

**APPENDIX B3 – ESTIMATED DISTRIBUTION OF
SPECIAL-STATUS SPECIES**

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INTRODUCTION

This document provides a discussion of the mapping approach used in the impact analysis for special-status species. Table B3-1 provides additional detail on species distribution to complement the discussion of each subroute in sections 3.6.9 and 4.6.5 of the EIS. The purpose of the impact analysis was to allow a comparison of alternatives to aid in selection of a preferred alternative, based on available data and initial field reconnaissance. These estimated distributions are not intended to substitute for any requirements under the ESA. Continuing coordination with other agencies, and the results of Section 7 consultation on the preferred alternative, will refine these estimates and set committed species-specific and site-specific mitigation.

The first group of species, those addressed in Table B3-1, discussed includes those that are known or expected to occur in specific areas, and sufficient information was available to allow that distribution to be estimated. Information is provided on how that distribution was estimated.

The second group includes species with unclear distributions, poor or no available information, species that would not be affected by the proposed Project, or species that may occur nearly anywhere in the region. A brief discussion is included that provides information on the status of the species, or of any information gaps that prevented an estimation of their distribution.

Appendix B1, the Biological Technical Report, addressed all special-status species that may occur in the Project area. Table B3-2 provides information on the potential presence of each of these species on Project subroutes, based on the information reviewed and presented in Appendix B1. All species addressed in Appendix B1 are listed in Table B3-2 except for those listed in Table B3-1.

SPECIES WITH ESTIMATED DISTRIBUTIONS

Lesser Long-nosed Bat

Areas with likely saguaro or agave presence were included in the milepost distribution, from the Peloncillo Mountains westward.

Mexican Long-nosed Bat

The species has been detected in New Mexico only once, in the southern Peloncillo Mountains. Link B150a is potentially within foraging range (approximately 40 miles) of that record.

Aplomado Falcon

Any areas that appeared to be relatively intact grassland, based on LANDFIRE and aerial imagery, were included in the milepost distribution.

Yuma Clapper Rail

This species has been detected infrequently at Picacho Reservoir. Flight patterns are unknown, although rails are most likely flying from the Gila River or wetlands in the Phoenix area. The milepost distribution includes portions of links north and west of Picacho Reservoir.

Yellow-billed Cuckoo

All river crossings with large trees were included, although not all have habitat patches large enough to support nesting. Foraging or floater individual presence is possible.

Cactus Ferruginous Pygmy-owl

Areas with potential saguaros or large trees were included from San Pedro River Valley westward.

Southwestern Willow Flycatcher

All river crossings with large trees were included, although not all have habitat patches large enough to support nesting. Foraging or floater individual presence is possible.

Sprague's Pipit

Areas were included in the milepost distribution that were mapped as greater than 75 percent grassland by LANDFIRE, extending to areas of greater than 50 percent grassland at the margins of large, contiguous grassland blocks.

Sonoran Desert Tortoise

The upper, eastern limit of the milepost distribution for Desert Tortoise was set at approximately 4500 feet in the San Pedro River Valley. All links in and west of the San Pedro River Valley were included, with the exception of urban Tucson, farmland, and low-elevation valley bottoms that appeared to lack substantial topographical relief.

Arizona Striped Whiptail

The milepost distribution includes valley bottom habitat near known populations in the Sulphur Springs Valley.

Tucson Shovel-nosed Snake

The milepost distribution includes valley-bottom creosote bush-bursage communities in Pima and Pinal counties.

Northern Mexican Garter Snake

Links crossing Cienega Creek were included in the milepost distribution.

Gila Chub

Links crossing Cienega Creek were included in the milepost distribution.

Roundtail Chub

The species is present in Aravaipa Canyon downstream from Link C170.

Rio Grande Silvery Minnow

Both crossing locations of the Rio Grande were included in the milepost distribution.

Spikedace

The species is present in Aravaipa Canyon downstream from Link C170. Critical habitat is designated in Hot Springs and Redfield canyons, but the Project would cross those canyons below any permanent water.

Loach Minnow

The species is present in Aravaipa Canyon downstream from Link C170. Critical habitat is designated in Hot Springs and Redfield canyons, but the Project would cross those canyons below any permanent water.

Gila Topminnow

Links crossing Cienega Creek were included.

Socorro Springsnail

Link A161b would pass very close to the sole known spring supporting this species.

Pima Pineapple Cactus

The milepost distribution includes all undeveloped, relatively flat areas from Cienega Creek Preserve to the southern boundary of Tucson.

Acuña Cactus

The milepost distribution includes areas with rocky slopes or near exposed bedrock in vicinity of a known population.

Huachuca Water-umbel

Links crossing Cienega Creek were included.

Three-nerved Scurfpea

Chihuahuan Desert scrub in the San Simon Valley was included in the milepost distribution.

SPECIES WITHOUT ESTIMATED DISTRIBUTIONS

New Mexico Meadow Jumping Mouse

This species is only known from within Bosque del Apache National Wildlife Refuge in the study area. No impacts are expected to occur.

Mexican Gray Wolf

This species is not expected to occur in areas that would be crossed by the proposed Project.

Jaguar

The potential for Jaguar movement in the Southwest, particularly north of I-10, is not clearly understood at present.

Ocelot

The potential for Ocelot movement in the Southwest, particularly north of I-10, is not clearly understood at present.

Jaguarundi

No clear evidence has been found to indicate that Jaguarundis have been present in Arizona in recent decades.

Golden Eagle

All undeveloped portions of the proposed Project are within or near Golden Eagle foraging or nesting habitat.

Bald Eagle

No nests are known near the proposed Project, although Bald Eagles may occur along major rivers in winter.

Piping Plover

The species has been recorded as only as an accidental near the proposed Project.

Mexican Spotted Owl

The species occurs in the northern Galiuro Mountains and southern Rincon Mountains, but no suitable wooded canyon habitat is crossed by the proposed Project.

Chiricahua Leopard Frog

All occupied Chiricahua Leopard Frog habitat is located no closer than approximately 3 miles upstream from any proposed stream crossing.

Apache Trout

No suitable habitat is present where Link C130a crosses Grant Creek.

Desert Pupfish

Suitable habitat is present only upstream from links C331 and C470 in Hot Springs and Redfield canyons.

Todsen's Pennyroyal

The USFWS indicated suitable habitat for this species occurs on Chupadera Mesa. However, no indication was given of the extent of that habitat, and the species has not been detected in that area.

Kuenzler's Hedgehog Cactus

The USFWS indicated suitable habitat for this species occurs in the foothills of the Gallinas Mountains, approximately 15 miles to the northwest of the nearest known population. However, no indication was given of the extent of that habitat, and the species has not been detected in that area.

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Table B3-2. Potential Presence of Special-status Species on Each Subroute																			
	Subroute 1A	Subroute 1A1	Subroute 1A2	Subroute 1B1	Subroute 1B2	Subroute 1B2a	Subroute 1B3	Subroute 3A	Subroute 3A2	Subroute 3B	Subroute 4A	Subroute 4B	Subroute 4C1	Subroute 4C2	Subroute 4C2a	Subroute 4C2b	Subroute 4C2c	Subroute 4C3	
Mammals																			
Mexican Opossum <i>Didelphis virginiana californica</i>																			
Cockrum's Desert Shrew <i>Notiosorex cockrumi</i>																			
California Leaf-nosed Bat <i>Macrotus californicus</i>																			
Mexican Long-tongued Bat <i>Choeronycteris mexicana</i>																			
California Myotis <i>Myotis californicus</i>																			
Yuma Myotis <i>Myotis yumanensis</i>																			
Small-footed Myotis <i>Myotis ciliolabrum</i>																			
Fringed Myotis <i>Myotis thysanodes</i>																			
Cave Myotis <i>Myotis velifer</i>																			
Western Pipistrelle <i>Pipistrellus hesperus</i>																			
Western Red Bat <i>Lasiurus blossevillii</i>																			
Western Yellow Bat <i>Lasiurus xanthinus</i>																			
Spotted Bat <i>Euderma maculatum</i>																			
Allen's Big-eared Bat <i>Idionycteris phyllotis</i>																			
Pale Townsend's Big-eared Bat <i>Corynorhinus townsendii pallescens</i>																			
Big Free-tailed Bat <i>Nyctinomops macrotis</i>																			
Pocketed Free-tailed Bat <i>Nyctinomops femorosaccus</i>																			
Greater Mastiff-bat <i>Eumops perotis californicus</i>																			
Spotted Ground Squirrel <i>Spermophilus spilosma</i>																			
Gunnison's Prairie Dog <i>Cynomys gunnisoni</i>																			
Mearns Pocket Gopher <i>Thomomys bottae mearnsii</i>																			
Hispid Pocket Mouse <i>Chaetodipus hispidus</i>																			
Plains Harvest Mouse <i>Reithrodontomys montanus</i>																			

Table B3-2. Potential Presence of Special-status Species on Each Subroute																			
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American Beaver <i>Castor canadensis</i>																			
Mesquite Mouse <i>Peromyscus merriami</i>																			
Northern Pygmy Mouse <i>Baiomys taylori ater</i>																			
Desert Pocket Gopher <i>Geomys arenarius arenarius</i>																			
Yellow-nosed Cotton Rat <i>Sigmodon ochrognathus</i>																			
Meadow Jumping Mouse <i>Zapus hudsonius luteus</i>																			
Mexican Gray Wolf <i>Canis lupus baileyi</i>																			
Red Fox <i>Vulpes vulpes</i>																			
Ringtail <i>Bassariscus astutus</i>																			
Western Spotted Skunk <i>Spilogale gracilis</i>																			
Hooded Skunk <i>Mephitis macroura milleri</i>																			
Common Hog-nosed Skunk <i>Conepatus leuconotus</i>																			
Jaguar <i>Panthera onca</i>																			
Ocelot <i>Leopardus (Felis) pardalis</i>																			
Jaguarundi <i>Herpailurus yaguarondi tolteca</i>																			
Mule Deer <i>Odocoileus hemionus</i>																			
Desert Bighorn Sheep <i>Ovis canadensis mexicana</i>																			
Birds																			
Eared Grebe <i>Podiceps nigricollis</i>																			
Double-crested Cormorant <i>Phalacrocorax auritus</i>																			
Neotropic Cormorant <i>Phalacrocorax brasilianus</i>																			
Great Egret <i>Ardea alba</i>																			
Cattle Egret <i>Bubuculus ibis</i>																			
American Bittern <i>Botaurus lentiginosus</i>																			

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Snowy Egret <i>Egretta thula</i>	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
Least Bittern <i>Ixobrychus exilis</i>	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•
White-faced Ibis <i>Plegadis chihi</i>	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•
Black-bellied Whistling-duck <i>Dendrocygna autumnalis</i>													•	•	•	•	•	•
Northern Pintail <i>Anas acuta</i>	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
American Wigeon <i>Anas americana</i>											•	•	•	•	•	•	•	•
Northern Shoveler <i>Anas clypeata</i>											•	•	•	•	•	•	•	•
Blue-winged Teal <i>Anas discors</i>											•	•	•	•	•	•	•	•
Canvasback <i>Aythya valisineria</i>											•	•	•	•	•	•	•	•
Mississippi Kite <i>Ictinia mississippiensis</i>	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•
Northern Harrier <i>Circus cyaneus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Osprey <i>Pandion haliaetus</i>	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•
Bald Eagle (Sonoran Desert DPS) <i>Haliaeetus leucocephalus</i>											•	•	•					
Bald Eagle (Wintering Population) <i>Haliaeetus leucocephalus</i>	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•
Golden Eagle <i>Aquila chrysaetos</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Zone-tailed Hawk <i>Buteo albonotatus</i>											•	•	•	•	•	•	•	•
Common Black-hawk <i>Buteogallus anthracinus</i>	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•
Northern Gray Hawk <i>Buteo (Asturina) nitidus maximus</i>											•	•	•	•	•	•	•	•
Swainson's Hawk <i>Buteo swainsoni</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ferruginous Hawk <i>Buteo regalis</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Prairie Falcon <i>Falco mexicanus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Peregrine Falcon <i>Falco peregrinus anatum</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Crested Caracara <i>Caracara cheriway</i>											•	•	•	•	•	•	•	•
Montezuma Quail								•	•	•								

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<i>Cyrtonyx montezumae</i>																		
Scaled Quail <i>Callipepla squamata</i>	•	•	•	•	•	•	•	•	•	•								
Sandhill Crane <i>Grus canadensis canadensis</i>	•	•	•	•	•	•	•				•							
Western Snowy Plover <i>Charadrius alexandrinus nivosus</i>	•	•	•	•	•	•	•						•					
Piping Plover <i>Charadrius melodus</i>				•	•	•	•											
Mountain Plover <i>Charadrius montanus</i>	•	•	•	•	•	•	•					•	•	•	•	•	•	•
Long-billed Curlew <i>Numenius americanus americanus</i>	•	•	•	•	•	•	•						•	•	•	•	•	•
American Avocet <i>Recurvirostra americana</i>													•	•	•	•	•	•
Lesser Yellowlegs <i>Tringa flavipes</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wilson's Phalarope <i>Phalaropus tricolor</i>	•	•	•	•	•	•	•	•	•	•								
Black Tern <i>Chlidonias niger</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Band-tailed Pigeon <i>Patagioenas (Columba) fasciata</i>	•	•	•	•	•	•	•	•	•	•								
Mourning Dove <i>Zenaida macroura</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Common Ground Dove <i>Columbina passerina pallescens</i>													•	•	•			
Short-eared Owl <i>Asio flammeus</i>													•	•	•	•	•	•
Mexican Spotted Owl <i>Strix occidentalis lucida</i>													•	•	•	•	•	•
Elf Owl <i>Micrathene whitneyi</i>													•	•	•	•	•	•
Western Burrowing Owl <i>Athene cucularia hypugaea</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Black Swift <i>Cypseloides niger</i>	•	•	•	•	•	•	•											
Allen's Hummingbird <i>Selasphorus sasin</i>													•	•	•	•	•	•
Rufous Hummingbird <i>Selasphorus rufus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Calliope Hummingbird <i>Selasphorus calliope</i>													•	•	•	•	•	•
Costa's Hummingbird <i>Calypte costae</i>													•	•	•	•	•	•
Elegant Trogon <i>Trogon elegans</i>																		•

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Belted Kingfisher <i>Megaceryle alcyon</i>								•	•	•	•	•	•	•	•	•	•	•
Lewis's Woodpecker <i>Melanerpes lewis</i>																		•
Gila Woodpecker <i>Melanerpes uropygialis</i>								•	•	•	•	•	•	•	•	•	•	•
Arizona Woodpecker <i>Picoides arizonae</i>											•	•	•	•	•	•	•	•
Williamson's Sapsucker <i>Sphyrapicus thyroideus</i>								•	•	•								
Greater Pewee <i>Contopus pertinax</i>								•	•	•								
Tropical Kingbird <i>Tyrannus melancholicus</i>											•	•	•	•	•	•	•	•
Thick-billed Kingbird <i>Tyrannus crassirostris</i>											•	•	•	•	•	•	•	•
Sulphur-bellied Flycatcher <i>Myiodynastes luteiventris</i>											•	•	•	•	•	•	•	•
Loggerhead Shrike <i>Lanius ludovicianus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bell's Vireo <i>Vireo bellii</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Gray Vireo <i>Vireo vicinior</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pinyon Jay <i>Gymnorhinus cyanocephalus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Western Purple Martin <i>Progne subis arboricola</i>											•	•	•	•	•	•	•	•
Desert Purple Martin <i>Progne subis hesperia</i>											•	•	•	•	•	•	•	•
Bank Swallow <i>Riparia riparia</i>	•	•	•	•	•	•	•	•	•	•								
Juniper Titmouse <i>Baeolophus ridgwayi</i>	•	•	•	•	•	•	•	•	•	•								
Sage Thrasher <i>Oreoscoptes montanus</i>	•	•	•	•	•	•	•	•	•	•								
Bendire's Thrasher <i>Toxostoma bendirei</i>								•	•	•	•	•	•	•	•	•	•	•
LeConte's Thrasher <i>Toxostoma lecontei</i>											•	•	•	•	•	•	•	•
Phainopepla <i>Phainopepla nitens</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Black-throated Gray Warbler <i>Dendroica nigrescens</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Yellow Warbler <i>Dendroica petechia</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Orange-crowned Warbler	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

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<i>Vermicora celata</i>																		
Virginia's Warbler <i>Vermivora virginiae</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lucy's Warbler <i>Vermivora luciae</i>											•	•	•	•	•	•	•	•
Canyon Towhee <i>Pipilo fuscus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Abert's Towhee <i>Pipilo aberti</i>											•	•	•	•	•	•	•	•
Rufous-winged Sparrow <i>Aimophila carpalis</i>											•	•	•	•	•	•	•	•
Sage Sparrow <i>Amphispiza belli</i>	•	•	•	•	•	•	•	•	•	•								
Black-chinned Sparrow <i>Spizella atrogularis</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Brewer's Sparrow <i>Spizella breweri</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Grasshopper Sparrow <i>Ammodramus savannarum</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Baird's Sparrow <i>Ammodramus bairdii</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lincoln's Sparrow <i>Melospiza lincolni</i>											•	•	•	•	•	•	•	•
Savannah Sparrow <i>Passerculus sandwichensis</i>											•	•	•	•	•	•	•	•
Lark Bunting <i>Calamospiza melanocorys</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
White-crowned Sparrow <i>Zonotrichia leucophrys</i>											•	•	•	•	•	•	•	•
Painted Bunting <i>Passerina ciris pallidior</i>	•	•	•	•	•	•	•	•	•	•								
Indigo Bunting <i>Passerina cyanea</i>											•	•	•	•	•	•	•	•
McCown's Longspur <i>Calcarius mccownii</i>	•	•	•	•	•	•	•	•	•	•								
Chestnut-collared Longspur <i>Calcarius ornatus</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Hooded Oriole <i>Icterus cucullatus</i>											•	•	•					
Lawrence's Goldfinch <i>Carduelis lawrencei</i>											•	•	•	•	•	•	•	•
Amphibians																		
Tiger Salamander (Barred subspecies) <i>Ambystoma tigrinum mavortium (nebulosum)</i>	•	•	•	•	•	•	•	•	•	•								

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Canyon Treefrog <i>Hyla arenicolor</i>											•	•	•	•	•	•	•	•
Western Chorus Frog <i>Pseudacris triseriata</i>	•	•	•	•	•	•	•											
Plains Leopard Frog <i>Lithobates blairi</i>	•	•	•	•	•	•	•											
Chiricahua Leopard Frog <i>Lithobates chiricahuensis</i>	•	•	•	•	•	•	•											
Northern Leopard Frog <i>Lithobates pipiens</i>	•	•	•	•	•	•	•				•	•	•	•	•	•	•	•
Lowland Leopard Frog <i>Lithobates yavapaiensis</i>													•	•	•	•	•	•
Great Plains Narrow-mouthed Toad <i>Gastrophryne olivacea</i>																		•
Reptiles																		
Desert Box Turtle <i>Terrapene ornata luteola</i>								•	•	•	•	•	•	•	•	•	•	•
Western Painted Turtle <i>Chrysemys picta bellii</i>	•	•	•	•	•	•	•											
Big Bend Slider <i>Trachemys gaiageae</i>	•	•	•	•	•	•	•											
Yellow Mud Turtle <i>Kinosternon flavescens</i>								•	•	•								
Sonora Mud Turtle <i>Kinosternon sonoriense sonoriense</i>											•	•	•	•	•	•	•	•
Chuckwalla <i>Sauromalus ater</i>											•	•	•	•	•	•	•	•
Collared Lizard <i>Crotaphytus collaris auriceps</i>	•	•	•	•	•	•	•	•	•	•								
Sonoran Earless Lizard <i>Holbrookia elegans thermophila</i>											•	•	•	•	•	•	•	•
Texas Horned Lizard <i>Phrynosoma cornutum</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Greater Short-horned Lizard <i>Phrynosoma hernandesi</i>											•	•	•	•	•	•	•	•
Regal Horned Lizard <i>Phrynosoma solare</i>								•	•	•								
Giant Spotted Whiptail <i>Aspidoscelis burti stictogrammus</i>											•	•	•	•	•	•	•	•
Madrean Alligator Lizard <i>Elgaria kingii</i>								•	•	•								
Reticulate Gila Monster <i>Heloderma suspectum suspectum</i>								•	•	•								
New Mexico Threadsnake <i>Leptotyphlops dissectus</i>											•	•	•	•	•	•	•	•
Desert Night Snake <i>Hypsiglena chlorophaea (torquata)</i>											•	•	•	•	•	•	•	•

Table B3-2. Potential Presence of Special-status Species on Each Subroute

	Subroute 1A	Subroute 1A1	Subroute 1A2	Subroute 1B1	Subroute 1B2	Subroute 1B2a	Subroute 1B3	Subroute 3A	Subroute 3A2	Subroute 3B	Subroute 4A	Subroute 4B	Subroute 4C1	Subroute 4C2	Subroute 4C2a	Subroute 4C2b	Subroute 4C2c	Subroute 4C3
<i>chlorophaea</i>																		
Smith's Black-headed Snake <i>Tantilla hobartsmithi</i>									•	•	•	•	•	•	•	•	•	•
Plains Black-headed Snake <i>Tantilla nigriceps</i>									•	•	•	•	•	•	•	•	•	•
Ground Snake <i>Sonora semiannulata</i>									•	•	•	•	•	•	•	•	•	•
California Kingsnake <i>Lampropeltis getula californiae</i>									•	•	•							
Milk Snake <i>Lampropeltis triangulum</i>	•	•	•	•	•	•	•	•	•	•								
Eastern Patch-nosed Snake <i>Salvadora grahamiae</i>											•	•	•	•	•	•	•	•
Western Black-necked Garter Snake <i>Thamnophis cyrtopsis cyrtopsis</i>									•	•	•	•	•	•	•	•	•	•
New Mexico Garter Snake <i>Thamnophis sirtalis dorsalis</i>	•	•	•	•	•	•	•											
Desert Massasauga <i>Sistrurus catenatus edwardsii</i>	•	•	•	•	•	•	•											
Western Diamondback Rattlesnake <i>Crotalus otaletus atrox</i>	•	•	•	•	•	•	•	•	•	•								
Banded Rock Rattlesnake <i>Crotalus lepidus klauberi</i>	•	•	•	•	•	•	•											
Fish																		
Apache Trout <i>Oncorhynchus apache</i>												•						
Longfin Dace <i>Agosia chrysogaster</i>												•	•	•	•	•	•	•
Rio Grande Chub <i>Gila pandora</i>	•	•	•	•	•	•	•											
Smallmouth Buffalo <i>Ictiobus bubalus</i>	•	•	•	•	•	•	•											
Speckled Dace <i>Rhinichthys osculus</i>												•	•					
Desert Sucker <i>Catostomus clarki</i>												•	•					
Sonora Sucker <i>Catostomus insignis</i>												•	•					
Rio Grande Sucker <i>Catostomus plebeius</i>	•	•	•	•	•	•	•											
Razorback Sucker <i>Xyrauchen texanus</i>												•						
Blue Catfish <i>Ictalurus furcatus</i>	•	•	•	•	•	•	•											
Desert Pupfish <i>Cyprinodon macularius</i>														•				

Table B3-2. Potential Presence of Special-status Species on Each Subroute

	Subroute 1A	Subroute 1A1	Subroute 1A2	Subroute 1B1	Subroute 1B2	Subroute 1B2a	Subroute 1B3	Subroute 3A	Subroute 3A2	Subroute 3B	Subroute 4A	Subroute 4B	Subroute 4C1	Subroute 4C2	Subroute 4C2a	Subroute 4C2b	Subroute 4C2c	Subroute 4C3
Invertebrates																		
Florida mountainsnail <i>Oreohelix florida</i>									•	•								
Socorro mountainsnail <i>Oreohelix neomexicana</i>	•	•	•	•	•	•	•											
Ovate vertigo snail <i>Vertigo ovata</i>	•	•	•	•	•	•	•											
Hydrobiid springsnails <i>Pyrgulopsis</i> spp.	•	•	•	•	•	•	•											
Talus snails <i>Sonorella</i> spp.																		•
Moore's fairy shrimp <i>Streptocephalus moorei</i>										•								
Bowman's fairy shrimp <i>Streptocephalus thomasbowmani</i>										•								
Lynch tadpole shrimp <i>Lepidurus lemmoni</i>										•								
Slate millipede <i>Comanchelus chihuanus</i>	•	•	•	•	•	•	•	•	•	•								
Bleached Skimmer Dragonfly <i>Libellula composita</i>											•							
Grasshopper 1 <i>Aeoloplides rotundipennis</i>	•	•	•	•	•	•	•											
Hebard's Blue-Winged Desert Grasshopper <i>Anconia hebardii</i>								•	•	•								
Grasshopper 3 <i>Melanoplus magdalenae</i>	•	•	•	•	•	•	•											
Shotwell's Range Grasshopper <i>Shotwellia isleta</i>								•	•	•								
Grasshopper 4 <i>Trimerotropis salina</i>								•	•	•								
Mayfly <i>Homoeoneuria alleni</i>	•	•	•	•	•	•	•											
Maricopa tiger beetle <i>Cicindela oregona maricopa</i>											•	•	•	•	•	•	•	•
Desert viceroy butterfly <i>Limenitis chippus obsoleta</i>	•	•	•	•	•	•	•											
Southwestern oak hairstreak butterfly <i>Satyrium [Fixsenia] favonius ilavia</i>	•	•	•	•	•	•	•	•	•	•								
Sandia hairstreak butterfly <i>Callophrys [Sandia] mcfarlandi</i>	•	•	•	•	•	•	•											
Xami hairstreak butterfly <i>Callophrys [Xamia] xami</i>	•	•	•	•	•	•	•											
Spalding's blue butterfly <i>Euphilotes spaldingi</i>	•	•	•	•	•	•	•											

Table B3-2. Potential Presence of Special-status Species on Each Subroute

	Subroute 1A	Subroute 1A1	Subroute 1A2	Subroute 1B1	Subroute 1B2	Subroute 1B2a	Subroute 1B3	Subroute 3A	Subroute 3A2	Subroute 3B	Subroute 4A	Subroute 4B	Subroute 4C1	Subroute 4C2	Subroute 4C2a	Subroute 4C2b	Subroute 4C2c	Subroute 4C3
Buchholz's blue butterfly <i>Plebejus [Icaricia] icarioides buchholzi</i>	•	•	•	•	•	•	•											
Four-spotted skipperling <i>Piruna polingii</i>	•	•	•	•	•	•	•											
Cassus roadside skipper <i>Amblyscirtes cassus</i>	•	•	•	•	•	•	•											
Texas roadside skipper <i>Amblyscirtes texanae</i>	•	•	•	•	•	•	•											
Deva skipper <i>Atrytonopsis deva</i>	•	•	•	•	•	•	•	•	•	•								
Orange giant skipper <i>Agathymus neumoeogeni neumoeogeni</i>									•	•	•							
Poling's giant skipper <i>Agathymus polingi</i>	•	•	•	•	•	•	•	•	•	•								
Ursine giant skipper <i>Megathymus ursus ursus</i>									•	•	•							
Zephyr Eyed Silkmoth <i>Automeris zephyria</i>	•	•	•	•	•	•	•											
Buck Moth Species <i>Hemileuca artemis</i>	•	•	•	•	•	•	•	•	•	•								
Plants																		
Pima Indian mallow <i>Abutilon parishii</i>															•	•	•	•
Fugate's blue-star <i>Amsonia fugatei</i>				•	•	•	•											
Chiltepin <i>Capsicum annuum</i> var. <i>glabriusculum</i>											•	•	•	•	•	•	•	•
Griffith's saltbush <i>Atriplex griffithsii</i>										•								
Cochise (Giant) Sedge <i>Carex ultra</i>										•	•	•	•	•	•	•	•	•
Playa spider plant <i>Cleome multicaulis</i>									•	•	•							
Metcalf's ticktrefoil <i>Desmodium metcalfei</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Needle-spined Pineapple Cactus <i>Echinomastus erectocentrus</i> var. <i>erectocentrus</i>											•	•	•	•	•	•	•	•
Arid Throne Fleabane <i>Erigeron arisolius</i>																	•	•
Fish Creek fleabane <i>Erigeron piscaticus</i>											•	•						
San Carlos wild-buckwheat <i>Eriogonum capillare</i>											•	•	•					

Table B3-2. Potential Presence of Special-status Species on Each Subroute																			
	Subroute 1A	Subroute 1A1	Subroute 1A2	Subroute 1B1	Subroute 1B2	Subroute 1B2a	Subroute 1B3	Subroute 3A	Subroute 3A2	Subroute 3B	Subroute 4A	Subroute 4B	Subroute 4C1	Subroute 4C2	Subroute 4C2a	Subroute 4C2b	Subroute 4C2c	Subroute 4C3	
San Pedro River wild buckwheat <i>Eriogonum terrenatum</i>																			•
Orcutt pincushion cactus <i>Escobaria orcuttii</i> var. <i>macraxina</i>	•	•	•	•	•	•	•	•	•	•									
Sandberg pincushion cactus <i>Escobaria sandbergii</i>	•	•	•	•	•	•	•												
Todsens' pennyroyal <i>Hedeoma todsenii</i>	•	•	•	•	•	•	•												
Arizona Alum Root <i>Heuchera glomerulata</i>											•	•							
Lemmon Cloak Fern <i>Notholaena lemmoni</i>														•	•	•	•		
Night-blooming cereus <i>Peniocereus greggii</i> var. <i>greggii</i>								•	•	•									
Catalina beardtongue <i>Penstemon discolor</i>											•	•	•	•	•	•	•	•	•
New Mexico rock daisy <i>Perityle staurophylla</i> var. <i>staurophylla</i>	•	•	•	•	•	•	•												

Table B3-2. Potential Presence of Special-status Species on Each Subroute																			
	Subroute 1A	Subroute 1A1	Subroute 1A2	Subroute 1B1	Subroute 1B2	Subroute 1B2a	Subroute 1B3	Subroute 3A	Subroute 3A2	Subroute 3B	Subroute 4A	Subroute 4B	Subroute 4C1	Subroute 4C2	Subroute 4C2a	Subroute 4C2b	Subroute 4C2c	Subroute 4C3	
Sivinski's scorpionweed <i>Phacelia sivinskii</i>	•	•	•	•	•	•	•												
Broadleaf Ground Cherry <i>Physalis latiphysa</i>																			•
Aravaipa Sage <i>Salvia amissa</i>											•	•	•						
Plank's campion <i>Silene plankii</i>	•	•	•	•	•	•	•												
Porter's globe mallow <i>Sphaeralcea procera</i>	•	•	•	•	•	•	•												
Wright's globe mallow <i>Sphaeralcea wrightii</i>	•	•	•	•	•	•	•												
Aravaipa woodfern <i>Thelypteris puberula</i> var. <i>sonorensis</i>											•	•							
Tumamoc globeberry <i>Tumamoca macdougalii</i>																			•