



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Southern Nevada Fish and Wildlife Office
4701 North Torrey Pines Drive
Las Vegas, Nevada 89130



IN REPLY REFER TO:
2022-0010513 and
1-5-04-F-526

February 18, 2022
Sent Electronically

Memorandum

To: Field Manager
Red Rock/Sloan Field Office
Bureau of Land Management
Las Vegas, Nevada

From: Field Supervisor
Southern Nevada Fish and Wildlife Office
Las Vegas, Nevada

Subject: Request to Append the Proposed Trail and Intersection Improvements to the
Bureau of Land Management Field Office Programmatic Biological Opinion
Red Rock Canyon National Conservation Area, Clark County, Nevada

This transmits the U.S. Fish and Wildlife Service's (Service) biological opinion in response to your memorandum received October 12, 2021, requesting that the subject action be appended to the Programmatic Biological Opinion for the Red Rock Field Office. This Programmatic Biological Opinion addresses potential effects to the federally threatened Mojave desert tortoise (*Gopherus agassizii*), in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 et seq.) and 50 Code of Federal Regulations (CFR) Part 402 of our interagency regulations governing section 7 of the Act.

This biological opinion is based on information provided in your memorandum; the biological assessment, meeting and correspondence between the Service and Bureau of Land Management; interagency section 7 consultation regulations in 50 CFR Part 402; scientific publications, articles, and reports; and our files. A complete project file of this consultation is available in the Service's Southern Nevada Fish and Wildlife Office in Las Vegas.

BIOLOGICAL OPINION

APPENDED ACTION UNDER THE “BLM RED ROCK FIELD OFFICE” PROGRAMMATIC BIOLOGICAL OPINION (FILE NO. 1-5-04-F-526)

This consultation consists of the programmatic biological opinion (PBO), Bureau of Land Management’s (BLM’s) request to append the proposed action to the PBO with project-specific information (Part A, provided by BLM), referenced sections of the biological assessment (BA) provided with the request, and the Fish and Wildlife Service’s (Service) response (Part B, below).

Service Project File No. 2022-0010513

Part A: Information provided by the Agency

Date of request: October 12, 2021	Agency Contact: Corey Lange	
Project/action title:	Red Rock Trail and Intersections Improvement Project	
NEPA # and Case File # ¹		
Section 7 Log no.: ¹		
Proponent/applicant:	Bureau of Land Management	
Program:	Red Rock NCA	
Species/critical habitat affected:	Mojave desert tortoise (<i>Gopherus agassizii</i>)	
No. of acres to be affected:	Non-critical: 35.65	Critical: 0

¹ If applicable

DESCRIPTION OF PROPOSED ACTION

Proposed Action

The Central Federal Lands Highway Division, in cooperation with the Bureau of Land Management (BLM) is proposing the construction and installation of a proposed trail and intersections improvement for access into Red Rock Canyon National Conservation Area (RRCNCA) from Summerlin, Nevada. The purpose of the project is to (1) improve the safety of Nevada State Route (SR) 159 for all users between the Summerlin residential development and the RRCNCA Scenic Drive Fee Area, (2) improve access to RRCNCA and the recreational nodes at the Scenic Drive Fee Area and along Calico Basin Road, (3) promote the preservation

of natural resources within RRCNCA, and (4) create a new high-quality recreational experience through creation of a multi-use trail.

The proposed action consists of four components:

1. **Multi-Use Trail:** To separate bicycles and pedestrians from motorized travel on SR-159, to improve access to the RRCNCA, and to reduce the development of social trails, the project includes a 5.5-mile-long multi-use trail connecting the Summerlin parking area to the Scenic Drive Fee Area. The multi-use trail would consist of a 12-foot-wide paved section with 1-foot-wide gravel shoulders on each side. The trail alignment generally follows an existing, informal social trail. Trail grades would range from 0.5 to 8.0 percent with 1.5 percent grade landing areas. The trail would meet American with Disabilities Act (ADA) compliance requirements.
2. **Deceleration Lanes:** To address the substandard deceleration distances and lack of queuing capacity at Calico Basin Road and the Scenic Drive Fee Area intersections, SR-159 would be widened to the north by approximately 12 feet to accommodate lengthened deceleration lanes. The deceleration lane at Calico Basin Road would be lengthened from approximately 120 feet to 500 feet and the paved shoulder width increased from approximately 1 to 6 feet. The deceleration lane at the Scenic Drive Fee Area intersection would be lengthened from 300 feet to 600 feet and the shoulder widened from 1 to 6 feet. For cyclists who choose to continue using the SR-159 shoulder, an additional 5 feet of widening and bike lane striping would clearly demarcate the trail for non-motorized travel through the entrance and Scenic Drive Fee Area intersection.
3. **Bridges and Other Structures:** The existing two-span SR-159 bridge over Red Rock Detention Basin would remain. A new two-span bridge approximately 230 feet long and 14 feet wide is proposed parallel to the existing SR-159 that would carry the multi-use trail across Red Rock Wash and connect to the Summerlin residential area and I-215 West Beltway Trail. The braided Red Rock Wash has a substantial flow, as indicated by the highway bridge. Upstream of this location, a new seven-span bridge is also proposed to carry the multi-use trail over Red Rock Wash where the trail turns north near the existing “Red Rock Canyon” rock sign. This bridge is anticipated to be approximately 280 feet long and 14 feet wide. At their highest points above Red Rock Wash, the new bridge structures are anticipated to be approximately 20 feet above existing grade. The other structures included for the smaller wash locations would consist of low-water crossings and box culverts.
4. **Parking Areas:** To provide access to the new multi-use trail and to reduce the number of vehicles parked on the SR-159 shoulder, the project includes four parking area improvements. The parking area locations are proposed based on current informal parking, available space adjacent to SR-159, and the trail terminus closest to development. The proposed size of each parking area is based on the estimated demand for parking in the future peak hour. Beginning at the eastern end of the project on the southern side of SR-159 at its intersection with Sky Vista Drive, a 9,300-square-foot

asphalt parking area providing approximately 31 parking spaces would be constructed to serve as trailhead parking for the new multi-use path.

Continuing east, a new 10,000-square-foot asphalt parking area providing approximately 23 parking spaces—including two bus stalls—would be constructed on the northern side of SR-159 approximately 0.75 mile east of the Calico Basin Road intersection. The existing RRCNCA gateway sign would be moved to this location where visitors would have adequate space to park and take photos with the popular gateway sign. A 530-foot deceleration lane requiring a 12-foot widening of SR-159 would also provide access to this parking area.

At the northwestern corner of the Calico Basin Road/SR-159 intersection, a small 5,400-square-foot asphalt parking lot would provide direct access to the multi-use trail and additional parking area. The existing gravel parking area would be formalized through the placement of boulders and wheel stops. This parking area would remain a dirt lot providing additional trail access and approximately 18 parking spaces.

The fourth and final parking improvement area is located at the northwestern corner of the SR-159/Calico Basin Road intersection but can only be accessed from Calico Basin Road. At this location, a large 18,600-square-foot asphalt parking lot would be constructed providing approximately 62 new parking spaces, with additional pavement included to expand the area to 141 total spaces in the future. This new parking area also would tie directly into the new multi-use trail.

The Proposed Action Route within BLM managed lands would occur along the shoulder and north of SR-159 for 5.5 miles (Fig 1). Most of the activities described would occur in previously undisturbed areas to expand roads, parking lots, and build a new trail. New disturbance on BLM managed lands would result in 15.54 acres of temporary disturbance and 20.11 acres of permanent disturbance totaling to 35.65 acres.

The Proposed Action would result in temporary disturbances related to construction activities and permanent disturbance resulting from grading and paving of the multi-use trail, parking areas, and roadway widening for deceleration lanes. The new multi-use trail follows existing informal social trail for intermittent portions of the proposed alignment. Previously disturbed areas also exist along SR-159 near the deceleration lanes where vehicles often park during peak visitation. Design features have been incorporated to avoid impacts where possible, and mitigation measures included to minimize impacts to a minor or negligible degree where avoidance is not feasible. Table 2-1 identified the disturbance acreages for each project element; existing disturbed areas have been excluded when calculating these areas. Construction for this project is expected to take approximately one year to complete, and construction will begin sometime around September 2022. Construction will occur during tortoise active season.

A disturbance map book identifying the areas reflected in Table 1 is included below. Construction of the project would require a variety of construction equipment, including both

tracked and wheeled vehicles. Although the construction contractor would have the flexibility to use the equipment needed to construct the project, anticipated construction equipment may include but is not limited to the following:

- Bulldozer used primarily used for soil excavation, salvage, removal, and grading
- Scraper used for soil excavation, salvage, removal, and grading
- Front end loaders used for soil excavation, salvage, and removal
- Crane to construct the two new bridges over Red Rock Wash
- Road-legal haul trucks to move materials to and from the construction areas

Paver for laying asphalt on the multi-use trail, parking areas, and in areas of SR-159 widening. Staging for construction equipment would occur onsite. Construction phasing may be implemented so the parking areas could be graded first and used as staging for construction of the other project elements. Construction means and methods are ultimately determined by the construction contractor within the stipulations and parameters of this EA.

Maintenance activities included in this EA would be limited to the disturbance areas and improvements resulting from the Proposed Action. Anticipated maintenance activities include, but are not limited to, removing rock and debris from the trail, removing sediment and debris from culverts, resealing or resurfacing pavements, repairing potholes, sealing cracks in asphalt and concrete, routine grading to maintain roadway shoulders at the deceleration lane locations, removing invasive vegetation, restriping, replacing signs, removing graffiti, and repainting bridges.

Clark County has agreed to maintain the multi-use trail, including the low-water crossings located at approximately nine wash crossings along the length of the trail. The low-water crossings would need to be cleared of wash debris in the event of a precipitation event resulting in debris being deposited on the trail. BLM would be responsible for maintenance of the new parking areas. The new parking areas represent approximately 2 acres of new pavement requiring routine maintenance. The deceleration lane improvements on SR-159 are within the NDOT right-of-way and would be maintained in the future as part of NDOT's maintenance activities for its roadway facilities.

Legal Description

Mount Diablo Prime Meridian
T21S. R59E. Sec 3-5, 7, 8

Habitat quality/suitability

Desert tortoise

The project area can be described as poor-quality tortoise habitat as evidenced by previous tortoise surveys completed throughout the area. The area is situated in low-density tortoise habitat that has an elevation between approximately 3500 and 4700 feet. Portions of the proposed work area are within suitable desert tortoise habitat, but habitat suitability in the vicinity has been reduced by various impacts. Tortoises have been known to wander near the Red Rock Canyon National Conservation Area fee area.

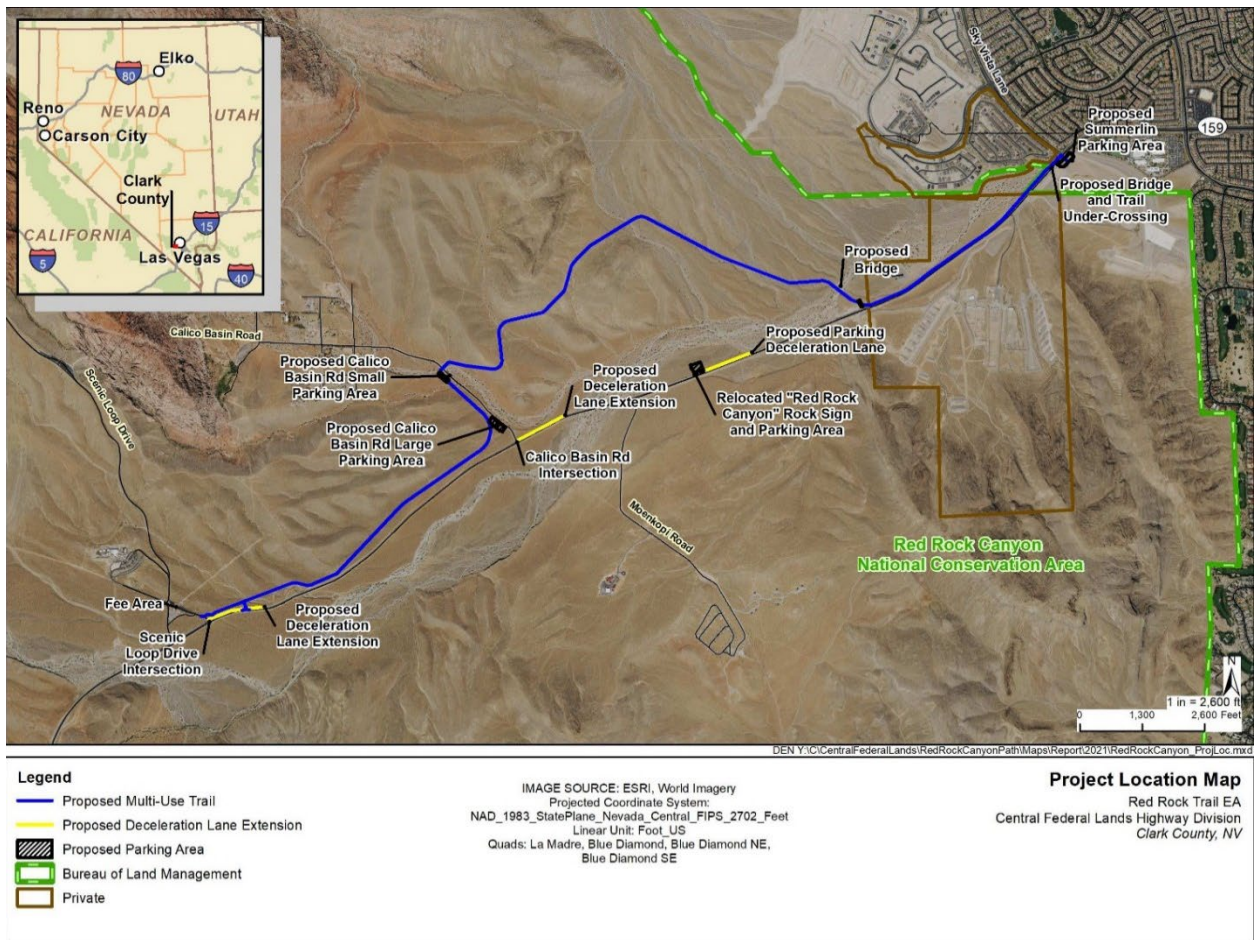


Figure 1: Project Location.

EFFECTS OF THE ACTION

General Description of Direct, Indirect and Cumulative Effects

Surface disturbance related to the construction of the project would result in the temporary and permanent removal of vegetation within the Project area. Disturbance caused by clearing, grubbing, grading, and trenching would result in the loss of up to approximately 35.65 acres of creosote-bursage scrub, desert wash, and Mojave mixed scrub vegetation types. Total disturbance would consist of approximately 15.54 acres of temporary impact and 20.11 acres of permanent impacts (Table 1). The vegetation that would be affected by the Project is represented throughout the Project area.

Amount of Habitat (in acres) and Plant Communities Disturbed

Up to approximately 35.65 acres of creosote-bursage scrub, desert wash, and Mojave mixed scrub habitat will be disturbed through project construction. The total disturbance acreage consists of approximately 20.11 acres of permanent impact and 15.54 acres of temporary impact (Table 1).

Description of Affected Individuals of Listed Species

During geotechnical surveys for this project (File No. 08ENVS00-2021-F-0011-R001) the authorized desert tortoise biologist did not observe or handle any tortoises and no tortoises were found injured or killed during the geotechnical analysis. No active tortoise burrows were observed as well.

During pre-project tortoise surveys, no live desert tortoises were observed during protocol surveys. Ten sign observations were detected, including three scat detections and seven tortoise burrows. However, six live tortoises were incidentally detected while walking to transects and within the project area by project personnel were conducting other investigations. These incidental detections include one adult and five immature/juvenile tortoises.

The action in this project is not taking place in desert tortoise critical habitat thus none will be affected.

To reduce the potential for adverse effects to desert tortoises and its habitat as a result of project activities, the project proponent would comply with all applicable Reasonable and Prudent Measures (RPM) with Terms and Conditions (T&C) in PBO File No. 1-5-04-F-526.

Additional Effects of the Action Not considered in the Programmatic Biological Opinion

There are no existing factors affecting the species in the project area not already discussed on the PBO.

Table 1. Summary of Project Disturbances

Project Element	Permanent Impact (acres)	Temporary Impact (acres)
<i>Parking Areas</i>		
Summerlin	0.57	0.37
Relocated Red Rock Canyon sign	0.52	0.40
Calico Basin Large	0.69	0.30
Calico Basin Small	0.02	0.05
<i>SR-159 Widening for Deceleration Lanes</i>		
Relocated Red Rock Canyon sign	0.01	0.11
Calico Basin Road	0.07	0.10
Scenic Drive Fee Area	0.14	0.14
<i>Multi-Use Trail</i>		
Multi-Use Trail	18.09	14.07
Totals	20.11	15.54

Notes: Acreages include existing disturbed areas.

PROPOSED MINIMIZATION MEASURES

Measures Proposed to Minimize the Effects of the Proposed Action:

1. **Speed limit:** Within Clark County, the speed limit is 15 miles-per-hour on unposted County roads; this speed will be established for all activities at all times unless otherwise designated.
2. **Vehicles:** All project/event-related individuals shall check underneath stationary vehicles before moving them.
3. **Vehicle traffic:** Shall be restricted to existing access roads, unless otherwise authorized by BLM and the Service.
4. **Litter-control:** Will be implemented and enforced by the project proponent or BLM. Trash containers shall remain covered, must be raven-proof, and emptied frequently

enough to prevent overflow of materials. Trash, litter, project debris, etc. shall be transferred to a designated solid waste disposal facility. Vehicles hauling trash must be secured to prevent litter from blowing out along the road.

5. **Tortoise mortality/injury:** BLM wildlife staff (702/515-5000) and the Service (702/515-5230) must be notified of any desert tortoise death or injury due to the project implementation by close of business on the following work day. In addition, the Service's Division of Law Enforcement shall be notified in accordance with the reporting requirements of this biological opinion.
6. **Tortoise activity:** The period of greatest tortoise activity is generally defined as March 1 – Oct 31. However, unseasonably warm weather and/or precipitation outside this period may result in tortoise activity, particularly by hatchling and juvenile tortoise, and thus warrant adherence to requirements established for periods of greater activity. Similarly, BLM may determine that additional measures are appropriate for projects planned for the end or beginning of either period if conditions are suitable for desert tortoises to be active.
7. **Education Program:** A BLM/Service-approved biologist (as defined below) shall present a tortoise education program to all foremen, workers, permittees and other employees or participants involved on projects covered under this opinion. The program will consist of either a presentation or fact sheet as determined by project level consultation between BLM and the Service. The program or fact sheet will include information on the life history of the desert tortoise, legal protection for desert tortoises, penalties for violations of Federal and State laws, general tortoise activity patterns, reporting requirements, measures to protect tortoises, terms and conditions of the biological opinion, and personal measures employees can take to promote the conservation of desert tortoises. The definition of "take" will also be explained. Workers and project associates will be encouraged to carpool to and from the project sites. Specific and detailed instructions will be provided on the proper techniques to capture and move tortoises which appear onsite if appropriate, in accordance with Service-approved protocol. Currently, the Service-approved protocol is Desert Tortoise Council 1994, revised 1999.
8. **Biologist approval:** BLM and Service wildlife staff must approve the biologists to be used to implement the terms and conditions of the biological opinion, or permit issued by BLM. Any biologist and/or firm not previously approved must submit a statement of qualifications in the Service-developed format and be approved by the wildlife staff before authorized to represent BLM in meeting compliance with the terms and conditions of the biological opinion. Other personnel may assist with implementing conservation measures, but must be under direct field supervision by the authorized biologist.
9. **Biologist qualifications:** In accordance with Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise (Service 1992), an authorized desert tortoise biologist should possess a bachelor's degree in biology, ecology, wildlife biology,

herpetology, or closely related fields as determined by BLM and the Service. The biologist must have demonstrated prior field experience using accepted resource agency techniques to survey for desert tortoises and tortoise sign, which should include a minimum of 60 days field experience. All tortoise biologists shall comply with the Service-approved handling protocol (Desert Tortoise Council 1994, revised 1999). 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.

10. **Tortoise in harm's way:** If a tortoise is found within the project/activity site in harm's way, all potentially harmful activity shall cease until the tortoise moves or is moved out of harm's way by an authorized biologist. If a desert tortoise is in imminent danger, the tortoise shall be moved out of harm's way and on to adjacent BLM land, using techniques described in the tortoise education program.
11. **Moving tortoises:** Tortoises that are moved offsite and released into undisturbed habitat on public land, must be placed in the shade of a shrub, in a natural unoccupied burrow similar to the hibernaculum in which it was found, or in an artificially constructed burrow in accordance with the tortoise handling protocol. Tortoises encountered shall be treated in a manner consistent with the appropriate measures in this biological opinion.
12. **Permits:** All appropriate State and Federal permits, including NDOW and Service permits for handling desert tortoises or their parts, must be acquired by the tortoise biologists or other personnel before project initiation and prior to handling any desert tortoise or their parts, or conducting any activity requiring a permit.
13. **Project oversight:** A BLM representative(s) shall be designated who will be responsible for overseeing compliance with the reasonable and prudent measures, terms and conditions, reporting requirements, and reinitiation requirements contained in this biological opinion. The designated representative shall provide coordination among the permittee, project proponent, BLM, and the Service.
14. **Desert tortoise burrows:** Will be avoided whenever possible; if not, the burrow will be cleared in accordance with the measures set forth in this biological opinion.
15. **Heat stress:** Desert tortoises encountered experiencing heat stress will be placed in a tub, by an authorized tortoise biologist, with one inch of 76-90°F water for at least 20 minutes or until heat stress symptoms are no longer evident.
16. **Temperature restrictions:** Desert tortoises shall be treated in a manner to ensure that they do not overheat, exhibit signs of overheating (e.g., gaping, foaming at the mouth, etc.), or are placed in a situation where they cannot maintain surface and core temperatures necessary to their well-being. Desert tortoises shall be kept shaded at all times until it is safe to release them. No desert tortoise shall be captured, moved, transported, released, or purposefully caused to leave its burrow for whatever reason

when the ambient air temperature is above 95°F (35°C). Ambient air temperature shall be measured in the shade, protected from wind, at a height of 2 inches (5 centimeters) above the ground surface. No desert tortoise shall be captured if the ambient air temperature is anticipated to exceed 95°F (35°C) before handling and relocation can be completed. If the ambient air temperature exceeds 95°F (35°C) during handling or processing, desert tortoises shall be kept shaded in an environment that does not exceed 95°F (35°C), and the animals shall not be released until ambient air temperature declines to below 95°F (35°C).

17. **Reporting:** The project proponent, permittee, or project lead if an internal action, must submit a document to BLM wildlife biologist within 30 days of completion of the project showing the number of acres disturbed, remuneration fees paid, and number of tortoises observed or taken, which includes capture and displacement, killed, injured, or harassed by other means, during implementation of programmatic actions.
18. **Previous disturbance:** Overnight parking and storage of equipment and materials, including stockpiling, shall be within previously disturbed areas or within areas cleared by a tortoise biologist to minimize habitat destruction.
19. **Project boundaries:** Project activity areas will be clearly marked or flagged at the outer boundaries before the onset of construction. All activities shall be confined to designated areas. When new access routes have been identified for development, routes will be flagged by the tortoise biologist prior to surface disturbance.

Proposed Measures for Actions Involving Ground Disturbance:

20. **Blading of vegetation:** Will occur only to the extent necessary and shall be limited to areas designated for that purpose by BLM or tortoise biologist.
21. **Fees:** Prior to issuance of authorization, and prior to any surface-disturbing activity associated with the proposed project, the project proponent shall pay a remuneration fee of \$936 for each acre of surface disturbance, if paid prior to March 1, 2022. This rate will be indexed annually for inflation based on the Bureau of Labor Statistics Consumer Price index for All Urban Consumers (CPI-U). Fees paid after March 1, 2022 may be assessed at the most current (2022) remuneration fee of \$1,002 per acre. Information on the CPI-U can be found on the internet at <http://stats.bls.gov/news.release/cpi.nws.htm>. An exception is made if the disturbance for the project is less than 0.25 acre of disturbance or for activities that result in a long term benefit for the species (e.g., trail realignment to minimize habitat impacts).
22. **Notification:** The project applicant/BLM lead shall notify BLM wildlife staff at least 10 days before initiation of the project. Notification shall be made to BLM's wildlife staff representative responsible for NEPA review of the project at (702) 515-5000.

23. **Clearance:** All project areas, fence lines, staging areas, etc. will be cleared of tortoises by an authorized biologist immediately before the start of ground disturbance using 100-percent coverage survey techniques. During the tortoise active season, an authorized tortoise biologist will be onsite during fence construction to ensure that no tortoises are harmed. Burrows found outside the area to be disturbed will be flagged and avoided. Clearance will involve excavating nests; relocating eggs; flagging avoidable burrows; collapsing unavoidable; unoccupied burrows; and relocating tortoises in accordance with the Service-approved protocol for handling desert tortoises (Desert Tortoise Council 1994, revised 1999). If disturbance is planned to occur during a period when tortoise are not anticipated to be active, surveys may be conducted earlier as determined during project-specific consultation.
24. **Fencing:** The height of all tortoise-proof fencing will be a minimum of 18 inches above ground. Fencing may be permanent or temporary as determined on a project-level basis. Temporary fence design should consist of 1-inch mesh or 1-inch horizontal by 2-inch vertical mesh (hardware cloth or plastic) and be installed flush with ground. Temporary tortoise-proof fencing should not be buried unless otherwise directed by BLM. Permanent tortoise-proof fencing will consist of 1-inch horizontal by 2-inch vertical wire mesh. Where feasible, the fence will be buried 6 to 12 inches below ground. In situations where it is not feasible to bury the fence, the lower 12 inches of the fence shall be bent at a 90-degree angle towards the potential direction of encounter with tortoise and covered with cobble or other suitable material to ensure that tortoise or other animals cannot dig underneath and create gaps through which tortoises may traverse.
25. **Clearance following fence construction:** Prior to the commencement of project activities, all desert tortoises shall be removed from the site. An authorized biologist shall oversee the survey for and removal of tortoises using techniques providing 100-percent coverage of all areas. Two complete passes of 100-percent coverage will be accomplished. If on the second pass, additional tortoises are encountered, a third pass will be conducted. Clearance of the fenced area will involve activities described in Measure 23 above.

During Ground Disturbing Activities:

26. **Fence inspection/maintenance:** Fencing will be inspected daily and zero clearance will be maintained between the bottom of the fence and the ground and to ensure any bent portions are properly covered. Additional monitoring and maintenance shall include regular removal of trash and sediment accumulation and checking for rodent damage or other breeches when using temporary tortoise proof fencing.
27. **On-site biologist:** Unless the area has been fenced and cleared, or the Service and BLM have determined an onsite biologist is not necessary through project-level consultation, the project will require an authorized biologist(s) onsite for project construction during the period of greatest tortoise activity (e.g., March 1 through October 31), and on-call at other times.

Following Termination of Ground Disturbing Activities:

28. **Fence removal:** Temporary fencing will be removed at the end of the construction activity. Permanent fencing may be removed upon termination and reclamation of the project, or when it is determined by BLM and the Service that the fence is no longer necessary.
29. **Restoration:** Temporary disturbance areas will be restored in accordance with the restoration protocols for the project.

Proposed Measures for Activities that Involve Maintenance or Modification of Existing Sites and Limited to Existing Disturbed Areas Adjacent to Tortoise Habitat:

30. **Clearance- barren/unsuitable areas:** All project areas that are barren or unsuitable for tortoises but occur adjacent to creosote-bursage or Mojave mixed scrub vegetation, will be cleared by an authorized biologist before the start of maintenance or modification using 100-percent coverage survey techniques no more than 3 days before the initiation of construction. Areas within blackbrush will be cleared only if reconnaissance surveys reveal tortoise sign within the project area.
31. **Fence high-risk areas:** If activities are expected to occur during the tortoise active season, and it is determined there is a high risk to tortoises (e.g., a tortoise has been found within 1,000 feet of the project area or heavy machinery is used), the project area will be fenced with tortoise-proof fencing in accordance with Measures 23, 24, 25, 26, 27, and 30 above.
32. **On-site biologist:** Unless the project area has been fenced and cleared; a survey has been conducted and determined that no tortoises or active burrows are within 1,000 feet of the project area; or the Service and BLM have determined an onsite biologist is not necessary, the project will require an authorized biologist(s) onsite for project construction during the period of greatest tortoise activity (e.g., March 1 through October 31), and on-call at other times.

Proposed Measures for Restoration Activities and Mechanical Weed Treatments:

33. **Clearance:** All sites including cross-country access routes and staging areas, will be cleared in accordance with Measure 23 and/or 30.
34. **On-site biologist or fence/clearance:** For restoration actions and weed treatment when mechanical treatments are employed, an authorized biologist must be present during periods of tortoise activity (generally from March 1 through October 31) to insure that desert tortoises are not inadvertently harmed. As an alternative to having a biologist onsite, the area may be temporarily fenced with tortoise-proof fencing. If temporary fencing is constructed, the fenceline shall be surveyed by a tortoise biologist before

construction of the fence. The area within the fence will be surveyed for, and cleared of, desert tortoises after construction of the fence to insure that no tortoises are trapped inside the fence.

35. **Project access, vehicles:** All vehicle traffic will be restricted to existing access roads where possible. New access routes will be created only when absolutely necessary and disturbance will be minimized by using the minimum tool needed for the job (i.e., the bobcat would result in less surface disturbance driving into a site than would the backhoe). If no access to the site exists, it would not be treated or restored unless it is a hazard to desert tortoises (e.g., pits or holes which may trap animals).

Proposed Measures for Wildlife Management Activities:

36. **Vehicles, access:** All vehicle use in desert tortoise habitat for these actions shall be restricted to existing roads, trails, large sandy washes, and ways. No new access roads shall be created.
37. **Disturbance:** Activities that involve ground disturbance, such as installation of water sources, fences, or other infrastructure shall comply with the proposed measures for ground disturbing actions.

It is recommended that the proposed action be appended to the Red Rock Canyon National Conservation Area Biological Opinion (1-5-04-F-526).

Signature: _____ Corey Lange _____
(Agency representative)

Title: _____ Wildlife Biologist _____

Date: _____ October 12th, 2021 _____

Part B: Fish and Wildlife Service Response

Date received: October 12th, 2021

Service File No. 2022-0010513

Date of response: February 18, 2022

ENVIRONMENTAL BASELINE

1. The rangewide status of the desert tortoise consists of information on its listing history, species account, recovery plan, recovery units, distribution, reproduction, and numbers. Because of the length of the document, the current rangewide status of the species and its critical habitat is provided on the Service's website at:

https://www.fws.gov/nevada/desert_tortoise/documents/reports/2021/Status-of-the-DT-CH-with-solar-table-08162021.pdf

If unavailable on this website, contact the Southern Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5230, and provide File No. 2022-.

2. The status of the species, factors affecting the desert tortoise in the action area, and the status and factors affecting species' critical habitat in the action area are described in the PBO (pages 33-43) and in information provided in Part A.
3. The effects of the action described in the PBO (pages 43-51) and in information provided by the BLM (Part A).
4. The exemption limits of incidental take and maximum habitat disturbance thresholds for activities proposed to occur in desert tortoise habitat in the Red Rock NCA planning area are described on pages 54-55 and 61 of the PBO.
5. Habitat quality/suitability: The project area is entirely within Sonora-Mojave Creosotebush-White Bursage Desert Scrub and North American Warm Desert Wash.
6. The U.S. Geological Survey habitat model (Nussear et al. 2009) shows habitat values within the project area between 0.8 and 0.9 (total range from 0 to 1.0).

PROJECT-SPECIFIC EFFECTS OF PROPOSED ACTION

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

Surveys performed on May 5 and 6, 2020 by Jacobs Engineering Group Inc. biologists occurred over a total of 20.2 miles with 47 transects, which ranged between 0.09 and 4.86 miles long. No live desert tortoises were observed during the protocol surveys. Ten sign observations were

detected during the protocol surveys, including three scat detections and seven burrows. Tortoise burrows were mostly recorded on the perimeter of the study area and were at least 0.21 mile from any road. Six live tortoises were incidentally detected while walking to transects and within the project area by project personnel conducting other investigations during the same timeframe. During geotechnical surveys for this project (File No. 08ENVS00-2021-F-0011-R001) the authorized desert tortoise biologist did not observe or handle any tortoises and no tortoises were found injured or killed during the geotechnical analysis. No active tortoise burrows were observed as well.

The proposed action is anticipated to result in up to 35.65 acres of desert tortoise non-critical habitat disturbance. All programmatic-level effects of the proposed action are within the scope of the PBO and described in the “Effect of the Action” section (IV) of the PBO on pages 43-51. This section includes ‘Effects of lands, resource management, habitat disturbance and loss, predators, and minimization measures. Adverse effects to desert tortoise would primarily result from tortoises found onsite being captured and moved out of harm’s way, and in the unlikely event of the crushing of tortoise burrows and injury or death of individuals from being crushed by heavy equipment if not located and moved out of harm’s way. Additionally, tortoises moved out of harms way could become dehydrated by voiding their bladders during handling resulting in a lower survival rate. Desert tortoise surveys show they are present in the project area, and the use of qualified biologists/monitors to locate any tortoises on site and move them out of harm’s way will greatly reduce the potential for mortality or injury. Additionally, crushing of cover and forage plants; introduction/spread of exotic species; soil compaction; loss of habitat and cover resulting from ground disturbance will also result from the proposed action, but is expected to be minimized by the proposed minimization measures.

CONCLUSION

After reviewing the current status of the desert tortoise, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service’s biological opinion that the proposed action is within the scope of the PBO issued to BLM Red Rock Field Office, and therefore, is not likely to jeopardize the continued existence of the threatened Mojave desert tortoise.

We have reached this conclusion based on the following:

- All on-site personnel will receive tortoise awareness training by an authorized desert tortoise biologist.
- Desert tortoise exclusionary fence will be installed for the project area and an authorized biologist will remove any desert tortoises from the site prior to commencement of project activities.
- Qualified Authorized biologist(s) will be onsite for project construction during the period of greatest tortoise activity (e.g., March 1 through October 31), and on-call at other times, Unless the project area has been fenced and cleared; a survey has been conducted and determined that no tortoises or active burrows are within 1,000 feet of the project area; or the Service and BLM have determined an onsite biologist is not necessary.

- BLM will implement the proposed minimization measures identified herein and those of the PBO
- This project will disturb 35.65 acres of non-critical tortoise habitat (20.11 acres permanent and 15.54 acres temporary impact). No critical habitat is within the project area.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act, provided that such taking is in compliance with the Terms and Conditions of this Incidental Take Statement.

AMOUNT OR EXTENT OF TAKE EXEMPTED

Based on the analysis of effects, proposed action, status of the desert tortoise in the action area, and minimization measures, implementation of the proposed activities may result in the following incidental take. Because the environmental conditions and level of tortoise activity may vary substantially during the proposed activities, we cannot provide a precise number for take of desert tortoises captured and moved up to 300 meters. We anticipate all tortoises located within harm's way will be relocated. Based on the information provided, we estimate that up to 7 desert tortoises of any age class may be captured and relocated in accordance with the measures in this biological opinion. We are allowing 1 take in the form of mortality or injury for tortoises of any age class.

Project Activity	Exempted Mortality or Injury (all age classes)	Exempted Non-Injury - Mortality: Capture and Relocation (all age classes)	Anticipated Habitat Loss (acres)	
			Critical	Non-critical
Trails and Intersection Improvements	1	7	0	35.65

This take is a subset of the desert tortoises anticipated to be taken in the programmatic incidental take statement of the PBO (File No. 1-5-04-F-526).

REASONABLE AND PRUDENT MEASURES WITH TERMS AND CONDITIONS

BLM will implement minimization measures included as part of the proposed action to minimize the incidental take of Mojave desert tortoise. Any proposed changes to the minimization measures or in the conditions under which project activities were evaluated may constitute a modification of the proposed action. If this modification causes an effect to Mojave desert tortoise not considered in this biological opinion, reinitiation of formal consultation pursuant to the implementing regulations of section 7(a)(2) of the Act (50 CFR § 402.16) may be warranted.

To be exempt from the prohibitions of section 9 of the Act, BLM, all agents, consultants, and contractors, must comply with the proposed measures incorporated into this incidental take statement by reference and the PBO terms and conditions, which implement the Reasonable and Prudent Measures. Collectively, these measures are intended to minimize the impact of incidental take of Mojave desert tortoise. These measures are non-discretionary.

The Service believes that the measures proposed by BLM in Part A and the terms and conditions in the PBO are sufficient to minimize potential effects to the desert tortoise that may occur as a result of the proposed event. No additional RPM or terms and conditions are provided.

REPORTING REQUIREMENTS

The reporting requirements for this appended action are provided in the PBO.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The Service does not offer any conservation recommendations at this time.

REINITIATION REQUIREMENT

As required by 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over an action has been retained (or is authorized by law) and if: (1) The amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

This concludes formal consultation on the action outlined in your request for consultation. This consultation document is hereby appended to the PBO issued to the BLM Red Rock Field Office to fulfill their consultation requirements pursuant to section 7(a)(2) of the Act.

If you have any questions about this biological opinion, please contact Jeffrey Goldstein in the Southern Nevada Fish and Wildlife Office in Las Vegas at (702) 515-5102 or by e-mail at kelly_douglas@fws.gov. Please reference the above file numbers in future correspondence concerning this consultation.

cc: Supervisory Biologist - Habitat, Nevada Department of Wildlife, Las Vegas, Nevada

LITERATURE CITED

- Nussear, K.E., Esque, T.C., Inman, R.D., Gass, Leila, Thomas, K.A., Wallace, C.S.A., Blainey, J.B., Miller, D.M., and Webb, R.H. 2009. Modeling habitat of the desert tortoise (*Gopherus agassizii*) in the Mojave and parts of the Sonoran Deserts of California, Nevada, Utah, and Arizona: U.S. Geological Survey Open-File Report 2009-1102. 18 pp.
- Service (Fish and Wildlife Service). 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.
- Jacobs Engineering Group Inc. 2020. Draft Desert Tortoise Survey Report Red Rock Canvon Trail and Intersections Project. Federal Highways Administration, July 2020.