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Biological Resources Evaluation Report

To: John O'Connell
BCT Sedona Multifamily, LLC
7 Columbia Turnpike, Suite 201
Florham Park, New Jersey 07932

From: Corina Anderson, SWCA Environmental Consultants

Date: September 21, 2022

Re: **Biological Resources Evaluation for the Goodrow Property Environmental Services Project / SWCA Project No. 74643**

INTRODUCTION

SWCA Environmental Consultants (SWCA) was contracted by BCT Sedona Multifamily, LLC to conduct a biological evaluation on approximately 2.8 acres of private land in Sedona, Yavapai County, Arizona (Figure 1). This biological report addresses the Endangered Species Act of 1973 (16 United States Code [USC] 1531 et seq.) (ESA), the Migratory Bird Treaty Act of 1918 (16 USC 703–712), the Bald and Golden Eagle Protection Act of 1940 (16 USC 668-668d), the Arizona Department of Agriculture (ADA)–administered Arizona Native Plant Law (Arizona Revised Statutes 3-904), the ADA's noxious weed regulations (Arizona Administrative Code R3-4-245), and City of Sedona regulations.

The proposed project includes residential development on a previously developed parcel of land in a mixed residential and commercial neighborhood.

METHODS

SWCA biologist Corina Anderson visited the project area on August 11, 2022, to record the field data necessary to complete this biological resources evaluation. The site visit involved a pedestrian survey of the project area to evaluate vegetation and other habitat features considered important to the potential occurrence of special-status plant and animal species. This field reconnaissance did not include any species-specific or systematic surveys for protected biological components, such as bird nests. Vegetation was classified to the community level according to the map "*Biotic Communities: Southwestern United States and Northwestern Mexico* (Brown 1994). The Natural Resources Conservation Service (NRCS) PLANTS database was used for plant naming conventions (NRCS 2022). Federally listed species are referred to by the nomenclature used by the U.S. Fish and Wildlife Service (USFWS) for listing.

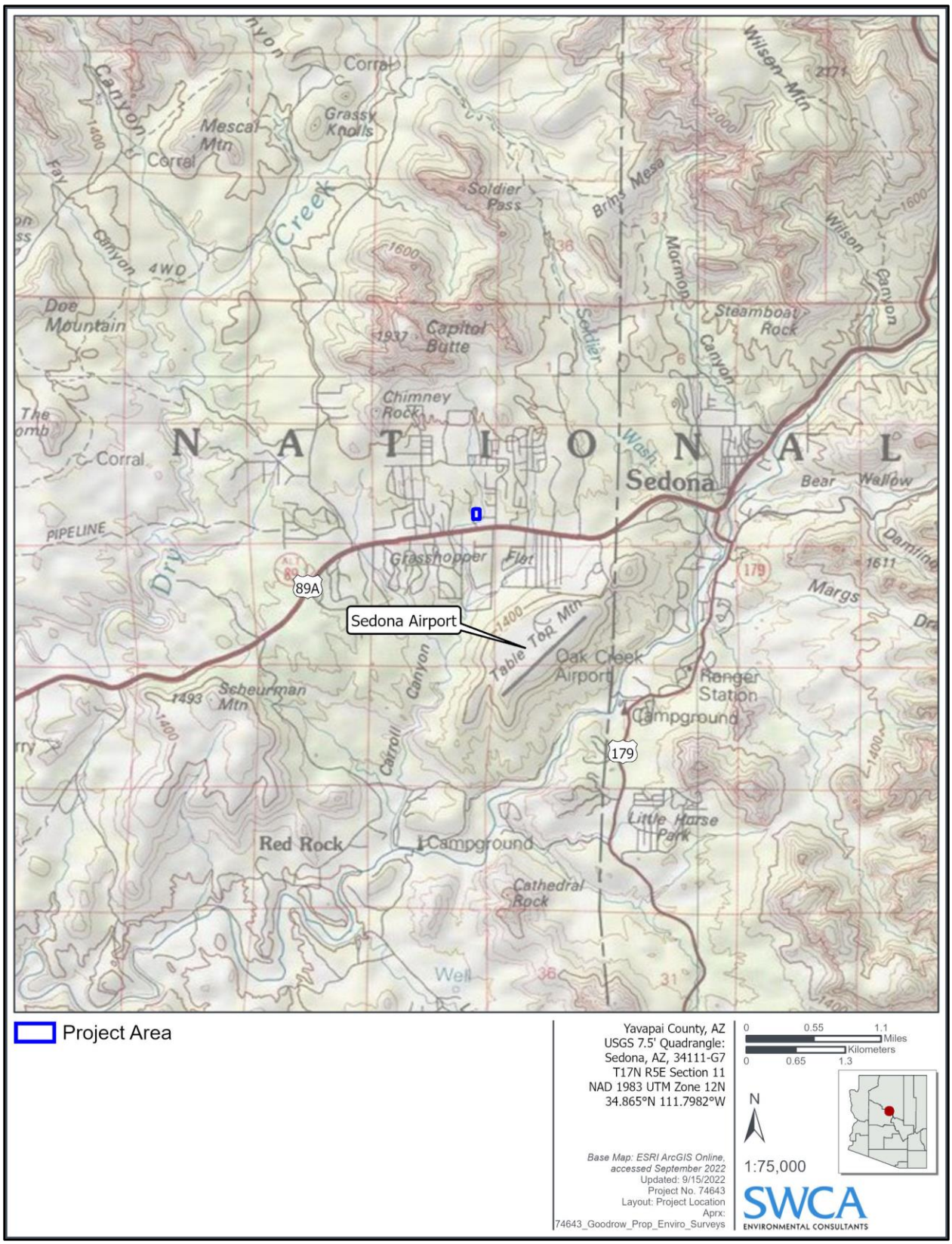

Figure 1. Project location.

ECOLOGICAL OVERVIEW

The project area is located within the Great Basin Conifer Woodland biotic community at elevations ranging from approximately 4,405 to 4,440 feet above mean sea level (amsl) (Brown 1994). It lies in the town of Sedona in West Sedona, on Grasshopper Flat just north of State Route 89A (Figure 2). It is located in a mixed residential and commercial neighborhood and currently has one existing residence on the property. Adjacent to the project area are both residences and businesses. Oak Creek, a perennial stream, is located approximately 2 miles east of the project area. Dry Creek, an ephemeral stream, is located approximately 2.25 miles to the west. The Sedona Airport is approximately 1 mile to the southeast.

No aquatic habitats including wetlands or stock ponds, broadleaf deciduous riparian vegetation communities (i.e., communities containing willow [*Salix* spp.], cottonwood [*Populus* spp.], or ash [*Fraxinus* spp.], etc.), or potential bat roost sites (e.g., natural caves or mine features) occur in the project area. The project area contains a few large landscape trees (pine and cedar [Family Pinaceae]) but due to the proximity to a busy highway and constant human presence in the area, these would not be attractive as perches for eagles. Most of the project area has been previously disturbed.

Vegetation within the project area is a mix of landscape plants and native vegetation. Dominant plant species observed during the site visit include velvet mesquite (*Prosopis velutina*), fourwing saltbush (*Atriplex canescens*), Sonoran scrub oak (*Quercus turbinella*), Utah juniper (*Juniperus osteosperma*), and Fremont's mahonia (*Mahonia fremontii*). Additional plants observed include Mormon tea (*Ephedra viridis*), catclaw acacia (*Senegalia greggii*), pricklypear (*Opuntia* spp.), two-needle pinyon *(Pinus edulis*), banana yucca (*Yucca baccata*), desert marigold (*Baileya multiradiata*), broom snakeweed (*Gutierrezia sarothrae*), western tansymustard (*Descurainia pinnata*), southwestern mock vervain (*Glandularia gooddingii*), brownfoot (*Acourtia wrightii*), beargrass (*Nolina macrocarpa*), purple threeawn (*Aristida purpurea*), squirreltail (*Elymus elymoides*), and sand dropseed (*Sporobolus cryptandrus*). Invasive, non-native species observed include silverleaf nightshade (*Solanum elaeagnifolium*), red brome (*Bromus rubens*), Siberian elm (*Ulmus pumila*), and horehound (*Marrubium vulgare*).

Wildlife species observed in the project area during the site visit include desert cottontail (*Sylvilagus audubonii*), plateau striped whiptail (*Aspidoscelis velox*), and plateau fence lizard (*Sceloporus tristichus*). Javelina, or collared peccary (*Tayassu tajacu*), sign was observed in the project area.

Thirteen avian species were observed during the site visit. These include Bewick's wren (*Thryomanes bewickii*), spotted towhee (*Pipilo maculatus*), common raven (*Corvus corax*), Woodhouse's scrub jay (*Aphelocoma woodhouseii*), juniper titmouse (*Baeolophus ridgwayi*), lesser goldfinch (*Carduelis psaltria*), bushtit (*Psaltriparus minimus*), Say's phoebe (*Sayornis saya*), Crissal thrasher (*Toxostoma crissale*), mourning dove (*Zenaida macroura*), Gambel's quail (*Callipepla gambelii*), Anna's hummingbird (*Calypte anna*), and zone-tailed hawk (*Buteo albonotatus*).

Avian species are discussed further in the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act (BGEPA) sections below.

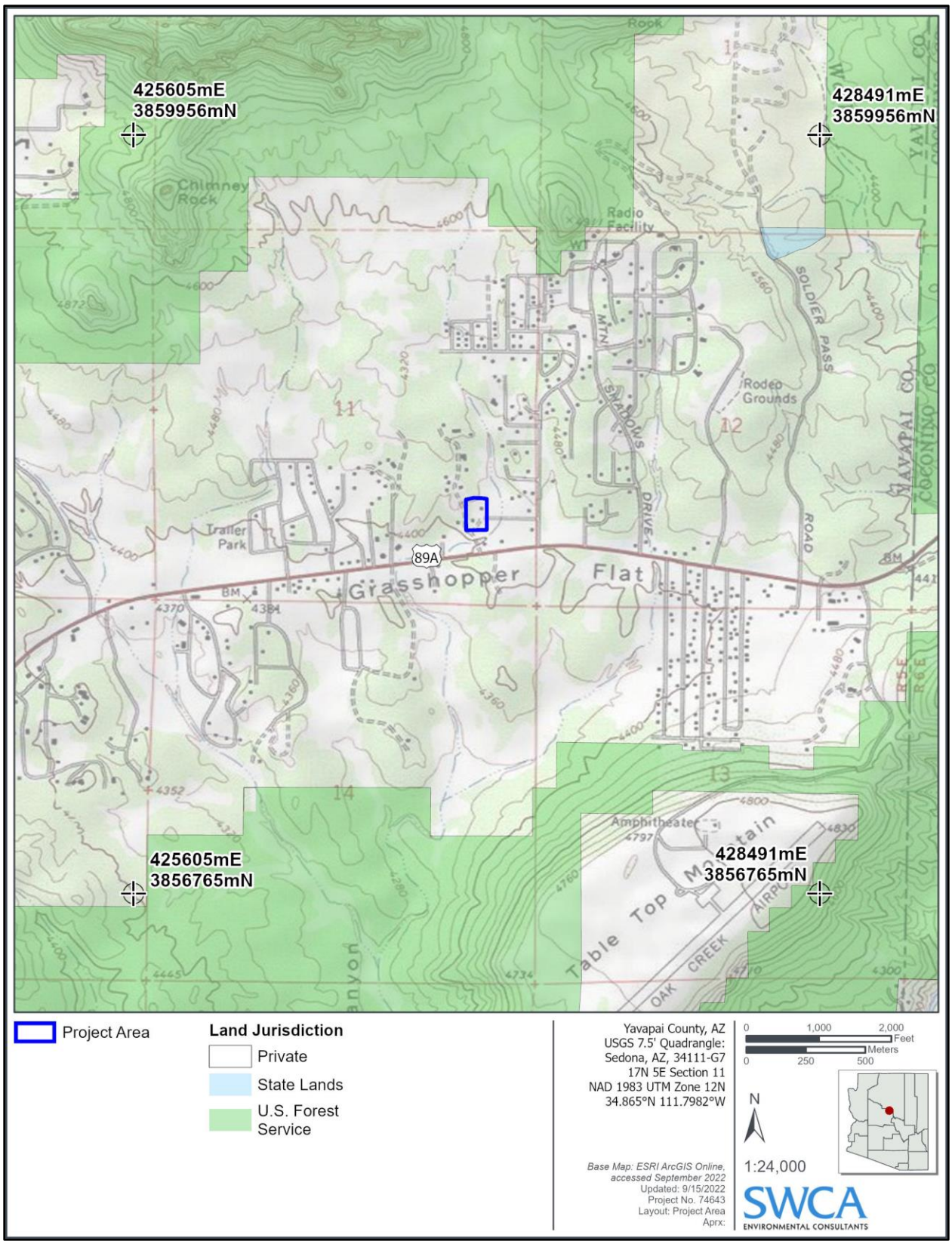

Figure 2. Project area with land jurisdiction.

FEDERAL ENDANGERED SPECIES ACT

The species evaluated in this biological report were based on the list of threatened, endangered, or experimental non-essential population species for Yavapai County, Arizona, available at the USFWS Information for Planning and Consultation (IPaC) website (Appendix A). To determine whether any federally proposed or designated critical habitat or USFWS-listed species have been documented in or near the project area, SWCA also accessed the Arizona Game and Fish Department's (AGFD) Heritage Data Management System (HDMS) database (Appendix B).

Species Evaluation

The potential for occurrence of each species was summarized according to the categories listed below. Because not all species are accommodated precisely by a given category (i.e., category definitions may be too restrictive), an expanded rationale for each category assignment is provided. Potential for occurrence categories are as follows.

- *Known to occur*—the species has been documented in the project area by a reliable observer.
- *May occur*—the project area is within the species' currently known range, and vegetation communities, soils, etc., resemble those known to be used by the species.
- *Unlikely to occur*—the project area is within the species' currently known range, but vegetation communities, soils, etc., do not resemble those known to be used by the species, or the project area is clearly outside the species' currently known range.

Those species listed by the USFWS were assigned to one of three categories of possible effect, following USFWS recommendations. The effects determinations recommended by the USFWS are as follows.

- *May affect, is likely to adversely affect*—the proposed project is likely to adversely affect a species if 1) the species occurs or may occur in the project area, and 2) any adverse effect on listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial. In the event that the overall effect of the proposed action is beneficial to the listed species but also is likely to cause some adverse effects, the proposed action "is likely to adversely affect" the listed species.
- *May affect, is not likely to adversely affect*—the project is not likely to adversely affect a species if 1) the species may occur but its presence has not been documented and/or surveys following approved protocol have been conducted with negative results, and/or 2) project activity effects on a listed species are expected to be discountable, insignificant, or completely beneficial.
- **Beneficial effects** are contemporaneous positive effects without any adverse effects on the species. **Insignificant effects** relate to the size of the impact and should never reach the scale where take occurs. **Discountable effects** are those extremely unlikely to occur. Based on best judgment, a person would not 1) be able to meaningfully measure, detect, or evaluate insignificant effects, or 2) expect discountable effects to occur.
- *No effect*—the project will have no effect on a species if 1) it has no likelihood of effect on a listed species or its designated critical habitat (including effects that may be beneficial, insignificant, or discountable), or 2) the species' habitat does not occur in the project area.

Because species not listed as threatened or endangered are not protected under the authority of the ESA, impact determinations for these species do not follow the above USFWS recommendations. Instead, the

impact determinations for any species listed as candidate or proposed endangered/threatened and not protected under the ESA are as follows:

- *No impact*—the project would have no impact on a species if 1) the species is considered unlikely to occur (range, vegetation, etc., are inappropriate), and 2) the species or its sign was not observed during surveys of the project area.
- *Beneficial impact*—the project is likely to benefit the species, whether it is currently present or not, by creating or enhancing habitat elements known to be used by the species.
- *May impact individuals but is not likely to result in a trend toward federal listing or loss of viability*—the project is not likely to adversely impact a species if 1) the species may occur but its presence has not been documented, and 2) project activities would not result in disturbance to areas or habitat elements known to be used by the species.
- *May impact individuals and is likely to result in a trend toward federal listing or loss of viability*—the project is likely to adversely impact a species if 1) the species is known to occur in the project area, and 2) project activities would disturb areas or habitat elements known to be used by the species or would directly affect an individual.

According to IPaC, 20 federally listed species have the potential to occur in Yavapai County, Arizona (USFWS 2022a) (Table 1). One of the 20 species listed by the USFWS as endangered, threatened, experimental/non-essential, or candidate species for Yavapai County may occur in the project area. The project area contains vegetation and landscape features known to support monarch butterfly (*Danaus plexippus*) and is within its known geographic range for breeding and migration. Monarch butterfly is a species which is currently a candidate for listing but is currently not afforded federal protection. For the remaining 19 species, the project area is clearly beyond their known geographic or elevational range or it does not contain vegetation or landscape features known to support these species, or both. Habitat requirements, potential for occurrence, and possible effects of the project for all 19 species are summarized in Table 1. There is no proposed or designated critical habitat within or adjacent to the project area.

The results of the HDMS online database query (see Appendix B) indicate that 3 ESA-listed species, Mexican spotted owl (*Strix occidentalis lucida*), monarch butterfly, narrow-headed gartersnake (*Thamnophis rufipunctatus*), and yellow-billed cuckoo *Coccyzus americanus*), have all been documented within 3 miles of the project area.

Table 1. Federally Listed Species Potentially Occurring in Yavapai County, Arizona

Common Name (Species Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Survey area	Determination of Effect
Arizona cliffrose (*Purshia subintegra*)	E	Occurs in central Arizona in white limestone soils derived from tertiary lakebed deposits at elevations below 4,000 feet amsl. This species is found in Graham, Maricopa, Mohave, and Yavapai Counties.	Unlikely to occur. The project area does not contain limestone hills and is outside the geographic range of this species.	No effect.
Black-footed ferret (*Mustela nigripes*)	E/NEP	Found in grassland plains on mountain basins in association with prairie dogs (*Cynomys* sp.).	Unlikely to occur. There are no reintroduced populations of black-footed ferrets in or near the project area.	No effect.

Common Name (Species Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Survey area	Determination of Effect
California condor (*Gymnogyps californianus*)	E/NEP	Nesting sites are in caves, crevices, and potholes in isolated regions of the Southwest. Condors forage for carrion along flight routes generally following over foothills and mountains. The USFWS began reintroducing a non-essential experimental population of California condors into northern Arizona and southern Utah in 1996. These condors are generally found in, or in the vicinity of, Grand Canyon National Park, the Kaibab Plateau, the Vermilion Cliffs, and Zion National Park.	Unlikely to occur. The project area is outside of the 10j recovery area and geographic range of this species.	No effect.
California least tern (*Sterna antillarum browni*)	E	Typical nesting habitat consists of open coastal beaches free of vegetation. Nests in shallow depressions on open sandy beaches, sandbars, gravel pits, or exposed flats along shorelines of inland rivers, lakes, reservoirs, and drainage systems. This subspecies is primarily found in California, though it has been recorded in Arizona where habitat components are adequate for nesting or feeding. A breeding pair has been documented in Maricopa County.	Unlikely to occur. The project area does not contain suitable nesting or foraging habitat for this species.	No effect.
Chiricahua leopard frog (*Rana chiricahuensis*)	T	Found in springs, livestock tanks, and streams in the upper portions of watersheds at elevations of 3,281–8,890 feet amsl.	Unlikely to occur. There is no permanent aquatic habitat present in or adjacent to the project area.	No effect.
Colorado pikeminnow (*Ptychocheilus lucius*)	NEP	Found in turbid, deep, and strongly flowing waters at elevations around 1,900 feet amsl. This species is considered extirpated from Arizona; however, NEPs have been reintroduced into the Verde and Salt River systems in Yavapai, Gila, and Maricopa Counties.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Desert pupfish (*Cyprinodon macularius*)	E	Found in shallow waters of desert springs, small streams, and marshes at elevations below 5,000 feet amsl. One natural population still occurs in Quitobaquito Spring and Quitobaquito Pond in Pima County, and reintroductions have been made in Pima, Pinal, Maricopa, Graham, Cochise, La Paz, and Yavapai Counties.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Gila chub (*Gila intermedia*)	E	Inhabits smaller streams, cienegas, and artificial impoundments ranging in elevation from 2,000 to 5,500 feet amsl.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Gila topminnow (incl Yaqui) (*Poeciliopsis occidentalis*)	E	Occurs in small streams, springs, and cienegas at elevations below 4,500 feet amsl, primarily in shallow areas with aquatic vegetation and debris for cover. In Arizona, most of the remaining native populations are in the Santa Cruz River system.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Gila trout (*Oncorhynchus gilae*)	T	Found in small, high mountain streams at elevations of approximately 5,000 to 10,000 feet amsl.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.

Common Name (Species Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Survey area	Determination of Effect
Loach minnow (*Tiaroga cobitis*)	E	Bottom dweller found in small to large perennial creeks and rivers, typically in shallow, turbulent riffles with cobble substrate, swift currents, and filamentous algae. Found at elevations below 8,000 feet amsl.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Mexican spotted owl (*Strix occidentalis lucida*)	T	Found in mature montane forests and woodlands and steep, shady, wooded canyons. Can also be found in mixed-conifer and pine-oak vegetation types. Generally nests in older forests of mixed conifers or ponderosa pine (*Pinus ponderosa*)–Gambel oak (*Quercus gambelii*). Nests in live trees on natural platforms (e.g., dwarf mistletoe [*Arceuthobium* spp.] brooms), snags, and canyon walls at elevations between 4,100 and 9,000 feet amsl.	Unlikely to occur. The project area does not contain suitable habitat as there are no shady, wooded canyons present. The species has been documented within 3 miles of the project area.	No effect.
Monarch butterfly (*Danaus plexippus*)	C	Habitat is complex. Generally, breeding areas are virtually all patches of milkweed (*Asclepias* sp.). The species occurs throughout Arizona during the summer and migrates to winter in Mexico and California, though small numbers do overwinter in the low deserts of southwestern Arizona.	May occur. The project area contains flowering plants and could potentially provide migratory stopover habitat. The species has been documented within 3 miles of the project area.	May impact individuals but is not likely to result in a trend toward federal listing or loss of viability.
Narrow-headed gartersnake (*Thamnophis rufipunctatus*)	T	Require clear, perennial streams or spatially intermittent streams with pools and riffles. Structural features such as cobble bars, boulders, logs, aquatic vegetation, and debris jams are necessary in the stream channel to allow for basking, thermo-regulation, shelter, protection from predators, and the maintenance of the aquatic prey base. Found in streams or rivers in communities ranging from Arizona Upland Sonoran Desertscrub through Petran Montane Conifer Forest in Apache, Coconino, Gila, Graham, Greenlee, Navajo, and Yavapai Counties. Healthiest populations found in Oak Creek Canyon, and the East Verde River.	Unlikely to occur. There are no permanent aquatic habitats in or adjacent to the project area. The species has been documented within 3 miles of the project area.	No effect.
Northern Mexican gartersnake (*Thamnophis eques megalops*)	T	This species is most abundant at elevations between 3,000 and 5,000 feet amsl in densely vegetated habitat surrounding cienegas, streams, and stock tanks, in or near water along streams in valley floors and generally open areas but not in steep mountain canyon stream habitat. Considered extant in fragmented populations within the middle to upper Verde River drainage, middle to lower Tonto Creek, Cienega Creek, and a small number of isolated wetland habitats elsewhere in southeastern Arizona.	Unlikely to occur. There are no permanent aquatic habitats in or adjacent to the project area.	No effect.
Razorback sucker (*Xyrauchen texanus*)	E	Found in riverine and lacustrine areas, generally not in fast-moving water, and may use backwaters at elevations below 6,000 feet amsl.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.

Common Name (Species Name)	Status*	Range or Habitat Requirements	Potential for Occurrence in Survey area	Determination of Effect
Southwestern willow flycatcher (*Empidonax traillii extimus*)	E	Found in dense riparian habitats along streams, rivers, and other wetlands where cottonwood, willow, boxelder (*Acer negundo*), saltcedar (*Tamarix* spp.), Russian olive (*Elaeagnus angustifolia*), buttonbush (*Cephalanthus* spp.), and arrowweed (*Pluchea sericea*) are present. Nests are found in thickets of trees and shrubs, primarily those that are 13 to 23 feet high, among dense, homogeneous foliage. Habitat occurs at elevations below 8,500 feet amsl.	Unlikely to occur. The project area does not contain suitable habitat for this species as it does not contain riparian woodlands.	No effect.
Spikedace (*Meda fulgida*)	E	Mid-water habitats, including runs, pools, and swirling eddies below 4,500 feet amsl.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Woundfin (*Plagopterus argentissimus*)	E/NEP	Found in shallow, warm, turbid, fast-flowing water below 4,500 feet amsl. Tolerates high salinity. In Maricopa County, it has been reintroduced to the Hassayampa River.	Unlikely to occur. There are no permanent water sources suitable for this species in or adjacent to the project area.	No effect.
Yellow-billed cuckoo (*Coccyzus americanus*)	T	Typically found in riparian woodland vegetation (cottonwood, willow, or saltcedar) at elevations below 6,600 feet amsl. Dense understory foliage appears to be an important factor in nest site selection. The highest concentrations in Arizona are along the Agua Fria, San Pedro, upper Santa Cruz, and Verde River drainages and Cienega and Sonoita Creeks.	Unlikely to occur. The project area does not contain suitable habitat for this species as it does not contain riparian woodlands. The species has been documented within 3 miles of the project area.	No effect.

Range or habitat information and occurrence records are from AGFD (2022a; 2022b). Additional sources: Arizona Rare Plant Committee (n.d. [2001]), Brennan (2012), Corman and Wise-Gervais (2005), Morris et al. (2015), USFWS (2021; 2022a; 2022b).

* USFWS Status Definitions:

C = Candidate. Candidate species are those for which the USFWS has sufficient information on biological vulnerability and threats to support proposals to list as endangered or threatened under the ESA. However, proposed rules have not yet been issued because such actions are precluded at present by other listing activity.

E = Endangered. An animal or plant species in danger of extinction throughout all or a significant portion of its range.

T = Threatened. An animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

NEP = Non-Essential Experimental Population. Experimental populations of a species designated under Section 10(j) of the ESA for which the USFWS, through the best available information, believes is not essential for the continued existence of the species. Regulatory restrictions are considerably reduced under an NEP designation.

A determination of effect is provided for feasibility purposes only. Additional details regarding construction timing, erosion controls, and/or noise levels during construction, once known, could change the potential to affect species.

MIGRATORY BIRD TREATY ACT AND BALD AND GOLDEN EAGLE PROTECTION ACT

Thirteen avian species were observed in the project area during the site visit: Bewick's wren, spotted towhee, common raven, Woodhouse's scrub jay, juniper titmouse, lesser goldfinch, bushtit, Say's phoebe, Crissal thrasher, mourning dove, Gambel's quail, Anna's hummingbird, and zone-tailed hawk. These bird species are protected under the MBTA (16 USC 703–712), which provides federal protection to all migratory birds, including nests and eggs. No nests were identified on-site, though they have the potential to occur.

If any MBTA-protected nests have to be relocated or altered prior to project construction, a permit from the USFWS must be obtained to maintain compliance with the MBTA. However, Section 1 of the Interim Empty Nest Policy of the USFWS, Region 2, 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 (USFWS 2022c). In the event that an active nest is observed before or during construction, measures should be taken to protect the nest from destruction and to avoid a violation of the MBTA. In north-central Arizona, some bird species are multi-clutch species, which means that they nest multiple times during the nesting season, generally February through late August for songbirds, depending on the species and habitat; for raptors, it is generally January through late June (Corman and Wise-Gervais 2005; AGFD 2022b).

The project's AGFD environmental review tool report (see Appendix B) indicates that there are occurrence records for American peregrine falcon (*Falco peregrinus anatum*), wintering bald eagle (*Haliaeetus leucocephalus*), Mexican spotted owl, and yellow-billed cuckoo within 3 miles of the project area. It would be unlikely for nesting or foraging American peregrine falcons to occur in the project area because cliff habitat overlooking open areas with prey species is not present. The records for bald eagle and yellow-billed cuckoo are likely due to the proximity of Oak Creek to the project area. Mexican spotted owls have likely been recorded within 3 miles due to the presence of forested canyon habitat approximately 1.5 miles north of the project area in Coconino National Forest.

Bald and golden eagles (*Aquila chrysaetos*) are protected under both the MBTA and the BGEPA. The BGEPA affords these eagles additional federal protection under 16 USC 668–668d; 50 Code of Federal Regulations Part 22. No suitable bald eagle nesting or foraging habitat (e.g., flowing rivers or lakes containing fish) is present in the project area and eagles are unlikely to perch in the few tall trees located at the site. The riparian corridor of Oak Creek and water features throughout the City of Sedona and the surrounding area may attract bald eagle activity, and bald eagles could fly over the project area while foraging. The project area does not contain nesting sites for golden eagles, but individuals may fly over the project area while foraging. However, the area of impact for the project is localized and would represent an extremely small portion of an individual eagle's territory. Therefore, impacts to foraging eagles of both species would be unlikely to result from the proposed project activities.

ARIZONA DEPARTMENT OF AGRICULTURE ARIZONA NATIVE PLANT LAW

Protected native plants are classified under the Arizona Native Plant Law (NPL) (Arizona Revised Statutes 3-904). The NPL states that protected plants cannot be salvaged from any land, including private land, without landowner permission and plant permit(s) from the ADA, and it also requires that notification prior to land clearing be submitted with a Notice of Intent to Clear Land form filed with the ADA, even if no plants will be salvaged and moved from the site.

Eight of the plant species documented in the project area are protected under the NPL: catclaw acacia, Utah juniper, two-needle pinyon, velvet mesquite, Sonoran scrub oak, beargrass, banana yucca, and pricklypear. The ADA Notice of Intent to Clear Land form included in Appendix C should be filled out and submitted to the ADA 30 days prior to conducting land-disturbing activities. More information regarding the NPL can be found on the ADA's Protected Native Plants by Category website[1].

[1] Arizona Department of Agriculture (ADA). 2022. *Protected Arizona Native Plants*. Available at: https://agriculture.az.gov/plantsproduce/native-plants. Accessed September 2022.

ARIZONA DEPARTMENT OF AGRICULTURE NOXIOUS WEED REGULATIONS

The ADA defines three classes of noxious weeds in the state of Arizona (ADA 2022):

- Class A is categorized as a species of plant that is not known to exist or of limited distribution in the state and is a high-priority pest for quarantine, control, or mitigation.
- Class B is categorized as a species of plant that is known to occur, but of limited distribution in the state and may be a high-priority pest for quarantine, control, or mitigation if a significant threat to a crop, commodity, or habitat is known to exist.
- Class C is categorized as a species of plant that is widespread but may be recommended for active control based on risk assessment.

Two restrictions have been developed to control noxious weeds in the state. First, no Class A, B, or C noxious weed or commodity infested or contaminated with a Class A, B, or C noxious weed can be admitted into the state unless otherwise authorized by the ADA. Second, the ADA may quarantine and abate an area infested or contaminated with a Class A or Class B noxious weed if it has been determined that an imminent threat to agriculture or horticulture exists.

Two ADA-listed Class C noxious weeds were identified in the project area during the site visit: Johnsongrass (*Sorghum halepense*) and Tree of Heaven (*Ailanthus altissima*). Both species were found in isolated patches and were not widespread. Recommended measures to help avoid introducing and spreading noxious weeds to the project area are provided below.

CITY OF SEDONA REGULATIONS

The project area is listed as Parcel No. 408-24-069 on the Yavapai County Assessor's website (Yavapai County 2022). This parcel falls under the jurisdiction of the City of Sedona (City) and is zoned as RS-10 Single Family Residential. In coordination with the City of Sedona's Community Development Department, SWCA confirmed that the only City regulation related to the biological environment that applies to this parcel is Section 2.4 Landscaping of the Design Review, Engineering, and Administrative Manual (DREAM), which features supporting materials to the Land Development Code (LDC). This Section describes requirements that must be followed for the landscaping plan for the parcel, including an approved plant list (Appendix A of Section 2.4.B.) and an invasive weed list (Appendix B of Section 2.4.B. [City of Sedona 2022]).

Two plant species observed on site, Tree of Heaven and Johnsongrass, are listed on the City's invasive weed list. For Tree of Heaven, it states that "Large old shade trees do not need to be removed unless desired by owner." For Johnsongrass, it states "Remove populations where practical" (City of Sedona 2022).

RECOMMENDATIONS

The following items are recommendations for maintaining environmental compliance with the regulations discussed in this report.

- If ground-disturbing activities are planned during the migratory bird nesting season (generally February through late August for songbirds and January through late June for raptors), measures to avoid any active bird nests within the project area at that time should be taken to maintain compliance with the MBTA since some suitable nesting habitat for migratory bird species is present in the project area.

- The ADA Notice of Intent to Clear Land form should be filled out and submitted to the ADA 30 days prior to conducting land-disturbing activities (see Appendix C).
- Protective measures to reduce the potential introduction and spread of noxious weeds should be implemented during project construction. These measures could include spot treatment of the noxious weeds with an herbicide (may require a licensed applicator) and washing equipment before it enters or leaves the project area.
- The landscaping plan for the parcel should adhere to the requirements found in Section 2.4 Landscaping of the DREAM and use plants found on the approved plants list in Appendix A of Section 2.4.B. The noxious weeds found on the property should be controlled; recommended actions for Johnsongrass[2] and Tree of Heaven[3] include mechanical removal, herbicide, and planting native species to replace the weeds, as appropriate.

The results and conclusions of this biological resources evaluation report represent SWCA scientists' best professional judgment, based on information provided by the project proponent, applicable agencies, and other sources during the course of this study. No other warranty, expressed or implied, is made. Project notes and files are available in SWCA's office project files.

[2] Colorado Department of Agriculture. 2009. Johnsongrass Fact Sheet. Available at: https://drive.google.com/file/d/11LqNRrB KbjsiaZzvl1ds1JvnDdJmhhue/view. Accessed September 2022.

[3] U.S. Department of Agriculture. 2014. Field Guide for Managing Tree-of-heaven in the Southwest. Available at: https://www.fs. usda.gov/Internet/FSE_DOCUMENTS/stelprdb5410131.pdf. Accessed September 2022.

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APPENDIX A

U.S. Fish and Wildlife Information for Planning and Consultation Species and Critical Habitats List for Yavapai County

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME

Goodrow Property Environmental Services

LOCATION

Yavapai County, Arizona

DESCRIPTION

Some(Residential development project in Sedona, Arizona.)

Local office

Arizona Ecological Services Field Office

(602) 242-0210
(602) 242-2513

9828 North 31st Ave
#c3
Phoenix, AZ 85051-2517

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of

Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Black-footed Ferret Mustela nigripes No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6953	Endangered
Black-footed Ferret Mustela nigripes No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6953	EXPN

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8193	Endangered
California Condor Gymnogyps californianus There is **proposed** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8193	EXPN
California Least Tern Sterna antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Mexican Spotted Owl Strix occidentalis lucida Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/8196	Threatened

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/6749

Yellow-billed Cuckoo Coccyzus americanus — Threatened
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/3911

Reptiles

NAME	STATUS

Narrow-headed Gartersnake Thamnophis rufipunctatus — Threatened
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/2204

Northern Mexican Gartersnake Thamnophis eques megalops — Threatened
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/7655

Amphibians

NAME	STATUS

Chiricahua Leopard Frog Rana chiricahuensis — Threatened
Wherever found
There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/1516

Fishes

NAME	STATUS

Colorado Pikeminnow (=squawfish) Ptychocheilus lucius — EXPN
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3531

Desert Pupfish Cyprinodon macularius — Endangered

Wherever found

There is **final** critical habitat for this species. The location of the critical habitat is not available.
https://ecos.fws.gov/ecp/species/7003

Gila Chub Gila intermedia — Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/51

Gila Topminnow (incl. Yaqui) Poeciliopsis occidentalis — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1116

Gila Trout Oncorhynchus gilae — Threatened

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/781

Loach Minnow Tiaroga cobitis — Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/6922

Razorback Sucker Xyrauchen texanus — Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/530

Spikedace Meda fulgida — Endangered

Wherever found

There is **final** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/6493

Woundfin Plagopterus argentissimus — EXPN

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/49

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Arizona Cliffrose Purshia (=Cowania) subintegra Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/866	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Chiricahua Leopard Frog Rana chiricahuensis https://ecos.fws.gov/ecp/species/1516#crithab	Final
Gila Chub Gila intermedia https://ecos.fws.gov/ecp/species/51#crithab	Final
Loach Minnow Tiaroga cobitis https://ecos.fws.gov/ecp/species/6922#crithab	Final
Mexican Spotted Owl Strix occidentalis lucida https://ecos.fws.gov/ecp/species/8196#crithab	Final
Narrow-headed Gartersnake Thamnophis rufipunctatus https://ecos.fws.gov/ecp/species/2204#crithab	Final

Northern Mexican Gartersnake Thamnophis eques megalops https://ecos.fws.gov/ecp/species/7655#crithab	Final
Razorback Sucker Xyrauchen texanus https://ecos.fws.gov/ecp/species/530#crithab	Final
Southwestern Willow Flycatcher Empidonax traillii extimus https://ecos.fws.gov/ecp/species/6749#crithab	Final
Spikedace Meda fulgida https://ecos.fws.gov/ecp/species/6493#crithab	Final
Yellow-billed Cuckoo Coccyzus americanus https://ecos.fws.gov/ecp/species/3911#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

Migratory bird information is not available at this time

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn

more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

CBRA information is not available at this time

This can happen when the CBRS map service is unavailable, or for very large projects that intersect many coastal areas. Try again, or visit the CBRS map to view coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

APPENDIX B

Arizona Game and Fish Department
Online Environmental Review Tool Report

Arizona Environmental Online Review Tool Report

Arizona Game and Fish Department Mission
To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:
Goodrow Property Environmental services

User Project Number:
74643

Project Description:
Multi-family housing development on previously developed lot.

Project Type:
Development Within Municipalities (Urban Growth), Residential subdivision and associated infrastructure, New construction

Contact Person:
Corina Anderson

Organization:
SWCA Environmental Consultants

On Behalf Of:
PRIVATE

Project ID:
HGIS-17234

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Disclaimer:

1. This Environmental Review is based on the project study area that was entered. The report must be updated if the project study area, location, or the type of project changes.
2. This is a preliminary environmental screening tool. It is not a substitute for the potential knowledge gained by having a biologist conduct a field survey of the project area. This review is also not intended to replace environmental consultation (including federal consultation under the Endangered Species Act), land use permitting, or the Departments review of site-specific projects.
3. The Departments Heritage Data Management System (HDMS) data is not intended to include potential distribution of special status species. Arizona is large and diverse with plants, animals, and environmental conditions that are ever changing. Consequently, many areas may contain species that biologists do not know about or species previously noted in a particular area may no longer occur there. HDMS data contains information about species occurrences that have actually been reported to the Department. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity. Such surveys may reveal previously undocumented population of species of special concern.
4. HabiMap Arizona data, specifically Species of Greatest Conservation Need (SGCN) under our State Wildlife Action Plan (SWAP) and Species of Economic and Recreational Importance (SERI), represent potential species distribution models for the State of Arizona which are subject to ongoing change, modification and refinement. The status of a wildlife resource can change quickly, and the availability of new data will necessitate a refined assessment.

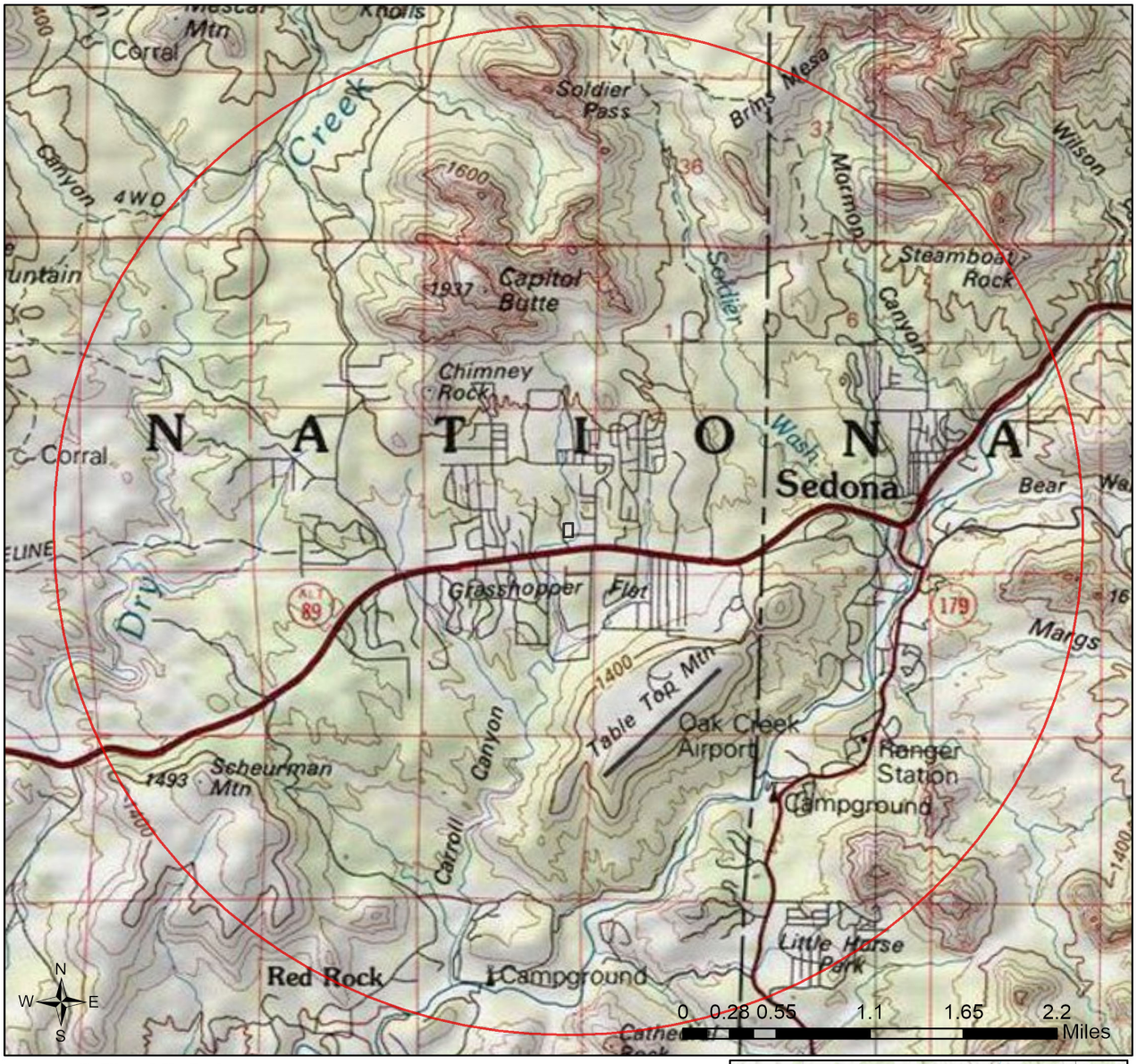
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

Recommendations Disclaimer:

1. The Department is interested in the conservation of all fish and wildlife resources, including those species listed in this report and those that may have not been documented within the project vicinity as well as other game and nongame wildlife.
2. Recommendations have been made by the Department, under authority of Arizona Revised Statutes Title 5 (Amusements and Sports), 17 (Game and Fish), and 28 (Transportation).
3. Potential impacts to fish and wildlife resources may be minimized or avoided by the recommendations generated from information submitted for your proposed project. These recommendations are preliminary in scope, designed to provide early considerations on all species of wildlife.
4. Making this information directly available does not substitute for the Department's review of project proposals, and should not decrease our opportunity to review and evaluate additional project information and/or new project proposals.
5. Further coordination with the Department requires the submittal of this Environmental Review Report with a cover letter and project plans or documentation that includes project narrative, acreage to be impacted, how construction or project activity(s) are to be accomplished, and project locality information (including site map). Once AGFD had received the information, please allow 30 days for completion of project reviews. Send requests to:
   Project Evaluation Program, Habitat Branch
   Arizona Game and Fish Department
   5000 West Carefree Highway
   Phoenix, Arizona 85086-5000
   Phone Number: (623) 236-7600
   Fax Number: (623) 236-7366
   Or
   PEP@azgfd.gov
6. Coordination may also be necessary under the National Environmental Policy Act (NEPA) and/or Endangered Species Act (ESA). Site specific recommendations may be proposed during further NEPA/ESA analysis or through coordination with affected agencies

Goodrow Property Environmental services

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 2.88

Lat/Long (DD): 34.8650 / -111.7982

County(s): Yavapai

AGFD Region(s): Flagstaff

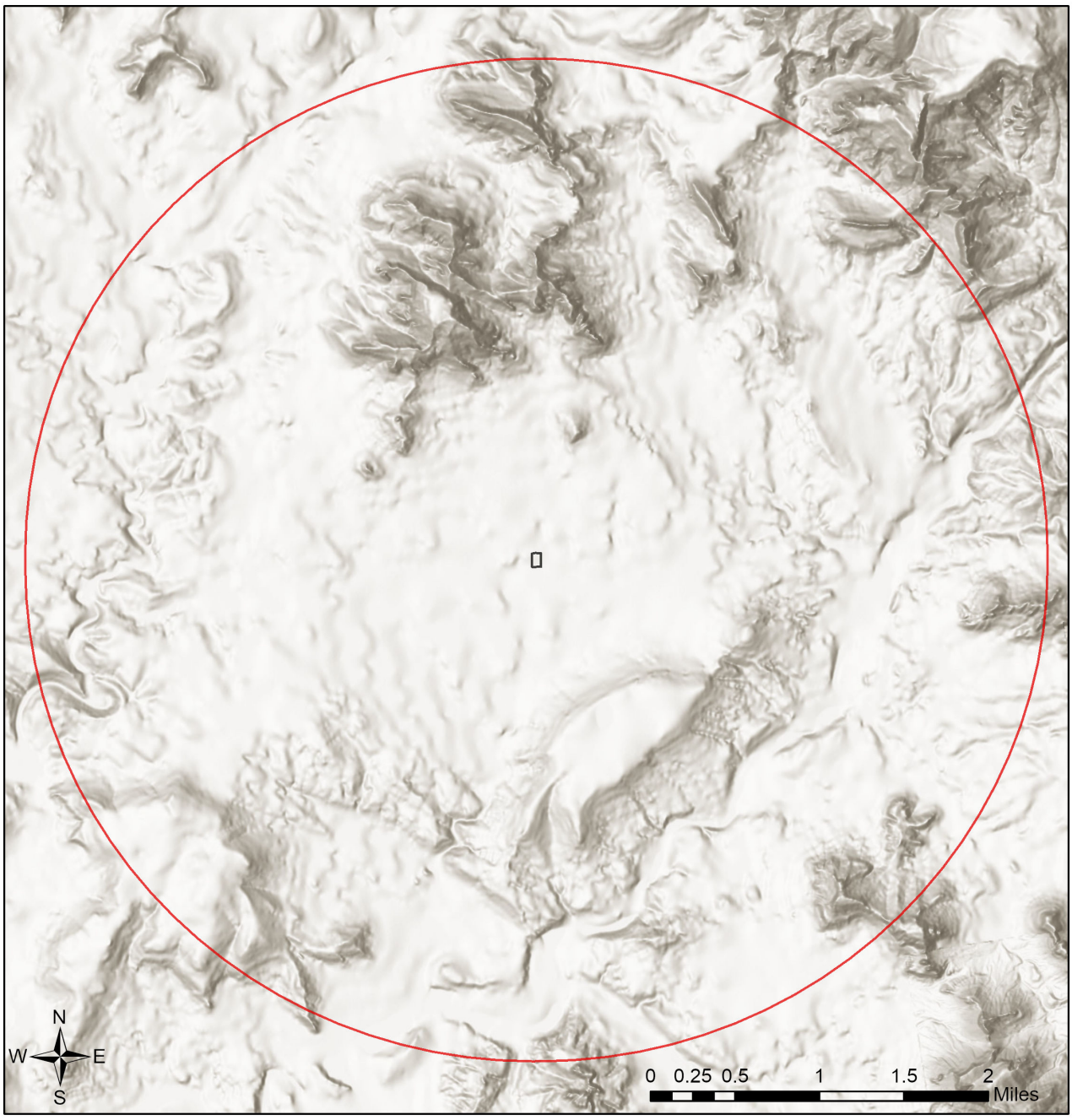
Township/Range(s): T17N, R5E

USGS Quad(s): SEDONA

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

Goodrow Property Environmental services

Web Map As Submitted By User



Buffered Project Boundary

Project Boundary

Project Size (acres): 2.88

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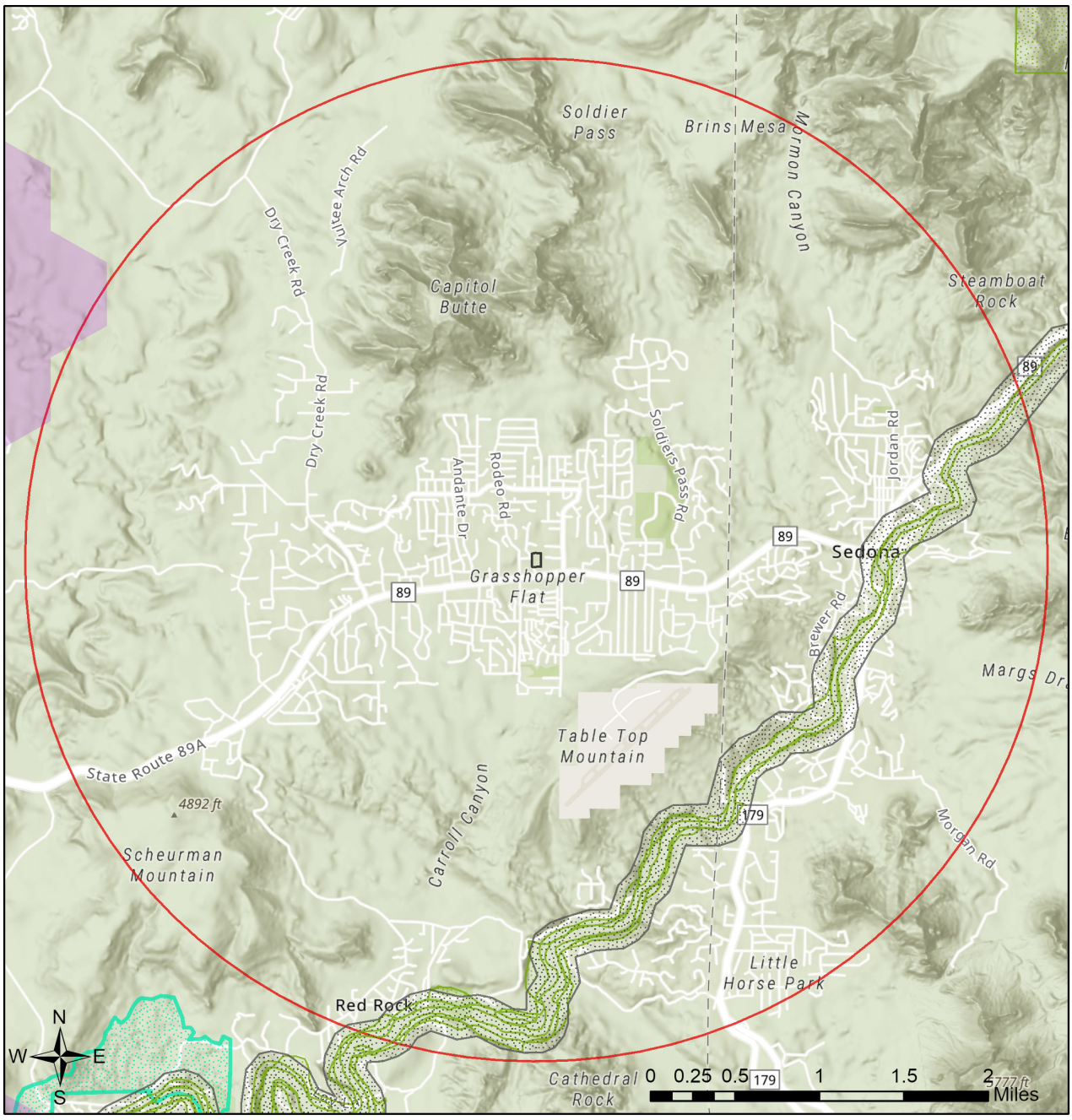
Goodrow Property Environmental services

Important Areas



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

Project Size (acres): 2.88

Lat/Long (DD): 34.8650 / -111.7982

County(s): Yavapai

AGFD Region(s): Flagstaff

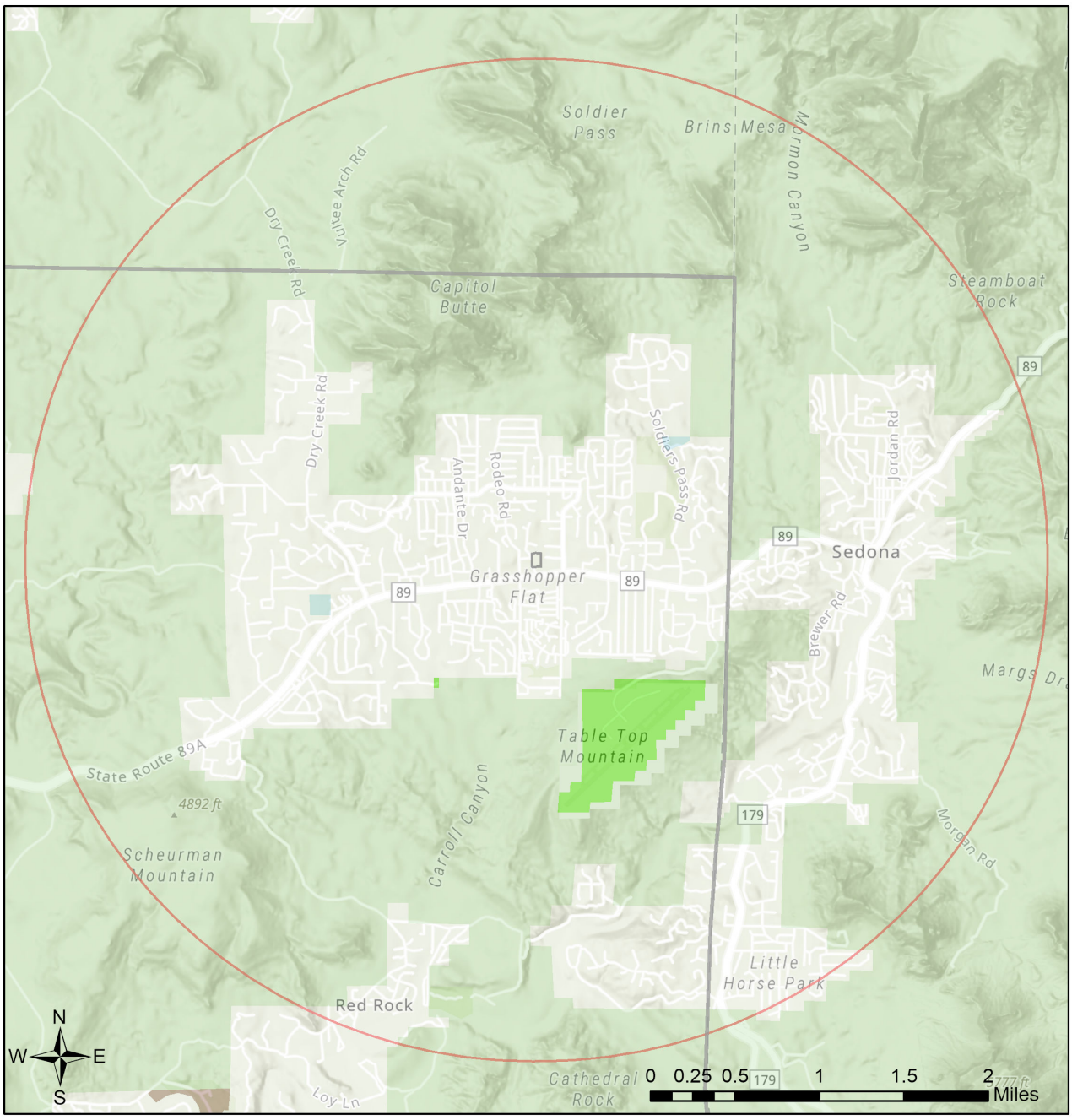
Township/Range(s): T17N, R5E

USGS Quad(s): SEDONA

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Goodrow Property Environmental services

Township/Ranges and Land Ownership



- Buffered Project Boundary
- Project Boundary
- AZ Game & Fish Dept.
- BLM
- BOR
- Indian Res.
- Military
- Mixed/Other
- National Park/Mon.
- Private
- State & Regional Parks
- State Trust
- US Forest Service
- Wildlife Area/Refuge
- Township/Ranges

Project Size (acres): 2.88

Lat/Long (DD): 34.8650 / -111.7982

County(s): Yavapai

AGFD Region(s): Flagstaff

Township/Range(s): T17N, R5E

USGS Quad(s): SEDONA

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Agave yavapaiensis	Page Springs Agave		S		SR	
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1A
Danaus plexippus	Monarch	C		S		
Desmodium metcalfei	Metcalfe's Tick-trefoil		S			
Eremogone aberrans	Mt. Dellenbaugh Sandwort		S			
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Gila robusta	Roundtail Chub	SC	S	S		1A
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S		1A
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Pellaea lyngholmii	Lyngholm's Brakefern		S			
Rhinichthys osculus	Speckled Dace	SC		S		1B
Salvia dorrii ssp. mearnsii	Verde Valley Sage	SC	S		SR	
Strix occidentalis lucida	Mexican Spotted Owl	LT				1A
Thamnophis rufipunctatus	Narrow-headed Gartersnake	LT	S			1A

Note: Status code definitions can be found at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/statusdefinitions/
.

No Special Areas Detected
No special areas were detected within the project vicinity.

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Accipiter gentilis	Northern Goshawk	SC	S	S		1B
Ambystoma mavortium nebulosum	Arizona Tiger Salamander					1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Aspidoscelis flagellicauda	Gila Spotted Whiptail					1B
Baeolophus ridgwayi	Juniper Titmouse					1C
Cardellina rubrifrons	Red-faced Warbler					1C
Chordeiles minor	Common Nighthawk					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Crotalus cerberus	Arizona Black Rattlesnake					1B
Empidonax wrightii	Gray Flycatcher					1C
Euderma maculatum	Spotted Bat	SC	S	S		1B
Eugenes fulgens	Rivoli's Hummingbird					1B
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S		1A
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Heloderma suspectum	Gila Monster					1A
Incilius alvarius	Sonoran Desert Toad					1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Melanerpes uropygialis	Gila Woodpecker					1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Melozone aberti	Abert's Towhee		S			1B
Microtus mexicanus	Mexican Vole					1B
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiodynastes luteiventris	Sulphur-bellied Flycatcher		S			1B
Myotis occultus	Arizona Myotis	SC		S		1B
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Odocoileus virginianus	White-tailed Deer					1B
Oreoscoptes montanus	Sage Thrasher					1C
Panthera onca	Jaguar	LE				1A
Patagioenas fasciata	Band-tailed Pigeon					1C
Peucedramus taeniatus	Olive Warbler					1C
Psiloscops flammeolus	Flammulated Owl					1C
Sciurus arizonensis	Arizona Gray Squirrel					1B
Sphyrapicus nuchalis	Red-naped Sapsucker					1C
Sphyrapicus thyroideus	Williamson's Sapsucker					1C
Spizella atrogularis	Black-chinned Sparrow					1C
Strix occidentalis lucida	Mexican Spotted Owl	LT				1A
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Vireo bellii arizonae	Arizona Bell's Vireo					1B
Vireo vicinior	Gray Vireo		S			1C
Vulpes macrotis	Kit Fox	No Status				1B

Species of Economic and Recreation Importance Predicted that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Callipepla gambelii	Gambel's Quail					
Odocoileus hemionus	Mule Deer					
Patagioenas fasciata	Band-tailed Pigeon					1C
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Sciurus nayaritensis	Mexican Fox Squirrel					
Ursus americanus	American Black Bear					
Zenaida macroura	Mourning Dove					

Project Type: Development Within Municipalities (Urban Growth), Residential subdivision and associated infrastructure, New construction

Project Type Recommendations:
Fence recommendations will be dependent upon the goals of the fence project and the wildlife species expected to be impacted by the project. General guidelines for ensuring wildlife-friendly fences include: barbless wire on the top and bottom with the maximum fence height 42", minimum height for bottom 16". Modifications to this design may be considered for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn (e.g., Pronghorn fencing would require 18" minimum height on the bottom). Please refer to the Department's Fencing Guidelines located on Wildlife Friendly Guidelines page, which is part of the Wildlife Planning button at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

During the planning stages of your project, please consider the local or regional needs of wildlife in regards to movement, connectivity, and access to habitat needs. Loss of this permeability prevents wildlife from accessing resources, finding mates, reduces gene flow, prevents wildlife from re-colonizing areas where local extirpations may have occurred, and ultimately prevents wildlife from contributing to ecosystem functions, such as pollination, seed dispersal, control of prey numbers, and resistance to invasive species. In many cases, streams and washes provide natural movement corridors for wildlife and should be maintained in their natural state. Uplands also support a large diversity of species, and should be contained within important wildlife movement corridors. In addition, maintaining biodiversity and ecosystem functions can be facilitated through improving designs of structures, fences, roadways, and culverts to promote passage for a variety of wildlife. Guidelines for many of these can be found at: https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Consider impacts of outdoor lighting on wildlife and develop measures or alternatives that can be taken to increase human safety while minimizing potential impacts to wildlife. Conduct wildlife surveys to determine species within project area, and evaluate proposed activities based on species biology and natural history to determine if artificial lighting may disrupt behavior patterns or habitat use. Use only the minimum amount of light needed for safety. Narrow spectrum bulbs should be used as often as possible to lower the range of species affected by lighting. All lighting should be shielded, canted, or cut to ensure that light reaches only areas needing illumination.

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

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

The construction or maintenance of water developments should include: incorporation of aspects of the natural environment and the visual resources, maintaining the water for a variety of species, water surface area (e.g., bats require a greater area due to in-flight drinking), accessibility, year-round availability, minimizing potential for water quality problems, frequency of flushing, shading of natural features, regular clean-up of debris, escape ramps, minimizing obstacles, and minimizing accumulation of silt and mud.

Minimization and mitigation of impacts to wildlife and fish species due to changes in water quality, quantity, chemistry, temperature, and alteration to flow regimes (timing, magnitude, duration, and frequency of floods) should be evaluated. Minimize impacts to springs, in-stream flow, and consider irrigation improvements to decrease water use. If dredging is a project component, consider timing of the project in order to minimize impacts to spawning fish and other aquatic species (include spawning seasons), and to reduce spread of exotic invasive species. We recommend early direct coordination with Project Evaluation Program for projects that could impact water resources, wetlands, streams, springs, and/or riparian habitats.

The Department recommends that wildlife surveys are conducted to determine if noise-sensitive species occur within the project area. Avoidance or minimization measures could include conducting project activities outside of breeding seasons.

Based on the project type entered, coordination with State Historic Preservation Office may be required (https://azstateparks.com/).

Trenches should be covered or back-filled as soon as possible. Incorporate escape ramps in ditches or fencing along the perimeter to deter small mammals and herpetofauna (snakes, lizards, tortoise) from entering ditches.

Communities can actively support the sustainability and mobility of wildlife by incorporating wildlife planning into their regional/comprehensive plans, their regional transportation plans, and their open space/conservation land system programs. An effective approach to wildlife planning begins with the identification of the wildlife resources in need of protection, an assessment of important habitat blocks and connective corridors, and the incorporation of these critical wildlife components into the community plans and programs. Community planners should identify open spaces and habitat blocks that can be maintained in their area, and the necessary connections between those blocks to be preserved or protected. Community planners should also work with State and local transportation planning entities, and planners from other communities, to foster coordination and cooperation in developing compatible development plans to ensure wildlife habitat connectivity. The Department's guidelines for incorporating wildlife considerations into community planning and developments can be found on the Wildlife Friendly Guidelines portion of the Wildlife Planning page at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Design culverts to minimize impacts to channel geometry, or design channel geometry (low flow, overbank, floodplains) and substrates to carry expected discharge using local drainages of appropriate size as templates. Reduce/minimize barriers to allow movement of amphibians or fish (e.g., eliminate falls). Also for terrestrial wildlife, washes and stream corridors often provide important corridors for movement. Overall culvert width, height, and length should be optimized for movement of the greatest number and diversity of species expected to utilize the passage. Culvert designs should consider moisture, light, and noise, while providing clear views at both ends to maximize utilization. For many species, fencing is an important design feature that can be utilized with culverts to funnel wildlife into these areas and minimize the potential for roadway collisions. Guidelines for culvert designs to facilitate wildlife passage can be found on the home page of this application at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/.

Based on the project type entered, coordination with Arizona Department of Environmental Quality may be required (http://www.azdeq.gov/).

Based on the project type entered, coordination with Arizona Department of Water Resources may be required (https://new.azwater.gov/).

Based on the project type entered, coordination with U.S. Army Corps of Engineers may be required (http://www.usace.army.mil/)

Based on the project type entered, coordination with County Flood Control district(s) may be required.

Development plans should provide for open natural space for wildlife movement, while also minimizing the potential for wildlife-human interactions through design features. Please contact Project Evaluation Program for more information on living with urban wildlife at PEP@azgfd.gov or at https://www.azgfd.com/wildlife/planning/wildlifeguidelines/ and https://www.azgfd.com/Wildlife/LivingWith.

Vegetation restoration projects (including treatments of invasive or exotic species) should have a completed site-evaluation plan (identifying environmental conditions necessary to re-establish native vegetation), a revegetation plan (species, density, method of establishment), a short and long-term monitoring plan, including adaptive management guidelines to address needs for replacement vegetation.

The Department requests further coordination to provide project/species specific recommendations, please contact Project Evaluation Program directly at PEP@azgfd.gov.

Project Location and/or Species Recommendations:
HDMS records indicate that one or more native plants listed on the **Arizona Native Plant Law and Antiquities Act** have been documented within the vicinity of your project area. Please contact:
Arizona Department of Agriculture
1688 W Adams St.
Phoenix, AZ 85007
Phone: 602.542.4373
https://agriculture.az.gov/sites/default/files/Native%20Plant%20Rules%20-%20AZ%20Dept%20of%20Ag.pdf starts on page 44

HDMS records indicate that one or more **Listed, Proposed, or Candidate** species or **Critical Habitat** (Designated or Proposed) have been documented in the vicinity of your project. The Endangered Species Act (ESA) gives the US Fish and Wildlife Service (USFWS) regulatory authority over all federally listed species. Please contact USFWS Ecological Services Offices at https://www.fws.gov/office/arizona-ecological-services or:

Phoenix Main Office
9828 North 31st Avenue #C3
Phoenix, AZ 85051-2517
Phone: 602-242-0210
Fax: 602-242-2513

Tucson Sub-Office
201 N. Bonita Suite 141
Tucson, AZ 85745
Phone: 520-670-6144
Fax: 520-670-6155

Flagstaff Sub-Office
SW Forest Science Complex
2500 S. Pine Knoll Dr.
Flagstaff, AZ 86001
Phone: 928-556-2157
Fax: 928-556-2121

HDMS records indicate that **Peregrine Falcons** have been documented within the vicinity of your project area. Please review the Peregrine Falcon Management Guidelines at: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/peregrineFalconConservGuidelines.pdf.

APPENDIX C

Notice of Intent to Clear Land Form and Project Map

Print Form

Arizona Department of Agriculture (ADA)
Licensing and Registration Section
1688 West Adams, Phoenix, Arizona 85007
Phone: (602) 542-6408
Fax: (602) 542-0466

Notice of Intent to Clear Land — ARS § 3-904

Pursuant to A.R.S. § 3-904 the undersigned, as Owner of the Property described herein, gives this Notice of Intent to Clear Land of protected native plants.

1. **Owner/landowner's agent.** The owner or landowner's agent of the Property upon which protected native plants will be affected:

   Owner's Name _____ Phone _____

   Address _____

   Agent's Name _____ Phone _____

   Address _____

2. **Property.** The description and location of the Property upon which protected native plants will be affected:

   County

   Name of Property/Project _____

   Address _____

   Physical Location (attach map) _____

   (Note: Map must also show surrounding land for 1/2 mile in each direction)

   Tax Parcel ID Nos. _____

   Legal Description (or attach copy) _____

   Number of Acres to be Cleared _____

3. **Owner's Intent.** Landowner's intentions when clearing private land of protected native plants.

   ☐ Owner intends to allow salvage of the plants, and agrees to be contacted by native plant salvagers.

   ☐ Owner intends to transplant the plants onto the same property, or to another property he also owns.

   ☐ Owner has already arranged for salvage of the plants.

   ☐ Owner does not intend to allow salvage of the plants.

   ☐ Other _____

4. **Approximate starting date.** _____
   (See notice period listed on reverse side)

The information contained in this application is true and accurate to the best of my knowledge. I understand that providing false information is a felony in Arizona

Signature _____ **Date** _____

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.

Explanation Of This Form

1. **Notice of Intent to Clear Land.**
   The majority of the desert plants fall into one of four groups specially protected from theft, vandalism or unnecessary destruction. They include all of the cacti, the unique plants like Ocotillo, and trees like Ironwood, Palo Verde and Mesquite. In most cases the destruction of these protected plants may be avoided if the private landowner gives prior notice to the Arizona Department of Agriculture.

2. **Notice Period.**
   When properly completed, this form is to be sent to the Department within the time periods described below. Landowners/ developers are encouraged to salvage protected native plants whenever possible.

3. **Information to Interested Parties.**
   The information in this notice will be posted in the applicable state office of the Department and mailed to those parties (salvage operators, revegetation experts) who have an interest in these plants and may approach the landowner with the possibility of saving the plant(s) from unnecessary destruction.

Notice to Landowner:

1. The owner may not begin destruction of protected native plants until he receives confirmation from the Arizona Department of Agriculture and the time prescribed below has elapsed. The "Confirmed" stamp only verifies that the Notice has been filed.

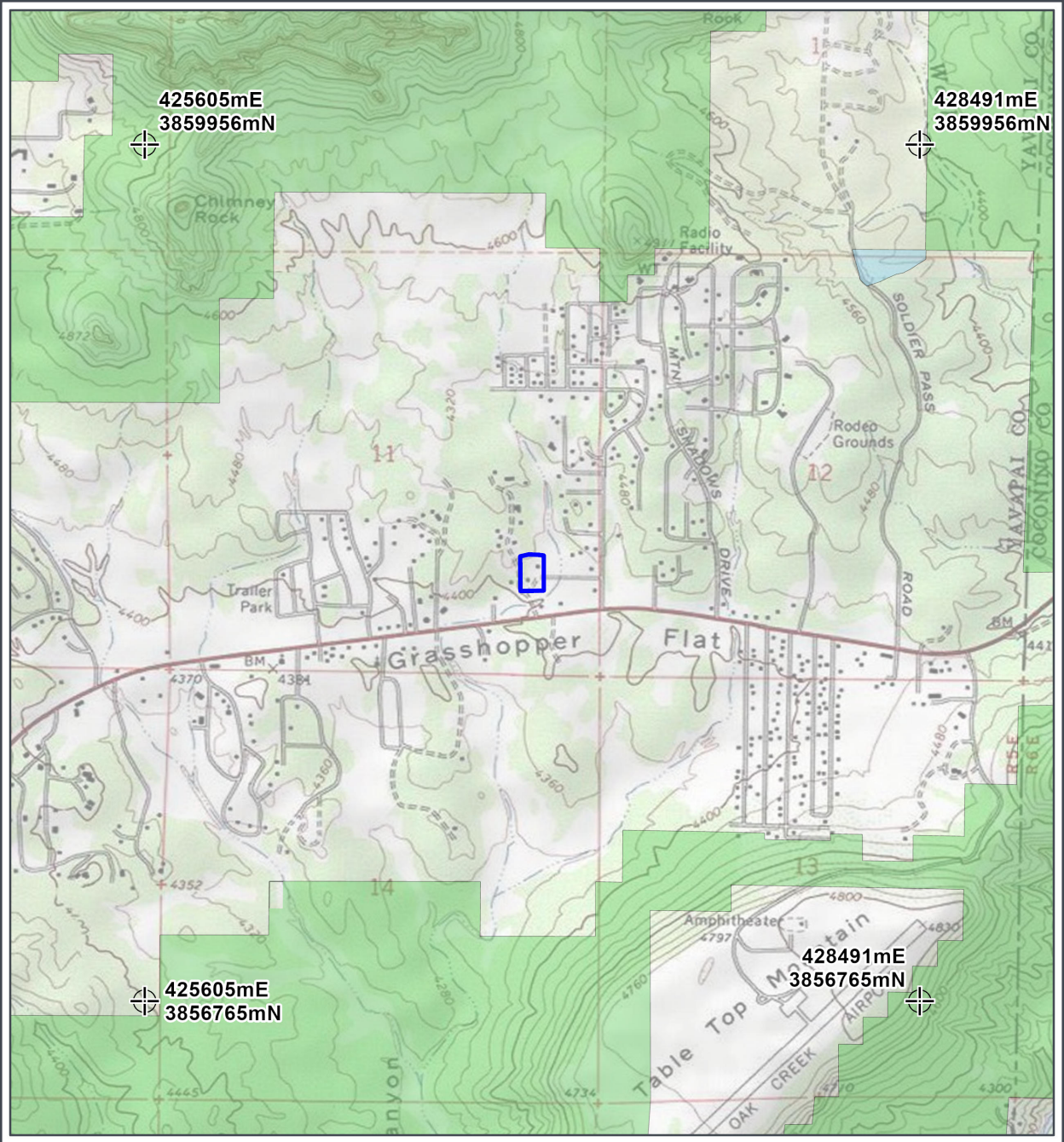
Size of area over which the Destruction of Plants will occur	**Length of Notice Period**
Less than one acre	20 days, oral or written
One acre or more, but less than 40 acres	30 days, written
40 acres or more	60 days, written

2. If you are clearing land over an area of less than one acre, oral notice may be given by calling the applicable state office at the telephone number given below.
3. If the land clearing or plant salvage does not occur within one year, a new Notice is required.
4. This Notice must be sent to the applicable state office of the Department of Agriculture at the address given below:

Phoenix Office
1688 W. Adams
Phoenix, AZ 85007
(602) 364-0935

Tucson Office
400 W. Congress Ste.124
Tucson, AZ 85701
(520) 628-6317
M-F 8a.m. - 11:30a.m.

Notice to salvagers: Consent of the landowner is required before entering any lands described in this notice.



Project Area

Land Jurisdiction

- Private
- State Lands
- U.S. Forest Service

Yavapai County, AZ
USGS 7.5' Quadrangle:
Sedona, AZ, 34111-G7
17N 5E Section 11
NAD 1983 UTM Zone 12N
34.865°N 111.7982°W

0 1,000 2,000 Feet
0 250 500 Meters

N

1:24,000

Base Map: ESRI ArcGIS Online, accessed September 2022
Updated: 9/1/2022
Project No. 74643
Layout: Project Area
Aprx:

SWCA ENVIRONMENTAL CONSULTANTS