

Yavapai Ranch Roads Reciprocal Easements Project

Wildlife, Fisheries, & Rare Plants (WFRP) Specialist Report/Biological Evaluation

CONTENTS:

- A – Proposed action
 B – Affected environment
 C – No action and other action alternatives
 D – Environmental effects (physical environment)
 E – Projects contributing to cumulative effects to WFRP resources
 F – **Endangered Species Act** – NEPA analysis for federally listed species and habitats
 G – Biological Evaluation effects determination for federally listed species and habitats under ESA
 H – **Bald & Golden Eagle Protection Act** – Assessment of protected species
 I – Bald & Golden Eagle Act determination
 J – **Migratory Bird Treaty Act** – Assessment of relevant species
 K – Regional Forester sensitive species – NEPA analysis
 L – Biological Evaluation effects determination for sensitive species
 M – Management Indicator Species analysis

APPENDICES:

- Appendix A – Federally listed species for Prescott National Forest
 Appendix B – Regional Forester's sensitive species for the Prescott National Forest
 Appendix C – Management Indicator Species for the Prescott National Forest
 Appendix D – Maps
 Appendix E – Road table with vegetation calculations
 Appendix F – AGFD correspondence
 Appendix G – Glossary of terms and definitions

| Species | Status | Determination | Page # |
|--|------------|-------------------------|--------|
| Endangered Species Act: | | | # |
| Mexican spotted owl | Threatened | No affect | 5 |
| MSO Critical Habitat | ----- | No affect | 5 |
| Southwestern willow flycatcher | Endangered | No affect | 5 |
| SWWF Critical Habitat | ----- | No affect | 5 |
| Colorado pikeminnow | E/EXPN | No affect | 5 |
| Gila chub | Endangered | No affect | 5 |
| GC Critical Habitat | ----- | No affect | 6 |
| Gila topminnow | Endangered | No affect | 6 |
| Gila trout | Threatened | No affect | 6 |
| Loach minnow | Endangered | No affect | 6 |
| LM Critical Habitat | ----- | No affect | 6 |
| Razorback sucker | Endangered | No affect | 6 |
| RBS Critical Habitat | ----- | No affect | 6 |
| Spikedace | Endangered | No affect | 6 |
| SD Critical Habitat | ----- | No affect | 6 |
| Western yellow-billed cuckoo | Candidate | No affect | 5 |
| WYBC Critical Habitat | Potential | No affect | 5 |
| Sonoran desert tortoise | Candidate | No affect | 6 |
| Northern Mexican garter snake | Candidate | No affect | 6 |
| Bald and Golden Eagle Protection Act: | | | # |
| Bald & Golden eagles | Protected | Possible Take | 9 |
| Migratory Bird Treaty Act: | | | # |
| Migratory birds | ----- | Compliance | 16 |
| FS Handbook & FS Manuals – Regional Forester's sensitive species | | | # |
| All sensitive species | Sensitive | No trend toward listing | 21 |
| Forest Plan Management Indicator Species analysis | | | # |

EXPN – Experimental/nonessential

A – Proposed action:

Yavapai Ranch LP (YRLP) owns approximately 35,500 acres within the Prescott National Forest (PNF). YRLP seeks to develop these lands in the foreseeable future. Access to parcels within the checkerboard of federal and private lands within the Chino Valley Ranger District is needed by way of utility and road easement exchange with PNF. This will allow access for YRLP to the private land it owns and allow users of National Forest Service (NFS) lands access across private land to PNF. Continuous and full access will allow existing roads to be maintained to minimum NFS standards for a single-lane fair-weather road. The road and utility easements to be acquired by YRLP will be 66 feet wide over, upon, under, or through PNF for permanent year-round use. PNF will acquire reciprocal easements over, upon, under, or through private land owned by YRLP for permanent year-round use. The reciprocal easements would be across the northeast portion of YR as shown on Figures 1 and 2a–2c (Appendix D). Approximately 16.4 miles of easements on 17 roads would be granted to PNF; approximately 16.2 miles of easements on 12 roads would be granted to YRLP.

All but three of the easements to be conveyed to YRLP are on existing and open NFS roads. A Travel Analysis Process has been completed to evaluate the need for and location of these three isolated routes. Two of these isolated routes are established roads that were once part of the NF Road System and were subsequently listed for decommissioning, though never restored to natural conditions. These roads have been used for administrative purposes and would be added back into the public road system as part of the exchange. The third road is a non-system route that has been used by hunters and for grazing allotment management and is in an environmentally preferable location to the system road in the same general location. This non-system road would be added to the system and the less desirable road, FS00099000M, would be closed and decommissioned.

No new roads would be constructed through PNF as a result of this action; however, existing roads could be improved and additional roads related to development may be constructed on private lands. The roads through PNF (public roads) will be maintained to at least the NFS minimum standards for a single-lane fair-weather road (R3-770-86(1/73)). The NFS maintains these roads only for resource protection (to avoid erosion and slope instability) and are currently considered Maintenance Level 2 roads, which are administrative and public-use roads maintained for pickup trucks and other high clearance vehicles. Passenger cars are not prohibited from using these roads but surface conditions usually discourage prudent passenger-car drivers. The roads through private lands will be managed by a homeowners association (HOA), which will ensure that signs will be posted to indicate where roads are not publicly maintained. Future road improvements might include grading, widening, hardening, new culverts or water crossings, signage, paint, and protective barriers.

Regardless of which parcels are developed, there would be a need for utilities, and the roadways assessed for this reciprocal easement would be the likely location for any utility lines or pipes. While it is currently anticipated that some or all of the electrical needs would be supplied by solar and/or wind power, there may be utility lines in the future. The road easements issued to the HOA will allow for the installation of utility lines or pipes within the 66-foot easement, subject to required plans and permits, without additional National Environmental Policy Act (NEPA) analysis. Before any water transportation across NFS lands occurs, there would be additional analysis required following the Region 3 Supplement to Forest Service Manual 2500 (Supplement #2500-2001-1).

B – Affected environment:

The reciprocal easements (i.e., project area) are located in the PNF in the northern portion of the Chino Valley Ranger District and lie approximately 30 miles north of Prescott and 12 miles south of Seligman, Arizona (Figures 1 and 2a–2c, Appendix D). Elevation within the project area ranges from 5,100 to 5,900 feet above mean sea level west of Big Chino Valley. Major geographic features within the project vicinity include the Juniper Mountains throughout and Turkey Canyon in its western half. Williamson Valley Road (Yavapai County/Forest Service Road 6) traverses the project vicinity from the southeast to the northwest.

Yavapai Ranch Reciprocal Easements Project – WSR/BE

Vegetation in the project area consists of ponderosa-pinyon and pinyon-juniper woodlands and open grasslands of the Great Basin Conifer Woodland and Plains and Great Basin Grasslands biotic communities. Roads in the project area are dirt and meet the minimum standards for NFS single-lane fair-weather roads. In addition to passing over open areas, some roads traverse passes between low hills, where various rock outcrops, including basalt and limestone, were noted on a site visit to the project area. No areas adjacent to the roads appear to have recently burned. Numerous cattle ponds and tanks are located within the project vicinity as the area is actively grazed. The project vicinity is also actively hunted and, on NFS lands, open to other multiple uses.

Because future road and utility improvements on roads in the easement exchange are as-yet determined, the affected environment includes all areas within the 66-foot roadway easement.

C – No action and other action alternatives:

Under the No Action alternative, current management plans would continue to guide management of the project area. No conveyance of reciprocal easements between PNF and YRLP would be implemented. Any development of adjacent private lands would still be possible, subject to local approval, as continued access across NFS lands would be allowed; however, no utility installation or improvements to roads would occur, and both public and private roads could be subject to closure.

D – Environmental effects (physical environment):

- 1) Proposed Action: The reciprocal road exchange itself would cause no ground-disturbing activities. However, future roadway improvements/alterations implemented to better access private lands might include grading, widening, hardening, new culverts or water crossings, signage, paint, and protective barriers. Roadways assessed for this reciprocal easement would also be the likely location for any utility lines or pipes. However, these future actions are not certain and no specific plans exist for their implementation. Because future roadway improvements are as-yet planned, a worst-case scenario can be calculated for all possible vegetation removal by ground-disturbing activities by multiplying the linear miles of reciprocal road exchanges (32.6 miles) by the 66-foot width of all road easements, totaling 260.8 acres of possible disturbance (Figure 3, Appendix E and table in Section J).

Indirect impacts include accelerated development of private lands accessed by roads involved in the easement exchange, including possible full build-out of two of six planned subdivisions in YR: Homestead Ranch (4,480 acres) and Juniper Mountain Ranch (17,400 acres). Accelerated residential development would mean more people living in the area and having closer access to the recreational opportunities provided on NFS lands. Human use in the area would be expected to increase from the current occasional, seasonal dispersed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use.

- 2) No Action: Without the reciprocal road exchange, current management plans would continue to guide management of the roadway system, and there would be no ground-disturbing activities (e.g., vegetation removal) by improvements to roads or utility installation on NFS lands. However, residential development could move forward on private lands, though residential density would not be as high as under full build-out of Homestead Ranch and Juniper Mountain Ranch. Human use in the area would be expected to increase from the current occasional, seasonal dispersed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use, though use would not be as great as under the Proposed Action. Effects would still include disturbance to wildlife habitat on NFS lands.

E – Projects contributing to cumulative effects to WFRP resources:

- Possible future build-out of all six subdivisions on the entire YR (51,300 acres)
- Improvements to Williamson Valley Road by Yavapai County
- Construction of wind farm on adjacent YR lands (west of project area)
- Management decisions on private land on the adjacent Baca Float #5 (ORO Ranch)

Environmental Consequences (wildlife & their habitats):

- a) Affected environment within the project area: roadside vegetation within the reciprocated easements to a width of 66 feet for a total of 260.8 acres across three vegetation types.
- b) Proposed Action: The reciprocal road exchange itself would cause no ground-disturbing activities. However, future roadway improvements/alterations implemented to better access private lands might include grading, widening, paving, and/or drainage work at ephemeral wash crossings, but these future actions are not certain and no specific plans exist for their implementation.
 - a. Direct impacts to vegetation and other biological resources within the project area from the implementation of reciprocal easements would occur as roadway improvements and utility installation is proposed and constructed. Any removal of roadside vegetation during utility and roadway improvements would impact a maximum of 260.8 acres. The ground-disturbing activities would likely be conducted in accordance with Yavapai County guidance and therefore conform to best management practices designed to eliminate, minimize, or mitigate for adverse effects.
 - b. Indirect impacts would include increased use of NFS and private lands, including possible full build-out of two of six planned subdivisions in YR that would be accessed by roads involved in the easement exchange: Homestead Ranch (4,480 acres) and Juniper Mountain Ranch (17,400 acres). Exact future development plans are as-yet designed and approved, making calculation of indirect impacts to surrounding vegetation difficult. Accelerated residential development would mean more people living in the area and having closer access to the recreational opportunities provided on NFS lands. Human use in the area would be expected to increase from the current occasional, seasonal disburbed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use.
 - c. Cumulative impacts to the project vicinity would include ultimate build-out of the entire six subdivisions of YR (51,300 acres) and future adjacent projects like a proposed wind farm and improvements to Williamson Valley Road. The extent of the impacts cannot be reasonably foreseen during this assessment as no specific plans exist. However, any future development will contribute to habitat loss and fragmentation.
- c) No Action: Without the reciprocal road exchange, current management plans would continue to guide management of the roadway system, and there would be no ground-disturbing activities (e.g., vegetation removal) by improvements to roads or utility installation on NFS lands. However, residential development could move forward on private lands, though residential density would not be as high as under full build-out of Homestead Ranch and Juniper Mountain Ranch. Human use in the area would be expected to increase from the current occasional, seasonal disburbed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use, though use would not be as great as under the Proposed Action. Effects would still include disturbance to wildlife habitat on NFS lands.

F – ESA species and habitats – NEPA analysis:

Table 2 compares the known habitat and distribution for each species with the project area and proposed action.

Table 2. Federally listed species and habitats under the Endangered Species Act.

| <u>Species</u> Common name <i>Scientific Name</i> | <u>Status</u> | <u>Species background information</u> The known distribution or habitat association for the species. | <u>Project Information</u> The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|--|---------------|--|---|
| Birds: | | | |
| Mexican spotted owl <i>Strix occidentalis lucida</i> | T | The MSO is known to nest in high elevation ponderosa pine/Gambel oak and mixed conifer and canyon lands. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Mexican spotted owl Critical Habitat | ---- | Designated on the Bradshaw RD of the PNF in the Prescott Basin and Crown King areas. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Southwestern willow flycatcher <i>Empidonax traillii extimus</i> | E | This flycatcher breeds principally in (at low elevations) dense willow, cottonwood, and tamarisk thickets and woodland along streams and rivers, and (at high elevations) pure, streamside stands of Geyer willow. Breeding success may be affected by brown-headed cowbird egg-parasitism. They are known to occur along the Verde River. Critical habitat has been designated along the Verde River. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Southwestern willow flycatcher Critical Habitat | ---- | Critical habitat has been designated along the Verde River. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i> | PT | This species is associated with mature stands of cottonwood-willow riparian deciduous forest. It is also known to use dense thickets comprised of mixed hardwoods species with tamarisk included. Known to occur at confluence of Verde River & Sycamore Creek, on Sycamore Creek, at Duff Spring, and at Perkinsville. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Western yellow-billed cuckoo Critical Habitat | Potential | Potential Critical Habitat is being considered along the Verde River from Sullivan Dam downstream through the entire reach on the PNF. Portions are also identified in the Agua Fria watershed along Agua Fria, Ash Creek, Little Ash Creek, and Sycamore Creek. | |
| Fish: | | | |
| Colorado pikeminnow <i>Ptychocheilus lucius</i> | E, EXPN | Experimental nonessential populations have been reintroduced into the Verde and Salt rivers in Arizona. This species occurs in rivers with high silt content, warm water, turbulence, and variable flow by season. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Gila Chub <i>Gila intermedia</i> | E | Gila chub occur in Sycamore Creek, Little Sycamore Creek, and Indian Creek in the Agua Fria River drainage on the PNF. They also occur in Williamson Valley Wash downstream of forestlands in the Verde River drainage. Gila chub commonly inhabit pools in smaller streams, cienegas, and artificial impoundments throughout its range. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |

Yavapai Ranch Reciprocal Easements Project – WSR/BE

Table 2. Federally listed species and habitats under the Endangered Species Act.

| Species Common name <i>Scientific Name</i> | Status | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|---|---------------|---|---|
| Gila chub Critical Habitat | ---- | Designated critical habitat occurs in Sycamore Creek, Little Sycamore Creek, and Indian Creek in the Agua Fria River drainage on the PNF. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Gila topminnow <i>Poeciliopsis occidentalis occidentalis</i> | E | There are no extant populations on the forest from introductions made in the early 1980's. Occurs in small streams, springs, and cienegas below 1,350 m (4,500 ft) elevation, primarily in shallow areas with aquatic vegetation and debris for cover. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Gila trout <i>Oncorhynchus gilae</i> | T | Gila trout were introduced into Grapevine Creek within the Grapevine Springs Botanical Area in 2009. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Loach Minnow <i>Tiaroga cobitis</i> | E | They are extirpated from the Verde River drainage. Found in moderate to swift flow velocities with shallow water with gravel and cobble substrates. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Loach minnow Critical Habitat | ---- | Critical habitat has been designated for 74 miles along the Verde River from the confluence of Beaver Creek upstream to Sullivan Dam. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Razorback sucker <i>Xyrauchen texanus</i> | E | Populations have been reintroduced into the Verde River. Found in backwaters, flooded bottomlands, pools, side channels, and other slower moving habitats. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Razorback sucker Critical Habitat | ---- | Critical habitat is designated for 124 miles of the Verde River from Perkinsville downstream to Horseshoe Dam. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Spikedace <i>Meda fulgida</i> | E | In the upper Verde River, spikedace have become rare to nonexistent. Found in moderate to large perennial streams, where it inhabits slow to moderate velocity waters over gravel and cobble substrates. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Spikedace Critical Habitat | ---- | Critical habitat has been designated along 107 miles of the Verde River from the confluence with Fossil Creek upstream to Sullivan Dam. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Roundtail chub <i>Gila robusta</i> | C | Commonly found in pool habitats and near instream cover. Known only in the Verde River on the PNF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Reptiles: | | | |
| Sonoran desert tortoise <i>Gopherus morafkai</i> | C | The Sonoran desert tortoise occurs primarily on rocky slopes and bajadas of Mojave and Sonoran desertscrub. Caliche caves in incised, cut banks of washes (arroyos) are also used for shelter sites. Shelter sites are rarely found in shallow soils. (HDMS) | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Northern Mexican gartersnake <i>Thamnophis eques megalops</i> | PT | Occurs primarily in permanent marshes and streams at middle elevations in central, south-central, and southeastern Arizona. Strongly associated with presence of native prey including leopard frogs and native fish. This species occurs in the Verde River. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |

Yavapai Ranch Reciprocal Easements Project – WSR/BE

Table 2. Federally listed species and habitats under the Endangered Species Act.

| Species Common name <i>Scientific Name</i> | Status | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|---|---------------|---|---|
| Northern Mexican gartersnake Critical Habitat | Proposed | Proposed critical habitat for the northern Mexican gartersnake occurs along 140 miles of the Verde River from the confluence with Horseshoe Reservoir upstream to Sullivan Lake and 6.7 miles of Little Ash Creek from the confluence with Ash Creek upstream to the confluence with Yellow Jacket Creek in the Agua Fria River drainage. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |
| Narrow-headed gartersnake <i>Thamnophis rufipunctatus</i> | PT | Highly aquatic species, associated with riffle/pool complexes of cool, clear, rocky mountain streams. Known at Mormon Pocket on the Verde River and on Oak Creek. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Narrow-headed gartersnake Critical Habitat | Proposed | Proposed critical habitat for the narrow-headed gartersnake occurs along 127.5 miles of the Verde River from the confluence with Red Creek upstream to Sullivan Lake. | No designated critical habitat for this species occurs within the area or would be impacted by this project. |

*** Status Definitions:**

- ◆ **E** Listed Endangered under the ESA: Any species that is in danger of extinction throughout all or a significant portion of its range. (Appendix A)
- ◆ **T** Listed Threatened under the ESA: Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. (Appendix A)
- ◆ **C** Candidates are those species for which the Fish and Wildlife Service has enough information on file to propose listing as threatened or endangered, but listing has been precluded by other agency priorities.
- ◆ **EXPN** Experimental population, non-essential

Because no federal species or habitats occur within or would be impacted by the project, there are no direct or indirect or cumulative effects from the proposed action or the no-action alternatives.

G – ESA species and habitats – Biological evaluation & determination of effects:

The purpose of this biological assessment is to document the determination of effects of the proposed action, the no action, and other action alternatives on plants, animals, and habitats federally listed under the Endangered Species Act (ESA).

Based on the effects analyses above,

- ✓ I find that this project will have no effect to plants, animals, and habitats federally listed under the Endangered Species Act.

Signatures:**Prepared by:**

February 6, 2014

Date

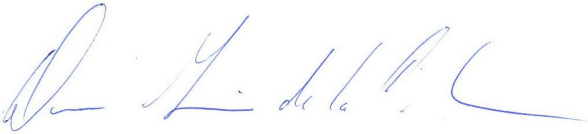
Shero Holland
Biologist
Del Sol Group

Reviewed by:

February 7, 2014

Date

Noel Fletcher
Wildlife Biologist
Prescott NF

Approved by:

February 7, 2014

Date

Dan Garcia de la Cadena
Journey Level Wildlife Biologist
Prescott NF

Yavapai Ranch Reciprocal Easements Project – WSR/BE

H – Bald & Golden Eagle Protection Act species and habitats – Assessment:

The purpose of this assessment is to document if there is “take of eagles” with the proposed action, the no action, or other action alternatives on bald and golden eagles protected under the Bald and Golden Eagle Protection Act. In the B&GEPA “take” is defined to include “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb.” The FWS (USDA Fish and Wildlife Service) subsequently defined “disturb” as follows: “Disturb means to agitate or bother a bald eagle or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” (Federal Register Vol.72/No.107/page31132 June 5, 2007) Table 3 compares the known habitat and distribution for each species with the project area and proposed action.

Table 3. Federally protected species under the Bald and Golden Eagle Protection Act of 1940 as amended.

| Species Common name <i>Scientific Name</i> | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|--|--|---|
| Birds: | | |
| Bald eagle <i>Haliaeetus leucocephalus</i> | A small resident population of approximately 40 pairs nests primarily along the Salt and Verde rivers. Lynx Lake is a nesting site. | See below. |
| Golden eagle <i>Aquila chrysaetos canadensis</i> | Within the Prescott NF the AZGFD HDMS shows several locations for the species along the Verde River and one location in the vicinity of Woodchute Mtn. | See below. |

Bald eagle:

- a) Affected environment within the project area: Approximately 261 acres across three vegetation types exists for foraging bald eagles.
- a) Proposed Action: Assessment of Take/Disturb: The reciprocal road exchange itself would cause no ground-disturbing activities. However, future roadway improvements/alterations implemented to better access private lands might include grading, widening, paving, and/or drainage work at ephemeral wash crossings. The Proposed Action also includes the installation of aboveground utility lines and poles which could pose a mortality risk to migrating bald eagles. In order to mitigate potential mortality risks from line collision or electrocution, the entity installing poles or aboveground lines should consult with the Avian Power Line Interaction Committee’s guidance to ensure that the design of its transmission-line supports and other transmission infrastructure minimize the potential for avian electrocution (<http://www.aplic.org/>).
- b) No Action: Assessment of Take/Disturb: Without the reciprocal road exchange, current management plans would continue to guide management of the roadway system, and there would be no ground-disturbing activities (e.g., vegetation removal) on PNF lands for roadway improvements. However, residential development could move forward and human use in the area would be expected to increase from the current occasional, seasonal disbursed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use. Although residential density would not be as high as under the Proposed Action, effects would still include disturbance to wildlife habitat on NFS lands.

Golden eagle:

- b) Affected environment within the project area: Approximately 261 acres across three vegetation types exists for foraging golden eagles. While there are no specific known locations for golden eagle nests or roosts on NFS lands within the project area, potential suitable nesting habitat is known in Aubrey Valley and Baca Float on either side of Yavapai Ranch. There are potential migrations of golden eagles through the project area.

- c) Proposed Action: Assessment of Take/Disturb: The reciprocal road exchange itself would cause no ground-disturbing activities. However, future roadway improvements/alterations implemented to better access private lands might include grading, widening, paving, and/or drainage work at ephemeral wash crossings. Increased use on the roads would not be expected to result in any disturbance or take of golden eagles. However, the future construction of aboveground utility lines and poles could pose a mortality risk to migrating golden eagles known to occur in the Aubrey Valley north of the project area (Jacobson and McCarty 2013, Kraft et al 2012). In order to mitigate potential mortality risks from line collision or electrocution, the entity installing poles or aboveground lines should consult with the Avian Power Line Interaction Committee's guidance to ensure that the design of its transmission-line supports and other transmission infrastructure minimize the potential for avian electrocution (<http://www.aplic.org/>).

Indirect impacts would include increased use of NFS and private lands, including possible full build-out of two of six planned subdivisions in YR that would be accessed by roads involved in the easement exchange: Homestead Ranch (4,480 acres) and Juniper Mountain Ranch (17,400 acres). Exact future development plans are as-yet designed and approved, making calculation of indirect impacts to golden eagles difficult. Accelerated residential development would mean more people living in the area and having closer access to the recreational opportunities provided on NFS lands. Human use in the area would be expected to increase from the current occasional, seasonal dispersed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use.

- d) No Action: Assessment of Take/Disturb: Without the reciprocal road exchange, current management plans would continue to guide management of the roadway system, and there would be no ground-disturbing activities (e.g., vegetation removal) by improvements to roads or utility installation, nor would there be installation of aboveground utility lines and poles, on NFS lands. However, residential development could move forward on private lands, though residential density would not be as high as under full build-out of Homestead Ranch and Juniper Mountain Ranch. Human use in the area would be expected to increase from the current occasional, seasonal dispersed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use, though use would not be as great as under the Proposed Action. Effects would still include disturbance to wildlife habitat on NFS lands.
- e) Cumulative Effects: As private property is developed in either alternative and various energy sources are possibly implemented on private land, wind turbines and aboveground utility lines providing electricity could result in additional potential mortality risk for migrating golden eagles being struck by turbines.

I – Bald & Golden Eagle Protection Act determination:

Based on the effects analyses above,

- ✓ I find that this project may result in take to federally protected bald and golden eagles.

Signatures:

Prepared by:



February 6, 2014

Date

Shero Holland
Biologist
Del Sol Group

Reviewed by:

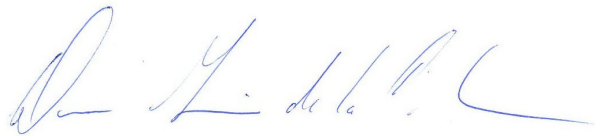


February 7, 2014

Date

Noel Fletcher
Wildlife Biologist
Prescott NF

Approved by:



February 7, 2014

Date

Dan Garcia de la Cadena
Journey level Wildlife Biologist
Prescott NF

J – Migratory bird species analysis:

In accordance with the Migratory Bird Treaty Act, Executive Order 13186, and the MOU signed December 2008, this project was evaluated for its effects on migratory birds.

A total of 92 species of migratory birds was assessed for the potential to occur on the PNF (PNF 2011).

- 9 species of migratory birds are also addressed elsewhere based on status, such as federally listed under ESA, federally protected under the Eagle Act, Forest Service sensitive, or Forest Plan MIS. All of these species are considered to occur on the PNF.

This table is sorted by PNF/Reference/Species. The 9 species analyzed above due to federal, Eagle Act, regional forester sensitive, or MIS status are indicated by a Z in the PNF column in the table. The 32 species that would not be expected to occur on the PNF have a “NO” in the PNF column. This table contains species that may occur within the project area. Nesting and foraging information was taken from The Birder’s Handbook (Ehrlich et al. 1988) except where noted.

| Species | BOCC/PIF | Habitat Type | PNF? | Reference |
|---|----------|--|------|---|
| Bald Eagle (b) | BOCC | Nests on lakes & rivers | Z | Eagle Act - Known to nest along Verde River & Lynx Lake TZ – Passage UV/WW – Nonbreeding |
| Golden eagle | BOCC | Desert scrub to conifer | Z | Eagle Act BCR 16 – BBA AF – Nonbreeding UV - Breeding |
| Juniper Titmouse | BOCC/PIF | Pinyon-juniper | Z | MIS – BBA AF – Breeding UV – Passage, nonbreeding |
| Lucy’s Warbler | BOCC/PIF | Low elevation Mesquite and cottonwood/willow riparian | Z | MIS – BBA AF/UV – Breeding TZ/WW - Mention |
| Mexican Spotted Owl | PIF | Madrean pine/oak & Mixed conifer | Z | Threatened - Known from surveys on PNF |
| Northern Goshawk | PIF | Pine & Mixed Conifer | Z | Sensitive – MIS - Known from surveys on PNF |
| Peregrine Falcon (b) | BOCC | Rock cliff faces | Z | Sensitive - Known @ Granite Mtn & Thumb Butte nest sites AF - Breeding |
| Southwestern Willow Flycatcher | PIF/TES | Low & High elevation riparian | Z | Endangered - Known from surveys on PNF AF – Passage TZ – Mention UV - Breeding |
| Western Yellow-billed Cuckoo(w. U.S. DPS) | BOCC/PIF | Low elevation dense riparian | Z | Proposed - Known from field surveys on PNF AF/UV – Breeding TZ - Mention |
| Band-tailed Pigeon | PIF | Madrean pine/oak | Yes | BBA |
| Bell’s Vireo (c) | BOCC | Low elevation riparian with willows, mesquite & dense shrubs | Yes | HDMS/BBA - Along Verde River AF – Breeding TZ - Mention |
| Black-chinned Sparrow | BOCC/PIF | Dry chaparral & PJ | Yes | BBA |

Yavapai Ranch Reciprocal Easements Project – WSR/BE

| Species | BOCC/PIF | Habitat Type | PNF? | Reference |
|---|----------|--|---|---|
| Black-throated Gray Warbler | BOCC/PIF | PJ & oak woodlands | Yes | BBA AF – Passage UV – Breeding Tritle |
| Brewer's Sparrow | BOCC/PIF | Cold desertscrub | Yes | BBA - Williamson Valley – BCR 16 AF/TZ - Passage |
| Canyon Towhee | BOCC | Chaparral, open PJ, and open evergreen oak | Yes | BBA |
| Common Black-Hawk | BOCC/PIF | Low & High elevation riparian | Yes | Sensitive - Known to occur on the PNF from field observations AF/TZ/UV - Breeding |
| Cordilleran Flycatcher | PIF | Pine, mixed conifer | Yes | BBA - Forest-wide AF – Passage TZ – Mention Tritle |
| Flammulated Owl | BOCC | Dry coniferous forests | Yes | Known on PNF – from field observations |
| Grace's Warbler | BOCC | Open, mature pine | Yes | BBA AF – Mention Tritle |
| Gray Flycatcher | PIF | Pinyon-juniper | Yes | BBA AF – Breeding TZ - Mention |
| Gray Vireo | BOCC/PIF | Open PJ | Yes | BBA AF - Passage |
| Olive Warbler | BOCC | Pine and mixed conifer | Yes | BBA |
| Phainopepla | BOCC | Open woodlands w/ mistletoe | Yes | BBA |
| Pinyon Jay | BOCC/PIF | Pinyon-juniper | Yes | BBA UV - nonbreeding |
| Purple Martin | PIF | Sonoran Desertscrub & Pine | Yes | BBA TZ - Mention |
| Red-faced Warbler | BOCC/PIF | Mixed conifer and riparian forest | Yes | Known from field observations on PNF |
| Swainson's Hawk | PIF | High elevation grassland | Yes | Known from Chino Valley AF - Passage |
| Virginia's warbler | PIF | Chaparral | Yes | BBA AF – Passage TZ – Mention Tritle |
| Yellow Warbler (<i>sonorana</i> ssp.) | BOCC | Cottonwood/willow riparian | Yes | BBA AF/UV - Breeding |
| Ferruginous Hawk | BOCC/PIF | High elevation grassland | Unknown - None reported but would expect them | HDMS/BBA BCR 16 UV – Nonbreeding, passage |
| Black rosy-finch | BOCC | Unknown | Unknown | BCR 16 |
| Black skimmer | BOCC | Sonoran & Mojave Deserts | Unknown | BCR 33 |
| Brown-capped rosy- finch | BOCC | Unknown | Unknown | BCR 16 |
| Chestnut-collared Longspur (nb) | BOCC | Unknown | Unknown | BCR 16 |

Yavapai Ranch Reciprocal Easements Project – WSR/BE

| Species | BOCC/PIF | Habitat Type | PNF? | Reference |
|---------------------------|----------|---|-------------|---|
| Gila woodpecker | BOCC | Sonoran desert | Unknown | BCR 33 – Sonoran & Mojave Desert |
| Gull-billed tern | BOCC | Sonoran & Mojave Deserts | Unknown | BCR 33 |
| Le Conte's Thrasher | BOCC/PIF | Sonoran Desertscrub | Unknown | BCR 33 |
| Marbled godwit | BOCC | Sonoran & Mojave Deserts | Unknown | BCR 33 WW - Passage |
| Olive-sided Flycatcher | PIF | Pine & Mixed Conifer | Unknown | BBA AF - Mention |
| Sage Sparrow | PIF | Cold desert scrub | unknown | BBA AF - Mention |
| Whimbrel | BOCC | Sonoran & Mojave Deserts | Unknown | BCR 33 |
| Burrowing Owl | PIF | High elevation grassland | Potentially | HDMS/BBA - BCR 33 – Sonoran & Mojave Desert |
| Cassin's Sparrow | PIF | Semidesert grassland | Possibly | BBA - Camp Verde |
| Bendire's Thrasher | BOCC | Open desert scrub | Possible | BBA AF - Nonbreeding |
| Costa's Hummingbird | BOCC/PIF | Sonoran Desertscrub | Possible | BBA – BCR33 AF - Breeding |
| Elf Owl | BOCC | Saguaros & sycamore cavities | Possible | BBA |
| Gilded Flicker | BOCC/PIF | Sonoran Desertscrub | Possible | BBA – BCR 33 |
| Lark Bunting (nb) | BOCC | Desert and grassland | Possible | BBA AF - Passage |
| Lawrence's goldfinch | BOCC | Riparian | Possible | BCR 33 – BBA AF - Nonbreeding |
| MacGillivray's Warbler | PIF | High elevation riparian | Possible | BBA AF/UV – Passage TZ - Mention |
| Prairie falcon | BOCC | Deserts, grasslands, & cliffs | Possible | BCR 16 & 33 - BBA |
| Red-naped Sapsucker | PIF | Aspen and mixed conifer | Possible | BBA AF/UV – Passage TZ - Mention |
| Sage Thrasher | PIF | Cold desert scrub | Possible | BBA AF – Nonbreeding UV - Passage |
| Pine Grosbeak | PIF | Spruce-fir | Not likely | BBA |
| Grasshopper Sparrow | BOCC/PIF | Semi-desert and high elevation grasslands, with scattered mesquite & mimosa | No? | No – HDMS/BBA - Southern AZ BCR 16 AF - Mention |
| American Bittern | BOCC/PIF | Freshwater marshes | No | BBA - Historic 1930? BCR 16 |
| Aplomado Falcon | PIF | Semidesert grassland SE AZ | No | HDMS/BBA |
| Arizona Woodpecker | BOCC | Madrean evergreen oak – SE AZ | No | BBA |
| Baird's Sparrow | BOCC/PIF | Semidesert grassland, Shortgrass prairies – SE AZ | No | HDMS |
| Black rail | BOCC | Colorado River | No | BCR 33 - BBA |
| Blue-throated Hummingbird | BOCC | Madrean oak and sycamore | No | BBA |
| Botteri's Sparrow | BOCC/PIF | Semidesert grassland | No | BBA |
| Buff-breasted Flycatcher | BOCC/PIF | Madrean oak woodlands in SE AZ | No | HDMS/BBA |

| Species | BOCC/PIF | Habitat Type | PNF? | Reference |
|-----------------------------------|----------|--|---------|--|
| Cactus Ferruginous Pygmy-Owl | PIF | Sonoran Desertscrub | No | HDMS/BBA - Southern AZ |
| California Black Rail | PIF | Freshwater marshes | No | HDMS/BBA - SW AZ |
| Cassin's finch | BOCC | Open mature coniferous forests | No | BCR 16 - BBA |
| Eastern (Azure) Bluebird | PIF | Madrean pine/oak | No | No – HDMS/BBA - Southern AZ |
| Elegant Trogon | BOCC/PIF | Forested mountain canyons with sycamores & High elevation riparian | No | No – HDMS/BBA - Southern AZ |
| Five-striped Sparrow | BOCC | Acacia, mesquite, Riparian - Southern AZ | No | HDMS/BBA |
| Golden-crowned Kinglet | PIF | Spruce-fir | No | BBA |
| Gunnison Sage Grouse | BOCC | | No | BCR 16 |
| Lewis's Woodpecker | BOCC | Open pine or riparian woodland | No | BBA – BCR 16 |
| Long-billed curlew | BOCC | Riparian | No | BCR 16 & 33 - BBA |
| Montezuma (Mearns') Quail | PIF | Madrean pine/oak | No | BBA |
| Mountain Plover (nb) | BOCC | High elevation short grass prairies | No | BBA |
| Northern Beardless-Tyrannulet | BOCC | Open riparian woodlands | No | BBA |
| Red knot (<i>roselaari</i> ssp.) | BOCC | Sonoran & Mojave Deserts | No | BCR 33 Natureserve |
| Rose-throated Becard | BOCC | Sycamore riparian in extreme Southcentral AZ | No | HDMS/BBA - Southern AZ |
| Rufous-winged Sparrow | BOCC/PIF | Sonoran desert grassland and desert scrub | No | BBA |
| Snowy plover | BOCC | Riparian | No | BCR 16 & 33 - BBA |
| Sprague's Pipit (nb) | BOCC | Grasslands, prairies and meadows | No | HDMS - southern AZ |
| Swainson's Thrush | PIF | Spruce-fir and riparian | No | BBA |
| Thick-billed Parrot | PIF | Madrean pine/oak | No | HDMS/BBA - None in AZ currently – Historically in Camp Verde |
| Three-toed Woodpecker | PIF | Spruce-fir | No | BBA |
| Varied Bunting | BOCC | Brushy arid slopes and dry washes | No | BBA |
| Veery | BOCC | Riparian | No | BCR 16 - BBA |
| Yuma Clapper Rail | PIF | Freshwater marshes | No | HDMS/BBA - SW AZ |
| Least bittern | BOCC | Tavaci Marsh | Nearby? | BCR 33 – BBA TZ - Breeding |

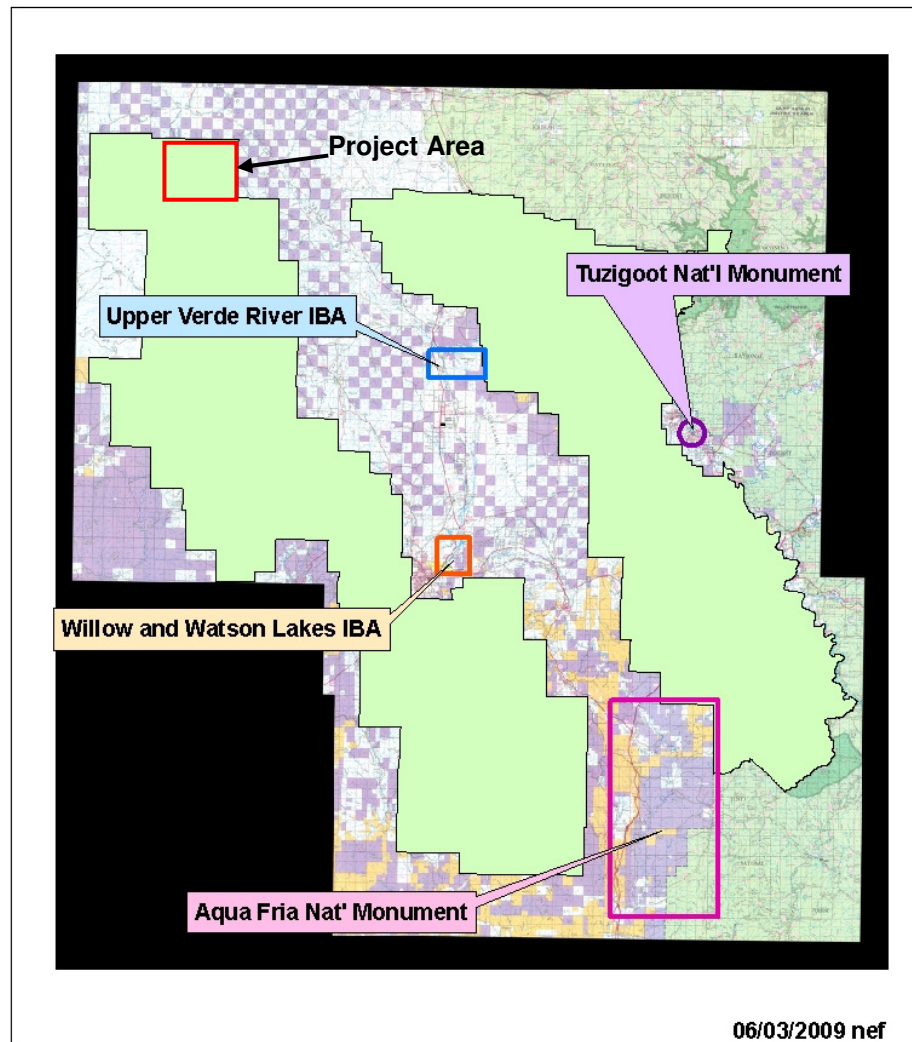
References:

- BBA – Breeding Bird Atlas
- HDMS – Heritage Database Management System (AZGFD Database)
- BCR – Bird Conservation Region – BOCC
- BNA – Birds of North America (online)
- AF – Aqua Fria IBA Species List
- TZ – Tuzigoot IBA Species List
- UV – Upper Verde IBA Species List
- WW – Watson/Willow Lakes IBA Species List
- Tittle – Michael Nicosia – Field note

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

Based on the three vegetation types within the project area (ponderosa-pinyon, pinyon-juniper, and grasslands), numerous species in the above table might be expected within the project area. The reciprocal road exchange itself would cause no ground-disturbing activities. However, future roadway improvements/alterations implemented to better access private lands might include grading, widening, paving, and/or drainage work at ephemeral wash crossings. The maximum amount of vegetation disturbance (including nesting, foraging, and cover habitat) by future roadway improvements would be 260.8 acres across the entire project area, a very small percentage (0.019%) of habitat available to migratory birds across the entirety of PNF. Snag retention would be compliant with the forest-plan direction in this project, and snags would only be removed as they pertain to safety. Removal and/or destruction of vegetation used by migratory birds is NOT a taking under the MBTA. Short-term impacts to migratory birds include the possible loss of a minor amount of suitable habitat. Long-term impacts to migratory birds include the loss and fragmentation of habitat away from the road easements brought about by possible future development of private lands.

Future installation of overhead utility lines and poles could pose some mortality risks to migratory birds. To alleviate or minimize impacts, entities installing overhead utilities should review Avian Power Line Interaction Committee's guidance to ensure that the design of its transmission line supports and other transmission infrastructure minimize the potential for avian electrocution (<http://www.aplic.org/>). This project does not alter the physical character or availability of any migratory bird habitat. This project was not altered to alleviate impacts to migratory birds.

Important Bird Areas:**Important Bird Areas
in the vicinity of the
Prescott National Forest**

The YR project area in the northwest corner of PNF does not contain nor is adjacent to any IBAs and will have no impacts to any conservation issues (PNF Draft 2011) associated with them.

Since the 2011 PNF Migratory Bird white paper was updated, the Aubrey Valley and Cliffs were identified as an IBA. This IBA lies about 20 miles to the north of the project area. Golden eagles are known to nest in this area as well as migrate through the area.

A conservation concern of the Aubrey Valley IBA is possible mortality to migrating raptors associated with wind-energy development. This project could contribute to or exacerbate that conservation issue if aboveground utilities pose potential collision mortality to migrating raptors.

K – Regional Forester sensitive species – NEPA analysis:

Table 5 compares the known habitat and distribution for each species with the project area and proposed action. For those species for which “Neither the habitat nor the species occur within the project area nor would be impacted by this project”, there is no further discussion of those species. Species with shading in the row are discussed in further detail following the table.

Table 5. Regional Forester sensitive species.

| Species Common name <i>Scientific Name</i> | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|--|---|---|
| <u>Birds:</u> | | |
| American peregrine falcon <i>Falco peregrinus</i> | The species nests at cliffs throughout the state, even at some distance from water. Nesting sites are known at Mormon Pocket along the Verde River, in Sycamore Canyon, on Granite Mountain, and Thumb Butte. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Bald eagle <i>Haliaeetus leucocephalus</i> | A small resident population of approximately 40 pairs nests primarily along the Salt and Verde rivers. Lynx Lake is a nesting site. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Northern Goshawk <i>Accipiter gentilis</i> | Nests locally in coniferous forests of the mountains and high mesas in the northeastern half of Arizona. This is a MIS for late seral stage ponderosa pine vegetation type. Goshawk PFAs occur in Prescott Basin, from Campwood west and north toward Apache Creek Wilderness and on Mingus Mountain. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i> | This species is associated with mature stands of cottonwood-willow riparian deciduous forest. It is also known to use dense thickets comprised of mixed hardwoods species with tamarisk included. Known to occur at confluence of Verde River & Sycamore Creek, on Sycamore Creek, at Duff Spring, and at Perkinsville. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Amphibians and aquatic reptiles:</u> | | |
| Lowland leopard frog <i>Lithobates (Rana) yavapaiensis</i> | This species is generally restricted to permanent waters below elevations of 3,000 feet. It is found in small to medium streams, and occurs in small springs, stock ponds, and occasionally in large rivers. Populations typically occur in aquatic systems with surrounding desert scrub, semi-desert grassland, or evergreen woodland. Known in several small streams on the forest. LLF may occur along the Verde River. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Mexican garter snake <i>Thamnophis eques megalops</i> | Occurs primarily in permanent marshes and streams at middle elevations in central, south-central and southeastern Arizona. This species occurs in the Verde River. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Narrowheaded garter snake <i>Thamnophis rufipunctatus</i> | Highly aquatic species, associated with riffle/pool complexes of cool, clear, rocky mountain streams. Known at Mormon Pocket on the Verde River and on Oak Creek. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Fish:</u> | | |
| Desert sucker <i>Catostomus latipinnis</i> | Found in rapids and flowing pools of streams and rivers primarily over bottoms of gravel-rubble with sandy silt in the interstices. Elevational range from 480 to 8,840 feet. Adults live in pools, moving at night to swift riffles and runs to feed. Young inhabit riffles throughout the day. Occurs in the Verde River, and Indian Creek, Sycamore Creek, Little Sycamore Creek, and Little Ash Creek (Agua Fria River Basin) on the PNF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

| Species Common name Scientific Name | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|---|---|---|
| Roundtail chub <i>Gila robusta</i> | Commonly found in pool habitats and near instream cover. Known only in the Verde River on the PNF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Sonora sucker <i>Catostomus insignis</i> | Commonly found in pool habitats. Known only in the Verde River on the PNF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Springsnails:</u> | | |
| Brown springsnail <i>Pyrgulopsis sila</i> | Total range: Endemic to Brown Spring, Yavapai County, northwestern Arizona. Spring is located on private lands. Known only on Prescott NF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Verde Rim springsnail <i>Pyrgulopsis glandulosa</i> | Total range: Nelson Place Spring complex that form the headwaters of Sycamore Creek, Yavapai County, central Arizona. Known only on Prescott NF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Mammals:</u> | | |
| Pale Townsend's big-eared bat <i>Corynorhinus townsendii pallescens</i> | Uses abandoned mines for roosting habitat. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Western red bat <i>Lasiurus blossevillii</i> | This species is associated with broad-leaf deciduous riparian forests and woodlands. Roosts by day in trees. Suitable habitat may occur along the Verde River. Red bats feed on moths. (HDMS). | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Reptiles:</u> | | |
| Sonoran desert tortoise <i>Gopherus morafkai</i> | The Sonoran desert tortoise occurs primarily on rocky slopes and bajadas of Mojave and Sonoran desertscrub. Caliche caves in incised, cut banks of washes (arroyos) are also used for shelter sites. Shelter sites are rarely found in shallow soils. (HDMS). | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Insects:</u> | | |
| A caddis fly <i>Wormaldia plana</i> | A Caribbean genus, <i>Wormaldia</i> , is more or less restricted to the cooler spring-fed streams in mountainous regions of Middle America (Flint 1968). This species was originally described from Chiapas, Mexico but was recently found in Arizona from Gila to Yavapai Cos. (Gila Co.: Line Fossil Creek, Fossil Creek; Yavapai Co.: Beaver Creek, below outlet of Montezuma Well, unnamed stream at Ward Ranch) (Munoz-Quesada and Holzanthal 2008). HDMS will need to obtain report to help identify locations found in AZ. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| <u>Plants:</u> | | |
| Arizona phlox <i>Phlox amabilis</i> | Endemic to north central and eastern AZ 4790-6900 ft elevation. Open, exposed, limestone-rocky slopes within pinyon-juniper woodlands and ponderosa pine-Gambel oak communities. Known to occur on Chino Valley RD. | The species and/or its habitat have the potential to occur in the project area. |
| Broad-leafed lupine <i>Lupinus latifolius</i> ssp. <i>leucanthus</i> | Habitat: Mostly restricted to Santa Maria and Bradshaw Mountains. Moist places in woods, shady to open areas, many plant communities between 4800 and 7000', coast to montane coniferous forest. Only known on Prescott NF. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Cochise sedge <i>Carex ultra</i> (= <i>C. spissa</i> var. <i>ultra</i>) | This plant grows in saturated soil near perennial seeps, streams, and springs. Also on: Coc, Cor, Ton NFs | Neither the species nor its habitat occur within the project area or would be impacted by this project. |

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

| Species Common name <i>Scientific Name</i> | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|---|--|---|
| Eastwood alum root <i>Heuchera eastwoodiae</i> | Heuchera eastwoodiae is known only from central Arizona and is found on moist slopes in ponderosa pine forests and canyons. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Flagstaff beardtongue <i>Penstemon nudiflorus</i> | This plant is restricted to small scattered limestone and sandstone outcrops of relatively undisturbed habitat at elevations ranging from 4,500 to 7,000 ft. Associated vegetation includes ponderosa pine, Gambel oak, blue grama, and alligator juniper. Responded well to low intensity fire. | The species and/or its habitat have the potential to occur in the project area. |
| Flagstaff pennyroyal <i>Hedeoma diffusum</i> | This species is endemic to Northern Arizona and is found on the Coconino and Prescott National Forests. It grows primarily on dolomitic limestone outcrops or soils derived from dolomitic limestone. However, it has been found on sandstone in Prescott National forest. Known to occur in Sycamore Canyon on Chino Valley RD. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Greene milkweed <i>Asclepias uncialis</i> ssp. <i>uncialis</i> | Broad range but is always rare and has small populations. Reported to prefer stable climax or near climax plains grassland communities. Reported to not tolerate competition from weedy annuals. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Heathleaf wild buckwheat <i>Eriogonum ericifolium</i> var. <i>ericifolium</i> | This species is known only from northern and central Arizona on the Coconino and Prescott National Forests. The type specimen for this species was collected near Fort Whipple, which is now Prescott in 1865. It also occurs in the Verde basin northwest of Clarkdale. The plant is restricted to a limestone substrate described as white or chalky gray and powdery, which is an old lakebed deposit. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Hualapai milkwort <i>Polygala rusbyi</i> | This species is known only from northern and central Arizona on the Coconino and Prescott National Forests. The species is known only from central Arizona at elevations of 5000 to 6500 feet. Habitat given on a specimen in 1985 was on the Verde formation with <i>Canotia</i> and <i>Juniper</i> as associated plants. This location was a few miles northeast of Cottonwood, Arizona. Other locations include areas around Camp Verde and Montezuma Well National Monument. | The species and/or its habitat have the potential to occur in the project area. |
| Mearns sage <i>Salvia dorii</i> spp. <i>mearnsii</i> | Endemic to central Arizona in portions of Yavapai and Coconino counties. Occurs at elevations of approximately 3,120 to 5,120 feet in open desertscrub or pinyon-juniper woodland with sparse vegetative cover. Occurs on powdery gypseous limestone soils of Tertiary lakebed deposits and on red-brown clay and sandy soil of the Supai/Hermit Formation. Known from the Verde Valley, Sedona, and along Oak Creek. | The species and/or its habitat have the potential to occur in the project area. |
| Metcalfe's tick-trefoil <i>Desmodium metcalfei</i> | Oak/pinyon woodlands (NM Rare Plant book). | The species and/or its habitat have the potential to occur in the project area. |
| Mt. Dellenbaugh sandwort <i>Arenaria aberrans</i> | This species is known only from northern and north-central Arizona. The type specimen is from Mount Dellenbaugh north of Grand Canyon. The habitat for this species is meadows within oak and pine forests at elevations between 5500 - 9000 feet. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Phillips agave <i>Agave phillipsiana</i> | Sandy to gravelly places with desert scrub (FNA), associated with archaeological sites. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

| Species Common name <i>Scientific Name</i> | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|--|--|---|
| Ripley wild buckwheat <i>Eriogonum ripleyi</i> | This species is known only from northern and central Arizona on the Coconino and Prescott National Forests. This species occurs on sandy-clay to gravelly, rocky, medium textured soils on sandstone bedrock; and on white calcareous soil of tertiary lakebed deposits. It is found in the creosote community of the Sonoran desert shrub and pinyon-juniper woodland of Great Basin conifer woodland. The elevation range of this species is 2,000 to 6,000 feet. Known to occur on the Chino Valley RD. | The species and/or its habitat have the potential to occur in the project area. |
| Rock fleabane <i>Eriogonum saxatilis</i> | This species is known only from northern and central Arizona on the Coconino, Kaibab and Prescott National Forests. The habitat is canyon walls with moist north-facing slopes between 4400 and 7000 feet. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Tonto Basin agave <i>Agave delamateri</i> | This species is often found in association with archeological features, including multi-room foundations, check dams and alignments. It is usually found on the tops of benches, edges of slopes, and on gentle slopes overlooking major drainages and perennial streams. Sonoran desert scrub 2800-3400 feet. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |
| Verde breadroot <i>Pediomelum verdiensis</i> | The plant grows on white powdery gypseous limestone of tertiary lakebed deposits where it occurs with several other rare plants adapted to this specialized habitat. | Neither the species nor its habitat occur within the project area or would be impacted by this project. |

Environmental Consequences:

Species:

- a) Affected environment within the project area: roadside vegetation within the reciprocated easements to a width of 66 feet for a total of 260.8 acres across three vegetation types.
- b) Proposed Action:

The reciprocal road exchange itself would cause no ground-disturbing activities. However, future roadway improvements/alterations implemented to better access private lands might include grading, widening, paving, and/or drainage work at ephemeral wash crossings, but these future actions are not certain and no specific plans exist for their implementation.

 - a. Direct & Indirect effects: The six plant species highlighted in the table above may be located along the roadway easements, but without species-specific surveys, exact presence/absence is unknown. Even with a maximum possible disturbance by roadway improvements of 260.8 acres, only a small percentage (0.019%) of all forest-wide habitats for sensitive species is being impacted. Exact future development plans are as-yet designed and approved, making calculation of indirect impacts to surrounding vegetation, and subsequently sensitive species, difficult. Accelerated residential development would mean more people living in the area and having closer access to the recreational opportunities provided on NFS lands. Human use in the area would be expected to increase from the current occasional, seasonal disburbed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use.
 - b. Cumulative effects: The extent of the impacts cannot be reasonably foreseen during this assessment as no specific plans exist. However, any future development will contribute to habitat loss and fragmentation.
- c) No Action:
 - a. Direct & Indirect effects:

Without the reciprocal road exchange, current management plans would continue to guide management of the roadway system, and there would be no ground-disturbing

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

activities (e.g., vegetation removal) by improvements to roads or utility installation on NFS lands. Habitat conditions along all existing roadways would remain unchanged. However, residential development could move forward on private lands, though residential density would not be as high as under full build-out of Homestead Ranch and Juniper Mountain Ranch. Human use in the area would be expected to increase from the current occasional, seasonal dispersed camping and off-road-vehicle use to more consistent use throughout all seasons of use and increased use, though use would not be as great as under the Proposed Action. Effects would still include disturbance to wildlife habitat on NFS lands.

- b. Cumulative effects: N/A

L – Regional Forester sensitive species – Biological Evaluation & determinations of effects:

The purpose of this biological evaluation is to document the determination of effects of the proposed action, the no action, and other action alternatives on Regional Forester sensitive plant and animal species.

Based on the effects analyses above,

- ✓ I find that this project is not likely to trend toward listing any Regional Forester sensitive species on the Prescott National Forest.

Signatures:**Prepared by:**February 6, 2014

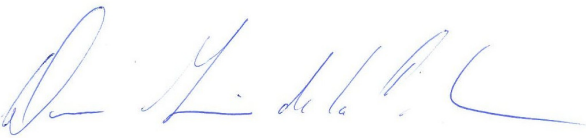
Shero Holland
Biologist
Del Sol Group

Date

Reviewed by:February 7, 2014

Noel Fletcher
Wildlife Biologist
Prescott NF

Date

Approved by:February 7, 2014

Dan Garcia de la Cadena
Journey Level Wildlife Biologist
Prescott NF

Date

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

M – Management Indicator Species analysis:

The purpose of this report is to disclose the impacts to PNF Management Indicator Species (MIS). For MIS, effects to habitat may be used as a proxy for effects to MIS. Forest-level population trends for MIS were discussed in Forest Level Analysis of MIS for the PNF, October 2010. Monitoring of game-species populations such as mule deer and pronghorn is conducted by the AGFD. This project analysis assesses the impacts of this project to the habitat quantity and quality within the project area and effects to forest-wide habitat and population trends.

Table 6. Forest Plan Management Indicator Species.

| Species Common name Scientific Name | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|---|---|---|
| Birds: | | |
| Turkey <i>Meleagris gallopavo</i> | This is a MIS for late seral stage ponderosa pine vegetation type. Population trend – Increasing | Project would impact a maximum of 17.44 acres (0.015%) of forest-wide ponderosa pine vegetation type. This small an area of impact would not have a discernible impact to any habitat trends and no impact to any population trends. |
| Northern Goshawk <i>Accipiter gentilis</i> | Nests locally in coniferous forests of the mountains and high mesas in the northeastern half of Arizona. This is a MIS for late seral stage ponderosa pine vegetation type. Goshawk PFAs occur in Prescott Basin, from Campwood west and north toward Apache Creek Wilderness and on Mingus Mountain. Population Trend – Decreasing | |
| Hairy woodpecker <i>Picoides villosus</i> | This is the MIS for snag component in ponderosa pine vegetation type. Population trend – Stable | |
| Pygmy nuthatch <i>Sitta pygmaea</i> | This is a MIS for late seral stage ponderosa pine vegetation type. Population trend – Stable | |
| Juniper (Plain) titmouse <i>Baeolophus ridgwayi</i> | This is the MIS for late seral pinyon juniper and for the snag component in pinyon juniper. Population trend – Decreasing | Project would impact a maximum of 129.72 acres (0.019%) of forest-wide pinyon juniper vegetation type. |
| Spotted (Rufous-sided) towhee <i>Pipilo maculatus</i> | This is the MIS for late seral stage chaparral vegetation type. Population trend – Decreasing | While the indicator habitat is not present in the project area, it is probable that the species occurs within and adjacent to the project area. With no changes in chaparral vegetation, there would not be any impacts to the habitat or population trends for the spotted towhee. |
| Lucy's warbler <i>Vermivora luciae</i> | This is the MIS for late seral riparian habitat. It is a secondary cavity nester. This species may occur along the Verde River. Population trend – Increasing | This indicator habitat is not present in the project area and the species would not be expected to occur within the project area; therefore, the MIS for this habitat is not analyzed. |
| Mammals: | | |
| Antelope <i>Antilocapra americana</i> | This is the MIS for early and late seral stage grassland/desert scrub vegetation types. Population trend – Declining | Project would impact a maximum of 113.64 acres (0.047%) of forest-wide grassland/desert scrub vegetation type. (See below.) |
| Abert squirrel <i>Sciurus aberti</i> | This is the MIS for early seral stage ponderosa pine vegetation type. Population trend – Stable | Project would impact a maximum of 17.44 acres (0.015%) of forest-wide ponderosa pine vegetation type. This small an area of impact would not have a discernible impact to any habitat trends and no impact to any population trends. |
| Mule Deer <i>Odocoileus hemionus</i> | This is the MIS for early seral stage pinyon-juniper and chaparral vegetation types. Population trend – Decreasing | Project would impact a maximum of 129.72 acres (0.019%) of forest-wide pinyon juniper vegetation type. |
| Aquatic Invertebrates: | | |

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

| Species Common name Scientific Name | Species background information The known distribution or habitat association for the species. | Project Information The project area is in Great Basin Conifer Woodland and Plains and Great Basin Grasslands vegetation communities at elevations from 5,100 to 5,900 feet. The project is in multiple watersheds. |
|--|---|---|
| Macroinvertebrates | This is the MIS for late seral riparian and aquatic habitats. Population trend – Stable | Macroinvertebrates are MIS for water quality in perennial streams. The project area contains only ephemeral streams. Therefore, assessing macroinvertebrates is not necessary. |

Environmental effects relative to MIS:

| Vegetation type | Forestwide Acres | Project Acres | Project % of Forest Wide |
|------------------------|------------------------------|----------------------|---------------------------------|
| Ponderosa pine | 115,535 | 17.44 | 0.015 |
| Pinyon/juniper | 683,795 | 129.72 | 0.019 |
| Chaparral | 304,780 | 0 | 0 |
| Grassland/Desert scrub | 240,580 | 113.64 | 0.047 |
| Riparian & aquatic | 17,160 | 0 | 0 |
| TOTAL ACRES | 1,372,053¹ | 260.8 | 0.019 |

Species – vegetation type – seral stage:

- a) Affected environment within the project area: roadside vegetation within the reciprocated easements to a width of 66 feet for a total of 260.8 acres across three vegetation types, in particular 113.64 acres of grassland habitat.
- b) Proposed Action:
 - a. Project-level habitat quantity and quality: maximum of 260.8 acres across three vegetation types, much of which is existing unimproved road and adjacent disturbance. During review of the Yavapai Ranch Planned Area Development by Yavapai County, AGFD reviewed and provided guidance on development proposals for all of Yavapai Ranch (Appendix F). AGFD was concerned about impacts to high-quality grassland habitat and the pronghorn antelope that depend on it, in addition to impacts to other vegetation types and wildlife species. AGFD is supportive of Yavapai Ranch's development but asked Yavapai County to consider several mitigation measures to help offset impacts to pronghorn antelope including clustered development of homes and other infrastructure at the grassland fringes, minimal use of fencing of all kinds but use of a pronghorn-friendly fence design when necessary, use of existing roads and minimized roadway proliferation, and preserved recreational access to public lands.

This project would decrease the quantity and quality of ponderosa pine, grassland, and juniper habitats at the project level.
 - b. Forest-level habitat trend: With only a maximum of 0.019% of forest-wide habitat across three vegetation types being disturbed, the impact to forest-level habitat trend would not be discernible.
 - c. Forest-level population trend: Because of miniscule impacts to forest-level habitat trends, there will be no impacts to forest-level population trends for any MIS.
- c) No Action:
 - a. Project-level habitat quantity and quality: 0.0 acre across three vegetation types, much of which is existing unimproved road and adjacent disturbance
 - b. Forest-level habitat trend: no impact
 - c. Forest-level population trend: no impact

¹ Acre estimates include private land inholdings.

Literature cited:

Ehrlich, Paul R., D. S. Dobkin, and D. Wheye. 1988. The birder’s handbook: a field guide to the natural history of North American birds. Simon & Schuster Inc. 785p.

Hoffmeister, D.F. 1986. Mammals of Arizona. The University of Arizona Press. 602p.

Jacobson, K.V. and K.M. McCarty. 2013. Raptor Migration Counts Aubrey Cliffs, Arizona: Fall 2012 summary report. Nongame and Endangered Wildlife Program Technical Report 274. Arizona Game and Fish Department, Phoenix, Arizona.

Kraft, J.P., K.M. McCarty and K.V. Jacobson. 2012. Raptor migration counts of the Aubrey Cliffs, Arizona: Fall 2011 summary report. Nongame and Endangered Wildlife Program Technical Report 269. Arizona Game and Fish Department, Phoenix, Arizona.

Latta, M.J., C.J. Beardmore, and T.E. Corman. 1999. Arizona Partners in Flight Bird Conservation Plan. Version 1.0. Nongame and Endangered Wildlife Program Technical Report 142. Arizona Game and Fish Department, Phoenix, Arizona.

USDA Forest Service. 2010. Prescott National Forest. Forest Level Analysis of Management Indicator Species (MIS) for the Prescott National Forest, 2009 update. October 2010.

References:

AGFD HDMS web page:

http://www.azgfd.com/pdfs/wildlife_conservation/hdms/COUNTY%20SPEC%20STAT%20LIST.pdf

NMDGF BISON web page:

<http://www.wildlife.state.nm.us/conservation/index.htm>

<http://bna.birds.cornell.edu/bna>

APPENDIX A
FEDERALLY LISTED PLANTS AND ANIMALS
OF THE PRESCOTT NATIONAL FOREST
April 2012

| <u>Scientific name</u> | <u>Common name</u> | <u>ESA Status</u> | <u>Migratory Bird status</u> |
|---|--|-------------------|------------------------------|
| Birds: | | | |
| <i>Empidonax traillii extimus</i> | Southwestern willow flycatcher | E | PIF |
| <i>Strix occidentalis lucida</i> | Mexican spotted owl | T | PIF |
| <i>Coccyzus americanus occidentalis</i> | Western yellow-billed cuckoo | PT | BOCC/PIF |
| Fish: | | | |
| <i>Gila intermedia</i> | Gila chub | E | N/A |
| <i>Poeciliopsis occidentalis occidentalis</i> | Gila topminnow | E | N/A |
| <i>Ptychocheilus lucius</i> | Colorado pikeminnow | E, EXPN | N/A |
| <i>Xyrauchen texanus</i> | Razorback sucker | E | N/A |
| <i>Meda fulgida</i> | Spikedace | E | N/A |
| <i>Oncorhynchus gilae</i> | Gila trout | T | N/A |
| <i>Tiaroga cobitis</i> | Loach minnow | E | N/A |
| <i>Gila robusta</i> | Roundtail chub | C | N/A |
| Reptiles: | | | |
| <i>Gopherus morafkaii</i> | Sonoran desert tortoise | C | N/A |
| <i>Thamnophis eques megalop</i> | Mexican garter snake | PT | N/A |
| <i>Thamnophis rufipunctatus</i> | Narrow-headed gartersnake | PT | NA |
| Critical Habitats: | | | |
| <i>Strix occidentalis lucida</i> | Mexican spotted owl | | |
| <i>Empidonax traillii extimus</i> | Southwestern willow flycatcher | | |
| <i>Gila intermedia</i> | Gila chub | | |
| <i>Meda fulgida</i> | Spikedace | | |
| <i>Xyrauchen texanus</i> | Razorback sucker | | |
| <i>Tiaroga cobitis</i> | Loach minnow | | |
| <i>Thamnophis eques megalop</i> | Northern Mexican gartersnake – (proposed) | | |
| <i>Thamnophis rufipunctatus</i> | Narrow-headed gartersnake – (proposed) | | |
| <i>Coccyzus americanus occidentalis</i> | Western yellow-billed cuckoo – (potential) | | |
| * Status Definitions: | | | |
| ◆ E | Listed Endangered under the ESA: Any species that is in danger of extinction throughout all or a significant portion of its range. (Appendix A) | | |
| ◆ T | Listed Threatened under the ESA: Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. (Appendix A) | | |
| ◆ C | Candidates are those species for which the Fish and Wildlife Service has enough information on file to propose listing as threatened or endangered, but listing has been precluded by other agency priorities. | | |
| ◆ EXPN | Experimental population, non-essential | | |
| ◆ BOCC | Birds of Conservation Concern – FWS National Priority List | | |
| ◆ PIF | Partners in Flight priority bird species (Latta, 1999) | | |

Federally listed species on the USFWS website for Yavapai County that have no record of occurring on the PNF:

- Brown pelican (*Pelecanus occidentalis*) – DM, Endangered
- Page springsnail (*Pyrgulopsis morrisoni*) – Candidate
- Lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*) – Endangered
- Black-footed ferret (*Mustela nigripes*) – Endangered
- California condor (*Gymnogyps californianus*) – Endangered
- Headwater chub (*Gila nigra*) - Candidate
- Chiricahua leopard frog (*Lithobates chiricahuensis*) – Threatened (Sredl, 2003)

➤ **Federally listed species previously listed for the PNF that do not occur on the PNF:**

- Desert pupfish (*Cyprinodon macularis macularis*) - Endangered
- Woundfin (*Plagopterus argentissimus*) - Endangered
- Arizona cliffrose (*Purshia subintegra*) – Endangered

Sredl, M. 2003. Personal communication between M. Sredl, AG&FD, and Mike Leonard, PNF, on March 3, 2003.

APPENDIX B**REGIONAL FORESTER'S SENSITIVE ANIMAL AND PLANT
SPECIES LIST FOR THE PRESCOTT NF****ANIMALS:****Birds****Migratory bird status**

| | | |
|---|------------------------------|-----------|
| <i>Haliaeetus leucocephalus</i> | Bald eagle | BOCC |
| <i>Accipiter gentilis</i> | Northern goshawk | BOCC, PIF |
| <i>Falco peregrinus</i> | American peregrine falcon | BOCC |
| <i>Coccyzus americanus occidentalis</i> | Western yellow-billed cuckoo | BOCC, PIF |

Amphibians & aquatic reptiles

| | |
|---------------------------------------|------------------------------|
| <i>Lithobates (Rana) yavapaiensis</i> | Lowland leopard frog |
| <i>Thamnophis eques megalops</i> | Northern Mexican gartersnake |
| <i>Thamnophis rufipunctatus</i> | Narrow-headed gartersnake |

Fish

| | |
|----------------------------|----------------|
| <i>Gila robusta</i> | Roundtail chub |
| <i>Catostomus clarki</i> | Desert sucker |
| <i>Catostomus insignis</i> | Sonora sucker |

Reptiles

| | |
|--------------------------|-------------------------|
| <i>Gopherus morafkai</i> | Sonoran desert tortoise |
|--------------------------|-------------------------|

Insects

| | |
|------------------------|--------------|
| <i>Wormaldia plana</i> | A caddis fly |
|------------------------|--------------|

Snails

| | |
|-------------------------------|-----------------------|
| <i>Pyrgulopsis glandulosa</i> | Verde Rim springsnail |
| <i>Pyrgulopsis sila</i> | Brown springsnail |

Mammals

| | |
|---|-------------------------------|
| <i>Lasiurus blossevillii</i> | Western red bat |
| <i>Corynorhinus townsendii pallascens</i> | Pale Townsend's big-eared bat |

PLANTS:

| | |
|--|--------------------------|
| <i>Agave delamateri</i> | Tonto Basin agave |
| <i>Agave phillipsiana</i> | Phillips agave |
| <i>Arenaria aberrans</i> | Mt. Dellenbaugh sandwort |
| <i>Asclepias incialis</i> ssp. <i>uncialis</i> | Greene milkweed |
| <i>Carex ultra</i> (= <i>C. spissa</i> var. <i>ultra</i>) | Cochise sedge |
| <i>Desmodium metcalfei</i> | Metcalfe's tick-trefoil |
| <i>Erigeron saxatilis</i> | Rock fleabane |
| <i>Eriogonum ericofolium</i> var. <i>ericofolium</i> | Heathleaf wild buckwheat |
| <i>Eriogonum ripleyi</i> | Ripley wild buckwheat |
| <i>Hedeoma diffusum</i> | Flagstaff pennyroyal |
| <i>Heuchera eastwoodiae</i> | Eastwood alum root |
| <i>Lupinus latifolius</i> spp. <i>leucanthus</i> | Broad-leafed lupine |
| <i>Pediomelum verdiensis</i> | Verde breadroot |
| <i>Penstemon nudiflorus</i> | Flagstaff beardtongue |
| <i>Phlox amabilis</i> | Arizona phlox |
| <i>Polygala rusbyi</i> | Hualapai milkwort |
| <i>Salvia dorii</i> spp. <i>mearnsii</i> | Mearns sage |

*** Status Definitions:**

- ◆ **BOCC** Birds of Conservation Concern – FWS National Priority List
- ◆ **PIF** Partners in Flight priority bird species (Latta, 1999)

APPENDIX C**Prescott National Forest
Management Indicator Species**

Excerpted from the FEIS for PNF FLMP, November 1986, Page 95

Pertinent portions of Table 28. Indicator Species

| Vegetation | Early Seral | Late Seral | Snag Component |
|------------------------------------|----------------|--|------------------|
| Ponderosa Pine | Abert Squirrel | Goshawk (BOCC, PIF) P. Nuthatch Turkey | Hairy Woodpecker |
| Pinyon Juniper | Mule Deer | Plain Titmouse (PIF) | Plain Titmouse |
| Chaparral | Mule Deer | Rufous-Sided Towhee | N/A |
| Grassland/ Desert Shrub | Antelope | Antelope | N/A |
| Riparian | ----- | Lucy's Warbler (PIF) | N/A |
| Aquatic | ----- | Macroinvertebrates | N/A |

**Prescott National Forest
Management Indicator Species**

Excerpted from the Forest Level Analysis of Management Indicator Species (MIS) for the Prescott National Forest, 2009 update. October 2010.

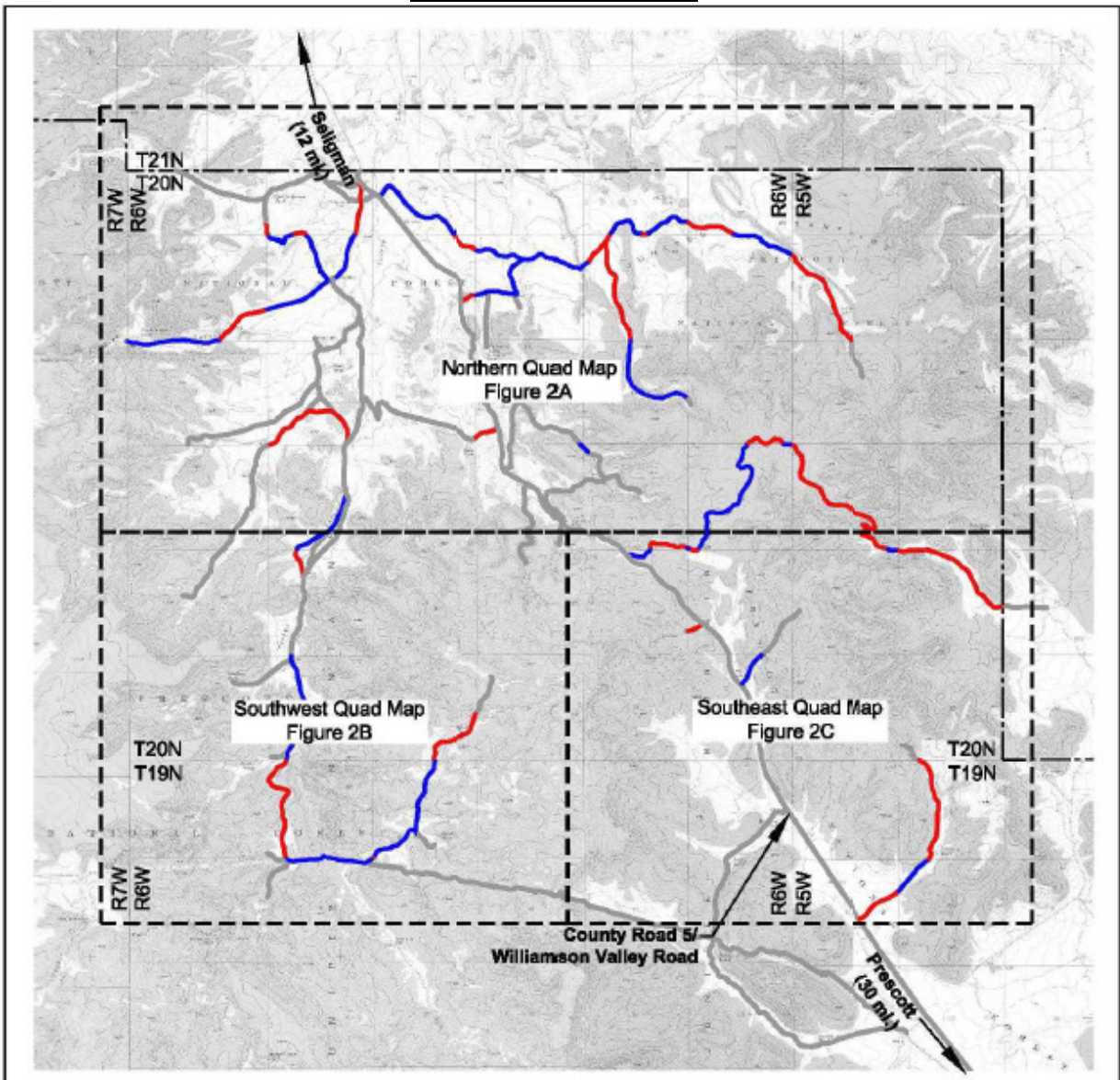
**TABLE 9. MANAGEMENT INDICATOR SPECIES,
TRENDS (2009 MIS REPORT)**

| SPECIES | HABITAT | POPULATION TREND |
|----------------------------------|--|------------------|
| Turkey | Ponderosa pine, late seral | Increasing |
| Goshawk | Ponderosa pine, late seral | Decreasing |
| Hairy woodpecker | Ponderosa pine, snags | Stable |
| Pygmy nuthatch | Ponderosa pine, late seral | Stable |
| Tassel-eared squirrel | Ponderosa pine, early seral | Stable |
| Juniper (Plain) titmouse | Pinyon/juniper snags | Decreasing |
| Mule deer | Pinyon/juniper/chaparral, early seral | Decreasing |
| Pronghorn antelope | Grassland, desert shrub | Declining |
| Spotted (Rufous-sided) towhee | Chaparral, late seral | Decreasing |
| Lucy's warbler | Riparian, late seral | Increasing |
| Aquatic Macroinvertebrates | Riparian, aquatic, late seral | Stable |

*** Status Definitions:**

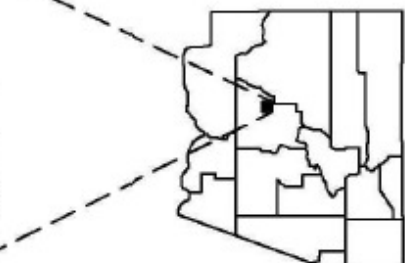
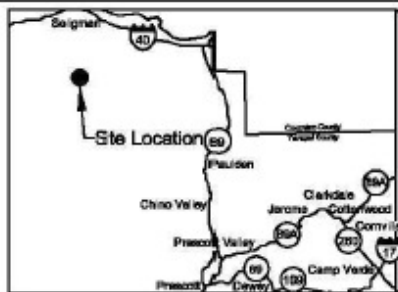
- ◆ **BOCC** Birds of Conservation Concern – FWS National Priority List
- ◆ **PIF** Partners in Flight priority bird species (Latta, 1999)

APPENDIX D – Maps



Legend

- Prescott National Forest Boundary
- Grant to Forest
- Grant to Private
- Quad Map Boundaries



**Yavapai Ranch
Reciprocal Easements**
Yavapai County, Arizona

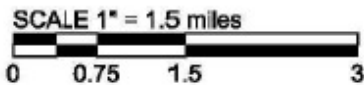
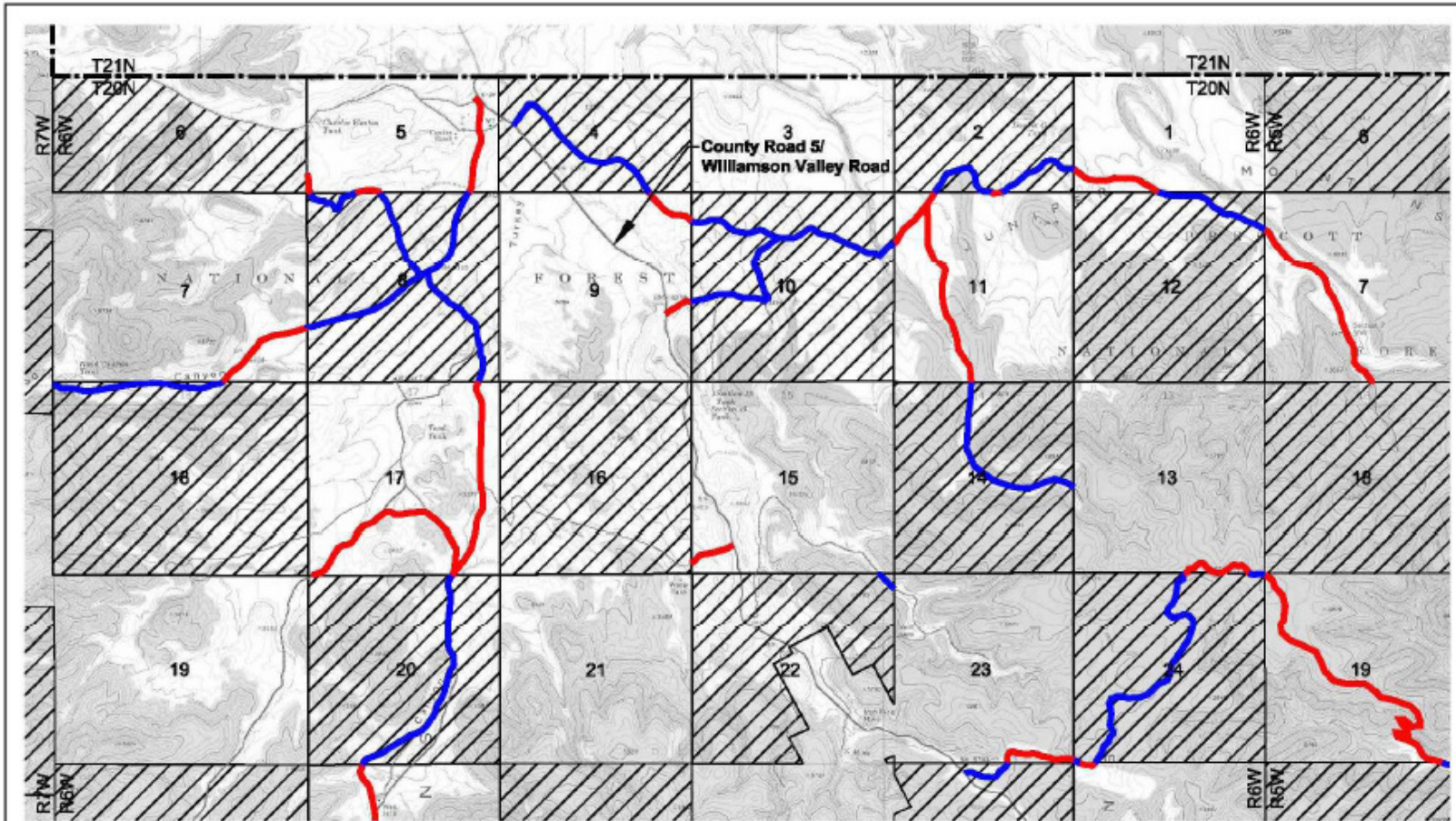


Figure 1. Project Location Map

Contour Interval: 20 feet
Source: National Geographic TOPOI

date initials

_____ Ranger District
Prescott National Forest
_____ Project
Wildlife, Fisheries, & Rare Plants (WFRP) Specialist Report

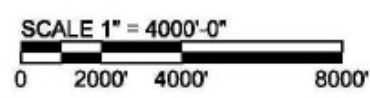


**Yavapai Ranch
Reciprocal Easements**
Yavapai County, Arizona

Figure 2A. Northern Quad Map

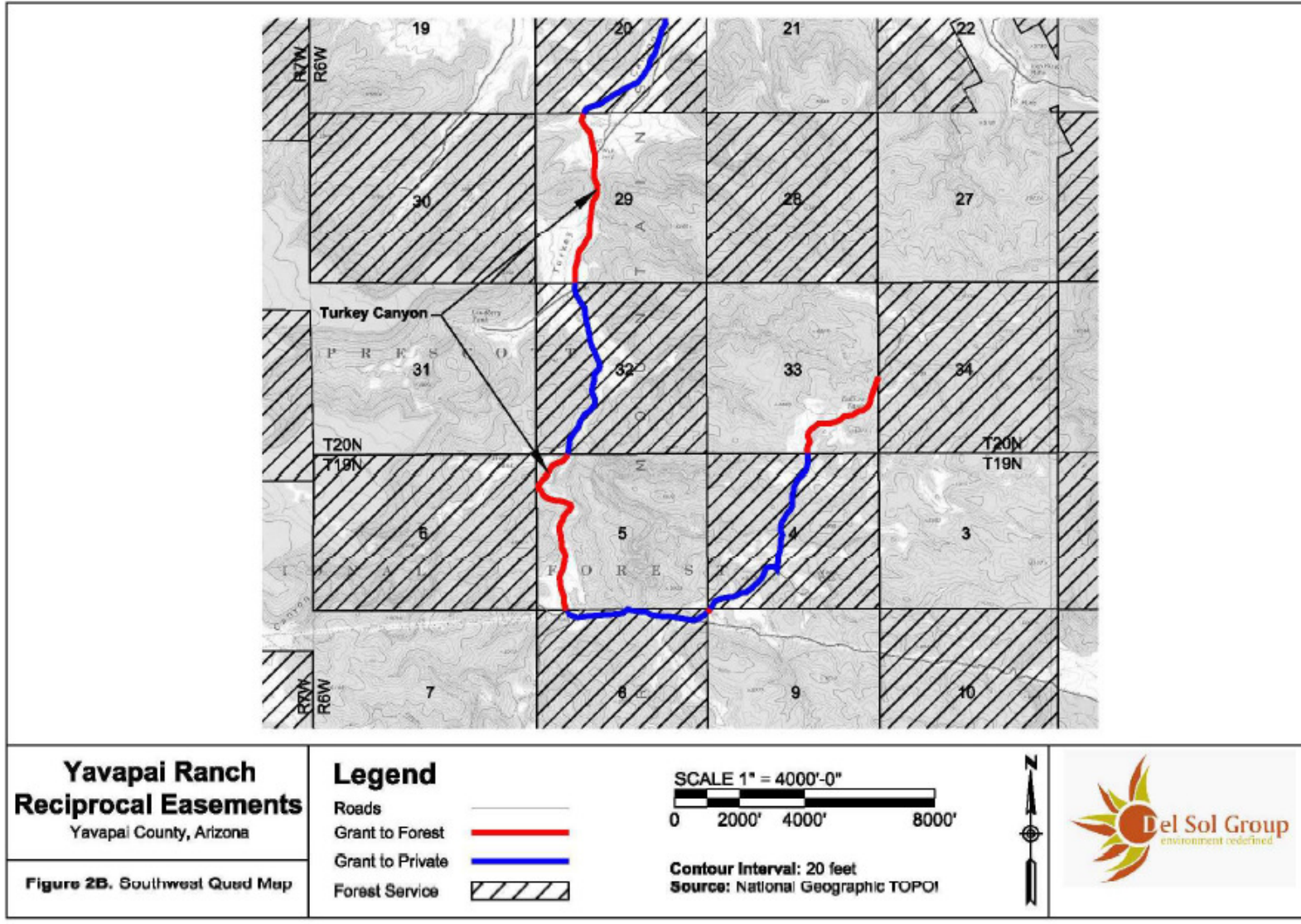
Legend

- Prescott National Forest Boundary: - - - - -
- Roads: _____
- Grant to Forest: ———
- Grant to Private: ———
- Forest Service: / / / / /

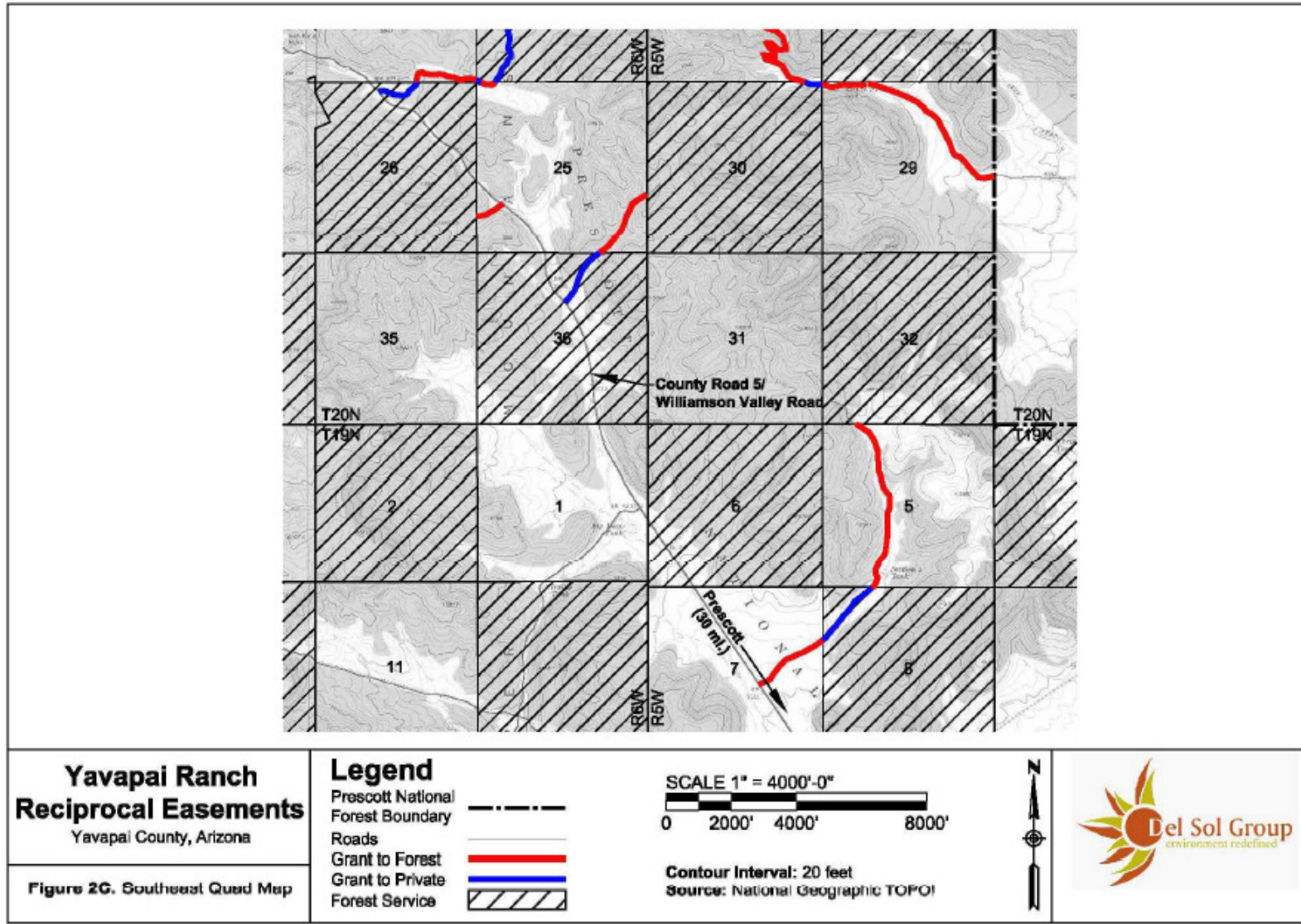


Contour Interval: 20 feet
Source: National Geographic TOPOI

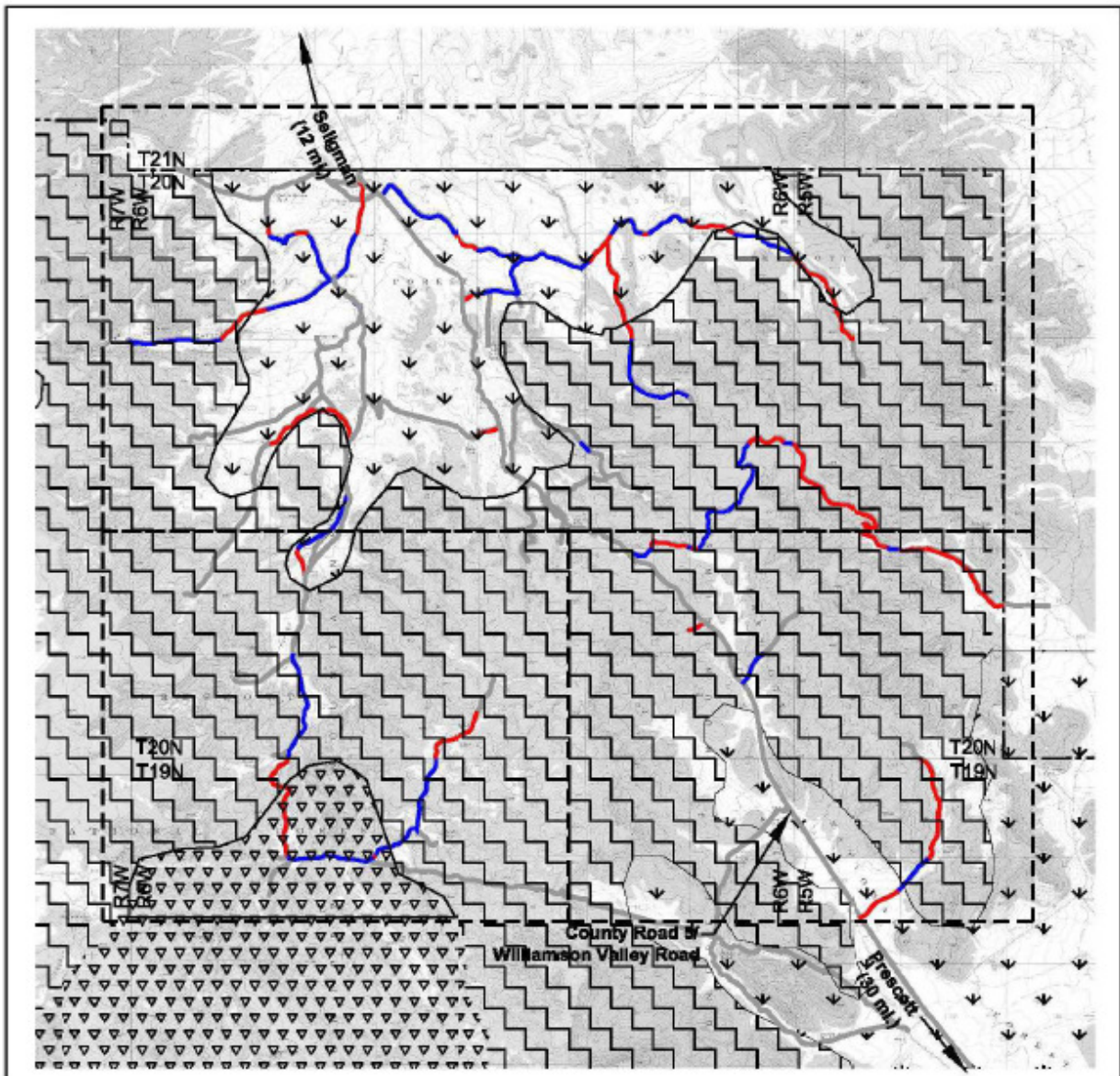




Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE



Wildlife, Fisheries, & Rare Plants (WFRP) Specialist Report



Legend

- Prescott National Forest Boundary
- Grant to Forest
- Grant to Private
- Quad Map Boundaries

- ↓ Grassland
- + Pinyon Pine - Juniper
- ▽▽▽▽ Ponderosa

**Yavapai Ranch
Reciprocal Easements**
Yavapai County, Arizona

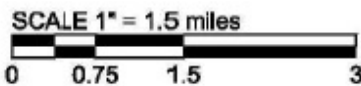


Figure 3 Roadway Impact on Vegetation Map

Source: National Geographic TOPOI

APPENDIX E – Road table with vegetation calculations

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE

| | | | | | | | | | | | | | |
|------------------|------------------|------------|----|-------------|-------------|--|-------------|--------------|---------------|---------------|-----|---------------|---------------|
| 009848A | grant to forest | 0190n0050w | 5 | | 1 | | | 100 | 1 | 8 | | | |
| 009848A | grant to forest | 0190n0050w | 7 | | 0.5 | | | | | | 100 | 0.5 | 4 |
| 009848A | grant to private | 0190n0050w | 8 | 0.4 | | | | 90 | 0.36 | 2.88 | 10 | 0.04 | 0.32 |
| TOTAL MILE\$ | | | | | | | | | | | | | |
| 009900L | grant to forest | 0200n0060w | 25 | | 0.1 | | | 100 | 0.1 | 0.8 | | | |
| TOTAL MILE\$ | | | | | | | | | | | | | |
| nonsystem(9838A) | grant to forest | 0200n0060w | 23 | | 0.4 | | | 100 | 0.4 | 3.2 | | | |
| nonsystem(9838A) | grant to forest | 0200n0060w | 25 | | 0.1 | | | 100 | 0.1 | 0.8 | | | |
| nonsystem(9838A) | grant to private | 0200n0060w | 24 | 1.4 | | | | 100 | 1.4 | 11.2 | | | |
| nonsystem(9838A) | grant to private | 0200n0060w | 26 | 0.3 | | | | 100 | 0.3 | 2.4 | | | |
| nonsystem(9838A) | grant to forest | 0200n0050w | 19 | | 1.7 | | | 100 | 1.7 | 13.6 | | | |
| nonsystem(9838A) | grant to forest | 0200n0060w | 13 | | 0.4 | | | 100 | 0.4 | 3.2 | | | |
| nonsystem(9838A) | grant to forest | 0200n0050w | 29 | | 0.2 | | | 100 | 0.2 | 1.6 | | | |
| nonsystem(9838A) | grant to private | 0200n0060w | 24 | 0.1 | | | | 100 | 0.1 | 0.8 | | | |
| nonsystem(9838A) | grant to private | 0200n0050w | 30 | 0.1 | | | | 100 | 0.1 | 0.8 | | | |
| TOTAL MILE\$ | | | | | | | | | | | | | |
| nonsystem(9836C) | grant to forest | 0200n0060w | 15 | | 0.2 | | | | | | 100 | 0.2 | 1.6 |
| TOTAL MILE\$ | | | | | | | | | | | | | |
| no name rd | grant to forest | 0200n0060w | 5 | | 0.1 | | | | | | 100 | 0.1 | 0.8 |
| no name rd | grant to private | 0200n0060w | 8 | 0.3 | | | | | | | 100 | 0.3 | 2.4 |
| no name rd | grant to forest | 0200n0060w | 5 | | 0.1 | | | | | | 100 | 0.1 | 0.8 |
| no name rd | grant to private | 0200n0060w | 8 | 0.5 | | | | | | | 100 | 0.5 | 4 |
| TOTAL MILE\$ | | | | | | | | | | | | | |
| TOTAL ALL | | | | 18.2 | 18.4 | | 2.18 | 17.44 | 16.216 | 129.72 | | 14.206 | 113.84 |

APPENDIX F – AGFD correspondence



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT
5000 W. CAREFREE HIGHWAY
PHOENIX, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV
REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
JANICE K. BREWER
COMMISSIONERS
CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
NORMAN W. FREEMAN, CHINO VALLEY
JACK F. HUSTED, SPRINGVILLE
J.W. HARRIS, TUCSON
JENNIFER L. MARTIN, PHOENIX
DIRECTOR
LARRY D. VOYLES
DEPUTY DIRECTORS
GARY R. HOWITTER
BOB BROSCHEID



September 27, 2012

Tammy DeWitt, Senior Planner
Yavapai County Development Services
500 S. Marina St.
Prescott, AZ 86303

Re: Comments regarding Yavapai Ranch ZMC H12066, Minor General Plan Amendment H12067
(To be provided as briefing materials to members of the Planning and Zoning Commission for review prior to hearing this matter on October 3, 2012)

Dear Ms. DeWitt,

The Arizona Game and Fish Department (Department) wishes to express its appreciation to Yavapai County (County) for the opportunity to review and provide project guidance on development proposals of this nature having the potential to impose broad impacts to the habitat resources upon which the wildlife in Yavapai County depends.

The Department wishes to commend the County for its previous willingness to consider and incorporate project-related recommendations submitted by the Department, into the terms and conditions of the permits necessary to proceed with development of this nature - as was the case in Conditional Use Permit recently approved by the County for the NextEra Wind Energy Development Proposal also submitted for the Yavapai Ranch (Ranch). The constructive partnership, and proactive relationship that is emerging between the Department and the County, is enabling the Department to successfully meet its Trust Responsibilities to the citizens of Yavapai County, which are embodied in the Department's Mission Statement:

"To conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations."

For its furtherance of this goal, the Department expresses its gratitude.

On behalf of the Department, the Region 3 Habitat Program, with support from the Wildlife Managers with oversight for wildlife management on the Ranch, have reviewed the Development Agreement of 2000, the 2012 Yavapai Ranch Planned Area Development Proposal (PAD), the Variance and Minor Plan Amendment Requests, and wishes to provide the County with the following comments for consideration relating to this development proposal:



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000
 (602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGERVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
DIRECTOR
 LARRY D. VOYLES
DEPUTY DIRECTORS
 GARY R. HOVATTER
 BOB BROSCHEID



Background and Importance of Habitat:

In June of 2010, after many years of research and interagency collaboration, a team comprised of biologists from the Tonto and Prescott National Forests, the Bureau of Land Management, and Regions 3 and 6 of the Arizona Game and Fish Department, released a document entitled "The Central Arizona Grassland Conservation Strategy" (CAGCS), with the hope that thru its implementation -- a continued presence of pronghorn antelope on the Central Arizona Landscape would be ensured.

North America's pronghorn population declined drastically from 30 - 40 million pronghorn prior to European settlement, to roughly 30,000 by the early 1920's. A concurrent reduction in Arizona's pronghorn population also took place, which was similar in magnitude to the decline that took place at the North American scale. During the late 1980's through the early 1990's Arizona's pronghorn population again experienced drastic declines. Those declines were due in part to habitat loss, habitat fragmentation, and a decrease in habitat quality related to Arizona's growth in population and the development associated with this growth. This culminated in a 2006 pronghorn population estimate of only 8,000 animals statewide.

With this alarming trend as a backdrop, the CAGCS team set out to develop an integrated management strategy for the conservation and restoration of Central Arizona's grassland ecosystems and associated pronghorn populations, thru management actions including grassland habitat assessments, risk assessments to grassland ecosystems and the pronghorn herds that depend on them, as well as management strategies and recommendations for implementation. By implementing the CAGCS, this multiagency team is working to reverse the population trend for one of Arizona's keystone species - pronghorn antelope, through the conservation and restoration of the key grasslands upon which this species relies.

The grasslands of Central Yavapai County found in Game Management Units 17B and 19B (Yavapai Ranch), and 19A is home to 15 to 25% of the State's pronghorn population (approximately 2,500 animals). It represents roughly 30% of statewide grassland habitat ranked as high quality, and supports one of the highest density pronghorn populations statewide. In terms of geography, this equates to approximately 1,362 mi² of high quality grassland habitat currently occupied by pronghorn antelope. Based upon the results of CAGCS study, it has been determined that urban development and subsequent habitat loss and fragmentation, are the single greatest threat to pronghorn within these areas. The PAD development proposal being considered, has the potential to directly or indirectly impact up to 114 mi² of wildlife habitat in this area.

Below is a map delineating the project boundaries for the CAGCS, wherein considerable manpower and financial resources have been expended (including grassland restoration and habitat improvement actions on the Yavapai Ranch itself) by signatory agencies and Non-Government Conservation Organizations, both research and restoration - carried out in support of the stated goals and objectives of the CAGCS.



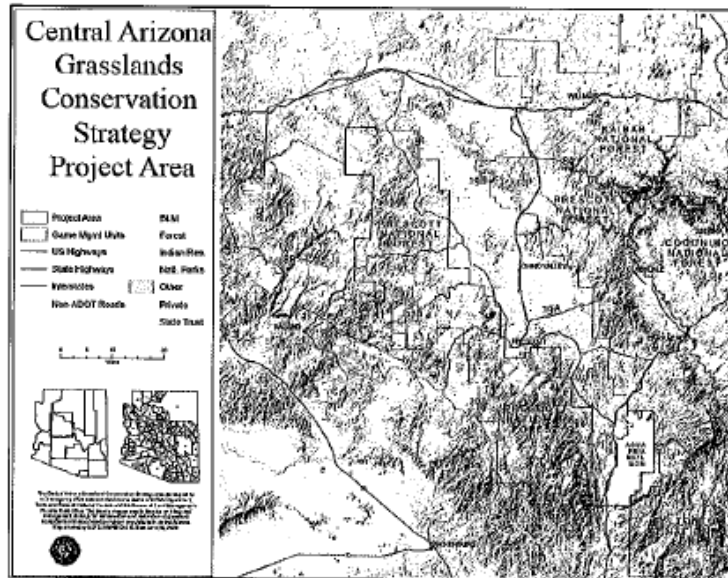
THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000

(602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
DIRECTOR
 LARRY D. VOYLES
DEPUTY DIRECTORS
 GARY R. HOVATTER
 BOB BROSCHEID



Rationale for the Recommendations and Requests that follow regarding Clustered Development, Roadway Proliferation, and Recreational Access:

Because the Yavapai Ranch PAD is situated within the CAGCS planning area, and due to serious concerns relating to potential impacts to pronghorn associated with this development proposal, the Department requests that the County give consideration to the following requests and recommendations relating to clustered development, roadway proliferation, and recreational access to public lands:

1. Clustered Development

The Department is supportive of the concept of “clustered development” in association with the existing network of roads already in place on the Ranch. When compared to development footprint associated with the dispersed placement of 25,000~ homes previously approved in the 2000 Development Agreement, the decreased development footprint associated with a maximum of 6,500 clustered residential units (indicated on page 28 of the PAD) is certainly a preferred alternative. By reducing the number of residential units, and siting them in clusters with greater densities rather than dispersed across the landscape, this approach to development will reduce direct habitat loss, reduce both direct and indirect habitat degradation effects, and contribute to the maintenance of the larger, unfragmented habitat blocks upon which pronghorn antelope and other grassland obligate species depend.

Yavapai Ranch Roads Reciprocal Easements Project – WSR/BE



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000

(602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGERVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
DIRECTOR
 LARRY D. VOYLES
DEPUTY DIRECTORS
 GARY R. NOVATIER
 BOB BROSCHEID



However, there appears to be a discrepancy in the number of residential units that will actually be permitted for construction in the Yavapai Ranch PAD. In the memo distributed to reviewing agencies by the County on August 16th, 2012, it indicates that the change from an RCU-2A to a PAD zoning district will allow for a *maximum of 12,500 residential units.*

Clustered Development Recommendations:

Terms and Conditions Request relating to the Maximum Number of Residential Units:

The Department advocates that the County establish 6,500 residential units as the maximum number of residences to be constructed within the residential districts of Yavapai Ranch PAD, as stated by the project proponent on page 28 of the PAD, and that this development threshold be incorporated as a term or condition associated with approval of this zoning change request and the associated PAD.

Antelope, Longview, and Homestead Ranches and Grassland Airpark Residential Districts:

This portion of the PAD is characterized by grasslands and mixed grassland ecotypes. As such, and depending upon its degree of openness, has value in varying degrees as habitat for pronghorn antelope. In decreasing habitat value to pronghorn, as a function of decreasing lot size and increasing residential densities, the grasslands resources of the Yavapai Ranch will impacted as follows:

- The 9700 acres that makes up the Antelope Ranch Residential District is planned for 90 residential units, at a density of roughly one residence per 107 acres.
- The 4520 acres that makes up the Longview Ranches Residential District is planned for 170 residential units, at a density of roughly one residence per 26 acres.
- The 5900 acres that makes up the Grassland Airpark Residential District is planned for 350 residential units, at a density of roughly one residence per 16.8 acres.
- The 4480 acres that makes up the Homestead Ranch Residential District is planned for 850 residential units, at a density of roughly one residence per 5.3 acres.

Pronghorn antelope are grassland obligates that rely on vast open spaces in which they can utilize their keen eyesight in combination with their speed and agility, to detect predators and avoid predation. Pronghorn are sensitive to roads, fences, and development which may effectively function as barriers to their seasonal migration to key habitat components spatially distributed throughout their native range, and utilized at different times on an annual basis in association with their life and reproductive cycles. Additionally, pronghorn are sensitive to noise, and the presence of people, pets, and associated activity.



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000
 (602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
 COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGERVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
 DIRECTOR
 LARRY D. VOYLES
 DEPUTY DIRECTORS
 GARY R. HOVATTER
 BOB BROSCHEID



It is difficult to quantify the impacts to pronghorn associated with the development proposed for the grassland component of the Ranch, but based upon on the professional judgment and extensive experience of those personnel within the Department that manage this species, and in consideration of research findings derived from a pronghorn habitat suitability assessment recently conducted by the Department in cooperation with The Nature Conservancy - as well as the Central Arizona Grassland Conservation Strategy, it is clear that the resident pronghorn population will be adversely impacted by this proposed development. The severity of that adverse impact may be great.

Antelope, Longview, Homestead and Grassland Recommendations and Request:

Recommendation:

To preserve the integrity of the grassland habitat upon which resident pronghorn rely, *to the maximum extent possible*, the Department recommends that development of the Ranch’s grasslands be as minimal, and as tightly clustered as possible along the margins of the grasslands - and by so doing, preserve the largest and most unfragmented expanse of contiguous and functional core grassland habitat for pronghorn as possible.

Terms and Conditions Request relating to Fencing:

The Department requests that as a term or condition of approval for this proposed development, the County require that wire fencing on the Ranch be minimized *to the greatest extent possible*. For those locations where wire fencing is necessary, the Department requests that the project proponent require that fencing erected by residents will conform to the Department’s pronghorn-friendly fence detail that follows:

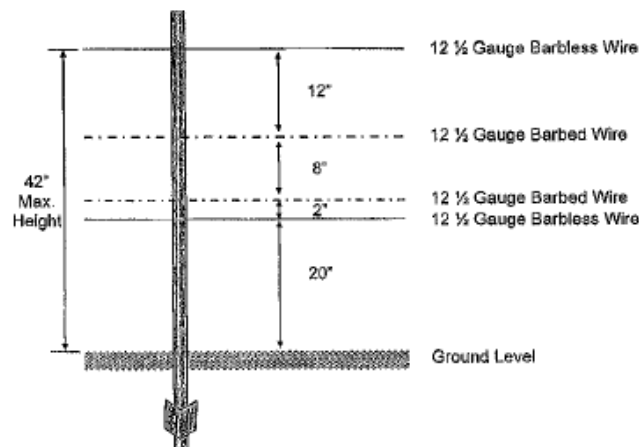


Figure 9: Standard ROW fence in pronghorn habitat
 AGFD Fencing Guidelines June 2006



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000
 (602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
 COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGERVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
 DIRECTOR
 LARRY D. VOYLES
 DEPUTY DIRECTORS
 GARY R. HOWATTEY
 BOB BROSCHEID



The Department's recommended maximum height is 42 inches and the bottom should be smooth wire 18 to 20 inches off the ground to allow pronghorn and deer fawns to go under. Anything less than 16 inches off the ground becomes a significant barrier to the passage of pronghorn. The top wire should be at least 12 inches above the second wire to minimize chances of deer or elk becoming entangled when they jump the fence.

The Ponderosa and Juniper Mountain Ranch Residential Districts:

This portion of the PAD is characterized by pinyon-juniper woodland and ponderosa pine ecotypes, and as such, is important habitat for mule deer, elk, and other wildlife species.

- The 9300 acres that makes up The Ponderosa Residential District is planned for 1755 residential units, at a density of roughly one residence per 5.3 acres.
- The 17400 acres that makes up Juniper Mountain Ranch Residential District is planned for 3285 residential units, at a density of roughly one residence per 5.3 acres.

Ponderosa and Juniper Mountain Ranch Residential District Recommendations:

At a density of 1 residential unit per 5.3 acres for the 26700 acres of wooded lands outlined above, historic hunting opportunities for deer, elk javelina and other species will no longer be possible on this portion of the Ranch due to the provisions of ARS 17-309, which prohibits the discharge of a firearm while taking wildlife within one-fourth mile of an occupied farmhouse or other residence, cabin, lodge or building without permission of the owner or resident. While the Department does not have any specific recommendations relating to this issue, it should be noted that this will result in decreased hunting and tourism-related revenues for both the County and the Department, and it is this source of revenue that is utilized by the Department to subsidize wildlife management in support of its Trust Responsibility.

2. Minimized Roadway Proliferation

If residential development must occur upon the Yavapai Ranch, the Department favors the approach outlined in the PAD, wherein the proliferation of roads will be minimized, by adhering to the greatest extent possible, to the use of the existing roadway infrastructure already in place upon the Ranch. Research has demonstrated that roadways serve as functional barriers to pronghorn movement within their historical range, and with the proliferation of new roads, habitat fragmentation occurs - resulting in increasingly smaller habitat patches, providing less viable habitat to species such as pronghorn antelope that are more sensitive to barriers and habitat fragmentation. By making use of existing roads, the barrier effect and resultant habitat fragmentation associated with roadway development will be lessened.



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000

(602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
 COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
 DIRECTOR
 LARRY D. VOYLES
 DEPUTY DIRECTORS
 GARY R. HOWATTER
 BOB BROSCHEID



Minimized Roadway Proliferation Terms and Conditions Request:

As a term or condition for approval of the variance request, amendment requests and PAD proposal, the Department advocates that the County require the Ranch to submit detailed development plans for any and all roadway development in the PAD, and in partnership with the Department, review such plans – holding the project proponent accountable to the stated standard for roadway development found in the fourth paragraph of the Letter of Intent for the PAD dated August 9, 2012, which states, “Lots will be anchored around the existing road network, and home sites will be consolidated at or very near the existing infrastructure.”

3. Recreational Access to Public Lands

As the economy recovers and construction of this development unfolds, at full build-out this PAD will create a landscape with housing densities of one residential unit per 5.3 acres on 27,550 acres of the PAD, and an additional 5900 acres populated with one residence per 16.8 acres. Consequently, the Department has concerns relating to how recreational access to public lands of the Prescott National Forest (Forest) will be maintained.

This issue was briefly addressed in the 2000 Development Agreement, wherein page 5 of the document states, *“The Yavapai Ranch intends to provide appropriate access for non-commercial purposes across the Property to public lands at future specified points. This access will be via permanently dedicated easements and/or tracts that conform to US Forest Service access plans or requirements, and/or the Yavapai County Master Trails Plan. Dedications of such easements will be made to the County during the platting of each development unit within the PAD. At a minimum, the trail known as Military Trail No. 1 on its current alignment or an acceptable alternative shall be or remain open to non-motorized public use in Section 1, Township 19N, Range 6W, and potentially Section 6, Township 19N, Range 5W”.*

When considering the scope of Forest lands that will potentially experience impaired recreational access, the Department does not feel that the expressed commitment to maintain limited, non-motorized recreational access to the roughly 2 miles of trail referenced above, adequately addresses the issue of recreational access. As it is currently worded, the Development Agreement provides no binding assurances of any additional roads remaining open to provide the public with appropriate access to the resources and recreational opportunities upon the public lands that will impacted by this proposed development. Consequently, the Department has concerns relating to the ability of its constituents to enjoy continued recreational opportunities upon the public lands of the Forest to which they are entitled. In the absence of overt plans identifying the routes whereby the public will be assured continued access to the recreational opportunities they currently enjoy upon the Forest, the Department requests that consideration be given to the following recommendation and requests relating to this issue:



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000

(602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR

JANICE K. BREWER

COMMISSIONERS

CHAIRMAN, ROBERT R. WOODHOUSE, ROLL

NORMAN W. FREEMAN, CHINO VALLEY

JACK F. HUSTED, SPRINGVILLE

J.W. HARRIS, TUCSON

JENNIFER L. MARTIN, PHOENIX

DIRECTOR

LARRY D. VOYLES

DEPUTY DIRECTORS

GARY R. HOVATTER

BOB BROSCHERD



Recreational Access Terms and Conditions Request:

To remediate the threat to the public's continued ability to recreate upon these public lands, the Department requests that Yavapai County, as a term or condition for approval of the Variance Request, Minor Plan Amendment Request and Approval of this PAD, require the project proponent to submit the following, prior to permitting or approval:

- A detailed map with appropriate legal assurances, identifying all roads that *shall* remain open to provide continued public access to public lands of the Prescott National Forest.
- Additionally, that the map describe above shall be developed cooperatively by Yavapai County, the Prescott National Forest, the Arizona Game and Fish Department and the project proponent - to ensure that the needs of the entities described herein are met, while at the same time ensuring that the public does not lose the benefit of access to public lands as a consequence of this proposed development.

Recreational Access Permitting Recommendation:

In the absence of these stated provisions, and given the magnitude of foreseeable impacts to members of the public desiring to recreate upon the Forest in the future, the Department recommends that the County give consideration to reviewing and approving this variance and minor plan amendment request as a Major Plan Amendment - with the full degree of public scoping provided for in the Major Plan Amendment process.

If you have any questions or concerns relating to the requests or recommendations provided in this letter, please feel free to contact me at your convenience by e-mail at tbuhr@azgfd.gov or via phone at 928-692-7700 ext. 2305. I thank you for your time and consideration in this matter.

Sincerely,

Trevor L. Buhr
 Habitat Program Manager, Region 3
 Arizona Game and Fish Department

TLB:tb

Cc: Tom Finley, Supervisor, Region 3
 Laura Canaca, Project Evaluation Program Supervisor, Habitat Branch



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
 PHOENIX, AZ 85086-5000

(602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
 JANICE K. BREWER
 COMMISSIONERS
 CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
 NORMAN W. FREEMAN, CHINO VALLEY
 JACK F. HUSTED, SPRINGVILLE
 J.W. HARRIS, TUCSON
 JENNIFER L. MARTIN, PHOENIX
 DIRECTOR
 LARRY D. VOYLES
 DEPUTY DIRECTORS
 GARY R. HOWATTEY
 BOB BROSCHEID



October 02, 2012

Tammy DeWitt, Senior Planner
 Yavapai County Development Services
 500 S. Marina St.
 Prescott, AZ 86303

Re: Additional Comments, Yavapai Ranch ZMC H12066, Minor General Plan Amendment H12067

Dear Ms. DeWitt and Members of the Yavapai County Planning and Zoning Commission,

The Yavapai Ranch (Ranch) has a long history of working closely with the Arizona Game and Fish Department (Department) to improve wildlife habitat on the Ranch, and has cooperated with the Department to preserve access on the Ranch for the recreating public. Additionally, the Ranch has been proactive in partnering with the Department and other agencies to administer a Coordinated Resource Management Plan for the Ranch that has been beneficial to rangeland resources, wildlife and wildlife habitat.

Following submission to Yavapai County (County) of the comment letter dated September 27, 2012, the Department met with Mr. Ruskin to discuss this proposal, as well as the comments submitted by the Department. At this meeting, Mr. Ruskin clarified his intentions for this development. At this time, the Department wishes to clarify the motivation behind the comments, requests and recommendations provided earlier to the County. In this regard, The Department is primarily concerned with the following: 1. Maintaining quality habitat for wildlife. 2. Maintaining functional connectivity for wildlife upon the landscape. 3. Preserving recreational access for its constituents.

Toward this end:

- The Department is supportive of Clustered Development designs that maximize wildlife habitats that are of a quality suitable for long-term of healthy wildlife populations.
- The Department is convinced that Clustered Development can be a superior approach to development, particularly in contrast to the effects of uncontrolled "wildcat" lot splits, and that if sited properly, it has the potential to preserve quality habitat and functional connectivity between the major habitat blocks and key components necessary for long-term viability of wildlife populations.
- Based upon the long-standing history of cooperation between the Department and the Ranch, the Department looks forward to future collaboration between the Ranch and the Department to produce a recreational access plan that is mutually agreeable to the Department and the project proponent.



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

5000 W. CAREFREE HIGHWAY
PHOENIX, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV

REGION III, 5325 N. STOCKTON HILL ROAD, KINGMAN, AZ 86409

GOVERNOR
JANICE K. BREWER
COMMISSIONERS
CHAIRMAN, ROBERT R. WOODHOUSE, ROLL
NORMAN W. FREEMAN, CHINO VALLEY
JACK F. HUSTED, SPRINGVILLE
J.W. HARRIS, TUCSON
JENNIFER L. MARTIN, PHOENIX
DIRECTOR
LARRY D. VOYLES
DEPUTY DIRECTORS
GARY R. HOWATER
BOB BROSCHEID



If you have any questions relating to the provisions of this letter, please feel free to contact me at your convenience by e-mail at tbuhr@azgfd.gov or via phone at 928-692-7700 ext. 2305. Thank you again for your time and consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Trevor L. Buhr".

Trevor L. Buhr
Habitat Program Manager, Region 3
Arizona Game and Fish Department

TLB:tb

Cc: Tom Finley, Supervisor, Region 3
Laura Canaca, Project Evaluation Program Supervisor, Habitat Branch

APPENDIX G – Glossary of terms and definitions**Wildlife, Fish, and Rare Plant Specialist Report:**

The purpose of this report is to document the effects of the proposed action and the alternatives on plant and terrestrial animal species that have the following status:

Federally listed under the Endangered Species Act of 1973 (ESA) –**Critical habitat**

Specific geographic areas, whether occupied by a listed species or not, that are essential for its conservation and that have been formally designated by rule published in the Federal Register.

Endangered species

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

Threatened species

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

Proposed species

A species of animal or plant that is proposed in the Federal Register to be listed under section 4 of the Endangered Species Act

Candidate species

Candidates are those species for which the Fish and Wildlife Service has enough information on file to propose listing as threatened or endangered, but listing has been precluded by other agency priorities.

Protected under the Bald and Golden Eagle Protection Act 1940:

This report assesses if the project is in compliance with the Eagle Act and determines whether the project will “take” an eagle, bald or golden.

Migratory birds -

In accordance with the Migratory Bird Treaty Act (MBTA), EO (Executive Order) 13186, and the Memorandum of Understanding (MOU) signed December 2008, this project was evaluated for its effects on migratory birds.

Regional Forester’s Sensitive (FSM 2670.5) –**Sensitive Species**

Those plant and animal species identified by a regional forester for which population viability is a concern, as evidenced by:

- a. Significant current or predicted downward trends in population numbers or density.
- b. Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

Prescott National Forest Management Indicator Species (MIS) –**Management Indicator Species**

These are species that were identified to monitor the conditions of the environment (PNF LRMP 1986).