

EXHIBIT C

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EXHIBIT C – AREAS OF BIOLOGICAL WEALTH

As stated in R14-3-219 of the Rules of Practice and Procedure Before Power Plant and Transmission Line Siting Committee, Exhibits to Application, Exhibit C:

“Describe any areas in the vicinity of the proposed site or route which are unique because of biological wealth or because they are habitats for rare and endangered species. Describe the biological wealth or species involved and state the effects, if any, the proposed facilities will have thereon.”

INTRODUCTION

The following analysis describes impacts to areas of biological wealth within the study area. The study area for this review is 1 mile on either side of the right-of-way (ROW) centerline of the Project (2 miles in total). This study area is consistent with the analysis area used in the Final Environmental Impact Statement (Final EIS); see Exhibit B-1. The following summary is based on the 2015 Final EIS (Exhibit B-1), with information focused on the analysis area for the Project.

The Project is an upgrade of an existing transmission line owned and operated by Western Area Power Administration (WAPA). The 64-mile route will include the replacement of wood H-frame poles with steel monopoles in approximately 52 miles of existing transmission line ROW. The Project will also include four realignments outside of the current ROW, totaling approximately 12 miles (Vail Lateral realignment [segment U4 in the Final EIS], Old Vail Road realignment [segment U3aPC in the Final EIS], Tumamoc Hill realignment [segments TH1a and TH1 Option in the Final EIS], and Marana Airport realignment [segment MA-1 in the Final EIS]).

REGULATORY FRAMEWORK

Federal

National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires the federal government to assess the environmental impacts of major federal actions, which include actions undertaken (1) on federal land, (2) by a federal agency, (3) with federal funds, or (4) where the federal government will be issuing a permit. An EIS for the Project was completed in 2015.

Endangered Species Act

Section 7 of the Endangered Species Act (ESA) of 1973, as amended, requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that undertaking, funding, permitting, or authorizing an action is not likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat, as defined under the act, exists only after it is officially designated by the USFWS. Critical habitats are (1) areas within the geographic area that have features essential to the conservation of the species and that may require special management consideration or protection; and (2) those specific areas outside the geographic area occupied by a species at the time it is listed that are essential to the conservation of the species. A biological assessment (BA) and biological opinion (BO) were completed for the Project in 2014 (see Appendix M of Exhibit B-1).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, gives federal protection to all migratory birds, including nests and eggs. This law states that it is unlawful to “pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention . . . for the protection of migratory birds . . . or any part, nest, or egg of any such bird” (16 United States Code [USC] 703). More than 800 species of migratory birds are protected under this law. The MBTA includes protection for all raptor species. This regulation does not discriminate between live or dead birds, and it also grants full protection to any bird parts, including feathers, eggs, and nests. In order to relocate or destroy any nest and maintain compliance with the MBTA, it is necessary to obtain a permit from the USFWS, the responsible agency for regulating this law. Only those entities permitted by the USFWS can assist in the relocation of birds or nests. Section 1 of the USFWS Region 2 “Interim Empty Nest Policy” states that if the nest is completely inactive at the time of destruction or movement, a permit is not required in order to comply with the MBTA. If an active nest is observed during any activities related to the Project, measures should be taken to protect the nest from destruction and to avoid a violation of the MBTA. Impacts to migratory birds were considered in the 2015 Final EIS.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act of 1934, as amended, requires coordination with federal and state wildlife agencies (USFWS, Arizona Game and Fish Department [AGFD]) for the purpose

of mitigating losses of wildlife resources caused by a Project that impounds, diverts, or otherwise modifies a stream or other natural body of water.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 668–668c), as amended, prohibits “taking” bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*), including their parts, nests, or eggs, without a permit from the USFWS. The Act provides criminal penalties for persons who “take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle . . . [or any golden eagle], alive or dead, or any part, nest, or egg thereof.”

The BGEPA defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb.” The USFWS defines “disturb” under the BGEPA as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” Impacts to bald and golden eagles were considered in the 2015 Final EIS.

Bureau of Land Management Sensitive Plant Species

The Arizona offices of the Bureau of Land Management (BLM) maintain lists of sensitive species known to occur on BLM land and listed by BLM districts managed by the various field offices. These species are believed to be declining in numbers and may need special conservation measures. Potential threats to these species are likely to include those for the ESA-listed species. BLM Sensitive Species in the Safford and Tucson Field Offices, which include Pinal, Pima, and Cochise Counties, Arizona, are listed in the Arizona Sensitive Species List (BLM 2010). Impacts to BLM Sensitive plant species were considered in the 2015 Final EIS.

[Placeholder: BLM updated this species list in 2017. Additional information will be included in the supplemental filing related to the updated list.]

BLM Phoenix District Resource Management Plan

The Phoenix District Resource Management Plan (RMP), finalized in 1988, covers the BLM land within the Phoenix District called the Phoenix Resource Area, including land for the Project that is managed by the BLM’s Tucson Field Office. The Phoenix District RMP identifies objectives and policies for land managed by the BLM and avoidance and exclusion areas including wilderness study areas.

State

Arizona Native Plant Law

The Arizona Native Plant Law (Arizona Department of Agriculture [ADA] 2013a) and Revised Statutes (ADA 2013b) regulate the destruction and transportation of native plants that are growing wild in Arizona. This law establishes a list of protected plants in Arizona and prohibits removal or destruction of wild-growing, protected plants without a permit, whether on public, state, or private land. Parties interested in removing native plants in Arizona must complete an application with the ADA to receive a permit.

The ADA maintains a list of sensitive species separated into the categories of highly safeguarded, salvage restricted, salvage assessed, and harvest restricted (ADA 2016). Highly safeguarded species are those “whose prospects for survival in this State are in jeopardy or which are in danger of extinction throughout all or a significant portion of their ranges, and those native plants which are likely within the foreseeable future to become jeopardized or in danger of extinction throughout all or a significant portion of their ranges” (Arizona Revised Statutes [ARS] 3-903.B.1) (ADA 2013b). Salvage restricted species are those “which are not included in the highly safeguarded category but are nevertheless subject to a high potential for damage by theft or vandalism” (ARS 3-903.B.2) (ADA 2013b). Salvage assessed species are those “which are not included in either the highly safeguarded or salvage restricted categories but nevertheless have a sufficient value if salvaged to support the cost of salvage tags and seals” (ARS 3-903.B.3) (ADA 2013b). Harvest restricted species are those “which are not included in the highly safeguarded category but are subject to excessive harvesting or overcutting because of the intrinsic value of their by-products, fiber, or woody parts” (ARS 3-903.B.4) (ADA 2013b). Permitting procedures for collection or salvage of protected plants are provided in ARS 3-906. Impacts to Arizona native plants were considered in the 2015 Final EIS. Additionally, native plant surveys were conducted along the Project route in 2018 and 2019, though no report has been prepared yet.

Arizona State Wildlife Action Plan

Per the Arizona State Wildlife Action Plan, the State of Arizona lists various wildlife species as species of greatest conservation need (SGCN), which is an AGFD status listing defined as wildlife of conservation priority—described nationally as Wildlife of Greatest Conservation Need. As discussed in the 2012 AGFD’s Comprehensive Wildlife Conservation Strategy (AGFD 2012a), SGCN are species of vertebrates, crustaceans, and mollusks that rank high in the vulnerability category and have been identified for immediate action.

County

Pima County Sonoran Desert Conservation Plan

The Sonoran Desert Conservation Plan (SDCP), prepared by Pima County (2016), was developed as an ESA Section 10 consultation with the USFWS. The 2009 plan addressed in the Final EIS included 23 species in Pima County, of which four are plant species. The four plant species have the potential to be present in the analysis area. Impacts to Pima County species of concern were considered in the 2015 Final EIS (see Exhibit B-1).

Pima County Native Plant Protection Ordinance

Pima County regulates the loss of native plant material associated with ground-disturbing activities through their Native Plant Protection Ordinance (NPPO) (Pima County 1998). The NPPO requires inventory of the site, along with protection and mitigation of certain plant species slated for destruction. There are various tables that determine the mitigation ratio for different native plant species (e.g., saguaros [*Carnegiea gigantea*], desert ironwood [*Olneya tesota*], and Pima pineapple cactus [*Coryphantha scheeri* var. *robustispina*]). Impacts to Pima County native plants were considered in the 2015 Final EIS. Additionally, native plant surveys were conducted along the Project route in 2018 and 2019, though no report has been prepared to date.

METHODOLOGY

Areas of biological wealth include areas of designated critical habitat, wildlife corridors, areas managed for conservation of biological resources, and other areas identified during the NEPA process (see Figures 3.8-1 through 3.8-15 in the Final EIS [Exhibit B-1]). Special-status species that may occur in the study area are included in Table C-1. These include species listed under the ESA, BLM Sensitive Species, State of Arizona Wildlife Species of Concern, State of Arizona Species of Greatest Conservation Need, and species covered under the Pima County Multi-species Conservation Plan. These species are discussed in further detail below.

INVENTORY AND EFFECTS OF THE PROPOSED PROJECT

Areas of Biological Wealth

Tumamoc Hill

Tumamoc Hill is a unique open space and ecological preserve within urban Tucson, adjacent to Interstate 10. Tumamoc Hill is managed by both the University of Arizona College of Science (University) and Pima County and has opportunities for recreation and research. Since 1906, Tumamoc Hill has been an ecological preserve and study area. Its 860-acre ecological reservation

is a National Historic Landmark and Archaeological District. The Desert Botanical Laboratory of the University is an active research center on Tumamoc Hill that attracts researchers on desert ecosystems and archaeology.

Tumamoc globeberry (*Tumamoca macdougallii*) is a sensitive plant that occurs at Tumamoc Hill. Pima County, the U.S. Forest Service, Bureau of Reclamation, USFWS, National Park Service, and the Desert Laboratory support species monitoring efforts, which are conducted by volunteers. There are a number of long-term monitoring plots for the species within the preserve, including one along the existing WAPA line across Tumamoc Hill (see Exhibit B-1, Chapter 8 of the Final EIS, comment number 353 from Pima County). The Project route was realigned off of the preserve (where the current WAPA ROW is located) to the perimeter along Star Pass Boulevard, Greasewood and Anklam Roads, in part in response to concerns about impacts to Tumamoc globeberry from stakeholders to the Project if the route were to stay in the current WAPA ROW location.

Designated Critical Habitat

There is no designated or proposed critical habitat in the study area for the Project; however, the 2014 BA indicated that areas within the Project had the potential to contain habitat suitable for species including the southwestern willow flycatcher (*Empidonax traillii extimus*) (foraging/migratory only), yellow-billed cuckoo (*Coccyzus americanus*) (foraging/migratory only), northern Mexican gartersnake (*Thamnophis eques megalops*), Sonoran desert tortoise (*Gopherus morafkai*), lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*), Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*), and Pima pineapple cactus.

Note that the proposed critical habitat for the yellow-billed cuckoo and the northern Mexican gartersnake has been updated since the 2014 BA, 2015 BO and 2015 Final EIS (see Exhibit B-1). While the proposed critical habitat has been updated since 2015, the Project still does not cross any proposed critical habitat in the Project area.

Subsequent to the 2015 BO and Final EIS, the Sonoran desert tortoise is no longer a candidate species, lesser long-nosed bat is now delisted, and the Tucson shovel-nosed snake is no longer a candidate species.

Wildlife Linkages

Potential wildlife linkage zones (PLZs) are areas identified as important for wildlife movement. There are three PLZs within the study area: the Tucson Mountains–San Xavier PLZ (Linkage #87), Ironwood–Tortolita PLZ (Linkage #79), and Saguaro–Tortolita PLZ (Linkage #80) (see Figure C-1). The Tucson Mountains–San Xavier PLZ (Linkage #87) provides a roughly north–south linkage

between the habitat blocks in Saguaro National Park–West, the Tucson Mountains, and the San Xavier Indian Reservation. Focal species include bobcat (*Lynx rufus*), California leaf-nosed bat (*Macrotus californicus*), cave myotis (*Myotis velifer*), giant spotted whiptail (*Aspidoscelis stictogramma*), greater western mastiff bat (*Eumops perotis*), mountain lion (*Puma concolor*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Sonoran desert tortoise, and western burrowing owl (*Athene cunicularia hypugaea*). The Project intersects the PLZ at U3c and U3d.

The Ironwood–Tortolita PLZ (Linkage #79) provides a roughly northeast–southwest linkage between the habitat blocks in the Ironwood Forest National Monument and the Tortolita Mountains. Focal species include bighorn sheep (*Ovis canadensis*), bobcat, cactus ferruginous pygmy-owl (*Glaucidium brasilianum cactorum*), cave myotis, javelina (*Tayassu tajacu*), kit fox (*Vulpes macrotis*), mountain lion, mule deer (*Odocoileus hemionus*), Sonoran desert tortoise, and western burrowing owl. The Project intersects the PLZ at U3k and U3l.

The Saguaro–Tortolita PLZ (Linkage #80) provides a northeast–southwest linkage between habitat blocks in the Santa Catalina Mountains and the Tortolita Mountains. Focal species include bobcat, cactus ferruginous pygmy-owl, cave myotis, javelina, kit fox, mountain lion, mule deer, pocketed free-tailed bat, and Sonoran desert tortoise. The Project intersects the PLZ at U3i.

All three linkages are crossed by the existing ROW and transmission line. None of the realignment areas cross PLZs.

Pima County Conservation Land System

The Project crosses land managed by Pima County as biological core management areas and important riparian areas (see Figure C-1). Biological core management areas are primarily distinguished from other land within the Conservation Land System (CLS) by their potential to support high-value habitat for five or more priority vulnerable species as identified by the SDCP (Regional Plan Policy 6 Environmental Element 2005). At least 80% of the total acreage of land within this designation shall be conserved as undisturbed natural open space. As such, land use changes will result in 4:1 land conservation (i.e., 4 acres conserved for every 1 acre developed) and may occur through a combination of on-site and/ or off-site conservation inside the biological core management area or habitat protection priority areas.

Important riparian areas are valued for their higher water availability, vegetation density, and biological productivity. In addition to the inherent high biological value of these water-related communities, important riparian areas, including their associated upland areas, provide a framework for linkages and landscape connections. Important riparian areas are essential elements in the CLS (Regional Plan Policy 6 Environmental Element 2005). At least 95% of the total acreage of land within this designation shall be conserved in a natural or undisturbed

condition. Every effort should be made to protect, restore, and enhance the structure and functions of important riparian areas, including their hydrological, geomorphological, and biological functions. Areas within an important riparian area that have been previously degraded or otherwise compromised may be restored and/or enhanced. Such restored and/or enhanced areas may contribute to achieving the 95% conservation guideline for important riparian areas (Regional Plan Policy 6 Environmental Element 2005).

Pima County Conservation Lands are discussed in the 2015 Final EIS (Exhibit B-1, pages 462–463).

Special-Status Species

The category of special-status species includes several different designations of sensitivity and levels of protection. The USFWS maintains a list of plant and animal species that are listed as endangered or threatened, or are proposed or candidates for listing, under the federal ESA. Other federal agencies, including the BLM and the U.S. Forest Service, have lists of plant and animal species that are considered sensitive on land under their respective jurisdictions. The State of Arizona maintains a list of plant species that are highly safeguarded or salvage restricted (listed as “AZ WSC” in Table C-1). within their Heritage Database Management System (HDMS). These are afforded protection under the Arizona Native Plant Law (ANPL). Local jurisdictions may also designate sensitive species, such as those listed in the SDCP in Pima County, Arizona (listed as “Pima County” in Table C-1).

Consultation with the USFWS is required to comply with Section 7 of the ESA (16 USC 1536(a)(2)), for species listed as threatened or endangered. The BLM and WAPA analyzed the effects of the Project on the species and on their designated critical habitat, if present.

Formal consultation under Section 7 of the ESA with the USFWS was initiated on March 4, 2014. On April 3, 2014, the FWS responded in a letter indicating that all required information was included in the March 4, 2014, submittal. On July 9, 2014, the USFWS sent a letter requesting a 60-day extension of the deadline to complete formal consultation. The BLM responded on July 30, 2014, concurring with the request for an extension. The USFWS issued a BO on December 30, 2014. The BO and amendment are included in Appendix M of the Final EIS (see Exhibit B-1).

Table C-1 lists each special-status species reviewed in the Vail to Tortolita Segment, and provides a rationale for whether each species may occur in the study area.

[Placeholder – additional information will be evaluated and discussed during the project hearing].

Table C-1. Special-Status Species that May Occur in the Vicinity of the Project in Arizona (from the 2015 Final EIS)

Common Name <i>Scientific Name</i>	Habitat	Status	Potential for Occurrence
Mammals			
Allen’s big-eared bat <i>Idionycteris phyllotis</i>	Ponderosa pine, pinyon-juniper woodlands, Mexican woodlands, and riparian areas. Roosts in caves and mines.	BLM Sensitive	May occur.
Antelope jackrabbit <i>Lepus alleni</i>	Desertscrub and grasslands.	AZ WSC	May occur.
Arizona pocket mouse <i>Perognathus amplus</i>	Desertscrub and grasslands.	AZ WSC	May occur.
Banner-tailed kangaroo rat <i>Dipodomys spectabilis</i>	Areas with sparse cover in desertscrub.	BLM Sensitive	May occur.
California leaf-nosed bat <i>Macrotus californicus</i>	Desertscrub with roosts in mines, caves, and rock shelters.	BLM Sensitive	May occur.
Cave myotis <i>Myotis velifer</i>	Desertscrub communities. Roosts in caves and mines.	BLM Sensitive	May occur.
Fringed myotis <i>Myotis thysanodes thysanodes</i>	Mid-elevation desert habitats including desertscrub and grasslands, but typically associated with oak-pinyon woodlands. Roosts in caves and abandoned mines.	BLM Sensitive	May occur.
Greater western mastiff bat <i>Eumops perotis californicus</i>	Lower and upper Sonoran desertscrub near cliffs. Roosts in crevices within high cliff walls.	BLM Sensitive	May occur.
Harris’ antelope squirrel <i>Ammospermophilus harrisi</i>	Desertscrub habitat in areas with dense vegetation.	AZ WSC	May occur.
Kit fox <i>Vulpes macrotis</i>	Desertscrub.	AZ WSC	May occur.
Lesser long-nosed bat <i>Leptonycteris curasoae yerbabuena</i>	Desertscrub habitat with agave and columnar cacti present as food source. Roosts in caves and abandoned mines.	USFWS Now Delisted	May occur.
Little pocket mouse <i>Perognathus longimembris</i>	Desertscrub and grasslands in western and southwestern Arizona.	AZ WSC	May occur.

Common Name <i>Scientific Name</i>	Habitat	Status	Potential for Occurrence
Merriam's mesquite mouse <i>Peromyscus merriami</i>	Once common in mesquite bosques, it has also been found in dense brush in the low desert, associated with mesquite.	Pima County	May occur.
Mexican free-tailed bat <i>Tadarida brasiliensis</i>	Desertscrub, coniferous forests, and coniferous woodlands.	AZ SGCN	May occur.
Mexican long-tongued bat <i>Choeronycteris mexicana</i>	Mesic areas of mixed oak-conifer communities and desert grasslands. Roosts in caves and abandoned mines.	BLM Sensitive	May occur.
Pale Townsend's big-eared bat <i>Corynorhinus townsendii pallascens</i>	Xeric habitats including sagebrush, desertscrub, chaparral, deciduous forests, and coniferous forests. Roosts in caves and abandoned mines.	BLM Sensitive	May occur
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	In Arizona, forages in riparian corridors dominated by sycamore and mesquite and bounded by large cliffs. Roosts in cliffs and tall, rocky outcrops.	AZ WSC	May occur.
Spotted bat <i>Euderma maculatum</i>	Roosts in crevices and high cliff walls. Inhabits desertscrub, riparian, pinyon-juniper woodlands, and coniferous forests.	BLM Sensitive	May occur.
Yuma myotis <i>Myotis yumanensis yumanensis</i>	Roosts in buildings, cliffs, caves, trees, and abandoned mines. Forages in a variety of habitats near open water.	BLM Sensitive	May occur.
Western red bat <i>Lasiurus blossevillii</i>	This species occurs primarily along riparian corridors among oaks, sycamores, and cottonwoods in central and southeastern Arizona.	Pima County	May occur.
Western yellow bat <i>Lasiurus xanthinus</i>	Riparian and wooded areas, associated with palm trees, sycamores, hackberries, and cottonwoods.	AZ SGCN	May occur.
Birds			
Abert's towhee <i>Melospiza aberti aberti</i>	Lowland riparian thickets and adjacent dry desert washes, irrigated parks and backyards.	AZ WSC	May occur.
American peregrine falcon <i>Falco peregrinus anatum</i>	Woodlands and riparian areas, rocky areas with steep cliffs primarily near water where prey concentrations are high. Nests on ledges of cliffs.	BLM Sensitive	May occur.
Arizona grasshopper sparrow <i>Ammodramus savannarum ammolegus</i>	Large expanses of intermediate height grass for nesting; occupied grasslands in Arizona often include scattered low woody shrubs.	BLM Sensitive	May occur.

Common Name <i>Scientific Name</i>	Habitat	Status	Potential for Occurrence
Bald eagle <i>Haliaeetus leucocephalus</i>	Areas with large trees or cliffs near water (reservoirs, rivers, and streams) and abundant prey.	BGEPA; BLM Sensitive	May occur.
Bell's vireo <i>Vireo bellii</i>	Dense, shrubby vegetation along woodland edges, especially with a mesquite component.	AZ WSC	May occur.
Buff-collared nightjar <i>Antrostomus ridgwayi</i>	Desert drainages with dense vegetation.	AZ SGCN	May occur.
Cactus ferruginous pygmy-owl <i>Glaucidium brasilianum cactorum</i>	Sonoran desertscrub and occasionally in riparian drainages and woodlands within semidesert grassland communities.	BLM Sensitive	May occur.
Crested caracara <i>Caracara cheriway</i>	Sonoran desertscrub, pastures, and cultivated areas.	AZ WSC	May occur.
Desert purple martin <i>Progne subis hesperia</i>	Nests in tree or cactus cavities. Sonoran Desert populations nest almost exclusively in large saguaros	BLM Sensitive	May occur.
Gila woodpecker <i>Melanerpes uropygialis uropygialis</i>	Sonoran Desert uplands with large saguaros.	AZ WSC	May occur.
Gilded flicker <i>Colaptes chrysoides</i>	Sonoran Desert uplands; uses saguaro cacti.	BLM Sensitive	May occur.
Golden eagle <i>Aquila chrysaetos</i>	Inhabits open areas with cliffs for nesting.	BGEPA; BLM Sensitive	May occur.
Loggerhead shrike <i>Lanius ludovicianus</i>	Variety of forest types, xeric habitats, desertscrub, mixed shrub, and agricultural fields throughout Arizona. Elevations range from 2,800 to 7,500 feet.	BLM Sensitive	May occur.
Northern harrier <i>Circus cyaneus</i>	Grasslands and wetlands; wintering habitat includes deserts, sand dunes, agricultural fields, grasslands, and marshes.	AZ WSC	May occur.
Rufous-winged sparrow <i>Peucaea carpalis</i>	Desertscrub.	Pima County	May occur.
Savannah sparrow <i>Passerculus sandwichensis</i>	Open fields, pastures, meadows, dunes, and grassy vacant lots.	AZ SGCN	May occur.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	Cottonwood/willow and tamarisk vegetation communities along rivers and streams.	USFWS Endangered	May occur.

Common Name Scientific Name	Habitat	Status	Potential for Occurrence
Swainson's hawk <i>Buteo swainsoni</i>	Grasslands, semidesert grasslands, and desertscrub.	Pima County	May occur.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	Open grasslands and agricultural areas.	BLM Sensitive	May occur.
Western grasshopper sparrow <i>Ammodramus savannarum perpallidus</i>	Grasslands with patchy bare ground.	AZ SGCN	May occur.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Large blocks of mature riparian woodlands (cottonwood, willow, or tamarisk galleries).	USFWS Threatened	May occur.
Yellow warbler <i>Setophaga petechia</i>	Streams and wetlands.	AZ WSC	May occur.
Reptiles			
Arizona striped whiptail <i>Aspidoscelis arizonae</i>	Semidesert grassland	BLM Sensitive	May occur.
Canyon spotted whiptail <i>Aspidoscelis burti</i>	Primarily in semidesert grassland and Madrean evergreen woodland communities and in drainages in Sonoran desertscrub.	AZ WSC	May occur
Desert ornate box turtle <i>Terrapene ornata luteola</i>	Semiarid regions with plains, grasslands, and pastures. Often associated with prairie dog towns.	BLM Sensitive	May occur.
Gila monster <i>Heloderma suspectum</i>	Sonoran desertscrub and less often in semidesert grasslands.	AZ WSC	May occur.
Goode's horned lizard <i>Phrynosoma goodie</i>	Lower Colorado River Valley Subdivision of Sonoran desertscrub.	AZ SGCN	May occur
Ground snake <i>Sonora semiannulata</i>	Desertscrub, semidesert grassland, interior chaparral, and Great Basin grassland.	Pima County	May occur.
Northern Mexican gartersnake <i>Thamnophis eques magalops</i>	Cienegas, stock tanks, large-river riparian woodlands and forests, and streamside gallery forests.	USFWS Threatened	May occur.
Regal horned lizard <i>Phrynosoma solare</i>	Sonoran desertscrub, Chihuahuan desertscrub, and semidesert grassland.	AZ WSC	May occur.

Common Name Scientific Name	Habitat	Status	Potential for Occurrence
Saddled leaf-nosed snake <i>Phyllorhynchus browni</i>	Sonoran desertscrub.	AZ WSC	May occur.
Sonora mud turtle <i>Kinosternon sonoriense sonoriense</i>	Creeks, streams, and rivers, as well as ditches, ponds, and cattle tanks in Lower Colorado River desertscrub through woodlands.	BLM Sensitive	May occur.
Sonoran collared lizard <i>Crotaphytus nebrius</i>	Sonoran desertscrub.	AZ WSC	May occur.
Sonoran coralsnake <i>Micruroides euryxanthus</i>	Desertscrub to semidesert grassland.	AZ WSC	May occur.
Sonoran desert tortoise <i>Gopherus morafkai</i>	Rocky (often steep) hillsides and bajadas of Mojave and Sonoran desertscrub but may encroach into desert grassland, juniper woodland, interior chaparral habitats, and even pine communities. Washes and valley bottoms may be used in dispersal.	BLM Sensitive	May occur.
Sonoran whipsnake <i>Coluber bilineatus</i>	Desertscrub, semidesert grassland, Madrean evergreen woodland and into Great Basin conifer woodland	AZ WSC	May occur.
Tiger rattlesnake <i>Crotalus tigris</i>	Desertscrub, interior chaparral, and Madrean evergreen woodland.	AZ WSC	May occur.
Tucson shovel-nosed snake <i>Chlonactis occipitalis klauberi</i>	Sonoran desertscrub, where it is associated with soft, sandy soils having sparse gravel.	BLM Sensitive	May occur
Variable sandsnake <i>Chilomeniscus stramineus</i>	Sonoran desertscrub.	AZ WSC	May occur.
Amphibians			
Colorado River toad (aka Sonoran Desert toad) <i>Incilius alvarius</i>	Sonoran and Chihuahuan desertscrub, semidesert grassland, and Madrean evergreen woodland. Breeds in temporary pools caused by monsoon rains. Adults can be found far from water. Southern Arizona.	AZ WSC	May occur.
Great Plains narrow-mouthed toad <i>Gastrophryne olivacea</i>	Found near streams, springs, and rain pools in Sonoran desertscrub, semidesert grasslands, and oak woodlands.	BLM Sensitive	May occur.
Lowland leopard frog <i>Lithobates yavapaiensis</i>	Desert grasslands to pinyon-juniper forests near water. Habitat generalists. Central and southeastern Arizona with the majority found below the Mogollon Rim. Elevations below 6,200 feet.	BLM Sensitive	May occur.

Common Name <i>Scientific Name</i>	Habitat	Status	Potential for Occurrence
Plains leopard frog <i>Lithobates blairi</i>	Streams, ponds, reservoirs, marshes, or irrigation ditches in prairie and desert grasslands, but also in oak, oak-pine woodland, and farmland.	BLM Sensitive	May occur.
Sonoran green toad <i>Bufo retiformis</i>	Sonoran desertscrub near rain pools, wash bottoms, and areas near water.	BLM Sensitive	May occur.
Plants			
Desert barrel cactus <i>Ferocactus cylindraceus</i>	Sonoran and Mohave Deserts on gravelly or rocky hillsides, canyon walls, alluvial fans, and wash margins.	Salvage Restricted	May occur.
Engelmann prickly pear <i>Opuntia engelmannii</i> var. <i>flavispina</i>	Sonoran Desert on sandy bajadas.	Salvage Restricted	May occur.
Cochise sedge (=giant sedge, Arizona giant sedge) <i>Carex ultra</i> (= <i>Carex spissa</i> var. <i>ultra</i>)	Moist soil near springs and streams.	BLM Sensitive	May occur.
Kelvin cholla <i>Cylindropuntia x kelvinensis</i>	Edges of grasslands, desertscrub, rolling hills, and rocky flats and slopes.	Salvage Restricted	May occur.
Littleleaf false tamarind <i>Lysiloma watsonii</i>	Arizona Upland subdivision of Sonoran desertscrub and in desert grasslands on rocky hillsides, as well as the slopes of creeks and tributaries.	Salvage Restricted	May occur.
Magenta-flowered hedgehog cactus <i>Mammillaria thornberi</i>	Sonoran desertscrub, semidesert grassland, and interior chaparral.	Salvage Restricted	May occur.
Night blooming cereus <i>Peniocereus greggii</i> var. <i>transmontanus</i>	Sonoran Desert, desertscrub in creosote-bursage flats, along the edges of washes, and on the slopes of small hills with sandy or gravelly loam substrates.	Salvage Restricted	May occur.
Pima Indian mallow <i>Abutilon parishii</i>	Sonoran desertscrub on rocky hillsides, cliff bases, canyon bottoms, and among rocks and boulders on canyon edges.	BLM Sensitive	May occur.
Pima pineapple cactus <i>Coryphantha scheeri</i> var. <i>robustispina</i>	Semidesert grassland or Sonoran desertscrub.	ESA Endangered	May occur.

Common Name <i>Scientific Name</i>	Habitat	Status	Potential for Occurrence
San Pedro River wild buckwheat <i>Eriogonum terrenatum</i>	Limestone and clay soils of the St. David formation and gravelly soils in association with creosote bush and whitethorn acacia. Its known range is limited to two disjunct populations, one on the San Pedro River south of St. David and the other on Cienega Creek near Pantano Road.	BLM Sensitive	Unlikely to occur.
Staghorn cholla <i>Cylindropuntia versicolor</i>	Sonoran Desert, desertscrub, canyons, washes, flats, and rocky hillsides.	Salvage Restricted	May occur.
Thornber fishhook cactus <i>Echinocereus fasciculatus</i>	Sonoran desertscrub under shrubs on valley floors in silty or sandy substrates.	Salvage Restricted	May occur.
Tumamoc globeberry Tumamoca macdougalii	Xeric areas under nurse plants along gullies and shady washes of hills and valleys in Sonoran desertscrub and Sinaloan thornscrub communities	BLM Sensitive; Salvage Restricted	May occur.
Varied fishhook cactus <i>Mammillaria viridiflora</i>	Semidesert grassland, interior chaparral, and pinyon-juniper woodlands on gravelly igneous substrates.	Salvage Restricted.	May occur.

Summary of Potential Effects of the Proposed Facilities

Construction

Vegetation and Wildlife. Potential construction-related impacts from the Project common to all wildlife groups would include the loss, degradation, and/or fragmentation of breeding, rearing, foraging, and dispersal habitats; collisions with and crushing by construction vehicles; loss of burrowing animals in burrows in areas where grading would occur; increased invasive and noxious weed establishment and spread; and increased noise/vibration levels. Application of PCEMs (as in the EIS and BLM and WAPA records of decisions [RODs]; see Exhibit B attachments) and rebuilding the line in place reduces these impacts.

Construction of the transmission line and associated access roads has the potential to create temporary impacts associated with the presence of workers and equipment, and related noise and vibration may cause species to avoid using work areas during construction activities. Noise/vibration and other disturbances may also lead to increased stress on individuals, which could decrease their overall fitness due to increased metabolic expenditures. These potential impacts would be temporary and would cease with the completion of construction activities. As such, they would be unlikely to be significant at the population level.

Proponent proposed measures PCEM VEG-4 and PCEM VEG-5 would minimize the introduction and spread of invasive and noxious weeds within the ROW or to adjacent areas from construction equipment. Minimization of ground-disturbing activities (PCEM VEG-1) would decrease conditions that favor the establishment and spread of invasive and noxious weed species.

Birds. Potential impacts on bird species from the Project would include those described above. Additional impacts to bird species outside of the ROW would occur and would include temporary disturbance from noise as well as changes to habitat use. Noise-related construction activities could affect nesting, roosting, and foraging activities. Changes to behavior could include increased alertness, turning toward the disturbance, fleeing the disturbance, changes in activity patterns, and nest abandonment. Raptors would be especially susceptible to noise disturbance early in the breeding season, when it can cause nest abandonment and failure for up to one season. Measures to avoid working in sensitive habitats during the breeding season would reduce these impacts (PCEM WILD-5), and they would be minor and short-term. Potential impacts from operation and maintenance would be from birds striking electrical transmission lines and towers.

Proponent proposed measures to design the transmission lines and structures in accordance with *Reducing Avian Collision with Power Lines* (Avian Powerline Interaction Committee [APLIC] 2012) would minimize the potential for bird collisions with transmission lines or poles (PCEM WILD-6). During poor weather conditions and along elevated terrain migrating birds and raptors would be at greater risk for collisions as they would fly nearer to transmission line facilities. While some individuals could be impacted these impacts would be unlikely to reach population levels. Small and mobile bird species, including southwestern willow flycatcher, would be anticipated to have a very low potential for collisions.

Electrocution is not a potential issue for birds as the transmission lines would have conductor spacing that is much larger than the largest wingspan of bird species that could occur in the area. Types of mitigation described by APLIC (2012) include collision monitoring, line marking, changing line configurations, and increasing wire diameters. Mitigation measures provided in the Avian Protection Plan and the application of PCEMs will eliminate potential impacts from birds in terms of electrocution.

Reptiles. Potential impacts on reptile species from the Project would include those described above. In addition, reptile species that shelter underground would be susceptible to being crushed by construction equipment. Construction-related trash may attract reptile predators such as ravens (*Corvus corax*) and raptor species. The presence of the transmission line and poles could provide perching and nesting habitat for ravens and other species, which may increase raven and other reptile predator numbers along the transmission line. Potential construction

impacts on reptiles would be short- and long-term and minor. Impacts from the operation and maintenance of the Project on reptiles would be long-term and minor/negligible.

Amphibians. Potential impacts on amphibian species from the Project would include those described above. Amphibian species would also be affected by any changes to water quality. Potential construction impacts on amphibian species would be short-term and minor/negligible. No operational or maintenance impacts on amphibians are anticipated.

Increases in erosion from ground-disturbing activities would be avoided through the development and implementation of a stormwater pollution prevention plan (PCEM WAT-1). A spill prevention plan (PCEM HAZ-5) would be developed that would limit the potential for construction equipment to leak any hazardous materials that could impact water quality. Proponent-proposed measures PCEM VEG-6 and WAT-2 requiring equipment to be washed prior to entering the ROW and avoiding flowing stream channels would minimize the potential for construction equipment to spread non-native species such as crayfish and diseases such as Chytridiomycosis from one water body to another.

Areas of ground disturbance would be restored to the extent possible upon completion of construction activities. If restoration activities are successful, potential erosion would be minimized. However, if restoration activities are not successful, erosion could continue throughout the life of the transmission line operation and maintenance, which may contribute to long-term impacts to water quality for amphibian species.

Federally Listed Species. As analyzed in the 2015 EIS, seven federally listed wildlife species were identified as having the potential to occur in the Project ROW: the southwestern willow flycatcher (foraging/migratory only), yellow-billed cuckoo (foraging/migratory only), northern Mexican gartersnake, Sonoran desert tortoise (no longer a candidate), lesser long-nosed bat (now delisted), Tucson shovel-nosed snake (no longer a candidate), and Pima pineapple cactus. As the Sonoran desert tortoise, lesser long-nosed bat, and Tucson shovel-nosed snake are no longer candidate or listed species, they are not discussed further in this exhibit.

In addition, three other species, the California least tern (*Sterna antillarum browni*), jaguar (*Panthera onca*), and ocelot (*Leopardus pardalis*), could also occur but would be considered unlikely to occur. Although habitat parameters would be present, the ROW would not be within the species' typical range, or habitat parameters would not be present. Therefore the Project activities would have no effect to the populations of California least tern, jaguar, or ocelot.

Tribal sensitive species for the Tohono O'odham Nation were considered in the Final EIS when they were also protected under a federal, state, or county law.

Potential impacts on northern Mexican gartersnake from construction-related activities would include those described above impacts to reptile species. As there is no designated or proposed critical habitat for the northern Mexican gartersnake in the Vail to Tortolita Project area, there would be no impact on habitat or proposed critical habitat.

Potential impacts on southwestern willow flycatcher from construction activities would include those described above as impacts to bird species. However, there would be no perennial or intermittent waterways in this ROW that would provide appropriate vegetation structure for nesting habitat for this species, and this ROW would not intersect with any designated critical habitat for this species. Riparian vegetation that may be used as migratory habitat is present near the Santa Cruz River in segments U3i and U3k. Approximately 13.6 acres of this habitat would be disturbed. However, these impacts would primarily occur within the existing WAPA ROW. As such, these would not be new impacts with the replacement of transmission line structures.

No large cottonwood and willow galleries that would provide nesting habitat for western yellow-billed cuckoo are present in the ROW, although riparian vegetation that may be used as migratory habitat is present near the Santa Cruz River in segments U3i and U3k. Approximately 13.6 acres of this habitat would be disturbed. However, these impacts would primarily occur within the existing WAPA ROW and would not be new impacts with the replacement of transmission line structures.

BLM Sensitive Species. Twenty-five BLM Sensitive wildlife species were identified in 2015 as having the potential to occur in the ROW, because it would be within the species' range and habitat parameters would be present. These species include Allen's big-eared bat (*Idionycteris phyllotis*), banner-tailed kangaroo rat (*Dipodomys spectabilis*), California leaf-nosed bat, cave myotis, greater western mastiff bat, Mexican long-tongued bat (*Choeronycteris mexicana*), Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*), spotted bat (*Euderma maculatum*), American peregrine falcon (*Falco peregrinus anatum*), Arizona grasshopper sparrow (*Ammodramus savannarum ammoregus*), bald eagle, cactus ferruginous pygmy-owl, desert purple martin (*Progne subis hesperia*), gilded flicker (*Colaptes chrysoides*), golden eagle, western burrowing owl, Arizona striped whiptail lizard (*Aspidoscelis arizonae*), desert ornate box turtle (*Terrapene ornata luteola*), Sonora mud turtle (*Kinosternon sonoriense sonoriense*), Sonoran desert tortoise, Tucson shovel-nosed snake, Great Plains narrow-mouthed toad (*Gastrophryne olivacea*), lowland leopard frog (*Lithobates yavapaiensis*), Plains leopard frog (*Lithobates blairi*), and Sonoran green toad (*Bufo retiformis*).

Cave myotis are known to roost on the Ina Street Bridge, approximately 0.66 mile from segment U3i, in April and May. Blasting may occur in this area. Impacts from blasting would be the same

as those described above for mammals. Implementation of PCEMs combined with the distance to the bridge would avoid potential impacts to roosting bats at the Ina Road Bridge.

The ROW crosses Sonoran desert tortoise habitat. Based on the amount of available Sonoran desert tortoise habitat in the ROW and broader analysis area, there would be no detectable effect on the viability of this species or contribution toward a downward population trend or listing of this species as threatened or endangered.

Potential impacts on plains leopard frog, lowland leopard frog, Sonoran green toad, and Great Plains narrow-mouthed toad from construction activities would include those described above as impacts to amphibian species. There are no perennial waterways in this ROW, and pole structures and laydown areas would not be placed in ephemeral or intermittent waterways that could provide dispersal habitats for toads or frogs. There would be no impacts to these species' habitat, and no detectable effect on the viability of these species or that would contribute toward a downward population trend or listing of these species as threatened or endangered.

Potential impacts on Sonoran mud turtle and desert ornate box turtle from construction-related activities would include those described above as impacts to reptile species. Construction-related impacts would include habitat disturbance. Based on the amount of available reptile habitat in the ROW and broader analysis area, there would be no detectable effect on the viability of these species or contribution toward a downward population trend or listing of any of these species as threatened or endangered.

Potential impacts on Tucson shovel-nosed snake would include those described previously for all reptiles. Habitat for the species occurs in Pinal County where segment UK3 would cross the Santa Cruz River floodplain. PCEMs to avoid and minimize disturbance in riparian areas and using the existing transmission line ROW would minimize impacts on the species. Based on the amount of available habitat in the representative ROW and broader analysis area, construction-related impacts would have a short-term, minor/negligible effect on Tucson shovel-nosed snake and its habitat. As noted in the federally listed species section, the Tucson shovel-nosed snake is no longer a federally protected candidate species.

Potential impacts on American peregrine falcon, Arizona grasshopper sparrow, western burrowing owl, golden eagle, gilded flicker, cactus ferruginous pygmy-owl, bald eagle, and desert purple martin from construction activities would include those described above as impacts to bird species. Based on the amount of available bird nesting habitat in the ROW and broader analysis area, construction-related activities would have no detectable effect on the viability of any of these bird species or contribute toward a downward population trend or listing of the species as threatened or endangered.

Potential impacts on the banner-tailed kangaroo rat from construction-related activities would include those described above as impacts to mammal species. Based on the amount of available small mammal habitat in the ROW and broader analysis area, there would be no detectable effect on the viability of this species or contribution toward a downward population trend or listing of this species as threatened or endangered.

Potential impacts on the seven bat species noted above from construction activities would include disturbance to habitat and a decrease in potential foraging habitat. However, there would be no roost or nest sites in the ROW that would provide shelter for these species. Based on the amount of available foraging habitat in the ROW and broader analysis area and utilizing the existing ROW, construction-related activities would have no detectable effect on the viability of these species or contribution toward a downward population trend or listing of these species as threatened or endangered.

State of Arizona Wildlife Species of Concern. Twenty-eight Arizona state-listed Wildlife Species of Concern were identified in 2015 as possibly occurring in this ROW. Of these, five are addressed above (Sonoran green toad, ornate box turtle, cave myotis, pale Townsend's big-eared bat, and gilded flicker are addressed in the BLM Sensitive Species section). The other 23 species are addressed below.

Amphibian species impacted would include the Colorado River (Sonoran Desert) toad (*Incilius alvarius*). Mammal species impacted would include antelope jackrabbit (*Lepus alleni*), kit fox, Arizona pocket mouse (*Perognathus amplus*), little pocket mouse (*Perognathus longimembris*), Harris' antelope squirrel (*Ammospermophilus harrisi*), and pocketed free-tailed bat.

Bird species impacted would include Abert's towhee (*Melospiza aberti aberti*), Bell's vireo (*Vireo bellii*), crested caracara (*Caracara cheriway*), and Gila woodpecker (*Melanerpes uropygialis uropygialis*). The crested caracara is known to breed in areas approximately 4 miles north of the Project terminus and is seen infrequently in the area near the Project terminus.

Reptile species impacted would include canyon spotted whiptail (*Aspidoscelis burti*), Gila monster (*Heloderma suspectum*), regal horned lizard (*Phrynosoma solare*), saddled leaf-nosed snake (*Phyllorhynchus browni*), Sonoran collared lizard (*Crotaphytus nebrius*), Sonoran coralsnake (*Micruroides euryxanthus*), Sonoran whipsnake (*Coluber bilineatus*), tiger rattlesnake (*Crotalus tigris*), and variable sandsnake (*Chilomeniscus stramineus*). Based on the amount of habitat for these species in the ROW and broader analysis area, and the species' use of the existing ROW, it is not anticipated that this ROW would cause significant population-level impacts for these species or a contribution toward a downward population trend or listing of these species as threatened or endangered.

State of Arizona Species of Greatest Conservation Need. Nineteen Arizona SGCN were identified in 2015 as possibly occurring in the ROW. Of these, 11 are addressed above (lesser long-nosed bat, cactus ferruginous pygmy-owl, and southwestern willow flycatcher are addressed in the Federally Listed Species section; and greater western mastiff bat, California leaf-nosed bat, spotted bat, peregrine falcon, desert purple martin, western burrowing owl, Sonoran desert tortoise, and lowland leopard frog are addressed in the BLM Sensitive Species section). The other eight species are addressed below.

Mammal species impacts would include Mexican free-tailed bat (*Tadarida brasiliensis*) and western yellow bat (*Lasiurus xanthinus*). Bird species impacted would include buff-collared nightjar (*Caprimulgus ridgwayi*), savannah sparrow (*Passerculus sandwichensis*), and western grasshopper sparrow (*Ammodramus savannarum perpallidus*). Reptile species impacted would include Goode's horned lizard (*Phrynosoma goodei*). Construction-related impacts would include those described above for mammals, birds, and reptiles. Based on the amount of habitat for these species in the ROW and broader analysis area, and the species' use of the existing ROW, it is not anticipated that this Project would cause any significant population-level impacts for these species or contribute toward a downward population trend or listing of these species as threatened or endangered.

Pima County Species. Fifteen priority vulnerable species in Pima County were identified in 2015 as possibly occurring in the ROW. Of these, 10 are addressed above (California leaf-nosed bat, pale Townsend's big-eared bat, Mexican long-tongued bat, western burrowing owl, ornate box turtle, and lowland leopard frog are addressed in the BLM Sensitive Species section; Abert's towhee, Bell's vireo, and spotted canyon whiptail are addressed in the Arizona Wildlife Species of Concern section; and the western yellow bat is addressed in the Arizona Species of Greatest Conservation Need section). The remaining five species are addressed below.

Mammal species impacted would include western red bat (*Lasiurus blossevillii*) and Merriam's mesquite mouse (*Peromyscus merriami*). Bird species impacted would include rufous-winged sparrow (*Peucaea carpalis*) and Swainson's hawk (*Buteo swainsoni*). Reptile species impacted would include the ground snake (*Sonora semiannulata*). Based on the amount of habitat for these species in the ROW and broader analysis area and utilizing the existing ROW it is not anticipated that the Project would cause any significant population-level impacts for these species or contribution toward a downward population trend or listing of these species as threatened or endangered.

The Pima pineapple cactus, listed as endangered under the ESA, has potential to be present on the southern part of segment U3. This species is known to be present in this vicinity from approximately the Pantano Substation to the Del Bac Substation. Spring surveys in 2013 have

documented the Pima pineapple cactus between Interstate 19 and Davidson Canyon in the existing Western ROW (personal communication, Johnida Dockens, BLM, 2013).

Pima County protected species would be inventoried and conserved, including saguaro, desert ironwood, and Pima pineapple cactus.

Impacts to special-status plants, including the Pima pineapple cactus and Tumamoc globeberry, would be avoided. Where avoidance is not possible, special-status plants would be conserved by relocating plants and/or reseeding, replacing topsoil with existing topsoil that was removed, and regrading in compliance with local ordinances (Pima County, Tohono O'odham Nation, etc.). Measures to conserve special-status plants would be implemented through the Reclamation, Vegetation, and Monitoring Plan. Adherence to PCEMs would result in short-term, minor impacts to special-status plant species.

Operation and Maintenance

Potential impacts from operation and maintenance activities would be similar in nature to those previously described above for construction activities. However, the scope of impacts would be lower in magnitude than those for construction as there would be less equipment and fewer people working. Operation and maintenance impacts would be temporary and would occur sporadically over the life of the Project. It is estimated that maintenance activities would occur once or twice per year under normal circumstances. Additionally, these activities already occur for the current WAPA 115-kV transmission line, so they would not be new impacts.

CONCLUSION

Potential impacts to species listed under the ESA were addressed during Section 7 consultation with USFWS. In their BO (USFWS 2014), the USFWS concluded that the Project was not likely to jeopardize the continued existence of listed species likely to be present in the study area.

The Final EIS and BLM and WAPA RODs (see Exhibit B) include the incorporation of PCEMs and mitigation measures, which will minimize or avoid potential impacts to species listed under the ESA, and areas of biological wealth. The Project plan of development (POD) is Appendix N of the Final EIS (Exhibit B-1 of this application) and details over 65 vegetation and wildlife related PCEMs that the BLM, WAPA, and Southline Transmission, LLC, committed to in order to minimize impacts from the Project.

A total of 91 special-status species were reviewed for the Project. Of those species, 76 have the potential to occur in the study area. This includes four species listed under the Endangered Species Act, 27 BLM Sensitive Species, 21 AZ wildlife species of concern (WSC), 7 Arizona SGCN, 2 BGEPA species, 14 AZNPL species, and one Pima County species.

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