Floodplain Comments

1. This parcel lies within FEMA Zones X. A FPUP is required and an Elevation Certificate (EC) for all proposed buildings must be submitted that are located within areas of Regulatory Floodplains (where Q100 > 500cfs).
2. The cumulative amount of improvements (include previous improvements) will require a Land Clearing Permit since the accumulative area of clearing is one acre or greater. Other permits include Cochise County Planning Department at https://www.cochise.az.gov/development-services/home, the Arizona Department of Environmental Quality ADEQ) at https://azdeq.gov/AZPDES/CGP, and Arizona State Department of Agriculture (for native plants removal) at https://agriculture.az.gov/download-forms. These permits must be submitted prior to any construction start-up. Refer to the associated websites for more information
3. A Drainage Analysis must be submitted from an Arizona Registered Professional Civil Engineer for any proposed development. Refer to the Cochise County Floodplain Regulations (Section 10) for more information regarding drainage development requirements at https://www.cochise.az.gov/sites/default/files/highway_and_floodplain/FLOOD_REGS_2015.pdf
4. The consultant acknowledges that there may be more comments forthcoming from this review

Health Comments

Septic review and permits will be required.

ADOT

Based on our (ADOT) review, no traffic submittals are required i.e. TIA/TIS. However, we will need to review any plans for any activities on ADOT R/W. Once we have commented and approved the activities on our R/W, an encroachment permit will need to be submitted.

From: Jeremy Moore
To: Kirschmann, Robert
Cc: Jay Gomes; Richard Freije; Michelle Garza
Subject: Re: Transmittal for RZ22-08 (Highway 83)
Date: Wednesday, April 6, 2022 1:30:53 PM

Hi Robert

Based on our (ADOT) review, no traffic submittals are required i.e. TIA/TIS. However, we will need to review any plans for any activities on ADOT R/W. Once we have commented and approved the activities on our R/W, an encroachment permit will need to be submitted. Let me know if you have any questions. Thanks for the opportunity to review.

Thanks

Jeremy Moore, P.E.
Assistant District Engineer
1221 S. 2nd Avenue
Tucson, Arizona 85713
520.260.2384
azdot.gov

On Wed, Apr 6, 2022 at 11:43 AM Kirschmann, Robert <RKirschmann@cochise.az.gov> wrote:

> Good afternoon,
>
> Attached please find a transmittal and an application we have received for a rezoning new Parker Canyon Lake. The request is to rezone an approximately 17 acre parcel from RU-4 (Rural, one dwelling per four acres) to RU-2 (Rural, one dwelling per two acres). With the current zoning 4 homes would be allowed. If the rezoning is approved, up to 8 could be allowed. Currently, the applicant is only proposing 5 lots. Part of the reason for the rezoning is the parcel occurs on both sides of Highway 83. The portion on the east side of the road is approximately 2.8 acres. The RU-4 designation would prevent the lot from being split and a single family home being constructed.
>
> Comments are due no later than May 2, 2022.
>
> Please let me know if you have any questions.
>
> Best regards,

May 6, 2022

Robert Kirschmann
Cochise County Community Development
Development Services Department
126 West 5th Street, Suite 4
Benson, AZ 85602

Electronically submitted to: RKirschmann@cochise.az.gov

Re: Review of the Parker Canyon Lake Rezoning Parcel 105-28-006 project

Dear Mr. Kirschmann:

The Arizona Game and Fish Department (Department) reviewed your Project Evaluation Request dated April 6, 2022, regarding the rezoning of an approximately 17 acre parcel from RU-4 (Rural, one dwelling per four acres) to RU-2 (Rural, one dwelling per two acres) in Elgin, Arizona. The parcel is situated within pinyon-juniper woodland vegetation, approximately 0.5 mile from Parker Canyon Lake.

Based on the information provided, the Department offers the following general recommendations:

- The Department's Online Environmental Tool report created for you (attached; HGIS-16208) on May 3, 2022, indicates that beardless cinchweed (*Pectis imberbis*), Huachuca water-umbel (*Lilaeopsis schaffneriana* ssp. *recurva*), jaguar (*Panthera onca*), ocelot (*Leopardus pardalis*), and Sonoran tiger salamander (*Ambystoma mavortium stebbinsi*), which are federally listed as Endangered under the Endangered Species Act (ESA), and Chiricahua leopard frog (*Lithobates chiricahuensis*), Mexican spotted owl (*Strix occidentalis lucida*), Northern Mexican Gartersnake (*Thamnophis eques megalops*), and Yellow-billed Cuckoo (*Coccyzus americanus*), which are federally listed as Threatened under the ESA, have been recorded in the project vicinity. Additionally, the project also falls within critical habitat for Mexican spotted owl and jaguar. The Department recommends that you and/or the project proponent contact the U.S. Fish and Wildlife Service[1] (USFWS) for their Technical Assistance. The USFWS will provide options to comply with the ESA, such as conservation measures to avoid or minimize adverse effects to listed species.
- The Huachuca Mountains are considered an Important Bird Area[2]. The Department recommends that a qualified biologist conduct a survey for nesting birds within the project

[1] https://www.fws.gov/office/arizona-ecological-services/contact-us
[2] https://aziba.org/?page_id=396

area prior to removal or trimming of trees/vegetation, if the removal or trimming occurs during the breeding season. The trees and/or vegetation within the project area may provide nesting opportunities for avian species that are regulated under the Migratory Bird Treaty Act (MBTA) and protected under state law. Breeding season for birds is generally March through late August, depending on the species and habitat, and for raptors it is generally January through late June. If it is anticipated the project will not be in compliance with MBTA, the Department also recommends that you contact the U.S. Fish and Wildlife Service[3] (USFWS) for their Technical Assistance. The USFWS will provide options to comply with the MBTA.

- Please minimize impacts to vegetation during project construction. Staging areas should be located in previously disturbed sites, and kept as small as possible. Implement erosion and drainage control measures during the project to prevent the introduction of sediment-laden runoff into adjacent surface waters, and to prevent impacts to surface water quality. Stabilize exposed soils, particularly on slopes, with native vegetation as soon as possible to prevent excess erosion.
- If proposed ground disturbance (both temporary and permanent) will meet or exceed 0.25 acre in areas with native vegetation, please ensure the project complies with Arizona Native Plant Law regulations[4]. A Native Plant Inventory may need to be conducted to identify, record, and coordinate plant salvage efforts for species that are Protected under the Arizona Native Plant Law. In addition, the applicable land management agencies should be consulted regarding guidelines for revegetation efforts.
- 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. Please review the Arizona Department of Agriculture's website for a list of prohibited and restricted noxious weeds[5] and the Arizona Native Plant Society[6] for recommendations on control methods. To view a list of documented invasive species or to report invasive species in or near your project area visit iMapInvasives[7] - a national cloud-based application for tracking and managing invasive species.
    - 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.
- If trenching will occur, trenching and backfilling crews should be close together to minimize the amount of open trenches at any given time. Avoid leaving trenches open overnight. Where trenches cannot be back-filled immediately, escape ramps should be constructed at least every 90 meters. Escape ramps can be short lateral trenches or wooden planks sloping

[3] https://www.fws.gov/office/arizona-ecological-services/contact-us
[4] https://agriculture.az.gov/plantsproduce/native-plants
[5] https://agriculture.az.gov/pestspest-control/agriculture-pests/noxious-weeds
[6] https://aznps.com/invas
[7] https://imap.natureserve.org/imap/services/page/map.html

to the surface. The slope should be less than 45 degrees (1:1). Trenches that have been left open overnight should be inspected and animals removed prior to backfilling.

- To further limit the spread of non-native, invasive plant species, the Department recommends landscaping with drought-tolerant species that are native to Arizona. Landscaping with native plants can help support wildlife and pollinator species that inhabit rural and urbanized areas. Visit the Arizona Native Plant Society's website[8] for information on preferred native plants to utilize in landscaping.
- Artificial lighting could impair the ability of nocturnal animals to navigate (e.g., owls, migratory birds, bats, and other nocturnal mammals), and may affect wildlife behavior and populations (Davies et. al. 2013). Consider using only the minimum amount of light needed for safety, especially in areas immediately adjacent to open space or undeveloped lands. Motion sensing lighting and narrow spectrum bulbs are the best and the Department encourages their use as often as possible to lower the range of species affected by lighting. Also, please consider shielding, canting, or cutting all lighting, where possible, to ensure that light reaches only areas needing illumination. This will minimize impacts to nocturnal wildlife.

The Department appreciates the opportunity to provide an evaluation of impacts to wildlife or wildlife habitats associated with the Parker Canyon Lake Rezoning Parcel 105-28-006 project. If you have any questions regarding this letter, please contact me at (623) 236-7615, and visit our website[9] for additional guidelines.

Sincerely,

Cheri Bouchér

Cheri Bouchér
Project Evaluation Program Specialist, Habitat Branch
Arizona Game and Fish Department

AZGFD# M22-04061211

[8] http://aznps.com/invasives/GrowNative/invasives.html
[9] https://www.azgfd.com/wildlife/planning/wildlifeguidelines/

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:

Stone Canyon Ranch RZ22-08 (Highway 83)

Project Description:

Attached please find a transmittal and an application we have received for a rezoning new Parker Canyon Lake. The request is to rezone an approximately 17 acre parcel from RU-4 (Rural, one dwelling per four acres) to RU-2 (Rural, one dwelling per two acres). With the current zoning 4 homes would be allowed. If the rezoning is approved, up to 8 could be allowed. Currently, the applicant is only proposing 5 lots. Part of the reason for the rezoning is the parcel occurs on both sides of Highway 83. The portion on the east side of the road is approximately 2.8 acres. The RU-4 designation would prevent the lot from being split and a single family home being constructed.

Project Type:

Development Outside Municipalities (Rural Development), Residential subdivision and associated infrastructure, New construction

Contact Person:

Kendra Loubere

Organization:

Arizona Game and Fish Department

On Behalf Of:

COCHISE

Project ID:

HGIS-16208

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.

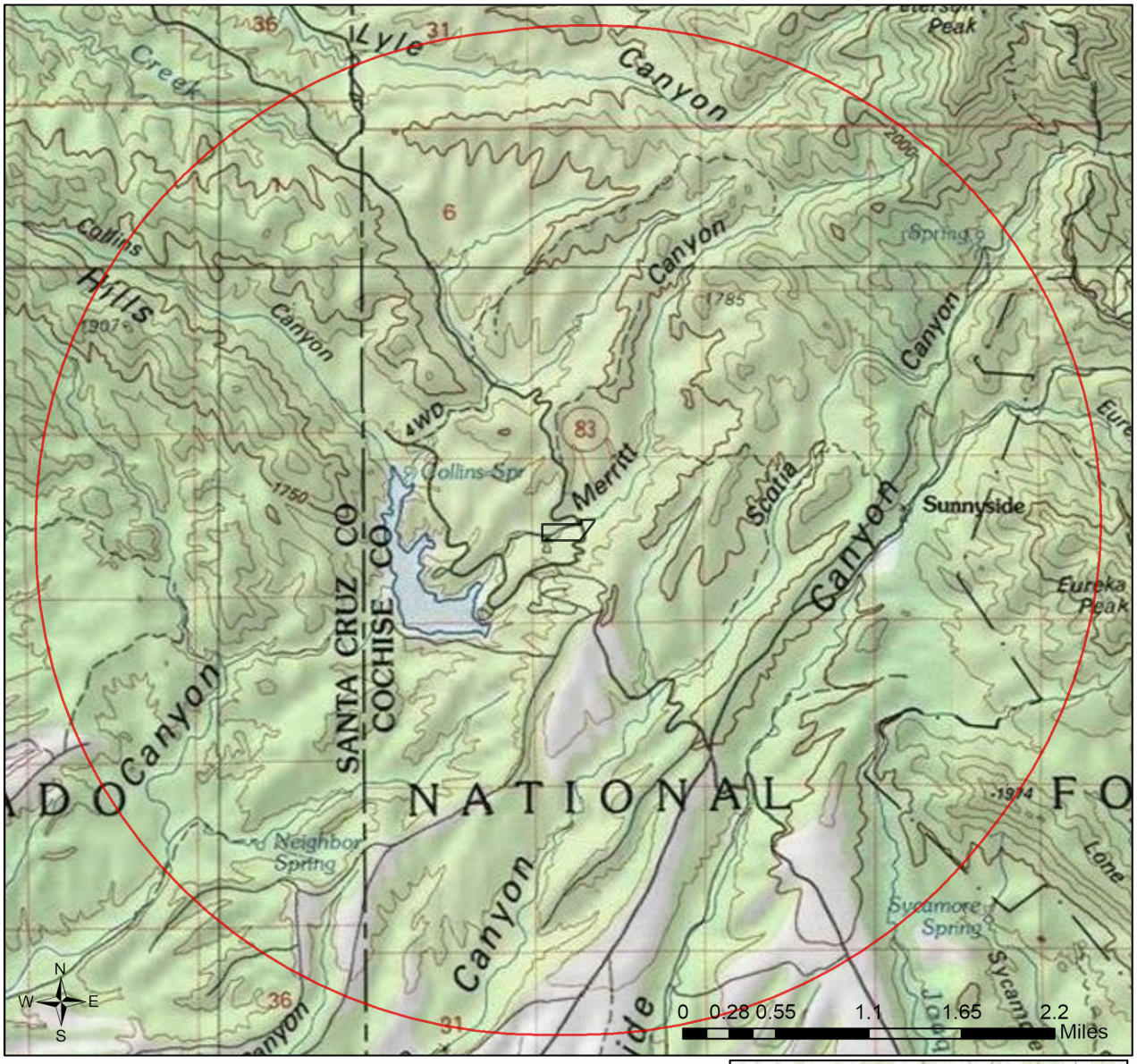
Locations Accuracy Disclaimer:
Project locations are assumed to be both precise and accurate for the purposes of environmental review. The creator/owner of the Project Review Report is solely responsible for the project location and thus the correctness of the Project Review Report content.

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

Stone Canyon Ranch RZ22-08 (Highway 83)

USA Topo Basemap With Locator Map



Buffered Project Boundary

Project Boundary

Project Size (acres): 17.58

Lat/Long (DD): 31.4320 / -110.4395

County(s): Cochise

AGFD Region(s): Tucson

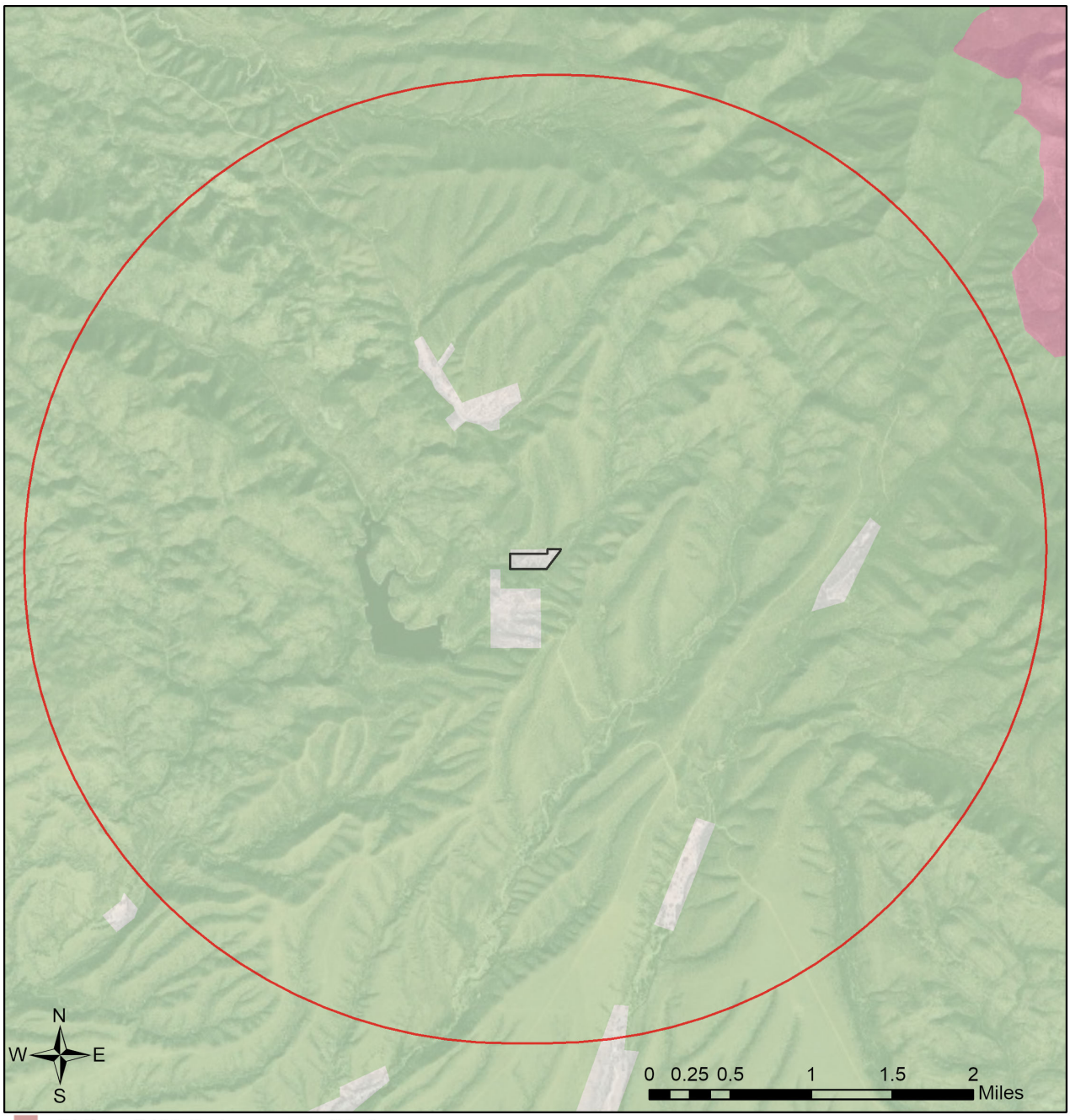
Township/Range(s): T23S, R19E

USGS Quad(s): HUACHUCA PEAK

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

Stone Canyon Ranch RZ22-08 (Highway 83)

Web Map As Submitted By User



- 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
- Buffered Project Boundary
- Project Boundary

Project Size (acres): 17.58

Lat/Long (DD): 31.4320 / -110.4395

County(s): Cochise

AGFD Region(s): Tucson

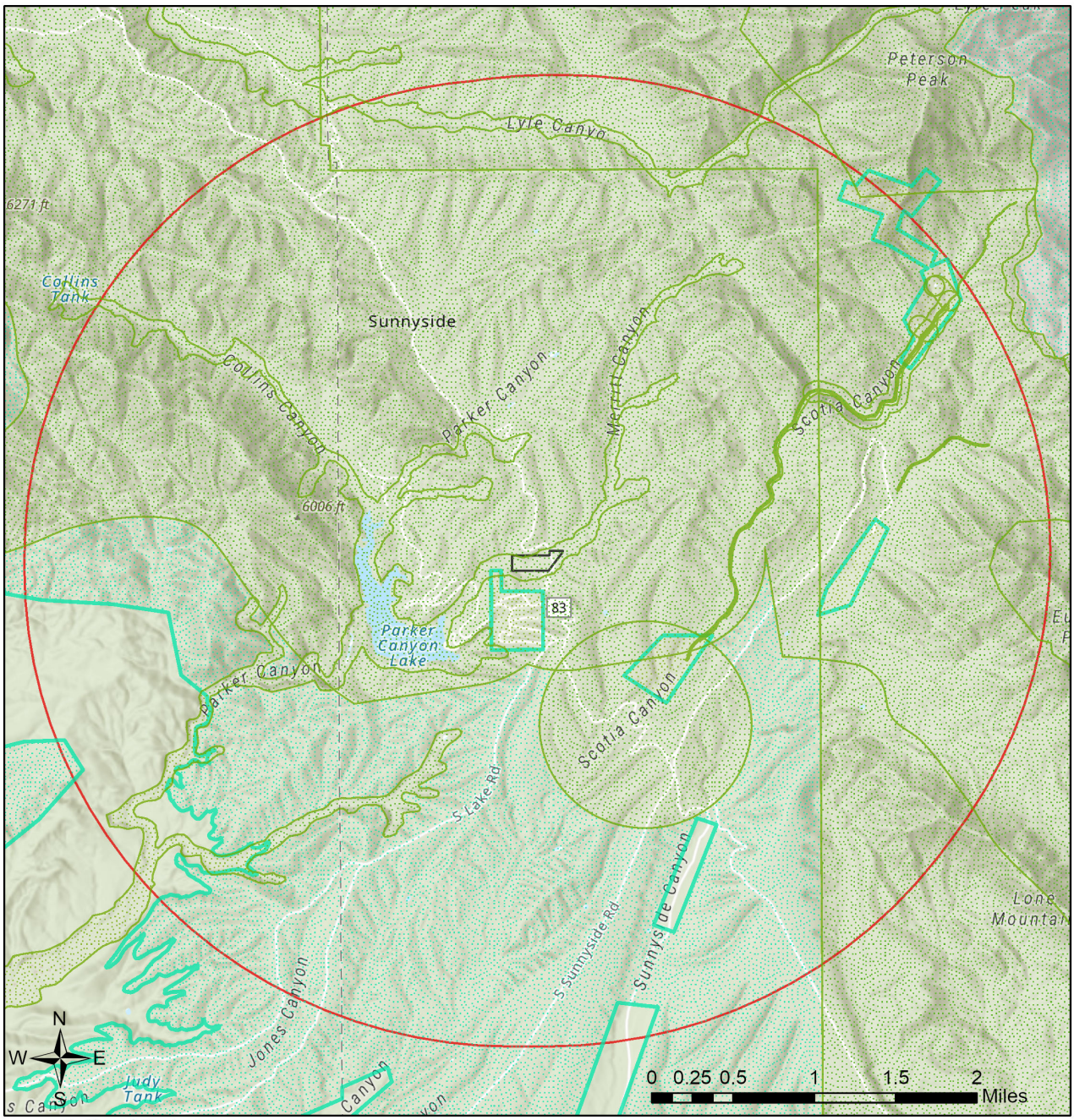
Township/Range(s): T23S, R19E

USGS Quad(s): HUACHUCA PEAK

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Stone Canyon Ranch RZ22-08 (Highway 83)

Important Areas



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

Project Size (acres): 17.58

Lat/Long (DD): 31.4320 / -110.4395

County(s): Cochise

AGFD Region(s): Tucson

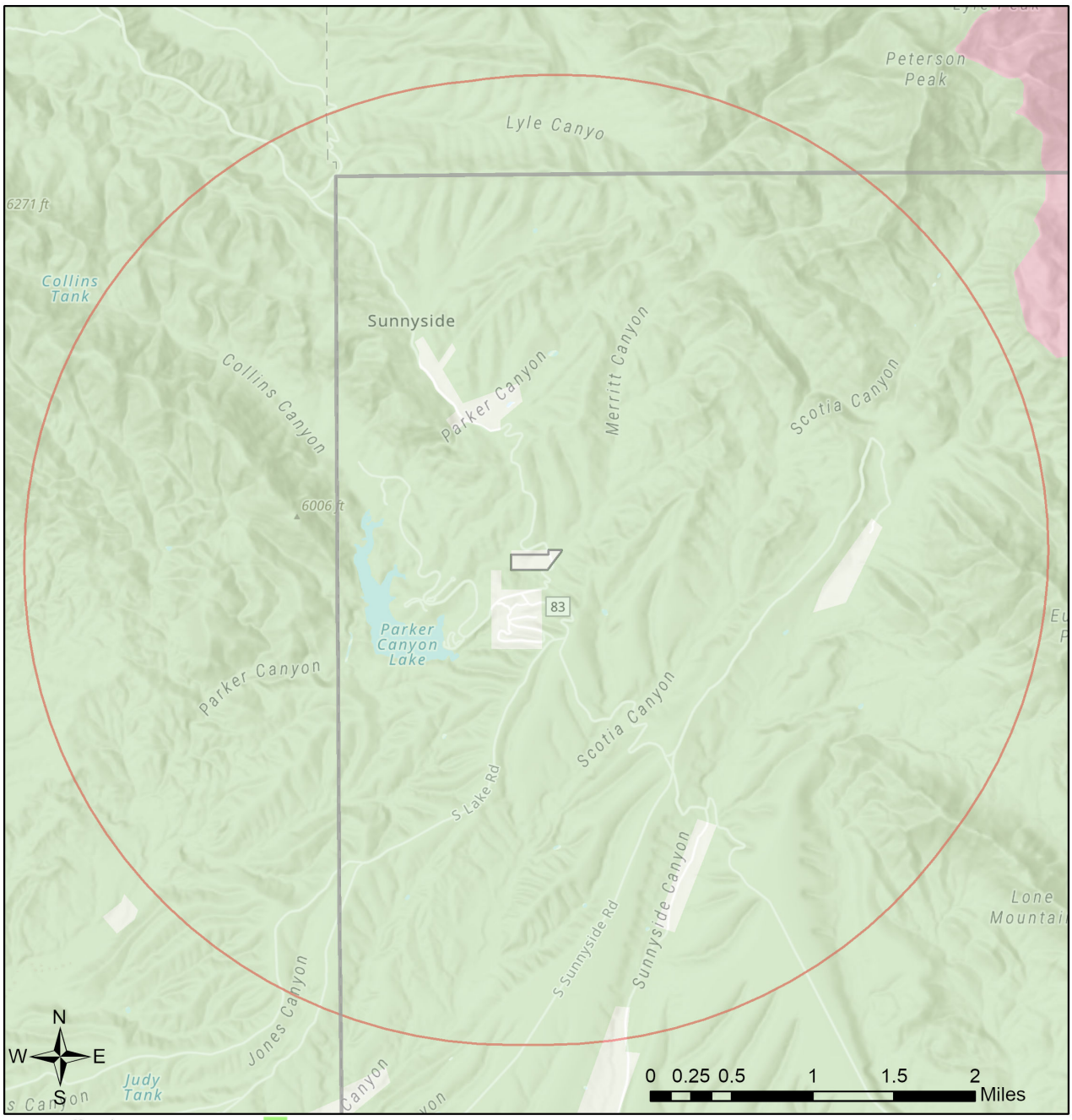
Township/Range(s): T23S, R19E

USGS Quad(s): HUACHUCA PEAK

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

Stone Canyon Ranch RZ22-08 (Highway 83)

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): 17.58

Lat/Long (DD): 31.4320 / -110.4395

County(s): Cochise

AGFD Region(s): Tucson

Township/Range(s): T23S, R19E

USGS Quad(s): HUACHUCA PEAK

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
Accipiter gentilis	Northern Goshawk	SC	S	S		1B
Agathymus evansi	Huachuca Giant-skipper		S			
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S		1B
Ambystoma mavortium stebbinsi	Sonoran Tiger Salamander	LE				1A
Asclepias lemmonii	Lemmon Milkweed		S			
Aspidoscelis stictogramma	Giant Spotted Whiptail	SC	S			1B
Astragalus hypoxylus	Huachuca Milkvetch	SC	S	S	SR	
Carex chihuahuensis	Chihuahuan Sedge		S			
Coccothraustes vespertinus	Evening Grosbeak					1B
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S	S		1A
Coursetia glabella	Smooth Baby-bonnets	SC	S			
Crotalus lepidus klauberi	Banded Rock Rattlesnake					1A
Crotalus willardi willardi	Arizona Ridge-nosed Rattlesnake		S			1A
Dichromanthus michuacanus	Michoacan Ladies'-tresses				SR	
Echinocereus santaritensis	Santa Rita Hedgehog Cactus				SR	
Empidonax fulvifrons pygmaeus	Northern Buff-breasted Flycatcher	SC	S			1B
Erigeron arisolius	Arid Throne Fleabane		S			
Euphorbia macropus	Woodland Spurge	SC			SR	
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC, BGA	S	S		1A
Hyla wrightorum	Arizona Treefrog					1C
Hypoxis mexicana	Yellow Star Grass				SR	
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lasiurus blossevillii	Western Red Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Lilaeopsis schaffneriana ssp. recurva	Huachuca Water-umbel	LE			HS	
Lithobates chiricahuensis	Chiricahua Leopard Frog	LT				1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S		1A
Lupinus huachucanus	Huachuca Mountain Lupine		S			
Muhlenbergia palmeri	Palmer's Muhly		S			
Myotis thysanodes	Fringed Myotis	SC				
Myotis volans	Long-legged Myotis	SC				
Panthera onca	Jaguar	LE				1A
Pectis imberbis	Beardless Cinchweed	LE	S			
Phemeranthus humilis	Pinos Altos Flameflower	SC	S		SR	
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE				1A
Psilactis gentryi	Mexican Tansyaster		S			
Pyrgulopsis thompsoni	Huachuca Springsnail	CCA	S			1A

Special Status Species Documented within 3 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Samolus vagans	Chiricahua Mountain Brookweed		S			
Sceloporus slevini	Slevin's Bunchgrass Lizard		S	S		1B
Stevia lemmonii	Lemmon's Stevia		S			
Strix occidentalis lucida	Mexican Spotted Owl	LT				1A
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Tantilla wilcoxi	Chihuahuan Black-headed Snake		S			1B
Thamnophis eques megalops	Northern Mexican Gartersnake	LT	S			1A
Tragia laciniata	Sonoita Noseburn		S			
Trogon elegans	Elegant Trogon		S			1B
Viola umbraticola	Ponderosa Violet		S			

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

Special Areas Documented that Intersect with Project Footprint as Drawn

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
CH for Coccyzus americanus	Yellow-billed Cuckoo Designated Critical Habitat					
CH for Panthera onca	Jaguar Designated Critical Habitat					
Huachuca Mountains IBA	Important Bird Area					

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

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
Agosia chrysogaster	Longfin Dace	SC		S		1B
Amazilia violiceps	Violet-crowned Hummingbird		S			1B
Ambystoma mavortium stebbinsi	Sonoran Tiger Salamander	LE				1A
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Athene cunicularia hypugaea	Western Burrowing Owl	SC	S	S		1B
Buteo regalis	Ferruginous Hawk	SC		S		1B
Buteo swainsoni	Swainson's Hawk					1C
Callipepla squamata	Scaled Quail					1C
Catostomus clarkii	Desert Sucker	SC	S	S		1B
Catostomus insignis	Sonora Sucker	SC	S	S		1B
Chordeiles minor	Common Nighthawk					1B
Cistothorus palustris	Marsh Wren					1C
Coccothraustes vespertinus	Evening Grosbeak					1B
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	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
Coluber bilineatus	Sonoran Whipsnake					1B
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Craugastor augusti	Barking Frog					1B
Crotalus lepidus	Rock Rattlesnake					1A
Crotalus willardi	Ridge-nosed Rattlesnake	PS				1A
Cynanthus latirostris	Broad-billed Hummingbird		S			1B
Cynomys ludovicianus	Black-tailed Prairie Dog	CCA		S		1A
Cyprinodon macularius	Desert Pupfish	LE				1A
Cyrtonyx montezumae	Montezuma Quail					1C
Dipodomys spectabilis	Banner-tailed Kangaroo Rat			S		1B
Empidonax fulvifrons pygmaeus	Northern Buff-breasted Flycatcher	SC	S			1B
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
Gila intermedia	Gila Chub	LE				1A
Glaucidium gnoma gnoma	Mountain Pygmy-owl					1B
Haliaeetus leucocephalus	Bald Eagle	SC, BGA	S	S		1A
Hypsiglena sp. nov.	Hooded Nightsnake					1B
Incilius alvarius	Sonoran Desert Toad					1B
Junco phaeonotus	Yellow-eyed Junco		S			1B
Kinosternon sonoriense sonoriense	Desert Mud Turtle			S		1B
Lampornis clemenciae	Blue-throated Hummingbird					1B
Lampropeltis nigrita	Mexican Black Kingsnake					1B
Lasiurus blossevillii	Western Red Bat		S			1B
Lasiurus xanthinus	Western Yellow Bat		S			1B
Leopardus pardalis	Ocelot	LE				1A
Leptonycteris yerbabuenae	Lesser Long-nosed Bat	SC				1A
Lithobates chiricahuensis	Chiricahua Leopard Frog	LT				1A
Megascops trichopsis	Whiskered Screech-owl		S			1B
Meleagris gallopavo mexicana	Gould's Turkey		S			1B
Melospiza lincolnii	Lincoln's Sparrow					1B
Micrathene whitneyi	Elf Owl					1C
Micruroides euryxanthus	Sonoran Coralsnake					1B
Myiarchus tuberculifer	Dusky-capped Flycatcher					1B
Myiarchus tyrannulus	Brown-crested Flycatcher					1C
Myiodynastes luteiventris	Sulphur-bellied Flycatcher		S			1B
Myotis occultus	Arizona Myotis	SC		S		1B

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
Myotis velifer	Cave Myotis	SC		S		1B
Myotis yumanensis	Yuma Myotis	SC				1B
Notiosorex cockrumi	Cockrum's Desert Shrew					1B
Nyctinomops femorosaccus	Pocketed Free-tailed Bat					1B
Odocoileus virginianus	White-tailed Deer					1B
Oreoscoptes montanus	Sage Thrasher					1C
Pachyramphus aglaiae	Rose-throated Becard		S			1B
Panthera onca	Jaguar	LE				1A
Passerculus sandwichensis	Savannah Sparrow					1B
Patagioenas fasciata	Band-tailed Pigeon					1C
Picoides arizonae	Arizona Woodpecker		S			1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE				1A
Pyrgulopsis thompsoni	Huachuca Springsnail	CCA	S			1A
Sceloporus slevini	Slevin's Bunchgrass Lizard		S	S		1B
Sciurus arizonensis	Arizona Gray Squirrel					1B
Setophaga petechia	Yellow Warbler					1B
Sialia sialis fulva	Azure Bluebird					1B
Sorex arizonae	Arizona Shrew	SC	S			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
Sturnella magna	Eastern Meadowlark					1C
Tadarida brasiliensis	Brazilian Free-tailed Bat					1B
Tantilla wilcoxi	Chihuahuan Black-headed Snake		S			1B
Terrapene ornata	Ornate Box Turtle					1A
Thamnophis eques megalops	Northern Mexican Gartersnake	LT	S			1A
Thomomys umbrinus intermedius	Southern Pocket Gopher					1B
Troglodytes pacificus	Pacific Wren					1B
Trogon elegans	Elegant Trogon		S			1B
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
Cyrtonyx montezumae	Montezuma Quail					1C
Meleagris gallopavo	Wild Turkey					
Odocoileus virginianus	White-tailed Deer					1B

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

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
Patagioenas fasciata	Band-tailed Pigeon					1C
Pecari tajacu	Javelina					
Puma concolor	Mountain Lion					
Ursus americanus	American Black Bear					
Zenaida asiatica	White-winged Dove					
Zenaida macroura	Mourning Dove					

Project Type: Development Outside Municipalities (Rural Development), Residential subdivision and associated infrastructure, New construction

Project Type Recommendations:
Fence recommendations will be dependant 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 (http://azstateparks.com/SHPO/index.html).

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 herptefauna (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 Widlife 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 **Chiricahua Leopard Frogs** have been documented within the vicinity of your project area. Please review the Chiricahua Leopard Frog Management Guidelines found at: https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/planningFor/wildlifeFriendlyGuidelines/FINALLithchirHabitatGdlns.pdf

The analysis has detected one or more **Important Bird Areas** within your project vicinity. Please see http://aziba.org/?page_id=38 for details about the Important Bird Area(s) identified in the report.

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:

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