



Desert Tortoise Recovery Partnership

Update on DOD/DOI's Recovery and Sustainment Partnership (RASP)

Brian Croft, U.S. Fish and Wildlife Service

Desert Tortoise Management Oversight Group: October 11, 2022

Program Overview: Desert Tortoise Recovery Partnership (DTRP)

- RASP is a joint initiative of DOD and the Department of the Interior. **In June 2018, DOD and DOI signed an MOU to establish the RASP to develop species conservation and recovery initiatives** and provide increased flexibility for military missions nationwide.
- DTRP supports the desert tortoise RASP by **implementing off-base conservation actions identified by partners in support of the draft RASP biological opinions** in development for MCAGCC and Ft. Irwin National Training Center (NTC).

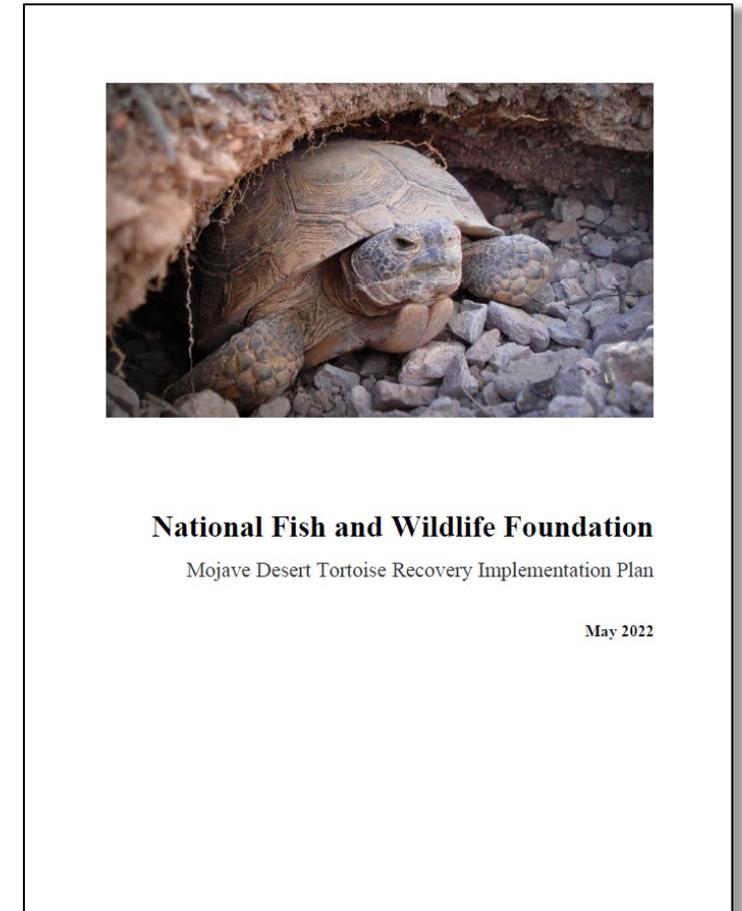


Implementation Plan Development (November 2020 – May 2022)

Objective: Produce measurable outcomes for the threatened Mojave desert tortoise in California’s Mojave Desert, particularly in the Western Mojave Recovery Unit.

Process:

- Start with 5-year objectives and focal areas drawn from preliminary FWS RASP Appendix, clip them to exclude installation lands.
- Develop plan further with sections on conservation context, adaptive management, priority conservation strategies, metrics for tracking implementation and outcomes, a monitoring plan, and 10-year budget.
- Use collaborative stakeholder process to incorporate on-the-ground knowledge in prioritizing conservation actions

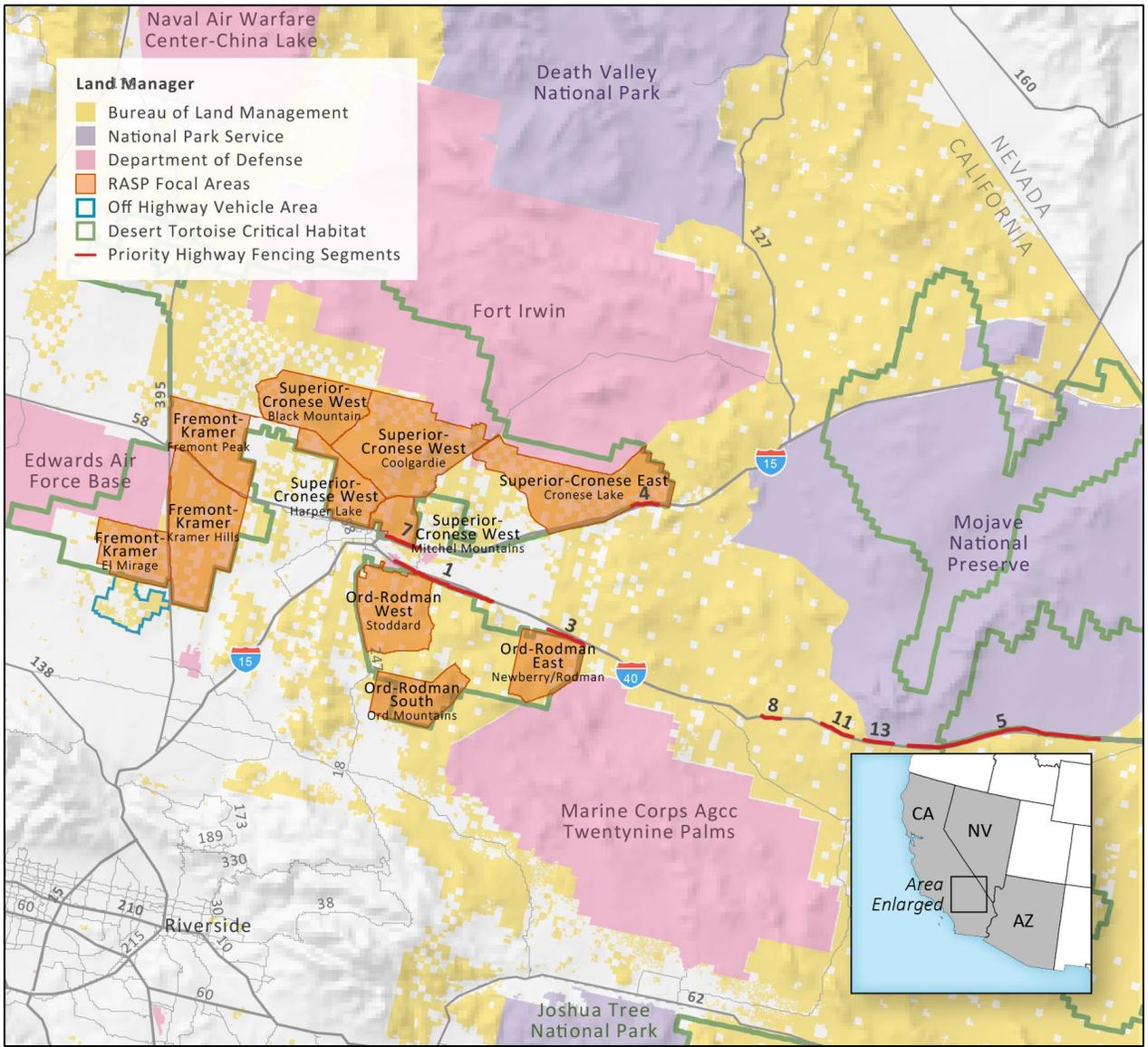


<https://www.nfwf.org/sites/default/files/2022-05/mojave-desert-tortoise-implementation-plan-2022.pdf>



NFWF

Geographic Focus



Priority will be given to projects that address desert tortoise conservation needs in one or more of six focal areas in the Western Mojave Recovery Unit.

Priority highway fencing segments include: (1) I-40 Daggett to Newberry Springs, CA; (3) I-40 National Trails West of Pigsah, CA; (5) I-40 West of Van Winkle Wash to E of Essex Rd, CA; (7) I-15 North of Barstow, CA; (8) I-40 North of Black Ridge, CA; (11) I-40 Old Dad Mountains, CA; and (13) I-40 Kelbaker Rd, CA.



NFWF

Priority Implementation Strategies

Strategy 1. Mojave desert tortoise habitat improvement

1.1 Establish defensible polygons of desert tortoise habitat – Expanding existing or conserving new tracts of Mojave desert tortoise habitat via route restoration and land protection

1.1.1 Land acquisitions and conservation easements

1.1.2 OHV route signage

1.1.3 Vertical mulching

1.1.4 Physical barrier installation

1.1.5 Community outreach and education

1.1.6 Increase visitor contact staffing to reduce non-compliance with route and habitat restoration closures

(While no funding for this strategy will come through NFWF, other RASP partners intend to support this strategy.)

1.2 Improve desert tortoise habitat on protected lands– Restoring degraded tortoise habitat on defensible habitat space

1.2.1 Habitat restoration

1.2.3 Increase native seed banks



NFWF

Priority Implementation Strategies

Strategy 2. Support road crossing improvements

- 2.1 Construct or repair exclusion fencing along roads
- 2.2 Install or improve culverts, underpasses or overpasses

Strategy 3. Augment depleted Mojave desert tortoise populations

- 3.1 Head-starting and reintroduction
- 3.2 Translocation *(While no funding for this strategy will come through NFWF , some RASP partners intend to support this strategy.)*

Strategy 4. Increase capacity for project implementation and data management

- 4.1 Create a RASP Coordinator position
- 4.2 Support regulatory compliance
- 4.3 Support data collection and data management

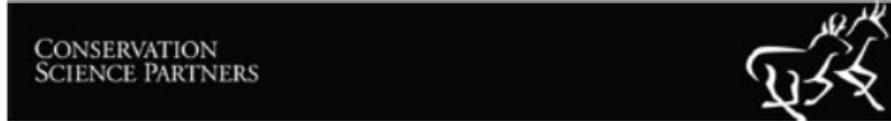
Strategy 5. Monitoring and Adaptive Management

- 5.1 Species monitoring
- 5.2 Improve understanding of recovery action effectiveness
- 5.3 Host annual stakeholder meetings
- 5.4 Assess and revise Plan in years 4 and 8



NFWF

Monitoring Plan



Mojave Desert Tortoise Monitoring Plan in Support of the Recovery and Sustainment Partnership

Submitted to:
Ms. Erica Perez – Staff Scientist for Wildlife Conservation
National Fish and Wildlife Foundation

By:
Dr. Laura Farwell
Dr. Bryan Wallace

Key Principles

- Expand range-wide monitoring (particularly line-distance sampling) for **long term** trends
- Conduct more population diversity monitoring in the West Mojave to track impact of RASP investments on population trends in the **medium term**
- Make **short term** effectiveness monitoring consistent across projects and compatible with existing protocols and databases (ex. BLM)

Table of Contents

<i>Executive Summary</i>	2
Section 1: Review of existing data on RASP monitoring metrics	2
Section 2: Population-level monitoring guidance to support RASP objectives	3
Section 3: Effectiveness monitoring guidance.....	4
Section 4: Data management Plan	5
Role of RASP coordinator	6
Existing data and information.....	6
Methods and design of monitoring activities to support RASP objectives	6
Opportunities for effectiveness monitoring and adaptive management	6
Data management	6
<i>Introduction: RASP Implementation Plan and Purpose of Monitoring Plan</i>	8
1. Review of existing data on RASP monitoring metrics	11
1.1. Overview	11
1.2. Existing MDT monitoring data sources within RASP focal areas	12
1.3. Summary of existing data and potential applications for RASP monitoring	13
1.5. Key gaps in information needed to track RASP monitoring metrics.....	16
1.6. Role of RASP coordinator	17
2. Population-level RASP monitoring guidance	18
2.1. Overview	18
2.2. Conceptual framework for holistic population monitoring	18
2.3. Relevant monitoring methods	20
2.3.1. Line Distance Sampling	20
2.3.2. Capture-Mark-Recapture	21
2.3.3. Radio-tracking Females and X-ray Exams of Clutch Size	21
2.4. Long-term demographic plots: history and study design recommendations.....	22
2.4.1. USGS Long-term Study Plots	22
2.4.2. Lessons Learned from Existing Long-term Demographic Study Plots	23
2.4.3. Additional Demographic Studies and Insights for the RASP Monitoring Plan	23
2.5. Monitoring Recommendations	24
2.5.1. Guiding principles for the RASP monitoring plan.....	24
2.5.2. Specific monitoring components and schema	26
2.6. Summary	29
2.7. Role of RASP coordinator	30
3. Effectiveness monitoring guidance	33
3.1. Overview	33
3.2. Effectiveness monitoring guidelines	33
3.2.1. Habitat restoration and improvement (Implementation Plan Strategy 1.2, 1.3)	33
3.2.2. Reduce direct and indirect sources of mortality (Implementation Plan Strategy 2.1)	35
3.2.3. Augment depleted MDT populations (Implementation Plan Strategy 3.2)	38

About NFWF

Who They Are

- Chartered by Congress in 1984
- Independent 501(c)(3) organization
- 30 member Board appointed by Secretary of the Interior
 - Includes FWS Director and NOAA Administrator

What They Do

- Sustain, restore and enhance wildlife
- Bring collaboration among federal agencies and private sector

How They Do It

- Leverage public funding with private money – average 3:1



Bald eagle

NFWF is

- An implementer – we fund projects

NFWF is not

- An advocacy organization that engages in lobbying or litigation



2022 Request for Proposals

\$2.5M awarded to 4 projects *(currently in contracting)*

- \$1,200,000 to ***Preservation Ranch***
 - For their Pilot Project to restore habitat in the Ord-Rodman Critical Habitat Unit
- \$1,100,000 to ***Mojave Desert Land Trust***
 - To co-host the RASP Coordinator position in BLM Barstow office and contract American Conservation Experience crews for restoration in the Superior-Cronese Critical Habitat Unit
- \$132,821 to ***Transition Habitat Conservancy***
 - To continue ongoing restoration efforts in critical habitat units through an established program, monitoring, and a USGS research study to analyze the impact of soil decompaction.
- \$70,000 to ***USFWS Desert Tortoise Recovery Office***
 - For line-distance sampling in Ord-Rodman CHU



Focused inaugural RFP priorities

- RASP Coordinator shared-stewardship position to be co-located in BLM Barstow Field Office
- Improve tortoise road crossings
- Closure of unauthorized routes
- Habitat restoration
- Community outreach and education
- Species monitoring



NFWF

2023 Request for Proposals

Up to \$2 million available from a variety of sources

- \$200,000 REPI Challenge remaining from 2022
- \$1,200,000 from USMC/MCAGCC
- \$200,000 Bureau of Land Management
- \$120,000 BNSF Railway corporate funding

Refined second year priorities to be identified with partners no later than Nov 2022

- ~~RASP Coordinator shared stewardship position to be co-located in BLM Barstow Field Office~~
- Improve tortoise road crossings
- Closure of unauthorized routes
- Habitat restoration
- Community outreach and education
- Species monitoring
- ???



Timeline

- Nov 29, 2022: RFP published on NFWF website
- Mid-Jan 2023: NFWF holds applicant webinar
- Mar 2, 2023: Full proposals due to NFWF
- First half of April 2023: Partners review proposals and make funding recommendations
- Late May 2023: Grantees Notified of Awards



NFWF

Thank You! Comments and Questions?

Brian Croft

*Division Supervisor
Mojave Desert Division
USFWS Palm Springs Fish & Wildlife Office
C: (760) 953-5494
brian_croft@fws.gov*

Kirstin Neff

*Manager, Southwest Rivers Program
NFWF Rocky Mountain Regional Office
C: (520) 977-3108
Kirstin.Neff@nfwf.org*

Jody Olson

*Senior Director, Federal Relations
NFWF Washington, DC Headquarters
C: (703) 338-3489
Jody.Olson@nfwf.org*

