

**Decision Record – Memorandum**  
**Land Use Application and Permit to Conduct Geotechnical Investigation**

**NEPA Number:** DOI-BLM-NV-S010-2015-0011-CX

**Compliance**

The proposed action is in conformance with the approved land use plan and is consistent with the applicable plans and policies of county, state, tribal and federal agencies. The proposed project is in compliance with the Federal Land Policy and Management Act (FLPMA) of 1976 and all Bureau of Land Management (BLM) land uses in Southern Nevada, the Las Vegas Resource Management Plan (RMP), the Endangered Species Act, the National Historic Preservation Act, and the Clean Water Act.

**Selected Action**

The selected action is to grant a Land Use Application and Permit to NV Dry Lake, LLC to conduct geotechnical investigation that will provide background site information necessary to support the engineering and design of a proposed utility-scale photovoltaic solar energy project, located in the Dry Lake Solar Energy Zone in Clark County, Nevada. Geotechnical data collected would be analyzed to select the type and size of foundations that may be required for project structures and equipment associated with the solar project. Additionally, data regarding the soil's resistance to electric current flow would be collected and used for the electrical grounding design to ensure the project meets electrical safety codes. All testing would occur within the boundaries of the Dry Lake Solar Energy Zone (SEZ), identified through an amendment to the Las Vegas Resource Management Plan (LVRMP) by the Record of Decision (ROD) for the BLM's Solar Energy Programmatic Environmental Impact Statement (Solar PEIS). In accordance with the Solar PEIS ROD, a SEZ is defined as an area within which the BLM will prioritize and facilitate utility-scale production of solar energy and associated transmission infrastructure development.

**Compliance with NEPA:**

The proposed action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM2, Appendix I, or 516 DM 11.9, under the following categorical exemptions:

**E. Realty**

(19) Issuance of short-term (three years or less) rights-of-way or land use authorizations for such uses as storage sites, apiary sites, and construction sites where the proposal includes rehabilitation to restore the land to its natural or original condition.

## J. Other

(3) Conducting preliminary hazardous materials assessments and site investigations, site characterization studies, and environmental monitoring. Included are siting, construction, installation, and /or operation of small monitoring devices such as wells, particulate dust counters, and automatic air or water samplers.

This categorical exclusion is appropriate in this situation because there are no circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 516 DM 2 apply.

It is my decision to implement the proposed action with the attached environmental protection measures/stipulations, including terms and conditions for the protection of desert tortoise from Biological Opinion File No. 84320-2010-F-0365-R003.

### **Public Involvement:**

As part of the NEPA process for the Solar PEIS, extensive public involvement specific to solar energy development in SEZs occurred. The BLM used this input on the Solar PEIS to inform its decision to designate the SEZs and it will be used to further evaluate project-specific development within those SEZs. Additional public involvement for projects in SEZs in exceedance of the requirements of NEPA is not required. In addition, comments provided by the resources staff from the Southern Nevada District Office relevant to the geotechnical investigation were used in preparation of the Categorical Exclusion and in the preparation of environmental protection measures that will be incorporated into the LUP.

### **Rationale:**

The proposed action is in conformance with the approved Las Vegas RMP and Final Environmental Impact Statement, and Record of Decision (October, 1998), even though it is not specifically provided for, because it is clearly consistent with the following decision(s) (objectives, terms, and conditions):

#### Land Use Authorizations

*LD-2. All public lands within the planning area, unless otherwise classified, segregated or withdrawn, and with the exception of Areas of Critical Environmental Concern and Wilderness Study Areas, are available at the discretion of the agency, for land use leases and permits under Section 302 of the Federal Land Policy and Management Act and for airport leases under the authority of the Act of May 24, 1928, as amended.*

#### Management Direction

*LD-2-a. Land use lease or permit applications and airport lease applications will be addressed on a case by- case basis, where consistent with other resource management objectives and local land uses. Special terms and conditions regarding use of the public lands involved would be developed as applicable.*

In addition, the site is located within the Dry Lake SEZ, identified through an amendment to the LVRMP by the ROD for the BLM's Solar PEIS (BLM 2012). In accordance with the Solar PEIS ROD, a SEZ is defined as an area within which the BLM will prioritize and facilitate utility-scale production of solar energy and associated transmission infrastructure development. The proposed geotechnical investigation is being conducted in support of the engineering and design of a proposed utility-scale solar energy project within the Dry Lake SEZ.

On June 30, 2014, the BLM conducted a competitive auction for 3,083 acres of land within the Dry Lake SEZ (divided into 6 individual parcels) in order to select preferred applicants to submit right-of-way applications and plans of development for solar energy projects. The Applicant submitted a preliminary ROW application to participate in the competitive auction and was the successful bidder on three of the parcels (Parcel Nos. 3, 4, and 5) auctioned within the Dry Lake SEZ.

Stipulations for the protection of environmental resources, including terms and conditions for the protection of desert tortoise from Biological Opinion File No. 84320-2010-F-0365-R003 have been incorporated.

#### **Appeal or Protest Opportunities:**

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (request) pursuant to regulations 43 CFR §2801.10 or 43 CFR §2881.10 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriated Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

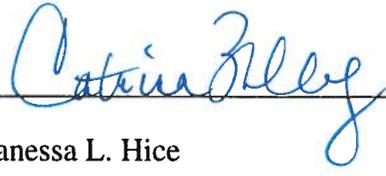
#### **Standards for Obtaining a Stay**

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) the relative harm to the parties if the stay is granted or denied,
- (2) the likelihood of the appellant's success on the merits,

- (3) the likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) whether the public interest favors granting the stay.

**Authorizing Official:**

for 

10/28/14.

Vanessa L. Hice  
Assistant Field Manager  
Division of Lands  
Bureau of Land Management - Las Vegas Field Office  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130

Date

**Contact Person:**

Nancy Christ  
Planning and Environmental Coordinator  
Bureau of Land Management – Renewable Energy Coordination Office  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 891310  
(702) 515-5136

ATTACHMENT A

**BLM Weed Best Management Practices**

**ALL VEGETATION AND SOIL SURFACE DISTURBING ACTIVITIES**

A. To limit the creation of bare soil and other factors that support invasive weed seeds and to retain the maximum shade possible to suppress weeds and prevent their establishment and growth. To incorporate weed prevention and control into project design, layout, alternative evaluation and project description and to avoid or remove sources of weed seed or propagules to prevent new weed infestations and the spread of existing weeds. Stipulations  
1, 2, 3, 4, 5,  
6, 7, 8, & 9

**OPERATIONS**

B. Minimize roadside sources of weed seed that could be transported to other areas. 10

**RECREATION**

C. To minimize the spread of weeds from infested areas into areas that are relatively weed free. 7 & 11

D. To minimize transport of weed seed by pack and saddle stock. 12 & 13

**WILDERNESS**

E. To encourage a weed-free trail user's ethic. 14

**CULTURAL RESOURCES**

F. To ensure that all bare ground created by archeology excavations is covered by desirable vegetation to discourage weeds. 15

**WILDLIFE**

G. Incorporate weed prevention into wildlife habitat improvement project design. 16

**LIVESTOCK GRAZING MANAGEMENT**

H. To minimize the creation of bare soil and other factors that support seeds. 17

I. Minimize weed seed transport to relatively weed-free areas. 18

J. Minimize spread of noxious weeds by livestock movement. 19 & 20

**LOCATABLE, LEASABLE AND MINERAL MATERIAL PROGRAM**

K. Minimize the chances of weed establishment in mining operations. 21, 22 &  
23

L. Remove seed sources that could be picked up by project related vehicles and equipment used on the project site and limit seed transport into relatively weed-free areas. 24 & 25

M. Improve effectiveness of prevention practices through weed awareness and education. 26

**FIRE**

N. Ensure that fire suppression and rehabilitation efforts minimize weed spread. 27

**LAS VEGAS FIELD OFFICE**

O. Maintain all LVFO building facilities, parking lots, visitor centers and other BLM facilities weed free. 28

## ATTACHMENT A

### BLM Weed Stipulations

1. The project proponent will limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed. The project proponent will avoid creating soil conditions that promote weed germination and establishment.
2. At the onset of project planning in the NEPA analysis phase, the project proponent, project lead or the LVFO noxious weed coordinator will complete the Risk Assessment Form for Noxious/Invasive Weeds (Appendix 11). This will provide information about the types of weed surveys to be conducted, the methods of weed treatments and weed prevention schedules for the management of noxious weeds on the project footprint. This will identify the level of noxious weed management necessary for stipulation 3 below.
3. The project proponent will coordinate project activities with the BLM Weed Coordinator (702-515-5000) regarding any proposed herbicide treatment. The project proponent will prepare, submit, obtain and maintain a pesticide use proposal (PUP) for the proposed action (Appendix 12). Weed treatments may include the use of herbicides, and only those herbicides approved for use on Public lands by the BLM.
4. Before ground-disturbing activities begin, the project proponent will review the weed risk assessment and prepare a weed management plan that will inventory and prioritize weed infestations for treatment within the project foot print. Should the weed spread beyond the project foot print then these weeds will be treated as a part of the project. This will include access routes.
5. The project proponent will begin project operations in weed free areas whenever feasible before operating in weed-infested areas.
6. The project proponent will locate pits and staging areas for the use of equipment storage, machine and vehicle parking or any other area needed for the temporary placement of people, machinery and supplies. These staging areas will be selected from locations that are relatively weed-free. The project proponent will avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seed or plant parts are least likely.
7. BLM or the project proponent will determine equipment cleaning sites. These sites will be coordinated with the BLM. Project related equipment and machinery (**this especially includes the nooks and crannies of undercarriages**) will be cleaned of all mud, dirt and plant parts before moving into relatively weed-free areas and when leaving weed infested sites. Seeds and plant parts need to be collected, bagged and deposited in land fills through the waste disposal system when practical. (This is not meant to apply to service vehicles that will stay on roadways avoiding weed infested sites.)
8. Project workers need to inspect, remove, and dispose of weed seed and plant parts found on their clothing and equipment. Disposal methods vary depending on the project. Therefore call the LVFO Noxious Weed Coordinator.

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9. The project proponent will evaluate options, including area closures, to regulate the flow of traffic on sites where native vegetation needs to be established.
10. Operation personnel shall include noxious weeds surveys in their daily field going operations. Weed infestation locations will be reported using the techniques provided at the annual LVFO noxious weed training.
11. Courses and routes for all speed and non-speed events will be inspected by recreational staff for weeds prior to scheduled events on that particular course. Any areas found to be infested will be marked and will be avoided until the weeds are either eradicated or under control. If weed infestations along courses and routes cannot be avoided or treatments cannot be done to control the weed infestations, then that portion of the course(s) and route(s) will be avoided entirely.
12. It is **strongly suggested** that the project proponent ensure that all pack and saddle stock on public lands within the LVFO use only certified weed-free and straw bedding which are available locally.
13. It is **strongly suggested** that the project proponent's pack and saddle stock be quarantined and fed only weed-free feed for 24 hours prior to using Public lands. Before quarantine, the entire animal should be brushed down to remove any weed seed.
14. Signage about weed awareness information will be provided at trailheads and incorporated in weed prevention techniques.
15. All archeological site excavations will be reseeded.
16. Environmental analysis for habitat improvement projects will include weed-risk considerations in the development and evaluation of alternatives.
17. Manage allotments to prevent excessive soil disturbance at salt licks, watering sites, and areas with sensitive soil conditions.
18. In range allotments that have both weed infested and relatively weed-free areas, control timing of animal movement from infested to non-infested areas. Prevent movement from infested to non-infested areas after weed seed set.
19. Livestock should be quarantined and fed weed seed free hay and other feeds for 2-4 days until weed seeds and plant propagules have passed through digestive tracts of livestock before they are transported into relatively weed-free areas in any active allotment.
20. Livestock permittees should notify their rangeland management specialist of weed infestation locations and coordinate livestock management with the goal of minimizing the spread of weeds by livestock.

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21. The operator/permittee shall be responsible for controlling all undesirable invading plant species (including listed noxious weeds and other invasive plants identified as undesirable by federal, state or local authorities) within the boundaries of their authorization area and Bureau-authorized ancillary facilities (e.g. access and utility corridors), including all operating and reclaimed areas, until revegetation activities have been deemed successful and responsibility released by the authorized officer. Control standards and measures proposed must conform to applicable state and federal regulations.

22. The operator shall use weed free seed for reclamation and for other organic products for erosion control, stabilization, or revegetation (e.g. straw bales, organic mulch) must be certified weed free. According to Nevada law (NRS 587.111), "all seed shipped to or sold within Nevada is to be free of noxious weed seeds".

23. Prior to any application of herbicide on public lands the operator shall have a current PUP (Appendix 12) that outlines application methods, rates, weather constraints and the specific dates of applications. See Stipulation 3.

24. The operator/permittee is responsible for ensuring that all project related vehicles and equipment arriving at the site (including, but not limited to, drill rigs, dozers, support vehicles, pickups and passenger vehicles, including those of the operator, any contractor or subcontractor and invited visitors) do not transport noxious weeds onto the project site. The operator shall ensure that all such vehicles and equipment that will be traveling off constructed and maintained roads or parking areas within the project area have been power washed, including the undercarriage, since their last off road use and prior to off road use on the project. When beginning off road use on the project, such vehicles and equipment shall not harbor soil, mud or plant parts from another locale. Depending on the site setting such as remoteness, or other site condition, the operator may be required to have an on-site wash area identified and readily available. If a noxious weed infestation is known or later discovered on the project site, project related vehicles or equipment that have traveled through such an infestation shall be power washed including the undercarriage prior to leaving the site, at an established, identified wash area. Wash water and sediment shall be contained in an adjacent settling basin. Should any vegetation emerge in the wash area or settling basin, it will be promptly identified and appropriately controlled if found to be an undesirable invasive plant.

25. Should undesirable invasive plants become established on developed areas prior to reclamation reshaping; appropriate measures will be taken to ensure that the invasive plants are eradicated prior to reclamation earthwork. Should undesirable invasive plants become established on reshaped areas prior to reclamation seeding; appropriate measures will be taken to ensure that invasive plants are eradicated prior to seeding the site.

26. Noxious weed training will be provided at annual fire fighter training. All field going fire personal should attend the annual LVFO weed awareness and weed prevention training.

**27. Weed abatement procedures will not impede initial attach response. Public safety comes first.** Include weed risk factors and weed prevention considerations in the Resource

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Advisor duties on all fire incidents. Set up vehicle wash down stations to clean, off district fire suppression equipment, prior to mobilization, and all vehicles during demobilization, if possible.

28. BLM staff will work to maintain weed free facilities and control the spread of weed seeds into surrounding areas. Assign to the LVFO volunteer coordinator the development of qualified (knowledgeable of noxious weeds and threatened and endangered plants and desert tortoise trained) intermediaries to lead volunteer weed pullers.

Case Number: N-93306-01  
NEPA Project #: DOI-BLM-NV-S010-2015-0011-CX  
Sec. 7 Log #: NV-052-15-010

**TERMS AND CONDITIONS for ROWs: BO File No. 84320-2010-F-0365.R003**

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In order to be exempt from the prohibitions of section 9 of the Act, the Bureau must comply with the following terms and conditions and minimization measures, which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary.

**RPM 1:** **Applies towards lands and realty, ROWs, and mining actions and other activities that involve vehicle and equipment use, excavations, or blasting.** *BLM, and other jurisdictional Federal agencies as appropriate, shall implement or ensure implementation of measures to minimize injury or mortality of desert tortoises due to project construction, operation and maintenance; and most actions involving habitat disturbance.*

Terms and Conditions:

1.a. *Field Contact Representative*—BLM shall ensure a Field Contact Representative (FCR) (also called a Compliance Inspection Contractor) is generally designated for each contiguous stretch of construction activity for linear projects or isolated work areas for non-linear projects. The FCR will serve as an agent of BLM and the Service to ensure that all instances of non-compliance or incidental take are reported. BLM has discretion over approval of potential FCRs; however, those who also may be acting as authorized desert tortoise biologists, and must also be approved by the Service (see Term and Condition 1.c). All FCRs will report **directly** to BLM and the Service.

The FCR, authorized desert tortoise biologist, and monitors (see Term and Condition 1.c.) shall have a copy of all stipulations when work is being conducted on the site and will be responsible for overseeing compliance with terms and conditions of the ROW grant, including those for listed species. BLM shall ensure the FCR and authorized desert tortoise biologists have authority to halt any activity that is in violation of the stipulations. The FCR shall be on site year-round during all project activities.

Within 3 days of employment or assignment, the project proponent and BLM shall provide the Service with the names of the FCR.

1.b. *Authorized desert tortoise biologist*—**required to be on site to escort and clear in front of vehicles or equipment while travelling over undisturbed habitat and ensure the same route is to be used for ingress and egress to the site.**

All authorized desert tortoise biologists (and monitors) are agents of BLM and the Service and shall report directed to BLM and the proponent concurrently regarding all compliance issues and take of desert tortoises; this includes all draft and final reports of non-compliance or take. The initial draft report shall be provided to BLM and Service within 24 hours of the observation of take or non-compliance.

An authorized desert tortoise biologist will be assigned to each piece/group of large equipment

engaged in activities that may result in take of desert tortoise (*e.g.*, clearing, blasting, grading, lowering in pipe, hydrostatic testing, backfilling, recontouring, and reclamation activities) and other work areas that pose a risk to tortoises. BLM may use their discretion to require a monitor instead of an authorized desert tortoise biologist to monitor equipment that is low risk to tortoises.

1. c. Authorized desert tortoise biologists, monitors, and the FCR (see Term and Condition 1.a.) shall be responsible for ensuring compliance with all conservation measures for the project. This responsibility includes: (1) enforcing the litter-control program; (2) ensuring that desert tortoise habitat disturbance is restricted to authorized areas; (3) ensuring that all equipment and materials are stored within the boundaries of the construction zone or within the boundaries of previously-disturbed areas or designated areas; (4) ensuring that all vehicles associated with construction activities remain within the proposed construction zones; (5) ensuring that no tortoises are underneath project vehicles and equipment prior to use or movement; (6) ensuring that all monitors (including the authorized desert tortoise biologist) have a copy of the required measures in their possession, have read them, and they are readily available to the monitor when on the project site.

An authorized desert tortoise biologist will serve as a mentor to train desert tortoise monitors and will approve monitors if required. An authorized desert tortoise biologist is responsible for errors committed by desert tortoise monitors.

An authorized desert tortoise biologist shall record each observation of desert tortoise handled in the tortoise monitoring reports. Information will include the following: location (GPS), date and time of observation, whether the desert tortoise was handled, general health and whether it voided its bladder, location desert tortoise was moved from and location moved to, unique physical characteristics of each tortoise, and effectiveness and compliance with the desert tortoise protection measures. This information will be provided **directly** to BLM and the Service.

An authorized desert tortoise biologist should possess a bachelor's degree in biology, ecology, wildlife biology, herpetology, or closely related field. The biologist must have demonstrated prior field experience using accepted resource agency techniques. As a guideline, Service approval of an authorized biologist requires that the applicant have at least 60 days project experience as a desert tortoise monitor. In addition, the biologist shall have the ability to recognize and accurately record survey results and must be familiar with the terms and conditions of the biological opinion that resulted from project-level consultation between BLM and the Service. All tortoise biologists shall be familiar with the field manual (Service 2009).

Potential authorized desert tortoise biologists must submit their statement of qualifications to the Service's Nevada Fish and Wildlife Office in Las Vegas for approval, allowing a minimum of 30 days for Service response. The statement form is available on the internet at:

[http://www.fws.gov/nevada/desert\\_tortoise/auth\\_dt\\_form.htm](http://www.fws.gov/nevada/desert_tortoise/auth_dt_form.htm).

Prior to final approval to begin work on the project, the authorized desert tortoise biologists will have read the required measures (terms and conditions and other stipulations) and have a copy of the measures available at all times while on the project site. BLM shall provide the appropriate

agency contact for the project to the Service and the Service will include the forms with approval letters. Biologists and monitors should be visibly identifiable on the project site, which may include use of a uniquely designated hardhat or safety vest color.

1. d. ***Desert tortoise monitor***—Desert tortoise monitors assist an authorized desert tortoise biologist during surveys and serve as apprentices to acquire experience. Desert tortoise monitors ensure proper implementation of protective measures, and record and report desert tortoises and sign observations in accordance with Term and Condition 1.c. They will report incidents of noncompliance to the authorized desert tortoise biologist or FCR. No monitors shall be on the project site unless supervised by an authorized desert tortoise biologist or approved by the BLM.

If a desert tortoise is immediately in harm's way (*e.g.*, certain to immediately be crushed by equipment), desert tortoise monitors may move the desert tortoise then place it in a designated safe area until an authorized desert tortoise biologist assumes care of the animal.

Desert tortoise monitors may not conduct field or clearance surveys or other specialized duties of an authorized desert tortoise biologist unless directly supervised by an authorized desert tortoise biologist or approved to do so by the Service; "directly supervised" means an authorized desert tortoise biologist has direct sight and voice contact with the desert tortoise monitor (*i.e.*, within approximately 200 ft of each other).

Within 3 days of employment or assignment, the project proponent and BLM shall provide the Service with the names of desert tortoise monitors who would assist an authorized desert tortoise biologist.

- 1.e. ***Desert tortoise education program***—A desert tortoise education program shall be presented to all personnel on site during construction activities by an agency or authorized desert tortoise biologist, monitor, FCR or other approved by the BLM. The Service, BLM, and appropriate state agencies shall approve the program. At a minimum, the program shall cover desert-specific Leave-No-Trace guidelines, the distribution of desert tortoises, general behavior and ecology of this species, sensitivity to human activities, threats including introduction of exotic plants and animals, legal protection (the definition of "take" will also be explained), penalties for violation of State and Federal laws, reporting requirements, and project measures in this biological opinion. All field workers shall be instructed that activities must be confined to locations within the approved areas and their obligation to walk around and check underneath and vehicles and equipment before moving them (or be cleared by an authorized desert tortoise biologist). Workers and project associates will be encouraged to carpool to and from the project sites. In addition, the program shall include fire prevention measures to be implemented by employees during project activities. The program shall instruct participants to report all observations of desert tortoise and their sign during construction activities to the FCR and authorized desert tortoise biologist.

- 1.f. ***Vehicle travel***— Project personnel shall exercise vigilance when commuting to the project area to minimize risk for inadvertent injury or mortality of all wildlife species encountered on paved and unpaved roads leading to and from the project site. Speed limits will be clearly marked, and all workers will be made aware of these limits. On-site, personnel shall carpool to the greatest extent possible.

During the desert tortoise less-active season (generally November through February), vehicle speed on project-related access roads and in the work area will not exceed 25 mph. All vehicles and construction equipment will be tightly grouped.

During the more-active season (generally March through October), and if temperatures are above 60 but below 95 °F for more than 7 consecutive days, vehicle speed on project-related access roads and in the work area will not exceed 15 mph. All vehicles and construction equipment will operate in groups of no more than three vehicles.

New access and spur road locations will be sited to avoid potentially active tortoise burrows to the maximum extent practicable.

- 1.g. *Unauthorized access*—BLM shall ensure that unauthorized personnel, including the public and off-duty project personnel, do not travel on project-related temporary access roads, to the greatest extent practicable.

During the more-active season (generally March through October), and if temperatures are above 60 but below 95 °F for more than 7 consecutive days, project- and non-project-related activities on all access roads that intersect the ROW will be monitored and logged. During construction, the ROW will be fenced at public roads that intersect the ROW. Signs will say that access on the ROW is strictly prohibited except by authorized personnel and that violators will be prosecuted.

- 1.h. *Desert tortoise clearance—Required for this project.*

Prior to surface-disturbing activities, authorized desert tortoise biologists potentially assisted by desert tortoise monitors, shall conduct a clearance survey to locate and remove all desert tortoises from harm's way including areas to be disturbed using techniques that provide full coverage of all areas (Service 2009). During the more-active season, clearance surveys will be conducted either the day prior to, or the day of, any surface-disturbing activity. During the less-active season, clearance surveys will be conducted within 7 days prior to any surface-disturbing activity. No surface-disturbing activities shall begin until two consecutive surveys yield no individuals.

An authorized biologist shall excavate all burrows that have characteristics of potentially containing desert tortoises in the area to be disturbed with the goal of locating and removing all desert tortoises and desert tortoise eggs. During clearance surveys, all handling of desert tortoises and their eggs and excavation of burrows shall be conducted solely by an authorized desert tortoise biologist in accordance with the most current Service-approved guidance (currently Service 2009). If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action. Unoccupied burrows shall be collapsed or blocked to prevent desert tortoise entry. Outside construction work areas, all potential desert tortoise burrows and pallets within 50 ft of the edge of the construction work area shall be flagged. If the burrow is occupied by a desert tortoise during the less-active season, the tortoise shall be temporarily penned (see Term and Condition 1.k.). No stakes or flagging shall be placed on the berm or in the opening of a desert tortoise burrow. Desert tortoise burrows shall not be marked in a manner that facilitates poaching. Avoidance flagging shall be designed to be easily distinguished from access route or other flagging, and shall be designed in consultation with

experienced construction personnel and authorized biologists. All flagging shall be removed following construction activities.

An authorized desert tortoise biologist will inspect areas to be backfilled immediately prior to backfilling.

- 1.i. ***Desert tortoise in harm's way***—Any project-related activity that may endanger a desert tortoise shall cease if a desert tortoise is found on the project site. Project activities may resume after an authorized desert tortoise biologist or desert tortoise monitor (see restrictions in Term and Condition 1.d.) removes the desert tortoise from danger or after the desert tortoise has moved to a safe area on its own.

During the more-active season and if temperatures are above 60 but below 95 °F for more than 7 consecutive days, at least 1 monitor shall be assigned to observe spoil piles prior to excavation and covering.

- 1.j. ***Handling of desert tortoises***—Desert tortoises shall only be moved by an authorized desert tortoise biologist or desert tortoise monitor (see restrictions in Term and Condition 1.d.) solely for the purpose of moving the tortoises out of harm's way. During construction, operation, and maintenance, an authorized desert tortoise biologist shall pen, capture, handle, and relocate desert tortoises from harm's way as appropriate and in accordance with the most current Service-approved guidance. No tortoise shall be handled by more than one person. Each tortoise handled will be given a unique number, photographed, and the biologist will record all relevant data on the Desert Tortoise Handling and Take Report (Appendix E) to be provided to BLM in accordance with the project reporting requirements.

Desert tortoises that occur aboveground and need to be moved from harm's way shall be placed in the shade of a shrub, 150 to 1,640 ft from the point of encounter. In situations where desert tortoises must be moved more than 1,640 ft (500 m), translocation procedures may be required. Translocation would likely result in a level of effect to the desert tortoise that would require the appended procedures.

If desert tortoises need to be moved at a time of day when ambient temperatures could harm them (less than 40 ° F or greater than 95° F), they shall be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized biologist under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes shall be discarded after one use and never hold more than one tortoise. If any tortoise active nests are encountered, the Service must be contacted immediately, prior to removal of any tortoises or eggs from those burrows, to determine the most appropriate course of action.

Desert tortoises located in the project area sheltering in a burrow during the less-active season may be temporarily penned in accordance with Term and Condition 1.k. at the discretion of an authorized desert tortoise biologist. Desert tortoises should not be penned in areas of moderate to heavy public use, rather they should be moved from harm's way in accordance with the most current Service-approved guidance (currently Service 2009).

Desert tortoises shall be handled in accordance with the Desert Tortoise Field Manual (Service

2009). Equipment or materials that contact desert tortoises (including shirts and pants) shall be sterilized, disposed of, or changed before contacting another tortoise to prevent the spread of disease. All tortoises shall be handled using disposable surgical gloves and the gloves shall be disposed of after handling each tortoise. An authorized desert tortoise biologist shall document each tortoise handling by completing the Desert Tortoise Handling and Take Report (Appendix E).

- 1.k. *Penning*—Not required for this project.
- 1.l. *Temporary tortoise-proof fencing*—Not required for this project.
- 1.m. *Permanent tortoise-proof fencing*—Not required for this project.
- 1.n. ***Wildlife escape ramps***—Earthen plugs, with wildlife escape ramps on either side of the plug, will be provided in open trench segments at no greater than every 0.25 mi. These distances will be reduced if the FCR and authorized desert tortoise biologist determine that the plug/escape ramp spacing is insufficient to facilitate animal escape from the trench. Any tortoise that is found in a trench or excavation shall be promptly removed by an authorized desert tortoise biologist in accordance with the most current Service-approved guidance. If the authorized desert tortoise biologist is not allowed to enter the trench for safety reasons, the alternative method of removal must have prior approval by the Service.
- 1.o. *Dust control*—Water applied to for dust control shall not be allowed to pool outside desert-tortoise fenced areas, as this can attract desert tortoises. Similarly, leaks on water trucks and water tanks will be repaired to prevent pooling water. An authorized desert tortoise biologist will be assigned to patrol each area being watered immediately after the water is applied and at approximate 60-minute intervals until the ground is no longer wet enough to attract tortoises if conditions favor tortoise activity.
- 1.p. *Blasting*— Not applicable for the proposed action.
- 1.q. *Power transmission projects*— Not applicable for the proposed action.
- 1.r. ***Timing of construction***—The BLM shall ensure that when possible, the project proponent schedules and conducts construction, operation, and maintenance activities within desert tortoise habitat during the less-active season (generally October 31 to March 1) and during periods of reduced desert tortoise activity (typically when ambient temperatures are less than 60 or greater than 95 °F).

All vehicles and equipment that are not in areas enclosed by desert tortoise exclusion fencing will stop activities in desert tortoise habitat during rainfall events in the more-active season (generally March 1 to October 31), and if temperatures are above 60 but below 95 °F for more than 7 consecutive days. The Field Contact Representative (FCR) or designee will determine, in coordination with the BLM and Service, when it is appropriate for project activities to continue.

**RPM 2: Predator Control— Applies to all actions.** *BLM, and other jurisdictional Federal agencies as appropriate, shall ensure their agency personnel, the project proponent, and their contractors implement the following measures to minimize injury to desert tortoises as a result of predators drawn to the project area from construction, operation, and minor maintenance activities:*

Terms and Conditions:

- 2.a. *Litter control, applies to all projects*—A litter control program shall be implemented to reduce the attractiveness of the area to opportunistic predators such as desert kit foxes, coyotes, and common ravens. Trash and food items will be disposed of properly in predator-proof containers with predator-proof lids. Trash containers will be emptied and construction waste will be removed daily from the project area and disposed of in an approved landfill. Vehicles hauling trash to the landfill or transfer facility must be secured to prevent litter from blowing out along the road.
- 2.b. *Deterrence*—The project proponent will implement measures to discourage the presence of predators on site (coyotes, ravens, etc.), including elimination of available water sources, designing structures to discourage potential nest sites, and use of hazing to discourage raven presence.
- 2.c. *Monitoring and predator control*— Projects that may create nest sites for ravens: The project proponent will monitor for the increased presence of ravens and other potential human-subsidized predators in the vicinity of the project area. A qualified biologist (not necessarily an authorized desert tortoise biologist) shall conduct monthly nest surveys of potential nest sites (e.g., power transmission towers/poles) during the raven breeding season (generally February 1 to April 30) and document the presence of all nests and the species using them. During these monthly surveys, an authorized biologist will also document any sign of predation of desert tortoises below the nest and in the vicinity of the transmission line. If sign of predation is found under a nest, control measures will be implemented in coordination with the Service. The frequency of these nest surveys may be modified as agreed upon by BLM and the Service.
- 2.d. *Evaporation ponds and open water sources*—Not applicable for the proposed action.

**RPM 3: Impacts to Desert Tortoise Habitat—Applies towards all actions that involve habitat impacts.** *BLM, and other jurisdictional Federal agencies as appropriate, shall ensure their agency personnel, the project proponent, and their contractors implement the following measures to minimize loss and long-term degradation and fragmentation of desert tortoise habitat, such as soil compaction, erosion, crushed vegetation, and introduction of weeds or contaminants from construction, operation, and minor maintenance activities:*

Terms and Conditions:

- 3.a. *Habitat protection plans*—*If required by a BLM specialist, BLM shall ensure that the applicants develop and implement an approved fire prevention and response plan, erosion control plan, and a weed management plan approved by BLM prior to surface disturbance.*
- 3.b. *Restoration plan*— *If required by a BLM specialist, BLM shall ensure that the applicant develop and implement a restoration/reclamation plan. The plan will describe objectives and methods to be used, species of native plants and/or seed mixture to be used, time of planting, success standards, actions to take if restoration efforts fail to achieve the success standards, and follow-*

up monitoring. The plan will be prepared and approved prior to the surface disturbance phase of the project. Reclamation will be addressed on a case-by-case basis.

- 3.c. ***Minimizing new disturbance***—Cross-country travel outside designated areas shall be prohibited. All equipment, vehicles, and construction materials shall be restricted to the designated areas and new disturbance will be restricted to the minimum necessary to complete the task (*e.g.*, such as construction of one-lane access roads with passing turnouts every mile rather than a wider two-lane road).

All work area boundaries shall be conspicuously staked, flagged, or otherwise marked to minimize surface disturbance activities.

- 3.d. ***Weed prevention***—Vehicles and equipment shall be cleaned with a high pressure washer prior to arrival in desert tortoise habitat and prior to departure from areas of known invasive weed and nonnative grass infestations to prevent or at least minimize the introduction or spread these species.

- 3.e. ***Chemical spills***—Hazardous and toxic materials such as fuels, solvents, lubricants, and acids used during construction will be controlled to prevent accidental spills. Any leak or accidental release of hazardous and toxic materials will be stopped immediately and cleaned up at the time of occurrence. Contaminated soils will be removed and disposed at an approved landfill site.

- 3.f. ***Residual impacts from disturbance***—*Not required for this action.*

**RMP 7: Compliance and Reporting**—Applies towards all actions. *BLM, and other jurisdictional Federal agencies as appropriate, shall ensure their agency personnel, the project proponent, and their contractors implement the following measures to comply with the reasonable and prudent measures, terms and conditions, reporting requirements, and reinitiation requirements contained in this biological opinion:*

Terms and Conditions:

- 7.a. ***Desert tortoise deaths***—The deaths and injuries of desert tortoises shall be investigated as thoroughly as possible to determine the cause. The Service (702/515-5230), BLM wildlife staff (702/515-5000) and appropriate state wildlife agency must be verbally informed immediately and within 5 business days in writing (electronic mail is sufficient). The Authorized Desert Tortoise Biologist shall complete the Desert Tortoise Handling and Take Report (Appendix E).
- 7.b. ***Non-compliance***—Any incident occurring during project activities that was considered by the FCR, authorized desert tortoise biologist, or biological monitor to be in non-compliance with this biological opinion shall be immediately documented by an authorized desert tortoise biologist. Documentation shall include photos, GPS coordinates, and details on the circumstances of the event. The incident will be included in the annual report and post-project report.
- 7.c. ***Fence inspection***—Fencing is not required for this project.
- 7.d. ***Project reporting requirements***— Project proponents will provide BLM with compliance reports. Quarter (non-appended actions), annual, and comprehensive final project reports will be submitted to BLM and the Service's Nevada Fish and Wildlife Office in Las Vegas. Annual

reports are required for all appended actions (except those completed and provided in a prior annual report). Annual reports will cover the calendar year and are due April 1<sup>st</sup> of the following year (e.g., the annual report for calendar year 2013 is due April 1, 2014). Quarterly reports for non-appended actions are due 15 calendar days following the quarter. Final project reports are due within 60 days following completion of the project or each phase of the project.

The Programmatic Biological Opinion Report to the Fish and Wildlife Service (Appendix G) will be used for quarterly, annual, and final project reports, and shall include all Desert Tortoise Handling and Take Reports (Appendix E). If available, GIS shape files will be included.

- 7.e. *Operation and maintenance*—A written assessment report shall be submitted annually to the Service outlining the operation and maintenance activities that occurred over the past year.

Report to include: It will include frequency of implementation of minimization measures, biological observations, general success of each of the minimization measures. All deaths, injuries, and illnesses of endangered or threatened species within the project area, whether associated with project activities or not, will be summarized in the annual report. The report is due April 1 of each year.

- 7.f. *Restoration monitoring*—Vegetation restoration success shall be monitored by project proponent and reported to BLM and the Service. Monitoring will include both qualitative and quantitative data collection and analysis. Monitoring frequency and parameters for restoration success will be described in the required restoration/reclamation plan.

## **8: Minimization Measures**

- 8.a. ***The project applicant shall notify BLM wildlife staff at 702-515-5000 at least 10 days before initiation of the project.*** Notification shall occur before any activities begin that will damage or remove vegetation, such as off-road vehicle travel for surveys, soil testing, and clearing vegetation off the project site. The purpose of the notification is to ensure that the proper education program is given and to review expectations for compliance with the terms and conditions of the biological opinion.
- 8.b. Overnight parking and storage of equipment and materials, including stockpiling, shall be in previously disturbed areas or areas cleared by a tortoise biologist. If not possible, areas for overnight parking and storage of equipment shall be designated by the tortoise biologist in coordination with BLM and project proponent, which will minimize habitat disturbance.
- 8.c. Within desert tortoise habitat, any construction pipe, culvert, or similar structure with a diameter greater than 3 inches stored less than 8 inches above the ground will be inspected for tortoises before the material is moved, buried, or capped.
- 8.d. **Trenches:** All trenches and holes will be covered, fenced or backfilled to ensure desert tortoises do not become trapped unless alternate measures are in place as agreed by BLM and the Service. If trenches or holes are to remain open during construction, they will be checked for tortoises at least four times a day, at the start of day, at mid-morning, early afternoon, and at the end of the work day. The trenches or holes will also be checked immediately before backfilling regardless of the season. Tortoises found in the trench will be reported and moved out of harm's way in accordance with handling protocols (Service 2009).

- 8.e. Ravens and other avian tortoise predators: All towers and poles will be fitted with “bird-be-gone” or other perch deterrent devices to minimize the potential for increased predation from aerial predators following construction.
- 8.f. Vehicles: All project/event-related individuals shall check underneath stationary vehicles before moving them. Tortoises often take cover under vehicles. All vehicle use will be restricted to existing roads. New access roads will be created only when absolutely necessary and only when approved by BLM. Workers shall not drive or park vehicles where catalytic converters can ignite dry vegetation and to exhibit care when smoking in natural areas. Fire protective mats or shields shall be used during grinding or welding.

## APPENDIX E. DESERT TORTOISE HANDLING AND TAKE REPORT

If a desert tortoise is killed or injured, immediately contact the U.S. Fish and Wildlife Service and BLM, by phone at the numbers below and complete Section 1 of the form.

Completed forms should be submitted to the BLM and Fish and Wildlife Service:

Bureau of Land Management  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130  
702-515-5000  
U.S. Fish and Wildlife Service  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130  
702-515-5230

Project Name: Geotechnical Investigations for the NV Dry Lake Solar Project	Report Date:
NEPA No.: DOI-BLM-NV-S010-2015-0011-CX	
Case File No./SRP No.: N-93306-01	
BLM Section 7 log no.: NV-052-15-010	
Fish and Wildlife Service Append File No.- n/a	
Authorized Desert Tortoise Biologist: _____	
Employed by: _____	
<b>Section 1: Complete all information below if a desert tortoise is injured or killed in addition to initial contact described above.</b>	
If tortoise was injured <input type="checkbox"/> or killed <input type="checkbox"/> (check appropriate box):	
Date and time found: _____	
Found by: _____	
GPS location (NAD 83): easting: _____ northing: _____	
No. of photos taken: _____	
Disposition: _____ _____ _____	
Attach report with photos that describe in detail, the circumstances and potential cause of injury or mortality. For injuries include name of veterinarian and detailed assessment of injuries.	

**Section 2: Complete all information below for each desert tortoise handled.**

All instances of desert tortoise handling must be reported in this section and be included in the quarterly, annual, and final project reports.

Desert tortoise number: \_\_\_\_\_

Date and time found: \_\_\_\_\_ Sex of tortoise: \_\_\_\_\_

Air temperature when found: \_\_\_\_\_ Air temperature when released: \_\_\_\_\_

Tortoise activity when found: \_\_\_\_\_

Handled by: \_\_\_\_\_ Approx. carapace length \_\_\_\_\_

GPS location (NAD 83) found: easting: \_\_\_\_\_ northing: \_\_\_\_\_

GPS location released: easting: \_\_\_\_\_ northing: \_\_\_\_\_

Approximate distance moved: \_\_\_\_\_

Did tortoise void bladder; if so state approximate volume and actions taken:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Post handling or movement monitoring and observations:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Section 3: Complete for each tortoise burrow penned.**

All instances of desert tortoise penning must be reported in this section and be included in the quarterly, annual, and final project reports.

Date and time of pen construction:

Began: \_\_\_\_\_ Completed: \_\_\_\_\_

Date and time pen removed: \_\_\_\_\_

Pen constructed by: \_\_\_\_\_

Why was tortoise penned? \_\_\_\_\_

How frequently was pen monitored? \_\_\_\_\_

Observations of desert tortoise behavior including time and date of observation:

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Include photos of pen and burrow with report.

**APPENDIX G. PROGRAMMATIC BIOLOGICAL OPINION (FILE NO. 84320-2010-F-0365.R003) REPORT TO THE FISH AND WILDLIFE SERVICE**

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The information below should be completed by BLM or the Authorized Desert Tortoise Biologist for the project/action. Reports for all appended actions are required annually (due March 1 of each year for prior calendar year activities) and upon completion of the project/action.

Project Name/NEPA no.: Geotechnical Investigations for the NV Dry Lake Solar Project

NEPA no.: DOI-BLM-NV-S010-2015-0011-CX

Case File no./SRP no.: N-93306-01

BLM Section 7 log no.: NV-052-15-010

Annual Report

Project Completion Report

1. Date: \_\_\_\_\_

2. Fish and Wildlife Service File No (for appended actions): \_\_\_\_\_ n/a

3. Species and critical habitat affected:

Desert tortoise

Desert tortoise critical habitat

Other (identify): \_\_\_\_\_

4. Project/action status:

Not begun     In progress\*     Completed    date \_\_\_\_\_

If in progress, state approximate percent complete: \_\_\_\_\_

5. Desert tortoise habitat disturbed:

Non-critical habitat		Critical habitat	
Proposed disturbance (ac)	Actual disturbance (ac)	Proposed disturbance (ac)	Actual disturbance (ac)
0		0	

6. Habitat of other species disturbed (identify species, non-critical, and critical habitat affected below):

7. Summary of individual desert tortoises taken (appended action):

	Desert Tortoise:		
	Adults	Juveniles	Eggs
Exempted			
Actual			

Describe other individuals taken:


8. Name of authorized desert tortoise biologists and monitors on the project and the dates they were on the project.

9. Describe all non-compliance issues and events.

10. Desert tortoise burrow observed during activity/event:

Total number desert tortoises observed: _____
Total number desert tortoises burrows observed: _____
Attach a summary report detailing each desert tortoise and/or desert tortoise burrows observed during activity/event including tortoise activity when found, how the animal was avoided, what happened to the tortoise, the date and time encountered and GPS location (NAD 83 easting: _____ northing: _____)

11. Contact Information

Name \_\_\_\_\_ Company \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Send completed form to:

Bureau of Land Management  
Attn: Wildlife Staff  
4701 North Torrey Pines Drive  
Las Vegas, Nevada 89130  
702-515-5000  
U.S. Fish and Wildlife Service  
4701 North Torrey Pines Drive

# The Threatened Desert Tortoise

## Life History

The desert tortoise is the largest reptile and the only wild land tortoise found in the southwestern United States. The tortoise occurs in southern Nevada, western Arizona, southeastern California, and northwestern Mexico. Desert tortoises are typically found in creosote bush, cactus and shad scale scrub, and Joshua tree woodland habitats below 5000' elevation.

Tortoise populations are patchily distributed and densities range from a few per square mile to 200 per square mile. A tortoise will live in the same general area of less than one square mile during its lifespan of 50 to 100 years. This slow-moving desert reptile ranges in size from 2 to 15 inches long and is soil colored. Because of their color and shape, tortoises can be very difficult to see.

There are several clues that can be used to tell male and female tortoises apart. However, only tortoises greater than seven inches long can be sexed reliably. Males tend to be larger than females, have a longer tail, have longer upward curving gular horns, have larger chin glands, and have a concave plastron (bottom portion of shell).



Tortoises are well adapted to their desert environment and spend up to 98% of their time in burrows they dig. Burrows are crescent shaped and are most often found at the base of desert shrubs or in wash banks. A

tortoise may excavate and use many burrows during the year. Some burrows are used for only a short period of time and others may be used for several years. Some researchers believe that some winter dens on the Beaver Dam Slope in Utah may be 5000 years old. Many mammals, birds, reptiles, and invertebrates utilize tortoise burrows. Burrows and tortoises are most often found on valley floors and slopes, but they may also be found on the less precipitous slopes and ridges of desert mountain ranges.

Besides burrows, and remains; another method that biologists use to determine if tortoises exist in an area is the presence of scat (feces). Fresh scat is dark brown or black, but turns gray as it weathers. Scat length varies, from one half to four inches, depending on the size of the tortoise. Scats usually contain coarse plant fibers.

Tortoises are inactive from mid November until February. The activity period for desert tortoises is from March until late October when they usually spend part of each day above ground. Tortoises are especially active during warm days when it is overcast or raining, when they seek water that collects in natural depressions or in depressions the tortoises dig themselves. Available drinking water is essential to tortoise survival. The diet of tortoises, which are vegetarians, includes a wide variety of herbs, grasses, cacti, and flowers. Since droughts are common in the desert that tortoises inhabit, they rely on the erratic years of good rainfall and the ensuing growth of palatable plants.



Sexual maturity for tortoises occurs at 15-20 years of age. Breeding occurs in March and April and egg laying is from May to July. Nests are almost always located at the entrance of burrows. Clutches 1 to 14 eggs and a mature female may lay 0 to 3 clutches annually. The eggs are covered with soil and hatch after 80 to 130 days in August or September.

Predators are usually only a problem for young tortoises. Predation is the greatest cause of mortality for hatchlings. Eggs are eaten by Gila monsters, foxes, coyotes, snakes, and badgers. The shell of juvenile tortoises does not harden for five or more years and young tortoises may fall prey to ravens, hawks, eagles, coyotes, foxes, bobcats, badgers, skunks, and feral dogs and cats. Up to 200 young tortoise carcasses have been found under raven perches and nests. While successful predation on adults is rare: coyotes, foxes, bobcats, eagles, and feral dogs have been known to prey on adult tortoises. Habitat quality can affect predation in certain habitats.

## Research

The Bureau of Land Management will be actively involved ongoing research projects that are addressing various aspects of tortoise management and physiology. Research is being conducted on disease, livestock grazing, predator-prey relationships, genetics, tortoise translocation/relocation, and habitat restoration.

## Legal Status

The desert tortoise (*Gopherus agassizii*) in the Mojave Desert was federally listed under the Endangered Species Act of 1973 as a threatened species on April 2, 1990. The tortoise was listed because of direct losses and threats to tortoise populations and habitat. Desert tortoises are directly impacted by increased raven predation on juveniles, collection by humans, vandalism, losses on roads and to off-highway vehicle (OHV) activities, and Upper Respiratory Tract Disease (URTD). Tortoise habitat is lost directly to urbanization, agriculture, road construction, military activities, and other uses. OHV use, rights-of-way, and grazing degrade habitat. All of these activities fragment tortoise habitat, which may reduce a tortoise population below the level necessary to maintain a minimum viable population.

The U.S. Endangered Species Act makes it illegal to harass, collect, or harm tortoises and provides for penalties of up to **\$50,000 in fines and one year in prison for each count.** State laws and Fish and Game Codes also afford protection to the desert tortoise.

**Legal Status continued..**

The Endangered Species Act allows for individuals of and endangered or threatened species to be taken incidentally to an otherwise lawful activity: as long as the conditions of the Fish and Wildlife Service's (Service) Biological Opinion are followed. "Take" includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing or collecting, or attempting to engage in any such conduct. Harm includes significant habitat modification or degradation that impacts a listed species by interfering with breeding, feeding, or sheltering behavior. The threatened listing of the desert tortoise occurred because of widespread habitat destruction and degradation, illegal collection, disease, raven predation, and other factors.

Tortoises in captivity prior to the initial listing of August 4, 1989 are no protected by the Act. If you are interested in having a pet tortoise, you may obtain one from an adoption group or from someone that has acquired their pet legally and gifted them to you. Tortoises can offer a unique alternative to more traditional family pets but please do not turn them loose or allow your tortoises to breed.

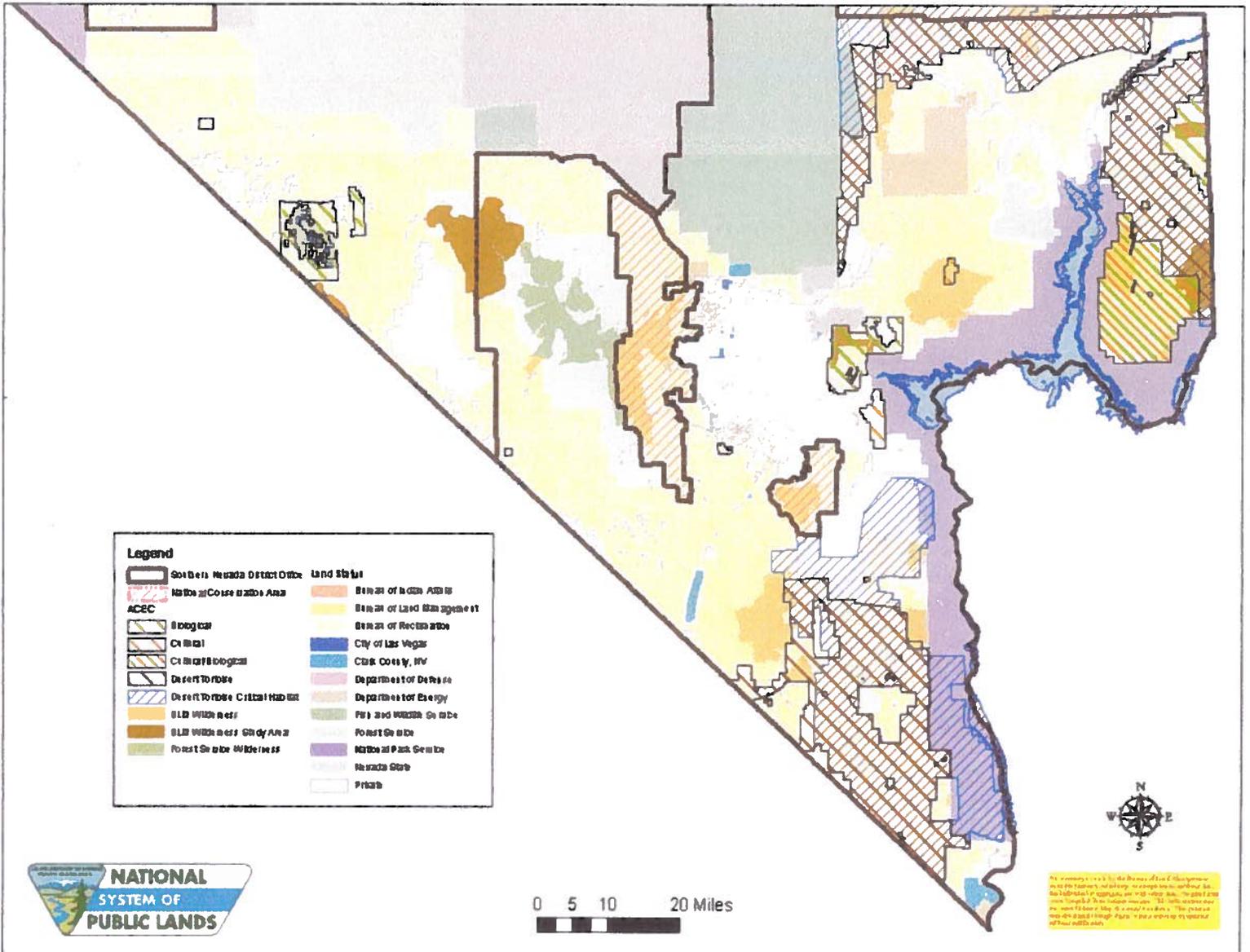


**Tortoise Handling**

Handle all tortoise carefully and only if authorized to do so! Tortoises can be injured and can die from improper handling. Do not approach tortoises unless absolutely necessary, as your presence can induce stress in the animal. When you must approach a tortoise, move slowly and approach from the rear of the animal. Pick up the tortoise gently and keep it level at all times. When handling large tortoises, grasp the animal with both hands, one at each side of the animal. When moving tortoises longer distances, a plastic tote or cardboard box should be used. Containers should be thoroughly cleaned between tortoises or only used for one tortoise. All personnel handling tortoises will wear surgical type gloves to inhibit the transmission of diseases among tortoises. Not more than one tortoise can be handled

*Remember to always check under your vehicles!!*

# Southern Nevada District



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