

City and County of Broomfield Policies for Prairie Dog Conservation and Management



Spring 2003

TABLE OF CONTENTS

1. PURPOSE AND GOALS	1
2. BACKGROUND	1
2.1. CURRENT STATUS OF PRAIRIE DOGS	1
2.2. PUBLIC OPINIONS CONCERNING PRAIRIE DOGS IN BROOMFIELD	1
3. INTRODUCTION TO PRAIRIE DOG ECOLOGY	2
3.1. TAXONOMY, BEHAVIOR, AND POPULATION DYNAMICS	2
3.2. INTERACTION WITH OTHER WILDLIFE, VEGETATION, AND PEOPLE	3
3.3. DISEASE	4
3.4. RELOCATION AS A CONTROL MEASURE	4
4. POLICIES PERTAINING TO CITY-OWNED LANDS, CITY PROJECTS, OR PROJECTS OF OTHER PUBLIC ENTITIES	4
4.1. AVOIDANCE	4
4.2. NOTIFICATION PRIOR TO RELOCATION, REMOVAL, OR LETHAL CONTROL	5
4.3. RELOCATION TO CITY OPEN SPACE	5
4.4. RELOCATION TO ALTERNATIVE SITES	6
4.5. REMOVAL BY LIVE TRAPPING, WATER FLUSHING OR VACUUM TRUCK FOR USE IN THE BLACK-FOOTED FERRET PROGRAM OR OTHER WILDLIFE RECOVERY PROGRAM	6
4.6. LETHAL CONTROL	6
4.7. EXCEPTION FOR EMERGENCY RESPONSES	7
4.8. CONTROL OF PRAIRIE DOGS THAT DISPERSE ONTO PRIVATE LAND	7
4.9. PROTECTION OF BURROWING OWLS	7
4.10. LIMITATIONS ON COSTS OF PRAIRIE DOG RELOCATIONS FROM CITY LAND, CITY PROJECTS, OR PROJECTS OF OTHER GOVERNMENTAL ENTITIES	8
4.11. IMPORTANCE OF VOLUNTEERS AND PUBLIC EDUCATION	8
5. POLICIES PERTAINING TO PRIVATELY SPONSORED PROJECTS	8
5.1. GENERAL POLICY	8
5.2. NOTIFICATION PRIOR TO RELOCATION, REMOVAL, OR LETHAL CONTROL	9
5.3. RELOCATION TO CITY OPEN SPACE	9
5.3.1. <i>City and State Permits Required for Relocation from Private Land</i>	9
5.3.2. <i>Relocation Costs</i>	10
5.4. REMOVAL FOR USE IN THE USFWS BLACK-FOOTED FERRET PROGRAM OR OTHER WILDLIFE RECOVERY PROGRAM	10
5.4.1. <i>City and State Permits Required for Removal from Private Land</i>	10
5.4.2. <i>Removal Costs</i>	10
5.5. LETHAL CONTROL	10
5.5.1. <i>City Permit Required for Lethal Control on Private Land</i>	10
5.5.2. <i>Permit Provisions for Private Residential Lots 5 Acres or Less in Area</i>	11
5.5.3. <i>Permit Provisions for Private Non-Residential Property and Private Residential Lots Larger than 5 Acres</i>	11
5.5.4. <i>Exceptions Applicable to Non-Residential Parcels and Residential Lots Larger than 5 Acres</i>	12
5.5.5. <i>Costs of Lethal Control</i>	13
5.6. EMERGENCY RESPONSE	13

5.7. PRAIRIE DOGS THAT DISPERSE FROM AN EXISTING COLONY OR PERMITTED RELEASE SITE 13

5.8. PRAIRIE DOG MANAGEMENT ENDOWMENT FEE 13

6. RELOCATION OF PRAIRIE DOGS TO PRIVATE LAND..... 14

7. PENALTIES FOR NONCOMPLIANCE 15

8. POLICIES PERTAINING TO RELEASE SITES 15

8.1. OVERVIEW 15

8.2. MAXIMUM PRAIRIE DOG POPULATION..... 16

8.3. DESIGNATION OF RELEASE SITES 16

8.4. POTENTIAL NEAR-TERM RELEASE SITES ON CITY OPEN SPACE 17

 8.4.1. *Great Western Reservoir Open Space*..... 17

 8.4.2. *Mitchem Open Space*..... 17

 8.4.3. *Dry Creek Business Center and Interlocken Open Space Parcels* 18

8.5 POTENTIAL LONG-TERM RELEASE SITES ON CITY OPEN SPACE OR PRIVATE LAND 18

9. OPEN SPACE MANAGEMENT POLICES RELATING TO PRAIRIE DOGS 19

 9.1. LONG-TERM MANAGEMENT 19

 9.2. RESPONSE TO OUTBREAKS OF SYLVATIC PLAGUE 19

10. UPDATING OF POLICIES 20

1. PURPOSE AND GOALS

These *Prairie Dog Conservation and Management Policies* have been developed to preserve populations of the black-tailed prairie dog and associated wildlife within the City and County of Broomfield (referred to hereafter as the City) while not placing undue constraints on property rights, private development rights, and use of City-owned lands to meet other societal needs. The policies are also intended to ensure humane treatment of prairie dogs, minimize the potential for loss of other wildlife, and provide flexible solutions for the City and private landowners in dealing with prairie dog issues. The overarching goal of the policies is to strike a balance between differing attitudes, visions, and needs of the community. The policies also reflect the small geographic size of the City and County of Broomfield and the limited amount of City Open Space that is suitable and potentially available for prairie dog relocation or preservation.

The policies have been developed in conjunction with the creation of the DRAFT Open Space, Parks, Recreation, and Trails Master Plan (OSPRT Master Plan). The OSPRT Master Plan contains overall wildlife management recommendations for the City. In addition, specific open space management plans for individual open space properties will provide comprehensive wildlife management direction.

2. BACKGROUND

2.1. CURRENT STATUS OF PRAIRIE DOGS

Less than 2 percent of pre-settlement prairie dog populations in the United States exist today, due to a combination of habitat loss (agriculture and other human land uses) and targeted extermination. This national trend is reflected in the Colorado Front Range. During the past 20 years, prairie dogs have colonized some areas of abandoned agricultural land in the region. However, these localized expansions have been offset by the habitat loss associated with urban and suburban development accompanying population growth in the Front Range.

Because of this historic and ongoing population decline, the U.S. Fish and Wildlife Service (USFWS) has concluded that adding the black-tailed prairie dog to the federal list of threatened or endangered species is “warranted” but “precluded” at this time due administrative and fiscal limitations within the agency. Although not currently listed as threatened or endangered at the federal or state level, the black-tailed prairie dog has been the subject of increasing attention by the Colorado Division of Wildlife (CDOW), many city and county governments, and local citizens. Just as throughout the region, prairie dogs have become an important political, social, economic, and ecological issue in the City and County of Broomfield.

2.2. PUBLIC OPINIONS CONCERNING PRAIRIE DOGS IN BROOMFIELD

Public meetings held in conjunction with the development of these Policies, and previous and ongoing public input, indicate that some citizens of Broomfield believe that prairie dogs should be protected and preserved to the maximum extent possible. These citizens hold some or all of the following viewpoints:

- Morally opposed to killing wildlife
- Enjoy watching prairie dogs

- Enjoy watching raptors and other species attracted to prairie dog towns
- Believe that prairie dogs form a connection to pre-settlement history
- Believe that prairie dogs are an important part of the prairie ecosystem
- Believe that prairie dog preservation is key to maintenance of raptor populations
- Concerned that prairie dog control may inadvertently harm other wildlife

The public meetings and ongoing input indicate that some other citizens of Broomfield believe that prairie dogs are pests that should be controlled. These citizens hold some or all of the following viewpoints:

- Concerned about threats to human health and pets from sylvatic/bubonic plague
- Concerned about impacts to landscaping and degradation of native vegetation
- Believe that prairie dog towns ruin the range for livestock
- Believe that prairie dog burrows represent a risk of injury to livestock
- Concerned about using too much open space for prairie dogs instead of other uses that are incompatible with prairie dogs
- Concerned about the cost to taxpayers for prairie dog management

The *Broomfield Open Space, Trails, Parks, and Recreation Needs Assessment Survey 2002*, conducted for the City by Wenk Associates/RRC Associates specifically addressed issues concerning prairie dogs. Results of the survey reflect this split within the community. For example:

- 46% of residents do not believe that the public and private sectors have a responsibility to relocate prairie dogs as an alternative to eradication when new development occurs, while 39% do believe that such a responsibility exists.
- 47% of residents oppose poisoning prairie dogs as a means of eradication, while 40% support this action.
- 43% of residents oppose using captured prairie dogs in endangered species or raptor recovery programs (e.g., donating them to the U.S. Fish and Wildlife Service [USFWS] for use as food in the black-footed ferret program], while 40% support this measure.

These results underscore the importance of one of the goals in Section 1 of these Policies: “[T]o strike a balance between differing attitudes, visions, and needs of the community.”

3. INTRODUCTION TO PRAIRIE DOG ECOLOGY

3.1. TAXONOMY, BEHAVIOR, AND POPULATION DYNAMICS

Prairie dogs are ground-dwelling sciurids (members of the squirrel family). Four species occur in the west-central and southwestern U.S. The species in eastern Colorado is the black-tailed prairie dog (*Cynomys ludovicianus*). The species name “*ludovicianus*” refers to the Louisiana Purchase, which added to the U.S. much of the High Plains region where the black-tailed prairie dog originally occurred.

Black-tailed prairie dogs do not hibernate but stay underground for protracted periods during severe winter weather. Burrows commonly extend more than 10 feet below the surface, which protects the den from hot, cold, or wet weather, and from most predators. Like most sciurids, prairie dogs are active during the day (diurnal) and thus vulnerable to predation by hawks and eagles. The raised dirt around a burrow entrance not only provides some protection from runoff, it also provides an elevated perch on which to sit and watch for raptors, coyotes, and other predators. Colonial behavior probably evolved in part as an adaptation that helps reduce the success of predators by providing numerous pairs of watchful eyes. One of the characteristic vocalizations of prairie dogs is given to alert others in the colony to the presence of a potential threat. Calling to others, although it may briefly increase the risk of predation to that individual (compared to simply disappearing down the burrow), is adaptive because of the probability that individuals benefiting from the warning include offspring and other close relatives.

Prairie dogs have one litter per year, typically ranging from one to six young and sometimes up to ten young. The average litter size is three prairie dogs. The young are born in March or April and venture above ground after 5 or 6 weeks. Offspring stay with their family group (“coterie”) for 2 years, and maximum life span for females is about 8 years, while males typically live up to 5 years. Survivorship of prairie dog young is low—a large majority of the young born each year are taken by predators or die from other causes. Infanticide (killing of young by the mother or another prairie dog) is a significant source of juvenile mortality. This behavior may have evolved as a means of population regulation (if by the mother) and removal of competitors (if by another adult). The large number of young seen in healthy prairie dog towns in early summer reflects the reproductive strategy of producing many young so that some will survive. A very brief estrous in adult females (only a few hours) and synchronous breeding throughout the colony result in production of more young than can be killed by predators during the most vulnerable early weeks—when the young are small and less adept at predator avoidance.

3.2. INTERACTION WITH OTHER WILDLIFE, VEGETATION, AND PEOPLE

Prairie dogs are neither “good” nor “bad” in an ecological sense. They are a natural part of the prairie ecosystem, and their presence profoundly influences not only vegetation but also habitat quality for other wildlife. Some wildlife species benefit from the presence of prairie dogs. These include species that feed on prairie dogs, that prefer areas of closely cropped vegetation, or that use the burrows for denning or nesting. Among these are a number of federally listed or state-listed threatened or endangered species. On the other hand, species that prefer areas of denser or taller plant cover suffer habitat loss when prairie dogs occupy an area. These species include most ground-nesting songbirds, small mammals, and reptiles.

Prairie dog towns in the region today are smaller and more isolated than existed under natural conditions. Consequently, the instinctive behavior of dispersing to new areas inevitably takes prairie dogs into unwanted places. Native predators are often unable to hunt in urban colonies because of the small area and surrounding land uses. Even where predators are able to hunt, they are present in low numbers.

Many of the areas currently occupied by prairie dogs were previously used for agriculture (growing of crops, grazing of cattle) or otherwise modified from the pre-settlement vegetation. The degraded condition of these lands (with low, sparse vegetation) is often what attracted prairie dogs to the site, rather than the result of use by prairie dogs. On the other hand, prairie dogs can and generally do have a significant negative impact on the vegetation when they move into an area of native grassland. This is exacerbated by the relatively recent introduction of

various non-native weeds in the ecosystem and the very high densities commonly associated with the small, isolated urban colonies.

3.3. DISEASE

Sylvatic plague (bubonic plague in humans) was inadvertently introduced to North America from Asia during the settlement of the New World. The plague bacterium is carried by the oriental rat flea (*Xenopsylla cheopis*), which has found a suitable host in the prairie dog. The fleas may in turn be transferred to dogs or cats that come in contact with an infected colony, and the disease may then be spread to humans.

Transmittal to humans may occur through fleabites or by exposure to infected pets. However, the risk of human infection is low. According to John Pape, Epidemiologist with the Colorado Department of Public Health and Environment (CDPHE), 48 cases of human plague have been documented in Colorado since 1957. Of these 48 cases, seven were the result of human being exposure via fleas, while four resulted from direct human exposure to infected prairie dogs or other rodents (John Pape, personal communication [October 5, 2001 and January 25, 2002], CDPHE, 4300 Cherry Creek Drive South, Denver, CO 80246, 303-692-2700, fax 303-782-0338, email john.pape@state.co.us).

Plague is treatable with antibiotics and readily curable in humans if diagnosed and treated early. For additional information on bubonic plague and other wildlife-borne (zoonotic) diseases, see www.cdphe.state.co.us/dc/zoonosis.asp and www.mountain-prairie.fws.gov/btprairiedog/plague.

3.4. RELOCATION AS A CONTROL MEASURE

In recent years, increasing emphasis has been placed throughout the Front Range region on relocating (“transplanting”) prairie dogs from areas that are to be developed instead of chemically eradicating the colony or simply beginning construction and forcing the prairie dogs to flee or be killed by the equipment or collapse of the burrows. Although clearly preferable to these actions, relocation is not completely effective in saving a colony or preventing prairie dog mortality. Data from numerous relocations indicate that perhaps only half of the relocated prairie dogs become established in their new location. The remainder die due to increased vulnerability to predators, physiological stress, injury inflicted by other prairie dogs, or being hit by vehicles while dispersing from the release site. More successful relocations can result in a 90% survival rate.

4. POLICIES PERTAINING TO CITY-OWNED LANDS, CITY PROJECTS, OR PROJECTS OF OTHER PUBLIC ENTITIES

4.1. AVOIDANCE

It is the City’s policy to avoid adverse impacts to prairie dog towns to the extent reasonable in planning for maintenance or use of lands owned or managed by the City, or in projects conducted by the City on other lands (e.g., utility easements) or funded by the City.

If impacts to prairie dogs cannot reasonably be avoided in conjunction with a City project, such as in cases where an overriding public need or benefit is incompatible with preservation of a prairie dog colony on a specific parcel of City-owned or City-managed land, one (or a combination) of the alternatives described in Sections 4.3 through 4.6 shall be implemented.

These alternatives—relocation to City Open Space, relocation to alternative sites, removal for use in the black-footed ferret recovery program, and lethal control—are presented in decreasing order of preference and shall not proceed without prior public notice (see Section 4.2).

4.2. NOTIFICATION PRIOR TO RELOCATION, REMOVAL, OR LETHAL CONTROL

It shall be the City's policy to implement no prairie dog relocation, removal, lethal control or designation of a release site without prior public notice. Such prior notice shall include, at a minimum, 5 days public notice in the local newspaper before any proposed action.

In the case of removal or lethal control, specific notice, by mailing or other direct notice shall be given to record landowners adjacent to the property containing the existing prairie dog site at least 10 days prior to the proposed action.

In the case of relocation, specific notice shall be given to record landowners within 500 feet of the property containing the release site within 10 days of the relocation. Specific notice, by mailing or other direct notice shall also be given to record landowners adjacent to the property containing the existing prairie dog site proposed for relocation at least 10 days prior to the proposed action.

In the case of release site designation (See Section 8.3), specific notice shall be given to record landowners within 500 feet of the proposed property containing the release site at least 10 days before any proposed action.

Public information signs shall be posted at the existing prairie dog site and the release site, if applicable, or proposed release site to explain the project at least 10 days before any proposed action. A sign shall be at least twenty-two inches by twenty-eight inches in size.

The purpose of the notification cited above and referenced throughout the Policies is to inform the public of proposed prairie dog management projects and not to get approval for each project.

4.3. RELOCATION TO CITY OPEN SPACE

If avoidance is not practicable, the City may relocate prairie dogs to an area of City Open Space designated for prairie dog relocation. This provision also applies to projects undertaken or funded by the City on other lands (e.g., utility easements and school district recreational facilities used by the City).

Relocation of a prairie dog colony by the City for the public benefit shall use humane capture-and-release methods (live-trapping or water-flushing) and shall not proceed prior to public notice (see Section 4.2). The City shall not approve relocations conducted by organizations or individuals with a prior violation of a City or State permit. For purposes of this provision, vacuum removal of prairie dogs is not considered "relocation" because prairie dogs captured using this method are not released back into the wild (see Section 4.5).

As noted in Section 3.4, relocation generally does not result in survival of all of the prairie dogs involved. However, relocation preserves much or most of the prairie dog population and genetic diversity of the colony that would otherwise be eradicated, and the City therefore prefers relocation over alternatives that result in direct loss of all or part of a colony.

Any prairie dog relocation requires a State permit from CDOW. The permit must specify the maximum number of prairie dogs that the release site can support, based on acres of suitable habitat and existing prairie dog populations. The relocation permit must also address provisions for handling the few remaining prairie dogs on the site once the majority of the relocation work is finished. Following a relocation, the City shall conduct monitoring of the release site and implement management measures as necessary and financially feasible to minimize adverse impacts on neighbors and other private or City-owned land.

Relocation from private land or other public land onto City Open Space will not be allowed during the birthing, nursing, and early rearing period of March through May. Prior to release, the captured prairie dogs will be dusted for fleas as a means of reducing the potential for transmission of sylvatic plague. All CDOW requirements for dusting of burrows shall be met.

Relocation of 10 or fewer prairie dogs will be scrutinized closely by Open Space staff with guidance from CDOW to determine if it is prudent to relocate the animals. This provision reflects both the lower survival associated with small relocations and the disproportionate administrative and fiscal burden for the City as well as CDOW in relation to the ecological and societal benefit. The primary goal of these Policies is to ensure that prairie dogs remain a component of the landscape in suitable areas of Broomfield. Minimizing mortality of prairie dogs is a secondary benefit but not the main goal.

4.4. RELOCATION TO ALTERNATIVE SITES

If relocation to a designated release site on City Open Space is not practicable due to insufficient capacity or unsuitability, the City shall make a reasonable effort to identify an alternative release site (e.g., future prairie dog banks, lands owned by other cities or counties, or the Rocky Mountain Arsenal if it resumes accepting prairie dogs). Relocation of prairie dogs to an alternative site shall not occur prior to public notice (see Section 4.2). In conformance with state law, prairie dogs shall not be relocated to other counties without approval of the County Commissioners of that county. Any relocation within Broomfield or to another jurisdiction requires a permit from CDOW.

4.5. REMOVAL BY LIVE TRAPPING, WATER FLUSHING OR VACUUM TRUCK FOR USE IN THE BLACK-FOOTED FERRET PROGRAM OR OTHER WILDLIFE RECOVERY PROGRAM

If no suitable release site on City Open Space or other suitable location can be identified after a reasonable level of effort, the City may elect to remove the prairie dogs using a vacuum truck or other method (e.g., live-trapping, flushing with water) for transport to a site designated by USFWS for use in the black-footed ferret recovery program. Prairie dogs transported to USFWS for this purpose are generally euthanized and used as food for captive-reared ferrets. Ferrets about to be released into the wild are fed live prairie dogs. The USFWS currently accepts prairie dogs only from late April through mid-October. Removal of prairie dogs for donation to USFWS shall not proceed prior to public notice (see Section 4.2).

4.6. LETHAL CONTROL

If none of the options described above is practicable, and only as a “last resort,” the City may retain the services of a professional exterminator to eradicate all or part of a prairie dog colony on City Open Space or other City-owned or City-managed land. Acceptable methods are currently limited to use of toxic gas. No other means of lethal control such as poison bait or

shooting shall be used to eradicate prairie dog colonies on City-owned or City-managed lands. The City shall not approve any exterminator with a prior violation of a City or State permit.

Extermination of a prairie dog colony by the City shall use a commercial exterminator and shall not proceed prior to public notice (see Section 4.2). Only toxicants approved by the U.S. Environmental Protection Agency (EPA) shall be used. Currently, these toxicants include zinc phosphate (an oral toxicant), aluminum phosphide pellets (a fumigant), and carbon monoxide gas cartridges (a fumigant).

4.7. EXCEPTION FOR EMERGENCY RESPONSES

Notwithstanding the above, public notice shall not be required prior to lethal control of individuals or small groups of prairie dogs on City-owned or City-managed land as an “emergency response.” Emergency responses may include, but are not limited to, prairie dogs that appear sick or injured or occur as vagrants in places where their presence is unsafe or clearly inappropriate. Unsafe or clearly inappropriate locations include, but are not limited to, parks, playgrounds, recreational areas, parking lots, roads, landscaping of public buildings or other facilities, or Open Space lands designated as unsuitable for prairie dogs. The exemption from the general requirement for public notice prior to lethal control is intended to allow a timely response in these situations.

4.8. CONTROL OF PRAIRIE DOGS THAT DISPERSE ONTO PRIVATE LAND

The City retains the right to exterminate, without public notice, prairie dogs that disperse from City land onto adjacent or nearby private land where their presence is undesirable or unwanted. Prairie dog removal or extermination by the City on private land may be initiated at the request of, or with the permission of, the private landowner. Lethal control shall be limited to use of toxic gas. The exemption from public notice is intended to allow timely response in these situations.

4.9. PROTECTION OF BURROWING OWLS

Prior to relocation, removal, or extermination of all or part of a prairie dog colony on City land during the burrowing owl nesting season (April 1 through July 31), the prairie dog town shall be surveyed by a qualified biologist for the presence of burrowing owls. The burrowing owl, which nests in abandoned prairie dog burrows, is listed by CDOW as a threatened species in Colorado and protected by USFWS under the federal Migratory Bird Treaty Act. It is unlawful to kill, injure, chase, or harass burrowing owls, or to destroy their eggs or active nests. Active nests are those that contain eggs or young or are being tended by adults in preparation for breeding. Destruction of nests is construed to include nest failure that results from abandonment by one or both adults. A burrowing owl survey prior to relocation, removal, or extermination of prairie dogs is required by CDOW. Failure to conduct a survey also creates the risk of violating the Migratory Bird Treaty Act, if the activity results in burrowing owl mortality, injury, or nest failure.

If burrowing owls are found to be nesting within a prairie dog town, the City shall postpone any relocation or control measures until after the nesting season. If postponing prairie dog relocation or control would represent an undue hardship for the City or its citizens, the City may apply to USFWS for authorization to implement the proposed action during the nesting season. Such a plan would be required to (a) demonstrate the necessity of undertaking the action during the nesting season and (b) describe how the proposed action would be conducted without destroying or causing abandonment of the nest or eggs and without injury or killing the adults or young. For example, the plan could prohibit relocation or control of prairie dogs in areas less

than 330 feet (1/16 mile [330 feet]) from a nest burrow until after the young have fledged and are old enough to survive away from the burrow. This distance is based on *Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors* (Gerald R. Craig, CDOW, March 19, 1998). Any plan will be evaluated by USFWS and CDOW on a case-by-case basis.

4.10. LIMITATIONS ON COSTS OF PRAIRIE DOG RELOCATIONS FROM CITY LAND, CITY PROJECTS, OR PROJECTS OF OTHER GOVERNMENTAL ENTITIES

Results of the *Open Space, Trails, Parks, and Recreation Needs Assessment Survey 2002* (see Section 2.2) indicate that citizen support for prairie dog relocation for City projects is significantly affected by the cost to the public. For example, 60% of survey respondents would support relocation if done by volunteers when possible, while only 29% would support relocation if the work were contracted to a private-sector [for-profit] entity.

Therefore, to reflect this public sentiment, it shall be the policy of the City to place a cap of \$4,500 per relocation effort for City projects or those of other governmental entities, except that City Council may authorize additional funds for specific City projects following public notice for the project (see Section 4.9). The cap amount is based on the typical costs for completing a volunteer relocation (building burrows, liability insurance, materials, excavator rental/labor, and water trailer rental for the relocation of approximately 150 prairie dogs). In addition, and above the \$4,500 cap, a burrowing owl study, if required, must be completed for any relocation, removal, or lethal control project (if required, see Section 4.9). To maximize the number of prairie dogs that can be relocated within the per-project ceiling of \$4,500, the City shall use volunteer organizations to the degree practicable and may seek opportunities for public-private partnerships including, but not limited to, fund-raising projects or cash contributions by private entities.

4.11. IMPORTANCE OF VOLUNTEERS AND PUBLIC EDUCATION

The City strongly encourages the use of volunteers to complete relocations and to assist the open space staff in conducting public education programs about prairie dogs and other wildlife in the community.

5. POLICIES PERTAINING TO PRIVATELY SPONSORED PROJECTS

5.1. GENERAL POLICY

To help attain the goals of these *Prairie Dog Conservation and Management Policies* (see Section 1), the City has established the following priority ranking for owners or occupants of private land to deal with prairie dogs in situations where the continued existence of a colony conflicts with an intended land use:

First, relocation to a land not owned by the City (i.e., private land, or other public land).

Second, relocation to a designated release site on City Open Space.

Third, removal by live-trapping, water flushing, vacuum truck, or other approved method for use in the black-footed ferret program or other City approved wildlife recovery program such as the Rocky Mountain Raptor Program.

Fourth, and as a last resort, humane extermination or lethal control using toxicants.

Any relocation, removal, or extermination of prairie dogs from private land shall require a permit from the City, as set forth in Sections 5.2 through 5.4.

5.2. NOTIFICATION PRIOR TO RELOCATION, REMOVAL, OR LETHAL CONTROL

The permit applicant shall meet the notification requirements described in Section 4.2. The permit applicant shall also be responsible for providing a list of landowners within 1/4 mile of the existing prairie dog site and release site if applicable, furnishing the City with stamped, addressed envelopes for the adjacent landowners, and posting an informational sign at the existing prairie dog site and the proposed release site if applicable.

5.3. RELOCATION TO CITY OPEN SPACE

5.3.1. City and State Permits Required for Relocation from Private Land

Relocation of prairie dogs from private land to another site within Broomfield or to another jurisdiction shall require a *Prairie Dog Relocation or Removal Permit* from the City, as well as a permit from CDOW. The permit application shall include location and current use of the subject property, name and telephone of the applicant, date of the application, and a relocation or removal proposal specifying the reason for the request, number of prairie dogs affected, results of a burrowing owl study (if required), and the proposed relocation method, schedule, and release site. A burrowing owl study shall be required for any proposed relocation that would be between April 1 and July 31 (see Section 4.9). A final report describing how many prairie dogs were relocated and the number of prairie dogs that survived shall be submitted by the permittee to the City within one month of project completion.

In keeping with the City's policy of preferring humane capture and relocation of prairie dogs over removal or extermination, the City may use suitable areas of Open Space for relocation of prairie dogs from other City-owned land within Broomfield or, when practicable and appropriate, from private land within Broomfield. The City will accept prairie dogs from private land or other public entities (e.g., the school district) only when:

- No suitable alternative release site is available.
- A suitable site on City Open Space is available.
- The relocation would not adversely affect adjacent or nearby private or City-owned land.
- The relocation would not foreclose or unreasonably limit planned future use of the site by the City.
- The relocation would not conflict with anticipated City-sponsored prairie dog relocations.

Relocation from private land or other public land onto City Open Space will not be allowed during the birthing, nursing, and early rearing period of March through May. Prior to release, the captured prairie dogs will be dusted for fleas as a means of reducing the potential for transmission of sylvatic plague.

Each application for relocation from private land to City Open Space shall also address provisions for handling prairie dogs that may remain on the site after the primary method of removal is implemented.

5.3.2. Relocation Costs

If the City approves a request to relocate prairie dogs to City Open Space, the requesting party shall be required to pay for all site preparation, relocation, and monitoring costs, a burrowing owl study (if required), and costs associated with public notice. Site preparation may include, but is not limited to, weed control, mowing of vegetation, and construction of dispersal barriers.

5.4 REMOVAL FOR USE IN THE USFWS BLACK-FOOTED FERRET PROGRAM OR OTHER WILDLIFE RECOVERY PROGRAM

5.4.1. City and State Permits Required for Removal from Private Land

Removal of prairie dogs from private land for donation to USFWS for the black-footed ferret program shall require a *Prairie Dog Relocation or Removal Permit* from the City, as well as a permit from CDOW. The permit application shall include location and current use of the subject property, name and telephone of the applicant, date of the application, and a relocation or removal proposal specifying the reason for the request, number of prairie dogs affected, results of a burrowing owl study (if the relocation would occur between April 1 and July 31) and the proposed relocation method, schedule, and USFWS agreement or other wildlife recovery program's agreement to accept the prairie dogs. A final report describing how many prairie dogs were removed shall be submitted by the permittee to the City within two weeks of project completion. The permittee shall also submit to the City documentation from the USFWS or wildlife recovery program to which the prairie dogs were provided.

If no suitable release site on City Open Space or another suitable location can be identified after a reasonable level of effort, the applicant may elect to remove the prairie dogs using live-trapping, water flushing, vacuum truck or other method and transport the removed prairie dogs to a site designated by USFWS for use in the black-footed ferret recovery program or other City approved wildlife recovery program such as the Rocky Mountain Raptor Program. [Prairie dogs transported to USFWS for this purpose are generally euthanized and used as food for captive-reared ferrets. Ferrets about to be released into the wild are fed live prairie dogs. The USFWS currently accepts prairie dogs only from late April through mid-October.] Removal of prairie dogs for donation to USFWS shall not proceed prior to public notice (see Section 4.2).

5.4.2. Removal Costs

The applicant is responsible for all costs associated with public notice and prairie dog removal.

5.5. LETHAL CONTROL

5.5.1. City Permit Required for Lethal Control on Private Land

It shall be unlawful to kill prairie dogs within the City and County of Broomfield by shooting, poisoning, fumigating, asphyxiating, drowning, lethal trapping, or any other means, unless authorized by the City as part of an approved prairie dog control program. The purpose of this provision is to reduce the loss of prairie dogs within the City, ensure the humane treatment of prairie dogs within the City, and reduce the potential for adverse impacts to other wildlife. A final report describing how many prairie dogs were lethally controlled shall be submitted by the permittee to the City within two weeks from completion of the project. This provision constitutes a *Prairie Dog Control Permit* process for private landowners within Broomfield.

Lethal control of prairie dogs pursuant to a *Prairie Dog Control Permit* issued by the City must be performed by an approved method and an approved exterminator. The only method currently approved for lethal control within Broomfield is asphyxiation by toxicants pursuant to Section 4.6, Lethal Control.

5.5.2. Permit Provisions for Private Residential Lots 5 Acres or Less in Area

Owners or occupants of residential lots containing a residence with an area of 5 acres or less may, at any time, obtain a permit from the City to exterminate prairie dogs on their property. The intent of the permit process for small residential lots is to allow flexibility to owners or occupants in responding to the unwanted presence of prairie dogs on their property, while providing a mechanism for the City to monitor prairie dog problems within its boundaries and ensure that control methods are humane.

Applications for a *Prairie Dog Control Permit* to exterminate prairie dogs on residential lots 5 acres or smaller shall be *pro forma*—that is, they shall be approved by the City upon receipt of the following information: address of the subject property, and name and telephone number of the applicant, date of the application, and description of the request. *Pro-forma* permits shall be issued at no cost to the applicant.

Residential subdivisions or contiguous residential lots in common ownership with a combined area larger than 5 acres will not qualify for a *pro-forma* or “small-lot” permit and instead are covered by the process described below.

5.5.3. Permit Provisions for Private Non-Residential Property and Private Residential Lots Larger than 5 Acres

Non-residential private property and privately owned residential lots larger than 5 acres tend to have the potential to support a larger number of prairie dogs and other wildlife more readily than residential lots 5 acres or smaller in size. Prairie dogs are generally not compatible with residential uses on smaller lots. Therefore, lethal control of prairie dogs on larger parcels has the potential for more significant ecological impacts. Additionally, larger parcels are more likely to be appropriate for prairie dog relocation or removal as alternatives to extermination. To assist the Open Space staff in making these determinations on a case-by-case basis, permit applications for private non-residential parcels and residential lots larger than 5 acres are subject to the following:

- In addition to the information specified for small residential lots (see Section 5.5.2), permit applications for larger parcels shall describe the size and current use of the property, the reason(s) for the intended control, the proposed method (toxic gas is the only method currently approved by the City), the name of the professional exterminator to perform the control, and the number of prairie dogs affected.
- If more than 10 prairie dogs are to be exterminated, the City may require that the applicant submit a written estimate, prepared by a qualified biologist, of the number of prairie dogs to be affected.
- The City may, at its discretion and no later than 4 weeks following receipt of an application, require that prairie dog control be postponed until the owner or occupant of the subject property has evaluated capture and relocation to another site or removal for donation to the black-footed ferret program.

- The City may, after evaluating the application and specific situation, determine that issuance of a permit for lethal control of prairie dogs is not justified. Criteria for denial may include demonstrated need, availability of alternative remedies, the effort made to identify an alternative remedy, and the number of prairie dogs to be affected.
- Prior to implementation of lethal control or an alternative remedy during the burrowing owl nesting season (April 1 through July 31), the prairie dog town shall be surveyed by a qualified biologist for the presence of burrowing owls. As described in Section 4.9, this is required by CDOW, and failure to conduct a survey creates the risk of violating the federal Migratory Bird Treaty Act. If burrowing owls are found onsite during the nesting season, the relocation, removal, or extermination must conform to the restrictions described in Section 4.9.
- If more than 10 prairie dogs are to be exterminated, the private landowner shall first provide public notice as described in Section 4.2. Extermination of fewer than 10 prairie dogs for any single project shall not require public notice.

5.5.4. Exceptions Applicable to Non-Residential Parcels and Residential Lots Larger than 5 Acres

Regardless of the size of the private property or the number of prairie dogs to be controlled by lethal means, the following situations create an exception to the permit process for large parcels outlined in Section 5.5.3:

- Prairie dogs that move onto private land from another parcel of private land or from public land.
- Prairie dogs that burrow in inappropriate areas such as a lawn, garden, flowerbed, driveway, or parking area.
- Prairie dogs that create a health or safety risk such as by burrowing in roads, trails, dikes, or dams or adjacent to buildings, other structures, or buried utilities.
- Prairie dogs that interfere with ongoing farming operations by burrowing in a cultivated cropland or an area used for the production of hay or sod. This exception is intended for the protection of agriculture and does not apply to former agricultural land that has been abandoned or is lying fallow in anticipation of development.
- Prairie dogs that interfere with ongoing ranching operations by damaging the range or creating a risk of injury to livestock. This exception is intended for the protection of ranching and does not apply to lands for which development is anticipated or proposed.
- Prairie dogs that create an unreasonable and immediate risk to horses or other livestock by burrowing in a corral, pen, feedlot, pasture, or equestrian facility, or along an equestrian path.

Any of these situations shall allow the applicant to use the free *pro-forma* process otherwise reserved for privately owned residential lots 5 acres or smaller in size (see Section 5.5.2).

5.5.5. Costs of Lethal Control

The cost of prairie dog extermination pursuant to a *Prairie Dog Control Permit* from the City (including the free *pro-forma* permit) shall be borne by the private landowner to whom the permit is issued. This provision does not apply when the lethal control is necessitated by dispersal of prairie dogs from City Open Space to private land (see 4.8). In these situations, the City shall undertake the control at its expense and within the following timeframes after receipt of a request: for lots smaller than 5 acres – 15 days, and for parcels 5 acres or larger – 30 days. If control is undertaken by the City, the landowner is not required to obtain a permit or pay for the control. However, if the affected landowner chooses to implement the control sooner than the allowable periods specified above, the landowner shall be required to obtain the free *pro-forma* permit described in Section 5.5.2, and costs incurred by the landowner shall not be reimbursed by the City.

5.6. EMERGENCY RESPONSE

In the event of an emergency response (e.g., a prairie dog that is in a clearly inappropriate or unsafe area, or a prairie dog that appears sick or injured), City of Broomfield Animal Control may continue its practice of capturing the vagrant animal and either humanely dispatching it, or, if the animal appears healthy, releasing it into an existing colony on City Open Space.

5.7. PRAIRIE DOGS THAT DISPERSE FROM AN EXISTING COLONY OR PERMITTED RELEASE SITE

The permit applicant shall be responsible for removing or relocating prairie dogs that disperse from the permitted land onto adjacent or nearby land where their presence is undesired. Prairie dog relocation, removal or extermination by the applicant on adjacent or nearby land may be initiated at the request of, or with the permission of, the impacted landowner.

Lethal control shall be limited to toxic gas. Public notification for the relocation or removal of prairie dogs that have dispersed onto adjacent or nearby property shall not require public notification. This exemption is intended to allow a timely response in these situations.

See relevant parts of Sections 4, 6, and 7 of these Policies for other requirements related to relocation or removal.

5.8. PRAIRIE DOG MANAGEMENT ENDOWMENT FEE

In addition to paying costs associated with moving prairie dogs to City Open Space from commercial or industrial land or from any land under review by the City for development—including the costs of public notice—the requesting party shall be assessed a “prairie dog management endowment fee.” The fee shall be \$100 for each prairie dog exterminated (i.e., killed by use of an approved lethal control method) and \$50 for each prairie dog either relocated to an approved City release site or removed by vacuum truck or other method for donation to the black-footed ferret recovery program or other approved use (e.g., raptor rehabilitation). The fee does not apply to private landowners that relocate their prairie dogs on their own property.

The higher fee for extermination is intended to both (a) encourage use of an alternative to extermination when dealing with prairie dogs and (b) help offset the higher costs to the City of replacing the lost ecological values resulting from extermination, such as by enabling the City to provide new or enhanced habitat elsewhere or preserving additional prairie dogs through relocation in conjunction with City projects.

The \$100 amount was derived from two types of costs: (a) a typical private contractor's relocation cost of \$100 per prairie dog to suitable release sites, and (b) a typical habitat restoration cost of \$100 per prairie dog based on \$1,000 per acre for weed control and reseeding and an average of 10 relocated prairie dogs that could be relocated to an acre of restored habitat. Actual relocation densities could range from as few as 5 prairie dogs per acre to as many as 15, based on information provided by CDOW and depends on factors such as habitat quality and drought. Relocation densities are lower than the ultimate carrying capacity of the release site to accommodate future population growth.

The City may use monies generated by the prairie dog management endowment fee for any purpose directly or indirectly related to prairie dog conservation or management, including (but not limited to) the following:

- Acquiring additional Open Space land to accommodate Open Space uses displaced by preservation or relocation of prairie dogs.
- Relocating Open Space uses on other City-owned Open Space that were displaced by the preservation or relocation of prairie dogs.
- Conducting relocations for City projects.
- Creating new habitat for prairie dogs by converting selected parcels of Open Space to conditions suitable for future in prairie dog relocations identified in Sections 8.4 and 8.5 (e.g., by converting small-grain fields to perennial grassland).
- Enhancing habitat quality of existing or future Open Space parcels prior to relocation of prairie dogs, such as through weed management and supplemental seeding programs.
- Monitoring the success of prairie dog relocation programs.
- Constructing and maintaining prairie dog barriers, such as by erecting fences and establishing natural barriers, to minimize impacts of existing or future colonies on Broomfield residents, and monitoring the effectiveness of the barriers.
- Producing educational signage, brochures, or other materials related to prairie dog conservation and management.
- Retaining consultant services to assist open space staff with prairie dog management such as a qualified consultant to monitor prairie dog towns for burrowing owls and to estimate prairie dog population size of colonies to be affected by City projects.

6. RELOCATION OF PRAIRIE DOGS TO PRIVATE LAND

The City may enter into an agreement with one or more landowners authorizing use of private land for relocation of prairie dogs and/or preservation of existing colonies. The relocating property owner will submit the CDOW permit authorizing the relocation to the Open Space and Trails Department so that the City is aware of the relocation project. Agreements for use of private land as prairie dog release sites or preservation sites may be predicated on consideration to the landowner, including granting of tax incentives through conservation easements, approval of increased development densities, payment of cash by the party from whose property the prairie dogs are to be relocated (e.g., a developer who can find no other

suitable site), a reduction in the public land dedication requirement, open area zoning requirements, or other compensation or inducement.

Release of prairie dogs onto private land within the City shall be preceded by public notice (see Section 4.2). Following public comment, the City may determine that the release onto private land is not appropriate. If relocation onto private land is approved, provisions of these Policies pertaining to the protection of private landowners from nuisance, property damage, or health risks associated with release of prairie dogs onto City Open Space (see Section 5.3) shall also apply to City-sanctioned releases onto private land.

7. PENALTIES FOR NONCOMPLIANCE

Any person who kills, removes, or relocates one or more prairie dogs from land within Broomfield without obtaining a permit from the City, or who violates the conditions of a permit from the City, shall be subject to the penalties provided in Chapter 1-12, General Penalty B.M.C. CDOW will be notified in cases of non-compliance and may assess its own penalties if the unpermitted control or relocation also violated state law.

These policies also prohibit the release of prairie dogs onto private or public land within Broomfield without a permit from the City and CDOW. The penalty for an unpermitted release may be as much \$1,000 in fines and/or up to one year in jail, plus any penalties levied by CDOW.

8. POLICIES PERTAINING TO RELEASE SITES

8.1. OVERVIEW

In conjunction with development of these *Prairie Dog Conservation and Management Policies*, the City Open Space and Trails Department and the Open Space and Trails Advisory Committee (OSTAC) have identified potential short-term, mid-term, and long-term prairie dog release sites on City Open Space. The goal of this process was twofold:

- Evaluate the potential suitability of various parcels of Open Space in terms of vegetation, topography, size, connectivity with other prairie dog colonies, use by other wildlife, and adjacent land uses.
- Assess whether sufficient acreage of currently or potentially suitable Open Space land is available to accommodate a substantial portion of the anticipated relocation needs for both the City and private landowners.

It is important to remember that the prairie dog populations and relocation potentials shown in the attached tables are only estimates, subject to wide variability within and between years. Prairie dog population cycles are a natural part of the ecology of the species and are exacerbated in conditions of poor habitat quality, small population size, severe drought, and outbreaks of plague or other diseases. It is not unusual for new colonies to arise or for existing colonies to disappear.

During the prairie dog census conducted as part of this process (in May/June 2001), an estimated 508 prairie dogs (1,215 including juveniles) were present within 118 acres of occupied habitat (8 mapped colonies) on City Open Space (Table 1). An estimated 800

additional prairie dogs (1,940 including juveniles) were present within 387 acres of occupied habitat on private land within the City (Table 2).

8.2. MAXIMUM PRAIRIE DOG POPULATION

Adoption and Implementation of these Policies would result in the preservation of approximately 2,810 prairie dogs on approximately 325 acres of City-owned Open Space within the City and County of Broomfield. These numbers reflect the sum of the estimated existing population of prairie dogs on City Open Space (1,420 animals on 122 acres, Table 1) and the number of prairie dogs that can be accommodated on existing and potential long-term City-owned release sites (1,390 prairie dogs on 203 acres, Table 3).

This number is only an approximation in terms of both the current population of prairie dogs and the relocation capacity of preliminarily identified release sites. The capacity of the preliminary release sites in Table 3 could decrease in the future as a result of drought or natural prairie dog population growth in those areas, or the capacity could increase if sylvatic plague or other factors cause the current population to decline. Additionally, future Open Space acquisitions could include lands that support prairie dogs, thus adding to the total to be preserved on City Open Space if deemed acceptable to Council. If future die-offs of prairie dogs occur on these future Open Space lands, the empty burrows may be retained to accommodate natural recolonization or, if recommended by OSTAC and approved by City Council following public notice (see Section 4.2), used for future prairie dog releases.

8.3. DESIGNATION OF RELEASE SITES

City Council may designate prairie dog release sites on City Open Space. Designation of release sites will be based on the combination of adequate area, capacity, configuration, and vegetation type and cover to ensure a reasonable likelihood of survival of the relocated animals. Sites with evidence of prior occupation by prairie dogs (i.e., abandoned burrows) will be given preferential consideration as release sites if all other factors are suitable and, in the event of a prior outbreak of sylvatic plague, at least 1 year has passed since the infection and the burrows have been dusted for fleas.

The City may designate as prairie dog release sites only those parcels or portions of City Open Space that meet the above criteria; do not pose an unacceptable risk of disease, nuisance, or damage to landscaping of adjacent landowners; and no risk of adverse impact to high-quality native grasslands or other sensitive habitat types or species. No site will be designated a prairie dog release site without prior public notice (see Section 4.2).

For release sites in proximity to a residential development, the City will establish buffer zones and construct movement barriers if deemed necessary (fences, plantings, etc.) to minimize the potential for prairie dogs to move from the release sites to adjacent or nearby properties where their presence is undesirable or unwanted. Buffers may vary in dimension depending on terrain, vegetation, and proximity of residences and shall provide a minimum of 500 feet separation between the release site and the closest residence.

As noted in Section 4.8, the City retains the right to control prairie dogs that disperse from City Open Space to areas where their presence is undesired. When practicable, control will occur in the buffer zone to minimize the need for control on adjacent properties.

8.4. POTENTIAL NEAR-TERM RELEASE SITES ON CITY OPEN SPACE

Preliminarily identified, currently suitable release sites on City Open Space could accommodate up to 580 prairie dogs over the short-term to mid-term, assuming that Great Western Reservoir will be expanded (Table 3). This estimate is based on a relocation density of 10 prairie dogs per acre (see Section 5.8) and includes the following:

8.4.1. Great Western Reservoir Open Space

This parcel is both the ecologically most suitable and most immediately available release site on City Open Space. The site is large, with approximately 124 acres suitable habitat, of which 56 acres is currently unoccupied by prairie dogs. The suitable acreage does not include four parts of the site: (1) a hill in the northeastern area that is a high quality remnant of native prairie, (2) buffer zones of 1,000 feet from the dam of Great Western Reservoir and 500 feet from the current high-water shoreline, (3) the area that would be inundated by future expansion of the reservoir, and (4) an area south of the reservoir. At an average relocation density of 10 per acre, the Great Western site could accept approximately 560 prairie dogs on the land currently assumed available.

The ability to establish a sizable prairie dog town at the Great Western Reservoir parcel would have ecological and educational benefits, most notably by attracting a greater number of raptors and other predators than at smaller sites. This would help meet one of the goals of prairie dog preservation within the City (i.e., providing a prey base for raptors); help control prairie dog population growth within, and dispersal from, the colony; and enhance the educational and scientific value of the site. The ability of the site to attract raptors is enhanced by the presence of mature trees along parts of Walnut Creek and the reservoir's shoreline. The trees provide nesting or winter perching sites for birds of prey, while the associated shrubs and lush herbaceous growth in these moist areas provide cover for ground-dwelling predators. A proposed future trail along the northern edge of the property could provide a good location for interpretive signage that would explain the different types of wildlife that use the site such as raptors, prairie dogs, and coyotes.

Another benefit of the Great Western site is that areas identified as suitable for prairie dogs have a relatively minor component of weeds. As noted above, ecologically important native prairie areas would not be used for prairie dog releases. Following relocations of prairie dogs, vegetation of the site should be monitored to ensure that an adequate plant buffer is present to protect water quality of the reservoir from sedimentation due to erosion and transport of soils.

Finally, the proximity to the Rocky Flats site and an extensive area of undeveloped open space in the City of Westminster (which also supports a prairie dog population) is a benefit, because the combined area is capable of supporting even larger numbers of raptors and other predators. Studies of radionuclides and other contaminants in the soils of the Great Western site indicate that the levels present would not represent a risk to the prairie dogs or predators feeding on them.

8.4.2. Mitchem Open Space

Portions of the Mitchem Open Space have been identified as suitable for small-scale relocations of prairie dogs. The suitable habitat at Mitchem is located along the western edge of the property, in a 6-acre bowl and adjacent slopes immediately east of U.S. Highway 287. Prairie dogs would be released only north of a minor drainageway that separates the bowl from the old

landfill site at the southern end of the City Open Space. The location will avoid an existing water line along US 287.

The Mitchem site consists primarily of non-native pasture grasses with relatively minor weeds and is near a large existing prairie dog colony on Boulder County Open Space (although separated by US 287.). The area of suitable habitat is larger than indicated in Table 3, but only areas well separated from existing residences would be considered for possible relocation. Because of the nearby residential development, a dispersal barrier would need to be erected to minimize the potential for adverse impacts on neighbors. A barrier would also be needed to protect the old landfill from burrowing by prairie dogs and ensure that the cap continues to prevent infiltration of precipitation. A barrier may also be desirable along US 287 to minimize mortality of prairie dogs attempting to disperse between the site and the large colony on County Open Space west of the highway.

Although the potential release site on the Mitchem Open Space is small and therefore cannot accept large numbers of prairie dogs, it has the benefit of proximity to nearby Boulder County Open Space, meaning that its use would have greater ecological value (in terms of attracting raptors) than normally associated with a small colony. The proximity to residential development and a major roadway provides the potential for education and viewing.

8.4.3. Dry Creek Business Center and Interlocken Open Space Parcels

These two small areas (each with 2 acres of currently unoccupied suitable habitat) are similar to the Mitchem site in that they do not contain ecologically sensitive vegetation or other wildlife uses and cannot accept large numbers of prairie dogs but provide opportunities for education and public viewing. In the future, both areas could potentially accept more prairie dogs, if the current populations succumb to outbreaks of plague.

The Dry Creek Business Center site would not need a barrier immediately, but a barrier may become necessary in the future if released prairie dogs (or those dispersing from the current population) become a nuisance for occupants of the few nearby residences. Similarly, the Interlocken site would not need a barrier immediately, but a barrier may be required in the future if prairie dogs become a nuisance for the adjacent office park. Of these two sites, the Dry Creek Business Center site is more suitable overall because of the presence of trees along an irrigation ditch, although it is likely that most of the trees will be removed by future development. The trees provide nesting and perching sites for birds of prey. To maximize the area suitable for release of prairie dogs, existing debris and abandoned structures from the earlier ranching era of the property would need to be cleaned up or removed.

8.5 POTENTIAL LONG-TERM RELEASE SITES ON CITY OPEN SPACE OR PRIVATE LAND

Additional sites were identified that have the potential for prairie dog relocation in the future. These sites, shown in the lower portion of Table 3, consist of two areas of City Open Space that currently are unsuitable but could potentially be made suitable over the long-term by converting existing agricultural land to mixed grassland.

The two potential areas listed in Table 3 are currently used for wheat production but are in areas that would otherwise be suitable for prairie dogs. These areas include Willow Park North, north of Midway and between Le Gault and Tom Frost Reservoirs, and the Nordstrom property, located along the Northwest Parkway at West 160th Avenue and North Huron Street. The estimated areas included in Table 3 assume a minimum 500-foot buffer from the nearest

residences and major roadways. Because of the proximity to current or planned Open Space and Park facilities, the potential future Willow Park North site offers good opportunities for education and public viewing.

Converting these or other wheat fields to suitable habitat for prairie dogs would consist of planting a blend of perennial grasses adapted to site conditions. Although native prairie grasses are preferred, it is possible that adapted non-native species could be planted if research indicates a greater potential for withstanding the eventual introduction of prairie dogs. It currently is assumed that a minimum of 5 to 10 years following planting of grasses would be required before prairie dogs could be released.

Either or both sites could be used for research by planting different seed mixes in different areas and monitoring their ability to tolerate grazing by prairie dogs. This information could be used by the City in future land management (e.g., rehabilitating prairie dog towns temporarily abandoned due to outbreaks of plague). Potentially, the results of this research could be published in the scientific literature and shared with other communities.

It is possible that other release sites with suitable habitat, or the potential for conversion to suitable habitat, could become available in the future. These could include dedicated open space within as-yet unidentified development projects.

9. OPEN SPACE MANAGEMENT POLICES RELATING TO PRAIRIE DOGS

9.1. LONG-TERM MANAGEMENT

The City is developing recommendations on the long-term management of other Open Space lands through its Open Space, Parks, Recreation and Trails Master Plan as well as site-specific management plans. One possible goal could be to convert one or more areas of existing agricultural land to suitable habitat for prairie dogs by planting appropriate vegetation and allowing sufficient time for establishment of a self-sustaining plant community. Two potential areas for converting cropland to prairie dog habitat are described in Section 8.4.

After relocation of prairie dogs to Open Space, the City will monitor the release site to identify weed infestations and will apply current practices for weed control, including chemical, biological, or mechanical control as appropriate. At times, it may also be necessary to remove prairie dogs from specified small areas for restoration of the habitat. The purpose of this provision is to minimize adverse impacts on neighbors and maintain suitable vegetation for the relocated prairie dogs.

In the case of a prairie dog die-off on Open Space due to plague or other causes, the City will survey the site to assess ecological conditions and develop a weed control and revegetation program in anticipation of natural recolonization or future use as a release site.

9.2. RESPONSE TO OUTBREAKS OF SYLVATIC PLAGUE

The Broomfield Department of Health and Human Services shall notify the Colorado Department of Public Health and Environment in the event of any prairie dog die-off potentially associated with sylvatic plague and shall cooperate with these agencies in obtaining samples for epidemiological evaluation.

If plague is confirmed in a prairie dog colony on Open Space land, the City's Health and Human Services Department, in cooperation with the Colorado Department of Public Health and Environment, shall implement a program to dust the affected area for fleas to eliminate or control the outbreak and shall provide public notice according to the Colorado Department of Public Health and Environment's guidelines.

10. UPDATING OF POLICIES

The policies shall be reviewed by the City staff and OSTAC at least every two years from the date of adoption to determine if amendments are appropriate. Any OSTAC recommendations will be presented to Council for review and adoption if deemed appropriate.