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AESO/ES  
2-21-89-F-213

May 15, 1990

MEMORANDUM

TO: District Manager, Phoenix District Office, Bureau of Land Management, Phoenix, Arizona

FROM: Field Supervisor

SUBJECT: Biological Opinion for Lower Gila south Habitat Management Plan

This responds to your request of February 16, 1990, for formal consultation with the Fish and Wildlife Service (FWS) pursuant to Section 7 of the Endangered Species Act (Act) of 1973 (as amended), on the Lower Gila South Habitat Management Plan (IIMP). The IIMP covers areas in Maricopa, Pima, Pinal, and Yuma Counties, Arizona. The species of concern are the Sonoran pronghorn antelope (Antilocapra americana sonoriensis), Sanborn's long-nosed bat (Leptonycteris sanborni) and the Tumamoc globeberry (Tumamoc macdougalii).

The following biological opinion is based on data presented in the Lower Gila South HNP, the biological evaluation of effects dated February 16, 1990, data in our files and other information available.

Biological Opinion

It is my biological opinion that implementation of the Lower Gila south HNP is not likely to jeopardize the continued existence of the Sonoran pronghorn, Sanborn's bat, or the Tumamoc globeberry.

Background Information

### Species Description

The Sonoran pronghorn antelope was listed as an endangered species on March 11, 1967. Critical habitat was not designated. Smallest and palest of the pronghorn subspecies, the Sonoran pronghorn was historically known from Arizona south of the Bill Williams River east to the Santa Cruz River, south in Northern Sonora, Mexico (USFWS 1982). Destruction of grassland and riparian habitat, competition with introduced livestock and other human caused factors has reduced populations. Present range in Arizona is largely confined to the Goldwater Range, Cabeza-Prieta National Wildlife Refuge and Organ Pipe Cactus National Monument. Sanborn's long-nosed bat was listed as an endangered species on September 30, 1988. Critical habitat was not designated. Historic range is likely similar to present range. Sanborn's bat annually arrives in Arizona from Mexico or Central America in late May although some individuals were present in mid-April 1990. Maternity colonies have been recorded from Pinal, Pinal, and Santa Cruz Counties with transient roosts recorded from Cochise and Graham Counties in Arizona. Sanborn's bat leaves Arizona in late September (Cockrill, in press). Nectar feeders, Sanborn's bat utilizes columnar cactus and some particulate agaves for food, their seasonal movements likely cued to flowering and fruiting of its forage species (Cockrill, In press). Loss of roosting habitat and destruction of forage plants are primary threats.

The Tumamoc globeberry, a perennial vine usually round growing under desert trees or shrubs, was listed as endangered on April 29, 1986. No critical habitat was designated. Range of the globeberry includes portions of Pinal and Pinal Counties and Northern Mexico (Rutman 1990). Threats to the species include urban development, grazing and other impacts on its habitat and required nurse plants.

### Project Description

The Lower Gila South HMP is a document designed to provide management guidance for both general and specific actions to be taken on Bureau of Land Management (BLM) lands in southwestern Arizona. Inventories for endangered species populations and subsequent monitoring of those populations are called for in the HMP. Evaluation of BLM permitted activities that could affect the listed species is also called for as is implementation of approved recovery plan tasks. Detailed discussions of the HMP are not provided in this opinion.

### Effects of the Action

In the HMP, four actions specifically address management of the Sonoran pronghorn. Acquisition of 640 acres of State of Arizona lands near Ajo would provide for more federally owned Sonoran pronghorn habitat and could benefit the Sonoran pronghorn, depending upon the management of the parcel once it was in federal ownership. This parcel is adjacent to the known range of a radio-tagged Sonoran pronghorn (DeVos 1990). Rehabilitation of the two watersheds for Sonoran pronghorn use may or may not be beneficial. The extent to which

Sonoran pronghorn utilize free water is unclear and maintenance of waters may be more of a benefit to potential predators or competitors of the Sonoran pronghorn than to the endangered species. Work on other water catchments within the IIMP area occupied by Sonoran pronghorn may have similar concerns. The HIMP does call for monitoring of the Sonoran pronghorn catchments but no specific plan has been developed.

An assessment of grazing effects to Sonoran pronghorn habitat would be useful in determining long term management of the habitat. Sonoran pronghorn were observed to move into areas after livestock were removed, thus indicating some effects are connected with livestock. If effects are noted, modifications of current range practices based on the monitoring results could be beneficial to the Sonoran pronghorn; however, residual adverse effects would remain if management did not completely eliminate the effects of grazing from the habitat. Effects of water developments and predator loads would also be analyzed with these effects.

Evaluation of the Ranegras/Paloma Plain area as possible reintroduction habitat for the Sonoran pronghorn is within the goals of the recovery plan and would likely be beneficial.

Documentation of Sanborn's bat habitat on the IIMP area is currently very limited. The HIMP proposes to identify suitable habitat and assist the FWS in determining suitable recovery activities. This would be beneficial to Sanborn's bat, but there may be adverse effects from disturbance of roost sites not totally protected and degradation of food resources by ongoing activities. Until the specific plan is developed, these effects cannot be quantified.

Suitable habitat for the Tumamoc globeberry would be identified and a IIMP supplement prepared to provide management of the species and perpetual protection of the habitat. Adverse effects due to disturbance and habitat degradation would continue at least until the beneficial management under the supplement to the IIMP is developed and implemented and possibly beyond if the management did not completely eliminate all adverse activities.

The HIMP also contains provisions for the management of candidate species to the Act. Desert tortoise (Gopherus agassizii) and several candidate plant species will receive special management emphasis as part of the IIMP.

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### Incidental Take

Section 9 of the Act prohibits any taking (harass, harm, pursue, hurt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct) of listed species 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. Under the terms of Section 7 (b) (4) and 7 (o) (2) , taking that is incidental to, not intended as part of, the agency action is not considered taking within the

bounds of the Act provided that such taking is in compliance with the incidental take statement.

No incidental take statement is included with this biological opinion as there are no specific projects contained in the proposed action for which take may be defined. As specific projects are developed and undergo Section 7 consultation, incidental take will be determined.

### Conservation Recommendations

Section 7 (a)(I) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of the endangered and threatened species. The term conservation recommendation has been defined as suggestions of the FWS regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information. Because of the nature of the IIMP, specific recommendations are not appropriate; instead we have provided some general recommendations to guide formulation of specific actions:

1. Participate with Arizona Game and Fish Department and FYS in determining effects of water developments on Sonoran pronghorn, their competitors and predators.
2. The renovation plan for the two water catchments should be developed with input from Cabeza Prieta NWR, especially in the area of fence types to be used and area to be enclosed.
3. Develop an interim protection program for bat roosts in the IIMP area until comprehensive surveys can be completed and long term management needs determined.
4. Provide protection for Tumamoc globeberry populations as they are discovered in lieu of waiting for the completion of the surveys.

This concludes formal consultation on this action. Reinitiation of formal consultations is required if the amount or extent of incidental take is exceeded, if new information reveals effects of the action that may impact listed species or critical habitat in a manner or to an extent not considered in this opinion, if the 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 if a new species or critical habitat is designated that may be affected by this action. This opinion applies only to the management guidance in the Lower Gila South IIMP. All other ongoing or future site specific actions will require additional consultations if they affect Sonoran pronghorn, Sanborn's bat or Tumamoc globeberry.

If we may be of further assistance, please contact Ms. Lesley Fitzpatrick or me (telephone: 602/379-4720; FTS 261-4720).

/s/ Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque, New Mexico (FWE/IIC)  
Director, Arizona Game and Fish Department, Phoenix, Arizona Director, Fish and  
Wildlife Service, Washington, D.C. (EHC)

#### LITERATURE CITED

- Cockrum, E.L. Seasonal Distribution of Northwestern Populations of the Long-Nosed Bats, Genus Leptonycteris, Family Phyllostomidae. In Press.
- DeVos, J.C. 1990. Evaluation of Sonoran pronghorn movements around military activity areas and habitat use patterns on Barry n. Goldwater Air Force Range, Cabeza Prieta National Wildlife Refuge, and Organ Pipe Cactus National Monument. Special Report per Cooperative Agreement 14-16-0002-85-910. Arizona Game and Fish Department.
- Rutman, S. 1990. Handbook of Federally Endangered, Threatened, and Candidate Plants of Arizona, U.S. Fish and Wildlife Service, Phoenix, Arizona. 34pp.
- U.S. Department of Interior, Fish and Wildlife Service. 1982. Sonoran Pronghorn Recovery Plan. USFWS, Albuquerque, New Mexico. 26 pp.