

U.S. FISH AND WILDLIFE SERVICE
WILDLIFE DIVISION
SALT LAKE CITY, UT 84115

HABITAT CONSERVATION PLAN

For The

**Issuance of an Incidental Take Permit
Under Section 10(a)(1)(B) of the Endangered Species Act**

For The

Utah Prairie Dog (*Cynomys parvidens*)

By The

**West Hills, L.L.C.
750 North Main
Kanarrville, Utah 84742**

June 16, 1995

Prepared for:

**U.S. Fish and Wildlife Service
Utah Field Office
Lincoln Plaza
145 East 1300 South, Suite 404
Salt Lake City, Utah 84115**

Prepared By:

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1.0 INTRODUCTION

1.1 PURPOSE AND NEED

West Hills, L.L.C. is currently in the process of developing a 33-acre housing community, on private property within Cedar City, Utah. The Utah prairie dog (*Cynomys parvidens*), a federally threatened species, is known to occur on approximately two acres of the project.

This HCP has been prepared to meet legal requirements contained in 50 CFR §17.22 (b)(1)(iii), which sets forth the application requirements for an Endangered Species Act Section 10(a)(1)(A) permit for incidental take. An Environmental Assessment has been prepared in conjunction with this HCP, as required by the National Environmental Protection Act (NEPA). An Implementation Agreement and Application Form have also been prepared. These documents constitute the permit application. The proposed length of the permit application is two (2) years.

1.2 UTAH PRAIRIE DOG BACKGROUND AND CONTEXT

The Utah prairie dog is a member of the white-tail subgenera, *Leucocrossuromys* and the species is limited to the southwestern quarter of the state of Utah. It was originally listed as endangered in 1974 (38 FR 14678). In 1979 the Utah Division of Wildlife Resources (UDWR) petitioned the U.S. Fish and Wildlife Service (Service) to downlist the Utah prairie dog from endangered to threatened. As a result, the Utah prairie dog was reclassified to threatened status in 1983 (48 FR 21604). The Service does not consider the Utah prairie dog to be in danger of extinction (49 FR 22330). Historically, the Utah prairie dog was found in southwestern and central Utah from the Nevada border on the west to Nephi on the north, east to the foothills of the Aquarius Plateau and south to the northern borders of Kane and Washington counties. The species now occurs principally in Iron, Sevier, Beaver, Wayne, and Garfield counties. The historical distribution of Utah prairie dogs has been reduced and their abundance has been in decline for decades due to habitat loss, intentional poisoning, drought, poor grazing practices, and episodes of plague.

Due to the number of Utah prairie dogs on private property in southwestern Utah, and conflict with private land owners, the Service established a Federal rule in 1984 that allows limited take of the Utah prairie dog on agricultural lands through trapping or shooting of Utah prairie dogs in Cedar and Parowan Valleys. The rule was amended in 1991 to allow take on agricultural lands within the entire range of the Utah prairie dog. The Utah Prairie Dog Recovery Plan (U.S. Fish and Wildlife Service 1991) encourages the relocation of prairie dogs from private to federal lands to promote the recovery of the species.

Utah prairie dogs prefer habitat in open terrain with clear visibility to avoid predators. They are found in elevations from 5,400 feet on valley floors up to 9,500 feet in mountain mesa habitats. Cedar City is one of three areas of population concentration for this species. Although approximately 24 percent of the colonies exist on public lands in Iron County, the majority of individuals are found on private land (UDWR 1994).

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND DESCRIPTION

West Hills, L.L.C. is currently in the process of developing a 33-acre housing community on private property within Cedar City, Utah. The project address is 2300 West 400 South, Highway 56 in Section 9, T36S, R11W. See Figure 1. The privately-owned property is zoned as residential (R-3-16) and the project is privately funded. Maximum density is 12 units per acre or 396 homes; however, the development plan is for 214 units. The project also includes installation of associated infrastructure such as natural gas, sewer, water, and phone, and development of streets, parking areas, tennis courts, and a club house.

The Utah prairie dog, a federally threatened species, occupies approximately two acres on the north side of the area to be developed. Project development is under way on portions of the property that are not suitable prairie dog habitat. The proposed action will require the capture and relocation of a maximum of 44 Utah prairie dogs and the possibility of incidental take of one prairie dog through direct mortality during construction. This take will be incidental to an otherwise lawful activity.

2.2 EXISTING ENVIRONMENT

2.2.1 Land Ownership, Existing Conditions, and Adjacent Land Uses

The project is owned and under development by West Hill, L.L.C. The following entities are members of West Hills, L.L.C.: M.L. Hanson Company, Inc.; Leroy Baily; and CC Vacant Partners C/O Goer Manufacturing.

Land use around the project includes business, industrial, and residential developments. The predominant land use in the greater Cedar City area, however, is agriculture. Land use to the east and south are established residential developments; to the west is Goer Manufacturing, a metal fabrication business; to the north is Highway 56; and across the highway is the Livestock Auction Barn and proposed retail developments.

2.2.2 Topography

Cedar City is located in Cedar Valley at approximately 5,622 feet. Hurricane Cliffs lie to the east and southeast, Cross Hollow Hills to the southwest, and Cedar Valley to the northwest.

A project bench mark on the northeast corner of the parcel is at 5,675 feet. The property gradually increases in elevation to the south.

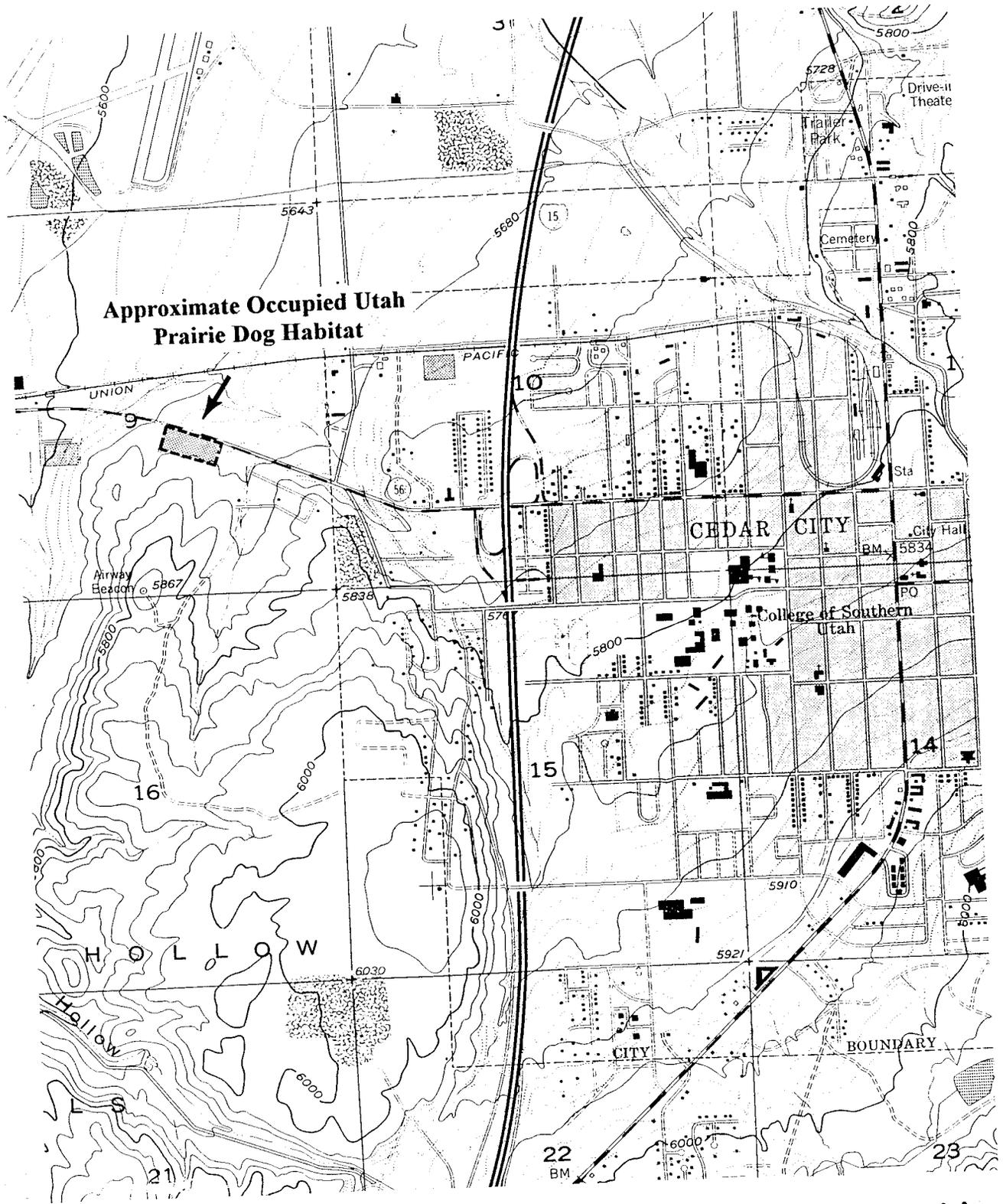


Figure 1. Approximate Project Area and Location of Occupied Utah Prairie Dog Habitat for West Hills, L.L.C



2.2.3 Soils

Soils at the project site range from silty clay loam to very gravelly loam. The soil series is Wales-Asdown-Medburn.

2.2.4 Vegetation

The majority of the property supports a relatively open stand of junipers with a grass/annual understory. The north side of the project site has been cleared in the past and is characterized by grasses and annuals. See Figures 2 and 3.

2.2.5 Wildlife

It is likely that raccoon, skunk, coyote, badger, gophers, mice, cottontail rabbits, meadowlarks, and sparrows occur within the project area.

2.2.6 Endangered, Threatened, and Candidate Species

In addition to the Utah prairie dog, two endangered species and eight category 2 candidate species were identified by the Service as potentially occurring within the project area. No critical habitat has been designated for any of the listed species. These species include seven mammals and four birds and are listed in Table 1.



Figure 2. North End of Project Area



Figure 3. Northeast Side of Project Area

Table 1. Endangered, Threatened, and Candidate Species That May Potentially Occur Within West Hills, L.L.C. Housing Development	
Species	Status¹
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Endangered
American peregrine falcon (<i>Falco peregrinus</i>)	Endangered
Utah prairie dog (<i>Cynomys parvidens</i>)	Threatened
Western burrowing owl (<i>Athene cunicularia hypugaea</i>)	C2
Ferruginous hawk (<i>Buteo regalis</i>)	C2
Pygmy rabbit (<i>Brachylagus idahoensis</i>)	C2
Spotted bat (<i>Euderma maculatum</i>)	C2
Small-footed myotis (<i>Myotis ciliolabrum</i>)	C2
Fringed myotis (<i>Myotis thysanodes</i>)	C2
Yuma myotis (<i>Myotis yumanensis</i>)	C2
Big free-tailed bat (<i>Nyctinomops macrotis</i>)	C2

¹ A Federal endangered species is defined as "...any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose protection under the provisions of the Endangered Species Act would present an overwhelming and overriding risk to man."

A Federal threatened species is defined as "... any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

A Federal Category 2 species (C2) is defined as one "...for which information now in possession of the Service indicates that proposing to list them as endangered or threatened species is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not currently known or on file to support the immediate preparation of rules."

3.0 STATUS OF ENDANGERED, THREATENED, AND CANDIDATE SPECIES ON THE PROJECT SITE

3.1 INTRODUCTION

The purpose of this section is to discuss the status of endangered, threatened, and candidate species in the project area. No critical habitat has been designated for any of the listed species. Section 4.0 discusses potential impacts to these species as a result of the development.

3.1.1 Utah Prairie Dog

Utah Division of Wildlife Resources personnel surveyed the property in 1992, 1993, 1994, and 1995 and counted 1, 4, 6, and 6 prairie dogs, respectively (McDonald 1995, pers comm.). The following calculations provide a projected estimate of prairie dogs. The calculations based on the maximum number of prairie dogs observed in 1995:

6 individuals observed x 2 = 12 adult prairie dogs estimated to be present (According to Crocker-Bedford's (1975) estimate that 40 to 60 percent or an average of 50 percent of prairie dogs are above ground at any given time);

12 prairie dogs equals approximately 8 females and 4 males (Based on a female to male ratio of 2:1, McDonald 1995, pers. comm.);

The 8 females could have 1 to 6 young (4 average) this year (McDonald 1995, pers. comm.):

$$\begin{aligned} 8 \text{ females} \times 1 \text{ young} &= 8 \text{ young} \\ 8 \text{ females} \times 4 \text{ young} &= 32 \text{ young} \end{aligned}$$

Therefore, the total number of estimated prairie dogs within the project area ranges between 20 and 44 individuals:

$$\begin{aligned} 8 + 12 &= 20 \text{ individuals} \\ 32 + 12 &= 44 \text{ individuals} \end{aligned}$$

The prairie dogs are restricted to the northern end of the project in a flat and open area immediately adjacent to the right-of-way for State Highway 56. Other prairie dog colonies occur across Highway 56 and to the east of the project in Section 10.

The area currently occupied by prairie dogs has been cleared and disturbed in the past. These actions created suitable habitat (i.e., open grassy area with no trees or shrubs) for the prairie dogs. See Figures 2 and 3.

3.1.2 Endangered Species and Candidate Species

Two endangered and eight Category 2 candidate species, identified by the Service, could potentially occur within the project area or the immediate vicinity include the bald eagle, American peregrine falcon, Western burrowing owl, ferruginous hawk, pygmy rabbit, spotted bat, small-footed myotis (bat), fringed myotis (bat), Yuma myotis (bat), and big free-tailed bat. No suitable habitat exists within the project area for these species with the exception of the bald eagle, ferruginous hawk, and burrowing owl.

There are no known bald eagle roost sites within the project area. However, it is possible that bald eagles could perch along fence posts or in nearby trees and forage in the area.

Nesting and foraging habitat preferred by ferruginous hawks is present throughout the Cedar City area and on the project site. Ferruginous hawks nest throughout the Intermountain West in isolated trees, woodland edges, buttes, cliffs, or grasslands with some relief. The forage in nonforested, nonmountainous areas, such as desert scrub and grassland communities. The majority of undeveloped portions of Cedar Valley are either suitable nesting or foraging habitat. No ferruginous hawks have been observed at the project site by UDWR or SWCA personnel during prairie dog surveys. And there is no ferruginous hawk nesting habitat within the two-acres occupied by the prairie dogs.

Burrowing owls are known to occur in Cedar City and coexist with prairie dogs. Burrowing owls also use the burrows of other burrowing mammals such as ground squirrel, rock squirrels, badgers, and others. These species commonly occur in the Cedar Valley. UDWR or SWCA personnel have not observed any burrowing owls within the occupied prairie dog colony during surveys.

4.0 POTENTIAL IMPACTS

4.1 INTRODUCTION

Preparing an HCP includes determining the amount of incidental take associated with the proposed project. Take as defined in Section 3 of the ESA means "to harass, harm, pursue, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Section 10(a)(1)(B) defines "incidental take" as "take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." Federal regulation defines the terms "harass" and "harm" as follows. Harass means "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." Harm means "an act which actually kills or injures wildlife" and "may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." A Section 10 permit allows an exception to the taking prohibition of the ESA.

4.2 UTAH PRAIRIE DOG

Direct impacts are those which are caused by an action and occur at the same time and place as the action. Direct impacts of the project is the conversion of approximately two acres of Utah prairie dog habitat to a housing development. In order to minimize the impacts of this direct impact, there will be an incidental take of a maximum of 44 prairie dogs through trapping and relocation and the potential incidental take of up to one prairie dogs as a result of on-site construction deaths. Accidental on-site deaths are not considered likely due to pre-construction education regarding prairie dogs and the ability of prairie dogs to move out of harms way.

The proposed project will adversely affect the approximately two-acre, Utah prairie dog colony estimated to support a maximum of 44 dogs, but will not adversely affect the Utah prairie dog population in the West Desert or anywhere within its range. The proposed project is not anticipated to jeopardize the continued existence of the Utah prairie dog. Furthermore, the relocation of the Utah prairie dogs to Federal lands will contribute to attainment of the Service's recovery goals for the Utah prairie dog.

4.2.1 Indirect Impacts

Indirect impacts are those caused by the action and are later in time or removed in distance but still reasonably foreseeable. Indirect impacts could include the failure of individual prairie dogs to survive at the new site, following relocation.

4.2.2 Direct Habitat Impacts

The proposed project will entail conversion of the approximately two acres of occupied prairie dog habitat to residential uses.

4.2.3 Indirect Habitat Impacts

All foreseen impacts to prairie dog habitat are direct.

4.3 ENDANGERED AND CANDIDATE SPECIES

No impacts to endangered or candidate species are anticipated to result from the project.

5.0 MEASURES TO AVOID, MINIMIZE, AND MITIGATE FOR POTENTIAL IMPACTS

5.1 INTRODUCTION

This section discusses the measures which are proposed to avoid, minimize, and mitigate potential impacts to the Utah prairie dog as a result of the project.

5.2 AVOIDANCE AND MINIMIZATION

Three means to avoid or minimize impacts to the Utah prairie dog will be employed: (1) trapping and relocation; (2) pre-construction education program; and (3) scheduling trapping and construction to avoid hibernation periods.

5.2.1 Trapping and Relocation

The Utah Prairie Dog Recovery Plan (U.S. Fish and Wildlife Service 1991) calls for establishing sufficient numbers of prairie dogs on public lands such that they can be delisted, and protective restrictions on private property removed. Toward that goal, the Adams Well Site, currently being developed by the BLM, will accommodate prairie dogs from private lands in Iron County. The Adams Well site will be 80 acres (two, forty acre plots) and considered a demonstration area to monitor transplant success, habitat requirements, and the compatibility of cattle grazing and prairie dog colonies.

The UDWR will remove the prairie dogs within the two-acre area occupied by prairie dogs beginning in late Summer of 1995 (subject to UDWR schedule) to the Adams Well Site or other BLM or Service approved sites. The UDWR estimates trapping and relocation costs to be \$50.00 per prairie dog (Valentine, 1995, pers. comm.). The maximum number of prairie dogs estimated to be relocated is 44 individuals. Upon completion of trapping, UDWR will bill West Hills, L.L.C. for the actual number of prairie dogs trapped. West Hills, L.L.C. will have 30 days to pay. Lack of payment may result in suspension of the permit. A maximum of \$2,200 may have to be paid to UDWR.

Development of the site will be initiated within 48 hours of completion of trapping to avoid recolonization by any nearby prairie dogs.

5.2.2 Pre-construction Education Program

In order to avoid or minimize impacts to prairie dogs, a pre-construction education program will be given by UDWR or the Service (Valentine 1995, pers. comm.). Advanced notice by West Hills, L.L.C. to schedule an education program is required. It is anticipated that all of the prairie dogs will

be removed by the UDWR. However if a prairie dog strays into the area, this program should aid in avoiding or minimizing incidental take. UDWR will explain to the contractor's employees that they are working in habitat occupied by a threatened species. They will be taught the definition of "harm" and the consequences of causing harm to a threatened species. Any recommendations identified in the Service's Finding of No Significant Impact (FONSI) and in the Implementing Agreement will also be explained at that time.

5.2.3 Scheduling

Avoidance and minimization of impacts will also be facilitated by trapping and relocating the prairie dogs before the end of September, when prairie dogs are active. After the prairie dogs have been removed, then construction can commence and be completed. This schedule avoids prairie dog hibernation periods, giving the prairie dogs the opportunity to move out of harms way, if necessary.

5.2.4 Other Requirements

The Service and UDWR will be notified immediately of the finding and circumstances surrounding discovery of any dead or injured listed species on-site. Should the discovery occur on the weekend, the agencies will be notified on the following Monday.

Within 45 days of completion of the project, West Hills, L.L.C. will forward to the Service, a brief post-construction compliance report prepared by a qualified biologist. This report will detail the following: (1) dates that construction occurred; (2) an evaluation of West Hill, L.L.C.'s success in meeting project mitigation measures; (3) an explanation of failure to meet such measures, if any; (4) known project effects on prairie dogs, including number destroyed if any; and (5) other pertinent information.

5.3 MITIGATION

Mitigation for incidental take of the Utah prairie dog will be a mitigation fee of \$200 per acre. The mitigation ratio will be 2:1; therefore the total mitigation fee for 2 acres will be \$800. The fee will be paid to the BLM prior to construction. The BLM will use these funds to enhance 4 acres public lands for the recovery of the Utah prairie dog.

The basis for the fee is the approximate cost to enhance BLM lands to provide suitable prairie dog habitat. Enhancement methods could include: sagebrush chaining, mowing, brushbeating, chemical treatment, disking, plowing, reseeding, interseeding, and/or burning.

5.4 FUNDING

Funding for preparation of the HCP permit application, trapping, relocation, and mitigation fees will be the responsibility of West Hills, L.L.C.

5.5 COORDINATION WITH THE IRON COUNTY HCP

Iron County is in the initial stage of developing a county-wide HCP for the Utah prairie dog. The Iron County HCP should be fully implemented and functioning by Summer 1996. The permit application for West Hills, L.L.C. housing development is for two years. This should be more than adequate as the housing development is scheduled for completion by Fall of 1995.

6.0 ALTERNATIVES

6.1 NO ACTION ALTERNATIVE

The no action alternative is forgoing the development of the two-acre area occupied by Utah prairie dogs. The ramifications of the No Action Alternative to the land owner is the direct loss of use of private land resulting in economic loss. The prairie dog colony of a maximum of 44 individuals is in an isolated location surrounded by intensive development including State Highway 56, manufacturing, and housing developments. This colony could become extinct as a result of increasing human encroachment, which would not contribute to the recovery of the species. Or individuals dogs could move to pockets of open land in surrounding areas creating additional conflicts with land owners and more permitting demands on the Service.

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