EcoPlan Associates, Inc.
Environmental Science & Resource Economics

Audrey Navarro
Digitally signed by Audrey Navarro
Date: 2019.05.09 14:09:35 -07'00'

Memorandum

Date: May 9, 2019

To: Audrey Navarro, ADOT Environmental Planning
Michelle Ogburn, ADOT Environmental Planning

Copy: Anthony Scolaro, WSP
Sarah Beloshapka, EcoPlan Associates, Inc.

From: Thomas C. Ashbeck

Federal Number: NH-010-C(220)T

ADOT Number: 010 MA 150 F0072 01D

EcoPlan Number: 18-655001

Project Name: I-10, I-17 (Split) to SR 202L (Santan)

Regarding: Biological Evaluation Update Memorandum—Third Submittal

This memorandum provides an update to the Biological Evaluation (BE) dated November 10, 2015, for I-10 Near-term Improvements (SR 143–SR 202L, Santan; Arizona Department of Transportation [ADOT] TRACS No. 010 MA 153 H8768 01L); which is now referred to as I-10, I-17 (Split) to SR 202L (Santan).
This memorandum reflects changes in the project scope and limits. Based on the changes to the project limits and scope, change in impacts to species and habitats are negligible and therefore, a new BE was not prepared.

Updated Project Description

ADOT, in cooperation with the Federal Highway Administration, is preparing an Environmental Assessment for the planned improvements to a segment of Interstate 10 (I-10) from the I-10/Interstate 17 (I-17) (Split) traffic interchange (TI) (milepost [MP] 149.5) to the Loop 202 Santan Freeway (MP 160.9). The project also includes the segment of State Route (SR) 143 (Hohokam Expressway) from Broadway Road (MP 0.25) to just south of the Salt River (MP 1.3), and US 60 (Superstition Freeway) from MP 172.0 east to Hardy Drive (MP 173.0). In addition, traffic control devices during construction, such as temporary construction signage, are planned between I-17 MP 195.1 and I-10 MP 149.5, I-10 MP 148.9 and MP 149.5, and I-10 MP 160.9 and MP 161.3.

The purpose this project is to enhance operational characteristics as well as mobility of regional and local traffic.

Traffic demand is causing the I-10 corridor and the adjacent local arterial street system to become increasingly congested during the morning and evening peak

travel periods. Future traffic volume projections indicate that the congestion will continue to worsen, causing further travel delays and increased travel times for those using the I-10 corridor. Increased congestion on I-10 will cause travelers to divert their trips to other freeway corridors and the local arterial street system, causing these transportation facilities to become increasingly congested as well. Improvements to the I-10 corridor are necessary to increase the freeway capacity and help alleviate increased levels of traffic congestion on all components of the overall transportation system in the project limits.

The objective of this project is to increase the capacity of the I-10 corridor in accordance with the approved regional and local transportation plans. This project will also seek to optimize the traffic operations within the corridor for the projected Design Year 2040 traffic demand, retain local access at existing traffic interchanges, and minimize or mitigate impacts the improvements could have on the surrounding community.

The project is located within the ADOT Central District, in the cities of Phoenix, Tempe, and Chandler, and the town of Guadalupe, in Maricopa County, Arizona (Figures 1 and 2, attached). The cadastral location for this project is Township 1 North, Range 3 East, portions of Sections 14, 23, and 24; Township 1 North, Range 4 East, portions of Sections 17, 18, 19, 20, 29, 32, and 33; and Township 1 South, Range 4 East, portions of Sections 5, 8, 17, 20, and 29.

The project scope will consist of widening and restriping I-10 within the project limits to add general-purpose (GP) lanes, high-occupancy vehicle (HOV) lanes, and auxiliary (AUX) lanes; constructing collector-distributor roads; reconstructing the I-10 system interchange with SR 143 to include direct HOV access between SR 143 and I-10 to and from the east; and improving the I-10 system interchange with US 60. Construction of the project will include the following:

- Widening the I-10 bridge over the Salt River
- Reconfiguring the I-10/40th Street TI as a standard diamond interchange
- Removing the existing 48th Street and Broadway Road bridges over I-10
- Constructing new bridges to carry 48th Street and Broadway Road over I-10
- Constructing new bridges and structures, as needed, to accommodate roadway elements at the reconfigured system interchanges, SR 143, and elsewhere within the project limits
- Constructing new pedestrian bridges over I-10 at Alameda Drive and the Western Canal
- Widening the Guadalupe Road bridge over I-10 to accommodate a multi-use path
- Milling the existing I-10 pavement within the project limits to a depth of 1.0 inch and replacing it with new pavement and striping
- Installing retaining walls
- Extending or replacing cross drain channels and culverts

- Constructing storm water detention basins within the project limits
- Removing and replacing existing guardrail and barrier throughout the project limits, as needed
- Removing and replacing chain link fence throughout the project limits
- Installing and/or upgrading Freeway Management System facilities within the project limits, including dynamic message signs and structures
- Installing new light poles in the I-10 median and relocating existing light poles, as needed
- Removing and replacing existing traffic signals throughout the project limits, as needed
- Removing existing signs and placing new signs
- Removing existing object markers and milepost markers and placing new markers
- Painting existing infrastructure within the project limits, as needed
- Applying aesthetic treatments to new infrastructure to complement existing treatments
- Relocating utilities
- Clearing and grubbing vegetation within the existing right-of-way
- Landscaping areas disturbed by construction, as needed
- Controlling noxious weeds within the project limits mechanically, chemically, or manually

Project construction is currently planned to begin the summer of 2021, with an expected duration of 30 months. Traffic will be controlled to minimize impacts on motorists, pedestrians, and construction personnel, as necessary. Access to residences and businesses will be maintained throughout construction. The project occurs within ADOT right-of-way through private lands. The acquisition of new right-of-way is anticipated in areas where widening and reconfiguration will extend outside existing right-of-way; some right-of-way acquisition associated with this project has already taken place. Temporary construction easements will also be required. Right-of-way acquisitions and temporary construction easements will be required from private landowners or will be converted from non-highway ADOT-owned land.

The project will widen existing I-10 to the outside between 24th Street and Ray Road. The existing Salt River bridge will be widened to accommodate seven GP lanes and two HOV lanes to 32nd Street. The west end of the bridge will flare to accommodate future reconstruction of the I-10/I-17 system interchange. Between 32nd Street and the I-10 system interchange with US 60, I-10 will have a basic six GP lane and two HOV lane typical section, with AUX lanes added between interchanges and at collector-distributor (CD) roadway connections. South of Baseline Road to Elliot Road, two GP eastbound lanes will be added (resulting in six GP lanes and one HOV lane) and one GP westbound lane) will be added (resulting in five GP lanes and one HOV lane. Between Elliot Road and

Ray Road, one GP lane will be added in each direction (resulting in four GP lanes and one HOV lane). HOV buffers will be eliminated throughout the project length.

The SR 143, Broadway Road, and 48th Street interchanges will be reconstructed and connected to new CD roads. The eastbound CD road will begin as the direct connection from southbound SR 143 to eastbound I-10, with the addition of the Broadway Road eastbound on-ramp and extending to Baseline Road, providing access to US 60, I-10, and Baseline Road. The westbound CD road will run between Baseline Road and 40th Street, providing access to Broadway Road, SR 143, 48th Street north, University Drive, and 40th Street. A direct HOV connection between SR 143 and I-10 to and from the east will also be added.

Existing accesses to I-10 eastbound will be maintained except for southbound SR 143 and the Broadway Road on-ramp, which will be provided access via the eastbound CD road. Traffic from the University Drive southbound on-ramp and southbound 48th Street to eastbound I-10 will need to use 48th Street south to eastbound Broadway Road to access the eastbound CD road. Other options for local traffic will be to use the 40th Street or 32nd Street TIs.

All existing westbound I-10 accesses between Baseline Road and 40th Street will use the westbound CD road, except for the ramp to eastbound US 60 and the Broadway Road westbound I-10 on-ramp.

The interchanges at 40th Street and US 60 will be modified. The 40th Street westbound off-ramp will be eliminated and access from I-10 provided via the westbound CD road. The existing 40th Street southbound loop on-ramp will be eliminated and the eastbound off-ramp relocated. The westbound I-10 to eastbound US 60 ramp will be widened, and the existing westbound US 60 to westbound I-10 ramp relocated to accommodate the westbound CD road and a new ramp providing access to the westbound CD road from westbound US 60.

Updated Species Identification

As part of the 2015 BE, a US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) official species list was generated (attached). All species identified in the 2015 IPaC were excluded from further evaluation in the 2015 BE. A new IPaC official species list (02EAAZ00-2019-SLI-0333, February 14, 2019) was generated reflecting the revised scope. There were no changes to designated or proposed critical habitat and no additional species were reported; however, the following four species are no longer reported:

- Sprague's pipit *(Anthus spragueii)*
- Roundtail chub *(Gila robusta)*
- Lesser long-nosed bat *(Leptonycteris curasoae yerbabuenae)*
- Sonoran Desert tortoise *(Gopherus morafkai)*

Based on a review of the 2015 BE and the revised project scope, and a recent site survey, the project limits do not support suitable habitat or proposed or

designated critical habitat for the species identified in the newly generated IPaC official species list, and the revised project will have no effect on these species or their habitats. The original effect determinations in the 2015 BE remain valid. No further biological evaluation is necessary.

Also, as part of the 2015 BE, the project was evaluated using a report generated by the Arizona Game and Fish Department (AGFD) Arizona Environmental Online Review Tool. This report listed special status species known to occur within 3 miles of the project limits. A new report (HGIS-05634, February 14, 2019, attached) was generated reflecting the revised scope and some differences were noted.

Two species are no longer reported:

- Sonoran pronghorn *(Antilocapra americana sonoriensis)*
- Mexican gray wolf *(Canis lupus baileyi)*

Two species are newly reported:

- Desert pupfish *(Cyprinodon macularius)*
- Gila topminnow *(Poeciliopsis occidentalis occidentalis)*

In addition, the Sonoran Desert tortoise underwent a status change in 2015 from Candidate species to Candidate Conservation Agreement species and is newly reported in the AGFD Arizona Environmental Online Review Tool. ADOT is a signatory to the Candidate Conservation Agreement for the Sonoran Desert tortoise in Arizona and makes accommodations for protection of tortoises on construction projects where tortoises may be present. The Sonoran Desert tortoise was reported within 3 miles of the project limits; however, observations of this species are only from the South Mountain area, approximately 2 miles away. There is no suitable habitat within the project limits.

On February 15, 2019, an email was sent to Sabra Tonn requesting more information on several of the species listed in the 2019 AGFD Arizona Environmental Online Review Tool Report. An email response from Sabra Tonn was received on February 21, 2019 (attached). In this email, Ms. Tonn suggested that we disregard the newly reported desert pupfish and Gila topminnow because they are located within isolated urban refugia.

Based on the revised project scope, recent information obtained from the AGFD, and the site survey, the 2015 BE remains valid with regard to the evaluation of state sensitive species and the effect determinations.

Environmental Commitments

Based on a review of the 2015 BE and the revised project scope, the environmental commitments listed in the 2015 BE remain valid. These environmental commitments are listed below and are provided in their currently recommended ADOT wording.

Central District Responsibility

- If any active bird nests cannot be avoided by vegetation clearing or construction activities, the Engineer will contact the Arizona Department of Transportation Environmental Planning biologist (602.712.7134 or 602.712.7767) to evaluate the situation.

Contractor Responsibilities

- If vegetation clearing will occur during the migratory bird breeding season (March 1 to August 31), the contractor shall avoid any active bird nests. If active nests cannot be avoided, the contractor shall notify the Engineer to evaluate the situation. During the nonbreeding season (September 1 to February 28), vegetation removal is not subject to this restriction.
- Prior to construction, all personnel who will be on-site, including, but not limited to, contractors, contractors' employees, supervisors, inspectors, and subcontractors, shall review the attached Arizona Department of Transportation Environmental Planning "Western Burrowing Owl Awareness" flier.
- If any burrowing owls or active burrows are identified, the contractor shall notify the Engineer immediately. No construction activities shall take place within 100 feet of any active burrow.
- If the Engineer in cooperation with the Environmental Planning Biologist determines that burrowing owls cannot be avoided, the contractor shall employ a qualified biologist holding a permit from the US Fish and Wildlife Service to relocate burrowing owls from the project area, as appropriate.
- 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.

Attachments

- Figure 1–State Location Map
- Figure 2–Project Location Map
- USFWS IPaC official species list (February 14, 2019)
- AGFD Environmental Online Review Tool Report (February 14, 2019)
- AGFD email response
- ADOT Western Burrowing Owl Awareness flier

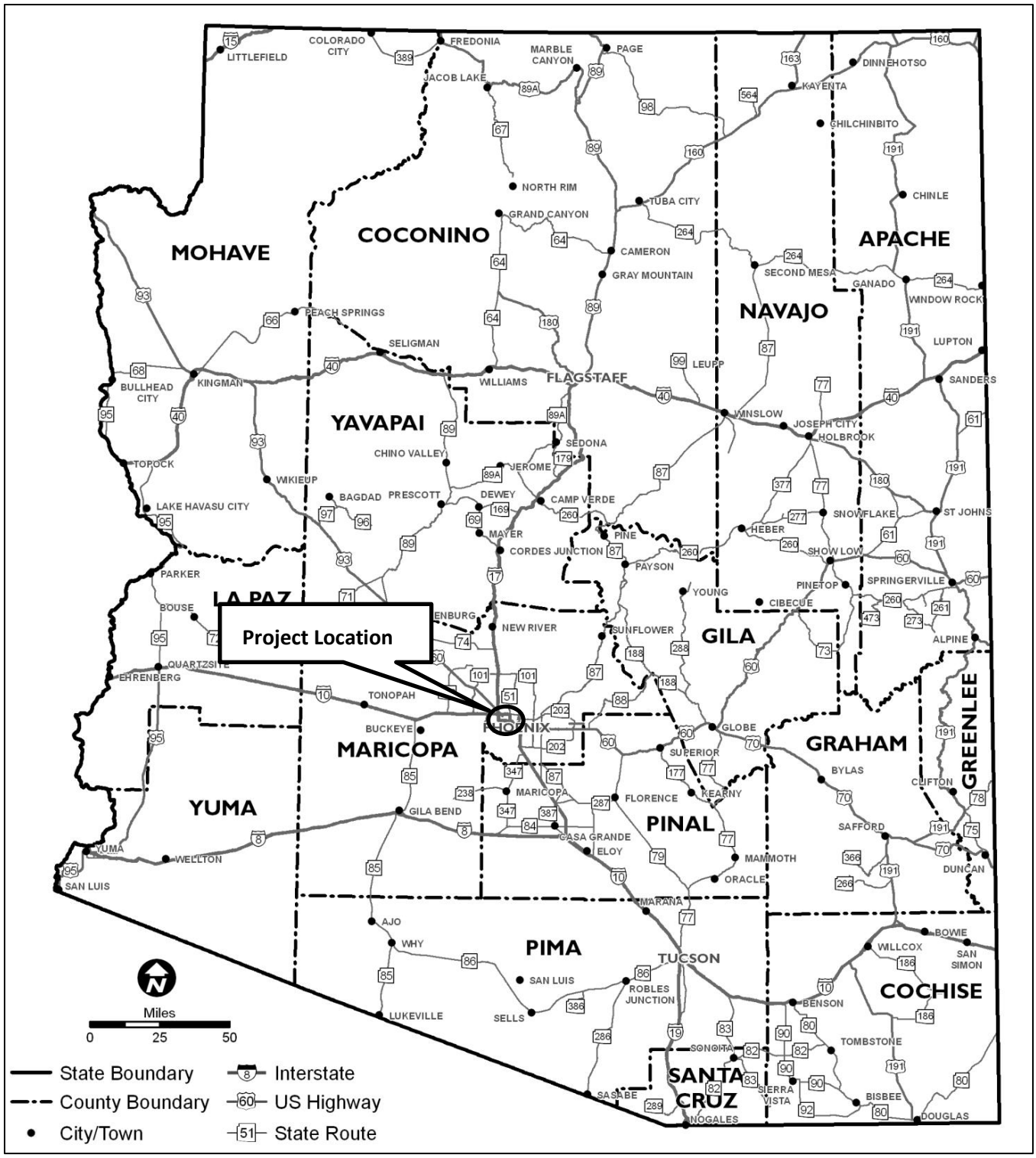


Figure 1. State Location Map

NH-010-C(220)T

010 MA 150 F0072 01D

I-10, I-17 (Split) to SR 202L (Santan)

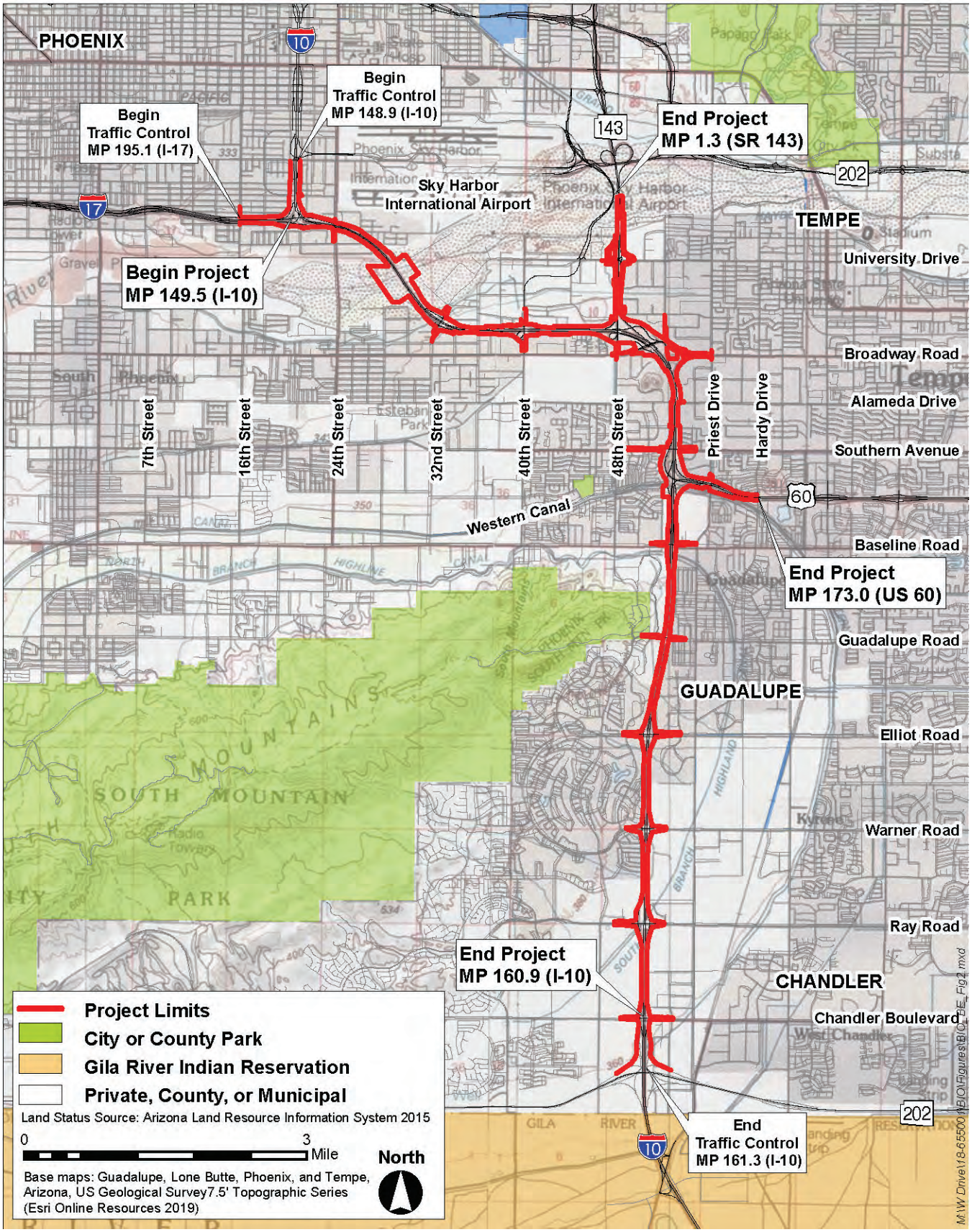


Figure 2. Project Location Map

NH-010-C(220)T
010 MA 150 F0072 01D
I-10, I-17 (Split) to SR 202L (Santan)

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: February 14, 2019
Consultation Code: 02EAAZ00-2019-SLI-0333
Event Code: 02EAAZ00-2019-E-00772
Project Name: F0072 01C: I-10, I-17 (split) to SR202L(Santan)

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

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

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/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-0333

Event Code: 02EAAZ00-2019-E-00772

Project Name: F0072 01C: I-10, I-17 (split) to SR202L(Santan)

Project Type: TRANSPORTATION

Project Description: The proposed improvements to a segment of I-10 from the I-10/I-17 (Split) Traffic Interchange (TI) (Milepost [MP] 149.5) to the Loop 202 (SR202L) Santan Freeway (MP 160.9). The purpose of the I-10, I-17 (Split) to SR202L (Santan). The proposed project is located in ADOT's Central District within the cities of Phoenix, Tempe, and Chandler, and the Town of Guadalupe, in Maricopa County, Arizona. The project also includes the segment of State Route (SR) 143 (Hohokam Expressway) from Broadway Road (MP 000.25-) north to just south of the south bank of the Salt River (MP 001.3), and US60 (Superstition Freeway) from I-10 (MP 172.0) east to Hardy Drive (MP 173.0). The project scope would consist of widening and restriping I-10 within the project limits to add general-purpose (GP) lanes, high-occupancy vehicle (HOV) lanes, and auxiliary (AUX) lanes; constructing collector-distributor (C-D) roads, reconstructing the I-10 system interchange with SR143 to include direct HOV access between SR143 and I-10 to and from the east, and improving the I-10 system interchange with US60. Construction of the proposed project would include the following:
• Widening the I-10 bridge over the Salt River;
• Reconfiguring the I-10/40th Street TI as a standard diamond interchange;
• Removing the existing 48th Street and Broadway Road bridges over I-10;
• Constructing new bridges to carry 48th Street and Broadway Road over I-10;
• Constructing new bridges and structures as needed to accommodate roadway elements at the reconfigured system interchanges, SR143, and elsewhere within the project limits;
• Constructing new pedestrian bridges over I-10 at Alameda Drive and the Western Canal;
• Widening the Guadalupe Road bridge over I-10 to accommodate a multi-use path;
• Milling the existing I-10 pavement within the project limits to a depth of 1.0 inch and replacing it with new pavement and striping;
• Installing retaining walls;
• Extending or replacing cross drain channels and culverts;

• Constructing storm water detention basins within the project limits;
• Removing and replacing existing guardrail and barrier throughout the project limits, as needed;
• Removing and replacing chain link fence throughout the project limits;
• Installing and/or upgrading Freeway Management System (FMS) facilities within the project limits, including dynamic message signs (DMS) and structures;
• Installing new light poles in the I-10 median and relocating existing light poles, as needed;
• Removing and replacing existing traffic signals throughout the project limits, as needed;
• Removing existing signs and placing new signs;
• Removing existing object markers and milepost markers and placing new markers;
• Painting existing infrastructure within the project limits, as needed;
• Applying aesthetic treatments to new infrastructure to complement existing;
• Relocating utilities;
• Clearing and grubbing vegetation within the existing right-of-way;
• Landscaping areas disturbed by construction, as needed; and
• Controlling noxious weeds within the project limits mechanically, chemically, or manually.

Project construction is currently planned to begin the summer of 2021, with an expected duration of 36 months. The project would occur within the existing ADOT right-of-way (ROW) through private lands. Approximately 10.6 acres of new ROW are required to construct the project, as well as temporary construction easements (TCEs). Some right-of-way acquisition associated with this project has already taken place.

Project Location:
Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.3612473320066N111.96926116340248W

Counties: Maricopa, 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 Fisheries[1], 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.

Mammals

NAME	STATUS
Sonoran Pronghorn *Antilocapra americana sonoriensis* Population: U.S.A. (AZ), Mexico No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4750	Experimental Population, Non-Essential

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* 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
Yuma Clapper Rail *Rallus longirostris yumanensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3505	Endangered

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:
F0072; I-10 TERM IMPROVMENTS WIDENING

User Project Number:
F0072; I-10 TERM IMPROVEMENTS WIDENING

Project Description:
The Arizona Department of Transportation (ADOT), in cooperation with the Federal Highway Administration (FHWA), is planning a roadway widening project within the cities of Phoenix, Tempe, and Chandler and the Town of Guadalupe in Maricopa County, Arizona. The project includes roadway widening and interchange improvements along the Interstate 10 (I-10) corridor between 24th Street and Pecos Road. The project will be constructed within the existing ADOT right-of-way; new right-of-way/ easement, temporary construction easements, or detours may also be required for this project.

Project Type:
Transportation & Infrastructure, Road construction (including staging areas), Road widening (shoulders or additional or new lanes)

Contact Person:
audrey navarro

Organization:
Arizona Department of Transportation

On Behalf Of:
ADOT

Project ID:
HGIS-05634

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

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

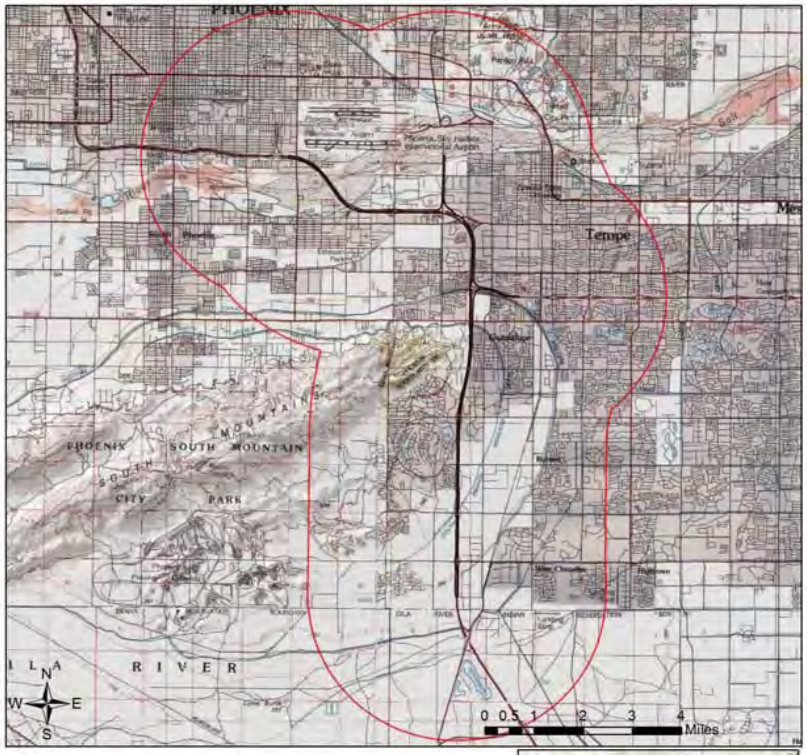
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

F0072; I-10 TERM IMPROVMENTS WIDENING

USA Topo Basemap With Locator Map



Project Boundary

Buffered Project Boundary

Project Size (acres): 427.60

Lat/Long (DD): 33.4110 / -111.9920

County(s): Maricopa

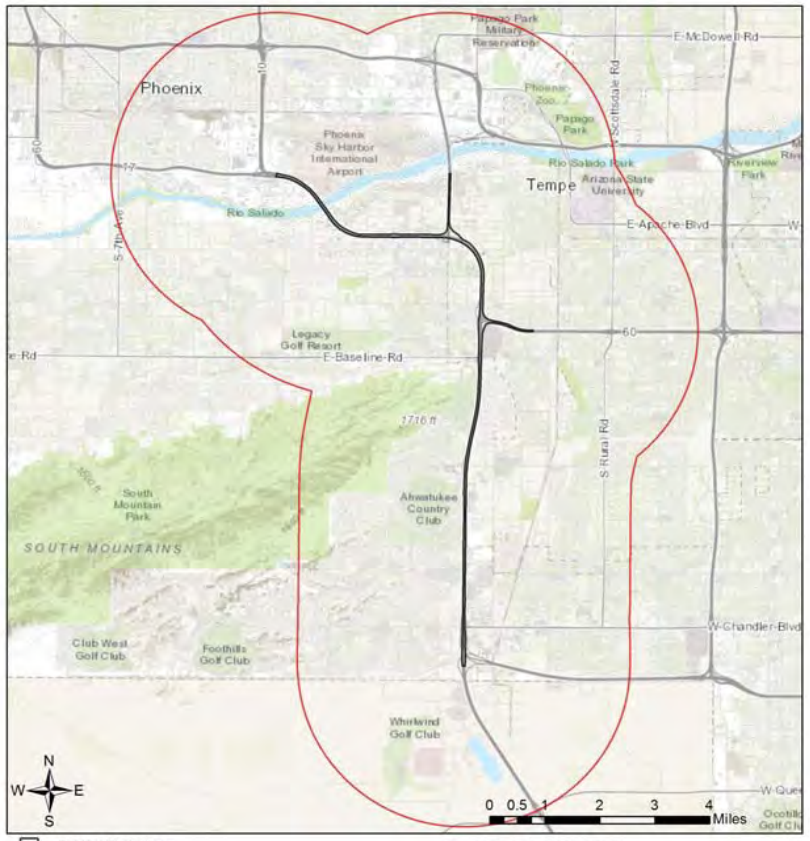
AGFD Region(s): Mesa

Township/Range(s): T1N, R3E; T1N, R4E; T1S, R4E

USGS Quad(s): GUADALUPE; PHOENIX +

F0072; I-10 TERM IMPROVMENTS WIDENING

Web Map As Submitted By User



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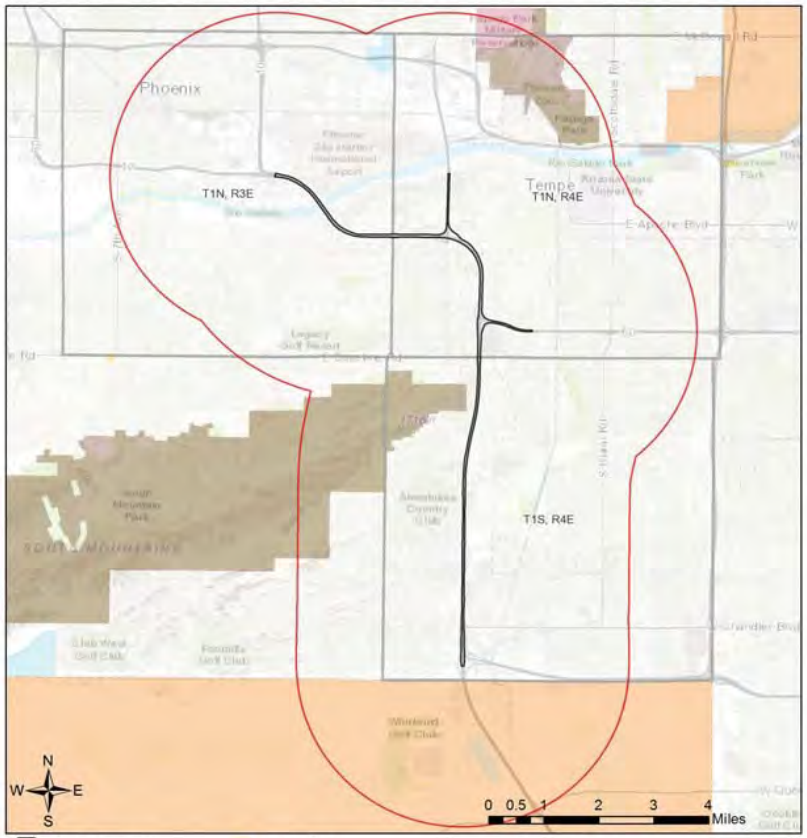
F0072; I-10 TERM IMPROVMENTS WIDENING

Topo Basemap with Township/Ranges, Land Ownership, Critical Habitats, Wildlife Corridors



- Project Boundary
- Buffered Project Boundary
- Township/Ranges
- Wildlife Corridors
- Critical Habitat

Land Ownership

- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge

Project Size (acres): 427.60
Lat/Long (DD): 33.4110 / -111.9920
County(s): Maricopa
AGFD Region(s): Mesa
Township/Range(s): T1N, R3E; T1N, R4E; T1S, R4E
USGS Quad(s): GUADALUPE; PHOENIX +

Special Status Species and Special Areas Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Bat Colony						
Cyprinodon macularius	Desert Pupfish	LE				1A
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gila River Indian Reservation	Gila River Indian Reservation					
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1A
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S		1A
Lasiurus blossevillii	Western Red Bat		S			1B
Parastrellus hesperus	Canyon Bat					
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE				1A
Psathyrotes ramosissima	Velvet Brittle-stem					
Sauromalus ater	Common Chuckwalla	SC				

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
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Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Agosia chrysogaster	Longfin Dace	SC		S		1B
Aix sponsa	Wood Duck					1B
Ammospermophilus harrisii	Harris' Antelope Squirrel					1B
Anthus spragueii	Sprague's Pipit	SC				1A
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Botaurus lentiginosus	American Bittern					1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Calypte costae	Costa's Hummingbird					1C
Castor canadensis	American Beaver					1B
Catostomus clarkii	Desert Sucker	SC	S	S		1B
Catostomus insignis	Sonora Sucker	SC	S	S		1B
Catostomus latipinnis	Flannelmouth Sucker	CCA		S		1A
Catostomus sp. 3	Little Colorado Sucker	CCA	S	S		1A
Chilomeniscus stramineus	Variable Sandsnake					1B
Chionactis occipitalis klauberi	Tucson Shovel-nosed Snake	SC				1A
Cistothorus palustris	Marsh Wren					1C
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S			1A
Colaptes chrysoides	Gilded Flicker			S		1B
Coluber bilineatus	Sonoran Whipsnake					1B

Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus tigris	Tiger Rattlesnake					1B
Cyprinodon macularius	Desert Pupfish	LE				1A
Dipodomys spectabilis	Banner-tailed Kangaroo Rat			S		1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gila elegans	Bonytail Chub	LE				1A
Gila robusta	Roundtail Chub	CCA	S	S		1A
Gopherus morafkai	Sonoran Desert Tortoise	CCA	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Ixobrychus exilis	Least Bittern					1C
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lepus alleni	Antelope Jackrabbit					1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Macrotus californicus	California Leaf-nosed Bat	SC		S		1B
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Melozone aberti	Abert's Towhee		S			1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Oreoscoptes montanus	Sage Thrasher					1C
Oreothlypis luciae	Lucy's Warbler					1C
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Phrynosoma goodei	Goode's Horned Lizard					1B
Phrynosoma solare	Regal Horned Lizard					1B

Species of Greatest Conservation Need
Predicted within 3 Miles of Project Vicinity based on Predicted Range Models

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Phyllorhynchus browni	Saddled Leaf-nosed Snake					1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE				1A
Ptychocheilus lucius	Colorado Pikeminnow	LE,XN				1A
Rallus obsoletus yumanensis	Yuma Ridgway's Rail	LE				1A
Setophaga petechia	Yellow Warbler					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Spizella breweri	Brewer's Sparrow					1C
Sturnella magna	Eastern Meadowlark					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Toxostoma lecontei	LeConte's Thrasher			S		1B
Troglodytes pacificus	Pacific Wren					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vireo vicinior	Gray Vireo		S			1C
Vulpes macrotis	Kit Fox	No Status				1B
Xyrauchen texanus	Razorback Sucker	LE				1A

Species of Economic and Recreation Importance Predicted within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Transportation & Infrastructure, Road construction (including staging areas), Road widening (shoulders or additional or new lanes)

Project Type Recommendations:
Fence recommendations will be dependant upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the WIldlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, https://agriculture.az.gov/. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, http://www.usda.gov/wps/portal/usdahome. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information https://www.azgfd.com/hunting/regulations.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (http://azstateparks.com/SHPO/index.html).

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more listed, proposed, or candidate species or Critical Habitat (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at http://www.fws.gov/southwest/es/arizona/ or:

Phoenix Main Office
2321 W. Royal Palm Rd, Suite 103
Phoenix, AZ 85021
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

HDMS records indicate that Western Burrowing Owls have been documented within the vicinity of your project area. Please review the western burrowing owl resource page at: https://www.azgfd.com/wildlife/speciesofgreatestconservneed/burrowingowlmanagement/.

HDMS records indicate that Sonoran Desert Tortoise have been documented within the vicinity of your project area. Please review the Tortoise Handling Guidelines found at: https://www.azgfd.com/wildlife/nongamemanagement/tortoise/

Tribal Lands are within the vicinity of your project area and may require further coordination. Please contact:
Gila River Indian Community
PO Box 97
Sacaton, AZ 85247
(520) 562-6000
(520) 562-6010 (fax)

From: Sabra Tonn <stonn@azgfd.gov>
Sent: Thursday, February 21, 2019 3:31 PM
To: Eric Liknes
Subject: Re: Questions for project HGISS-05634 I-10 Term Improvement Widening

Follow Up Flag: Follow up
Flag Status: Flagged

New with the current ERT are Desert Pupfish and Gila Topminnow. Can you provide me with more details about the location of these species, please? Please disregard these. These are from refugia at the zoo and Desert Botanical Gardens that should have been filtered out of the dataset before going into the ERT. USFWS has said not include them for Section 7 consultation.

Desert Tortoise also appear on the new ERT, am I correct in thinking that observations of this species are likely only from South Mountain Park? Yes, you are correct. There are two different records both just over 2 miles away in the South Mountain area. Observation date of 2016-07-31.

Are there any new bat detections or bat colonies near the project area since 2015 that would cause concern? No new bat data within 3 miles of the project area.

Are there any burrowing owl detections near the project area that might cause concern? I did a site visit and paid special attention to the southern project limits and the eastern I-10/ Elliot Rd exit and did not see any owls, burrows, or attractive habitat. Burrowing owls have been detected along the Salt River between 16-18th streets 2015-2017. Also within 1.5 miles near the Whirlwind Golf Club 2006. 1.5 miles west of I-10 on Baseline Road along irrigation ditches 2001. I wouldn't think these would be an issue. The only place that seem like a possibility would be along the Salt River area. There are observations in eBird for non-breeding scattered around the airport, ag fields, and parks in that part of town, including several along the car rental buildings adjacent to the project (2014, 2015, 2017). With the number and various years, it seems like there must be a breeding population somewhere in that general vicinity.

On Fri, Feb 15, 2019 at 10:52 AM Eric Liknes <eliknes@ecoplanaz.com> wrote:

> Hi Sabra,
>
> We are working on an update for the 2015 BE for this project.
>
> New with the current ERT are Desert Pupfish and Gila Topminnow. Can you provide me with more details about the location of these species, please?

Desert Tortoise also appear on the new ERT, am I correct in thinking that observations of this species are likely only from South Mountain Park?

Are there any new bat detections or bat colonies near the project area since 2015 that would cause concern?

Are there any burrowing owl detections near the project area that might cause concern? I did a site visit and paid special attention to the southern project limits and the eastern I-10/ Elliot Rd exit and did not see any owls, burrows, or attractive habitat.

Thanks, and please let me know if there is anything else of concern that I didn't ask about!

Eric

Eric T. Liknes, PhD

Biologist

EcoPlan Associates, Inc.

701 W. Southern Ave., Suite 203
Mesa, AZ 85210

Office: 480.733.6666 x128

Mobile: 480.733.6666 x228

eliknes@ecoplanaz.com

Western Burrowing Owl Awareness

ADOT Environmental Planning
1611 W. Jackson St- Mail Drop EM02
Phoenix, AZ 85007

The purpose of this flyer is to provide ADOT employees and contractors, working on roadside projects, with basic knowledge to reduce the risk of incidental take of Western Burrowing Owls.

Legal Status:

Western Burrowing Owls (*Athene cunicularia*) are protected under the Federal Migratory Bird Treaty Act of 1918. All migratory birds and their parts are fully protected. They are also protected under Arizona State Law in Title 17-101, Title 17-235, and Title 17-236.

What to look for:

- Description– small, ground-dwelling owl.
- Length– 19.5-25.0 cm (7.68-9.85 inches)
- Wingspan– 58.42 cm (23.0 inches)
- Mass– about 150 grams
- Males are typically slightly larger than females.
- Round head, lacks ear tufts.
- Distinct oval facial ruff, framed by a broad, puffy white eyebrow.
- Eyes contain a bright yellow iris.

Where are owls found?

- Dry, open, short grass, treeless plains.
- Dependent on fossorial mammals. (ground squirrels, prairie dogs, badgers, etc.) to construct burrows.
- Human dominated landscapes: golf courses, airports, agricultural fields.

Identifying an active burrow:

- Owls use burrows constructed by ground squirrels, badgers, coyotes and tortoises. They can also use pipes, culverts, and ditches.
- Presence of excrement (whitewash) near entrance to burrow.
- Burrowing owls frequently decorate entrance of burrows with cow or horse manure, feathers, vegetation and trash items.

How to avoid them:

- Scan ahead prior to arriving at a sign location.
- If burrowing owls are observed within the project area, stop and move at least 100 feet beyond the owl or occupied burrow before resuming work.

If you think your work may potentially impact a Burrowing Owl or active burrow, please stop.
Move at least 100 feet from the animal or burrow before resuming work.

If you have any questions or think you have a borrowing owl or active burrow on your work site please contact: Joshua Fife, Biologist, ADOT Environmental Planning, jfife@azdot.gov
Office: (602)712-6819, Mobile: (602) 622-9622, EP General: (602)712-7767

Source: Arizona Game and Fish Department Animal Abstract: Western Burrowing Owl. Heritage Data Management System

(revised October 24, 2018)