EXECUTIVE SUMMARY—BIOLOGICAL EVALUATION

Project Type: Road extension and bridge construction

Project Duration and Anticipated Construction Schedule: 24 months starting fall 2022

Project Location: Along Sunset Road from west of the Interstate 10/Sunset Road traffic interchange, across the Rillito River, and east to River Road in Tucson and unincorporated Pima County, Arizona

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

Habitat for monarch butterflies (Danaus plexippus), a candidate species per the Endangered Species Act, may be impacted as part of this project; see Appendix B for further information.
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DEFINITIONS

Action area all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR §402.02)
ADOT Arizona Department of Transportation
AGFD Arizona Game and Fish Department
BE Biological Evaluation
C candidate
CCA Candidate Conservation Agreement
CFR Code of Federal Regulations
Construction footprint the area where construction-related equipment will operate
dBA A-weighted decibels
ESA Endangered Species Act
FHWA Federal Highway Administration
I-10 Interstate 10
IPaC Information for Planning and Consultation
LE listed endangered
L_{eq} equivalent continuous sound level
L_{max} maximum sound level
LT listed threatened
ROW right-of-way
SWPPP Stormwater Pollution Prevention Plan
The Loop Chuck Huckelberry Loop
TI traffic interchange
UPRR Union Pacific Railroad
US United States
USFWS US Fish and Wildlife Service
XN experimental population, nonessential
1. Project Overview

1.1 Federal Nexus

Federal funding has been programmed for this project in the 2022–2026 Pima Association of Governments Transportation Improvement Program through Surface Transportation Block Grant funding for construction.

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 to begin in fall 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-SLI-0146) was accessed on October 12, 2021, and the Arizona Game and Fish Department (AGFD) Arizona Environmental Online Review Tool (Project ID: HGIS-10046) was accessed on November 8, 2021; 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. Only the tan shaded species in Table 1 is evaluated in detail in Appendix B. Justifications for excluding the other listed species from further evaluation are included in Table 1. The project and related erosion and sediment control measures will have no effect on species excluded from further evaluation.

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 deserts from 1,600 to 9,000 feet elevation.</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 deserts 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 (Serna 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>Sonoran Desert tortoise (Gopherus morafkai)</td>
<td>ESA C</td>
<td>Rocky habitats, bajadas, and washes within Sonoran or Mohave deserts.</td>
<td>No suitable habitat. No rocky habitats or bajadas 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>
<tr>
<td><strong>Insects</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monarch butterfly (Danaus plexippus)</td>
<td>ESA C</td>
<td>Blooming nectar plants during the monarch migration timeframe.</td>
<td>Addressed in Appendix B.</td>
</tr>
</tbody>
</table>


1 Elevations in this document are referenced to mean sea level.
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.

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 Desertscrub 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*) tamarisk (*Tamarix* spp.), and desertbroom (*Baccharis sarothroides*). Russian thistle (*Kali tragus*) is also present, particularly on the west side of I-10, and stinknet (*Oncosiphon pilulifer*) 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 desertscrub 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 construction equipment on the east and west sides of I-10 along Sunset Road
- Reconstructing Sunset Road from the Santa Cruz River bridge to I-10
• Constructing a temporary access route along the Rillito River for construction of the Rillito River bridge from Camino de la Tierra to the bridge location
• Constructing Sunset Road (a new road on a new alignment) from I-10 to River Road
• Constructing a bridge over the UPRR ROW
• Constructing a bridge over the Rillito River
• Constructing embankment and retaining walls along Sunset Road on the west and east sides of I-10
• Constructing ground improvements consisting of compaction grout columns below the retaining walls between the proposed UPRR bridge and the proposed Rillito River bridge
• Reconstructing portions of the existing Loop path
• Constructing a connection for the Loop path to Sunset Road on both sides of Rillito River
• Constructing new Portland cement concrete pavement
• Constructing new asphalt concrete pavement
• Removing and replacing fencing, as needed
• Removing and replacing guardrail to comply with Manual for Assessing Safety Hardware guidelines
• Removing temporary construction access routes and restoring to preconstruction conditions
• Removing existing signage and providing new signage as needed, including embedded advance-warning signs
• Obliterating/removing roadway striping and restriping roadway, as needed
• Constructing erosion control, as needed
• Installing catch basins and installing riprap, as needed
• Removing vegetation to access and construct the new Rillito River bridge

This project will occur in three phases, consisting of construction footprint preparation, project construction (construction of Sunset Road, including new pavement, embankment, retaining walls, and bridges), and construction footprint restoration. Preparation will begin by delineating an access route from Camino de la Tierra along the Rillito River to the Rillito River bridge location. Clearing and grubbing or grading of the construction footprint is anticipated to require earthmoving equipment such as an excavator, backhoe, bobcat, grader, bulldozer, front-end loader, or scraper. Following establishment of the access road, advance-warning signs will be placed along Silverbell Road and River Road. The construction footprint will then be cleared of vegetation, including tree removal, which will require a chainsaw for cutting, lopping, and bucking stems or clearing and grubbing. A bulldozer or front-end loader may be required to pick up or drag trees to remove them from the construction footprint. Trees removed from the construction footprint will be hauled off by the contractor.

The proposed UPRR bridge consists of a single span over the UPRR ROW and will involve constructing drilled shafts at each abutment, forming and pouring concrete for the abutments, erecting steel girders and forming and pouring the concrete deck. The proposed Rillito River bridge consists of three spans across the river and will involve constructing drilled shafts at the abutments and piers, forming and pouring concrete for the abutments and piers, erection of precast concrete girders, and forming and pouring of the concrete bridge deck. Mechanically stabilized earth walls supporting portions of Sunset Road will be constructed between the UPRR and the Rillito River bridges.
Once the road has been constructed, the bridges have been installed, and the existing bridge has been removed, the construction footprint will be regraded and restored to preconstruction conditions to the extent practicable. Seeding will be applied to all disturbed areas. Seed will be spread with handheld or electric broadcast seeders, drill seeding equipment, or a hydro-seeder. The new bridge decks and roadway will then require new striping. Striping may be applied as paint by a truck with a pressurized paint spraying system or as thermoplastic reflectorized material, such as extruded methyl methacrylate materials and 3M polymer pavement marking tapes, which are extruded or rolled into a shallow groove ground into the pavement surface. Construction is anticipated to begin in fall 2022, and the construction duration is anticipated to be approximately 24 months.

A disturbance area of approximately 25.6 acres (permanent and temporary) was calculated for the construction footprint. Permanent impacts (approximately 16.1 acres) from construction include the construction of the two bridges, roadway embankment, retaining walls, and new pavement. Temporary impacts (approximately 9.5 acres) from construction include temporary access routes and equipment maneuvering that will be restored to the extent practicable. It is unknown how many acres of vegetation removal will be required; groundcover, shrubs, immature trees, and mature trees will need to be removed during construction.

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.

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 Regional General Permit 96 with a Preconstruction Notification and conditional Section 401 Water Quality Certification. More than one acre of soil will be disturbed: 9.5 acres of ground will be temporarily disturbed, and 16.1 acres will be permanently disturbed. Permanent impacts to Waters of the United States will likely exceed 0.1 acre; therefore, a Preconstruction Notification will be required. A Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented, and an Arizona Pollutant Discharge Elimination System permit will be required. 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

Sound is measured in A-weighted decibels (dBA), and the equivalent continuous sound level is described as $L_{eq}$. The $L_{eq}$ sound level for roadways that passenger cars and motorcycles use typically ranges from 71 to 80 dBA at 50 feet from the roadway (USFWS 2006).

Equipment used to construct a bridge over the UPRR and the Rillito River and other associated activities will result in increased noise levels. For machinery noise level measurements, the $L_{max}$ or maximum sound level, is typically taken to account for the most extreme noise impact at a given time during the machinery’s use. The machines that will likely be used for construction include bulldozers (82 dBA at 50 feet), backhoes (78 dBA at 50 feet), excavators (81 dBA at 50 feet), graders (85 dBA at 50 feet), front-end loaders (79 dBA at 50 feet), and
scrapers (84 dBA at 50 feet) (FHWA 2006). The loudest piece of machinery to be used will be the grader, which produces 85 dBA at 50 feet (FHWA 2006). Sound levels drop by 6 dBA with every doubling of distance (FHWA 2017; OSHA 2021); therefore, at 100 feet, the loudest piece of equipment’s (grader’s) noise will drop to 79 dBA, which is within the range of the typical noise level on this kind of roadway.

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 trees will be removed; however, 9.5 acres of ground will be temporarily disturbed, and 16.1 acres will be permanently 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 extend beyond the construction footprint.

5.4 Action Area Limits

Noise impacts will occur in the action area at varying degrees, and the action area currently experiences a variety of noise impacts from roadway traffic, the railroad, and overhead aircraft. Noise impacts from construction-related equipment will be heard approximately 100 feet from the construction footprint. 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 construction footprint. 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 100 feet for noise impacts and 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. Therefore, completion of the project will have no effect on federally listed threatened or endangered species.
Figure 3. Action Area Map
7. Environmental Commitments

The following environmental commitments are for species discussed in Appendix B.

ADOT Roadside Development Section Responsibilities

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

- 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.

Southcentral District Responsibilities

- 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 by the approved biologist. The Engineer will confer with the approved biologist to determine the appropriate avoidance strategies until the nestlings have fledged from the nest and the nest is no longer active.

- 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 (602.341.9331) to evaluate the situation.

Contractor Responsibilities

- 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 with the 10 (ten) 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–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. 2006. Transmittal of guidance: Estimating the effects of auditory and visual disturbance to Northern spotted owls and marbled murrelets in northwestern California. Memorandum from field supervisor, Arcata Fish and Wildlife Office, Arcata, California.


9. **Signatures**

Prepared by: Maria M. Altemus
Name: Maria M. Altemus
Title: Biologist
Firm Name: EcoPlan Associates, Inc.

Reviewed by: [Signature]
Name: Thomas C. Ashbeck
Title: Director of Biological Resources
Firm Name: EcoPlan Associates, Inc.
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.
APPENDIX B
OTHER SPECIAL STATUS SPECIES

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 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 by the approved biologist. The Engineer will confer with the approved biologist to determine the appropriate avoidance strategies until the nestlings have fledged from the nest and the nest is no longer active.

- 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 (602.341.9331) to evaluate the situation.

**Contractor Responsibility**

- 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 with the 10 (ten) 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–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>Insects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monarch butterfly</td>
<td>Danaus plexippus</td>
<td>ESA C</td>
<td>No</td>
<td>Possibly</td>
<td>Possibly</td>
<td>Possibly</td>
</tr>
</tbody>
</table>

* C = candidate, ESA = Endangered Species Act

The monarch butterfly (*Danaus plexippus*) is designated a candidate species under the Endangered Species Act. Monarch butterflies migrate to Arizona in the spring from overwintering sites in California and Mexico. They follow the blooming of nectar plants to the north and from low to higher elevations and back between spring and fall. While the majority of monarchs return to overwintering sites in the fall, some monarchs remain in sheltered low-elevation riparian areas in central and southern Arizona during the winter months. This project may result in a temporary loss of monarch habitat.

VI. STATE SENSITIVE SPECIES

The AGFD Arizona Environmental Online Review Tool was accessed on November 8, 2021 (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. During active bridge construction, terrestrial animals may be deterred from traveling through the Rillito River; however, due to the high urbanization that surrounds the Rillito River, it is unlikely that animals will be permanently affected. Animals will likely move through the area when construction equipment is inactive and after construction is complete.
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, and October 13, 2021; the emails are included in this appendix.
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 hypogeae). 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 at pepi@azgfd.gov. 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 (https://ert.azgfd.gov), administered through the Heritage Data Management System (https://hdms.azgfd.com) and Project Evaluation Program (https://www.azgfd.com/wildlife/planning/projevalprogram/)

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

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**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: 02EAAZ00-2020-SLI-0146
Event Code: Some(02EAAZ00-2022-E-00129)
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 UP RR and the future alignment of the UP RR 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/@32.31136473902429,-111.03969697740831,14z

Counties: Pima County, Arizona
Endangered Species Act Species
There is a total of 8 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>
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</thead>
<tbody>
<tr>
<td>Jaguar <em>Panthera onca</em></td>
<td>Endangered</td>
</tr>
<tr>
<td><em>Thamnophis eques megalops</em></td>
<td>Threatened</td>
</tr>
<tr>
<td><em>Sonora Pronghorn Antilocapra americana sonoriensis</em></td>
<td>Candidate</td>
</tr>
<tr>
<td><em>Gopherus morafkai</em></td>
<td>Experimental</td>
</tr>
<tr>
<td><em>Sonoyta Mud Turtle Kinosternon sonoriense longifemorale</em></td>
<td>Endangered</td>
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</table>

**Birds**

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

**Insects**

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Danaus plexippus</em></td>
<td>Candidate</td>
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</table>

**Reptiles**

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Thamnophis eques megalops</em></td>
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</tr>
<tr>
<td><em>Gopherus morafkai</em></td>
<td>Candidate</td>
</tr>
<tr>
<td><em>Kinosternon sonoriense longifemorale</em></td>
<td>Endangered</td>
</tr>
</tbody>
</table>

**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 Department’s review of site-specific projects.

3. The Department’s 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

Web Map As Submitted By User

Project Size (acres): 49.89
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 P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community
Sunset Road: I-10 to River Road

Important Areas

Project Boundary
Buffered Project Boundary
Wildlife Connectivity
Important Connectivity Zones
Pinal County Riparian
Critical Habitat
Important Bird Areas

Project Size (acres): 49.89
Lat/Long (DD): 32.3103, -111.0412
County(s): Pima
AGFD Region(s): Tucson
Township/Range(s): T13S, R13E
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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 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>
</tr>
</thead>
<tbody>
<tr>
<td>Bat Colony</td>
<td>Yellow-billed Cuckoo (Western DPS)</td>
<td>LT</td>
<td>S</td>
<td>S</td>
<td></td>
<td>1A</td>
</tr>
<tr>
<td>Crotalus willardi willardi</td>
<td>Arizona Ridge-nosed Rattlesnake</td>
<td>S</td>
<td></td>
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<td>1A</td>
</tr>
<tr>
<td>Danaus plexippus</td>
<td>Monarch</td>
<td>C</td>
<td>S</td>
<td></td>
<td></td>
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</tr>
<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>
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<td>Glaucidium brasilianum cactorum</td>
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<tr>
<td>Gopherus morafkai</td>
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<tr>
<td>Heloderma suspectum</td>
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<tr>
<td>Leptonycteris yerbabuenae</td>
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<tr>
<td>Tumamoca macdougalii</td>
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<td>S</td>
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</tr>
</tbody>
</table>

*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 that Intersect with Project Footprint as Drawn

<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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</thead>
<tbody>
<tr>
<td>Rillito Creek/Tanque Verde Wash</td>
<td>Pima County Wildlife Movement Area - Riparian/Wash</td>
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<tr>
<td>Santa Cruz River</td>
<td>Pima County Wildlife Movement Area - Riparian/Wash</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Note: Status code definitions can be found at [https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/](https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/).*

### Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

<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>
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<td>Amazilia violiceps</td>
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<td>Anaxyrus retiformis</td>
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<td>Anthus spragueii</td>
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<td>Antrostomus ridgwayi</td>
<td>Buff-collared Nightjar</td>
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### Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

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<tr>
<th>Scientific Name</th>
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<td>Aspidoscelis stictogramma</td>
<td>Giant Spotted Whiptail</td>
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<td>Botaurus lentiginosus</td>
<td>American Bittern</td>
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<td>Calypte costae</td>
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<td>Chilomeniscus stramineus</td>
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<td>Cyprinodon macularius</td>
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<td>Dipodomys spectabilis</td>
<td>Banner-tailed Kangaroo Rat</td>
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<td>Empidonax wrightii</td>
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<td>American Peregrine Falcon</td>
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<td>Gopherus morafkai</td>
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<td>Gila Monster</td>
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<td>Incilius alvarius</td>
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<td>Kinosternon sonoriense sonoriense</td>
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<td>Lasiurus blossevillii</td>
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<td>Lepus alleni</td>
<td>Antelope Jackrabbit</td>
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<td>Macrotus californicus</td>
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<td>Melanerpes uropygialis</td>
<td>Gila Woodpecker</td>
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<td>Meleagris gallopavo mexicana</td>
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<td>Melozone aberti</td>
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<td>Micrathene whitneyi</td>
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<td>Micruroides euryxanthus</td>
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<td>Myiarchus tyrannulus</td>
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### Species of Greatest Conservation Need Predicted that Intersect with Project Footprint as Drawn, based on Predicted Range Models

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<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>FWS</th>
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<td>Myotis occultus</td>
<td>Arizona Myotis</td>
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<td>Myotis yumanensis</td>
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<td>Nyctinomops femorosaccus</td>
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<td>Oreoscoptes montanus</td>
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<td>Oreothlypis luciae</td>
<td>Lucy's Warbler</td>
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<td>Panthera onca</td>
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<td>Peucaea carpalis</td>
<td>Rufous-winged Sparrow</td>
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<td>Phrynosoma solare</td>
<td>Regal Horned Lizard</td>
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<td>Phyllorhynchus browni</td>
<td>Saddled Leaf-nosed Snake</td>
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<td>Setophaga petechia</td>
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<td>Sphyrapicus nuchalis</td>
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<td>Tadarida brasiliensis</td>
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<td>Terrapene ornata</td>
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<td>Toxostoma lecontei</td>
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<td>Trogodytes pacificus</td>
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<td>Vulpes macrotis</td>
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### Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

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<td>Callipepla gambelli</td>
<td>Gambel's Quail</td>
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<td>Pecari tajacu</td>
<td>Javelina</td>
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<td>Mountain Lion</td>
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<td>Zenaida macroura</td>
<td>Mourning Dove</td>
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Project Type: Transportation & Infrastructure, Bridge replacement/New Construction, In-stream geotech boring, abutments, stream crossing, realignment, channelization, rip rap, vegetation removal

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/.

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 the potential introduction or spread of exotic invasive species, including aquatic and terrestrial plants, animals, insects and pathogens. Precautions should be taken to wash and/or decontaminate all equipment utilized in the project activities before entering and leaving the site. See the Arizona Department of Agriculture website for a list of prohibited and restricted noxious weeds at https://www.invasivespeciesinfo.gov/unitedstates/az.shtml and the Arizona Native Plant Society https://aznps.com/invas for recommendations on how to control. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives - a national cloud-based application for tracking and managing invasive species at https://imap.natureserve.org/imap/services/page/map.html.

- To build a list: zoom to your area of interest, use the identify/measure tool to draw a polygon around your area of interest, and select “See What’s Here” for a list of reported species. To export the list, you must have an account and be logged in. You can then use the export tool to draw a boundary and export the records in a csv file.

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

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) for specific project 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/](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/)
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 (rmixan@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 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/.

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...
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
From: Sabra Tonn <stonn@azgfd.gov>
Sent: Thursday, November 21, 2019 1:36 PM
To: Maria Altemus
Subject: Re: Species Occurrences near Sunset/I-10 in Tucson

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

gila.topminnow | 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,
From: Sabra Tonn <stonn@azgfd.gov>
Sent: Wednesday, October 13, 2021 4:30 PM
To: Maria Altemus
Subject: Re: Species Occurences near Sunset/I-10 in Tucson (HGIS-11046)

• (New) Monarch about 1.5 miles to the south and also SE 2021. There are monarchs all over the Tucson area.
• YBCU - update of previous records at Sweetwater Wetlands in 2020 and 2021.
• Sonoran Desert Tortoise - no new data since last provided in 2019.
• Burrowing owl - no new data since last provided in 2019.
• Gila topminnow - two records in 2019 from sampling along the Santa Cruz (Roger/El Camino del Cerro Santa Cruz annual sampling site and Silverbell Santa Cruz annual sampling site) within 1 mile south and 2 miles north.

On Tue, Oct 12, 2021 at 3:37 PM Maria Altemus <maltemus@ecoplanaz.com> wrote:

Hi Sabra,

Can you please give me any updates on species occurrences near this project in Tucson (HGIS-11046)? Thank you.

• (New) Monarch
• YBCU
• Sonoran Desert Tortoise
• Burrowing owl
• Gila topminnow

All the best,

Maria M. Altemus | EcoPlan Associates, Inc.

O: (520) 624-4326, ext. 111 | C: (520) 624-4326, ext. 211
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Let me know if you have any other questions.

SABRA TONN | HDMS PROGRAM SUPERVISOR
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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

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