

SUMMARY
BIOLOGICAL OPINION FOR
FIVE GRAZING ALLOTMENTS IN THE VICINITY OF MO, ARIZONA

Date of opinion: December 3, 1997

Action agency: Bureau of Land Management

Project: Five grazing allotments in the vicinity of Ajo

Location: Maricopa and Pima counties

Listed species affected: Endangered Sonoran pronghorn (*Antilocapra americana sonoriensis*)

Biological opinion: The proposed action is unlikely to jeopardize the continued existence of the Sonoran pronghorn

Incidental take statement:

Anticipated take: *Exceeding this level may require reiniriarion of formal consultation.*

Take can be expected to occur in the form of harassment and death due to grazing management activities. The following level of take may be expected to occur for every 15 years of project implementation: 1) Take in the form of harassment that is likely to injure (harm) one Sonoran pronghorn, and; 2) Take in the form of the death of one Sonoran pronghorn.

Reasonable and prudent measures: *Implementation of these measures through the terms and conditions is mandatory.*

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take:

- 1) Measures shall be implemented to minimize impacts of the BLM's grazing management activities on Sonoran pronghorn.
- 2) Measures shall be implemented to minimize habitat loss, degradation, and fragmentation of Sonoran pronghorn habitat.

Terms and conditions: *Terms and conditions implement reasonable and prudent measures and are mandatory requirements.*

To implement Reasonable and Prudent Measure number 1:

- 1) During any major maintenance work that requires heavy machinery or major activity, a

biological monitor will arrive at the maintenance site at least one hour before the machinery arrives or major activity takes place. If pronghorn are observed, maintenance will be suspended until the animals move off on their own. If necessary, maintenance will be suspended or the location or timing of work will be altered depending on the proximity of pronghorn to the project.

To implement Reasonable and Prudent measure number 2:

1) The BLM will monitor vegetation of sample washes within the different allotments for downward trends in canopy cover of shrubs and trees within a five year period for the life of the project. If there is a downward trend, the BLM will discuss options with the Service, including reinitiation of formal consultation.

2) A report of the results of all monitoring efforts, including complete and accurate records of all incidental take that occurred during the course of the actions described herein, will be submitted to the Service on a yearly basis unless where otherwise directed. This report will also describe how the terms and conditions of all Reasonable and Prudent measures in this incidental take statement were implemented.

Conservation recommendations: *Implementation of conservation recommendations is discretionary.*

1) Develop allotment management plans for all allotment within this resource area.

2) Monitor Sonoran pronghorn use (in particular, interactions of cattle and pronghorn, and pronghorn and fences) within Cameron, Coyote Flat, Sentinel, and Why Allotments.

The Service concurs with the ELM's finding that the proposed action may affect but is not likely to adversely affect the lesser long-nosed bat with the following condition:

- o Periodic studies on recruitment levels of saguaros in areas most likely to serve as potential foraging habitat are conducted. If data show a decline in recruitment levels, the BLM must discuss options with the Service including entering into formal consultation.

The Service also concurs with the BLM's finding that the proposed action may affect but is not likely to adversely affect the cactus ferruginous pygmy-owl with the following conditions:

- o Two years of surveys for cactus ferruginous pygmy-owl presence in suitable habitat must be completed before any maintenance or other work is conducted, or
- o Maintenance or other work must be done outside of the breeding period for cactus ferruginous pygmy-owl (September through May).
- o No additional ground clearing is to occur in either suitable or potential habitat except as approved through the National Environmental Protection Act and the Endangered Species Act (ESA).

It is the Service's opinion that the proposed grazing activities within the five allotments are not likely to jeopardize the continued existence of Sonoran pronghorn.

CONSULTATION HISTORY

Informal Section 7 consultation on this project began January 31, 1994, when several documents regarding information on livestock grazing and Sonoran pronghorn were provided by the BLM to the Service. An October 2, 1995, request from the BLM for the Service's concurrence with determinations that the proposed grazing activities "may affect but was not likely to adversely affect" Sonoran pronghorn or lesser long-nosed bat was received on October 4, 1995.

Additionally, a conferencing determination of "not likely to jeopardize the continued existence" was made for the proposed endangered cactus ferruginous pygmy-owl. On April 15, 1996, the Service received an April 12, 1996, request from the BLM to formally consult on the effects of the grazing activities on Sonoran pronghorn and lesser long-nosed bat. On February 25, 1997, the Service received additional information from the BLM regarding livestock impacts on saguaro cactus (*Carnegiea gigantea*) habitat. On March 10, 1997, the Service published a final rule listing the pygmy-owl as endangered under the Act (62 FR 10730).

In a memorandum to the Service dated June 23, 1997, the ELM offered new management direction for the cactus ferruginous pygmy-owl in areas covered by the Lower Gila South Resource Management Plan and the Lower Gila North Management Framework Plan. This new direction includes specific conservation measures to be implemented by the ELM in Arizona.

On October 15, 1997, the ELM sent an e-mail clarifying the determinations of effects of the project on the various species. On November 1, 1997, the Service received a memorandum estimating forage use at full preference on four of the allotments from the BLM.

BIOLOGICAL OPINION

DESCRIPTION OF PROPOSED ACTION

The five BLM allotments addressed in this consultation include the Cameron, Childs, Coyote Flat, Sentinel, and the Why allotments. The distribution of the Sonoran pronghorn, lesser long-nosed bat, and cactus ferruginous pygmy-owl overlap BLM lands within the Lower Gila Resource Area in the five allotments listed above.

The Sentinel Allotment is south of Interstate 8 and is separated from the other four allotments by the Barry M. Goldwater Range (BMGR), which forms the southern boundary of the allotment. The Cameron and Childs allotments have northern boundaries with the BMGR Range. These allotments, and the Coyote Flat and Why allotments include all public lands surrounding Ajo and Why, Arizona. The Cameron Allotment extends south to the boundary with Organ Pipe Cactus National Monument. The western boundary of the Childs and Cameron allotments extends to Cabeza Prieta National Wildlife Refuge (CPNWR) and a portion of the BMGR. The eastern border of the Childs, Cameron, Coyote Flat, and Why allotments abuts the Papago Indian Reservation.

The vegetation in the area is characterized by two distinct communities: the Creosote-Bursage Series (Lower Colorado Valley subdivision) and the Palo Verde-Mixed Cacti Series (Arizona Uplands subdivision) of the Sonoran Desert biome. The first series is characterized by small woody shrubs dominated by creosote bush (*La rrea tridentata*) and white bursage (*Ambrosia dumosa*). When favorable moisture conditions are present, usually in Spring, numerous annual forbs and grasses are present. The second series is highly variable, complex, and dominated by small-leaved trees, shrubs, and cacti such as saguaro and organ pipe cactus (*Stenocereus thurberi*).

According to the BLM, livestock use within the five allotments has been relatively low for the past ten years. The effects of stocking the allotments at any level had not been analyzed. The Cameron, Coyote Flat, Sentinel, and Why allotments are within the distribution of Sonoran pronghorn. The Childs Allotment contains lesser long-nosed bat habitat. All allotments, except Sentinel, contain potential cactus ferruginous pygmy-owl habitat. In southern Arizona, livestock forage use during the late winter/early spring period is typically of annual forage. Depending upon climatic conditions, May-June use is mainly on perennial forage (trees, shrubs, grasses, and forbs) supplemented by annuals. Dry annuals will be used in all seasons as available. Late summer forage use is derived primarily from the foliage and beans of trees and shrubs (paloverde (*Cercidium sp.*), catclaw (*Acacia sp.*), and mesquite (*Prosopis sp.*)).

The five allotments are classified as perennial/ephemeral, which means they have a base allocation (preference) of animal unit months (the amount of forage required to feed a cow with a calf for one month) for year-long operation. Perennial/ephemeral allotments are generally cow-calf operations which may also graze steers during years of favorable ephemeral forage growth. Perennial preference (base allocation) was based on historic use and mutual agreement with the permittee. Preference for the Cameron (2526 Animal Unit Months; 2 head per section), Childs (3802 AUM; 2 head per section), Coyote Flat (456 AUM; 2.2 head per section) and Why (452 AUM; 2.4 head per section) allotments was set in 1973. Preference (360 AUM; 0.94 head per section) on the Sentinel Allotment was set in 1981. These allotments have no formal grazing systems in place and the BLM does not anticipate preparing allotment management plans for them.

The ephemeral part of the classification recognizes that the allotments have the potential to provide significant forage during wet years in the form of annual vegetation, thereby giving the permittee the option to request livestock use of this seasonally abundant annual production. Additional livestock grazing is authorized for ephemeral use under a supplemental grazing license when sufficient forage is present and such use does not conflict with other resources or damage the perennial vegetation base. There are no set Animal Unit Months for ephemeral use. Ephemeral permits are considered upon request and dealt with separately from the perennial permit. The ephemeral stocking rate is based on the amount of annual vegetation present at the time of the request.

According to the guidelines for permitting ephemeral grazing, the following criteria have to be met:

- 1) Presence of ephemeral vegetation in draws, washes, and under shrubs.
- 2) Sufficient surface and subsurface soil moisture for continued plant growth exists.
- 3) Ephemeral forage has grown to useable levels by the time grazing begins.
- 4) Enough serviceable waters to provide good grazing distribution on the allotment for the number of livestock to be authorized.
- 5) All range improvements and livestock facilities needed for proper administration of authorized grazing use are properly maintained.
- 6) The level of grazing use allows for sufficient annual vegetation to remain on site to satisfy other resource concerns. i.e. watershed, wildlife, wild horses and burros.

If there are known resource conflicts with livestock grazing (such as habitat for special status species) ephemeral authorizations will be limited to a maximum of 30 days per authorization (See Appendix 4 of the BE for more details).

The Cameron, Childs, and Sentinel allotments are considered Maintain allotments (allotments less intensively managed due to their low resource potential, lack of conflicts, or other considerations). The Coyote Flat and Why allotments are Custodial allotments (allotments for which only limited management occurs). Monitoring of the Coyote Flat and Why allotments has not occurred. Of the three allotments with monitoring data available, the

permittees have not run their full preference for a sustained period of time. According to the BLM, monitoring data do not show overutilization of the vegetation and no change in vegetative composition has been noted on any of the allotments since establishment of the study plots. The BLM estimates that if allotments were stocked at full preference levels, utilization rates could approach 40 percent. The BLM will be establishing utilization transects on the Coyote Flat and Why allotments and utilization transects on the Sentinel and Cameron allotments will be read annually.

In the summer of 1997, ten-year permits were issued for these five allotments as mandated under 43 CFR 4130.2(d). At the start of each grazing season, the permittees determine how much of their preference to activate. Because the amount of activated preference may vary on a yearly basis and is due to a number of factors, it is difficult to predict future livestock use on the allotments. Regardless of past use, the operator may activate a portion or all of his preference every year and, in addition, may activate ephemeral use in years in which conditions permit the emergence of abundant annual forage. The Childs Allotment has utilized full preference twice in 20 years; the Cameron Allotment once in 25 years; the Sentinel allotment four times in 15 years; and the Why Allotment five times in 24 years. The operator of the Coyote Flat Allotment has licensed full preference every year except one for the past 24 years.

On the Cameron Allotment, the permittee wants to redevelop an existing, non-functioning range improvement to supplement a seasonal earthen tank. The redeveloped water, referred to as "New Well," is proposed to consist of a submersible pump, a 10,000-gallon storage tank, approximately three miles of plastic PVC pipe, and a water trough. Water will be pumped to the storage tank at the well site. The PVC pipe will connect the storage tank to a water trough several miles away. The pipeline will be installed adjacent to an existing road in order to decrease surface disturbance. This part of the project is intended to replace or supplement the earthen reservoir referred to as "Bob's Tank." No additional livestock improvements are anticipated for the remaining allotments for the next several years.

Maintenance of existing improvements consists of replacing or repairing pipelines, pumps, storage tanks, fencelines, refurbishing or redrilling wells, and excavating silted-in tanks. All fences being replaced or repaired will be made to be more pronghorn passable by including a smooth bottom strand placed 16" off the ground. Fencelines, pipelines, and above-ground storage tanks will be inspected annually and repaired or replaced as necessary. Maintenance of pumps will occur approximately every two years and will range from servicing motors to redrilling new wells. Dirt tanks will be excavated approximately every 10 years with heavy equipment.

STATUS OF THE SPECIES

The Service considers Sonoran pronghorn as a distinct subspecies of American pronghorn. It is distinguished from other subspecies by its small size, pale coloration, and distinctive cranial features (Goldman 1945). The Sonoran pronghorn was listed as an endangered species on March 11, 1967. In Arizona, the Sonoran pronghorn occurs on the CPNWR, EMOR, and Organ Pipe

Cactus National Monument, from Highway 85 west to the Cabeza Prieta Mountains and from approximately the Wellton-Mohawk Canal south to the Mexican border (Snow 1994, Service 1982). Recent unconfirmed sightings suggest some animals may occur on the Tohono O'odham Reservation and in the Lechuguilla Desert, west of the Cabeza Prieta Mountains, as well (Service 1994). In Sonora, Mexico, the Sonoran pronghorn is known from near Sonoyta south to the Puerto Penasco area, east to the sandy plains around Eahia de San Jorge, and west into flats surrounding the Sierra de Pinacate (Service 1994). The current range of the Sonoran pronghorn is estimated at more than 4.9 million acres (Service 1994). Historically, the range of the Sonoran pronghorn may have been much larger, extending further west, possibly into the Yuma Desert, Imperial Valley of California, and northeastern Baja California; to north of the Gila River; east to the Eaboquivari Mountains; and south to Eahia Kino or Guaymas (Service 1994, Hall and Kelson 1959, Hoffmeister 1986). However, precise determination of the historic range is precluded by a lack of specimens and the largely anecdotal nature of historic records.

Eased on survey data collected from 1992 to 1994, an estimated 125 to 256 Sonoran pronghorn occur in Arizona and 179 to 313 occur in Sonora (Snow 1994, Service 1994). Data are insufficient to determine trends in population size (Service 1994). Current estimates for the population range from 130 to 160 animals in Arizona (J. Hervert, Arizona Game and Fish Department (AGED), pers. comm. 1997). Pronghorn are typically found in broad, alluvial valleys. They inhabit creosote and bursage vegetation communities year round and more diverse vegetation associations from late winter to early fall (Service 1994). Hughes and Smith (1990) found Sonoran pronghorn in areas of approximately 11 percent perennial cover.

The diet of Sonoran pronghorn consists of a variety of plant materials, particularly cacti, such as fruits of Jrrping cholla (*Opuntia fulgida*), herbaceous species such as plantain (*Plantago insularis*), and filaree (*Erodium texanum*), a variety of shrubs, trees, and grasses (Hughes and Smith 1990, Monson 1968, Carr 1970). The importance of the availability of water sources to Sonoran pronghorn is unknown. Hughes and Smith (1990) found no significant difference in distance of pronghorn localities to water between the wet and dry seasons, implying that they do not congregate near water. Monson (1968) found no evidence that pronghorn drink water, even when it is available. Wright and deVos (1986) have documented Sonoran pronghorn at water sources on numerous occasions. AGED have also documented numerous instances of Sonoran pronghorn drinking water. Sonoran pronghorn have also been documented by AGED interacting with coyotes at a bomb crater filled with water on the EMUR. Encounters observed include passive reactions of both species and dominance on the part of Sonoran pronghorn and retreat on the part of the coyote.

Pronghorn become sexually mature at 12 to 16 months. Parturition occurs from February through May and animals rut from July to September (Kitchen and O'Gara 1982, Service 1994). Mean home range size is 56.1 square kilometers for males and 45.2 square kilometers for females (deVos 1990). At the onset of the hot, dry period in late spring, individual animals move distances of up to 50 km from lower, sparsely vegetated valleys to areas of more complex vegetation. With the Onset of the summer rains, animals move back to areas with low vegetation

diversity (deVos 1990).

Review of the literature suggests that historic population declines and extirpation from portions of its historic range include unregulated hunting in historic times, current illegal hunting in Sonora (Service 1994), degradation of habitat by livestock grazing, disturbance of habitat resulting from ground-based activities, disturbance of animals caused by overflights, loss of riparian habitat on the Gila River and the Rio Sonoyta that may have been important as foraging or watering areas, and conversion of habitat to agriculture, particularly in the Gila River Valley and Imperial Valley, California (deVos 1990, Service 1994, 1982). This subspecies lives in an extremely harsh desert environment that is subject to extended drought. As a result, the viability of the species is sensitive to environmental and demographic stochastic events.

A population viability analysis conducted with the program VORTEX suggested that three factors are especially important in determining population persistence. The variability in population size increased, and in some cases, populations went extinct if any of the following three variables were included in a simulation: five catastrophic events, such as drought, occurring in 100 years; annual mortality of females in excess of 60 percent; or female fawn mortality in excess of 60 percent (deVos 1995).

The Service finalized a recovery plan for the Sonoran pronghorn in 1982. The recovery objective was defined as “maintain existing population numbers and distribution of Sonoran pronghorn while developing techniques which will result in a U.S. population of 300 animals (average for a five-year period) or numbers determined feasible for the habitat.’ However, the recovery plan is currently being revised and this target number may change. The draft plan calls for downlisting the Sonoran pronghorn to threatened when the U.S. population reaches at least 500 animals (average for a five-year period), numbers are determined feasible for the habitat, or numbers are determined adequate to sustain the population through time (Service 1994).

Additional information on the taxonomy, range, distribution, biology, and threats to the Sonoran pronghorn can be found in Service (1982, 1994), Wright and deVos (1986), Hoffmeister (1986), Meams (1907), Hughes (1991), Edwards and Ohmart (1981), deVos (1990), and Cockrum (1981).

ENVIRONMENTAL BASELINE

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

As late as 1994, the estimated population of Sonoran pronghorn using distance sampling methods

was more than 200 individuals. The results of an aerial survey, conducted in December 1996, suggest that the most reliable estimate (based on capture-recapture estimates using collared individuals) of the current population is 130-160 individuals (J. Hervert, pers. comm. 1997). The decrease in the population may be attributable to periods of drought in 1994 (November), 1995 (summer), and 1996 (winter). Available food was not as abundant, such low food availability forces pronghorn to use habitat where they appear to be vulnerable to predation, and lack of water may also be a factor.

Recent drought conditions have had severe impacts on the Sonoran pronghorn population in the United States (Hervert 1996). In 1995, there was abundant rainfall in the Spring. Productivity of Sonoran pronghorn was between 1 and 1.4 fawns per doe. In July, the ratio of fawns to does was as high as 50/100. However, as drought conditions set in from July to December most fawns died. Recruitment was 12 fawns per 100 does.

Drought conditions continued in 1996. Productivity was only 0.33 fawns per doe. The fawns that were produced died very quickly. The AGED could not detect a single fawn surviving in the population in the United States in 1996; recruitment was zero. At a recent population viability analysis workshop conducted for the Sonoran pronghorn, recruitment at a level of 35 fawns per 100 does was deemed to be necessary for the subspecies to persist (Hervert 1996).

Adult mortality has been very high in the winter drought periods. Overall, of the 22 Sonoran pronghorn that were collared in the last few years, predation may account for 10 and possibly more of the known mortalities and insufficient evidence resulted in the rest being labeled as "cause unknown." No collared pronghorn mortalities were documented during the height of the drought season. Capture myopathy may have played a role in up to four of the mortalities (J. HERVERT *in litt.* 1997). Where possible (the majority of documented mortalities) bone marrow condition was assessed. Only one specimen was determined to be in poor to fair condition while all others were determined to be in good condition. No evidence of predation of pronghorn has been documented near water sources (J. Hervert, AGED, pers. comm. 1997).

The ELM stated that, of the known sightings or telemetry locations plotted from 1968 to 1988, all but six occurred on lands other than those administered by the ELM. They also stated that Sonoran pronghorn do not appear to be expanding their distribution eastward onto ELM lands or Organ Pipe Cactus National Monument. However, the western and southern boundaries of the BLM lands are fenced by the neighboring landowners (CPNWR and Organ Pipe Cactus National Monument) to restrict livestock use from lands they administer. Inspection of maps of Sonoran pronghorn location records suggest that the fences may be a factor in preventing Sonoran pronghorn from expanding eastward into the project area. Thus, cattle grazing and the fencing associated with it may be a factor regarding the distribution of the Sonoran pronghorn in the area. The action area does contain Sonoran pronghorn habitat.

On April 17, 1996, the Service issued a biological opinion to the Marine Corps for existing and proposed activities by the Marine Corps Air Station (Yuma) in the Arizona portion of the Yuma

Training Range Complex. This biological opinion addressed activities in the western portion of the BMGR and west of the Gila Bend segment. The Service found that the activities were not likely to jeopardize the Sonoran pronghorn. However, take of Sonoran pronghorn was anticipated and several reasonable and prudent measures with several implementing terms and conditions were provided for that species and others. In addition, several conservation recommendations were provided. On August 27, 1997, the Service issued a biological opinion to the U.S. Air Force for proposed training activities conducted on the eastern portion of the BMGR (Gila Bend segment). The Service found that the activities were not likely to jeopardize the Sonoran pronghorn. However, take of Sonoran pronghorn was anticipated and several reasonable and prudent measures with several implementing terms and conditions were provided for that species. In addition, several conservation recommendations were provided.

EFFECTS OF THE ACTION

According to the BLM, cattle do not use allotments uniformly. Due to the foraging behavior of cattle, vegetation use is heaviest around water sources and tapers off to the maximum distance the animals will travel away from water. The heaviest livestock use occurs within one-quarter mile of water and is typically considered, by the ELM, a “sacrifice area.” According to the BLM, a distance of two miles or greater is generally considered outside the influence of cattle use. The amount of each of the five allotments in each of these zones is as below in Table I.

Table 1. *Percentage of allotment within sacrifice areas and the influence of cattle use.*

<u>Allotment</u>	<u>% In Sacrifice Areas</u>	<u>% In Influence of Cattle Use</u>
Cameron	2.7	59.6
Childs	0.04	18.0
Coyote Flat	6.9	93.1
Sentinel	3.4	96.7
Why	6.2	93.8

According to the ELM, utilization has been monitored on the Sentinel and Cameron allotments since 1989, and the Childs Allotment since 1992. Utilization studies have shown little to no use for all but the Sentinel Allotment. The mean percent utilization of key plant species of study sites on those three allotments ranged from 0 to 5.7. In 1993-94, the figures ranged from 29.4-54.0 percent.

The ELM presented 1980-81 data regarding range condition and apparent trend for each of the five allotments. In general, the five allotments were primarily in fair to good condition, with a smaller percentage of the allotments in poor condition. The apparent trend for each of the five allotments was essentially static. It is believed that such conditions are adequate to support pronghorn. Preliminary data from the ELM and AGFD is that there is minimal dietary overlap between pronghorn and cattle. Because of this, the amount of forage on allotments and the likely utilization levels, adequate forage should be available for pronghorn. Pronghorn are not known to have any significant behavioral, spatial, or disease conflicts with cattle.

The ELM stated that several (pipelines, pumps, above-ground storage tanks, dirt tanks, and fence maintenance) of the livestock improvement maintenance proposals may temporarily disrupt Sonoran pronghorn activity in the immediate vicinity of the improvement. Such disruptions are expected to be very infrequent and short term in nature. Sonoran pronghorn may also become entangled in fences, though the frequency of occurrences is expected to be very low and to date, this has not been documented on the allotments.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the ESA. The action area is completely contained within land of Federal ownership. Therefore, no future State, local or private land management actions are expected to occur.

The AGFD is anticipated to continue aerial surveys of the Sonoran pronghorn population, telemetry flights to track collared pronghorn, and attempts to radio-collar additional pronghorn. The latter action has had some adverse affect on Sonoran pronghorn. It is difficult to definitely determine the extent to which capture and collaring may have attributed to mortalities of collared animals. Capture myopathy is generally attributable to animals that die within a few days of capture, and not greater than 3 weeks. Four mortalities that occurred in 1994 were due to unknown causes but because the mortalities occurred within 3 weeks of capture, they may have been due at least in part to capture myopathy (J. Hervert, in litt., 1997).

CONCLUSION

After reviewing the current status of Sonoran pronghorn, the environmental baseline for the action area, the effects of the proposed action and the cumulative effects, it is the Service's biological opinion that the action, as proposed, is not likely to jeopardize the continued existence of the Sonoran pronghorn. The allotments currently contain suitable habitat that is occasionally used by pronghorn, but are not known to be areas of primary use. Replacing current fencing with more pronghorn passable fencing will minimize any potential impact to dispersing pronghorn since the area has the potential for use as expanded habitat. At current stocking levels, the area is in fair to good condition and at full preference levels, use is not expected to go above 40 percent. Utilization transects will be established on the Coyote Flat and Why allotments and utilization transects on the Sentinel and Cameron allotments will be read annually to ensure adequate vegetation parameters are maintained or improved. No critical habitat has been designated for this species, therefore, none will be affected.

INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of ESA, as amended, prohibit taking (harass, harm, pursue, hunt, shoot,

wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying Out an otherwise lawful activity conducted by the Federal agency or the applicant. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The ELM has a continuing duty to regulate the activity covered by this incidental take statement. If the ELM (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

AMOUNT OR EXTENT OF TAKE

Take can be expected to occur in the form of harassment and death due to grazing management activities. The following level of take may be expected to occur for every 15 years of project implementation: 1) Take in the form of harassment that leads to injury (harm) one Sonoran pronghorn, and; 2) Take in the form of the death of one Sonoran pronghorn.

This biological opinion does not authorize any form of take not incidental to the actions described herein. If the incidental take authorized by this opinion is met, the ELM shall immediately notify the Service in writing. If, during the course of the action, the amount or extent of the incidental take anticipated is exceeded, the ELM must reinitiate consultation with the Service immediately to avoid violation of section 9. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined that the impact of the additional taking will cause an irreversible and adverse impact on the species, as required by 50 CFR 402.14(i). An explanation of the causes of the taking should be provided to the Service.

EFFECT OF THE TAKE

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species. There is no critical habitat designated for this species.

REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize take:

- 1) Measures shall be implemented to minimize impacts of the BLM’s grazing management activities on Sonoran pronghorn.
- 2) Measures shall be implemented to minimize habitat loss, degradation, and fragmentation of Sonoran pronghorn habitat.

TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of ESA, the ELM must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary. To implement Reasonable and Prudent Measure number 1:

- 1) During any major maintenance work that requires heavy machinery or major activity, a biological monitor will arrive at the maintenance site at least one hour before the machinery arrives or major activity takes place. If pronghorn are observed, maintenance will be suspended until the animals move off on their own. If necessary, maintenance will be suspended or the location or timing of work will be altered depending on the proximity of pronghorn to the project.

To implement Reasonable and Prudent measure number 2:

- 1) The ELM will monitor vegetation of sample washes within the different allotments for downward trends in canopy cover of shrubs and trees within a five year period for the life of the project. If there is a downward trend, the BLM will discuss options with the Service, including reinitiation of formal consultation.
- 2) A report of the results of all monitoring efforts, including complete and accurate records of all incidental take that occurred during the course of the actions described herein, will be submitted to the Service on a yearly basis unless where otherwise directed. This report will also describe how the terms and conditions of all Reasonable and Prudent measures in this incidental take statement were implemented.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The ELM must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent

measures.

DISPOSITION OF DEAD, INJURED, OR SICK INDIVIDUALS

If a dead, injured, or sick individual of a listed species is found on any of the five allotments, initial notification must be made to Service Law Enforcement, Federal Building, Room 105, 26 North McDonald, Mesa, Arizona, 85201 (Telephone:602/835-8289) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the finding, a photograph of the animal, and any other pertinent information. The notification shall be sent to Law Enforcement with a copy to the Arizona Ecological Services Field Office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains shall be placed with educational or research institutions holding appropriate State and Federal permits. If such institutions are not available, the information noted above shall be obtained and the carcass left in place. Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to implementation of the action. Injured animals should be transported to a qualified veterinarian by an authorized biologist. Should any treated animals survive, the Service shall be contacted regarding the final disposition of the animals.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of ESA directs Federal agencies to utilize their authorities to further the purposes of ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- 1) Develop allotment management plans for all allotments within this resource area.
- 2) Monitor Sonoran pronghorn use (in particular, interactions of cattle and pronghorn, and pronghorn and fences) within Cameron, Coyote Flat, Sentinel, and Why Allotments.

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In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the actions outlined in the project proposal. As provided

in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Thank you for your continuing efforts to conserve listed species. If we can be of further assistance, please contact Lorena Wada or Ted Cordery. Please refer to the consultation number 2-21-94-F-192 in future correspondence concerning this project.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Spiller', written in a cursive style.

/s/ Sam F. Spiller
Field Supervisor

cc: Regional Director, Fish and Wildlife Service, Albuquerque NM (ES) Refuge Manager,
Cabeza Prieta National Wildlife Refuge, Ajo, AZ

(Director, Arizona Game and Fish Department, Phoenix AZ)

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