

Meeting Summary

Desert Tortoise Management Oversight Group (MOG)

October 3, 2024 | 10:00-2:00pm | Zoom

[Meeting Agenda](#) | [Acronyms List](#) | [MOG Library](#)

Partner Needs and Resources:

- FHWA is eager to know what additional tasks partners would like FHWA to participate in/fund on a programmatic level. Please contact Abdelmoez (Del) Abdalla (abdelmoez.abdalla@dot.gov)
- The FHWA's technical team will provide training on Section 7 of the ESA on October 10, 2024. Please contact Craig Greg (CCrick@dot.nv.gov) to register.
- Naval Air Weapons Station China Lake would like to plan to engage more with other DoD installations in future, especially Ft Irwin and EAFB (due to shared boundary and northwestern Mojave location). Contact Julie Hendrix (julie.m.hendrix2.civ@us.navy.mil)
- Living Desert Zoo would be happy to share materials and tips related to outreach to OHV users. Contact Katie Shaw (kshaw@livingdesert.org)
- Mojave Desert Native Plant Materials Development and Restoration Workshop is on October 8-10, 2024 at Victor Valley College in Victorville, CA. To register, Judy Perkins (jlperkins@blm.gov) with your name and affiliation. Please note if you are interested in remote participation. Workshop is free of charge.

Next Steps

- Dates of future MOG meetings: April 3 (in-person/virtual in Las Vegas) and October 8 2025 (virtual).
- DTRO and NDOW will further discuss your post-treatment monitoring results on ravens.
- Clark County and DTRO will coordinate on the implications of techno torts on monitoring.

Table of Contents

1. Executive Summary	2
2. Welcome and Opening Remarks	2
2. Overview of the MOG	2
3. MOG Executives Report Out and Member Updates.....	3
4. Rangewide Monitoring Results and Next Steps.....	4

5. Recovery Implementation Teams: Progress and Issues Addressed	4
6. Mojave Desert Sentinel Landscape	5
7. BLM Solar Programmatic Environmental Impact Statement	6
Solar PEIS Process Update	6
Utility Scale Solar Impacts to Mojave Desert Tortoise Recovery	7
Closing Remarks on Solar PEIS.....	9
8. Technical Session: Predator Management	9
Raven Monitoring and Management in California, Nevada, and Utah	9
Avicide Applications in Sage-grouse Habitats of Nevada	10
Coyote Ecology and Related Impacts to Solar Facilities in Southern Nevada	10
Coyote and Raven Deterrents and Management in Clark County	11
Opportunities for Partnering with USDA-Animal and Plant Health Inspection Service (APHIS)	11
7. Closing Comments, Evaluation, and Wrap Up	13
Glen Knowles and Julia Guglielmo.....	13
Appendix A: Participant List	13

1. Executive Summary

On October 3, 2024, the Desert Tortoise Management Oversight Group (MOG) met virtually to focus on Mojave Desert Tortoise recovery efforts. The theme of this meeting was predator management, and so the technical presentations largely focused on scientific studies and management practices related to common ravens and coyotes. Additionally, the meeting included the annual update on line-distance sampling from the US Fish and Wildlife Service's Desert Tortoise Recovery Office (DTRO), a presentation on the Bureau of Land Management's Western Solar Plan and discussion on solar energy development, and the recent designation of the Mojave Desert Sentinel Landscape as a significant conservation opportunity. Presenters highlighted the need for enhanced monitoring, funding for recovery initiatives, resource subsidy access management for subsidized predators, and adaptive management practices to mitigate threats to tortoise populations. The meeting concluded with plans for future MOG meetings to be held in 2025.

2. Welcome and Opening Remarks

Glen Knowles, Southern Nevada Fish and Wildlife Office, USFWS

Mike Senn, Deputy Assistant Regional Director of Ecological Services, USFWS

Glen opened the meeting and welcomed participants. Mike offered opening remarks to the MOG. Highlights included:

- Mike acknowledged that this has been a tough fire season and extended well wishes to all communities affected.

- The number of people involved in tortoise conservation is impressive. This is one of the largest collaborative groups and its enthusiasm and momentum is inspiring.
- Key challenges we are all facing relate to climate change. The national effort to reduce greenhouse gasses (GHGs) through a transition to renewable energy will help to mitigate this issue. If we don't get this right, we have larger problems down the road. However, tortoises are in the epicenter of impacts from renewable energy development. It's imperative to reduce greenhouse gas emissions, while recovering tortoise populations.
- BLM has had a challenging and daunting task with their Western Solar Plan/ programmatic environmental impact statement (PEIS). The PEIS is a necessary process to navigate renewable energy and species recovery values. USFWS and BLM have different missions and are working collaboratively as partners. In April, MOG members collaborated to provide BLM with constructive input on their draft plan (primarily on design guidelines and exclusion areas).
- The recent designation of the Mojave Desert Sentinel Landscape is an amazing opportunity for MOG partners. This designation of 3.5 million acres of landscape will help to protect Mojave Desert lands and waters.
- In addition, MOG members have innovated and developed strategies to reduce predation of desert tortoise with new technologies and a commitment to sustainable strategies.
- The recovery implementation teams (RITs) continue to make progress, with a focus on predator control, vehicle disturbance density management, and tortoise fencing.

2. Overview of the MOG

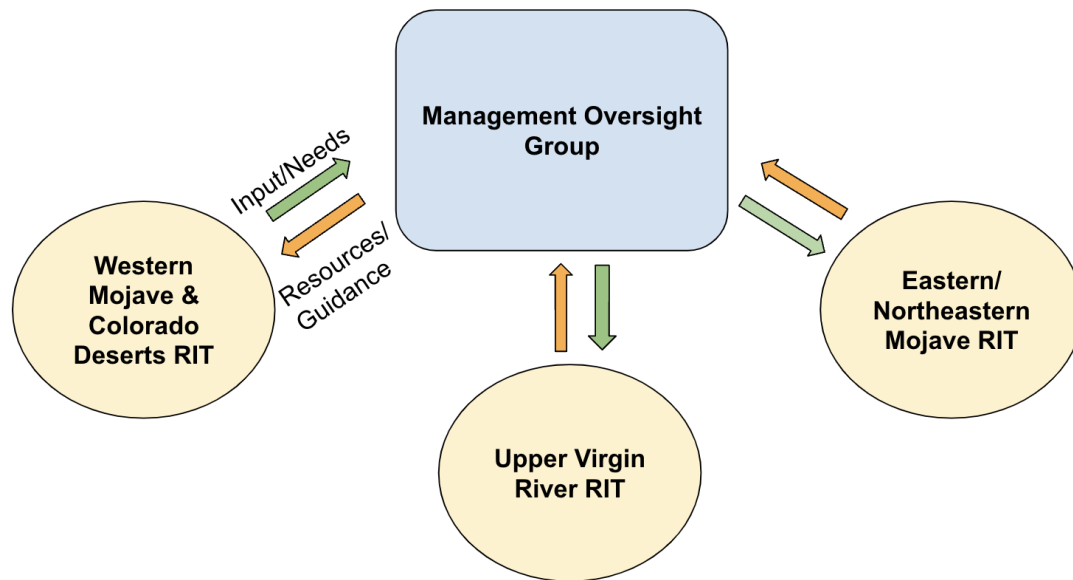
Julia Guglielmo, Southwest Decision Resources

The Desert Tortoise Management Oversight Group (MOG) was established in 1988 to coordinate agency planning and management activities affecting the desert tortoise. MOG meetings aim to:

- Standardize procedures for data analysis and interpretation
- Report on management actions
- Recommend funding priorities
- Identify areas lacking sufficient information for management
- Identify research needs
- Identify threats and conflicts
- Complete annual status or progress reports
- Coordinate existing laws and guidance
- Review ongoing research

A diagram of how the MOG interacts with RITs can be found below:

MOG Structure



3. MOG Executives Report Out and Member Updates

MOG Executives

MOG Executives shared high priority actions they have been implementing related to restoration, predator management, and highway fencing. They also expressed needs for accomplishing their goals. Their updates are below; agency acronyms are defined in the update titles.

- To review MOG Member Written Reports click [here](#)
- To review a synthesis of updates by theme, [click here](#)

4. Rangewide Monitoring Results and Next Steps

Corey Mitchell, USFWS Desert Tortoise Recovery Office

Corey provided an overview of the rangewide monitoring program including its history, latest monitoring efforts, and ongoing funding needs. You can find the recording for the presentation here and the [slides here](#). Key conclusions include:

- Range-wide tortoise monitoring is complex and sometimes counterintuitive
- Adult populations are in decline across the range, limited knowledge of status of other age classes

- Sufficient funding to achieve monitoring goals continues to be an issue across the range
- Working to increase understanding of vital rates by implementing demographic plots across the range
- Recent work highlights need for both density and demography focused surveys

Discussion:

- One participant wanted to make MOG members aware of a development being proposed between Las Vegas and Pahrump. Lots of mining and solar impacts are occurring and now, a space port is being proposed near Trout Canyon. The National Park Service is working with the Federal Aviation Administration (FAA) on horizontal landings and vertical takeoffs related to this development.

5. Recovery Implementation Teams: Progress and Issues Addressed

Kerry Holcomb, USFWS Desert Tortoise Recovery Office

Kerry presented on recent efforts to understand vehicle mortality and identify thresholds for management, in response to needs expressed in RIT meetings. You can find his [slides here](#).

Conclusions include:

- Linear landscape feature density is a positive covariate with:
 - Mojave desert tortoise road mortality
 - Subsidized predatory density
 - Percent invasive species cover
 - Fire ignition risk, and more
- The route density threshold for positive population trends is ~0.6 routes km/km²
- Approximately 11,014 of 26,116 km² (~42%) of critical habitat are currently above the route density threshold and need to be restored.
- Dividing the area of MDT habitat on public land by the length of TIGER 2020 features creates a useful index for prioritizing.

Questions/Discussion:

- Is there a route polygon size that is most conducive to restoring habitat for tortoise or their populations or does it primarily come down to route density?
 - Size of polygons can be misleading - could be high density of routes or low amount of habitat.
- I wonder how well current BLM TMPs and route designations in tortoise habitat comport with this recommended route density threshold. I also hope that BLM will use this science during preparation of new TMPs, such as in Washington County, Utah.

6. Mojave Desert Sentinel Landscape

Phil Murray, Marine Corps Air Ground Combat Center

Phil gave a presentation about the newly designated Mojave Desert Sentinel Landscape (MDSL). You can find his [slides here](#). Key points include:

- Sentinel Landscapes are partnerships between DOD, USDA, DOI, and FEMA to work with agencies and private landowners on multiple objectives
- Goals of the MDSL:
 - Reduce vehicle strikes to threatened, endangered, and other special status species (e.g. tortoise)
 - Provide community outreach in tandem with habitat improvements to increase the success of restoration and climate resilience activities
 - Reduce and mitigate impacts from unauthorized OHV use and illegal cannabis grows
 - Reclaim and rehabilitate priority resilient habitats by supporting the protection, restoration, wildlife resilience, and rehabilitation of up to 50,000 acres
 - Develop sustainable seed propagation agricultural practices and seed growing cooperatives that are climate resilient
- Next steps include:
 - Fall 2024: State hires MDSL Landscape Coordinator
 - October 2024 – May 2025: Develop Implementation Plan
 - 6-7 November 2024: Desert Manager's Group
 - 7 November 2024: In person meeting at DMG
 - November 2024: Received results from NFWF ATBC Challenge
 - January 2024 – July 2026: Joint Environmental Planning

Discussion:

- How does the Sentinel Landscape protect habitat?
 - The designation does not change any land management uses. Agencies can prioritize habitat protections. It provides additional coordination - brings together local to state level partners to enhance communication. The MDSL has a coordinator with a specified coordination role to keep the effort on track and keep it moving forward.
 - Various funding opportunities are prioritized toward Sentinel Landscapes (e.g., NRCS RCPP, America the Beautiful Challenge)
- How would land designation be prioritized?
 - A programmatic agreement/joint NEPA could help with prioritization.

7. BLM Solar Programmatic Environmental Impact Statement

Solar PEIS Process Update

Vicki Campbell, Bureau of Land Management

Vicki presented on the final BLM Western Solar Plan (Solar PEIS). She focused on the differences between the draft and the final PEIS, with a focus on how it relates to desert tortoise and its habitat. You can find her [slides here](#) and the [E-Planning webpage here](#).

Discussion:

- If stakeholders were confused at some aspects of the draft, why did the BLM not write a Supplement to the Draft EIS instead of moving to a final draft?
 - BLM looked at a range of alternatives. Adjustments between the draft and final EIS fit within the range of alternatives, and the BLM addressed the most confusing aspects in the Final EIS. We thought it was best for everyone to go from draft to final.
- If a pending solar application is found on a crucial Mojave desert tortoise connectivity corridor, what happens then?
 - Connectivity corridors were excluded. But, there are pending applications (fully exempt and partially exempt). There will still be NEPA documents on all of these projects. So, within exclusion areas, tortoise connectivity has to be considered in the NEPA and BO for that specific project.
- You said that MDT connectivity areas were excluded from solar energy development. Can you explain more about which linkages were excluded and why?
 - The areas FWS said were critical linkages are excluded.
- What tortoise areas that FWS recommended be excluded remain as available for development in the final PEIS?
 - E-Planning has a [webmapper experience](#). You can go to a specific exclusion and it will tell you whether projects can be developed and why the decision was made.
 - The 300k acre difference between what FWS asked for and what was ultimately excluded was primarily in Arizona. The area east of the Colorado River is not listed as habitat for MDT, and those areas were not excluded.
- Discussion on unlisted populations:
 - It is sad that the tortoise habitat east of the Colorado River in Arizona was not excluded since these tortoises have the Mojave species DNA but live on the wrong side of the Colorado River.
 - The Solar PEIS does not cover the currently unlisted population of Mojave desert tortoise near the Black Mountains. This population is at the forefront of one participant's concerns about the PEIS.

- Unlisted populations were not considered with the same standard as listed species. MDT in AZ and Sonoran Desert Tortoise (SDT) - these species are covered in the plan under design features.
- FWS's 2022 five-year status review for the Mojave desert tortoise recommended that all *Gopherus agassizii* tortoises be included in the ESA listing and that the distribution and taxonomy also be updated. DTRO continues to support this recommendation and are working with partners and FWS leads in these areas to fund and survey areas of interest East of the Colorado Desert. FWS did ask for exclusions for *G. agassizii* in these unlisted habitat areas, but it is my understanding that listed species/populations were prioritized for exclusion considerations in BLM's solar plan.
- Discussion on design feature from the final solar PEIS: "ER-1sss – For ESA listed species: avoid impacts; impacts no greater than minor":
 - ER-1sss require impacts to be avoided (impacts no greater than minor). How will minor be defined and determined?
 - "Minor" was not defined. This was intentional. It depends on the species on the site and the population as a whole. This is weaved into the project specifics, so BLM didn't want to provide a number or acreage attached to the definition of "minor." Impacts depend on where you are and when the project comes in. A partially exempt project that begins in January could be very different from a project that comes in 10 years from now.
 - Who will define "impacts no greater than minor"?
 - The authorized officer for BLM is the decision maker on projects: Field Office Manager. BLM coordinates with USFWS and involves state agencies. It is a coordinated effort.

Utility Scale Solar Impacts to Mojave Desert Tortoise Recovery
Kristina Drake, USFWS Desert Tortoise Recovery Office

Kristina provided a presentation discussing the impacts of solar to beyond just on BLM lands. You can find her [slides here](#). Conclusions include:

- Within the Mojave Desert Tortoise's Range:
 - Extensive solar development is expected
 - Need to track planned & current landscape changes
 - Need online, publicly available tools
 - Need MOG/Agency support to update
 - Projects should provide frequent comprehensive findings
 - Resource managers need to learn and adapt through adaptive management

- Proposed an annual MOG Special Session on solar projects
- Manager updates to MOG are needed

Discussion:

- One participant recommended looking at the areas designated in the PEIS as "Avoidance" areas as well as the "Allowed" areas. Their understanding is that solar applications will still be allowed in Avoidance areas, but they will be evaluated on a case-by-case basis and are projects that will require an RMP amendment to approve - so they will work very similar to the way "Variance" areas were treated under the 2012 PEIS.
 - The only avoidance areas in the Solar Final PEIS Proposed Plan are for big game (non-high use) migration corridors. Applications are allowed in these avoidance areas but must maintain the function of the area for big game migration. A Resource Management Plan amendment is not needed if applications are in conformance with the eventual ROD.
- The BLM Desert Renewable Energy Conservation Plan Land Use Plan Amendment (DRECP, 2016) in the deserts of southern California are not part of the BLM Solar Programmatic EIS.
- Pending solar applications are having site specific NEPA proposing 50% vegetation removal and much grading and soil removal—BLM is claiming they can then remove fences and allow tortoises to move through in a crucial connectivity corridor. Does FWS approve of this as “minimal”?
 - DTRO prefers at least 70% of native perennial vegetation to remain undisturbed or a total perennial vegetation cover of 15% if we plan to allow tortoises to reoccupy this project site.
 - It all depends on how contractors go through the project’s travel management plan. It will depend on the proposal and FWS will evaluate on a case by case basis.
- Do herbicides used for exotic weed control in solar facilities impact the health of tortoises that reoccupy solar sites? Even when native shrubs are left, invasive grasses can return to these sites for years. Some projects do use herbicides to control this.
 - If we don’t use herbicides, nonnative and invasive plants such as *Brumus* sp. and *Schismus* sp. thrive in disturbed habitats and can dominate landscapes. Tortoises that consume nonnative and invasive plants often yield poor nutrition, physical damage to the gastrointestinal track, and reduced development for young tortoises. Manually pulling weeds should be addressed if possible, then herbicide applications may be required. We don’t have a lot of information on how

herbicides affects tortoises. Timing application with estivation can reduce impacts to tortoises.

- Not all herbicides are equal - they have different residual times and have different effects as pre and post emergent treatments.

Closing Remarks on Solar PEIS

Jeremy Bluma, Bureau of Land Management

- BLM appreciates the engagement of all stakeholders, especially expertise from DRT0 and MOG.
- BLM understands that navigating this is a challenge. We are glad to incorporate comments.
- Looking forward to Record of Decision (ROD), which will increase durable protections.
- In the partially exempt category, new design features will raise the bar to ensure BLM has the right mitigation in place. Otherwise, BLM reserves the right to say no to projects.

8. Technical Session: Predator Management

Raven Monitoring and Management in California, Nevada, and Utah

Kerry Holcomb, USFWS

Kerry presented on raven trends and management in California, Nevada, and Utah within a framework of adaptive management. You can find his [slides here](#). Conclusions include:

- Oiling and subsidy denial have changed distribution of ravens and their nests within control areas, but expensive and needed in perpetuity
- Indirect effects fee is needed to adequately implement subsidized predatory management at a landscape scale
- One size doesn't fit all, but USFWS' structured decision making tool helps
- Areas near subsidies are slowest to respond to treatments - meaning we should focus on subsidies

Discussion:

- On the map of increasing raven densities, were the raven density trends adjusted somehow for reporting rates by eBird observers? I.E, were they true increases or just increased total observations?
 - The [eBird data](#) are based on corrected values, using a machine learning approach (Fink et al. 2023)
- Did you say that all of the Reserve/RCNCA is considered a tortoise recruitment area? Or is it just the lower elevations (below 4000 ft in elevation) defined as the tortoise recruitment area?

- Areas below 4000 ft in elevation are tortoise recruitment areas.

Avicide Applications in Sage-grouse Habitats of Nevada

Shawn Espinosa, Nevada Dept of Wildlife

Shawn presented background on ravens and their impacts to sage grouse, including the scale of the problem, a summary of research and tools, and recent efforts in Nevada. You can find his [slides here](#). Key points include:

- Raven populations are exploding in their distribution and abundance
- Population growth is primarily due to anthropogenic resource subsidies (i.e. large landfills, trash cans at rest stops, transmission lines, agriculture/livestock, and other factors)
- Shawn provided a summary of research and data, an overview of predator control being done and how NDOW makes decisions about raven management
- What's next:
 - Increase capacity to reach new permit limit - bandwidth and funding
 - Increase raven biology understanding
 - Collaborate with biodiversity
 - Establish common raven working group
 - Raise awareness

Discussion:

- DTRO would like to find a time to further discuss your post treatment monitoring results.
 - The preliminary decline reported for the northern Nevada control site seems counter to the eBird trends for Northern Nevada—
<https://science.ebird.org/en/status-and-trends/species/comrav/trends-map>.
 Further analysis is therefore required to determine the robustness of this result.
 We all need to get better at subsidy reduction measures.

Coyote Ecology and Related Impacts to Solar Facilities in Southern Nevada

Sean Murphy, US Geological Survey

Sean presented on the influence of Solar on Coyote Ecology and Predator/Prey Dynamics. You can find his [slides here](#). Key points include:

- There is heightened concern that coyotes are prey-switching to desert tortoises
- Studies on solar facilities on predator-prey dynamics have preliminary results related to movements and social status, home range characteristics, home range sizes

- Trying to understand if coyotes are influenced by anthropogenic subsidies. They appear to be using solar sites in the summer. Jackrabbits are also selecting areas closer to human developments, including solar facilities - so it is uncertain whether coyotes are looking for water or for jackrabbits.

Coyote and Raven Deterrents and Management in Clark County
Kimberley Jenkins, Clark County Desert Conservation Program

Kimberley presented on predatory management efforts at the Boulder City Conservation Easement, under the Multi Species Habitat Conservation Plan. You can find her [slides here](#). Key points include:

- Under the multispecies habitat conservation plan (MSHCP), Clark County maintains the Boulder City Conservation easement and incidental take permits
- Conducted a predatory assessment on ravens, coyotes, and kit foxes. Tortoise predation risk was highest near US 95 and populated areas of Boulder City.
- Coyotes may be relying on subsidies in Boulder City and solar development areas to travel as far south as Mojave Desert Preserve
- Clark County is in the early stages of implementation of management actions - raven nest surveys, targeting nests, egg oiling, techno torts, and experimental rovers to target coyotes at subsidy sites
- Monitoring is needed - how frequently do management actions need to be repeated?
- Management actions should be paired with education and outreach – it takes a village!

Discussion:

- Since aversive techno tortoises will impact current monitoring efforts, please make sure you coordinate the use with Kerry Holcomb and the DTRO.

Opportunities for Partnering with USDA-Animal and Plant Health Inspection Service (APHIS)
Mark Ono, Wildlife Services

Mark provided an overview of Wildlife Services under USDA APHIS, with a focus on compliance and other hurdles to predatory management. You can find his [slides here](#). Conclusions include:

- APHIS-WS authorities and organization ([link](#)) - This is not a regulatory agency; it enters into agreements with State, local jurisdictions, individuals, public and private organizations for wildlife damage management. They have offices in each state.
- Scope of Services
 - Small (individual or local population) and large-scale resources protection work

- Avian and mammalian conflict species
- Integrated management - lethal and non-lethal methodologies
- Proactive or responsive
- Scope of Wildlife Damage Management (WDM) services for desert tortoise protection
- Cost and timelines
 - Costs vary depending on scope and locality
 - Utilize interagency agreements and cooperative service agreements - need to establish agreement to do the work
 - 100% full cost recovery - does not receive funding for T&E species protection
 - Approximately \$150-175k for wildlife biologist FTE, slightly less for technicians
 - Start up costs of capital assets
- Regulatory hurdles
 - There are existing NEPA related to WDM for desert tortoise protection
 - Expanded flyway/population level raven management - additional NEPA would be required, maybe EIS
 - Possible additional Section 7 compliance required
- Land class challenges
 - Additional NEPA needed for wilderness, areas of critical environmental concern, national parks and monuments, etc
 - GIS exercise needed to identify land class types
- Staffing challenges
 - Staff is not stationed in areas of interest in NV and CA
 - Would need facilities to house staff and equipment, funding to establish positions, on call services is challenging
- State regulations (e.g. California species differences, methodology limitations, pesticide notification requirements, firearm ammunition restrictions); drives up costs but is still workable
- National wildlife research center
 - Has innovative tools and techniques, conducts assessments of tools/techniques
 - Have talked with DTRO about possible studies

Discussion:

- One participant shared concerns about whether engaging with Wildlife Services on raven management would draw controversy toward raven management work, including NEPA and other legal challenges.

7. Closing Comments, Evaluation, and Wrap Up

Glen Knowles, USFWS, and Julia Guglielmo, Southwest Decision Resources

Glen and Julia closed the meeting by sharing next steps (April and October 2025 meetings, dates to be announced; plans to revisit the MOG charter), thanking presenters, and thanking MOG members for all the recovery actions they are working on and shared during their updates.

Discussion:

- One participant shared that they hoped future MOG meetings will address the cumulative and widespread impacts of commercial livestock grazing on federal lands in tortoise critical and other habitats. Concerns related to cheatgrass and associated fires, ravens and coyotes subsidies. Areas of particular concern include: tortoise habitats in southwest Utah and northwest Arizona, including in the BLM Beaver Dam Wash National Conservation Area and BLM Grand Canyon-Parashant National Monument and western Arizona Strip Field Office lands east of Mesquite. Also trespass concerns in BLM Gold Butte National Monument in southern Nevada.

Appendix A: Participant List

First	Last	Office/Title	Organization
Abdelmoez (Dell)	Abdalla		Federal Highways Administration
Alison	Ainsworth	Death Valley National Park, Ecologist	National Park Service
Ann	McLuckie	St. George Field Office	Utah Division of Wildlife Resources
Anna	Johnson	Natural Resources Program Manager	DOD, Nellis Air Force Base, NTTR
Anna	Murveit	Facilitator	Southwest Decision Resources
Ashley	Rosales		
Becky	Jones		

Ben	Roberts	Grand Canyon-Parashant National Monument Superintendent	National Park Service
Bill	Lamb	Acting Executive Director	QuadState Local Governments Authority
Brad	Hardenbrook	Supervisory Biologist, Habitat	Nevada Department of Wildlife
Brandy	Wood	Environmental Program Manager for Region 6	CDFW
Brian	Croft	Division Chief, West Mojave Desert Division	Fish and Wildlife Service, Palm Springs
Brian	Henen	Ecologist	DOD, USMC - MCAGCC
Brian	Todd		U.C. Davis
Brianna	Fogel	Fish and Wildlife Biologist	FWS
Cameron	Rognan	Washington Co. HCP Administrator	Washington County
Carrie	Norman		NPS - Lake Mead
Cecilia	Milner		
Chad	Rubke	Turtles Project Coordinator	Arizona Game and Fish Department
Chad	Utz	Government and External Affairs	DOD - National Training Center - Fort Irwin
Chris	Faehling	Lincoln County HCP Coordinator	Lincoln County
Christopher	Otahal	California - Barstow Field Office	Bureau of Land Management
Clay	Noss	RASP Coordinator	RASP
Corey	Lange	Nevada - Pahrump Field Office	Bureau of Land Management

Corey	Mitchell	Desert Tortoise Monitoring Coordinator	FWS
Craig	Wentworth		D8 Env
Curtis	Walker		Bureau of Land Management
Danny	McCamish	Environmental Scientist/Research Permit Coordinator	California State Parks - Anza Borrego State Park
Darrell	Lacy	Executive Director	QuadState Local Governments Authority
David	Berman		
Debra	Hughson	Mojave National Preserve, Deputy Superintendent	National Park Service
Debra	Strickland	County Commissioner	Nye County
Elissa	Olimpi		Conservation Science Partners
Elizabeth	Herrmann		USFWS
Eric	Jordan	Director of Tribal Programs	Twenty-Nine Palms Band of Mission Indians
Evan	Myers	Nevada - Las Vegas Field Office	Bureau of Land Management
Ford	Mauney		BLM AZ LHFO
George	Weekley	Field Supervisor	Utah Ecological Services Office
Glen	Knowles	Field Supervisor	Fish and Wildlife Service, Las Vegas
Heather	Whitlaw	Arizona Ecological Services Ofc, Field Supervisor	Fish and Wildlife Service, Arizona
Janyne	Pringle	Nevada - Las Vegas Field Office	Bureau of Land Management
Jayme	Lopez		BLM

JB	Flores		USDA
Jeff	Aardahl		Defenders of Wildlife
Jeff	Young	Arizona - Grand Canyon Parashant Monument	Bureau of Land Management
Jeremy	Bluma		BLM HQ
John	Kersey	Government and External Affairs	DOD - Naval Air Weapons Station, China Lake?
Jonathan	Young	Wildlife Diversity Staff Specialist	Nevada Department of Wildlife
Joseph	Brombacher	EPA Manager	Twenty-Nine Palms Band of Mission Indians
Julia	Sittig		Southwest Decision Resources
Julie	Donnelly		BLM Barstow Field Office
Julie	Hendrix	Natural Resources Specialist	DOD, NAWWS China Lake
K	Davidson		
Karen	Gray	Government and External Affairs	
Katie	Shaw	Conservation Social Scientist	The Living Desert
Katrina	Smith		
Kellie	Berry	Assistant Field Supervisor	Fish and Wildlife Service, Las Vegas
Kent	Kowalski		USFWS
Kerry	Holcomb		Fish and Wildlife Service, Palm Springs
Kevin	Emmerich		Basin and Range Watch
Kevin	Wilson	Aquatic Ecologist	Death Valley NP

Khoa	Nguyen	Division Administrator	Federal Highways Administration
Kim	Field	Desert Tortoise Recovery Biologist	Fish and Wildlife Service, DTRO
Kimberley	Jenkins	Principal Environmental Specialist	Clark County
Kristina	Drake	Desert Tortoise Recovery Coordinator	FWS
Laura	Cunningham		Western Watersheds Project
Laura	Patterson	Statewide Conservation Coordinator for Amphibians and Reptiles	California Department of Fish Wildlife
Laura	Romin	National Threatened and Endangered Species Program Lead (Acting)	Bureau of Land Management
Lisa	Belenky	Staff Attorney	Center for Biological Diversity
Mac	Maxwell		
Maribel	Lopez		Ironwood Consulting
Mark	Massar	California - Palm Springs Field Office	Bureau of Land Management
Mark	Ono	State Director, Nevada	APHIS
Mary	Lane Poe		Desert Tortoise Council
Matt	Dekar	Director	Western Ecological Research Science Center
Matt	Ihnken		NextEra
Matthew	Lohr	Field Manager - El Centro Field Office	Bureau of Land Management
Meghan	Branson		NAWS China Lake

Michael	Burchett	Biological Science Technician - Mojave National Preserve	National Park Service
Mike	Schijf	Washington County HCP Biologist	Washington County
Mike	Senn	Assistant Regional Director	Fish and Wildlife Service, Region 8
My-linh	Nguyen	Chief, Environmental Division	Nevada Department of Transportation
Neal	Darby	Mojave National Preserve, Wildlife Biologist	National Park Service
Olivia	Niziolek	Region 40 Supervisor	Eocene Environmental Group
Peter	Sanzenbacher		Fish and Wildlife Service, Palm Springs
Phillip	Murray	Government and External Affairs	MCAGCC, USMC
Priscilla	Guzman		
Rebecca	Windsor		USFWS
Richard	Spotts		retired BLMer and volunteer tortoise activist
Rick	Applegate		Desert Tortoise Council
Roger	Dale	President	DTPC
Ron	Berger		Desert Tortoise Preserve Committee
Ryan	Hampshire		NDOT Environmental Las Vegas
Sarah	Mortimer	Executive Director	Tortoise Group
Sean	Murphy		USGS
Shawn	Espinosa		Nevada Dept of Wildlife

Sheri	Shiflett	Chief of Science and Resource Stewardship	NPS Joshua Tree National Park
Susie	Tharatt		FWS Pacific Southwest Region
Theresa	Coleman	District Manager	Bureau of Land Management
Tiffany	Shepherd	Arizona Wildlife Program Lead and T&E Lead (non- aquatic)	Bureau of Land Management
Todd	Esque	Western Ecological Research Center - Henderson	USGS
Tom	Jones	Amphibians and Reptiles Program Manager	Arizona Game and Fish Department
Tyler	Williford		MCAS Yuma
Vera	Smith	Senior Federal Land Policy Analyst	Defenders of Wildlife
Vicki	Campbell	BLM-CA listed species program lead	Bureau of Land Management