Assessment Phase III Adaptive Management Memo. US DOI, Palm Springs, California.
- USFWS, 2008. Environmental Assessment to Implement a Desert Tortoise Recovery Plan Task: Reduce Common Raven Predation on the Desert Tortoise. US DOI, Ventura, California. Available at: www.fws.gov/carlsbad/PalmSprings/DesertTortoise/Raven%20EA%20Final%203-08.pdf

Attachment One Priority Management Actions by CHU and NPS Unit for 2025

- 1. Chemehuevi CHU
 - Conduct 50, 10-minute variable radius point counts **between sunrise and 1400 hours when sustained winds are less than 40km/h and there is no more than light precipitation** at previously determined random points.
 - Report raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
- 2. Fenner, Ivanpah, and MNP
 - Initial nest phenology survey in Tortoise Recruitment Priority Areas (TRPAs) to best time oiling
 efforts in elevation-latitude classes, (coordinate routes with NPS contact) (see Item 3, "Nest
 Location and Egg Oiling", beginning on page 3). NOTE: Management actions are prohibited
 throughout BLM Wilderness while a Minimum Tools Analysis is completed by the Bureau. Polemounted and handheld oil applicators are permitted in Wilderness Areas managed by Joshua
 Tree National Park.
 - Apply oil to Common Raven eggs in <u>Tortoise Recruitment Priority Areas (TRPAs)</u> to addle them (see Item 3 and Table 1)
 - Report hatched or inaccessible raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
 - Conduct 50, 10-minute variable radius point counts **between sunrise and 1400 hours when sustained winds are less than 40km/h and there is no more than light precipitation** at previously determined random points.
 - Deploy and retrieve 20 tortoise decoy survival trails, at 20 predetermined random points (note: these points will be 250 meters from variable radius point count locations)
 - Survival trial image review. (see Item 6)
- 3. Joshua Tree National Park and Pinto Mountains CHU
 - Initial nest phenology check survey in Tortoise Recruitment Priority Areas (TRPAs) to best time oiling efforts in elevation-latitude classes, (coordinate routes with NPS contact) (see Item 3, "Nest Location and Egg Oiling", beginning on page 3). NOTE: Management actions are prohibited throughout BLM Wilderness while a Minimum Tools Analysis is being completed by the Bureau. Pole-mounted and handheld oil applicators are permitted in Wilderness Areas managed by Joshua Tree National Park.
 - Apply oil to Common Raven eggs in <u>Tortoise Recruitment Priority Areas (TRPAs)</u> to addle them (see Item 3 and Table 1)
 - Report hatched or inaccessible raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
 - Conduct 50, 10-minute variable radius point counts between sunrise and 1400 hours when sustained winds are less than 40km/h and there is no more than light precipitation at previously determined random points.
- 4. Ord-Rodman CHU (includes a portion within Barstow Marine Corps Logistics Base)
 - Initial nest phenology check survey in <u>Tortoise Recruitment Priority Areas (TRPAs)</u> to best time oiling efforts in elevation-latitude classes, (coordinate routes with NPS contact) (see Item 3, "Nest Location and Egg Oiling", beginning on page 3). NOTE: Management actions are prohibited throughout BLM Wilderness while a Minimum Tools Analysis is completed by the Bureau. Pole-mounted and handheld oil applicators are permitted in Wilderness Areas managed

by Joshua Tree National Park.

- Apply oil to Common Raven eggs in <u>Tortoise Recruitment Priority Areas (TRPAs)</u> to addle them (see Item 3 and Table 1)
- Report hatched or inaccessible raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
- Conduct 50, 10-minute variable radius point counts between sunrise and 1400 hours when sustained winds are less than 40km/h and there is no more than light precipitation at previously determined random points. Deploy and retrieve 20 tortoise decoy survival trail, 1 camera only survival control, and 1 novel-object survival trail control at 22 predetermined random points (note: these points will be 250 meters from variable radius point count locations)
- Deploy and retrieve 20 tortoise decoy survival trails, at 20 predetermined random points (note: these points will be 250 meters from variable radius point count locations)
- Survival trial image review. (See Item 6)
- 5. Fremont-Kramer CHU (includes a portion within Edwards Air Force Base and Desert Tortoise Research Natural Area)
 - Initial nest phenology check survey of the nest to best time oiling efforts in elevation-latitude classes, (coordinate routes with NPS contact) (see Item 3, "Nest Location and Egg Oiling", beginning on page 3). **NOTE:** Management actions are prohibited throughout BLM Wilderness while a Minimum Tools Analysis is completed by the Bureau. Pole-mounted and handheld oil applicators are permitted in Wilderness Areas managed by Joshua Tree National Park.
 - Apply oil to Common Raven eggs to addle (see Item 3 and Table 1)
 - Report hatched or inaccessible raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
 - Conduct 50, 10-minute variable radius point counts **between sunrise and 1400 hours when sustained winds are less than 40km/h and there is no more than light precipitation** at previously determined random points.
 - Deploy and retrieve 20 tortoise decoy survival trails, at 20 predetermined random points (note: these points will be 250 meters from variable radius point count locations)
 - Survival trial image review. (See Item 6)
- 6. Superior-Cronese CHU and Fort Irwin's southeast conservation area
 - Initial nest phenology check survey of the nest to best time oiling efforts in elevation-latitude classes, (coordinate routes with NPS contact) (see Item 3, "Nest Location and Egg Oiling", beginning on page 3). **NOTE:** Management actions are prohibited throughout BLM Wilderness while a Minimum Tools Analysis is completed by the Bureau.
 - Apply oil to Common Raven eggs to Addle (see Item 3 and Table 1)
 - Report hatched or inaccessible raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
 - Conduct 50, 10-minute variable radius point counts **between sunrise and 1400 hours when sustained winds are less than 40km/h and there is no more than light precipitation** at previously determined random points.
 - Deploy and retrieve 20 tortoise decoy survival trails, at 20 predetermined random points (note: these points will be 250 meters from variable radius point count locations)
 - Survival trial image review. (See Item 6)
- 7. Chuckwalla CHU
 - Report raven nests to Wildlife Services (coordinate with USFWS, BLM, NPS contact, and WS)
 - Conduct 50, 10-minute variable radius point counts between sunrise and 1400 hours when

sustained winds are less than 40km/h and there is no more than light precipitation at previously determined random points.

Attachment Two

Protocol adapted from:

Berry, K.H., and A.P. Woodman. 1984. Methods used in analyzing mortality data for most tortoise populations in California, Nevada, Arizona, and Utah. Appendix 7 in Berry, K.H. (ed.), The Status of the desert tortoise (*Gopherus agassizii*) in the United States. Report to the U.S. Fish and Wildlife Service from the Desert Tortoise Council on Order No. 11310-0083-81.

A) Shell <50 mm MCL	В
B) Scutes may be fading slightly, and/or bone may be slightly porous with <75% bone surface pitted	<1 year
BB) Scutes more weathered than above; bone, if still present, extremely porous with >75% bone surface pitted.	C
C) Scutes faded, curling, maybe breaking	L-2 years
CC) Scutes breaking apart, very faded, curled; growth rings peeling and cracking	>2 years
AA) Shell >50 mm MCL	D
D) Shell 51-120 mm MCL	E
E) Scutes not fading, and/or bone solid.	<1 year
EE) Scutes and/or bone more weathered than above	F
F) Scutes fading, growth rings beginning to peel, and/or bone sol or slightly porous	id 1-2 years
FF) Scutes faded; growth rings peeling, cracking, and brittle. and/or bone slightly to extremely porous	G
G) Scutes faded, usually curling; growth rings peeling and bone porous.	l cracking; <75% 2-4 years
GG) Scutes very faded, curling, usually breaking, and/or bone extremely porous (>75%)	>4 years
DD) Shell >120 mm MCL	Н
H) Scutes not faded, and/or bone solid	<1 year

HH) Scutes and/or bone more weathered than aboveI
I) Scutes of both the plastron and carapace faded
J) Shell worn with depressed scutesK K) Very slight peeling or cracking of growth rings, and/or bone solid1-2 years
KK) Scutes and bone are more weathered than aboveL
L) Some peeling and cracking of growth rings on scutes, and/or bone solid2-4 years
LL) Growth rings peeling and cracking, and/or bone peeling, cracking, or showing mosaic cracking
JJ) Scutes on shell not depressed M
M) Growth rings not peeling or cracking, and/or bone solid
MM) Scutes and/or bones more weathered than aboveN
N) Growth rings beginning to crack and peel on scutes, and/or bone solid
NN) Growth rings peeling and cracking on scutes, and /or bone peeling, cracking, or showing mosaic cracking
II) Soutes of either the plastron or the carapace faded, but not both
O) Shell worn with depressed scutes
P) Some peeling and cracking of growth rings, usually on the vertebral scute, and/or bone solid
PP) Scutes and/or bone more weathered than aboveQ
Q) Growth rings on scutes peeling and cracking, usually not curled, and/or bone solid or beginning to crack and peel
2-4 years

RR) Scutes and/or bone more weathered than above.....S

S) Scutes may be curling at edges; growth rings cracking and peeling; and/or bone solid if still covered by scutes, or may show some cracking and peeling if exposed. 2-4 years

Attachment Three Desert Tortoise Remains Notification Guidelines

Date	DTMA	Nest	Nesting	Easting	Northing	Species	Breeding/	Number	Description	Age	Time
Found		ID	Substrate				Development	of	of Remains	Class	Since
							Stage	Carcasses			Death
5/30/2016	Ord-Rodman	ON051418-P059	Wooden	545314	3848714	Commo	Fledgling	3	Disarticulated	Hatchling	1-2
			Utility			n Raven				(<60)	yrs
			Support								
			Structure								

*Please copy and paste cells in electronic correspondence from a Microsoft Excel document. Do not change the order of cells above.

**Describe extra details, if needed, in electronic correspondence that may aid WS to find and/or remove offending ravens such as the level of difficulty in finding the nest, preferred route of travel to reach the nest, compass bearings, etc.

Attachment Four Proposal Guidelines

The work described in this RFP for the CHUs and NPS units will be performed over a three-and-a-half-month period (Oiling: March 17 and June 9, 2025, Reports: June 10 to a maximum of June 30, 2025). Once recipients are selected, the funding agreements will be between each recipient and NFWF. All proposals should be sent via email to Anna Beatrice at Anna.Beatrice@nfwf.org by **Wednesday, January 8, 2025 (5:00 pm PST).**

Proposals should include the following information:

- 1. A description of how your organization plans on completing the work described in the RFP.
- 2. Information about the qualifications, experience, and past performance of the Project Director/Principal, as well as all other staff that would contribute.
- 3. Your detailed budget for the activities described in the RFP.
- 4. Your detailed survey effort by person days and hours.
- 5. The tax ID number for your organization.
- 6. The mailing address for your organization (not a P.O. Box).
- 7. Financial information for your organization, as described below in Attachment Five.
- 8. Insurance information for your organization. If selected, please be prepared to add the National Fish and Wildlife Foundation as additional insured.
- 9. If the proposal references this RFP, the RFP needs to be included as an Appendix and a reference to that Appendix must be added wherever the RFP is mentioned.

Attachment Five Required Financial Documents

To consider your proposal, the Foundation requires non-Federal applicants to submit specific financial documents. ALL FINANCIAL DOCUMENTS MUST BE NO MORE THAN 2 YEARS OLD AND FROM THE SAME YEAR.

State/Local Government Agencies

- Certificate of Insurance. A Certificate of Insurance (COI) is a document issued by an insurance company that verifies the existence of insurance coverage. Specifically, the COI lists the effective date of the policy, the type of insurance coverage purchased, and the types and dollar amount of applicable liability. If funds are awarded, your organization must agree to obtain and maintain all appropriate insurance against liability for injury to persons or property from any and all activities undertaken by your organization and associated with the funding agreement in any way and must have NFWF named as an additional insured on all such policies and provide NFWF with appropriate Certificates of Insurance reflecting such additions within sixty (60) days after a funding agreement is fully executed.
- Most recent GAAP Audited Financial Statements (with Auditor's Opinion)
- A-133 Audit (if applicable for entities that expend more than \$750,000 in federal financial assistance funds in a given fiscal year)

Non-Profit Organizations / Universities

- Certificate of Insurance. A Certificate of Insurance (COI) is a document issued by an insurance company that verifies the existence of insurance coverage. Specifically, the COI lists the effective date of the policy, the type of insurance coverage purchased, and the types and dollar amount of applicable liability. If funds are awarded, your organization must agree to obtain and maintain all appropriate insurance against liability for injury to persons or property from any and all activities undertaken by your organization and associated with the funding agreement in any way and must have NFWF named as an additional insured on all such policies and provide NFWF with appropriate COI reflecting such additions within sixty (60) days after a funding agreement is fully executed.
- Most recent IRS Form 990 (Income Tax Return)
- Most recent GAAP Audited Financial Statements (with Auditor's Opinion)
- A-133 Audit (if applicable for entities that expend more than \$750,000 in federal financial assistance funds in a given fiscal year)
- Certificate of Good Standing. A Certificate of Good Standing, sometimes called a Certificate of Existence or Certificate of Authorization, is a state-issued document used to demonstrate that a corporation, limited liability company, or non-profit entity exists, is authorized to do business in the state, and has complied with all state-required formalities. More information on requesting a California Certificate of Good Standing can be found here: http://kepler.sos.ca.gov/ For other states, please visit the Secretary of State website for the applicable state.
- Conflict of Interest Disclosure. On a separate piece of paper, state whether your organization, or any individuals or organizations associated with your organization, has an actual or potential conflict of interest with respect to NFWF, the Scope of Work, or the subject matter of your proposal and, if so, the nature and specific details of that conflict.
- Statement of Litigation. On a separate piece of paper, state any litigation (including bankruptcies) involving your organization and either a federal, state, or local government

agency as parties. This includes anticipated litigation, pending litigation, or litigation completed within the past twelve months. If your organization is not involved in any litigation, please state.

Businesses

- Certificate of Insurance. A Certificate of Insurance (COI) is a document issued by an insurance company that verifies the existence of insurance coverage. Specifically, the COI lists the effective date of the policy, the type of insurance coverage purchased, and the types and dollar amount of applicable liability. If funds are awarded, your organization must agree to obtain and maintain all appropriate insurance against liability for injury to persons or property from any and all activities undertaken by your organization and associated with the funding agreement in any way and must have NFWF named as an additional insured on all such policies and provide NFWF with appropriate COI reflecting such additions within sixty (60) days after a funding agreement is fully executed.
- Businesses are not required to submit financial documents.
- Certificate of Good Standing. A Certificate of Good Standing, sometimes called a Certificate of Existence or Certificate of Authorization, is a state-issued document used to demonstrate that a corporation, limited liability company, or non-profit entity exists, is authorized to do business in the state, and has complied with all state-required formalities. More information on requesting a California Certificate of Good Standing can be found here: http://kepler.sos.ca.gov/ For other states, please visit the Secretary of State website for the applicable state.
- Conflict of Interest Disclosure. On a separate piece of paper, state whether your organization, or any individuals or organizations associated with your organization, has an actual or potential conflict of interest with respect to NFWF, the Scope of Work, or the subject matter of your proposal and, if so, the nature and specific details of that conflict.
- Statement of Litigation. On a separate piece of paper, state any litigation (including bankruptcies) involving your organization and either a federal, state, or local government agency as parties. This includes anticipated litigation, pending litigation, or litigation completed within the past twelve months. If your organization is not involved in any litigation, please state.

Individuals

- A Certificate of Insurance (COI) is a document issued by an insurance company that verifies the existence of insurance coverage. Specifically, the COI lists the effective date of the policy, the type of insurance coverage purchased, and the types and dollar amount of applicable liability. If funds are awarded, you must agree to obtain and maintain all appropriate insurance against liability for injury to persons or property from all activities undertaken by you and associated with the funding agreement in any way and must have NFWF named as an additional insured on all such policies and provide NFWF with appropriate COI reflecting such additions within sixty (60) days after a funding agreement is fully executed.
- Individuals are not required to submit financial documents.
- Conflict of Interest Disclosure. On a separate piece of paper, state whether you, or any individuals or organizations associated with you, have an actual or potential conflict of interest with respect to NFWF, the Scope of Work, or the subject matter of your proposal and, if so, the nature and specific details of that conflict.
- Statement of Litigation. On a separate piece of paper, state any litigation (including bankruptcies) involving you and either a federal, state, or local government agency as parties. This includes anticipated litigation, pending litigation, or litigation completed within the past twelve months. If you are not involved in any litigation, please state.

Attachment Six Required Datasheets

Who Found Nes	ion Date:	/ /2	.02_	Study	Study Area					(Sketch the nest location on the reverse side of this sheet.) Comments						
Waypoint ID	<u>_N</u>	1		UTM (NAD83	3) Zone 119	6 Ea	sting:		Northing:							
Best viewed from Easting Northing				Habitat			Topography			Route						
¹ Nest Location: ² Nest Heig			² Nest Heigh	t (m): ³ Nest Aspect			:: Photo ID (s)									
To be filled out at the end of the season Nest Fate Cause of F If applical			Cause of Fa If applicabl	ilure e		Tota Obs	al Young served	'oung ved			Total Young Observed Fledged			Item Tort Remains Found		
WS Action Taken?				Carc ID	Carc IDs of Tort					Item Pellets Colle			ted Tort in Pellet?			
Observer	Date MM/DD/YY	Start Time (12hr am/pm)	End Time (12hr) am/pm)	⁴ Species Use	ltem Adults	⁵ Breeding/ Develop.	Stage Item of	Descr of Yo G (Age, behav	oung vior)	Tortoise Carcass & Item	Raven Pellets (⁷ Y/N/Unk)	Dir of Carcass Search Transects (N-S, etc)	Expanded Search ⁸	Comments: Cause of Failure or why chose B/D Stage (use back, too)		