



**Arizona Department of Transportation
Environmental Planning**

BIOLOGICAL EVALUATION

I-40/US 93 West Kingman System Traffic Interchange
NH-NHFP-040-A(212)S
040 MO 048 H7993 01C

Prepared for:
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Environmental Planning
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<i>ADOT Approval Signature</i>

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EXECUTIVE SUMMARY – BIOLOGICAL EVALUATION

Project Type: System interchange improvements to connect Interstate 40 (I-40) to U.S. Route 93 (US 93) and provide a high-speed interchange.

Project Duration and Anticipated Construction Schedule: Project has not been programmed. Construction is anticipated for a duration of 24 months.

Project Location: The project is located in the City of Kingman, Mohave County, Arizona, where I-40 intersects US 93 at Beale Street, also known as the West Kingman Traffic Interchange (TI). The construction footprint extend approximately 3.4 miles along I-40 from milepost (MP) 48.32 to MP 51.75 (Stockton Hill Road) and approximately 1.4 miles along US 93 from MP 69.60 to approximately MP 71.00.

No federally-listed threatened or endangered species will be affected by this project; see Table 1 for further information. Other federally protected species, in particular, BLM designated Sensitive Species are summarized in Table S.1. and Appendix B.

Table S.1. Other Federal Species Analyzed

Common Name	Scientific Name	Status*	Potentially Affected?
Allen’s big-eared bat	<i>Idionycteris phyllotis</i>	BLM-S	No
Greater western mastiff bat	<i>Eumops perotis</i>	BLM-S	No
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	BLM-S	No
Sonoran desert tortoise	<i>Gopherus morafai</i>	BLM-S CCA	Yes

* BLM-S = Bureau of Land Management Sensitive Species; CCA = Candidate Conservation Agreement.

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DEFINITIONS

Action area – all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR §402.02)

ADOT – Arizona Department of Transportation

AGFD – Arizona Game and Fish Department

AIDTT – Arizona Interagency Desert Tortoise Team

amsl – Above mean sea level

AZPDES – Arizona Pollutant Discharge Elimination System

AWLW – Arizona Wildlife Linkage Workgroup

BE – Biological Evaluation

BGEPA – Bald and Golden Eagle Protection Act

BLM – US Bureau of Land Management

BLM-S – BLM Sensitive Species

Construction footprint – the area where construction-related equipment will operate

Corps – US Army Corps of Engineers

dB – decibel scale

dBA – A-weighted decibel scale

EA – Environmental Assessment

EB – Eastbound

EP – Environmental Planning

ESA – Endangered Species Act

FHWA – Federal Highway Administration

FWCA – Fish and Wildlife Coordination Act

HGIS – Heritage Database Geographic Information System

I – Interstate

IPaC – Information, Planning, and Conservation

LE – Listed Endangered

L_{max} – maximum sound level

LT – Listed Threatened

MBTA – Migratory Bird Treaty Act

mi – mile

MP – Milepost

NB – Northbound

PLSS – Public Land Survey System

PM – Project Manager

ROW – Right-of-Way

SB – Southbound

SWPPP – Storm Water Pollution Prevention Plan

TI – Traffic Interchange

TCE – Temporary Construction Easement

US – United States

USFWS – US Fish and Wildlife Service

WB – Westbound

XN – Experimental Non-essential Population

1. Project Overview

1.1 Federal Nexus

The project evaluated in this Biological Evaluation (BE) is funded in part by the Federal Highway Administration (FHWA) and will be constructed by the Arizona Department of Transportation (ADOT).

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated April 16, 2019, and executed by FHWA and ADOT. Therefore, ADOT is acting in the role of lead federal agency for this project.

This BE addresses the proposed action in compliance with Section 7(c) of the Endangered Species Act (ESA) of 1973, as amended. Section 7 of the ESA requires that, through consultation (or conferencing for proposed species) with the U.S. Fish and Wildlife Service (USFWS), federal actions do not jeopardize the continued existence of any threatened, endangered, or proposed species or result in the destruction or adverse modification of critical habitat. This document evaluates the potential effects of the proposed transportation project on species that are federally listed under the ESA. Specific project design elements are identified that avoid or minimize adverse effects of the proposed project on listed species and/or critical habitat.

1.2 Project Description

The West Kingman Traffic Interchange (TI) project would improve capacity and operational efficiency by providing a high-speed interchange between Interstate 40 (I-40) and United States Route 93 (US 93). A free-flowing connection between I-40 and US 93 would increase local and regional mobility, provide better access between regional economic hubs, eliminate the “bottleneck” along the future I-11 corridor, and support interstate commerce.

ADOT, FHWA, USFWS, Arizona Game and Fish Department (AGFD), and other agencies met on September 14, 2011 to discuss the initial project development. The environmental issues of the various corridors were discussed. A BE was approved April 19, 2013 for the original project design and limits (BE ADOT Project No. 040 MO 048 H7993 01L).

The original design and environmental study for this project resulted in the preparation of a Design Concept Report and a draft Environmental Assessment (EA), both published in 2015. Since the project was not fiscally constrained, it was deferred until funding was available. In the interim, some improvements were completed under a different project to address the most critical needs at the Beale Street TI. Project funding has now been identified for a portion of the improvements, and the design is being revisited based on current conditions and current standards. During these investigations and based on coordination with stakeholders, modifications to the previously recommended alternative have been identified. The modifications include improving the:

- Configuration of the new West Beale Street TI (incorporating free-flow ramps);
- Width of Beale Street following construction;
- Lengthened merge lanes from Beale Street onto US 93 to include parallel merging lanes; and
- System-to-system ramp configurations lengthening parallel merge lanes.

In addition, shifting the widening of I-40 to the median may reduce the cuts into the hills, impacts to Clack Canyon, and overall earthwork required. The construction footprint has been expanded along I-40 and US 93 to allow for necessary improvements in capacity to Stockton Hill Road and to allow for transition to existing lane configurations at the project termini. ADOT is in the process of refining the design of this updated alternative and re-initiating the environmental studies.

The project location in the previous BE included 3 alternatives located approximately 0.65 miles north of the current TI and approximately 1.5 miles in length (**Appendix A**, 2013 BE Figure 2 Project Vicinity). This new BE has

been initiated in response to these updates in the project design, with incorporation of the previous 2013 BE as referenced.

Construction will be phased and is anticipated for a duration of 24 months.

1.3 Project Location

The project is located in the City of Kingman, Mohave County, Arizona, where I-40 intersects US 93 at Beale Street, also known as the West Kingman TI. The construction footprint extends approximately 3.4 miles along I-40 from milepost (MP) 48.32 to MP 51.75 (Stockton Hill Road) and approximately 1.4 miles along US 93 from MP 69.60 to approximately MP 71.00 (**Figures 1 and 2**). The cadastral location of the project includes portions of Sections 12, 13, 14, 15, 22, and 23 of Township 21 North, Range 17 West and Section 7 of Township 21 North, Range 16 West of the Gila and Salt River Baseline and Meridian. The project would occur within existing ADOT easement through lands managed by the Bureau of Land Management (BLM) and private lands, and within new ROW acquired from the City of Kingman and Mohave County.

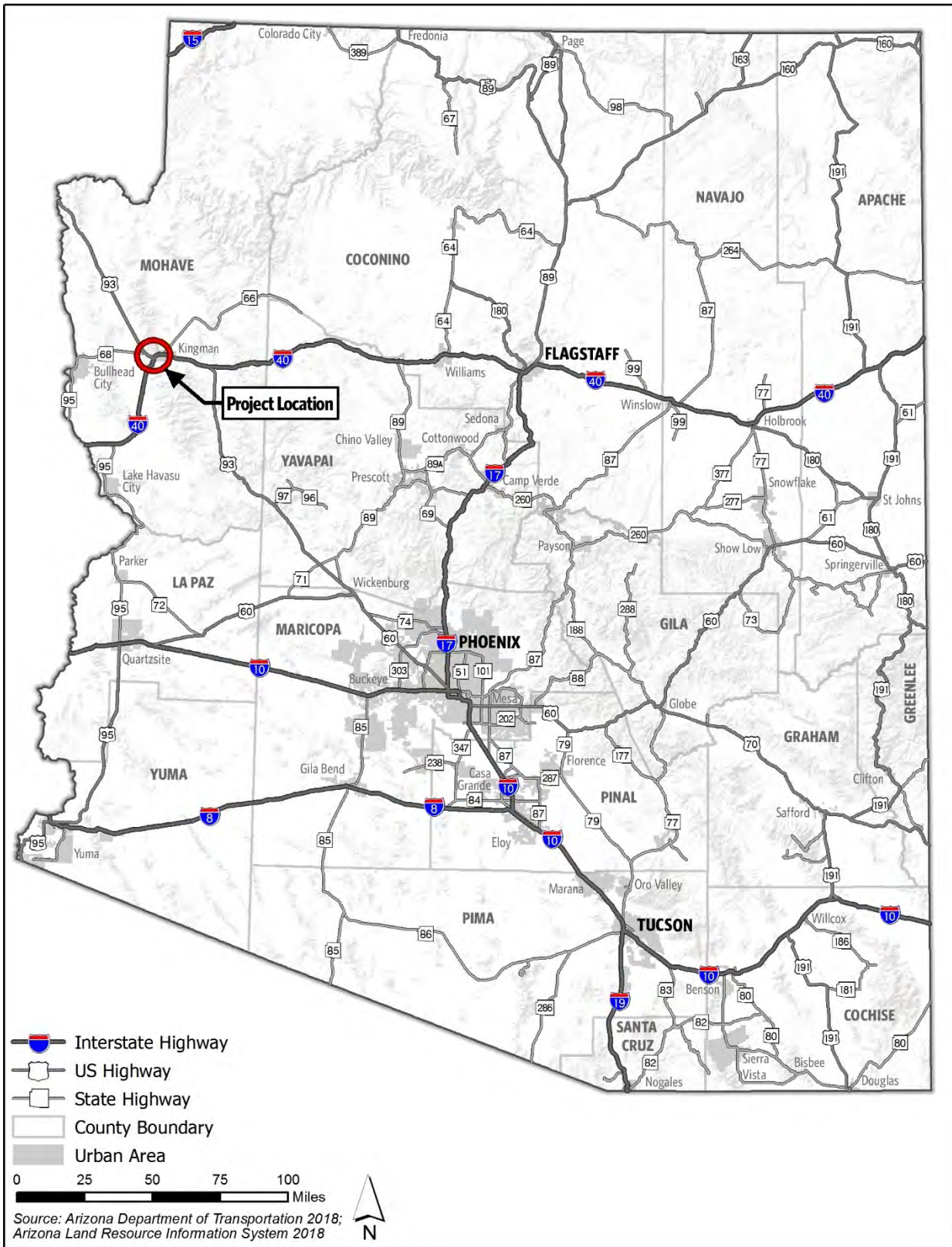


Figure 1. State Location Map

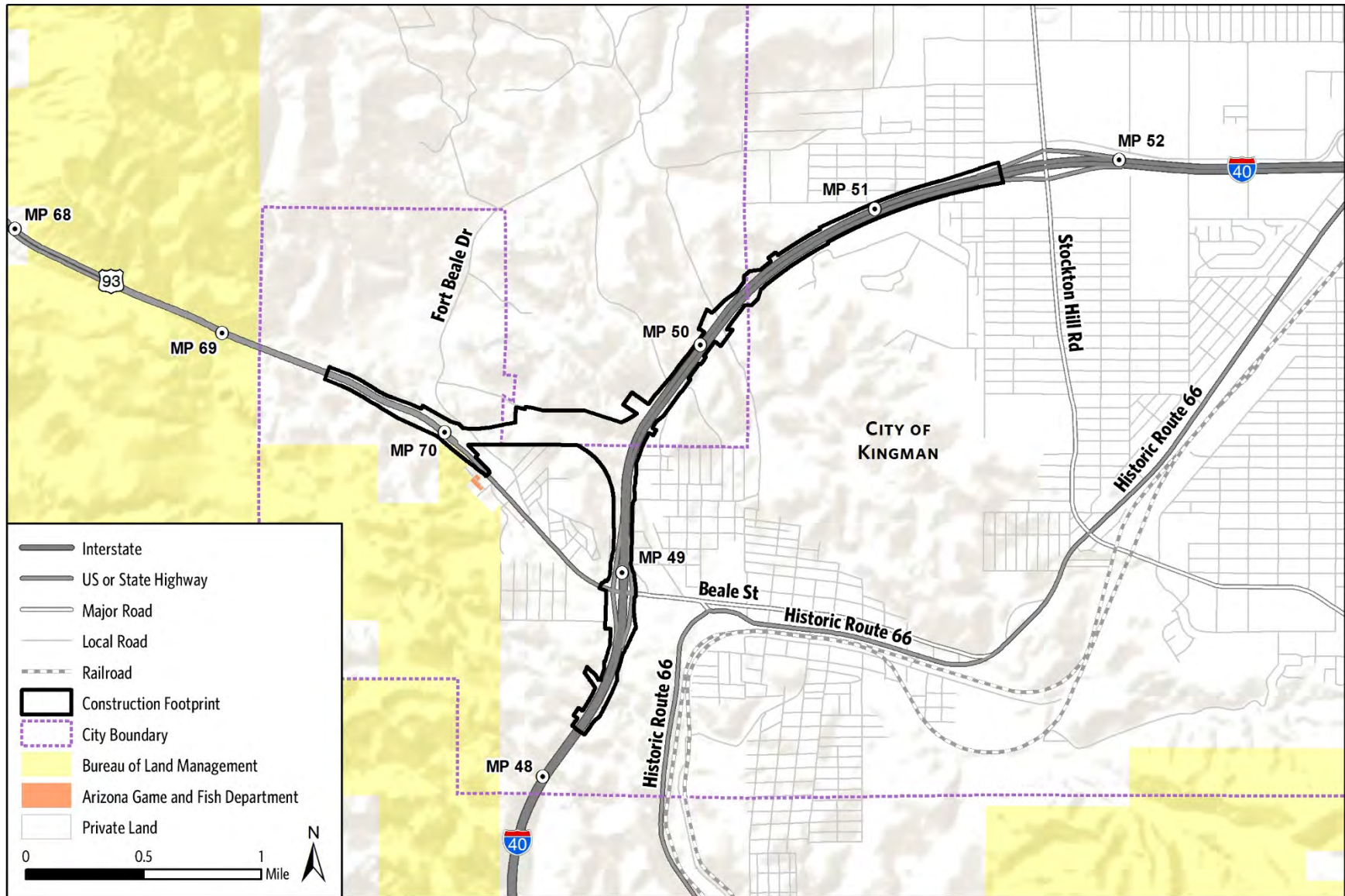


Figure 2. Project Location Map

2. Federally Proposed and Listed Species and Designated Critical Habitat

Previously, the USFWS list of threatened, endangered, proposed, candidate, and conservation agreement species for Mohave County dated October 3, 2012 was reviewed. Using the refined construction footprint, the IPaC system was accessed on 7/31/19 (updated 1/2/2020) (Consultation code: 02EAAZ00-2019-SLI-0854) and the AGFD Online Review Tool (accessed on 7/31/19; updated 1/2/2020 [HGIS-09536]). The 2020 lists are included in Appendix C. The ESA species list from the IPaC receipt was reviewed by a qualified biologist (Jill Harris, Jacobs Engineering) and the species are included in Table 1 below. Neither the IPaC search nor the AGFD Online Review Tool identified critical habitat within the search area for the project.

As a result of a suitable habitat analysis for ESA-listed species within the Action Area, it was determined that no ESA-listed species will be impacted and therefore no detailed evaluation is required. Justifications for excluding the species from further evaluation are included in Table 1. The project and related erosion and sediment control measures will have no effect to species excluded from further evaluation.

Table 1 – Project Species List

Species	Status ¹	Habitat Requirements	Exclusion Justification
Birds			
California Condor <i>(Gymnogyps californianus)</i>	ESA LE XN	High desert canyon lands and plateaus for nesting; and open grasslands and savannahs for foraging at elevations of 2,000 to 6,500 feet amsl. The 10J experimental population area includes the area bounded by I-40 to the south, and US 93 to the west.	There is no suitable canyon or plateau for nesting habitat within the Action Area. The construction footprint abuts the southern boundary of the designated 10J experimental population area; however, no condors have been documented in the Action Area.
California least tern <i>(Sterna antillarum browni)</i>	ESA LE	Open, bare or sparsely vegetated sand, sandbars, gravel pits, or exposed flats along shorelines of inland rivers, lakes, reservoirs, or drainage systems below 2,000 feet amsl.	There is no suitable habitat and no suitable water sources within the action area.
Yellow-Billed Cuckoo <i>(Coccyzus americanus)</i>	ESA LT	Uses large contiguous patches of multi-layered riparian habitat, such as cottonwood-willow gallery forests along rivers and streams below 6,600 feet in elevation amsl.	There is no suitable riparian habitat within the action area.
Reptiles			
Northern Mexican gartersnake <i>(Thamnophis eques megalops)</i>	ESA LT	Cienegas, stock tanks and rivers that are densely vegetated such as lowland river riparian woodlands, and upland stream gallery forests most frequently between 3,000 to 5,000 feet in elevation amsl.	There is no suitable habitat and no suitable water sources, riparian woodlands, or forests within the Action Area.

Source: USFWS July 31, 2019; updated January 2, 2020 <http://ecos.fws.gov/ipac>

¹Status Definitions: ESA = Endangered Species Act; LE = Listed Endangered, LT = Listed Threatened, XN = Experimental Non-essential Population.

3. Environmental Baseline

The environmental baseline represents the current biological and physical conditions of the action area (defined in Section 5). This baseline describes the current conditions and reflects the following:

- Past and present impacts of all federal, state, or private activities,
- Anticipated impacts of all proposed federal projects that have already undergone Section 7 consultation, and
- Impacts of state or private actions that are contemporaneous with the consultation in process.

A site visit was conducted on June 21, 2012 for the original project evaluation. Google Maps imagery dated April 13, 2018 was evaluated in 2019 to determine current project conditions for the updated construction footprint. Refer to the approved 2013 BE for representative photographs of the construction footprint and surrounding ROW (Appendix A). As noted in the previous 2013 BE:

The project is located at the north end of the Hualapai Mountains. Elevation within the project limits ranges from 3,300 to 3,700 feet. Topography within the project limits is mountainous. Short cliffs, approximately 40–60 feet tall, are present throughout the project limits. Larger cliffs, up to approximately 120 feet tall, are present in the project area outside the project limits. Within the project limits and surrounding project area, geologic formations include surficial-deposits of alluvium, granitoid rocks, and volcanic rocks. Soils are of the Lithic Torriorthents-Rock Outcrop-Lithic Haplargids Association, which consists of rock outcrops and well drained very shallow soils on hills and mesa escarpments (Hendricks 1985).

The project area is located in a transition zone with vegetation characteristic of the Semidesert Grassland Biotic Community (Brown 1994), which is found east of the project area, and the Mohave Desertscrub Biotic Community (Turner 1994), which is found west of the project area. Dominant vegetation in the project area includes saltbush (*Atriplex* spp.), creosote bush (*Larrea tridentata*), and various grasses and forbs. Other vegetation observed in the project area includes prickly pear cacti (*Opuntia* sp.), globemallow (*Sphaeralcea* spp.), catclaw acacia (*Acacia greggii*), buckwheats (*Eriogonum* spp.), desert broom (*Baccharis sarothroides*), and cheat grass (*Bromus tectorum*).

No permanent water source is present within the project limits or immediately adjacent in the surrounding area. Five ephemeral drainages are located within the project limits, including Clack Canyon Wash and other unnamed drainages. Vegetation along these drainages is similar to the adjacent upland areas. No riparian or wetland vegetation is present within the project limits.

Current conditions within the updated construction footprint are representative of those described in the 2013 BE.

4. Scope of Work

4.1 Construction

ADOT proposes to construct the project in two phases. The first phase would include:

- Providing free-flow, grade-separated ramps to service I-40 westbound (WB) to US 93 northbound (NB) and US 93 southbound (SB) to I-40 eastbound (EB), resulting in approximately one mile of new highway
- Widening and deck rehabilitation of the existing White Cliff Road Overpass EB #1839 and White Cliff Road Overpass WB #1840
- Widening Clack Canyon Wash Bridge EB #1837
- Rehabilitating the deck of Clack Canyon Wash Bridge WB #1838
- Widening of I-40 and US 93
- Constructing new concrete barrier as needed
- Constructing new on-site drainage collection and conveyance systems

- Extending existing culverts and pipes, as needed
- Installing or reconstructing ramp metering, lighting, signage, and pavement markings
- Constructing Americans with Disabilities Act improvements, as needed

The second phase would include the construction of the low-volume I-40 EB to US 93 NB and US 93 SB to I-40 WB ramps.

A total area of up to 124 acres within the construction footprint could be disturbed through the earthwork, including approximately 36 acres of paved roadway, 48 acres within previously disturbed ROW, and 40 acres within previously undisturbed land. All impacts are anticipated to be permanent.

The construction of the project would include blasting, pile driving, jackhammering, and grading. Additionally, there would be production of mineral aggregate from on-site materials sources (some of the blasted material) which would involve a screening plant located within the new ROW, roadway excavation and embankment construction utilizing bulldozers, large rock trucks, scrapers, water pulls, graders, loaders, compactors, and other heavy construction equipment. The bridge construction would utilize drilled shafts; several large track cranes with large drills would be required to complete the drilled shafts and other bridge construction. Concrete pump trucks would be utilized for bridge construction. Paving activities and drilling would occur to place guardrail, sign structures, traffic signs, and other construction activities. Heavy equipment such as trucks, graders, compactors, and paving machines would be used for these tasks. The roadway would be striped several times using a truck mounted striper.

Storage, stockpiling, and screening of materials would occur within the construction footprint.

Work would occur both during the day and at night. Nighttime work would occur mostly on US 93 due to traffic demands and lack of detour routes.

Sequencing of the project has not been determined at this time. However, WB I-40 would most likely be widened to the median first to provide room for the bridge construction. Many activities would occur simultaneously.

This project would use federal funding. Construction is expected to take approximately two years to complete. Vegetation removal and ground disturbance would occur within existing ADOT easements and new ROW, including removal of trees within previously undisturbed land. Access to all adjacent property would be maintained throughout and following construction. Motorists would experience slower speeds and temporary delays while travelling through the construction footprint. Detours are anticipated but existing traffic patterns would resume immediately following construction. During construction, noise levels may increase temporarily due to the use of heavy equipment, but upon completion of construction, noise levels would return to existing conditions.

4.2 Potential Impacts on Water Quality and Clean Water Act Compliance

The project would impact waters of the US and is anticipated to be authorized by a Section 404 non-notifying Regional General Permit with a conditional Section 401 Water Quality Certification. No work would occur within flowing water. The project is not within a 0.25 mile of an impaired or unique water source.

Because more than one acre of soil would be disturbed, an Arizona Pollutant Discharge Elimination System (AZPDES) permit would be required and a Storm Water Pollution Prevention Plan (SWPPP) would be developed and implemented.

5. Project Action Area

The action area includes all areas to be affected directly or indirectly by the action and not merely the construction footprint (50 CFR §402.02). In delineating the action area, the farthest reaching physical, chemical,

and biotic effects of the action on the environment was evaluated, focusing on, but not exclusive to, the I-40/US 93 roadways.

The construction footprint includes unpaved land where proposed ramps would be constructed to tie into the existing TI. Work would require cuts into the adjacent hills and other earthwork to develop the TI. Soil displacement and erosion, changes in lighting, paving of surfaces, clearing and grading, and other construction activities would occur. There would be direct impacts to the environment throughout the construction footprint of the project up to the existing and new ROW along the length of the project.

The majority of ground disturbance would occur as a result of installing the ramps, widening Beale Street, and constructing one mile of new highway. The hills within the construction footprint would be altered by cutting and other earthwork, including soil removal. Vegetation loss and soil displacement can lead to sedimentation and erosion impacts. Culverts would need to be installed or extended and new on-site drainage conveyed to accommodate the pavement runoff and the realignment of the TI.

Lights would be required for the new ramps and expanded TI.

There could be effects from noise and vibrations in the area surrounding the construction footprint as a result of rock removal activities, grinding and saw-cutting of concrete, pile driving, and the overall earthwork that would occur in several locations. I-40 and US 93 are continuously traveled roads with existing traffic noise generated from trucks and cars passing through. Commercial and residential buildings are situated adjacent to portions of the construction footprint, contributing to additional noise and disturbance.

Reactions of wildlife to noise are complex. The FHWA looked at the noise effects on wildlife populations as it relates to roadway activities (FHWA 2004). Roadway noise can affect wildlife, in particular birds and mammals. Sound levels are measured on a logarithmic decibel scale (dB), which corresponds fairly well to the human hearing response. A commonly used means of measuring sound is the A-weighting network (A-weighted decibels [dBA]) that assigns weights to sounds based on audibility to human hearing (low weights to low frequency sounds and higher weights to more audible high-frequency sounds). Noise-related disturbance can affect nesting, roosting, and feeding activities of wildlife. However, wildlife in noisy habitats are exposed to higher levels of noise and visual disturbances and have likely habituated to these human activities (USFWS 2006). USFWS found birds in various sites had habituated to a base level of human activities, which is below the upper threshold to cause abandonment of the nest site, but above ambient noise levels found in natural sites (USFWS 2006).

Normal conversation levels are typically between 60 and 70 dB and can increase 3 decibels for multiple conversations held concurrently (USFWS 2006). The roads within the construction footprint and surrounding area have moderate to heavy traffic and most likely an average ambient noise level of 70-80 dB or higher (USFWS 2006). Moderate traffic is characterized by the presence of passenger vehicles and street-legal motorcycles.

In Table 2, construction equipment has been modeled according to dBA and distance at 50 feet from point source (construction equipment) (FHWA 2005 and 2010). The attenuation is the reduction in noise when the distance is doubled. The standard reduction for point source noise is 6 dB per doubling of distance from the source. This represents a worst-case scenario. This does not take into account topography or vegetation, all which further reduce noise over distance. For example, dense vegetation can reduce noise levels up to 5 dB for every 100 feet of vegetation, up to a maximum reduction of 10 dB over 200 feet.

Table 2: Construction Equipment Sound Levels

Equipment Type	Actual Measured Average L_{max} (dBA) at 50 ft	Noise Attenuation (Point Source)		
		L_{max} (dBA) at 400 ft	L_{max} (dBA) at 800 ft	L_{max} at 1600 ft

		(0.08 mi)	(0.15 mi)	(0.30 mi)
Blasting	94	71.5	64	56.5
Chain Saw	84	61.5	54	46.5
Compressor (air)	78	55.5	48	40.5
Concrete Mixer Truck	79	56.5	49	41.5
Concrete Pump Truck	81	58.5	51	43.5
Concrete Saw	90	67.5	60	52.5
Crane	81	58.5	51	43.5
Excavator	81	58.5	51	43.5
Front End Loader	79	56.5	49	41.5
Grader	85	62.5	55	47.5
Impact Pile Driver	101	78.5	71	63.5
Mounted Impact Hammer (hoe ram)	90	67.5	60	52.5
Rock Drill	81	58.5	51	43.5

Source: FHWA's Roadway Construction Noise Model Database (2005)

As shown in Table 2, most construction equipment noise levels would be reduced to the average ambient noise level of the surrounding area for this project when measured out to 400 feet (55-79 dBA). The action area encompasses the construction footprint as well as the surrounding area and extends outward 400 feet from the construction footprint to capture potential noise impacts (**Figure 3**). Cerbat Foothills Recreation Area and Fort Beale Springs, both nearby recreation areas, could be temporarily impacted by noise from project activities and are included in the action area.

Lighting can also have potential impacts on wildlife. Increased lighting at night can attract insects and increase foraging potential for bats and other animals. Lighting can also alter the behavior of wildlife that may avoid the brighter area to reduce the potential of predation.

Removal of vegetation can result in loss of habitat for wildlife. Approximately 90 acres of habitat, both previously disturbed and undisturbed lands would be impacted, resulting in loss of potentially suitable foraging, breeding, or dispersal habitat. Vegetation removal, disturbance of unpaved land, or introduction of plant material through construction equipment, can increase the potential of non-native species invading the action area.

The effects of noise, sedimentation, lighting, and habitat alteration would not be expected to extend beyond the action area, as shown in Figure 3.

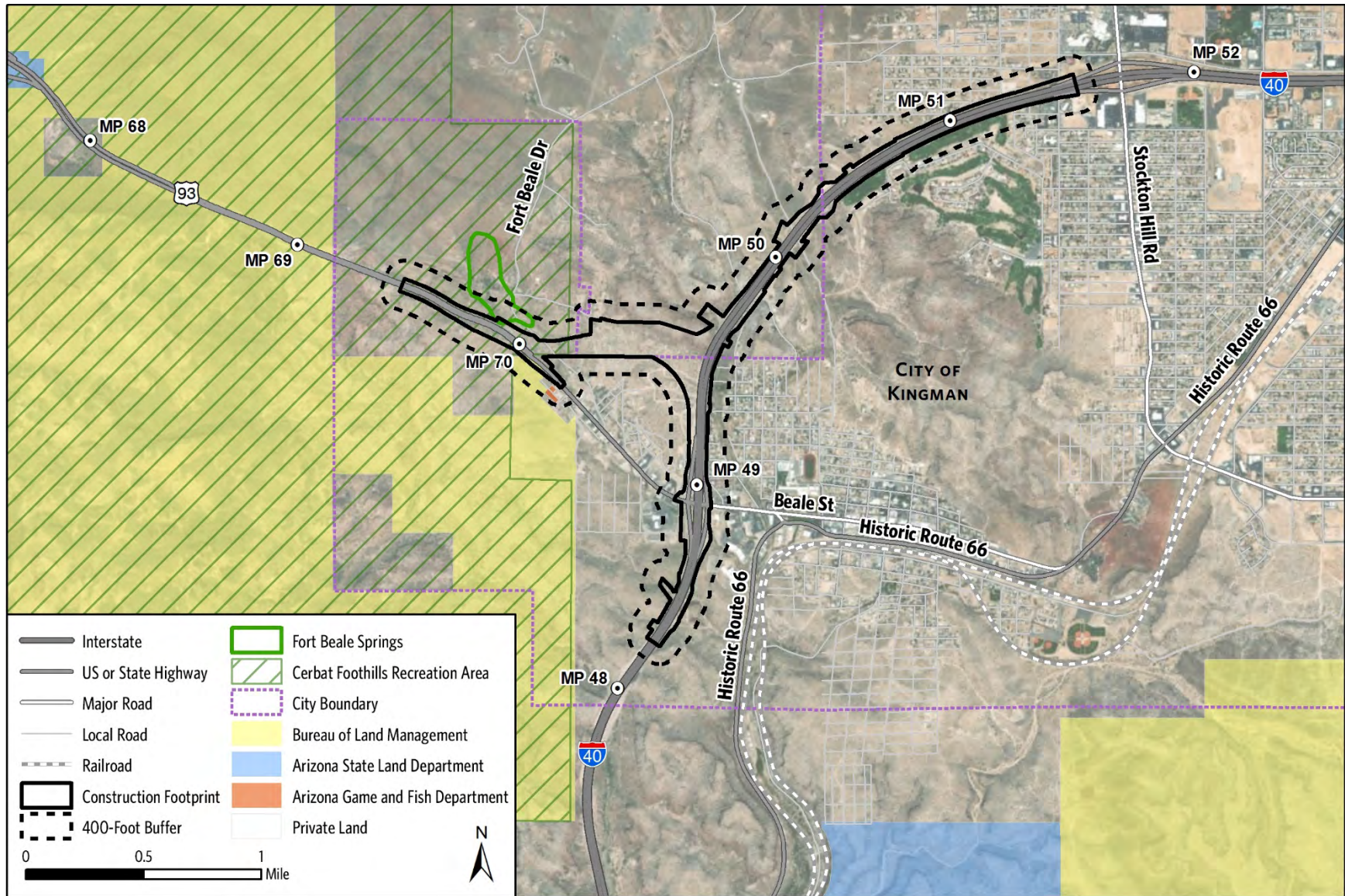


Figure 3. Action Area

6. Species Evaluation

No ESA-listed species are further evaluated in detail as implementation of the project is not anticipated to adversely affect any ESA-listed species.

7. Environmental Commitments

Although there would be no impacts to ESA-listed species, there are other protected resources within the action area, including migratory birds, native plants, and the Sonoran desert tortoise, that could be potentially impacted by implementation of the project (discussed in **Appendix B**). Therefore, there are several conservation measures outlined below to minimize potential impacts resulting from project implementation.

Roadside Development Section Responsibilities

- Protected native plants within the project limits will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.
- The Arizona Department of Transportation Roadside Development Section will provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits.

District Responsibility

- If any active bird nests cannot be avoided by vegetation clearing or construction, the Engineer will contact the Environmental Planning Biologist (602-712-7134 or 602-341-9331) to evaluate the situation.
- The Engineer will provide Sonoran Desert tortoise survey results to the Arizona Department of Transportation Environmental Planning biologist (email: bioteam@azdot.gov or 602-712-7134/602-341-9331).

Contractor Responsibilities

- The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the state and federal noxious weed and the state invasive species lists in accordance with state and federal laws and executive orders. The plan and associated treatments shall include all areas within the project right-of-way and easements as shown on the project plans. The treatment and control plan shall be submitted to the Engineer for the Arizona Department of Transportation Construction Professional Landscape Architect for review and approval prior to implementation by the contractor.
- Prior to the start of ground-disturbing activities and throughout the duration of construction and any landscape establishment period, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.
- To prevent the introduction of invasive species seeds, all earthmoving and hauling equipment shall be washed prior to entering the construction site and the contractor shall inspect all construction equipment and remove all attached debris, including plant parts, soil and mud, prior to the equipment entering the construction site.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction and hauling equipment and remove all debris, including plant parts, soil and mud, prior to leaving the construction site.
- If vegetation clearing will occur during the migratory bird breeding season (March 1 - August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify

the Engineer to evaluate the situation. During the non-breeding season (September 1- February 28) vegetation removal is not subject to this restriction.

- The contractor shall employ a qualified biologist with necessary scientific collecting permit(s) to conduct a preconstruction survey for the Sonoran Desert tortoise.
- At least 10 (ten) days prior to construction or any ground-disturbing activities, the contractor will arrange for a qualified biologist with experience handling Sonoran Desert tortoises to conduct a pre-construction survey for the Sonoran Desert tortoise or potential tortoise burrows.
- No construction including pre-construction ground-disturbing activities shall begin until a qualified biologist has completed a survey for the presence of Sonoran Desert tortoises or potential desert tortoise burrows.
- Prior to construction activity the contractor's field personnel including the Project Manager, Assistant Project Manager, General Superintendent, and Project Superintendent shall review the attached Arizona Department of Transportation Environmental Planning "Sonoran Desert Tortoise Awareness Program Handout" flier, become familiar with the identification and avoidance of the Sonoran Desert tortoise, and follow the notification request, as applicable.
- The contractor shall require all on-site workers to check under their parked vehicles and equipment prior to driving to make sure there isn't a tortoise sheltering underneath the vehicle or piece of equipment. If a desert tortoise is found sheltering underneath a parked vehicle or piece of equipment, the tortoise shall be allowed to move out from under the vehicle on its own or be relocated following the current guidelines for Sonoran desert tortoise handling before the vehicle can be moved.
- If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects". If any tortoise is encountered during construction the contractor shall notify the Engineer to report the encounter.
- The contractor shall report encounters with any Sonoran Desert tortoises (live, injured, or dead) during construction to the Engineer using the attached Arizona Department of Transportation Sonoran Desert Tortoise Observation Form. The final form shall be sent to Arizona Department of Transportation Environmental Planning (email: bioteam@azdot.gov) within 24 hours of the encounter. Photographs should be taken of tortoises encountered and included in the report if possible.

8. Literature Cited

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9. Signatures

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Title: Biologist
Firm Name: Jacobs Engineering Group

Reviewed by:  _____ Date: January 14, 2020
Name: Kay Nicholson
Title: Biologist
Firm Name: Jacobs Engineering Group

APPENDIX A

2013 BE FIGURE 2, PROJECT VICINITY

2013 BE PHOTOGRAPHS

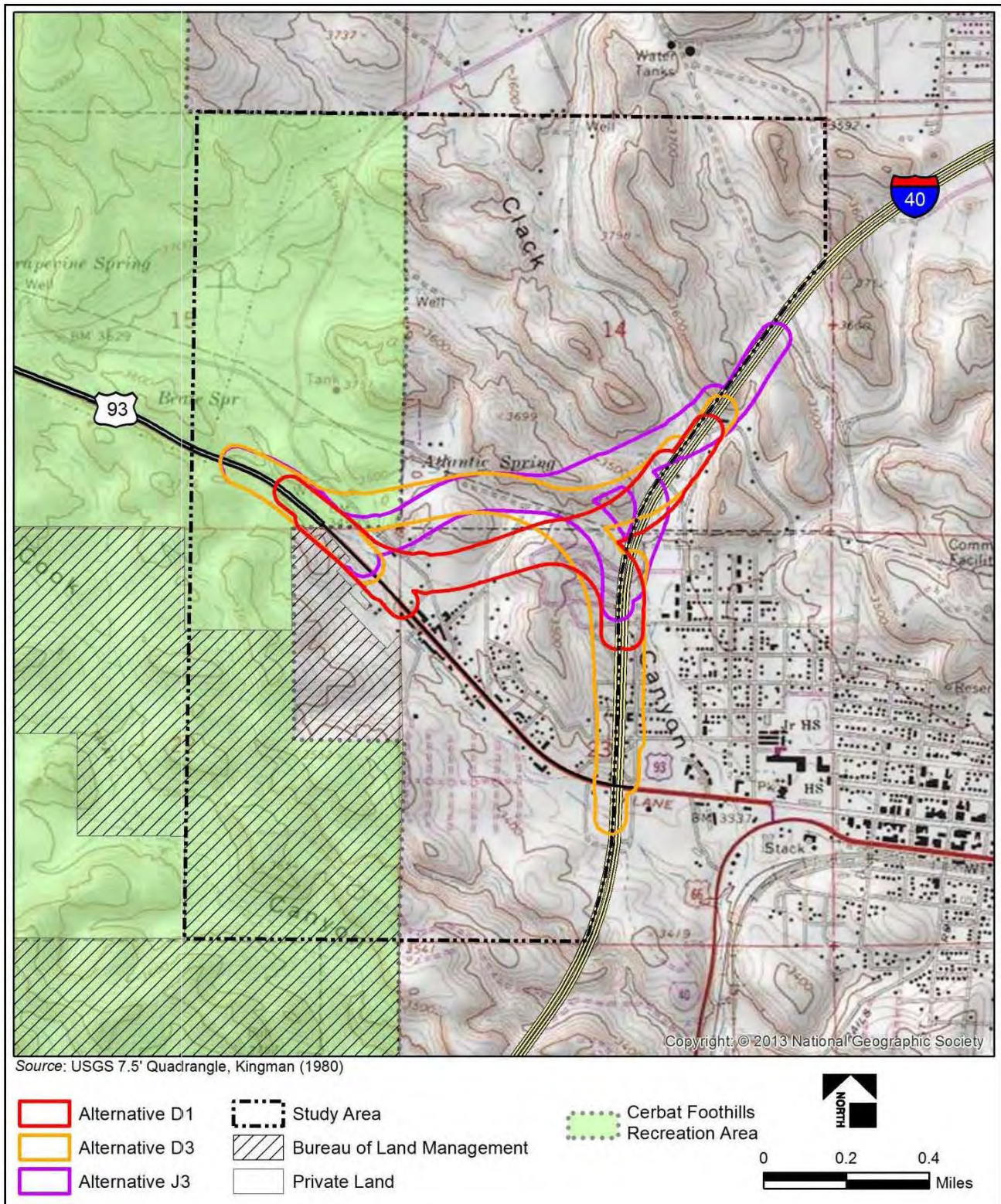


Figure 2 (2013 BE) Project Vicinity



Photograph 1. View to the west at the eastern end of the project area (June 21, 2012)



Photograph 2. Potential desert tortoise shelter site (June 12, 2012)



Photograph 3. View to the east of the route for Alternative J3 (June 21, 2012)



Photograph 4. View to the southwest of Alternative D1 (June 21, 2012).



Photograph 5. View to the east at the west end of Alternatives J3 and D3
(June 21, 2012)

APPENDIX B

OTHER SPECIAL STATUS SPECIES

I. MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA; 16 USC 703-712), establishes protections for migratory birds and their parts (e.g., eggs, nests, and feathers) from taking, hunting, capture, transport, sale, or purchase. Most species of birds are classified as migratory under the MBTA, except for upland game and introduced birds. No active nests were noted in the 2012 survey of the project location. Potential exists for breeding birds protected by the MBTA to occur adjacent to the existing roadways and within the project action area. The project is anticipated to occur during the breeding season, between March 1 and August 31, when nesting migratory birds may be present.

Noise can impact birds nesting adjacent to a roadway during the breeding season; however, as both roadways experience continuous traffic noise and construction activities would be temporary, the likelihood of significant noise impacts to nesting birds is minimal.

The following environmental commitments are required to minimize impacts on migratory birds:

District Responsibility

- If any active bird nests cannot be avoided by vegetation clearing or construction, the Engineer will contact the Environmental Planning Biologist (602-712-7134 or 602-341-9331) to evaluate the situation.

Contractor Responsibility

- If vegetation clearing will occur during the migratory bird breeding season (March 1 - August 31), the contractor shall avoid any active bird nests. If the active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the non-breeding season (September 1- February 28) vegetation removal is not subject to this restriction.

II. BALD AND GOLDEN EAGLE PROTECTION ACT

The construction footprint and action area was evaluated by Jill Harris. The action area occurs within golden eagle foraging habitat, and eagles have been documented within 3 miles of the action area (AGFD 2020). Golden eagles are known to occur in the expanded vicinity; however, they typically occupy habitat away from human disturbance. Activity associated with residential and commercial developments in Kingman reduces the suitability of habitat in the action area. Although trees that eagles could use for nesting or perching would be disturbed by project activities, the abundance of large trees available in the surrounding area and the proximity of continuous human disturbance within the action area, the project is not anticipated to disturb or result in take of bald or golden eagles. This project will comply with the National Bald Eagle Management Guidelines of 2007.

III. FISH AND WILDLIFE COORDINATION ACT (FWCA)

This project is a federal action but it will not impound, divert, deepen the channel or otherwise control or modify any stream or other body of water; the FWCA does not apply.

IV. NOXIOUS AND INVASIVE PLANT SPECIES

The ADOT District responded to a request for information on the presence of noxious and invasive plants in the construction footprint on 12/2/19. Although a survey of the construction footprint was not conducted, two noxious and/or invasive plants, malta starthistle (*Centaurea melitensis* L.) and Russian thistle (*Kali tragus*) have previously been reported nearby. Environmental commitments for a Noxious and Invasive Species Plan would be implemented.

Roadside Development Section Responsibility

- The Arizona Department of Transportation Roadside Development Section will provide special provisions for the control of noxious and invasive plant species during construction that may require treatment and control within the project limits.

Contractor Responsibilities

- The contractor shall develop a Noxious and Invasive Plant Species Treatment and Control Plan in accordance with the requirements in the contract documents. Plants to be controlled shall include those listed in the state and federal noxious weed and the state invasive species lists in accordance with state and federal laws and executive orders. The plan and associated treatments shall include all areas within the project right-of-way and easements as shown on the project plans. The treatment and control plan shall be submitted to the Engineer for the Arizona Department of Transportation Construction Professional Landscape Architect for review and approval prior to implementation by the contractor.
- Prior to the start of ground-disturbing activities and throughout the duration of construction and any landscape establishment period, the contractor shall arrange for and perform the control of noxious and invasive species in the project area.
- To prevent the introduction of invasive species seeds, all earthmoving and hauling equipment shall be washed prior to entering the construction site and the contractor shall inspect all construction equipment and remove all attached debris, including plant parts, soil and mud, prior to the equipment entering the construction site.
- To prevent invasive species seeds from leaving the site, the contractor shall inspect all construction and hauling equipment and remove all debris, including plant parts, soil and mud, prior to leaving the construction site.

V. OTHER FEDERAL SENSITIVE SPECIES

The action area includes an easement from the BLM and, therefore, the following BLM sensitive species (BLM-S) have been evaluated for potential impacts as a result of implementing the proposed project.

Table B-1. Other Federal Sensitive Species

Common Name	Scientific Name	Status*	Occupied Habitat Present?	Suitable Habitat Present?	Suitable Habitat Affected?	Species Potentially Affected?
Mammals						
Allen’s big-eared bat	<i>Idionycteris phyllotis</i>	BLM-S	No	Yes, bats are found in ponderosa pine, piñon-juniper, Mexican woodland and riparian areas of sycamores, cottonwoods and willows. They have also been found in white fir and in Mojave desert scrub. These bats typically occur along streams or over ponds where the bats may be seeking insects, water or both. They roost in caves and abandoned mineshafts	Yes	Yes, see discussion below.

Common Name	Scientific Name	Status*	Occupied Habitat Present?	Suitable Habitat Present?	Suitable Habitat Affected?	Species Potentially Affected?
Greater western mastiff bat	<i>Eumops perotis</i>	BLM-S	No	Yes, bats occur from lower and upper Sonoran desert scrub near cliffs, preferring rugged rocky canyons with abundant crevices	Yes	Yes, see discussion below.
Birds						
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	BLM-S	No	No	No	No
Reptiles and Amphibians						
Sonoran desert tortoise	<i>Gopherus morafkai</i>	BLM-S CCA	Yes	Yes	Yes	Yes-see discussion below

Source: BLM, Arizona – Bureau Sensitive Species List (February 2017); AGFD Environmental Online Tool (2020)

Status*: BLM-S = Bureau of Land Management Sensitive Species; CCA = Candidate Conservation Agreement with the USFWS

Allen’s Big-eared Bat (*Idionycteris phyllotis*) and Greater Western Mastiff Bat (*Eumops perotis*)

Allen’s big-eared bat roosts in caves and abandoned mines and the greater western mastiff bat roosts in caves and rugged rocky canyons with abundant crevices. Both bats have been recorded near to the construction footprint (AGFD 2019; Joelle Acton, BLM, personal communication, January 8, 2020). However, there is no suitable roosting habitat within the construction footprint for either species. While there is no permanent water for the Allen’s big-eared bat, seasonal water sources do provide potential for foraging of insects. Cliffs and rugged rocky outcrops do not occur within the construction footprint or action area, but do occur in the vicinity of the project. Construction activities would remove vegetation and work would impact ephemeral waterways within the construction footprint. Activities could occur at night when bats are actively foraging, and potential foraging habitat could be temporarily impacted by the project construction activities. Therefore, the following determinations are made for each bat species:

- This project may impact individuals of Allen’s big-eared bat, but is not likely to result in a trend toward federal listing or loss of viability.
- This project may impact individuals of greater western mastiff bat, but is not likely to result in a trend toward federal listing or loss of viability.

Sonoran Desert Tortoise (*Gopherus morafkai*)

ADOT is a signatory to the Candidate Conservation Agreement for the Sonoran Desert Tortoise (*Gopherus morafkai*) in Arizona (USFWS and AIDTT 2015) and makes accommodations for the protection of Sonoran Desert tortoise (SDT) on construction projects where individuals may be present.

Status

Protected under a Candidate Conservation Agreement (May 27, 2015).

Table B-2. Species Summary Table

	Feeding		Breeding	Sheltering	
	Juvenile	Adult	Adult	Juvenile	Adult
Habitat	Rocky habitats, bajadas, and washes within Sonoran or Mohave Desertscrub	Rocky habitats, bajadas, and washes within Sonoran or Mohave Desertscrub	Rocky habitats, bajadas, and washes within Sonoran or Mohave Desertscrub	Below rocks, boulders, vegetation, on semi-open slopes, caliche caves of washes, or rocky crevices	Below rocks, boulders, vegetation, on semi-open slopes, caliche caves of washes, or rocky crevices
Prey	Primarily plants, some bones, and soil	Primarily plants, some bones, and soil	Primarily plants, some bones, and soil	N/A	N/A
Perches	N/A	N/A	N/A	N/A	N/A
Cover	Open areas with cover nearby	Open areas with cover nearby	N/A	Full cover	Full cover
Temperature	Cooler temperatures in spring time and after rainfall events	Cooler temperatures in spring time and after rainfall events	N/A	During extreme temperatures	During extreme temperatures
Lighting	N/A	N/A	N/A	N/A	N/A
Moisture	Emerge in response to precipitation	Emerge in response to precipitation	Highly dependent on summertime monsoon events	During periods of drought	During periods of drought
Sound	N/A	N/A	N/A	N/A	N/A
Water	Drought tolerant, but require periodic free-standing water	Drought tolerant, but require periodic free-standing water	N/A	N/A	N/A
Dispersal	0.01 to 1.0 square mile	0.01 to 1.0 square mile	0.01 to 1.0 square mile	0.01 to 1.0 square mile	0.01 to 1.0 square mile
Seasonal Activity	Early-mid spring, during monsoon season	Early-mid spring, during monsoon season	July through October	Daily and year-round, but dormant from mid-November to mid-February.	Daily and year-round, but dormant from mid-November to mid-February.

Life History

Species Description and Ecology

The adult desert tortoise is a fairly large (8–15 inches in length) tortoise with a high domed brownish carapace, yellowish unhinged plastron, short tail, and stocky limbs. Both the carapace and plastron exhibit prominent growth lines, and the forelimbs are covered with large conical scales (USFWS 2015).

Sonoran desert tortoises are long-lived and are thought to have three life stages: young juveniles, older juveniles (sub-adults), and adults. Time within each life stage is dependent on the size of the animal. Young juveniles

include hatchlings and very small juveniles up to about 5 years of age or when their shells harden. After their shells completely harden, they are considered to be within the older juvenile life stage until they reach sexual maturity. This can be from age 6-15, but it is largely dependent on precipitation trends. Most tortoises are considered adults from around 16 years of age (USFWS 2015).

Desert tortoises spend much of the winter months dormant within their burrows and tend to only emerge in response to precipitation or other physiological needs. Precipitation is an important factor for the desert tortoise because free-standing water is critical for their survival during long periods of drought. Surface activity for desert tortoises occurs primarily during daylight hours from early – mid spring, and then again during summer monsoons (USFWS 2015).

Desert tortoises eat a variety of plants including fresh winter and summer annuals, perennials, dried annuals, and plant litter. In addition to being herbivores, they also consume bones and soil especially that of exposed calcium carbonate, to help grind plant matter in their stomachs and supplement their diet with nutrients and minerals not found in plants (USFWS 2015).

Reproduction

The Sonoran desert tortoise breeding season typically occurs from July to October. Approximately half of adult females reproduce in any given year, though once mated, females are capable of storing sperm for up to two years. This allows them to lay fertile eggs for up to two years after a single mating. Females dig a nest hole in the soil and may lay one clutch of 1 – 12 eggs per year, typically around the onset of the summer monsoon season. After depositing eggs, the female fills in the nest hole and may defend the site for some time against potential predators (USFWS 2015).

Suitable Habitat

Sonoran desert tortoises typically inhabit the bajadas and rocky, steep slopes of Mojave Desertscrub and both subdivisions of Sonoran Desertscrub, but can be found in other habitat within western and central Arizona between 900 and 4,200 feet elevation amsl east and south of the Colorado River. Desert tortoises most often occur in a paloverde-cacti mix with boulders, rocky outcrops, and natural ground cavities nearby. They require loose soils to excavate shelters below rocks, boulders, and vegetation on semi-open slopes, but will also shelter in caliche caves of washes, or otherwise in rocky crevices. These shelter sites are one of the more important components of desert tortoise habitat since they shelter for long spans of time to avoid temperature extremes and drought conditions (USFWS 2015).

The Sonoran desert tortoise also utilizes inter-mountain valleys for dispersal at all life stages and these areas are considered part of their home range. Home ranges vary in size based on rainfall levels, with small home ranges in wet years and larger home ranges in dry years. Typically, these tortoises will occupy from 0.01- 1.0 square mile with high fidelity to their home ranges except when dispersing to new areas. Tortoise dispersal into new areas is typically related to physiological needs such as food and shelter availability and suitability (USFWS 2015).

Threats

Primary threats to Sonoran desert tortoise include habitat loss and fragmentation. Urban, agricultural, and road development have resulted in significant loss and fragmentation of the species habitat. Other factors causing the loss or alteration of tortoise habitat include invasion of exotic annual grasses and forbs which have changed fire regimes resulting in more frequent large scale destructive wildfires, climate change and drought. Additional threats to the species include human tortoise interactions such as off-road vehicle use, illegal collection, and illness from the release of captive tortoises into the wild, and handling of wild tortoises (USFWS 2015).

Range and Survey History

Sonoran desert tortoises within Arizona occupy rocky and boulder strewn mountains and hills east and south of the Colorado River. This includes portions of western and central Arizona between 900 and 4,200 feet elevation within the Mohave and Sonoran Desertscrub biotic communities. Based on available data, the current range and distribution for the species is largely the same as was historically documented. No population extirpations or range reductions have been documented in Arizona (USFWS 2015).

The AGFD Online Environmental Review tool indicated Sonoran desert tortoise have been documented within 3 miles of the project vicinity (AGFD 2020). Numerous records of tortoise occurrences in all directions from the construction footprint have been documented from the early 1980s through 2015. A 2015 observation occurred between Cook Canyon and Beale Street (Sabra Tonn, HDMS Program Supervisor, AGFD, personal communication, January 10, 2020). Tortoises occur in all of the hills in the area and the construction footprint occurs within known habitat. No surveys were conducted for this project. The 2013 BE noted that “based on occurrence data and habitat suitability, it is assumed that the tortoise is present in the project area.”

Analysis and Determination of Impacts

The project would result in the loss of suitable foraging habitat and potential shelter sites for the Sonoran desert tortoise. Any desert tortoises present during construction, whether above or below ground, could be injured or killed by heavy machinery. With the addition of roadway surfaces within tortoise habitat, the project would fragment suitable habitat for the tortoise, and could isolate tortoises present between Beale Street and the proposed alignment of US 93. The addition of road surfaces would increase the potential for tortoises to encounter a road during daily activities. Tortoises attempting to cross these roads have a higher likelihood of being injured or killed by oncoming traffic. Therefore, the project could result in impacts to the Sonoran desert tortoise.

The following conservation measures are required to minimize effects to the Sonoran desert tortoise:

Contractor Responsibilities

- The contractor shall employ a qualified biologist with necessary scientific collecting permit(s) to conduct a preconstruction survey for the Sonoran Desert tortoise.
- At least 10 (ten) days prior to construction or any ground-disturbing activities, the contractor will arrange for a qualified biologist with experience handling Sonoran Desert tortoises to conduct a pre-construction survey for the Sonoran Desert tortoise or potential tortoise burrows.
- No construction including pre-construction ground-disturbing activities shall begin until a qualified biologist has completed a survey for the presence of Sonoran Desert tortoises or potential desert tortoise burrows.
- Prior to construction activity the contractor’s field personnel including the Project Manager, Assistant Project Manager, General Superintendent, and Project Superintendent shall review the attached Arizona Department of Transportation Environmental Planning “Sonoran Desert Tortoise Awareness Program Handout” flier, become familiar with the identification and avoidance of the Sonoran Desert tortoise, and follow the notification request, as applicable.
- The contractor shall require all on-site workers to check under their parked vehicles and equipment prior to driving to make sure there isn’t a tortoise sheltering underneath the vehicle or piece of equipment. If a desert tortoise is found sheltering underneath a parked vehicle or piece of equipment, the tortoise shall be allowed to move out from under the vehicle on its own or be relocated following the current guidelines for Sonoran desert tortoise handling before the vehicle can be moved.
- If any Sonoran Desert tortoises are encountered during construction, the contractor shall adhere to the attached Arizona Game and Fish Department “Guidelines for Handling Sonoran Desert Tortoises

Encountered on Development Projects". If any tortoise is encountered during construction the contractor shall notify the Engineer to report the encounter.

- The contractor shall report encounters with any Sonoran Desert tortoise tortoises (live, injured, or dead) during construction to the Engineer using the attached Arizona Department of Transportation Sonoran Desert Tortoise Observation Form. The final form shall be sent to Arizona Department of Transportation Environmental Planning (email: bioteam@azdot.gov) within 24 hours of the encounter. Photographs should be taken of tortoises encountered and included in the report if possible.

VI. STATE SENSITIVE SPECIES

The AGFD on-line environmental review tool was originally accessed on June 26, 2012 and was reported in the 2013 BE. An on-line environmental review tool was accessed July 13, 2019 (updated January 2, 2020) (Receipt Number: HGIS-09536) to determine whether special status species have been reported to occur in the area surrounding the updated project location and for any recent changes in the status of special status species. As part of the environmental review process, agency meetings were held for the original project and the updated project scope to solicit comments. AGFD, USFWS, BLM, and others attended the meetings and their input, including biological concerns, have been integrated into the project development.

AGFD expressed concerns regarding the disturbance to desert tortoise and raptor populations in the area, as well as wildlife designated as Species of Economic and Recreation Importance, including javalina and deer (Approved 2013 BE). Javalina, deer, raptors, and other wildlife in the area, including within the nearby recreation areas, may temporarily avoid the action area during construction due to noise and human activity; but would be expected to resume use of the area once the project is complete. Measures to reduce impacts to the Sonoran desert tortoise are included in this BE.

VII. PROTECTED NATIVE PLANTS

The construction footprint and surrounding ROW was previously surveyed for the presence of protected native plants on June 21, 2012 during a reconnaissance survey of the construction footprint. The following protected plants were found: prickly pear cactus (*Opuntia* spp.) and yucca (*Yucca* spp.). Since protected native plants occur within the construction footprint, the following measure will occur:

ADOT Roadside Development Responsibility

- Protected native plants within the construction footprint will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine if Arizona Department of Agriculture notification is needed. If notification is needed, the Arizona Department of Transportation Roadside Development Section will send the notification at least 60 (sixty) calendar days prior to the start of construction.

VIII. WILDLIFE CONNECTIVITY

ADOT, the AGFD, the FHWA and representatives from other agencies have completed a Wildlife Linkages Assessment to address important wildlife movement corridors in Arizona. The AGFD on-line environmental review tool included a standard response regarding local or regional needs of wildlife movement, connectivity, access to habitat needs and design of various roadway features such as culverts and bridges.

The project occurs within Potential Linkage Zone Hualapai Mountains – Cerbat Mountain (Zone 20) as identified in the *Arizona Wildlife Linkages Assessment* (AWLW 2006). This zone is a migration corridor for mule deer. The project would expand the transportation corridor within the linkage and could impact the connectivity for wildlife movement within and between the surrounding mountains. ADOT continues to work with partners involved, including AGFD, and has considered wildlife movement patterns during the planning of this project.

APPENDIX C

AGENCY COORDINATION

The USFWS IPaC system and AGFD on-line environmental review tool were utilized to identify special status species potentially occurring in the area surrounding the updated project. The IPaC and AGFD review tool results are included in this Appendix. As part of the environmental review process, agency meetings were held for the original project and the updated project scope to solicit comments (see below). USFWS, BLM, AGFD, US Army Corps of Engineers (Corps), and others have attended the meetings and their input, including biological concerns, have been integrated into the project development.

- Agency Scoping meeting was held September 14, 2011.
- Agency Design Kick-off meeting to share proposed changes to the updated project was held February 27, 2019.
- Agency Update meeting was held June 17, 2019.
- Cooperating Agency letters were sent to the BLM and Corps on November 27, 2019.
- BLM reviewed the draft 2019 BE with updated construction footprint on January 7, 2020.
- AGFD reviewed the Sonoran desert tortoise occurrences within the updated construction footprint on January 10, 2020.

The AGFD responded with concerns regarding Sonoran desert tortoise and other species, as summarized in Appendix B. The BLM responded at the September 2011 meeting with a request to reduce environmental impacts with the various alternatives selection (2013 BE) and changes were incorporated into the updated construction footprint. The Corps responded on December 5, 2019 indicating they would be a cooperating agency since the project may impact waters of the US. BLM Wildlife Biologist, Joelle Acton, reviewed this draft BE as part of the cooperating agency review. Ms. Acton recommended inclusion of two bat species, Allen's big-eared bat and the greater western bonneted bat, which have been recorded near the construction footprint. AGFD verified that Sonoran desert tortoise occurrences have been recorded within the revised project action area and surrounding vicinity.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Arizona Ecological Services Field Office
9828 North 31st Ave

#c3

Phoenix, AZ 85051-2517

Phone: (602) 242-0210 Fax: (602) 242-2513

<http://www.fws.gov/southwest/es/arizona/>

http://www.fws.gov/southwest/es/EndangeredSpecies_Main.html

In Reply Refer To:

Consultation Code: 02EAAZ00-2019-SLI-0854

Event Code: 02EAAZ00-2020-E-00591

Project Name: 040 MO 048 H7993 01D; I-40/US 93 WEST KINGMAN SYSTEM TRAFFIC INTERCHANGE

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

January 02, 2020

To Whom It May Concern:

The Fish and Wildlife Service (Service) is providing this list under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). The list you have generated identifies threatened, endangered, proposed, and candidate species, and designated and proposed critical habitat, that may occur within one or more delineated United States Geological Survey 7.5 minute quadrangles with which your project polygon intersects. Each quadrangle covers, at minimum, 49 square miles. In some cases, a species does not currently occur within a quadrangle but occurs nearby and could be affected by a project. Please refer to the species information links found at:

http://www.fws.gov/southwest/es/arizona/Docs_Species.htm

<http://www.fws.gov/southwest/es/arizona/Documents/MiscDocs/AZSpeciesReference.pdf>

The purpose of the Act is to provide a means whereby threatened and endangered species and the habitats upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of Federal trust resources and to consult with us if their projects may affect federally listed species and/or designated critical habitat. A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, we recommend preparing a biological evaluation similar to a Biological Assessment to determine whether the project may

01/02/2020

Event Code: 02EAAZ00-2020-E-00591

2

affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If the Federal action agency determines that listed species or critical habitat may be affected by a federally funded, permitted or authorized activity, the agency must consult with us pursuant to 50 CFR 402. Note that a "may affect" determination includes effects that may not be adverse and that may be beneficial, insignificant, or discountable. You should request consultation with us even if only one individual or habitat segment may be affected. The effects analysis should include the entire action area, which often extends well outside the project boundary or "footprint." For example, projects that involve streams and river systems should consider downstream effects. If the Federal action agency determines that the action may jeopardize a proposed species or adversely modify proposed critical habitat, the agency must enter into a section 7 conference. The agency may choose to confer with us on an action that may affect proposed species or critical habitat.

Candidate species are those for which there is sufficient information to support a proposal for listing. Although candidate species have no legal protection under the Act, we recommend considering them in the planning process in the event they become proposed or listed prior to project completion. More information on the regulations (50 CFR 402) and procedures for section 7 consultation, including the role of permit or license applicants, can be found in our Endangered Species Consultation Handbook at: <http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>.

We also advise you to consider species protected under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712) and the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668 et seq.). The MBTA prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when authorized by the Service. The Eagle Act prohibits anyone, without a permit, from taking (including disturbing) eagles, and their parts, nests, or eggs. Currently 1026 species of birds are protected by the MBTA, including species such as the western burrowing owl (*Athene cunicularia hypugea*). Protected western burrowing owls are often found in urban areas and may use their nest/burrows year-round; destruction of the burrow may result in the unpermitted take of the owl or their eggs.

If a bald eagle (or golden eagle) nest occurs in or near the proposed project area, you should evaluate your project to determine whether it is likely to disturb or harm eagles. The National Bald Eagle Management Guidelines provide recommendations to minimize potential project impacts to bald eagles:

[https://www.fws.gov/migratorybirds/pdf/management/](https://www.fws.gov/migratorybirds/pdf/management/nationalbaldeaglenanagementguidelines.pdf)

[nationalbaldeaglenanagementguidelines.pdf](https://www.fws.gov/migratorybirds/pdf/management/nationalbaldeaglenanagementguidelines.pdf)

<https://www.fws.gov/birds/management/managed-species/eagle-management.php>.

The Division of Migratory Birds (505/248-7882) administers and issues permits under the MBTA and Eagle Act, while our office can provide guidance and Technical Assistance. For more information regarding the MBTA, BGEPA, and permitting processes, please visit the following: <https://www.fws.gov/birds/policies-and-regulations/incidental-take.php>. Guidance for minimizing impacts to migratory birds for communication tower projects (e.g. cellular, digital television, radio, and emergency broadcast) can be found at:

<https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds/collisions/communication-towers.php>.

Activities that involve streams (including intermittent streams) and/or wetlands are regulated by the U.S. Army Corps of Engineers (Corps). We recommend that you contact the Corps to determine their interest in proposed projects in these areas. For activities within a National Wildlife Refuge, we recommend that you contact refuge staff for specific information about refuge resources.

If your action is on tribal land or has implications for off-reservation tribal interests, we encourage you to contact the tribe(s) and the Bureau of Indian Affairs (BIA) to discuss potential tribal concerns, and to invite any affected tribe and the BIA to participate in the section 7 consultation. In keeping with our tribal trust responsibility, we will notify tribes that may be affected by proposed actions when section 7 consultation is initiated.

We also recommend you seek additional information and coordinate your project with the Arizona Game and Fish Department. Information on known species detections, special status species, and Arizona species of greatest conservation need, such as the western burrowing owl and the Sonoran desert tortoise (*Gopherus morafkai*) can be found by using their Online Environmental Review Tool, administered through the Heritage Data Management System and Project Evaluation Program <https://www.azgfd.com/Wildlife/HeritageFund/>.

For additional communications regarding this project, please refer to the consultation Tracking Number in the header of this letter. We appreciate your concern for threatened and endangered species. If we may be of further assistance, please contact our following offices for projects in these areas:

Northern Arizona: Flagstaff Office 928/556-2001
Central Arizona: Phoenix office 602/242-0210
Southern Arizona: Tucson Office 520/670-6144

Sincerely,
/s/ Steven L. Spangle Field Supervisor

Attachment

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arizona Ecological Services Field Office
9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517
(602) 242-0210

Project Summary

Consultation Code: 02EAAZ00-2019-SLI-0854

Event Code: 02EAAZ00-2020-E-00591

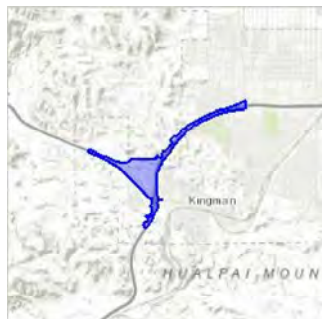
Project Name: 040 MO 048 H7993 01D; I-40/US 93 WEST KINGMAN SYSTEM TRAFFIC INTERCHANGE

Project Type: TRANSPORTATION

Project Description: ADOT is proposing to construct a new traffic interchange (TI) in Kingman, Arizona connecting US Highway 93 (US 93) and Interstate 40 (I-40). The project area includes portions of I-40 and US 93 at the existing TI, and currently unpaved land where proposed ramps would be constructed.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/35.20034973349898N114.07319766194071W>



Counties: Mohave, AZ

Endangered Species Act Species

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. (specific portions of Arizona, Nevada, and Utah) There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Experimental Population, Non-Essential
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Northern Mexican Gartersnake <i>Thamnophis eques megalops</i>	Threatened
There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7655	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Arizona Environmental Online Review Tool Report



*Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.*

Project Name:

040 MO 048 H7993 01D: I-40/US 93 WEST KINGMAN SYSTEM TI

User Project Number:

H7993 01D; I-40/US93 TRAFFIC INTERCHANGE

Project Description:

ADOT is proposing to construct a new traffic interchange (TI) in Kingman, Arizona connecting US Highway 93 (US 93) and Interstate 40 (I-40). The project area includes portions of I-40 and US 93 at the existing TI, and currently unpaved land where proposed ramps would be constructed.

Project Type:

Transportation & Infrastructure, Road construction (including staging areas), Realignment/new roads

Contact Person:

audrey navarro

Organization:

Arizona Department of Transportation

On Behalf Of:

ADOT

Project ID:

HGIS-09536

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Aquila chrysaetos</i>	Golden Eagle	BGA		S		1B
<i>Astragalus lentiginosus</i> var. <i>ambiguus</i>	Freckled Milk-vetch	SC				
<i>Athene cucularia hypugaea</i>	Western Burrowing Owl	SC	S	S		1B
<i>Eumops perotis californicus</i>	Greater Western Bonneted Bat	SC		S		1B
<i>Gopherus morafkai</i>	Sonoran Desert Tortoise	CCA	S	S		1A
<i>Heloderma suspectum cinctum</i>	Banded Gila Monster	SC				1A

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

Special Areas Documented within the Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Hualapai - Cerbat Linkage Design	Wildlife Connectivity					

Note: Status code definitions can be found at <https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/>

Species of Greatest Conservation Need Predicted within the Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Aix sponsa</i>	Wood Duck					1B
<i>Ammospermophilus harrisi</i>	Harris' Antelope Squirrel					1B
<i>Aquila chrysaetos</i>	Golden Eagle	BGA		S		1B
<i>Aspidoscelis flagellicauda</i>	Gila Spotted Whiptail					1B
<i>Athene cucularia hypugaea</i>	Western Burrowing Owl	SC	S	S		1B
<i>Baeolophus ridgwayi</i>	Juniper Titmouse					1C
<i>Botaurus lentiginosus</i>	American Bittern					1B
<i>Calypte costae</i>	Costa's Hummingbird					1C
<i>Castor canadensis</i>	American Beaver					1B
<i>Colaptes chrysoides</i>	Gilded Flicker			S		1B
<i>Corynorhinus townsendii pallescens</i>	Pale Townsend's Big-eared Bat	SC	S	S		1B
<i>Crotalus cerberus</i>	Arizona Black Rattlesnake					1B
<i>Euderma maculatum</i>	Spotted Bat	SC	S	S		1B
<i>Eumops perotis californicus</i>	Greater Western Bonneted Bat	SC		S		1B
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	SC	S	S		1A
<i>Gopherus morafkai</i>	Sonoran Desert Tortoise	CCA	S	S		1A
<i>Haliaeetus leucocephalus</i>	Bald Eagle	SC, BGA	S	S		1A
<i>Heloderma suspectum</i>	Gila Monster					1A
<i>Incilius alvarius</i>	Sonoran Desert Toad					1B
<i>Lasiurus blossevillii</i>	Western Red Bat		S			1B

Species of Greatest Conservation Need Predicted within the Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Lithobates pipiens</i>	Northern Leopard Frog		S	S		1A
<i>Macrotus californicus</i>	California Leaf-nosed Bat	SC		S		1B
<i>Melanerpes uropygialis</i>	Gila Woodpecker					1B
<i>Melospiza lincolni</i>	Lincoln's Sparrow					1B
<i>Microtus mexicanus</i>	Mexican Vole					1B
<i>Micruroides euryxanthus</i>	Sonoran Coralsnake					1B
<i>Myotis occultus</i>	Arizona Myotis	SC		S		1B
<i>Myotis velifer</i>	Cave Myotis	SC		S		1B
<i>Myotis yumanensis</i>	Yuma Myotis	SC				1B
<i>Nyctinomops femorosaccus</i>	Pocketed Free-tailed Bat					1B
<i>Oreoscoptes montanus</i>	Sage Thrasher					1C
<i>Oreothlypis luciae</i>	Lucy's Warbler					1C
<i>Pyrgulopsis conica</i>	Kingman Springsnail	SC		S		1A
<i>Setophaga petechia</i>	Yellow Warbler					1B
<i>Sphyrapicus nuchalis</i>	Red-naped Sapsucker					1C
<i>Spizella atrogularis</i>	Black-chinned Sparrow					1C
<i>Spizella breweri</i>	Brewer's Sparrow					1C
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat					1B
<i>Troglodytes pacificus</i>	Pacific Wren					1B
<i>Vireo bellii arizonae</i>	Arizona Bell's Vireo					1B
<i>Vireo vicinior</i>	Gray Vireo		S			1C
<i>Vulpes macrotis</i>	Kit Fox			No Status		1B

Species of Economic and Recreation Importance Predicted within the Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Callipepla gambelii</i>	Gambel's Quail					
<i>Odocoileus hemionus</i>	Mule Deer					
<i>Pecari tajacu</i>	Javelina					
<i>Puma concolor</i>	Mountain Lion					
<i>Zenaida asiatica</i>	White-winged Dove					
<i>Zenaida macroura</i>	Mourning Dove					

From: [Kyle Seisinger](#)
To: [Harris, Jill](#)
Cc: [Shelton, Nancy](#); [Audrey Navarro](#)
Subject: [EXTERNAL] Re: H7993 Invasive species request
Date: Monday, December 2, 2019 10:35:49 AM

Good Morning Jill,

Our notes indicate we have had Malta Starthistle (*Centaurea melitensis* L.) in the area of the Stockton Hill TI in the past. We haven't looked at this area in quite some time, so I'm not sure what is out there now. I believe this area has had a lot of Russian thistle in the past and I'm sure there are several other common weeds in the area as well. A survey would need to be done preferably in the late spring/early summer to determine what species are out there. Depending on timing and duration of the project I would recommend a spray plan if these two species are present.

Thanks,

Kyle Seisinger

Highway Operations Supervisor

Northwest Roadway Management

2650 Glassford Hill Rd. MD-P863

Prescott Valley, AZ 86314

928.277.2938

Work Schedule: Monday-Thursday 6AM to 4:30PM

www.azdot.gov



On Thu, Nov 14, 2019 at 1:45 PM Harris, Jill <Jill.Harris@jacobs.com> wrote:

Good afternoon Kyle,

ADOT is planning a reconfiguration of the I-40/US 93 West Kingman TI and I am inquiring on invasive species in the project area.

The project description is as follows:

The project is located in the City of Kingman, Mohave County, Arizona, where I-40 intersects US 93 at Beale Street, also known as the West Kingman TI. The project limits extend approximately 3.4 miles along I-40 from milepost (MP) 48.32 to MP 51.75 (Stockton Hill Road) and approximately 1.4 miles along US 93 from MP 69.60 to approximately MP 71.00 (Figures 1 and 2). The cadastral location of the project includes portions of Sections 12, 13, 14, 15, 22, and 23 of Township 21 North, Range 17 West and Section 7 of Township 21 North, Range 16 West of the Gila and Salt River Baseline and Meridian. The project would occur within existing Arizona Department of Transportation (ADOT) easement through lands managed by the Bureau of Land Management (BLM) and private lands.

Project location maps are attached.

If you could please reply with any known species and any recommended conservation measures for the project, it would be appreciated.

Please respond by **12/12/19**.

Thank you,

Jill Harris

Biologist/Environmental Planner

Jacobs Engineering Group, Inc.

101 N. 1st Ave. Suite 2600, Phoenix, AZ 85048

602.740.1541

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**DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT
3636 NORTH CENTRAL AVENUE SUITE 900
PHOENIX, AZ 85012-1939**

December 5, 2019

SUBJECT: Cooperating Agency Invitation for the I-40/US 93 West Kingman System Traffic Interchange (040 MO 048 H7993 01C)

Mr. Paul O'Brien, P.E.
Environmental Planning Administrator
Arizona Department of Transportation
1611 W. Jackson St., MD EM02
Phoenix, Arizona 85007

Dear Mr. O'Brien:

I am responding to your letter received on November 27, 2019 inviting the U.S. Army Corps of Engineers (Corps) to participate as a Cooperating Agency in an Environmental Assessment (EA) for a proposed traffic interchange that would connect Interstate 40 and U.S. Route 93 within the city of Kingman, Mohave County, Arizona. The Arizona Department of Transportation (ADOT), which has assumed the Federal Highway Administration's responsibilities under the National Environmental Policy Act pursuant to 23 U.S.C. 327 and a Memorandum of Understanding executed on April 16, 2019, is the lead agency for this EA. The Corps File Number for this project is SPL-2011-00655.

Since the proposed project may impact waters of the United States, a permit under Section 404 of the Clean Water Act may be required. Therefore, we accept ADOT's invitation to participate in the EA as a Cooperating Agency. We expect to provide technical guidance on matters related to Section 404 permitting and provide input on the project's purpose and need, range of alternatives, and impacts analysis as it relates to the Corps' jurisdiction. However, our participation should not be interpreted as a guarantee of permit issuance.

Thank you for the invitation to participate in this EA. The point of contact for the Corps regarding this project is Mr. Jesse Rice, Project Manager in the Regulatory Division's Arizona Branch. If you have questions, you may contact him at (602) 230-6854 or Jesse.M.Rice@usace.army.mil.

Sincerely,

Sallie Diebolt
Chief, Arizona Branch
Regulatory Division

APPENDIX D

ATTACHMENTS

Arizona Game and Fish Department “Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects”

Arizona Department of Transportation Sonoran Desert Tortoise Observation Form

Arizona Department of Transportation Environmental Planning “Sonoran Desert Tortoise Awareness Program Handout”

GUIDELINES FOR HANDLING SONORAN DESERT TORTOISES
ENCOUNTERED ON DEVELOPMENT PROJECTS

Arizona Game and Fish Department
Revised September 22, 2014

The Arizona Game and Fish Department (Department) has developed the following guidelines to reduce potential impacts to desert tortoises, and to promote the continued existence of tortoises throughout the state. These guidelines apply to short-term and/or small-scale projects, depending on the number of affected tortoises and specific type of project.

The Sonoran desert tortoise occurs south and east of the Colorado River. Tortoises encountered in the open should be moved out of harm's way to adjacent appropriate habitat. If an occupied burrow is determined to be in jeopardy of destruction, the tortoise should be relocated to the nearest appropriate alternate burrow or other appropriate shelter, as determined by a qualified biologist. Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim. Tortoises should be moved quickly, kept in an upright position parallel to the ground at all times, and placed in the shade. Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises. Tortoises must not be moved if the ambient air temperature exceeds 40 Celsius (105 Fahrenheit) unless an alternate burrow is available or the tortoise is in imminent danger.

A tortoise may be moved up to one-half mile, but no further than necessary from its original location. If a release site or alternate burrow is unavailable within this distance, and ambient air temperature exceeds 40 Celsius (105 Fahrenheit), contact the Department for guidance. Tortoises salvaged from projects which result in substantial permanent habitat loss (e.g. housing and highway projects), or those requiring removal during long-term (longer than one week) construction projects, may be placed in the Department's tortoise adoption program. *Managers of projects likely to affect desert tortoises should obtain a [scientific collecting license](#) from the Department to facilitate handling or temporary possession of tortoises.* Likewise, if large numbers of tortoises (>5) are expected to be displaced by a project, the project manager should contact the Department for guidance and/or assistance.

Please keep in mind the following points:

Use the Department's [Environmental On-Line Review Tool Department](#) during the planning stages of any project that may affect desert tortoise habitat.

Unless specifically authorized by the Department, or as noted above, project personnel should avoid disturbing any tortoise.

Take is prohibited by state law.

These guidelines do not apply to Mojave desert tortoises (north and west of the Colorado River). Mojave desert tortoises are listed as threatened under the Endangered Species Act, administered by the U.S. Fish and Wildlife Service.

These guidelines are subject to revision at the discretion of the Department.

Arizona Department of Transportation
Sonoran Desert Tortoise Observation Form



Date of Observation

Time

Observed By

Location- Route

Location- Milepost

ADOT District

Description of Encounter

Photo(s)

GPS (if available)

Email completed form to:
ADOT Biology Team
bioteam@azdot.gov

Why does ADOT protect tortoises?

ADOT, along with the Arizona Game and Fish Department (AGFD) and several federal agencies, are signatory members of a Candidate Conservation Agreement (CCA) for the Sonoran Desert Tortoise (SDT). The CCA was developed to help preclude the listing of SDT under the Endangered Species Act. It is a cooperative effort to provide effective conservation for the SDT in Arizona. Under the agreement, ADOT has committed to enact avoidance, minimization, and mitigation measures for projects occurring within and adjacent to suitable habitat for SDT. This includes surveying proactively for tortoise habitat ahead of projects, collecting information on sightings, and training staff and contractors on methods to protect the tortoise during construction and maintenance work.



Legal Status

The SDT is protected under a CCA as described above. At the state level, wildlife are protected from collection and sale under Title 17 (ARS 17-309). AGFD classifies the SDT as a Tier 1A Species of Greatest Conservation Need and SDT are specifically restricted from collection under the AGFD Commission Rule R12-4-406.

Where are they found?

Two separate and distinct populations of desert tortoise occur in Arizona. The Mojave Desert Tortoise occurs west and north of the Colorado River within open, flat expanses of desert. The Sonoran Desert Tortoise occurs primarily in rocky and boulder strewn mountains and hills east of the Colorado River throughout western and central Arizona.



This handout applies ONLY to the Sonoran Desert Tortoise. Separate guidelines/measures are required for the Mojave Desert Tortoise due to its listing as Threatened under the Endangered Species Act.



THE GOAL IS TO AVOID NEGATIVE ENCOUNTERS!

How?

1. ALWAYS check under your vehicle and construction equipment **before** operating.
2. Drive slowly, especially on unpaved roads or off-road.
3. Cover any holes/pits/trenches at the end of each construction day.

If you encounter a tortoise:

1. Stop work immediately and turn off all equipment.
2. Notify your superintendent and the Resident Engineer.
3. Is the tortoise in imminent danger?
 - **No:** Stay back at least 10 feet from the animal. Allow the animal to leave. PLEASE BE PATIENT!
 - If the animal is located within your work area and is not leaving in a timely manner, then move your operation to a different location at least 1,000 feet away.
 - **Yes:** Move it out the way by following the attached AGFD "Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects" dated September 22, 2014.
 - Tortoises should be moved less than 48 hours in advance of the habitat disturbance so they do not return to the area in the interim.
 - Tortoises should be moved quickly, kept in an upright position parallel to the ground at all times, and placed in the shade.
 - Separate disposable gloves should be worn for each tortoise handled to avoid potential transfer of disease between tortoises.
 - Tortoises must not be moved if the ambient air temperature exceeds 40°C (105°F) unless an alternate burrow is available or the tortoise is in imminent danger.
 - A tortoise may be moved up to one-half mile, but no further than necessary from its original location.



---If you don't know or are unsure of what to do, ASK!---

4. Fill out the attached ADOT Sonoran Desert Tortoise Observation Form and submit to the ADOT Biology Team (bioteam@azdot.gov) within 24 hours of any encounter. Photograph the animal if possible.

If you encounter a **sick, dying, injured, or dead tortoise** or if the ambient air temperature exceeds 105° F, please contact Joshua Fife (602.622.9622) immediately with the location of the animal. These animals will be collected either by trained ADOT personnel or by AGFD.

If you observe poaching, collecting, selling, or any other illegal activities, contact AGFD's OPERATION GAME THIEF at **1-800-352-0700**, 24 hours a day or on the internet at <http://www.azgfd.gov/ogt.shtml>

Additional information for SDT life history and habitat requirements is available at:

Arizona Game and Fish Department:

<https://www.azgfd.com/wildlife/nongamemanagement/tortoise/>

US Fish and Wildlife Service:

https://www.fws.gov/southwest/es/arizona/Sonoran_Tort.htm

