BIOLOGICAL EVALUATION

Sunset Road: I-10 to River Road
Federal Aid Number To Be Determined
ADOT Number To Be Determined

Prepared for:
Pima County
Department of Transportation
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Pima County Number: 4SRRIV

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October 20, 2020
Submittal Number: 4
EXECUTIVE SUMMARY—BIOLOGICAL EVALUATION

Project Type: Road extension and bridge construction

Project Duration and Anticipated Construction Schedule: 24 months starting in Fiscal Year 2022

Project Location: Tucson and unincorporated Pima County, Arizona

No threatened or endangered species will be affected by this project; see Table 1 for further information.
# TABLE OF CONTENTS

1. Project Overview ............................................................................................................................................. 1  
   1.1 Federal Nexus .................................................................................................................................... 1  
   1.2 Project Description ............................................................................................................................. 1  
   1.3 Project Location ................................................................................................................................. 1  
2. Federally Proposed and Listed Species and Designated Critical Habitat ......................................................... 4  
3. Environmental Baseline .................................................................................................................................. 4  
4. Scope of Work ................................................................................................................................................. 5  
   4.1 Construction ....................................................................................................................................... 5  
   4.2 Potential Impacts on Water Quality and Clean Water Act Compliance ............................................ 6  
5. Project Action Area ......................................................................................................................................... 6  
   5.1 Noise Impacts .................................................................................................................................... 6  
   5.2 Vegetation Removal .......................................................................................................................... 7  
   5.3 Sedimentation .................................................................................................................................... 7  
   5.4 Action Area Limits .............................................................................................................................. 7  
6. Species Evaluation ........................................................................................................................................... 7  
7. Environmental Commitments ......................................................................................................................... 9  
8. Literature Cited ............................................................................................................................................. 10  
9. Signatures ...................................................................................................................................................... 10

## LIST OF TABLES

- Table 1. Project Species List .......................................................................................................................... 4
- Table B-1. Other Federal Sensitive Species ................................................................................................... B-3

## LIST OF FIGURES

- Figure 1. State Location Map ......................................................................................................................... 2
- Figure 2. Project Location Map ..................................................................................................................... 3
- Figure 3. Action Area Map ............................................................................................................................ 8

## LIST OF APPENDICES

- Appendix A. Photos
- Appendix B. Other Special Status Species
- Appendix C. Agency Coordination
### DEFINITIONS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action area</td>
<td>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)</td>
</tr>
<tr>
<td>ADOT</td>
<td>Arizona Department of Transportation</td>
</tr>
<tr>
<td>AGFD</td>
<td>Arizona Game and Fish Department</td>
</tr>
<tr>
<td>BE</td>
<td>Biological Evaluation</td>
</tr>
<tr>
<td>CCA</td>
<td>Candidate Conservation Agreement</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>Construction footprint</td>
<td>the area where construction-related equipment will operate</td>
</tr>
<tr>
<td>dBA</td>
<td>A-weighted decibels</td>
</tr>
<tr>
<td>ESA</td>
<td>Endangered Species Act</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>I-10</td>
<td>Interstate 10</td>
</tr>
<tr>
<td>IPaC</td>
<td>Information for Planning and Consultation</td>
</tr>
<tr>
<td>ROW</td>
<td>right-of-way</td>
</tr>
<tr>
<td>SWPPP</td>
<td>Stormwater Pollution Prevention Plan</td>
</tr>
<tr>
<td>The Loop</td>
<td>Chuck Huckelberry Loop</td>
</tr>
<tr>
<td>TI</td>
<td>traffic interchange</td>
</tr>
<tr>
<td>UPRR</td>
<td>Union Pacific Railroad</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USFWS</td>
<td>US Fish and Wildlife Service</td>
</tr>
</tbody>
</table>
1. Project Overview

1.1 Federal Nexus

Pima County is seeking federal funding for the project evaluated in this Biological Evaluation (BE). One possible funding source is the Federal Highway Administration (FHWA). If it is feasible, construction of this project will be combined with the Arizona Department of Transportation (ADOT) planned widening of Interstate 10 (I-10) from the Ina Road traffic interchange (TI) to the Ruthrauff Road TI (010 PM 248 H7853 01C; NHPP-010-D[211]A). Therefore, the Sunset Road: I-10 to River Road BE was prepared as if it were an ADOT/federally funded 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 US 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 project on listed species and/or critical habitat.

1.2 Project Description

The Pima County Department of Transportation is planning the extension of Sunset Road from I-10 to River Road. The project will include new roadway construction, with a new bridge over the Rillito River and an overpass over the Union Pacific Railroad (UPRR). This project will begin west of the I-10 Sunset Road TI and extend to River Road in the city of Tucson and unincorporated Pima County, Arizona (Figure 1–State Location Map and Figure 2–Project Location Map). The project will also necessitate improvements to approximately 2,000 feet of River Road at the new intersection with Sunset Road. Segments of the Chuck Huckelberry Loop shared-use path (The Loop) fall within the construction footprint (the area where construction-related equipment will operate) and the action area (defined in Section 5). Construction of the project will require adjustments to The Loop. Project construction is tentatively scheduled for Fiscal Year 2022, with an expected duration of 24 months.

This project is the second phase of a two-phase plan to provide a connection between Silverbell Road and River Road. Phase 1, the construction of Sunset Road from the eastbound I-10 frontage road to Silverbell Road, was completed in 2017 and included a bridge over the Santa Cruz River. Phase 2 will modify up to 2,000 feet of Sunset Road south of I-10, and extend Sunset Road to the east from the westbound frontage road a distance of approximately 1,400 feet to River Road and construct a bridge over the Rillito River. The River Road improvements will extend in each direction from the new intersection with Sunset Road, for a total distance of up to 2,000 feet. Construction of Phase 2 may be combined with an ADOT project to reconstruct the I-10 Sunset Road TI at approximately milepost 251.2 and widen I-10 from Ina Road to Ruthrauff Road.

The project will increase roadway and intersection capacity of Sunset Road and its existing and future intersections, enhance regional transportation system connectivity and support planned development by extending Sunset Road to River Road (establishing a new direct, north–south connection over I-10 from Silverbell Road to River Road), and tie the Sunset Road: I-10 to River Road improvements north and south of I-10 to ADOT’s I-10 Sunset Road TI reconstruction.

1.3 Project Location

This project occurs along an existing segment of Sunset Road south of I-10 and a planned segment of Sunset Road between I-10 westbound frontage road and River Road. The project will occur within lands owned by ADOT, Pima County, and the UPRR, and will require land acquisition from private landowners.
Figure 1. State Location Map
Figure 2. Project Location Map
2. Federally Proposed and Listed Species and Designated Critical Habitat

The USFWS Information for Planning and Consultation (IPaC) system (Consultation Code: 02EAAZ00-2020-SL1-0146) was accessed on May 6, 2020, and the Arizona Game and Fish Department (AGFD) Arizona Environmental Online Review Tool (Project ID: HGIS-10046) was accessed on May 6, 2020; both are included in Appendix C. The ESA species list from the IPaC receipt was reviewed by a qualified biologist (Maria M. Altemus, EcoPlan Associates, Inc.), and the species are listed in Table 1. Neither the IPaC search nor the AGFD Arizona Environmental Online Review Tool identified critical habitat within the search area for the project.

Table 1. Project Species List

<table>
<thead>
<tr>
<th>Species</th>
<th>Status*</th>
<th>Habitat Requirements</th>
<th>Exclusion Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mammals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jaguar (Panthera onca)</td>
<td>ESA LE</td>
<td>In Arizona, found in a variety of habitats, from Sonoran desertscrub up through subalpine conifer forests from 1,600 to 9,000 feet elevation.¹</td>
<td>No suitable habitat. No suitable mountainous connectivity.</td>
</tr>
<tr>
<td>Sonoran pronghorn (Antilocapra americana sonoriensis)</td>
<td>ESA XN</td>
<td>Broad intermountain alluvial valleys in low elevation Sonoran desertscrub with creosote-bursage and paloverde–mixed cacti associations from 400 to 1,600 feet elevation.</td>
<td>No suitable habitat. No grasslands or valleys within the construction footprint.</td>
</tr>
<tr>
<td><strong>Birds</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California least tern (Sterna antillarum browni)</td>
<td>ESA LE</td>
<td>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 elevation.</td>
<td>No suitable habitat. No shorelines within the construction footprint.</td>
</tr>
<tr>
<td>Yellow-billed cuckoo (Coccyzus americanus)</td>
<td>ESA LT</td>
<td>Uses large, contiguous patches of multilayered riparian habitat, such as cottonwood-willow gallery forests along rivers and streams below 6,600 feet elevation.</td>
<td>No suitable habitat. No riparian habitat or riparian vegetation within the construction footprint.</td>
</tr>
<tr>
<td><strong>Reptiles</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Mexican gartersnake (Thamnophis eques megalops)</td>
<td>ESA LT</td>
<td>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 elevation.</td>
<td>No suitable habitat. No cienegas, stock tanks, or rivers within the construction footprint.</td>
</tr>
<tr>
<td>Sonoyta mud turtle (Kinosternon sonoriense longifemorale)</td>
<td>ESA LE</td>
<td>Restricted to pond and stream habitat at Quitobaquito Springs in Organ Pipe Cactus National Monument, Arizona, and in nearby Rio Sonoyta, Sonora, Mexico, at 1,100 feet elevation.</td>
<td>No suitable habitat. No pond or stream habitat within the construction footprint.</td>
</tr>
</tbody>
</table>


3. Environmental Baseline

The environmental baseline represents the current biological and physical conditions of the action area. 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 progress.

¹ Elevations in this document are referenced to mean sea level.
Site visits were conducted on October 21 and November 18, 2019. The project is located in a partially developed but highly disturbed site in Tucson, Arizona, within the upland subdivision of the Sonoran Desertsrub biotic community (Brown 1994). The project occurs at an approximate elevation of 2,224 feet, and the surrounding landscape is flat, except for where the Rillito River crosses through the construction footprint. Land use in the area consists of recreation, storage/industrial, residential, transportation, and natural open space. A large portion of the construction area is disturbed but unused. The southwest half of the construction footprint is composed of the newly constructed Sunset Road, which connects Silverbell Road to I-10 and its frontage roads.

The vegetative community is dominated by creosote bush (*Larrea tridentata*), paloverde species (*Parkinsonia* spp.), velvet mesquite (*Prosopis velutina*), white bursage (*Ambrosia dumosa*), triangle-leaf bursage (*Ambrosia deltoidea*), brittlebush (*Encelia farinosa*), fourwing saltbush (*Atriplex canescens*), desert senna (*Senna covessii*), white bursage (*Ambrosia dumosa*), triangle-leaf bursage (*Ambrosia deltoidea*), brittlebush (*Encelia farinosa*), fourwing saltbush (*Atriplex canescens*), desert senna (*Senna covessii*), Russian thistle (*Kali tragus*) is also present, particularly on the west side of I-10, and stinknet (*Onocosphon pilifer*) was also found within the construction footprint. During the site visits, four inactive bird nests were identified in paloverde trees. The construction footprint has been previously disturbed, including the Rillito River bed, which is used for horseback riding, and some small areas of relatively undisturbed desert scrub between the Rillito River and the UPRR north of I-10.

The Rillito River runs through the construction footprint from southeast to northwest. The river is 330 to 500 feet wide within the construction footprint. It is ephemeral and flows only during periods of heavy rain. Runoff events periodically result in bank-to-bank flows that substantially scour the streambed and maintain a disclimax plant community dominated by dense patches of burrobrush (*Hymeclea* sp.) separated by unvegetated sandy channel braids. Scattered large tamarisk trees occur along the banks, along with occasional mesquite and Mexican paloverde (*Parkinsonia aculeata*) that are able to withstand scouring flood flows. The Rillito River lacks a continuous tree canopy and dense multistoried riparian vegetation.

The Loop can be found on the north and south banks of the Rillito River within the construction footprint. Desert landscaping, similar to the surrounding area, has been installed along The Loop throughout the construction footprint. See Appendix B for representative photos of the construction footprint and surrounding right-of-way (ROW).

4. **Scope of Work**

4.1 **Construction**

The scope of work for this project will consist of:

- Conducting geotechnical and utility potholing investigations
- Staging and stockpiling equipment and materials during construction
- Modifying the Sunset Road south approach to the future reconstructed I-10 Sunset Road TI and accommodating any potential modifications to The Loop
- Constructing a Sunset Road overpass spanning the UPRR and the future alignment of the UPRR access road
- Constructing a new segment of Sunset Road from the I-10 westbound frontage road to River Road, including a bridge spanning the Rillito River
- Building Americans with Disabilities Act–compliant bicycle and pedestrian access ramps from the new Rillito River bridge to The Loop
- Modifying the elevation of The Loop at the Rillito River banks, as needed, to accommodate the new bridge
- Installing new traffic signals at the intersection of Sunset Road and River Road
• Constructing improvements to River Road to accommodate the new intersection with Sunset Road, such as new turning lanes
• Constructing maintenance access roads, as needed
• Constructing connections to adjacent parcels, as needed
• Installing lighting and landscaping, as needed
• Constructing drainage improvements, as needed
• Relocating existing and installing new utilities, and installing underground conduit for future utilities, as needed
• Relocating the Pima County Natural Resources Parks and Recreation Department maintenance yard to adjacent county-owned property
• Constructing new vehicular access from Tres Nogales Road to the relocated Pima County Natural Resources Parks and Recreation Department maintenance yard

Project construction is tentatively scheduled for Fiscal Year 2022, with an expected duration of 24 months. No lane closures on I-10 are anticipated. Traffic restrictions at the eastbound and westbound frontage roads and the River Road connections are expected during construction. Access to residences and businesses will be maintained throughout construction. New ROW will be required for the project from ADOT, Pima County, the UPRR, and several private landowners. Slope easements and temporary construction easements will also be required. Vegetation removal will be required.

The following project activity descriptions more thoroughly describe the activities presented in the previous bullets. These are generalized activity descriptions provided by ADOT in “ADOT-FHWA-USACE-USFWS Programmatic Section 7 Activity Descriptions” and last updated July 3, 2018. The descriptions cover actions that may occur in more detail and in the sequencing that they will occur.

### 4.2 Potential Impacts on Water Quality and Clean Water Act Compliance

The project may impact Waters of the United States and is anticipated to be authorized by a Section 404 Nationwide Permit 14 Preconstruction Notification with a conditional Section 401 Water Quality Certification. More than one acre of soil will be disturbed, though the acreage of temporary and permanent impacts are not yet known. More than one acre of soil will be disturbed; therefore, an Arizona Pollutant Discharge Elimination System permit will be required, and a Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented. The construction footprint is not within ¼ mile of an impaired water or Outstanding Arizona Water.

### 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 were evaluated, focusing on, but not exclusive to, the extension of Sunset Road to River Road. Effects from construction activities will include noise impacts, vegetation removal, and possible soil erosion and sedimentation.

#### 5.1 Noise Impacts

The use of heavy machinery and construction equipment will incur noise impacts on the surrounding environment. Sound is measured in A-weighted decibels (dBA). Sound levels on a freeway such as I-10 typically
range from 70 to 80 dBA at 50 feet from the highway (Corbisier 2003). Equipment used to construct a bridge over the UPRR and the Rillito River and other associated activities will result in increased noise levels. The loudest piece of machinery to be used will be the pile driver, which produces 101 dBA at 50 feet (FHWA 2006) and is similar to a jet flyover at 300 meters (Corbisier 2003). The pile driver produces impact-type noises, which will be of short duration and high intensity. The action area experiences noise effects currently because it is in a developed area with roadways, an adjacent railroad, and overhead air traffic. Increased noise impacts could potentially affect birds nesting in trees and shrubs or other wildlife in the area; however, no threatened or endangered animal species that could be affected are anticipated to be within the construction footprint or the action area.

5.2 Vegetation Removal

Vegetation removal, including removal of trees and shrubs, will occur, as needed, for the extension of Sunset Road and the construction of the new bridge over the Rillito River. It is not yet known how many acres of vegetation will be removed or how many acres of soil will be disturbed. Vegetation removal may impact nesting birds or small wildlife species. No endangered plants were found within the construction footprint or are expected to occur in the action area.

5.3 Sedimentation

As areas around the new roadway are cleared, vegetation removal and construction equipment may cause some incidental and limited erosion and/or sedimentation during precipitation following construction. More than one acre of ground will be disturbed; therefore, a SWPPP will be required. Best management practices of a SWPPP may include diversion ditches or berms, rolled erosion control products, or storm drain inlet protection. The disturbance area surrounding the new roadway will likely return to preconstruction conditions quickly due to landscaping and seeding.

Construction of the bridge over the Rillito River will require some work in the river, including installation of footings, piers, pier caps, abutments, and wingwalls. Work in the river will comply with all conditions of the Section 404 permit, including a condition that work will occur in the river bed only when there is no surface water present and measures to limit debris that enters the river. Minor sedimentation effects may occur immediately downstream in ephemeral washes or in the Rillito River post-construction; however, effects will be minimal and should not reach farther than one mile downstream. All construction activities will occur within the construction footprint. The effects of sedimentation will not extend beyond the action area.

5.4 Action Area Limits

Noise impacts will occur in the action area at varying degrees; however, the action area currently experiences a variety of noise impacts from roadway traffic, the railroad, and overhead aircraft. Vegetation removal will be confined to the construction footprint. Sedimentation due to land clearing will be minimal and managed using best management practices. Sedimentation in the Rillito River may occur due to work in the river; however, effects will not exceed the action area. Based on the effects of construction activities, the action area for the project is defined as extending throughout the construction footprint of the project and out to a quarter-mile to account for noise impacts, as well as one mile downstream along the Rillito River to account for any sedimentation effects (Figure 3–Action Area Map).

6. Species Evaluation

Because the project action area does not support suitable habitat for species listed in Table 1, no federally listed threatened or endangered species are evaluated in detail in this BE.
Figure 3. Action Area Map

Construction Footprint

Action Area

All Land Shown within Construction Footprint is Private, County, Municipal, or owned by Union Pacific Railroad

Aerial base: Esri Online Resources (2019)
7. Environmental Commitments

The following environmental commitments are for species discussed in Appendix B. These environmental commitments were written as if this were an ADOT/federally funded project to be constructed by ADOT. If the project is instead constructed by Pima County, the wording of these measures would need to be revised as appropriate.

ADOT Roadside Development Section Responsibilities

- 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.

- Protected native plants within the project limits will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine whether 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.

Southcentral District Responsibilities

- If clearing, grubbing, or tree/limb removal will take place during the breeding season (March 1 to August 31), the Engineer will contact the Arizona Department of Transportation Environmental Planning biologist (602.399.3233 or 602.712.7767) to arrange for a qualified biologist to conduct active nest surveys of vegetation 10 (ten) calendar days prior to removal. During the nonbreeding season (September 1 to February 28), clearing, grubbing, or tree/limb removal may proceed without restriction.

- If active bird nests are identified within the project limits, construction activities will avoid disturbing any active nest. Avoidance areas, if necessary, will be marked in the field with temporary fencing or T-posts with flagging. The Engineer will confer with the Arizona Department of Transportation Environmental Planning biologist (602.399.3233 or 602.712.7767) to determine the appropriate avoidance strategy until the nestlings have fledged from the nest and the nest is no longer active.

Contractor Responsibilities

- The contractor shall not conduct any clearing, grubbing, or tree/limb removal from March 1 to August 31 unless a qualified biologist approved by Arizona Department of Transportation Environmental Planning has conducted a bird nest search of the affected vegetation and has determined that no active bird nests are present. Vegetation removal may occur if the area has been surveyed within 10 (ten) calendar days prior to removal as long as only inactive bird nests, if any, are present.

- If clearing, grubbing, or tree/limb removal will occur between March 1 and August 31, the contractor shall employ a qualified biologist to conduct a migratory bird nest search of all vegetation within 10 (ten) calendar days prior to removal. Vegetation may be removed if it has been surveyed and no active bird nests are present. 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.

- 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.

8. Literature Cited


USFWS and Arizona Interagency Desert Tortoise Team. 2015. Candidate Conservation Agreement for the Sonoran Desert Tortoise (Gopherus morafkai) in Arizona.

9. Signatures

Prepared by: Maria M. Altemus
Name: Maria M. Altemus
Title: Biologist
Firm Name: EcoPlan Associates, Inc.
Date: 10/20/2020

Reviewed by: Thomas C. Ashbeck
Name: Thomas C. Ashbeck
Title: Director of Biological Resources
Firm Name: EcoPlan Associates, Inc.
Date: 10/20/2020
APPENDIX A

PHOTOS

Site visit conducted November 18, 2019

Photo 1. View between a Pima County Flood Control District storage area and The Loop along the south side of the Rillito River, facing west.

Photo 2. View at the southwest corner of the Pima County Flood Control District storage area, facing northeast.
Photo 3. View at the southwest corner of the Pima County Flood Control District storage area, facing southwest.

Photo 4. View from an open desert area southwest of The Loop on the south side of the Rillito River, facing north.
Photo 5. View from The Loop on the south side of the Rillito River, facing northeast.

Photo 6. View from the north side of Sunset Road on the west side of I-10, facing southwest.
I. MIGRATORY BIRD TREATY ACT

The construction footprint and surrounding ROW was surveyed by Maria M. Altemus of EcoPlan Associates, Inc., on November 18, 2019, for indications that migratory birds may nest in the area. Four inactive nests in paloverde trees were detected.

In the AGFD scoping response letter dated March 5, 2020, the AGFD recommended an occupancy survey (per the AGFD “Burrowing Owl Project Clearance Guidance for Landowners” protocol) be completed to determine whether Western burrowing owls (*Athene cunicularia*) occur within the construction footprint. During the site visit, a one-time, non-protocol occupancy survey for Western burrowing owls was completed, during which the construction footprint was evaluated for possible suitable habitat for Western burrowing owls, sign of burrowing owls, burrows, and burrowing owls. Though there was possible suitable habitat found within the construction footprint, no burrowing owls, burrows, or sign of burrowing owls were found during the occupancy survey for this species. Based on the results of this occupancy survey, burrowing owls are not anticipated to be found within the construction footprint, environmental commitments are not necessary for this species, and no further survey is needed.

Because of the potential for migratory birds to occur within the construction footprint and the potential for the project to impact them, the following environmental commitments are included.

**Environmental Commitments**

**Southcentral District Responsibilities**

- If clearing, grubbing, or tree/limb removal will take place during the breeding season (March 1 to August 31), the Engineer will contact the Arizona Department of Transportation Environmental Planning biologist (602.399.3233 or 602.712.7767) to arrange for a qualified biologist to conduct active nest surveys of vegetation 10 (ten) calendar days prior to removal. During the nonbreeding season (September 1 to February 28), clearing, grubbing, or tree/limb removal may proceed without restriction.

- If active bird nests are identified within the project limits, construction activities will avoid disturbing any active nest. Avoidance areas, if necessary, will be marked in the field with temporary fencing or T-posts with flagging. The Engineer will confer with the Arizona Department of Transportation Environmental Planning biologist (602.399.3233 or 602.712.7767) to determine the appropriate avoidance strategy until the nestlings have fledged from the nest and the nest is no longer active.

**Contractor Responsibilities**

- The contractor shall not conduct any clearing, grubbing, or tree/limb removal from March 1 to August 31 unless a qualified biologist approved by Arizona Department of Transportation Environmental Planning has conducted a bird nest search of the affected vegetation and has determined that no active bird nests are present. Vegetation removal may occur if the area has been surveyed within 10 (ten) calendar days prior to removal as long as only inactive bird nests, if any, are present.

- If clearing, grubbing, or tree/limb removal will occur between March 1 and August 31, the contractor shall employ a qualified biologist to conduct a migratory bird nest search of all vegetation within 10 (ten) calendar days prior to removal. Vegetation may be removed if it has been surveyed and no active bird nests are present. 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.
II. BALD AND GOLDEN EAGLE PROTECTION ACT

The construction footprint and surrounding ROW was evaluated by Maria M. Altemus. It is not located in the range or suitable habitat for bald and/or golden eagles. The project will not disturb or result in take of bald or golden eagles.

III. FISH AND WILDLIFE COORDINATION ACT

This project is a federal action and will impound, divert, deepen the channel or otherwise control or modify a stream or other body of water. Coordination with the AGFD and the USFWS has been undertaken to consider the effects of the project on fish and wildlife resources, including water-related aspects. This coordination fulfills the requirements of the Fish and Wildlife Coordination Act.

A scoping letter was sent to the AGFD on February 5, 2020. A response was received on March 5, 2020. The scoping letter and response can be found in Appendix C. Correspondence with Sabra Tonn, AGFD, regarding threatened or endangered species in the vicinity of the construction footprint can be found in Appendix C.

IV. NOXIOUS AND INVASIVE PLANT SPECIES

The construction footprint and surrounding ROW were surveyed for the presence of noxious and invasive plants on November 18, 2019, by pedestrian survey. The following invasive and noxious plants were reported within the construction footprint and surrounding ROW: stinknet, Russian thistle, and saltcedar. A Noxious Species Control Plan will be required for the project. Because invasive and noxious species were found within the construction footprint, the following environmental commitments have been included.

**Environmental Commitments**

**ADOT 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

Table B-1. Other Federal Sensitive Species

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
<th>Occupied Habitat Present?</th>
<th>Suitable Habitat Present?</th>
<th>Suitable Habitat Affected?</th>
<th>Species Potentially Affected?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reptiles and Amphibians</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonoran Desert tortoise</td>
<td><em>Gopherus morafkai</em></td>
<td>CCA</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

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

The Sonoran Desert tortoise, a Candidate Conservation Agreement (CCA) species, was listed on the AGFD Arizona Environmental Online Review Tool Report as having been documented within 3 miles of the construction footprint. Sabra Tonn, AGFD Heritage Data Management System program supervisor, indicated that the closest recorded Sonoran Desert tortoise was found 1.5 miles from the construction footprint. No suitable habitat for Sonoran Desert tortoises is within the construction footprint; therefore, the project is not anticipated to affect this species.

VI. STATE SENSITIVE SPECIES

The AGFD Arizona Environmental Online Review Tool was accessed on May 6, 2020 (Project ID: HGIS 10046) to determine whether special status species have been reported to occur in the area surrounding the project. As part of the environmental review process, a letter describing the project was sent to the AGFD on February 5, 2020, to inform the agency of the project and to solicit comments. The letter requested any specific concerns, suggestions, or recommendations the agency may have related to the project.

The AGFD Arizona Environmental Online Review Tool included a list of special status species known to occur within the area surrounding the project, and the AGFD returned a response letter. The agency included concerns regarding bats in the 2017 Sunset Road Bridge over the Santa Cruz River to the west; however, the proposed project will have no impact on that bridge. Unrelated to state sensitive species, concerns regarding bridge construction were included in the letter with recommendations to refer to the *Guidelines for Bridge Construction to Accommodate Fish & Wildlife Movement and Passage* during the design phase. Concerns regarding impacts to vegetation, the yellow-billed cuckoo, and Western burrowing owl were also included in the letter. Project effects on vegetation and these species have been addressed in sections of the BE and in a response letter from Pima County sent to the AGFD on May 8, 2020.

VII. PROTECTED NATIVE PLANTS

The construction footprint and surrounding ROW was surveyed by pedestrian survey for the presence of protected native plants on November 18, 2019. The following protected plant was found: velvet mesquite (*Prosopis velutina*).

Because protected native plants were found within the construction footprint, the following environmental commitment is included.
Environmental Commitment

ADOT Roadside Development Section Responsibility

- Protected native plants within the project limits will be impacted by this project; therefore, the Arizona Department of Transportation Roadside Development Section will determine whether 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 Arizona Environmental Online 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 is not located within the Potential Linkage Zones identified in the Arizona Wildlife Linkages Assessment (Arizona Wildlife Linkage Workgroup 2006).

The Rillito River is identified by Pima County as a Wildlife Movement Area that links to Tanque Verde Wash upstream and the Santa Cruz River downstream. This Wildlife Movement Area is likely used by a variety of mammals common to the surrounding desert and mountain habitats.
APPENDIX C
AGENCY COORDINATION

The USFWS IPaC system and the AGFD Arizona Environmental Online Review Tool were used to identify special status species potentially occurring in the area surrounding the project. The IPaC and the AGFD review tool results are included in this appendix. As part of the environmental review process, a letter describing the project was sent to the AGFD (Cheri Bouchér, transportation project evaluation specialist, WMHB-Project Evaluation Program) on February 5, 2020, to inform it of the project and to solicit comments.

The AGFD responded with a letter (attached) on March 5, 2020, and Pima County responded to that letter (attached) on May 8, 2020, both of which are summarized in Appendix B: Section VI. Sabra Tonn (program supervisor, AGFD Heritage Data Management System) responded to an email regarding special status species in the project area on November 21, 2019; the email is included in this appendix.
In Reply Refer To:
Consultation Code: 02EAAZ00-2020-SLI-0146 Event Code: 02EAAZ00-2020-E-01795  Project Name: Sunset Road: I-10 to River Road
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

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:

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 hypugaea). 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:

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:
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 barrowing 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/ Jeff Humphrey Field Supervisor

Attachment

Attachment(s):

- Official Species List
Project Summary
Consultation Code: 02EAAZ00-2020-SLI-0146
Event Code: 02EAAZ00-2020-E-01795
Project Name: Sunset Road: I-10 to River Road
Project Type: BRIDGE CONSTRUCTION / MAINTENANCE
Project Description: The project would establish an important link between Silverbell Road, I-10, and River Road, and provide additional roadway capacity for existing and future travel needs. The project purpose is to relieve traffic congestion, improve travel safety, and provide an alternative route between I-10 and River Road for the upcoming reconstruction of the I-10 Orange Grove Road TI that is part of ADOT’s overall widening of I-10 from Ina Road to Ruthrauff Road.

The scope of work for this project would consist of:
• Conducting geotechnical investigations
• Staging and stockpiling equipment and materials during construction
• Modifying the Sunset Road south approach to the future reconstructed I-10 Sunset Road TI and accommodating any potential modifications to the Chuck Huckelberry Loop (The Loop)
• Installing new traffic signals at the I-10 Sunset Road TI eastbound and westbound frontage roads
• Constructing a Sunset Road overpass spanning the UPRR and the future alignment of the UPRR access road
• Constructing a new segment of Sunset Road from the reconstructed I-10 Sunset Road TI to River Road, including a bridge spanning the Rillito River
• Building Americans with Disabilities Act–compliant bicycle and pedestrian access ramps from the new Rillito River bridge to The Loop
• Modifying the elevation of The Loop at the Rillito River banks, as needed, to accommodate the new bridge
• Installing new traffic signals at the intersection of Sunset Road and River Road
• Constructing intersection improvements on River Road at the new Sunset Road connection
• Installing lighting and landscaping, as needed
• Constructing drainage improvements, as needed
• Relocating existing and installing new utilities, and installing underground conduit for future utilities, as needed

Project Location:

Approximate location of the project can be viewed in Google Maps: [https://www.google.com/maps/place/32.31136473902429N111.03969697740831W](https://www.google.com/maps/place/32.31136473902429N111.03969697740831W)

Counties: Pima, AZ
Endangered Species Act Species

There is a total of 6 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, 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

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaguar <em>Panthera onca</em></td>
<td>Endangered</td>
</tr>
</tbody>
</table>

There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: [https://ecos.fws.gov/ecp/species/3944](https://ecos.fws.gov/ecp/species/3944)

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonoran Pronghorn <em>Antilocapra americana sonoriensis</em></td>
<td>Experimental</td>
</tr>
</tbody>
</table>

No critical habitat has been designated for this species. Species profile: [https://ecos.fws.gov/ecp/species/4750](https://ecos.fws.gov/ecp/species/4750)

Birds

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>California Least Tern <em>Sterna antillarum browni</em></td>
<td>Endangered</td>
</tr>
</tbody>
</table>

No critical habitat has been designated for this species. Species profile: [https://ecos.fws.gov/ecp/species/8104](https://ecos.fws.gov/ecp/species/8104)

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow-billed Cuckoo <em>Coccyzus americanus</em></td>
<td>Threatened</td>
</tr>
</tbody>
</table>

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](https://ecos.fws.gov/ecp/species/3911)

Reptiles

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Mexican Gartersnake <em>Thamnophis eques megalops</em></td>
<td>Threatened</td>
</tr>
</tbody>
</table>

There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: [https://ecos.fws.gov/ecp/species/7855](https://ecos.fws.gov/ecp/species/7855)

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sonoyta Mud Turtle <em>Kinosternon sonoriense longifemorale</em></td>
<td>Endangered</td>
</tr>
</tbody>
</table>

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/7276](https://ecos.fws.gov/ecp/species/7276)

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:
Sunset Road: I-10 to River Road

User Project Number:
19-698

Project Description:
The project would establish an important link between Silverbell Road, I-10, and River Road, and provide additional roadway capacity for existing and future travel needs. The project purpose is to relieve traffic congestion, improve travel safety, and provide an alternative route between I-10 and River Road for the upcoming reconstruction of the I-10 Orange Grove Road TI that is part of ADOT’s overall widening of I-10 from Ina Road to Ruthrauff Road. The scope of work for this project would consist of: • Conducting geotechnical investigations • Staging and stockpiling equipment and materials during construction • Modifying the Sunset Road south approach to the future reconstructed I-10 Sunset Road TI and accommodating any potential modifications to the Chuck Huckelberry Loop (The Loop) • Installing new traffic signals at the I-10 Sunset Road TI eastbound and westbound frontage roads • Constructing a Sunset Road overpass spanning the UPRR and the future alignment of the UPRR access road • Constructing a new segment of Sunset Road from the reconstructed I-10 Sunset Road TI to River Road, including a bridge spanning the Rillito River • Building Americans with Disabilities Act-compliant bicycle and pedestrian access ramps from the new Rillito River bridge to The Loop • Modifying the elevation of The Loop at the Rillito River banks, as needed, to accommodate the new bridge • Installing new traffic signals at the intersection of Sunset Road and River Road • Constructing intersection improvements on River Road at the new Sunset Road connection • Installing lighting and landscaping, as needed • Constructing drainage improvements, as needed • Relocating existing and installing new utilities, and installing underground conduit for future utilities, as needed

Project Type:
Transportation & Infrastructure, Bridge replacement/New Construction, In-stream geotech boring,
abutments, stream crossing, realignment, channelization, rip rap, vegetation removal

Contact Person:
Thomas Ashbeck

Organization:
EcoPlan Associates, Inc.

On Behalf Of:
CONSULTING

Project ID:
HGIS-10046

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.
Sunset Road: I-10 to River Road
USA Topo Basemap With Locator Map

- Project Boundary
- Buffered Project Boundary

Project Size (acres): 49.69
Lat/Long (DD): 32.3103 / -111.0412
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T13S, R13E
USGS Quad(s): JAYNES

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap
Sunset Road: I-10 to River Road

Important Areas

Project Boundary
Buffered Project Boundary
Wildlife Stakeholder Assessment
- Wildlife Crossing Area
- Wildlife Movement Area - Diffuse
- Wildlife Movement Area - Landscape

Wildlife Movement Area - Riparian/Wash
Wildlife Connectivity
Important Connectivity Zones
Pinal County Riparian
Critical Habitat
Important Bird Areas

Project Size (acres): 49.69
Lat/Long (DD): 32.3103 / -111.0412
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T13S, R13E
USGS Quad(s): JAYNES

Sources: Esri, HERE, Garmin, Intermap, increment, iCorp, GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), ©OpenStreetMap contributors, and the GIS User Community.
### Special Status Species Documented within 3 Miles of Project Vicinity

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>FWS</th>
<th>USFS</th>
<th>BLM</th>
<th>NPL</th>
<th>SGCN</th>
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<tbody>
<tr>
<td>Bat Colony</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coccyzus americanus</td>
<td>Yellow-billed Cuckoo (Western DPS)</td>
<td>LT</td>
<td>S</td>
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<td>1A</td>
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<tr>
<td>Crotalus willardi willardi</td>
<td>Arizona Ridge-nosed Rattlesnake</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
<td>1A</td>
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<tr>
<td>Dendrocygna bicolor</td>
<td>Fulvous Whistling-Duck</td>
<td>SC</td>
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<tr>
<td>Falco peregrinus anatum</td>
<td>American Peregrine Falcon</td>
<td>SC</td>
<td>S</td>
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<tr>
<td>Gastrophyne olivacea</td>
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<td>Gopherus morafkai</td>
<td>Sonoran Desert Tortoise</td>
<td>CCA</td>
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<tr>
<td>Heloderma suspectum</td>
<td>Gila Monster</td>
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<tr>
<td>Kinosternon sonoriense sonoriense</td>
<td>Desert Mud Turtle</td>
<td>S</td>
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<tr>
<td>Leptonycteris yerabuenae</td>
<td>Lesser Long-nosed Bat</td>
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<td>Myotis velifer</td>
<td>Cave Myotis</td>
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<td>Tadarida brasiliensis</td>
<td>Brazilian Free-tailed Bat</td>
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<td>Terrapene ornata luteola</td>
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<td>Tumamoc Globeberry</td>
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**Note:** Status code definitions can be found at [https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/](https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/).

### Special Areas Documented within the Project Vicinity

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

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

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

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<td>Phrynosoma solare</td>
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<td>Troglodytes pacificus</td>
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### Species of Economic and Recreation Importance Predicted within the Project Vicinity

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<td>Javelina</td>
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<td>Mourning Dove</td>
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</table>
**Project Type Recommendations:**

**Bridge Maintenance/Construction**

Identify whether wildlife species use the structure for roosting or nesting during anticipated maintenance/construction period. Plan the timing of maintenance/construction to minimize impacts to wildlife species. In addition to the species list generated by the Arizona's On-line Environmental Review Tool, the Department recommends that surveys be conducted at the bridge and in the vicinity of the bridge to identify additional or currently undocumented bat, bird, or aquatic species in the project area. To minimize impacts to birds and bats, as well as aquatic species, consider conducting maintenance and construction activities outside the breeding/maternity season (breeding seasons for birds and bats usually occur spring - summer). Examining the crevices for the presence of bats prior to pouring new paving materials or that the top of those crevices be sealed to prevent material from dripping or falling through the cracks and potentially onto bats. If bats are present, maintenance and construction (including paving and milling) activities should be conducted during nighttime hours, if possible, when the fewest number of bats will be roosting. Minimize impacts to the vegetation community. Unavoidable impacts to vegetation should be mitigated on-site whenever possible. A revegetation plan should be developed to replace impacted communities.

Consider design structures and construction plans that minimize impacts to channel geometry (i.e., width/depth ratio, sinuosity, allow overflow channels), to avoid alteration of hydrological function. Consider incorporating roosting sites for bats into bridge designs. During construction, erosion control structures and drainage features should be used to prevent introduction of sediment laden runoff into the waterway. Minimize instream construction activity. If culverts are planned, use wildlife friendly designs to mitigate impacts to wildlife and fish movement. Guidelines for bridge designs to facilitate wildlife passage can be found on our Wildlife Friendly Guidelines web page under the Wildlife Planning button, at [https://www.azgfd.com/wildlife/planning/wildlifeguidelines/](https://www.azgfd.com/wildlife/planning/wildlifeguidelines/).

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/](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/](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/](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, [https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/water/quality/?cid=stelprdb1044769](https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/water/quality/?cid=stelprdb1044769) 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](https://www.azgfd.com/hunting/regulations).
Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

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 Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

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

Based on the project type entered, coordination with County Flood Control district(s) may be required.

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 native plants listed on the Arizona Native Plant Law and Antiquities Act have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44
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/](http://www.fws.gov/southwest/es/arizona/) or:

**Phoenix Main Office**  
9828 North 31st Avenue #C3  
Phoenix, AZ 85051-2517  
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 **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/](https://www.azgfd.com/wildlife/nongamemanagement/tortoise/)

Analysis indicates that your project is located in the vicinity of an identified **wildlife habitat connectivity feature**. The **County-level Stakeholder Assessments** contain five categories of data (Barrier/Development, Wildlife Crossing Area, Wildlife Movement Area- Diffuse, Wildlife movement Area- Landscape, Wildlife Movement Area- Riparian/Washes) that provide a context of select anthropogenic barriers, and potential connectivity. The reports provide recommendations for opportunities to preserve or enhance permeability. Project planning and implementation efforts should focus on maintaining and improving opportunities for wildlife permeability. For information pertaining to the linkage assessment and wildlife species that may be affected, please refer to: [https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/](https://www.azgfd.com/wildlife/planning/habitatconnectivity/identifying-corridors/).

Please contact the Project Evaluation Program ([pep@azgfd.gov](mailto:pep@azgfd.gov)) for specific project recommendations.
March 5, 2020

Stephen Wilson, P.E.
Pima County Department of Transportation
201 N. Stone Ave., 4th Floor
Tucson, AZ 85701-1207

Re: Review of the Sunset Road extension: I-10 to River Road project

Dear Mr. Wilson:

The Arizona Game and Fish Department (Department) reviewed your Project Evaluation Request dated February 5, 2020, regarding the planning to extend Sunset Road from Interstate 10 (I-10) to River Road in the City of Tucson and unincorporated Pima County. As seen on the Department's Heritage Data Management System (HDMS)’s Online Environmental Tool report you created on November 20, 2019, a number of special status species have been reported within a three mile radius of your proposed project, primarily associated with the Rillito and Santa Cruz Rivers.

Based on the information provided, the Department offers the following general recommendations:

- Minimize impacts to vegetation during project construction. Staging areas should be located in previously disturbed sites, and kept as small as possible. Implement erosion and drainage control measures during the project to prevent the introduction of sediment-laden runoff into adjacent surface waters, and to prevent impacts to surface water quality. Stabilize exposed soils, particularly on slopes, with native vegetation as soon as possible to prevent excess erosion.

- The yellow-billed cuckoo (*Coccyzus americanus*), which is federally listed as Threatened under the Endangered Species Act (ESA), has been recorded with a three mile radius of your proposed project. If you are uncertain about the effects of your project to the yellow-billed cuckoo, or if you anticipate your project will not be in compliance with the ESA, the Department recommends that you and/or the project proponent contact the U.S. Fish and Wildlife Service (USFWS) for their Technical Assistance. The USFWS will provide options to comply with the ESA, such as conservation measures to avoid or minimize adverse effects to listed species.

- The western burrowing owl (*Athene cunicularia hypugaea*), a special status species that is regulated under the Migratory Bird Treaty Act (MBTA), is known to occur at numerous locations along the Santa Cruz and Rillito Rivers. Although it hasn’t been recorded in the immediate vicinity, the Rillito River and its surrounding banks and floodplain may provide...
suitable habitat for this species. The Department recommends conducting an occupancy survey for western burrowing owl to determine if this species occurs within your project footprint. Guidelines for conducting this survey are found in Burrowing Owl Project Clearance Guidance for Landowners which can be accessed on-line through the Department’s website. Please note that the survey should be conducted by a surveyor that is certified by the Department. If an active burrowing owl burrow is detected, please contact the Department and the U.S. Fish and Wildlife Service for direction, in accordance with the Burrowing Owl Project Clearance Guidance for Landowners.

- For construction of the bridge that will span the Rillito River, the Department recommends referring to the Guidelines for Bridge Construction to Accommodate Fish & Wildlife Movement and Passage. Additionally, the Department recommends referencing the Wildlife Crossing Structure Handbook Design and Evaluation in North America. We suggest utilizing the higher end of the recommended dimensions for a large mammal underpass within these guidelines. Additionally, we recommend a concrete bottomless arch or a bridge span for this type of construction.
https://www.azgfd.com/wildlife/planning/wildlifeguidelines/

- The Guidelines for Bridge Construction to Accommodate Fish & Wildlife Movement and Passage also provides recommendations to incorporate bat friendly design elements within the structure of the new bridge that will span the Rillito River. We request coordination with our Wildlife Contracts Specialist, Ron Mixan (rmi@azgfd.gov 602.942.3000), to discuss the design of the new bridge at the earliest stages of design development.

- Please determine if bats are currently roosting in the 2017 Sunset bridge that crosses the Santa Cruz River or the nearby drainage culverts on N. Camino de la Tierra; bats may use structures seasonally, so evidence of bat use, such as guano, should also be evaluated. If construction could encroach on the breeding season (May - August), impacts could occur to a maternity colony of bats, if present. If necessary, bat surveys should be conducted prior to any work adjacent to the bridge; surveys should be scheduled far in advance of proposed work to allow for schedule modification to avoid disruption of maternity roosts during the breeding season, and again immediately prior to construction. If the project will impact a roosting feature, roost friendly designs should be incorporated into the design plans to replace loss of roosting habitat. Refer to the Guidelines for Bridge Construction or Maintenance to Accommodate Fish & Wildlife Movement and Passage, for additional guidance on bats as appropriate.
The Department understands that Pima County DOT will comply with the Arizona Native Plant Law for any ground disturbing activities, efforts will be made to minimize ground disturbance, and all temporarily disturbed land will be re-seeded to minimize erosion. In addition, the Department understands that, in accordance with Pima County DOT’s guidelines, invasive species and the Migratory Bird Treaty Act (MBTA) will be addressed within the proposed project’s biological report, if applicable.

**The Department requests continued coordination on this project, as planning progresses.**

Please coordinate with Wildlife Contracts Specialist, Ron Mixan ([rmixan@azgfd.gov](mailto:rmixan@azgfd.gov) 602.942.3000) when draft design plans and/or planning documents are available for review. Additionally, visit our website for additional guidelines at: [https://www.azgfd.com/wildlife/planning/wildlifeguidelines/](https://www.azgfd.com/wildlife/planning/wildlifeguidelines/).

Sincerely,

Cheri A. Bouchér  
Project Evaluation Program Specialist, Habitat Branch  
Arizona Game and Fish Department

cc: Ginger Ritter, Project Evaluation Program Supervisor  
John Windes, Habitat Program Manager, Region V  
Ron Mixan, Wildlife Contracts Specialist  
Karla Reeve Wide, Pima County

AGFD# M20-02063839
May 8, 2020

Cheri A. Boucher
Project Evaluation Program Specialist, Habitat Branch
Arizona Game and Fish Department
5000 W. Carefree Highway
Phoenix, AZ 85086

RE: Sunset Road: I-10 to River Road (4SRRIV)

Dear Ms. Boucher:

This letter is in response to the letter we received from the Arizona Game and Fish Department dated March 5, 2020, for the above-referenced project. We offer the following responses to the recommendations mentioned in the letter:

• Vegetation removal will be confined to the construction footprint of the project. The proposed staging areas are located on previously disturbed sites, as recommended. The project will require a Storm Water Pollution Prevention Plan, which will include temporary erosion control measures for grading within the project footprint. New slopes will be stabilized as soon as possible with seeding or rock mulch to minimize erosion and sedimentation.

• A review of the project site by a qualified biologist did not find any suitable habitat for the yellow-billed cuckoo. Adverse effects to yellow-billed cuckoo habitat are not anticipated.

• A burrowing owl site survey was conducted by a biologist certified by the Arizona Game and Fish Department. The survey did not find any evidence of burrowing owls, burrows, or sign within the project footprint. However, if burrowing owls are found at the project site, we will contact the Arizona Game and Fish Department and the US Fish and Wildlife Service for direction.

• The proposed bridge spanning the Rillito River would consist of a three-span precast-prestressed concrete girder bridge that is 384 feet long by 83.75 feet wide and would average approximately 21 feet high. Using the “Guidelines for Bridge Construction or Maintenance to Accommodate Fish and Wildlife and Passage,” the approximate openness ratio was calculated to be 4.7. This ratio is relatively high, which is conducive to use by large and small mammals. The bridge would also meet the size of openings for large mammals per the “Wildlife Crossing Structure Handbook Design and Evaluation in North America.” The channel would remain as is without a concrete bottom.

• The Pima County Department of Transportation (PCDOT) recently completed a new bridge of the Santa Cruz River as part of Phase I of the project from Silverbell Road to Interstate 10 (I-10). Bat boxes were installed on the bridge over the Santa Cruz River in 2017 as part of that project. As of March 2020, there has been no evidence of bats roosting in the bat boxes. PCDOT will continue to monitor for the presence of bats at Sunset Road and the Santa Cruz River. If, however, bats do not utilize bat boxes on the Santa Cruz River, we recommend that bat boxes not be installed at the [Signature] 

Ana M. Olivares, P.E., Director
201 N. Stone Avenue, 4th Floor, Tucson, Arizona 85701-1207 • Phone: 520-724-6410 • Fax: 520-724-6439
Rillito River crossing. We will coordinate with the Arizona Game and Fish Department Wildlife Contracts Specialist, Ron Mixan, to discuss the design of the new bridge.

- A Native Plant Inventory was conducted for the project in accordance with the PCDOT Memorandum, update to Appendix 4D of the Environmentally Sensitive Roadway (ESR) Design Guidelines, PCDOT Roadway Design Manual dated July 2015. Vegetation removal will be confined to the construction footprint of the project. Vegetation removal will be timed in consideration of the mitigation required for the project to conform with the Migratory Bird Treaty Act.

We appreciate the Arizona Game and Fish Department’s recommendations and look forward to working with you on the design and construction of the project in the future.

Sincerely,

Stephen Wilson, P.E.
Project Manager
Pima County Department of Transportation

    Karla Reeve-Wise, Pima County Department of Environmental Quality
    Jim Glock, P.E., Project Manager, CONSOR Engineers
Yellow-billed Cuckoo: eBird has one seen Jul 5, 2019 along the Santa Cruz and June 29, 2018 at the Sweetwater Wetlands. The HDMS also has a breeding record at the same location from 2002. This location is about 1 mile to the south of the project area.

Sonoran Desert Tortoise: population just over 2 miles to the SW of the project area at the Sweetwater Preserve (mountains). iNaturalist has record at Christopher Columbus Park and also just west of the park. These locations are within 1.5 miles. The closest location to the east is near the Medical Center about 1.5 miles to the east.

Burrowing Owl: closest breeding locations are about 3.5 miles to the south of Silverbell Golf Course. eBird has non-breeding locations within 2 miles of the project area near the Sweetwater Wetlands Park. Also eBird locations within 3 miles to the north. The largest populations are at Davis Montham Air Force Base and the Tucson Airport.

Gila Topminnow: the closest records are in Sabino Canyon more than 13 miles to the east. There is a refugia at the Safari Club International Wildlife Museum about 5 miles to the SSW.

Let me know if you have any other questions.

SABRA TONN | HDMS PROGRAM SUPERVISOR
ARIZONA GAME AND FISH DEPARTMENT
OFFICE: 623.236.7618
MOBILE: 602.524.1004
EMAIL: stonn@azgfd.gov
azgfd.gov | 5000 W. Carefree Highway, Phoenix, AZ 85086

Join our new Conservation Membership program and ensure a wildlife legacy for the future.

On Thu, Nov 21, 2019 at 10:29 AM Maria Altemus <maltemus@ecoplanaz.com> wrote:

Hi Sabra,

I was wondering if you could provide the nearest species occurrences for a project that will extend Sunset Road east across I-10 and span the Rillito River to connect to River Road in Tucson, AZ. I ran the AGFD Tool and the Project ID is HGIS-10046. Could you please provide occurrence records for the yellow-billed cuckoo, Sonoran Desert tortoise, burrowing owl, and Gila topminnow? The burrowing owl and Gila topminnow are not listed on the tool, but the area looks like it could be habitat for BUOW and since the Rillito connects with the Santa Cruz, I wanted to check on Gila topminnow as well. Thank you for your help.

All the best,
Maria M. Altemus

Environmental Planner | Biologist

EcoPlan Associates, Inc.

3610 N. Prince Village Place, Suite 140
Tucson, AZ 85719

O: (520) 624-4326, ext. 111
C: (520) 624-4326, ext. 211