



United States Department of the Interior  
FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE  
2369 WEST ORTON CIRCLE, SUITE 50  
WEST VALLEY CITY, UTAH 84119

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ECOLOGICAL SERVICES

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Memorandum

To: Mary Henry, ARD, Region 6, U. S. Fish and Wildlife Service, PO Box 25486,  
Denver Federal Center, Denver CO 80225

From: Henry Maddux, Utah Field Supervisor, Ecological Services, U.S. Fish and  
Wildlife Service, West Valley, Utah

Subject: Intra-agency Formal Section 7 Consultation for the Proposed Pace Safe Harbor  
Agreement in Sevier County, Utah

This biological opinion was prepared at the request of the Ecological Services Regional Office of the U.S. Fish and Wildlife Service (Service) as required by the Endangered Species Act of 1973 (Act), as amended, for proposed issuance of a section 10(a)(1)(A) incidental take permit for the Utah prairie dog (*Cynomys parvidens*) associated with implementation of a Safe Harbor Agreement (SHA). The SHA is between Mr. Mitchel W. Pace (Cooperator), the Service, and the Natural Resources Conservation Service (NRCS). The Federal action constituting a section 7 nexus under the Act is issuance of an incidental take permit by the Service. This biological opinion has been prepared by the Service in accordance with section 7 of the Act (16 USC 1531, *et seq.*) and Interagency Cooperation Regulations (50 CFR 402).

The Service has determined that the proposed action will have "no effect" on the Heliotrope milkvetch, Last Chance townsendia, and Wright fishhook cactus because these species do not occur within the project area. The Service has also determined that the proposed action will have "no effect" on the bald eagle because the species is a migrant winter visitor to the area and there are no known foraging, roosting, or nesting sites within the project area. No further analysis of impacts to these species is included in this biological opinion.

The Utah prairie dog is federally listed as a threatened species and occurs within Sevier County, Utah. This biological opinion addresses impacts of the SHA proposal to this species and was prepared using information contained in the SHA application package prepared by Mr. Pace. Additional information was obtained from existing Service files and communications among

Proposed actions will provide a net conservation benefit for the Utah prairie dog (UPD) by improving and increasing available foraging and visual surveillance habitat on private lands, and allowing an adjacent active colony to naturally expand onto the cooperators' property.

Upon implementation of the conservation measures identified above, a permit will be issued to authorize routine grazing operations on the enrolled property. Incidental take of prairie dogs due to normal grazing and irrigation activities will not affect the net conservation benefit provided by the Agreement. The Agreement authorizes take of UPD, because the species does not currently occupy the Property, nor would it be likely to do so without the voluntary measures described in this Agreement.

## **Status of the Species/Critical Habitat**

### Species/Critical Habitat Description

The Utah prairie dog (*Cynomys parvidens*) was listed as an endangered species on June 4, 1973 (38 FR 14678), pursuant to the Endangered Species Conservation Act of 1969. In 1979, because of the improved status of the species and population increases on private lands in the Cedar and Parowan Valleys, where UPD numbers climbed from a census count of 627 in 1976 to 3,699 animals in 1982, the UDWR petitioned the Service to remove the UPD from the U.S. List of Endangered and Threatened Wildlife. The UDWR also petitioned the Service to develop a special rule under section 4(d) of the Endangered Species Act to allow "take" of 5000 animals annually between June 1 and December 31 on agricultural lands in Cedar and Parowan Valleys in Iron County. Upon reviewing all pertinent biological data, the Service determined that the UPD was not currently in danger of extinction and published the Final Rule reclassifying the species to threatened with a 4(d) rule on May 29, 1984 (49 FR 22330). In June of 1991, the 4(d) special rule was revised to include all agriculture land throughout the range of the species and to increase the take from 5000 to 6000 animals annually (USFWS 1991b).

A burrowing member of the squirrel family, the Utah prairie dog is one of three species of prairie dogs that live in Utah, all of which are in the subgenera *Leucocrossuromys* or white-tailed prairie dogs. Utah prairie dogs range in color from cinnamon to clay, with dark markings above the eyes and white on the tip of the tail (Pizzimenti, 1975). Adult Utah prairie dogs measure from 12 to 14 inches in length.

Utah prairie dogs forage primarily on grasses and forbs, and tend to select those with higher moisture content (Crocker-Bedford 1976). They often select colony sites in swales where the vegetation can remain moist even in drought conditions (Collier 1975, Crocker-Bedford and Spillet 1981). Vegetation must be short stature to allow the prairie dogs to see approaching predators as well as have visual contact with other prairie dogs in the colony (Collier 1975, Crocker-Bedford and Spillet 1981). Soils need to be well drained for burrow sites. Burrows must be deep enough to protect the prairie dogs from predators as well as environmental and temperature extremes. Utah prairie dogs are found in elevations from 5,400 feet on valley floors up to 9,500 feet in mountain habitats.

species in the United States. As ascertained by Collier (1975), the species distribution was much broader prior to control programs and in the past, extended across the desert almost to the Nevada-Utah state line. At one time, the species was known to occur in approximately 700 sections in 10 areas of southwestern Utah. The total species population was estimated to be 95,000 animals prior to control programs in the 1920's (Turner 1979).

By the 1960's, distribution of the UPD was greatly reduced due to a non-native disease (sylvatic plague), poisoning, drought, and human-related habitat alteration resulting from cultivation and poor grazing practices. Studies by Collier and Spillett (1972) indicated that the UPD had declined or been eliminated from major portions of its estimated historical range. By 1972, they estimated that there were 3,300 UPDs in 37 separate UPD colonies.

The decreasing trend in UPD counts prior to 1972 appears to have stabilized (Heggen and Hasenyager 1977), though numbers have vacillated greatly (McDonald 1993). Total counts have been as high as 7,400 in the 1989 spring census count (Coffeen 1989) with a low count of 3,500 animals in 1992, largely due to climatic and disease factors (McDonald 1993). Census counts most likely underestimated the total number of adult animals because only 40 to 60 percent of individual prairie dogs are above ground at any one time (Crocker-Bedford 1975). Significant concentrations of UPDs presently occur in only three areas: the Awapa Recovery Area, the Paunsaugunt Recovery Area, and the West Desert Recovery Area.

Reestablishment of UPD populations on public lands is identified in the Recovery Plan (U.S. Fish and Wildlife Service 1991) to ensure the continued existence of the species. Thus, in 1972, the Utah Division of Wildlife Resources (UDWR) initiated a transplant program to move animals from private agricultural lands to areas of historical occupancy on public lands. Over a 31-year period from 1972 to 2002, over 19,561 UPD were translocated to public land sites (Bonzo 2003). Although initial survival has been limited, the number of UPD colonies on public lands has increased. Increases in the known number of active colonies on public land can be attributed to a combination of factors including the translocation program, natural increases, dispersal from existing sites, and discovery of previously unrecorded colonies.

In 1994, the Recovery Implementation Team (RIT) was formed, due in large part to the cooperative efforts of federal and state agencies. In 1997, the RIT developed an Interim Conservation Strategy (ICS) to direct recovery activities including habitat improvement and translocation efforts, as well as direct research activities to further improve conservation and recovery measures. The ICS was intended to supplement the existing Recovery Plan and eventually provide additional data to facilitate a Recovery Plan revision. Federal agencies involved in management of the UPD have worked to recover and conserve the UPD and its' habitat using the best available information and adaptive management practices.

Rangewide spring survey counts conducted by the UDWR in the spring of 2004 reported 4022 adult UPDs (unpublished data, UDWR). Despite the aforementioned public land efforts of establishing new UPD colonies and supplementing existing ones, approximately 68% of UPDs still occur on private and other non-federal lands (unpublished data, UDWR).

Habitat treatments will improve available habitat by decreasing shrub cover and increasing grasses and forbs available for foraging prairie dogs. Should colony expansion efforts be successful, the long term benefits of the project include a reduced risk of catastrophic decline by increasing the size of a UPD colony and increasing plant diversity, forage availability, and surveillance habitat within the project area which is beneficial to UPDs.

The long term effects of this project will result in a net conservation benefit for UPD that contributes directly or indirectly to recovery of the species. The net conservation benefit is defined as "the cumulative benefits of the management actions provide for increase in species' population and/or enhancement, restoration, or maintenance of covered species' habitat." Conservation benefits for UPDs from implementation of the Safe Harbor Agreement are expected by--(1) increased availability of foraging (forage quantity and quality) and visual surveillance habitat for UPDs, (2) reduced risk of catastrophic decline due to increased UPD numbers and high plant diversity on colony site; (3) improved chance of natural restocking following catastrophic declines without increasing the risk of plague through an increased number of distinct colonies and reduced inter-colony distance, and (4) increased genetic mixing in the Awapa Plateau Recovery Area following natural dispersal. Furthermore, conservation of UPDs will be enhanced by improving and encouraging cooperative management efforts with this private landowner, who is willing to establish a model for others to follow.

Adverse effects to UPDs could also occur in association with normal grazing and irrigation activities, such as mortality due to vehicle traffic or habitat flooding. In addition to the effects from normal grazing activities, after the term of the Agreement, the Cooperator may return the land to baseline condition which is set at zero UPDs. This action could result in the reduction of habitat for an established colony. However, currently there are no UPDs on the site and without this SHA it is unlikely that they would occur there. If the property is returned to baseline, any affected UPDs may be relocated by the Service or UDWR to minimize impacts. The Cooperator and the Service will work cooperatively to minimize negative impacts to UPD from such actions. However, during relocation, animals can die from stress or heat exhaustion. UPDs would be relocated under approved guidelines to minimize any loss of animals.

### **Cumulative Effects**

Cumulative effects include the effects of future State, tribal 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 ESA. At this time there are no know State, tribal or private actions that are reasonably certain to occur in the action area.

### **Conclusion**

After reviewing the current status of the UPD, the environmental baseline for the action area, the effects of the proposed action, and the cumulative effects, it is the Service's opinion that the action as proposed is not likely to jeopardize the continued existence of the UPD, and is not likely to destroy or adversely modify designated critical habitat as no critical habitat has been designated. The Service has reached this opinion based on the following reasons:

communication with Keith Day, UDWR). Take may occur through harm and harassment of UPDs and through mortality of individual UPDs due to grazing operations.

### **Effect of Take**

In the accompanying Biological Opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to this species or destruction or adverse modification of critical habitat as no critical habitat has been designated. The Agreement authorizes incidental take of the covered species, because the species does not currently occupy the Property, nor would it be likely to do so without the voluntary measures described in this Agreement.

If, after the term of the Agreement, the Cooperator proposes to undertake any actions that fall outside the scope of habitat enhancements or his normal grazing operations, he will give the Service at least 60 days advance notice thereof and provide the Utah Department of Wildlife Resources (UDWR) an opportunity to relocate any affected individuals. This provision also encompasses expected actions that will result in the taking of the covered species, including any activities that will return the Cooperator's Property to baseline conditions by taking all individuals of the covered species. The Cooperator and the Service will work cooperatively to minimize negative impacts to the covered species from such actions.

### **Reasonable and Prudent Measures**

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize impacts of incidental take of Utah prairie dogs.

1. Measures shall be implemented during the life of the agreement to prevent Utah prairie dogs from being killed or harmed by any project-related activity.

### **Terms and Conditions**

In order to be exempt from the prohibitions of Section 9 of the Act, the Fish and Wildlife Service must ensure implementation of the Pace Safe Harbor complies with the following Terms and Conditions, which implement the Reasonable and Prudent measure described above.

To implement Reasonable and Prudent Measure number 1, the following Terms and Conditions shall be implemented:

- a) All future permits issued to relocate Utah prairie dogs from the Property must utilize Service approved relocation guidelines.

### **REPORTING REQUIREMENTS**

Upon locating a dead or injured Utah prairie dog, initial notification must be made within one business day to the Service's Division of Law Enforcement in Cedar City, Utah at telephone (435) 865-0861, the Service's Ecological Services Office at telephone (801) 975-3330, and the Cedar City office of the Utah Division of Wildlife Resources at telephone (435) 865-6120.

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