Table 1. USFWS Endangered, Threatened, Proposed for listing, or Candidate for listing; Potential for Occurrence in the Project Area; Basis for the Determination of Potential Occurrence; and Determination of Project’s Effects.

<table>
<thead>
<tr>
<th>Species and Status</th>
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<th>Potential to occur at Project Area; Justification for determination</th>
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</thead>
<tbody>
<tr>
<td><strong>PLANTS</strong></td>
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</tr>
</tbody>
</table>
| Wright’s Marsh thistle *(Cirsium wrightii)* | Range: Extirpated from all previously known locations in Arizona.  
Habitat: Wet, alkaline soils in spring seeps, cienegas, and marshy edges of streams and ponds, in otherwise semi-arid to arid areas.  
Elevation: 3,450 to 8,500 ft  
Reference(s): AGFD 2010a | Potential to occur: None  
This species is extirpated from Arizona. The Project Area is largely disturbed and follows existing paved roads within Pomerene, Arizona; therefore, there are no cienegas, streams, springs, or ponds within the Project Area to support this species.  
Determination of Effects: The Project is not expected to adversely impact this species or result in a trend towards federal listing of the Wright’s marsh thistle. |
| **INVERTEBRATES**  |                                                  |                                                                     |
| Huachuca springsnail *(Pyrgulopsis thompsoni)* | Range: Springs in Huachuca Mountains of southern Santa Cruz County and San Rafael Valley of Cochise County, Arizona.  
Habitat: Springs and cienegas inhabited by the snail are typically marshy areas characterized by various aquatic and emergent plant species that occur within plains grasslands, oak and pine-oak woodlands, and coniferous forest vegetation communities. Typically occupies shallower areas within the cienega, which are often very limited. Often found in the rocky seep areas at the spring source.  
Elevation: 4,500 to 7,000 ft  
Reference(s): AGFD 2003 | Potential to occur: None  
The Project Area is outside of the known geographic and elevational range and does not contain springs or cienegas required by the species.  
Determination of Effects: The Project is not expected to adversely impact this species or result in a trend towards federal listing of the Huachuca springsnail. |
### AMPHIBIANS

<table>
<thead>
<tr>
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</thead>
</table>
| Arizona treefrog   | **Range**: Forested central plateau north of Mogollon Rim and isolated populations in the Huachuca Mountains and adjacent Canelo Hills in southeastern Arizona.  
**Habitat**: In Arizona, found on the ground or in shrubs and trees near ponds, pools and streams, usually in coniferous forests.  
**Elevation**: 3,000 to 9,500 ft  
**Reference(s)**: AGFD 2013 | **Potential to occur**: None  
The Project Area is outside the geographic distribution of the species and occurs along existing paved roads and previously disturbed land in Pomerene, Arizona; therefore, it does not contain suitable habitat of coniferous forests with perennial water.  
**Determination of Effects**: The Project is not expected to adversely impact this species or result in a trend towards federal listing of the Arizona treefrog. |

### REPTILES

<table>
<thead>
<tr>
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</thead>
</table>
| Northern Mexican gartersnake (Thamnophis eques megalops) | **Range**: Historic range included much of the greater Gila River Basin. Currently found in less than 10% of former range and restricted to isolated, scattered populations.  
**Habitat**: Perennial cienegas, cienega-streams, riparian forests and woodlands; usually associated with dense vegetation.  
**Elevation**: 3,000 to 5,000 ft  
**Reference(s)**: AGFD 2012 | **Potential to occur**: None  
The Project Area is outside the geographic distribution of the species and occurs along existing paved roads and previously disturbed land in Pomerene, Arizona; therefore, it does not contain suitable habitat of coniferous forests with perennial water.  
**Determination of Effects**: The Project is not expected to adversely impact this species or result in a trend towards federal listing of the Arizona treefrog.  
**Section F6** for further discussion. |
### Species and Status

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<tr>
<td><strong>Sonoran desert tortoise</strong></td>
<td><strong>Range:</strong> South and east of the Colorado River, generally keeping south of the Mogollon rim. Middle portion of the San Pedro River drainage harbors the easternmost substantial tortoise population. <strong>Habitat:</strong> Found primarily on rocky slopes and bajadas of Sonoran desertscrub; also found associated with caliche caves (shelter sites) along lower Sonoran Desert washes. <strong>Elevation:</strong> 510 to 5,300 ft <strong>Reference(s):</strong> AGFD 2010b</td>
<td><strong>Potential to occur:</strong> Possible Although geographically, the Project Area is located along the bajadas and terraces of the San Pedro River floodplain, the proposed Project will occur along existing paved roads and previously disturbed land in Pomerene, Arizona. The AGFD HDMS includes records of the species within 3 miles of the Project Area (Appendix C) Biologists familiar with this species surveyed the Project Area. No shelter sites (rocky slopes, caliche dens, other hard cover), sign, tracks, or individual tortoise were observed during this survey (See Section B.10c for further discussion). <strong>Determination of Effects:</strong> Adverse impacts to the Sonoran desert tortoise are not expected though dispersing individuals may have some potential to occur in the Project Area. The Project is not expected to adversely impact desert tortoise or result in a trend towards federal listing of the Sonoran desert tortoise.</td>
</tr>
<tr>
<td><strong>Sprague pipit</strong> (Anthus spragueii)</td>
<td><strong>Range:</strong> Winters in grasslands of the San Rafael, Sonoita, and Sulphur Spring valleys in southeastern Arizona. <strong>Habitat:</strong> Native grasslands, pastures, and weedy fields with vegetation of intermediate height and lacking woody shrubs. A few individuals have been recorded foraging in agricultural fields. <strong>Elevation:</strong> below 5,000 ft <strong>Reference(s):</strong> AGFD 2010c</td>
<td><strong>Potential to occur:</strong> None The Project Area is located outside the normal wintering area of the species and although it is within the vicinity of agricultural fields that could potentially provide suitable foraging habitat, the Project Area itself does not provide suitable habitat for this species or potential foraging habitat of native grassland or agricultural fields. <strong>Determination of Effects:</strong> The Project is not expected to adversely impact this species or result in a trend towards federal listing of the Sprague pipit.</td>
</tr>
</tbody>
</table>
### Species and Status

**Mexican spotted owl**
*(Strix occidentalis lucida)*

- **Federal**: Threatened (USFWS 1993)
- **Critical Habitat**: Yes
- **Final**: (USFWS 2004)
- **Recovery Plan**: Yes (USFWS 2012a)

**Known Geographic Range and Habitat Preference(s)**

- **Range**: Patchily distributed in forested areas throughout Arizona.
- **Habitat**: Breed primarily on dense old growth mixed conifer forests.
- **Elevation**: 3,700 to 9,600 ft (AZ)
- **Reference(s)**: AGFD 2005

**Potential to occur at Project Area; Justification for determination**

- **Potential to occur**: None
- **Justification**: The Project Area does not support dense old growth mixed conifer forests as it is located in developed portions of Pomerene, Arizona along roadways. There is no Critical Habitat in the vicinity of the Project Area. The nearest designated critical habitat is approximately 8 miles southwest of the Project Area in the higher elevations of the Huachuca Mountains.

**Determination of Effects**: No Affect

**Northern aplomado falcon**
*(Falco femoralis septentrionalis)*

- **Federal**: Experimental Population, Non-Essential (USFWS 2006)
- **Critical Habitat**: No
- **Recovery Plan**: Yes (USFWS 1990)

**Known Geographic Range and Habitat Preference(s)**

- **Range**: Historically occurred through the southwestern U.S. Thought to be extirpated from AZ since 1940.
- **Habitat**: Semi-desert grasslands or riparian associations with scattered trees and shrubs.
- **Elevation**: 3,300 to 4,900 ft (SW U.S.)
- **Reference(s)**: AGFD 2001

**Potential to occur at Project Area; Justification for determination**

- **Potential to occur**: None
- **Justification**: There are no substantiated occurrence records of this species in Arizona since 1940 and its status in the state is regarded as questionable.

**Determination of Effects**: The Project is not expected to adversely impact the northern aplomado falcon.

**Southwestern willow flycatcher**
*(Empidonax traillii extimus)*

- **Federal**: Endangered (USFWS 1995a)
- **Critical Habitat**: Yes (USFWS 2013b)
- **Recovery Plan**: Yes (USFWS 2002)

**Known Geographic Range and Habitat Preference(s)**

- **Range**: Known throughout much of the southwestern United States, from southern California to western Texas. Breeds near the mouth and headwaters of the Little Colorado River, along the middle Gila, Salt, Verde, and the middle to lower San Pedro River.
- **Habitat**: Cottonwood/willow and/or tamarisk riparian communities along rivers and streams; prefer riparian areas with dense under- and mid-story vegetation that is ≥ 10 ft in height, with or without canopy cover, and in close proximity to surface water.
- **Elevation**: 75 to 9,200 ft
- **Reference(s)**: AGFD 2002

**Potential to occur at Project Area; Justification for determination**

- **Potential to occur**: None
- **Justification**: The Project Area itself does not support the appropriate dense, emergent, riparian vegetation communities with nearby surface water required by the Southwestern willow flycatcher for breeding. There is no designated Critical Habitat in the immediate vicinity of the Project Area. The nearest designated Critical Habitat is along a reach of the San Pedro River approximately 10 miles north of the Project Area. The Project is not expected to affect surface flows or have adverse impacts to riparian habitat along the San Pedro River (See Section F6 for further discussion).

**Determination of Effects**: No Affect
### Yellow-billed cuckoo

*Species and Status*
- **Species**: *Coccyzus americanus*
- **Federal**:
  - Western DPS Proposed Threatened (USFWS 2013c)
- **Critical Habitat**: No
- **Recovery Plan**: No

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| **Range**: A late spring migrant from South America, cuckoos breed throughout the western U.S. They occur in west, central and southeastern Arizona. **Habitat**: Associated with a variety habitat types, including humid, riparian woodlands dense with cottonwood, willow, and tamarisk galleries, as well as dryer areas, where thornscrub, desertscrub, and upland Sonoran desert are the dominant vegetative communities. In southeastern Arizona they are known to nest along intermittent streams supporting dense stands of mesquite and netleaf hackberry. **Elevation**: < 6,700 ft (more typically < 5,000 ft) | **Potential to occur**: Limited Potential  
This species occurs frequently along the lower San Pedro River. Patches of riparian habitat within or in the vicinity of the Project Area are small and not considered suitable habitat for this species, though the potential for migratory-bound, dispersing birds to occasionally be present cannot be discounted. The Project is not expected to affect surface flows or have adverse impacts to riparian habitat along the San Pedro River (See Section F-6 for further discussion). **Determination of Effects**: While there is potential for individuals to fly over the Project Area, the Project is not expected to adversely impact or jeopardize the continued existence of the yellow-billed cuckoo. |

### Jaguar

*Species and Status*
- **Species**: *Panther onca*
- **Federal**:
  - Endangered (USFWS 1972)
- **Critical Habitat**: Yes (USFWS 2014b)
- **Recovery Plan**: Yes (Draft) (USFWS 2012b)

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| **Range**: Globally, from southern U.S. to South America. Recent observations in AZ have been restricted to mountain ranges of southeastern AZ. **Habitat**: Occur in a variety of habitats; in recent AZ observations this has been restricted to oak-pine woodlands. **Elevation**: 5,200 to 5,700 ft (AZ) | **Potential to occur**: Limited Potential  
Historic records for this species exist throughout Arizona; however, recent observations are limited to mountainous regions of southern Arizona. No records of the species are known from the vicinity of the Project Area. The only known Jaguar in Arizona occurs in the Santa Rita Mountains approximately 35 miles southwest of the Project Area. Considering the level of development and human activity in the Project Area and this species’ tendency to avoid areas with human activity, Jaguars are not expected to occur. The nearest designated Critical Habitat is between the Huachuca mountains and AZ State Route 90, approximately 8 miles southwest of the Project Area. The Project is not expected to affect surface flows or have adverse impacts to riparian habitat along the San Pedro River (See Section F6 for further discussion). **Determination of Effects**: No Affect |

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**M A M M A L S**

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| Jaguar (Panther onca) | **Potential to occur**: Limited Potential  
Historic records for this species exist throughout Arizona; however, recent observations are limited to mountainous regions of southern Arizona. No records of the species are known from the vicinity of the Project Area. The only known Jaguar in Arizona occurs in the Santa Rita Mountains approximately 35 miles southwest of the Project Area. Considering the level of development and human activity in the Project Area and this species’ tendency to avoid areas with human activity, Jaguars are not expected to occur. The nearest designated Critical Habitat is between the Huachuca mountains and AZ State Route 90, approximately 8 miles southwest of the Project Area. The Project is not expected to affect surface flows or have adverse impacts to riparian habitat along the San Pedro River (See Section F6 for further discussion). **Determination of Effects**: No Affect |
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| Lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*)  
Federal: Endangered (USFWS 1988)  
Critical Habitat: No  
Recovery Plan: Yes (USFWS 1995b) | **Range:** A summer migrant that winters in Central America, Lesser Long-nosed bats are found locally in the U.S. only in southern Arizona and extreme southwestern New Mexico from April to late-September. Peripheral observations exist from the Phoenix area and the Pinaleño Mountains  
**Habitat:** Sonoran desertscrub through semi-desert grasslands and into oak woodlands where columnar cacti and agaves occur. Roosts in caves, abandoned mines and occasionally old buildings. Forages at night on nectar, pollen, and possibly fruit of columnar cacti and agaves.  
**Elevation:** 1,200 to 7,300 ft (most often < 5500 ft)  
**Reference(s):** AGFD 2011b | **Potential to occur:** Limited Potential  
Although the Project is located within the geographic distribution of the species, it does not support appropriate foraging plant species (i.e., no agaves and no saguaros) or roost sites (i.e., no caves or abandoned mines). The species may occasionally fly over the Project Area as it is known to have a relatively large foraging area.  
**Determination of Effects:** No Affect  
While the species may occasionally fly over the Project Area, the absence of roosts, suitable foraging habitat, and considering the short-term nature of the planned construction, the proposed action is not expected to adversely impact individual lesser long-nosed bats. |
| Ocelot (*Leopardus pardalis*)  
Federal: Endangered (USFWS 1982)  
Critical Habitat: No  
Recovery Plan: Yes (Draft) (USFWS 2010d) | **Range:** Globally ranges from the southern U.S. to northern South America. In U.S., currently known from AZ and south Texas.  
**Habitat:** Areas with dense cover and avoids open areas. Desertscrub communities in Arizona, thickets in Texas, and humid tropical and coastal habitats in the southern U.S.  
**Elevation:** generally < 4,000 ft  
**Reference(s):** AGFD 2010d | **Potential to occur:** Limited Potential  
Recent records indicate this species occurs north and south of the Project Area. We are aware of no records in the Vicinity of the Project Area. Considering the level of development and human activity in the Project Area and this species’ tendency to avoid areas with human activity, Ocelots are not expected to occur. The Project is not expected to affect surface flows or have adverse impacts to riparian habitat along the San Pedro River (See Section F6 for further discussion).  
**Determination of Effects:** No Affect |