EXHIBIT D
BIOLOGICAL RESOURCES

In accordance with Arizona Administrative Code R14-3-219, the Applicant provides the following information:

List the fish, wildlife, plant life and associated forms of life in the vicinity of the proposed site or route and describe the effects, if any, the proposed facilities will have thereon.

Introduction

To identify vegetation and wildlife that may occur at or in the vicinity of the proposed Project Huckleberry 230 kilovolt (kV) Transmission Line Project (Project Huckleberry or Project), KP Environmental, Inc. (KPE) reviewed the following sources:

- Topographical and aerial maps and land use, land cover, and elevation data.
- Arizona Game and Fish Department (AGFD) Online Environmental Review Tool.
- The following resources were utilized to analyze the potential occurrence of common plant life, mammals, birds, reptiles and amphibians:
    - *Biotic Communities: Southwestern United States and Northwestern Mexico* (Brown, 1994).
    - The *Mammals of Arizona. University of Arizona Press* (Hoffmeister, 1986).
    - *Arizona Breeding Bird Atlas. University of New Mexico Press* (Corman and Wise-Gervais, 2005).
    - *A Field Guide to Western Reptiles and Amphibians. Peterson Field Guides* (Stebbins, 1985).

In addition, several surveys have been conducted within the Project area for biological resources:

- In June and July of 2021, an AECOM biologist with expertise in the biology of flora and fauna of the region completed on-ground field reconnaissance surveys of the Project area.
- In January 2022, Salt River Project Agricultural Improvement and Power District (SRP) biologists performed a pre-construction burrowing owl and migratory bird nest survey for the proposed 230 kV transmission line right-of-way (ROW).
- In March 2022, SRP biologists performed a native plant survey of the proposed 230 kV transmission line ROW.

Exhibit D-1 contains **Tables D-1, D-2, D-3,** and **D-4** which include lists of common plant life, mammals, birds, reptiles, and amphibians potentially present in Maricopa County and within the vicinity of the Project.

The analysis determined that overall habitat quality, plant diversity, and vegetation density within the Project area is extremely low. The Project area has been mostly cleared of native vegetation during construction and operation of the General Motors (GM) Desert Proving Ground that closed

in 2009 and, more recently, for construction staging for Meta's Mesa Data Center (Data Center). In addition, the Project is located in an area with active residential, commercial, and industrial development.

Existing Conditions

Vegetation

The Project is within a disturbed area adjacent to residential, commercial and industrial developments and several paved roadways including Elliot Road, Loop 202, Warner Road, Ellsworth Road, and several unnamed dirt roads. Additionally, the proposed 230 kV transmission line would cross Ellsworth Road. Elevations within the Project area are relatively flat and range from 1,380 to 1,400 feet. The vegetation communities found within the area are described below. **Table D-1** in **Exhibit D-1** lists some of the native species that could be found within the Project area and Maricopa County generally.

Sonoran Desert Scrub

The Project site is mapped as having native vegetation characteristics of the Lower Colorado River Valley subdivision of the Sonoran Desert scrub biome; however, the entire proposed Prickly Pear 230 kV Substation site has been mostly cleared of native vegetation (AECOM, 2021). The proposed 230 kV transmission line ROW and surrounding areas contain sparse Sonoran Desert scrub vegetation. Native vegetation that occurs within this vegetation type and within the Project area includes scattered velvet mesquite (*Prosopis velutina*) and creosote bush (*Larrea tridentata*). Greythorn (*Ziziphus obtusifolia*), wolfberry (*Lycium greggii*), rubber rabbitbrush (*Chrysothamnus nauseosus*), brittlebush (*Encelia farinosa*), desert globe mallow (*Sphaeralcea ambigua*), and big saltbush (*Atriplex lentiformis*) are also present in smaller numbers. Patches of bare ground are prevalent throughout the Project area (AECOM, 2021; SRP, 2022a and 2022b).

Disturbed Habitat

The Project area contains graded areas and several paved and dirt roadways. The area within the proposed Prickly Pear 230 kV Substation and surrounding areas have been disturbed by construction and operation of the GM Desert Proving Ground that closed in 2009 and, more recently, for construction staging for the Data Center (AECOM, 2021). Residential developments, construction of a 69 kV transmission line and roadside landscaping exist within and adjacent to the Project. There are scattered and isolated native plants along these features.

Wildlife

Wildlife resources within the Project area are predominantly associated with disturbed or landscaped habitats. Species occurrence, abundance, and distribution are strongly influenced by the topography and habitat types.

Wildlife species that were observed during field surveys include the round-tailed ground squirrel (*Xerospermophilus tereticaudus*), black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis*

latrans), desert cottontail (*Sylvilagus audubonii*), common raven (*Corvus corax*), great horned owl (*Bubo virginianus*), killdeer (*Charadrius vociferus*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), Gambel's quail (*Callipepla gambelii*), and black-throated sparrow (*Amphispiza bilineata*) (AECOM, 2021; SRP, 2022a and 2022b).

Tables D-2, D-3, and **D-4** in **Exhibit D-1** present lists of common mammals, birds, reptiles, and amphibians that may occur or that have been observed within Maricopa County in habitats similar to those in the Project area. Some of the species are also listed in **Exhibit C** as Wildlife of Special Concern; although there is a potential for these species to occur, field verification shows that it is unlikely.

Mammals

Most mammalian species likely to be present are small, inconspicuous, largely nocturnal species of rodents and bats. Desert-adapted rodents include pocket mice and kangaroo rats. Additionally, several species of bats could be present within the Project area. Medium-sized mammals that could be found or were observed during field surveys within the Project area include the desert cottontail, black-tailed jackrabbit, coyote, gray fox (*Urocyon cinereoargenteus*), bobcat (*Felis rufus*), and badger (*Taxidae taxus*). Large mammals are not expected to occur. **Table D-2** in **Exhibit D-1** presents a more comprehensive list of mammalian species that may occur within the Project area and Maricopa County.

Birds

Most bird species likely to be present are associated with urbanized land uses and disturbed areas. The majority of the birds present during any given season are small songbirds, doves, and raptors such as the red-tailed hawk (**Table D-3** in **Exhibit D-1**).

Amphibians and Reptiles

Relatively undisturbed desert habitats represent the best habitat for reptiles, although some species could be found in disturbed areas. Water resources do not exist in the Project area; therefore, amphibians would not be expected to be present on the site. **Table D-4** in **Exhibit D-1** presents a list of amphibian and reptilian species that could be present in the vicinity of the Project area and in Maricopa County.

Invasive Weed Species and Noxious Weeds

Non-native and weed species typically dominate disturbed and unmaintained areas. It is possible that invasive weed species and/or noxious weeds are present in the disturbed areas within the proposed Prickly Pear 230 kV Substation Project area. One invasive weed species, stinknet (*Oncosiphon piluliferum*) was observed along the proposed 230 kV transmission line ROW during the native plant survey (SRP, 2022b).

Summary of Potential Effects

The following sections address the potential effects from development of the Project components to the biological resources that are likely to occur in the Project area.

Proposed Prickly Pear 230 kV Substation

Vegetation

The proposed Prickly Pear 230 kV Substation was previously disturbed, is largely devoid of vegetation and is part of the overall Data Center parcel. Therefore, the proposed Prickly Pear 230 kV Substation would only have impacts on disturbed habitats; no natural habitats or vegetation would be disturbed. With implementation of SRP's proposed measures described in **Exhibit C**, **Table C-3**, there would be no expected change in species composition and no impact to vegetation communities within the area as a result of construction or operation due to the lack of vegetation within the construction area.

Wildlife

The proposed Prickly Pear 230 kV Substation would result in the temporary and permanent disturbance of very low-quality wildlife habitat (disturbed areas).

Mammals

Project construction activities could cause death or injury to terrestrial mammals that may not be able to flee from heavy equipment or vehicular traffic, with a higher likelihood of these impacts for individuals of species that are small, nocturnal, or fossorial. Substation construction could cause behavior changes, as individuals would be expected to flee from an increase of noise, vibration, and human presence within the Project area. Individuals would be expected to flee or hide, depending on the species' life history, which could increase depredation, decrease foraging success, reduce reproductive success, and result in loss of fitness for that individual from increased metabolic output. Substation construction activities would be short-term and temporary. The loss and degradation of mammal habitat from short- and long-term Project activities would be negligible as the proposed Prickly Pear 230 kV Substation area is relatively small, contains no natural vegetation, and is entirely disturbed. Similarly, because the Project area is largely disturbed and contains residential and industrial developments and associated roads, any loss of vegetation from construction activities would not contribute meaningfully to habitat fragmentation for mammals or decrease connectivity between habitats.

Project activities that may occur at night or nighttime could impact bat activity patterns. The increase of nighttime lighting in the Project area has the potential to attract insects, which could have minor beneficial impacts to some bat species if their food source increases. However, some bat species would likely shift their foraging activities away from construction and additional light. The loss of habitat in the Prickly Pear 230 kV Substation area is unlikely to have population-level impacts to any bat species because the area of disturbance is relatively small compared with the available habitat outside of the Project area.

With implementation of SRP's proposed measures (**Exhibit C**, **Table C-3)**, impacts on mammals associated with the Prickly Pear 230 kV Substation would be minor. Operation of the facility would include periodic maintenance activities in existing disturbed areas; because of this, impacts to mammalian wildlife species are expected to be very minimal.

Birds

Breeding habitat for birds within the construction area for the proposed Prickly Pear 230 kV Substation would be limited to ground nesting birds due to the lack of vegetation. If construction occurs during the breeding season (approximately February 1 to August 31), a pre-construction nest survey would be conducted 30 days prior to construction by a qualified biologist and active nests would be avoided or removed before they become active, if possible. If active nests cannot be avoided, on-site personnel will contact the SRP Avian Protection Program for steps to take to ensure the nesting birds are protected. Therefore, there would be no impacts to active nests.

Birds, including raptors, can collide with powerlines, resulting in injury or death (APLIC, 2012). Birds that are large-bodied, are fast flyers, have large wing spans, or that have low maneuverability (e.g., many wading birds or waterfowl) or birds that show certain behaviors (e.g., flocking, flying at altitudes at or below powerline height, or birds that nest or forage in close proximity to powerlines) have a higher risk of impacts from powerline collisions (APLIC, 2012). Birds generally avoid collision with powerlines when they are perceived by the bird, and therefore collision risk is lower in areas such as within the Project area where multiple transmission lines are co-located, or transmission lines are placed near other infrastructure (APLIC, 2012).

Powerlines can also cause electrocution when a bird is able to touch both energized and grounded electrical components at the same time, which is generally more common in birds with large wing spans, birds that use power poles for their life history activities (e.g., perching, foraging, roosting, or nesting), or in situations where electrical configurations include closely spaced energized and grounded components that are easily spanned by birds (APLIC, 2006). The proposed Prickly Pear 230 kV Substation infrastructure would be constructed following industry practices aimed at reducing avian collisions and electrocutions (APLIC, 2006 and 2012). If avian line interactions become an issue, SRP will move quickly to evaluate the issue and craft a solution using appropriate measures.

Potential impacts resulting from behavioral changes arising from increased noise, vibration, or human presence would be the same as those described for terrestrial mammals. Potential impacts from the loss, degradation, and fragmentation of bird habitat from Project activities would be the same as those described for terrestrial mammals. With implementation of SRP's proposed measures (**Exhibit C**, **Table C-3)**, impacts on birds associated with the Prickly Pear 230 kV Substation would be minor. Operation of the facility would include periodic maintenance activities in existing disturbed areas; because of this, impacts to bird species are expected to be very minimal.

Amphibians and Reptiles

Potential impacts to reptiles and amphibians including death, injury, or impacts arising from behavior changes would be similar to those described for terrestrial mammals. No amphibians are expected to be encountered within the Project area due to the lack of water sources in the vicinity. Fossorial reptiles, reptiles that are inactive due to heat or cold, and small reptiles would have a higher chance of injury or death compared with those individuals that are more mobile. Potential impacts from the loss, degradation, and fragmentation of reptile habitat from substation construction would be the same as those described for terrestrial mammals. With implementation of SRP's proposed measures (**Exhibit C**, **Table C-3)**, direct impacts on reptiles and amphibians associated with the proposed Prickly Pear 230 kV Substation would be short-term and minor. Operation of the facilities would include periodic maintenance activities along existing disturbed areas; because of this, direct impacts to reptiles and amphibians are expected to be very minimal.

Invasive Weed Species and Noxious Weeds

Invasive weed species and/or noxious weeds have the potential to occur as a result of previous construction and the current disturbed nature of the area. The spread of invasive weeds is not expected due to the implementation of SRP's proposed mitigation measures described in **Exhibit C**, **Table C-3**. To minimize the potential spread of invasive weed species into the area, all heavy equipment from other geographic areas utilized during construction would be washed prior to arrival on site. This would ensure that weed seed from a different area is not transported into the Project area.

Proposed 230 kV Transmission Line

Vegetation

The proposed 230 kV transmission line has native vegetation characteristics of the Lower Colorado River Valley subdivision of the Sonoran Desert scrub biome; however, vegetation is limited within the ROW (AECOM, 2021). The construction of the proposed 230 kV transmission line would result in temporary impacts from pads, access roads, and pulling/tensioning sites within the ROW along approximately 0.5 mile of Sonoran Desert scrub habitat. The Project would permanently impact only areas associated with pole locations and the access road. With implementation of SRP's proposed measures described in **Exhibit C**, **Table C-3**, there would be no change in species composition and there would only be a small impact to vegetation communities at the actual pole locations as a result of construction or operation. Therefore, the proposed 230 kV transmission line would have minor impacts on vegetation communities within the Project area.

Wildlife

The proposed 230 kV transmission line would result in the temporary and permanent disturbance of low-quality wildlife habitat (disturbed habitat and limited Sonoran Desert scrub). Additionally, the approximately 0.5-mile route is located adjacent to a 69 kV transmission line that is currently under construction. Construction-related impacts associated with the proposed 230 kV transmission line would be temporary and short-term.

Mammals

Construction-related impacts including death, injury, or impacts arising from behavior changes to mammal species would be the same as those described for the proposed Prickly Pear 230 kV Substation in the sections above. With implementation of SRP's proposed measures (**Exhibit C**, **Table C-3)**, impacts on mammalian wildlife species associated with the proposed 230 kV transmission line would be short-term and minor. Operation of the facilities would include periodic maintenance activities along existing disturbed areas; because of this, direct impacts to mammalian wildlife species are expected to be very minimal.

Birds

Bird nests could be encountered on existing transmission line poles, in trees and shrubs, and on the ground within the vicinity of the proposed 230 kV transmission line. If construction occurs during the breeding season (approximately February 1 to August 31), a pre-construction nest survey would be conducted 30 days prior to construction by a qualified biologist and active nests would be avoided or removed before becoming active, if possible. If active nests cannot be avoided, on-site personnel would contact the SRP Avian Protection Program for steps to take to ensure the nesting birds are protected. Therefore, there would be no impacts to active nests.

The proposed 230 kV transmission line could create a slight collision risk to birds. However, due to the very short length of overhead lines, the fact that the proposed 230 transmission line is being built in close proximity to an existing transmission line ROW and an in-construction 69 kV transmission line, the degraded nature of the habitats within and adjacent to the proposed ROW, the amount of industrial and residential development in the Project area, and the lack of high-quality foraging and migration areas in the Project area, this risk would be low and would represent a minor adverse impact on bird species. Although the proposed 230 kV transmission line would be slightly taller than the in-construction 69 kV transmission line, resident bird species are likely accustomed to the existing lines in the area and would become accustomed to the in-construction line; collision risk would be minimal. If avian line interactions become an issue, SRP would move quickly to evaluate the issue and craft a solution using appropriate measures.

Amphibians and Reptiles

Construction-related impacts to reptile and amphibian species including death, injury, or impacts arising from behavior changes would be the same as those described for the proposed Prickly Pear 230 kV Substation in the sections above. No amphibians are expected to be encountered within the Project area due to the lack of water sources in the vicinity. With implementation of SRP's proposed measures (**Exhibit C**, **Table C-3)**, impacts on reptiles and amphibians associated with the proposed 230 kV transmission line would be short-term and minor. Operation of the facilities would include periodic maintenance activities along existing disturbed areas; because of this, impacts to reptiles and amphibians are expected to be very minimal.

Invasive Weed Species and Noxious Weeds

Invasive weed species and/or noxious weeds have the potential to occur in the Project area as a result of previous construction and the current disturbed nature of the Project area within and adjacent to the proposed 230 kV transmission line. The spread of invasive weeds is not expected due to the implementation of SRP's proposed mitigation measures described in **Exhibit C**, **Table C-3**. To minimize the potential spread of invasive weed species into the Project area, all heavy equipment from other geographic areas utilized during construction would be washed prior to arrival on site. This would ensure that weed seed from a different area is not transported into the area.

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EXHIBIT D-1
BIOLOGICAL RESOURCES TABLES

Table D-1 Plant Species Potential Occurrence in Isolated Disturbed/Native Habitats in the Vicinity of the Project Area[1]		
Common Name	**Scientific Name**	**Ecosystem**
Triangleleaf bursage	*Ambrosia deltoidea*	Sonoran Desertscrub, Sonoran Riparian
White bursage	*Ambrosia dumosa*	Sonoran Desertscrub
Fiddlehead	*Amsinckia intermedia*	Sonoran Riparian
Fiddleneck	*Amsinckia spp.*	Sonoran Desertscrub, Disturbed
Purple three-awn	*Aristida purpurea*	Sonoran Desertscrub
Four-wing saltbush	*Atriplex canescens*	Sonoran Desertscrub
All scale	*Atriplex polycarpa*	Sonoran Desertscrub
Red brome	*Bromus madritensis ssp. rubens*	Sonoran Desertscrub, Disturbed
Blue palo verde	*Circidium floridum*	Sonoran Desertscrub, Sonoran Riparian
Datura	*Datura stramonium*	Sonoran Riparian
Englemann's hedgehog cactus	*Echinocereus englemannii*	Sonoran Desertscrub
Brittlebush	*Encelia farinosa*	Sonoran Desertscrub, Sonoran Riparian
Skeletonweed	*Eriogonum deflexum*	Sonoran Desertscrub
Filaree	*Erodium cicutarium*	Sonoran Desertscrub, Disturbed
Barrel cactus	*Ferocactus wislizenii*	Sonoran Desertscrub
Ocotillo	*Fouquieria splendens*	Sonoran Desertscrub
Halogeton	*Halogeton glomeratus*	Sonoran Desertscrub, Disturbed
Rhatany	*Krameria parviflora*	Sonoran Desertscrub, Sonoran Riparian
Creosote bush	*Larrea tridentata*	Sonoran Desertscrub, Sonoran Riparian
Wolfberry	*Lycium spp.*	Sonoran Desertscrub, Sonoran Riparian
Little fishhook cactus	*Mammillaria thornberi*	Sonoran Desertscrub
Teddybear cholla	*Opuntia bigelovii*	Sonoran Desertscrub
Prickly pear cactus	*Opuntia engelmannii*	Sonoran Desertscrub
Jumping cholla	*Opuntia fulgida*	Sonoran Desertscrub
Desert mistletoe	*Phoradendron californicum*	Sonoran Desertscrub
Plantago	*Plantago spp.*	Sonoran Desertscrub, Disturbed
Galleta grass	*Pleuraphis jamesii*	Sonoran Desertscrub, Sonoran Riparian
Mesquite	*Prosopis spp.*	Sonoran Riparian
Bladdersage	*Salazaria mexicana*	Sonoran Desertscrub
Russian thistle	*Salsola tragus*	Sonoran Desertscrub, Sonoran Riparian
London rocket	*Sisymbrium irio*	Sonoran Desertscrub, Sonoran Riparian
Globe mallow	*Sphaeralcea spp.*	Sonoran Desertscrub, Sonoran Riparian
Mediterranean grass	*Schismus arabicus and S. barbatus*	Sonoran Desertscrub, Disturbed
[1] Brown, 1994		

Table D-2 Mammal Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Harris' antelope squirrel	*Ammospermophilus harrisii*
Pallid bat	*Antrozous pallidus*
Ringtail	*Bassariscus astutus*
Coyote	*Canis latrans*
Mexican long-tongued bat	*Choeronycteris mexicana*
Desert kangaroo rat	*Dipodomys deserti*
Merriam's kangaroo rat	*Dipodomys merriami*
Big brown bat	*Eptesicus fuscus*
Spotted bat	*Euderma maculatum*
Western mastiff bat	*Eumops perotis*
Mountain lion	*Felis concolor*
Bobcat	*Felis rufus*
Red bat	*Lasiurus borealis*
Hoary bat	*Lasiurus cinereus*
Southern yellow bat	*Lasiurus ega xanthinus*
Mexican long-nosed bat	*Leptonycteris nivalis*
Black-tailed jackrabbit	*Lepus californicus*
Hooded skunk	*Mephitis macroura*
Striped skunk	*Mephitis mephitis*
California myotis	*Myotis californicus*
Fringed myotis	*Myotis thysanodes*
Cave myotis	*Myotis velifer*
Yuma myotis	*Myotis yumanensis*
White-throated woodrat	*Neotoma albigula*
Desert wood rat	*Neotoma lepida*
Desert shrew	*Notiosorex crawfordi*
Desert Mule deer	*Odocoileus hemionus crooki*
Muskrat	*Ondatra zibethicus*
Southern grasshopper mouse	*Onychomys torridus*
Collared peccary	*Pecari tajacu*
Arizona pocket mouse	*Perognathus amplus*
Bailey's pocket mouse	*Perognathus baileyi*
Long-tailed pocket mouse	*Perognathus formosus*
Rock pocket mouse	*Perognathus intermedius*
Little pocket gopher	*Perognathus longimembris*
Desert pocket mouse	*Perognathus penicillatus*
Brush mouse	*Peromyscus boylii*
Cactus mouse	*Peromyscus eremicus*
Deer mouse	*Peromyscus maniculatus*

Table D-2 Mammal Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Western pipistrelle	*Pipistrellus Hesperus*
Townsend's big-eared bat	*Plecotus townsendii*
Raccoon	*Procyon lotor*
Western harvest mouse	*Reithrodontomys megalotis*
Arizona gray squirrel	*Sciurus arizonensis*
Arizona cotton rat	*Sigmodon arizonae*
Rock squirrel	*Spermophilus variegatus*
Western spotted skunk	*Spilogale gracilis*
Desert cottontail	*Sylvilagus audubonii*
American free-tailed bat	*Tadarida brasiliensis*
Pocketed free-tailed bat	*Tadarida femorosacca*
Big free-tailed bat	*Tadarida macrotis*
Badger	*Taxidae taxus*
Botta's pocket gopher	*Thomomys bottae*
Gray fox	*Urocyon cinereoargenteus*
Kit fox	*Vulpes macrotis*
Round-tailed ground squirrel	*Xerospermophilus tereticaudus*
[1] Hoffmeister, 1986	

Table D-3 Bird Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Cooper's hawk	*Accipiter cooperii*
Sharp-shinned hawk	*Accipiter striatus*
Western Grebe	*Aechmophorous occidentalis*
Red-winged blackbird	*Agelaius phoeniceus*
Sage sparrow	*Amphispiza belli*
Black-throated sparrow	*Amphispiza bilineata*
Cinnamon teal	*Anas cyanoptera*
Mallard	*Anas platyrhynchos*
Black-chinned hummingbird	*Archilochus alexandri*
Great egret	*Ardea alba*
Great blue heron	*Ardea herodias*
Verdin	*Auriparus flaviceps*
Cedar waxwing	*Bombycilla cedrorum*
Great horned owl	*Bubo virginianus*
Cattle egret	*Bubulcus ibis*
Zone-tailed hawk	*Buteo albonotatus*
Red-tailed hawk	*Buteo jamaicensis*
Ferruginous hawk	*Buteo regalis*
Swainson's hawk	*Buteo swainsoni*
Green heron	*Butorides virescens*
Lark bunting	*Calamospiza melanocorys*
Gambel's quail	*Callipepla gambelii*
Anna's hummingbird	*Calypte anna*
Costa's hummingbird	*Calypte costae*
Cactus wren	*Campylorhynchus brunneicapillus*
Northern cardinal	*Cardinalis cardinalis*
Pyrrhuloxia	*Cardinalis sinuatus*
Lesser goldfinch	*Carduelis psaltria*
House finch	*Carpodacus mexicanus*
Turkey vulture	*Cathartes aura*
Killdeer	*Charadrius vociferus*
Lark sparrow	*Chondestes grammacus*
Lesser nighthawk	*Chordeiles acutipennis*
Northern harrier	*Circus cyaneus*
Red-shafted northern flicker	*Colaptes cafer*
Gilded flicker	*Colaptes chrysoides*
Rock dove	*Columba livia*
Inca dove	*Columbina inca*
Common ground-dove	*Columbina passerine*

Table D-3 Bird Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Western wood-pewee	*Contopus sordidulus*
Common raven	*Corvus corax*
Yellow-rumped warbler	*Dendroica coronata*
Black-throated gray warbler	*Dendroica nigrescens*
Yellow warbler	*Dendroica petechia*
Snowy egret	*Egretta thula*
Pacific-slope flycatcher	*Empidonax difficilis*
Dusky flycatcher	*Empidonax oberholster*
Cordilleran flycatcher	*Empidonax occidentalis*
Gray flycatcher	*Empidonax wrightii*
Horned lark	*Eremophila alpestris*
Brewer's blackbird	*Euphagus cyanocephalus*
American kestrel	*Falco sparverius*
American coot	*Fulica americana*
Common moorhen	*Gallinula chloropus*
Greater roadrunner	*Geococcyx californianus*
Blue grosbeak	*Guiraca carulea*
Cliff swallow	*Hirundo pyrrhonota*
Barn swallow	*Hirundo rustica*
Northern oriole	*Icterus bullockii*
Hooded oriole	*Icterus cucullatus*
Bullock's oriole	*Icterus galbula*
Dark-eyed junco	*Junco hyemalis*
Loggerhead shrike	*Lanius ludovicianus*
Gila woodpecker	*Melanerpes uropygialis*
Lincoln's sparrow	*Melospiza lincolnii*
Song sparrow	*Melospiza melodia*
Elf owl	*Micrathene whitneyi*
Northern mockingbird	*Mimus polyglottos*
Bronzed cowbird	*Molothrus aeneus*
Brown-headed cowbird	*Molothrus ater*
Ash-throated flycatcher	*Myiarchus cinerascens*
Brown-crested flycatcher	*Myiarchus tyrannulus*
Black-crowned night-heron	*Nycticorax nycticorax*
MacGillivary's warbler	*Oporornis tolmiei*
Sage thrasher	*Oreoscoptes montanus*
Western screech owl	*Otus kennicottii*
Harris' hawk	*Parabuteo unicinctus*
House sparrow	*Passer domesticus*

Table D-3 Bird Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Phainopepla	*Phainopepla nitens*
Double-crested cormorant	*Phalacrocorax auritus*
Common poorwill	*Phalaenoptilus nuttallii*
Black-headed grosbeak	*Pheucticus melanocephalus*
Ladder-backed woodpecker	*Picoides scalaris*
Abert's towhee	*Pipilo aberti*
Green-tailed towhee	*Pipilo chlorurus*
Spotted towhee	*Pipilo erythrophthalmus*
Canyon towhee	*Pipilo fuscus*
Western tanager	*Piranga ludoviciana*
Pied-billed grebe	*Podilymbus podiceps*
Blue-gray gnatcatcher	*Polioptila caerulea*
Black-tailed gnatcatcher	*Polioptila melanura*
Vesper sparrow	*Pooecetes gramineus*
Vermillion flycatcher	*Pyrocephalus rubinus*
Great-tailed grackle	*Quiscalus mexicanus*
Ruby-crowned kinglet	*Regulus calendula*
Rock wren	*Salpinctes obsoletus*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Rufus hummingbird	*Selasphorus rufus*
Western bluebird	*Sialia mexicana*
Brewer's sparrow	*Spizella breweri*
Chipping sparrow	*Spizella passerine*
Northern rough-winged swallow	*Stelgidopteryx serripennis*
Western meadowlark	*Sturnella neglecta*
European starling	*Sturnus vulgaris*
Tree swallow	*Tachycineta bicolor*
Violet-green swallow	*Tachycineta thalassina*
Bewick's wren	*Thryomanes bewickii*
Bendire's thrasher	*Toxostoma bendirei*
Curve-billed thrasher	*Toxostoma curvirostre*
House wren	*Troglodytes aedon*
American robin	*Turdus migratorius*
Western kingbird	*Tyrannus verticalis*
Barn owl	*Tyto alba*
Orange-crowned warbler	*Vermivora celata*
Lucy's warbler	*Vermivora luciae*
Nashville warbler	*Vermivora ruficapilla*

Table D-3 Bird Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Virginia's warbler	*Vermivora virginiae*
Bell's vireo	*Vireo bellii*
Warbling vireo	*Vireo gilvus*
Wilson's warbler	*Wilsonia pusilla*
White-winged dove	*Zenaida asiatica*
Mourning dove	*Zenaida macroura*
White-crowned sparrow	*Zonotrichia leucophrys*
[1] Corman and Wise-Gervais, 2005	

Table D-4 Reptile and Amphibian Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Arizona glossy snake	*Arizona elegans noctivaga*
Sonoran desert toad	*Bufo alvarius*
Great plains toad	*Bufo cognatus*
Red-spotted toad	*Bufo punctatus*
Zebra tail lizard	*Callisaurus draconoides*
Banded sand snake	*Chilomeniscus cinctus*
Western shovel-nosed snake	*Chionactus occipitalis*
Gila spotted whiptail	*Cnemidophorus flagellicaudus*
Western whiptail	*Cnemidophorus tigris*
Desert banded gecko	*Coleonyx variegatus variegatus*
Western diamondback rattlesnake	*Crotalus atrox*
Sonoran sidewinder	*Crotalus cerastes cercobombus*
Speckled rattlesnake	*Crotalus mitchellii pyrrhus*
Black-tailed rattlesnake	*Crotalus molossus*
Mojave rattlesnake	*Crotalus scutulatus*
Arizona black rattlesnake	*Crotalus viridis cerberus*
Common collared lizard	*Crotaphytus collaris*
Western collared lizard	*Crotaphytus collaris baileyi*
Desert iguana	*Dipsosaurus dorsalis*
Large spotted leopard lizard	*Gambelia wislizenii wislizenii*
Desert tortoise	*Gopherus agassizii*
Gila monster	*Heloderma suspectum*
Canyon tree frog	*Hyla arenicolor*
Night snake	*Hypsiglena torquata*
Sonoran mud turtle	*Kinosternon sonoriense*
Common kingsnake	*Lampropeltis getula*
Western blind snake	*Leptotyphlops humilis*
Rosy boa	*Lichanura trivirgata*
Red coachwhip	*Masticophis flagellum piceus*
Arizona coral snake	*Micruroides euryxanthus*
Desert horned lizard	*Phrynosoma platyrhinos*
Desert horned lizard	*Phrynosoma platyrhinos calidiarum*
Regal horned lizard	*Phrynosoma solare*
Saddled leaf-nosed snake	*Phyllorhynchus browni*
Western leaf-nosed snake	*Phyllorhynchus decurtatus perkinsi*
Sonoran gopher snake	*Pituphis melanoleucus affinis*
Bullfrog	*Rana catesbeiana*
Western long-nosed snake	*Rhinocheilus lecontei lecontei*
Western patch-nosed snake	*Salvadora hexalepis*

Table D-4 Reptile and Amphibian Species Potential Occurrence in the Vicinity of the Project Area[1]	
Common Name	**Scientific Name**
Western chuckwalla	*Sauromalus obesus obesus*
Couch spadefoot	*Scaphiopus couchi*
Western spadefoot	*Scaphiopus hammondii*
Southern spadefoot	*Scaphiopus multiplicatus*
Sonoran spiny lizard	*Sceloporus magister magister*
Yellow-backed spiny lizard	*Sceloporus magister uniformis*
Ground snake	*Sonora semiannulata*
SW black-headed snake	*Tantilla hobartsmithi*
Lyre snake	*Trimorphodon biscutatus*
Spiny softshell	*Trionyx spiniferus*
Arizona brush lizard	*Urosaurus graciosus shannoni*
Tree lizard	*Urosaurus ornatus*
Side-blotched lizard	*Uta stansburiana*
[1] Stebbins, 1985	