

United States Department of the Interior
ARIZONA
FISH AND WILDLIFE SERVICE
POST OFFICE BOX 1306
ALBUQUERQUE, N.M. 87103

JULY 8 ,1986

2-21-86-F-81

MEMORANDUM

To: Refuge Manager, Cabeza Prieta National Wildlife Refuge, Ajo, Arizona

From: Regional Director (AHR)

Subject: Biological Opinion, Mohawk Valley Water Tank Installation, Yuma County, Arizona

This responds to your April 1, 1986, request for formal intra-service consultation pursuant to Section 7 of the Endangered Species Act (ESA) of 1973, as amended, for the installation and maintenance of the subject water tank on the Cabeza Prieta National Wildlife Refuge (NWR). The 90-day consultation period began on April 17, 1986, the date your request was received in the Phoenix Ecological Services Field Office. The species of concern is the Sonoran pronghorn antelope (Antilocapra americana sonori- ensis).

This opinion is based on information provided by the refuge staff, data in our files, and the approved recovery plan for the Sonoran pronghorn (USFWS 1982).

BACKGROUND INFORMATION

The project is on the Cabeza Prieta NWR in Yuma County, Arizona. A 200 square ft., 20 inch deep depression will be hand dug in Section 13, Township 14 South, Range 11 West, just north of Dos Playas and adjacent to the road north of Papago Well to accommodate a 2,100 gallon fiber plastic parabolic (dish covered) water catchment. The installation of this tank will provide a water source in the Mohawk Valley for several wildlife species, and possibly the Sonoran pronghorn.

An estimated 85-100 Sonoran pronghorn utilize the Cabeza Prieta NWR. Another 200-350 animals may be found in Mexico (IJSFWS 1982) south of the Refuge. The Sonoran subspecies is smaller and paler than the other prong-horn subspecies and possesses some distinct cranial features. Overhunting, overgrazing, habitat loss, and the drying of major rivers are the main

factors proposed for the decline of the Sonoran pronghorn. There are still questions about whether this desert antelope needs open water for survival or whether it is able to obtain sufficient metabolic water from food to negate the need to drink.

Although there are sightings on Organ Pipe National Monument, the Luke Air Force Base Gunnery Range, Bureau of Land Management lands near Ajo, and on the Tohono O'odham Nation Reservation, the primary habitat for Sonoran pronghorn in the United States is on the Cabeza Prieta NWR. The habitat consists of broad alluvial valleys separated by block faulted mountains. Vegetation is within the Arizona Upland Desert (Palo Verde-Saguaro Association) and Lower Colorado Desert (Creosotebush-Bursage Association). Rainfall in these desert areas is low (3-15 inches/year) with half falling from July to September in the form of intense, localized thunderstorms and the remainder from the more widespread winter storms rising in the Pacific Ocean. Temperatures in the summer exceed 1100 F and seldom reach freezing in the winter (USFWS 1982).

INPACTS OF THE ACTION

Available water on the Cabeza Prieta NWR is quite limited. This limits wildlife use of certain areas during dry periods, especially during the very hot summer months. At these times, the Sonoran pronghorns may utilize established water sources, thereby concentrating habitat use in very few areas. Efforts to increase the availability of water on the Refuge are identified in the Sonoran Pronghorn Recovery Plan (USFWS 1982) as part of the efforts to increase the Refuge pronghorn population, but recommended installation only after existing catchments have been monitored to determine their value to the pronghorn. Some evaluations have been completed, but results are ambiguous. If the tank is successfully installed and utilized by pronghorn, it could open up the Mohawk Valley to Sonoran pronghorn use during the dry periods. The Mohawk Valley is used by pronghorns during other seasons and it is hoped that the increased, dry-season habitat availability will promote expansion of the pronghorn population and more dispersed habitat use. The coyote (Canis latrans), a known predator of the Sonoran pronghorn, must have surface water to survive. There is some question that new water areas may be more beneficial to Sonoran pronghorn predators than for this endangered species, and could potentially result in a negative impact on the pronghorn. The loss of vegetated land to the water tank will have an insignificant effect on the pronghorn population.

Following the installation of the catchment, remote control cameras will be installed and operated by the refuge to record diurnal wildlife use of this facility. This information will be reviewed with the Regional Endangered Species Office to more precisely assess the potential effects of the catchment on the Sonoran pronghorn antelope and other wildlife species of the Cabeza Prieta NWR. If the water catchment is found to adversely impact the pronghorn, it will be removed.

BIOLOGICAL OPINION

Based upon the preceding information, it is my biological opinion that installation and maintenance of the Mohawk Valley water tank is not likely to jeopardize the continued existence of the Sonoran pronghorn antelope.

Further consultation is not required unless the project undergoes substantial modification, new species are listed which may be affected by the project, or new information becomes available that reveals impacts not considered in this opinion.

cc: Director, FWS, Washington, D.C. (OES) Director, Arizona Game and Fish Department,
Phoenix, AZ
Field Supervisor, Ecological Services, KWS, Phoenix, AZ Zone Supervisor, Zone 1, FWS,
Albuquerque, NM

LITERATURE CITED

U.S. Fish and Wildlife Service. 1982. Sonoran Pronghorn Recovery Plan. Region 2. 20 pp.