



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

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REGION I, 2878 E. WHITE MOUNTAIN BLVD., PINETOP, AZ 85935

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TY E. GRAY



May 7, 2015

Ms. Peggy Saunders
Planning Technician
100 West Public Works Drive
PO Box 668
Holbrook, AZ 86025

Dear Ms. Saunders,

The Arizona Game and Fish Department (Department) has reviewed Invenergy LLC's (Invenergy) Hashknife Wind Energy Project (Hashknife) Navajo County's Special Use Permit applications for three meteorological towers (met towers) installations. The locations for the three proposed met towers are approximately 17 miles south-southwest of Joseph City, Arizona on Aztec Land and Cattle Company lands. The Department generally supports the development of wind energy as a viable source of clean and renewable energy. We believe with proper site placement and safeguards, the benefits of utilizing wind energy outweigh the potential for negative effects to wildlife populations. While we believe that wind can be a viable option for energy, we are concerned that specific sites may have an increased potential for negative impacts to certain breeding, migratory, and wintering species.

Met towers (whether temporary or permanent) and their associated infrastructure have the potential to cause avian and bat mortalities resulting from mid-flight strikes with tower guy wires. Studies have shown that guy-wired towers can cause 4 times more bird mortality than towers without guy wires (Young et al., 2003) (http://www.west-inc.com/reports/fcr_final_mortality.pdf). While bats can also strike guy wires, it happens much less frequently. In addition, visibility of met towers is important for the safety of Departmental personnel performing low elevation aerial wildlife surveys. Therefore, the Department has the following recommendations:

Met Towers

- The Department requests that all *permanent* met towers be unguyed, free standing structures. If possible, the Department also requests that temporary met towers be unguyed, free standing structures.
- If guy wires are present, AGFD recommends attaching Bird Flight Diverters (BFDs) at spaced intervals along the length of multiple wires. **At a minimum, four Aircraft Warning Markers (AWMs) (spherical or cylindrical, 21 inches in diameter) should be placed 10 meters below the apex and BFDs be placed at 10 meter intervals along the length of each outer wire.** Research shows the attachment of BFDs can reduce bird collisions by as much as 86-89% (Pope et al., 2006). AWMs should be recognizable from a distance of at least 4,000 feet (1219m) in clear air and visible from all directions.

- The Department recommends all temporary towers are only on site for the minimum amount of time needed to monitor the wind resource. If towers are on site for more than 1 year, the Department recommends carcass searches be implemented, especially during the bird migration period.
- AGFD recommends the applicant place acoustic monitoring stations on met towers in the proposed project area (**Note:** This will help collect bat activity information needed for pre-construction analysis). An acoustic monitoring station is defined as two acoustic detectors, one at “ground level” (approximately 1.5 meters above ground) and the other with an elevated microphone, ideally within the future rotor swept zone, but not less than 30 meters high. Reynolds (2006) and Lausen (2006) provide detailed guidelines for detector deployment and operation. Rainey et al. (2006) provides an in depth discussion of acoustic monitoring systems. Acoustic data collection objectives should strive to evaluate bat species composition and bat use of the project area nightly and across seasons to assess potential impacts.
- Work with the Department to determine the number of acoustic monitoring stations needed to adequately cover the project areas. The number of acoustic stations will depend on project footprint and habitat complexity.
- When siting met towers, avoid habitat features that congregate wildlife such as water resources, habitat edges, ridgelines, etc. At a minimum, AGFD recommend 100 m setbacks from these features. This varies site to site dependent on the combination geographic features and wildlife resources.

Department Personnel Safety

- Low-level aerial flights can occur outside routine wildlife survey routes. GPS locations of all towers need to be provided to the Department prior to construction to allow survey aircraft to avoid the towers. In addition, the Department requests project proponents notify the Department when met towers are removed.
- When guy wires are present, AGFD recommends attaching Bird Flight Diverters at spaced intervals along the length of multiple wires. **At a minimum, four Aircraft Warning Markers (spherical or cylindrical, 21 inches in diameter) should be placed 10 meters below the apex and BFDs be placed at 10 meter intervals along the length of each outer wire.** AWMs should be recognizable from a distance of at least 4,000 feet (1219m) in clear air and visible from all directions.
- For all monopole towers ≥ 50 feet tall, paint the top 30 feet of the tower in alternate orange and white paint. This does not apply to lattice towers or lit towers, both of which are more visible than monopoles.

Department’s Wind Guidelines

The Department encourages Invenergy to obtain a copy of the Department’s wind development guidelines (revised Nov. 23, 2009) which provides guidance on reducing impacts to birds and bats, located at <http://www.azgfd.gov/hgis/guidelines.aspx>. Please refer to these guidelines and work with the Department during the early planning stages of the projects.

Heritage Data Management System

The Department has accessed the Heritage Data Management System (HDMS) via Arizona’s On-line Environmental Review Tool, and current records indicate that 10 special status species have been documented as occurring within the buffered Invenergy Hashknife Wind Project area. Please be aware that there may be several species of raptors such as golden and bald eagles that overwinter or forage year-

round in the area. One of the ten special status species is a native cactus listed on the Arizona Native Plant Law and Antiquities Act and has been documented within 10 miles of the project area. Please contact: Arizona Department of Agriculture, 1688 W. Adams, Phoenix, AZ 85007 (602-542-4373) for further information on this cactus.

I have attached the On-line Environmental Review Tool Report containing the Special Status Species, Species of Greatest Conservation Need, Species of Economic and Recreation Importance lists and further Departmental Project Type Recommendations. The Department's species lists are intended show species that may occur within the project area. Please keep in mind, 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. Not all of Arizona has been surveyed for special status species, and surveys that have been conducted have varied greatly in scope and intensity.

The Department also respectfully requests the proposed project boundary from Invenergy as soon as possible in order to start assessing potential impacts from the proposed wind project on habitat and wildlife in the project vicinity.

We appreciate the opportunity to provide comments on Navajo County's Special Use Permit applications. The Department would like to continue to coordinate directly with Invenergy and Navajo County on the scope of work. Specifically, we request to be directly involved in site assessments for the met towers and/or wind generation sites. If the meteorological towers eventually indicate that the site is appropriate for wind energy development, the Department recommends coordinating with the Arizona Game and Fish Department and the US Fish and Wildlife Service at the early planning stages to ensure that any impacts to birds, bats, wildlife migration and populations within the area are avoided and/or mitigated as much as possible. In addition, the Department should be provided the opportunity to review and comment on the study plan for any biological studies. Please do not hesitate to contact me with any questions, concerns, or requests for more information. Thank you.

Sincerely,



Dannette Weiss
Habitat Specialist
Arizona Game and Fish Department

Enclosure
By e-mail

cc: Dave Dorum, Habitat Program Manager, Pinetop Region
Ginger Ritter, Project Evaluation Program Specialist, Habitat Branch
Laura Canaca, Project Evaluation Program Supervisor, Habitat Branch

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:

Invenergy-Hashknife Wind Energy Project - Met Towers

Project Description:

Invenergy has applied for Navajo County SUPs for 3 met towers for the potential Hashknife Wind Energy Project approximately 17 miles south-southwest of Holbrook.

Project Type:

Energy Storage/Production/Transfer, Energy Production (generation), wind power facility (new)

Contact Person:

Dannette Weiss

Organization:

AGFD

On Behalf Of:

None Selected

Project ID:

HGIS-01280

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

Invenergy-Hashknife Wind Energy Project - Met Towers

Aerial Image Basemap With Locator Map



-  Project Boundary
-  Buffered Project Boundary

Project Size (acres): 0.77

Lat/Long (DD): 34.7632 / -110.4577

County(s): Navajo

AGFD Region(s): Pinetop

Township/Range(s): T16N, R18E; T15N, R18E; T15N, R17E

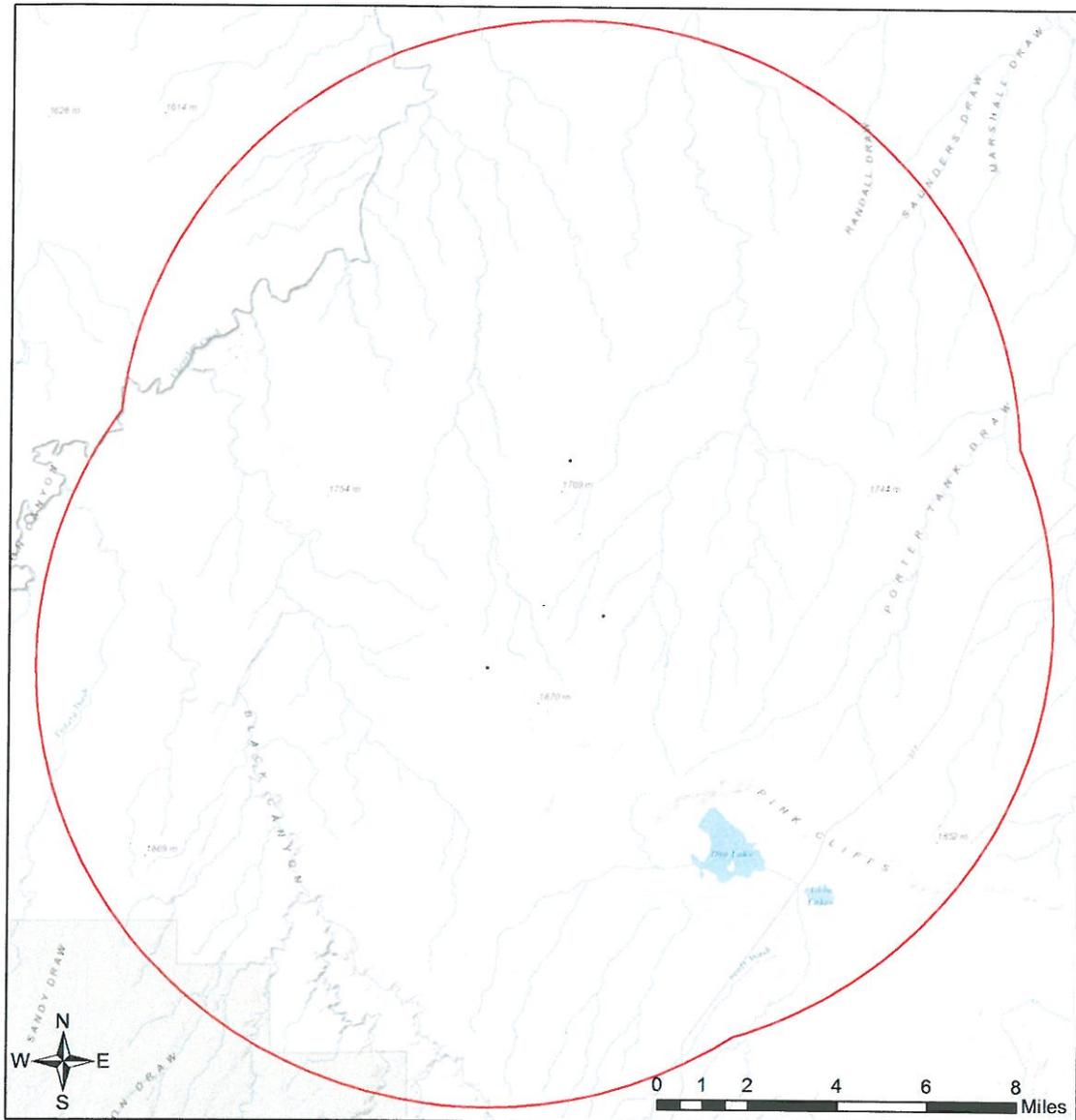
USGS Quad(s): CHIMNEY CANYON; DRY LAKE NW

Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong),



Invenergy-Hashknife Wind Energy Project - Met Towers

Web Map As Submitted By User



- Project Boundary
- Buffered Project Boundary

Project Size (acres): 0.77

Lat/Long (DD): 34.7632 / -110.4577

County(s): Navajo

AGFD Region(s): Pinetop

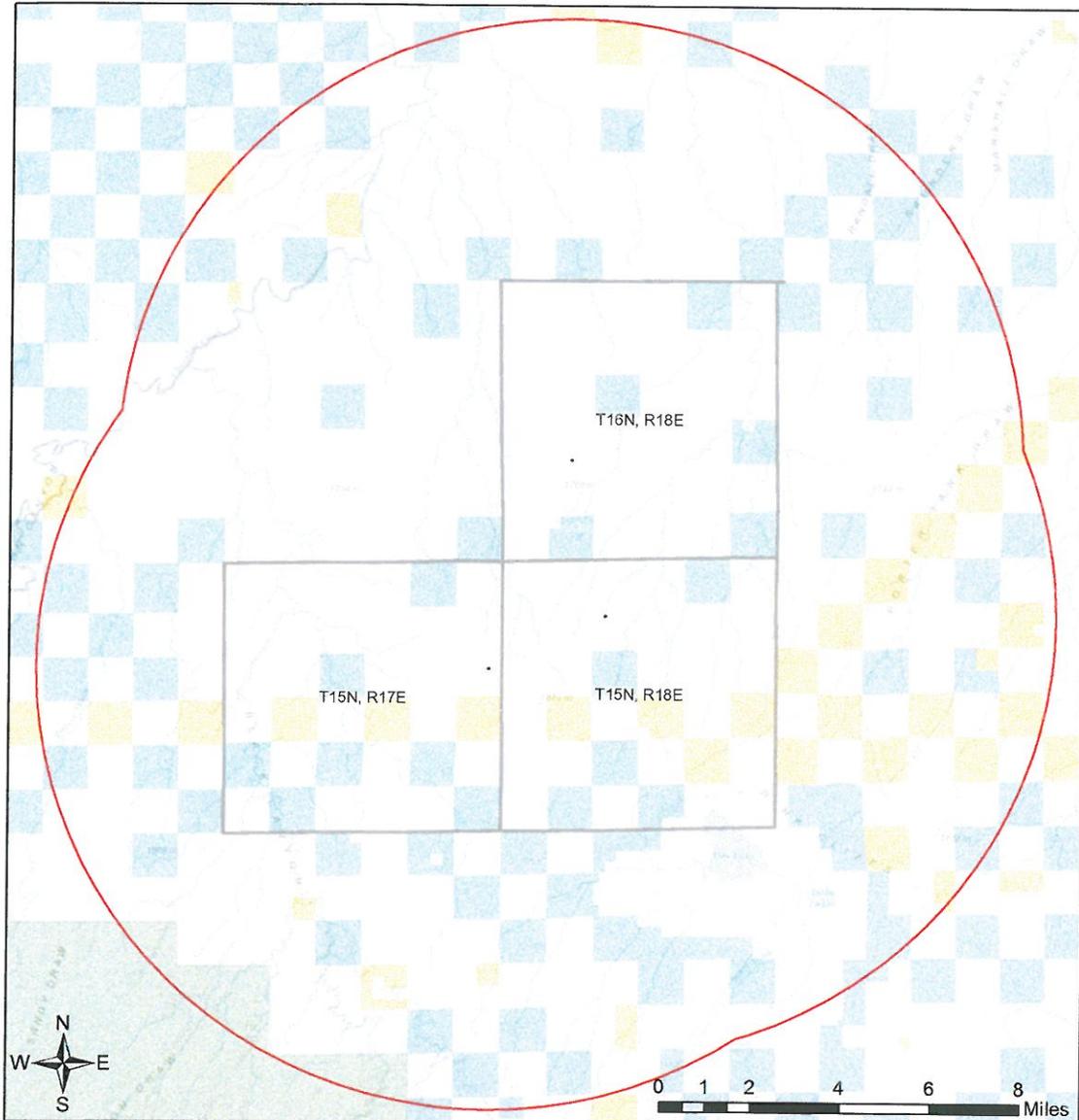
Township/Range(s): T16N, R18E; T15N, R18E; T15N, R17E

USGS Quad(s): CHIMNEY CANYON; DRY LAKE NW

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Invenergy-Hashknife Wind Energy Project - Met Towers

Topo Basemap With Township/Ranges and Land Ownership



<ul style="list-style-type: none"> Project Boundary Buffered Project Boundary Township/Ranges AZ Game and Fish Dept. BLM BOR Indian Res. Military 	<ul style="list-style-type: none"> Mixed/Other National Park/Mon. Private State and Regional Parks State Trust US Forest Service Wildlife Area/Refuge 	<p>Project Size (acres): 0.77</p> <p>Lat/Long (DD): 34.7632 / -110.4577</p> <p>County(s): Navajo</p> <p>AGFD Region(s): Pinetop</p> <p>Township/Range(s): T16N, R18E; T15N, R18E; T15N, R17E</p> <p>USGS Quad(s): CHIMNEY CANYON; DRY LAKE NW</p> <p><small>Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community</small></p>
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Special Status Species and Special Areas Documented within 10 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Aquila chrysaetos</i>	Golden Eagle	BGA		S		1B
<i>Buteo regalis</i>	Ferruginous Hawk	SC		S		1B
CH for <i>Lepidomeda vitatta</i>	Little Colorado spinedace Designated Critical Habitat					
<i>Canis lupus baileyi</i>	10J area Zone 1 for Mexican gray wolf	LE,XN				
<i>Canis lupus baileyi</i>	10J area Zone 2 for Mexican gray wolf	LE,XN				
<i>Catostomus sp. 3</i>	Little Colorado Sucker	SC	S	S		1A
<i>Gila robusta</i>	Roundtail Chub	C*	S			1A
<i>Haliaeetus leucocephalus</i> (wintering pop.)	Bald Eagle - Winter Population	SC,BG A	S	S		1A
<i>Lepidomeda vittata</i>	Little Colorado Spinedace	LT				1A
<i>Sclerocactus papyracanthus</i>	Grama-grass Cactus	SC			SR	

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

**Species of Greatest Conservation Need
 Predicted within Project Vicinity based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Accipiter gentilis atricapillus</i>	Northern Goshawk	SC	S			1B
<i>Anaxyrus microscaphus</i>	Arizona Toad	SC				1B
<i>Anodonta californiensis</i>	California Floater	SC	S			1A
<i>Antilocapra americana americana</i>	America Pronghorn					1B
<i>Aquila chrysaetos</i>	Golden Eagle	BGA		S		1B
<i>Aspidoscelis pai</i>	Pai Striped Whiptail					1B
<i>Buteo regalis</i>	Ferruginous Hawk	SC		S		1B
<i>Castor canadensis</i>	American Beaver					1B
<i>Catostomus discobolus</i>	Bluehead Sucker	PS		S		1A
<i>Catostomus insignis</i>	Sonora Sucker	SC	S	S		1B
<i>Catostomus sp. 3</i>	Little Colorado Sucker	SC	S	S		1A
<i>Chordeiles minor</i>	Common Nighthawk					1B
<i>Cinclus mexicanus</i>	American Dipper					1B
<i>Coccyzus americanus occidentalis</i>						
<i>Corynorhinus townsendii pallescens</i>	Pale Townsend's Big-eared Bat	SC	S	S		1B
<i>Cynomys gunnisoni</i>	Gunnison's Prairie Dog	SC		S		1B
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	LE				1A
<i>Euderma maculatum</i>	Spotted Bat	SC	S	S		1B
<i>Falco peregrinus anatum</i>	American Peregrine Falcon	SC	S	S		1A
<i>Geothlypis tolmiei</i>	MacGillivray's Warbler					1B
<i>Gila robusta</i>	Roundtail Chub	C*	S			1A
<i>Gymnorhinus cyanocephalus</i>	Pinyon Jay			S		1B
<i>Haliaeetus leucocephalus</i>	Bald Eagle	SC, BGA	S	S		1A

**Species of Greatest Conservation Need
 Predicted within Project Vicinity based on Predicted Range Models**

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Idionycteris phyllotis</i>	Allen's Lappet-browed Bat	SC	S	S		1B
<i>Lasiurus blossevillii</i>	Western Red Bat		S			1B
<i>Lepidomeda vittata</i>	Little Colorado Spinedace	LT				1A
<i>Lithobates chiricahuensis</i>	Chiricahua Leopard Frog	LT				1A
<i>Lithobates pipiens</i>	Northern Leopard Frog		S	S		1A
<i>Melospiza lincolnii</i>	Lincoln's Sparrow					1B
<i>Microtus mexicanus</i>	Mexican Vole					1B
<i>Mustela nigripes</i>	Black-footed Ferret	LE,XN				1A
<i>Myotis occultus</i>	Arizona Myotis	SC		S		1B
<i>Myotis yumanensis</i>	Yuma Myotis	SC				1B
<i>Neotoma stephensi</i>	Stephen's Woodrat					1B
<i>Panthera onca</i>	Jaguar	LE				1A
<i>Perognathus flavus goodpasteri</i>	Springerville Pocket Mouse	SC	S			1B
<i>Peromyscus nasutus</i>	Northern Rock Mouse					1B
<i>Rhinichthys osculus</i>	Speckled Dace	SC		S		1B
<i>Sciurus arizonensis</i>	Arizona Gray Squirrel					1B
<i>Setophaga petechia</i>	Yellow Warbler					1B
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	LT				1A
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat					1B
<i>Troglodytes pacificus</i>	Pacific Wren					1B
<i>Vulpes macrotis</i>	Kit Fox					1B

Species of Economic and Recreation Importance Predicted within Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	NPL	SGCN
<i>Antilocapra americana americana</i>	America Pronghorn					1B
<i>Cervus elaphus</i>	Elk					
<i>Odocoileus hemionus</i>	Mule Deer					
<i>Pecari tajacu</i>	Javelina					
<i>Puma concolor</i>	Mountain Lion					
<i>Ursus americanus</i>	American Black Bear					

Project Type: Energy Storage/Production/Transfer, Energy Production (generation), wind power facility (new)

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 the home page of this application at <http://www.azgfd.gov/hgis/guidelines.aspx>.

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.

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, cantered, or cut to ensure that light reaches only areas needing illumination.

Minimize potential introduction or spread of exotic invasive species. Invasive species can be plants, animals (exotic snails), and other organisms (e.g., microbes), which may cause alteration to ecological functions or compete with or prey upon native species and can cause social impacts (e.g., livestock forage reduction, increase wildfire risk). The terms noxious weed or invasive plants are often used interchangeably. Precautions should be taken to wash all equipment utilized in the project activities before leaving the site. Arizona has noxious weed regulations (Arizona Revised Statutes, Rules R3-4-244 and R3-4-245). See Arizona Department of Agriculture website for restricted plants, <https://agriculture.az.gov/>. Additionally, the U.S. Department of Agriculture has information regarding pest and invasive plant control methods including: pesticide, herbicide, biological control agents, and mechanical control, <http://www.usda.gov/wps/portal/usdahome>. The Department regulates the importation, purchasing, and transportation of wildlife and fish (Restricted Live Wildlife), please refer to the hunting regulations for further information http://www.azgfd.gov/h_f/hunting_rules.shtml

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.

For any powerlines built, proper design and construction of the transmission line is necessary to prevent or minimize risk of electrocution of raptors, owls, vultures, and golden or bald eagles, which are protected under state and federal laws. Limit project activities during the breeding season for birds, generally May through late August, depending on species in the local area (raptors breed in early February through May). Conduct avian surveys to determine bird species that may be utilizing the area and develop a plan to avoid disturbance during the nesting season. For underground powerlines, 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. In addition, indirect affects to wildlife due to construction (timing of activity, clearing of rights-of-way, associated bridges and culverts, affects to wetlands, fences) should also be considered and mitigated.

Based on the project type entered, coordination with State Historic Preservation Office may be required (<http://azstateparks.com/SHPO/index.html>).

The effects of wind development projects on wildlife, in particular birds and bats, are well documented. The Department recommends conducting raptor nest, general avian, and threatened and endangered species surveys during the appropriate breeding/migration seasons within 10 miles of the project site to determine the location of active nests, migratory pathways, and associated species potentially disturbed by project activities. Effects that should be minimized or mitigated may include direct habitat loss from the wind plant footprint, including turbine base, access road, and substation construction; indirect habitat loss from increased human presence and/or turbine operation noise; habitat alteration, such as soil erosion and construction of migration-hindering obstacles; mortality by powerline electrocution; and mortality by collision with structures, turbine blades or guy wires. The Department has developed guidelines for wind energy development which can be found on the home page of this application at <http://www.azgfd.gov/hgis/guidelines.aspx>. We also recommend referring to the USFWS Land-based Wind Energy Guidelines, <http://www.fws.gov/windenergy/>. We encourage the project proponent to coordinate directly with the Project Evaluation Program to identify and develop mitigation measures for these projects.

Based on the project type entered, coordination with U.S. Fish and Wildlife Service (Migratory Bird Treaty Act) may be required (<http://www.fws.gov/southwest/es/arizona/>).

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, 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/environmental-services/np1>

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 <http://www.fws.gov/southwest/es/arizona/> or:

Phoenix Main Office

2321 W. Royal Palm Rd, Suite 103
Phoenix, AZ 85021
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