

Bluestem Prairie Open Space Management Plan



Prepared for—

City of Colorado Springs
Parks, Recreation, and Cultural Services
1401 Recreation Way
Colorado Springs, Colorado 80905

Prepared by—

ERO Resources Corporation
1842 Clarkson Street
Denver, Colorado 80218
(303) 830-1188

February 2016

DRAFT
for Public Review
February 2016

Contents

Summary 1
Introduction 2
Existing Conditions 7
Resource Management Plan 16
References 27
Appendices..... 28

Tables

Table 1. Summary of Management Strategies for Bluestem Prairie Open Space 24
Table 2. Summary of Monitoring Actions 26

Figures

Figure 1. Location 3
Figure 2. Existing Conditions 8
Figure 3. Soils 9
Figure 4. Vegetation 11
Figure 5. Management Considerations 19
Figure 6. Black-Tailed Prairie Dogs 22

Appendices

- Appendix A Deed of Conservation Easement
- Appendix B Public Involvement Summary
- Appendix C Plant Species List
- Appendix D 2015 Conservation Interest Monitoring Report

Plan Preparers

This Management Plan was completed as a collaborative effort between Colorado Springs Parks, Recreation, and Cultural Services Department, Palmer Land Trust, the ERO consulting team, and the Colorado Springs community. The ERO consulting team consisted of:

- ERO Resources Corporation: Project lead and natural resources
- Tapis Associates: Trails and recreation
- Kezziah-Watkins: Public process and facilitation

This plan was adopted by the City of Colorado Springs Parks and Recreation Advisory Board on _____, 2016.

Summary

Bluestem Prairie Open Space consists of 646 acres located southeast of Colorado Springs near Powers Boulevard and Bradley Road at the south end of the Colorado Springs Airport. The namesake “bluestem” highlights the tallgrass species found in northwest portion of the property, while the more predominant shortgrass community in the bowl-shaped valley surrounds the privately-owned Big Johnson Reservoir. Bluestem Prairie Open Space acts as a community buffer and preserves native prairie and wildlife habitat. Combined with the adjacent water resource, Bluestem Prairie Open Space is a haven for a wide variety of migrating bird species.

This Management Plan is intended to provide the City of Colorado Springs Parks, Recreation and Cultural Services Department with a framework for management and stewardship of the property over the next five years. This Management Plan was completed based on existing documentation, field assessments, stakeholder meetings, and community input. This plan provides broad guidance and specific resource management strategies to achieve the following goals:

1. **Vegetation** – Protect and enhance the quality, diversity, and health of native plant communities
2. **Wildlife** – Protect and enhance wildlife habitat on the property
3. **Trails and Infrastructure** – Manage trails and visitor use facilities to provide high-quality recreation experience, while protecting natural resource values

The Introduction provides a background on the property, the process, and relevant planning and policy guidance. The Existing Conditions section outlines the natural resources, visitor uses and amenities, and management context of the property. The Resource Management Plan section provides general guidance on several key issues, including: noxious weed management, black-tailed prairie dog management, and grassland management. It outlines the recommended timing and priority of specific management strategies. This section also outlines recommended resource monitoring actions.

This Management Plan not only satisfies the requirements of the Deed of Conservation Easement for the property, but also provides a blueprint for proactive management of open space resources over the next five years.



Introduction

Location and Background

Bluestem Prairie Open Space consists of 646 acres located southeast of Colorado Springs near Powers Boulevard and Bradley Road, in unincorporated El Paso County south of the Colorado Springs Airport (Figure 1). The property consists of open grasslands in a bowl-shaped valley surrounding the privately-owned Big Johnson Reservoir. Bluestem Prairie Open Space acts as a community buffer and preserves native prairie and wildlife habitat (Figure 2).

The property was purchased by The Trust for Public Land in 2000, who then conveyed the property to the City of Colorado Springs. To complete the acquisition, the City of Colorado Springs used funds from the Trails, Open Space, and Parks (TOPS) sales tax, a grant from Great Outdoors Colorado (GOCO) Trust Fund, and private donations. In 2003, the City of Colorado Springs conveyed a conservation easement to The William J. Palmer Parks Foundation, now known as the Palmer Land Trust.

Vision and Goals

Vision Statement

Bluestem Prairie Open Space provides a unique remnant of native shortgrass and mid-tallgrass prairie, providing habitat for a variety of prairie wildlife species, and remains the City's first and only open space acquisition in this setting. The property also serves as a scenic and community buffer from surrounding development, and provides access for passive and interpretive enjoyment of the natural prairie landscape.

Goals

The following goals for the Bluestem Prairie Open Space provide a philosophical foundation on which to base the implementation of this Management Plan. These broad goals provide the basis for management actions related to issues such as vegetation management, weed management, wildlife habitat, trail management, and overall visitor use.

1. **Vegetation** – Protect and enhance the quality, diversity, and health of native plant communities
2. **Wildlife** – Protect and enhance wildlife habitat on the property
3. **Trails and Infrastructure** – Manage trails and visitor use facilities to provide high-quality recreation experience, while protecting natural resource values



Bluestem Prairie provides a unique grassland remnant

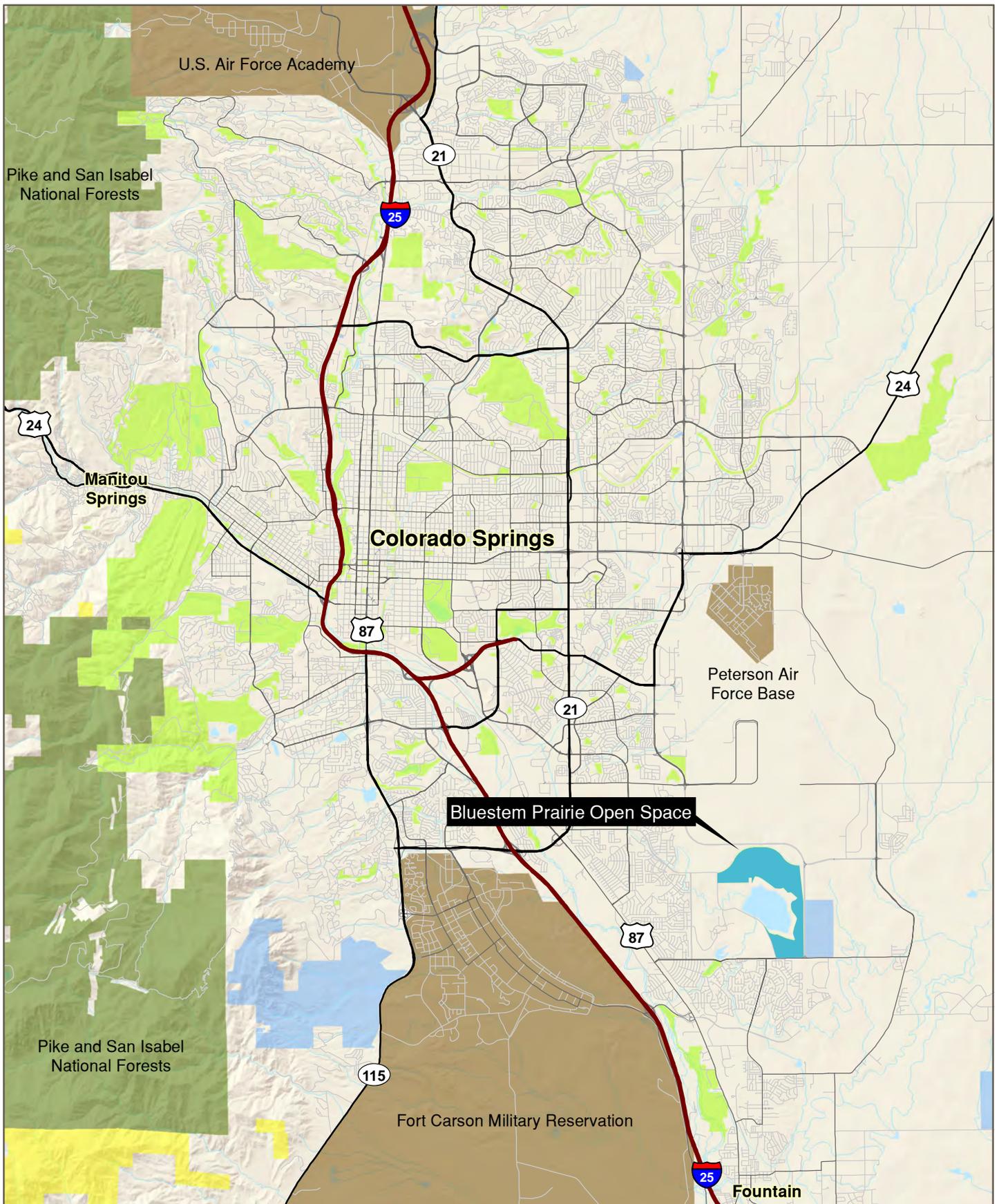


Figure 1. Location

- Parks and Open Space
- Bureau of Land Management
- Department of Defense
- State of Colorado
- U.S. Forest Service



CITY OF COLORADO SPRINGS

Plan Givens

The following “givens” represent existing guidance and decisions that are non-negotiable and set the parameters for the decision making-process and implementation of this management plan.

- The City’s Parks, Recreation and Cultural Services Department is legally responsible for design, maintenance, operations and management of Bluestem Prairie Open Space. All elements of the Bluestem Prairie Open Space Management Plan must conform to the Colorado Springs Parks Rules and Regulations Ordinances.
- Bluestem Prairie Open Space is subject to the requirements and restrictions of the Trails, Open Space and Parks (TOPS) Ordinance.
- The planning process will respect the terms and conditions of existing utility easements and the deed restriction on the property. Any proposed changes to the deed restriction must be approved by the Colorado Springs Parks and Recreation Advisory Board, the Palmer Land Trust, and GOCO.
- Implementation of the Management Plan will occur as funding allows.
- Groups and individuals interested in the property are encouraged to help develop the best possible management plan; all voices will be equal in the decision-making process.
- The recommended Bluestem Prairie Open Space Management Plan will be submitted to the Parks and Recreation Advisory Board for approval.

Planning Process

The City of Colorado Springs hired a consultant team lead by ERO Resources Corporation in August 2015 to undertake the planning process and to develop this management plan. The planning process proceeded in three phases:

1. **Phase One: Information Gathering:** The initial step included personal interviews with individuals who have a history of involvement and familiarity with the property.
2. **Phase Two: Public Process:** Based on the issues identified by the community and by analysis of existing conditions on the property, draft management strategies were developed and were reviewed with and discussed by the community at a workshop on December 8, 2015. Necessary adjustments were made to the strategies, based on community responses. The draft Management Plan was offered for online community review for a period of 14 days on February 12, 2016.
3. **Phase Three: Approvals:** The recommended Management Plan was reviewed and approved by the TOPS Working Committee on _____ and by the Parks Advisory Board on _____.

A more detailed summary of community and stakeholder input is provided in Appendix B.

Plan Guidance

Deed of Conservation Easement

The purpose of the conservation easement (Appendix A) is to assure that the Bluestem Prairie Open Space property “will be retained forever in its natural, scenic, open space condition and to prevent any use of the property that will significantly impair or interfere with the conservation values of the property.”

Prohibited uses listed in the conservation easement include subdivision; commercial timber harvest; mining or extraction of soil, sand, gravel, rock, oil, natural gas, fuel or any other mineral substance; construction of buildings, roads, trails or other improvements without prior approval of the Palmer Land Trust; dumping of trash; and commercial or industrial activity. In addition, the property must be managed in accordance with an approved land stewardship plan. This Management Plan serves as that land stewardship plan.

Colorado Springs Park System Master Plan

Recommendations from the 2014 Colorado Springs Park System Master Plan that are relevant to management of the property include the following:

- Comprehensively address the management and care needs of the natural environment and open space lands such as erosion, invasive species, forest management and wildfire.
- Work to eliminate and/or control noxious weeds on park and open space properties as a part of ongoing maintenance. Develop a citywide integrated weed management plan to help effectively and efficiently control weeds.
- Comprehensively address natural resource management and urban forestry through the creation of annual maintenance tasks as part of a long-term natural resource management approach.
- Increase trail maintenance and address the negative impacts of rogue or unplanned trail creation.
- Work with natural resource managers of wildlife habitat to balance wildlife needs with management for fire, floods and drought.
- Identify and re-route trails that are susceptible to frequent damage from flooding.
- Improve wayfinding by installing signs and maps at key junctions in the trail system and identifying parking locations.
- Establish a policy allowing for programmed events/activities within open space lands as long as the natural and cultural resource values are not impacted.
- Develop master plans for all open space properties which address appropriate access and connectivity with neighboring properties, resource sensitivity, existing resources and opportunities for resource enhancement and restoration. Plans should be created and updated for all properties or groups of properties within a contiguous area with progress tracked over time.
- Communicate park rules and “Leave No Trace” ethics to the public through the use of signage and informational campaigns.
- Signs in the parks system should clearly indicate rules, regulations and expectations of usage to maintain quality of facilities and prevent harmful behaviors that would negatively impact the natural or programmatic features of the parks and trails.
- Enforcement should include ticketing for infringements to the established dog leash law.

Previous Planning Documents

The following previous planning documents were reviewed in the preparation of this management plan:

- Big Johnson Open Space Existing Conditions Report (2001)
- Big Johnson Open Space Master Plan (2002)
- Bluestem Prairie Open Space Stewardship Plan (2008)
- Conservation Interest Monitoring Report – Bluestem Prairie Open Space (2014)
- Conservation Interest Monitoring Report – Bluestem Prairie Open Space (2015)

Purpose of the Management Plan

The purpose of this management plan is to guide resource management at Bluestem Prairie Open Space and to identify project priorities for the next five years. More specifically, this plan is also intended to achieve the following objectives:

1. Articulate the overall resource management goals for the property
2. Document existing conditions and resource management issues on the property
3. Identify and prioritize strategies to address resource management issues and maintain the overall integrity of resources on the property
4. Document the agreed-upon goals, strategies, and priorities for resource management on the property that are commonly understood by visitors, stakeholders, and the surrounding community
5. Provide an implementation and monitoring plan for the Parks, Recreation and Cultural Services staff, Friends Groups, and volunteers

In addition, this management plan fulfills the requirement under paragraph 3(e) of the Conservation Easement, which states:

The Property must be operated and managed in accord with a land management plan prepared and accepted with the mutual consent of the Grantor (City of Colorado Springs) and Grantee (Palmer Land Trust). The land stewardship plan will be updated every five (5) years and distributed to the parties.



Bluestem Prairie is the City's first grassland open space

Existing Conditions

Geographic Setting

Bluestem Prairie Open Space is located about 10 miles southeast of downtown Colorado Springs, about one mile south of the Colorado Springs Airport near Powers Boulevard and Bradley Road. The property is located in portions of Sections 7, 8, and 17, Township 15 South, Range 65 West. The property is bounded by residential development along the northwest and southeast edges, private irrigation land (Big Johnson Reservoir) and the Fountain Valley School campus to the west, and undeveloped land to the north and east.

Elevations range from about 5,820 feet near the reservoir in the northeast portion of the property, to about 5,940 feet along the northern edge. Four small and ephemeral drainages are found on the northern half of the property, draining to Big Johnson Reservoir to the south. The reservoir drains to the southwest into Cruse Gulch.

Geology

The property is underlain by Quaternary alluvial sands and gravels dating to the Pinedale and Bull Lake glacial periods, and Pierre Shale.

Soils

The Natural Resources Conservation Service has mapped eight soil types on the property. These are shown on Figure 3 and are summarized as follows (NRCS 2015):

- Blakeland loamy sand, 1 to 9 percent slopes – Loamy sand with slow runoff and moderate erosion hazard. Found in the northeast portions of the property.
- Ellicott loamy coarse, 0 to 5 percent slopes – Loamy soils, with slow runoff and high erosion hazard. Found along a drainage in the northern portion of the property.
- Fort Collins loam, 0 to 3 percent slopes/3 to 8 percent slopes – Well drained loam with medium surface runoff and moderate erosion hazard. This soil type dominates the southern portion of the property.
- Manzanola clay loam, 1 to 3 percent slopes – Well drained loamy alluvium with medium surface runoff and moderate erosion hazard. Found in the eastern portion of the property.
- Nelson-Tassel fine sandy loam, 3 to 18 percent slopes – Well drained sandy loam with slow runoff and moderate erosion hazard. This soil types dominates the eastern edge of the property.
- Stoneham sandy loam, 3 to 8 percent slopes – Well drained sandy loam with medium surface runoff and moderate erosion hazard. Found throughout the northern portions of the property.
- Ustic Torrfluvents, 0 to 3 percent slopes – Well drained soil with slow runoff and moderate to high erosion hazard. Found in the northwest portion of the property.
- Wiley silt loam, 3 to 9 percent slopes – Well drained silty loam with medium surface runoff and moderate erosion hazard. Found in pockets in the northern portion of the property.



Figure 2. Existing Conditions



- Bluestem Prairie Open Space
- State of Colorado
- Utility Easement
- Trailhead
- Designated Trail



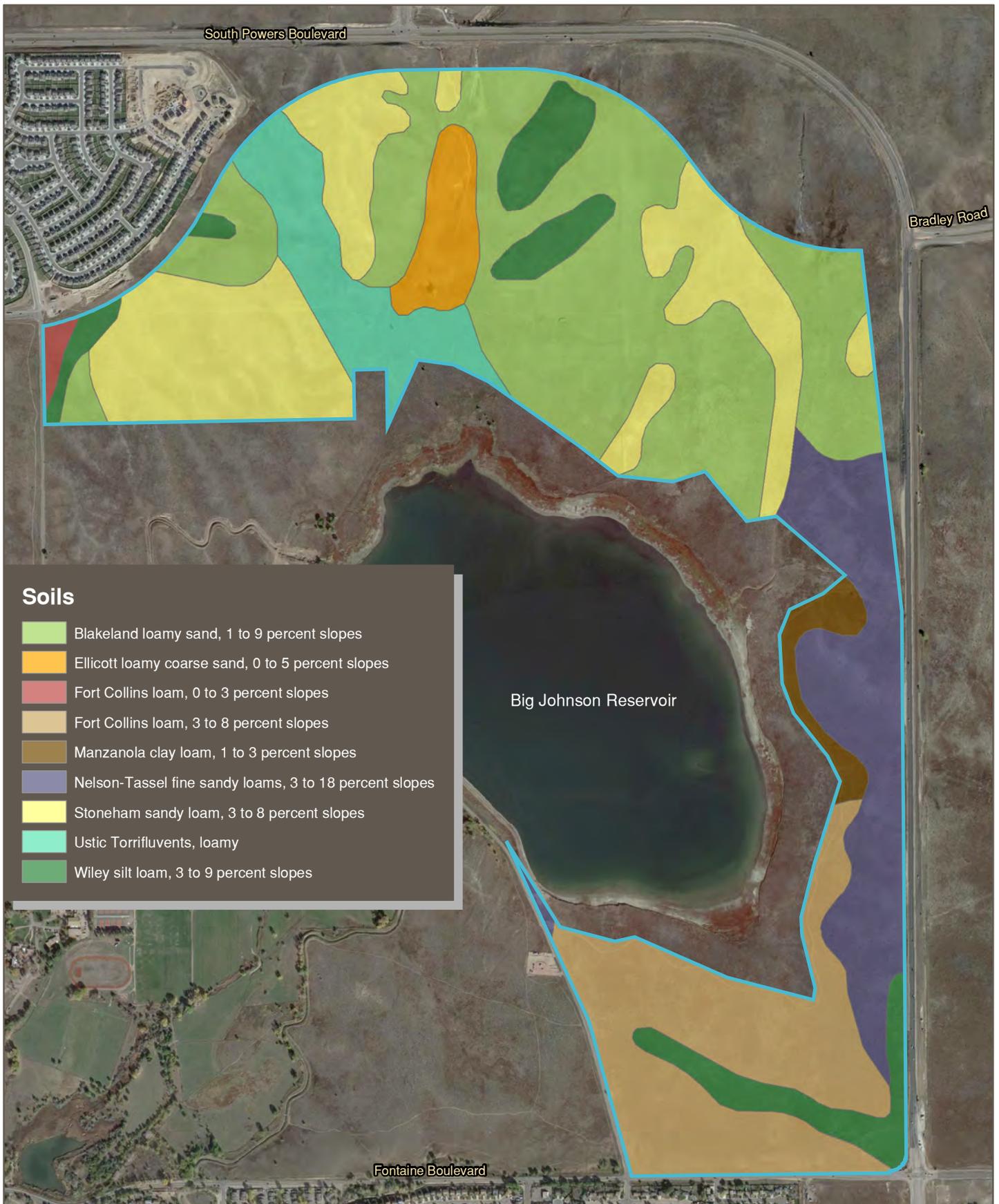


Figure 3. Soils



Bluestem Prairie Open Space



CITY OF COLORADO SPRINGS

Water Resources

Bluestem Prairie Open Space is located in a large, bowl-shaped valley dominated by Big Johnson Reservoir. Several ephemeral gulches cross the northern portion of the property, draining into the reservoir. There are no wetlands on the property. Big Johnson Reservoir is located on private land and is not part of the open space property. The reservoir is fed by a canal from the west, and releases water into Cruse Gulch.

A new residential subdivision was recently completed adjacent to the northwest edge of the property. This development is near the upper edge of the property and could potentially contribute surface drainage onto the ephemeral gulches on the property, increasing their flows during and after precipitation events.

Vegetation Resources

Native Plant Communities

Bluestem Prairie Open Space is dominated by native grassland communities, including shortgrass prairie and mid-tallgrass prairie communities. Plant communities are shown on Figure 4 and are described below.

Shortgrass Prairie

This community type is found along the south and east boundaries of the property and is the most common community (Figure 4). This community is dominated by native perennial warm season grasses such as blue grama grass, buffalograss, purple threeawn, and galleta grass. Native perennial forb species such as scarlet globemallow, wild tarragon, hairy false goldenaster, and sanddune wallflower are common within this community. Soapweed yucca is the most dominant shrubby species in this community and can be seen scattered across the landscape.

Mid-Tallgrass Prairie

Found in the northern areas of the property, this community is dominated by native perennial warm season grasses such as big bluestem and little bluestem. Native perennial cool season grasses including as green needlegrass, western wheatgrass, and needle and thread are intermixed with the warm season grasses. Native perennial forb species such as crested prickly poppy, prairie thermopsis, and slimflower scurfpea are common.

Sand Sagebrush Shrubland

Found on the north side of the property, this community type is dominated by sand sagebrush. Understory species such as needle and thread, blue grama grass, and purple threeawn are present. Introduced annual/biennial species such as tall tumble mustard and prickly Russian thistle are prevalent in this community. Canadian horseweed, a native annual that thrives on bare soil, has colonized many open areas. Horseweed is soon crowded out as perennials become established.

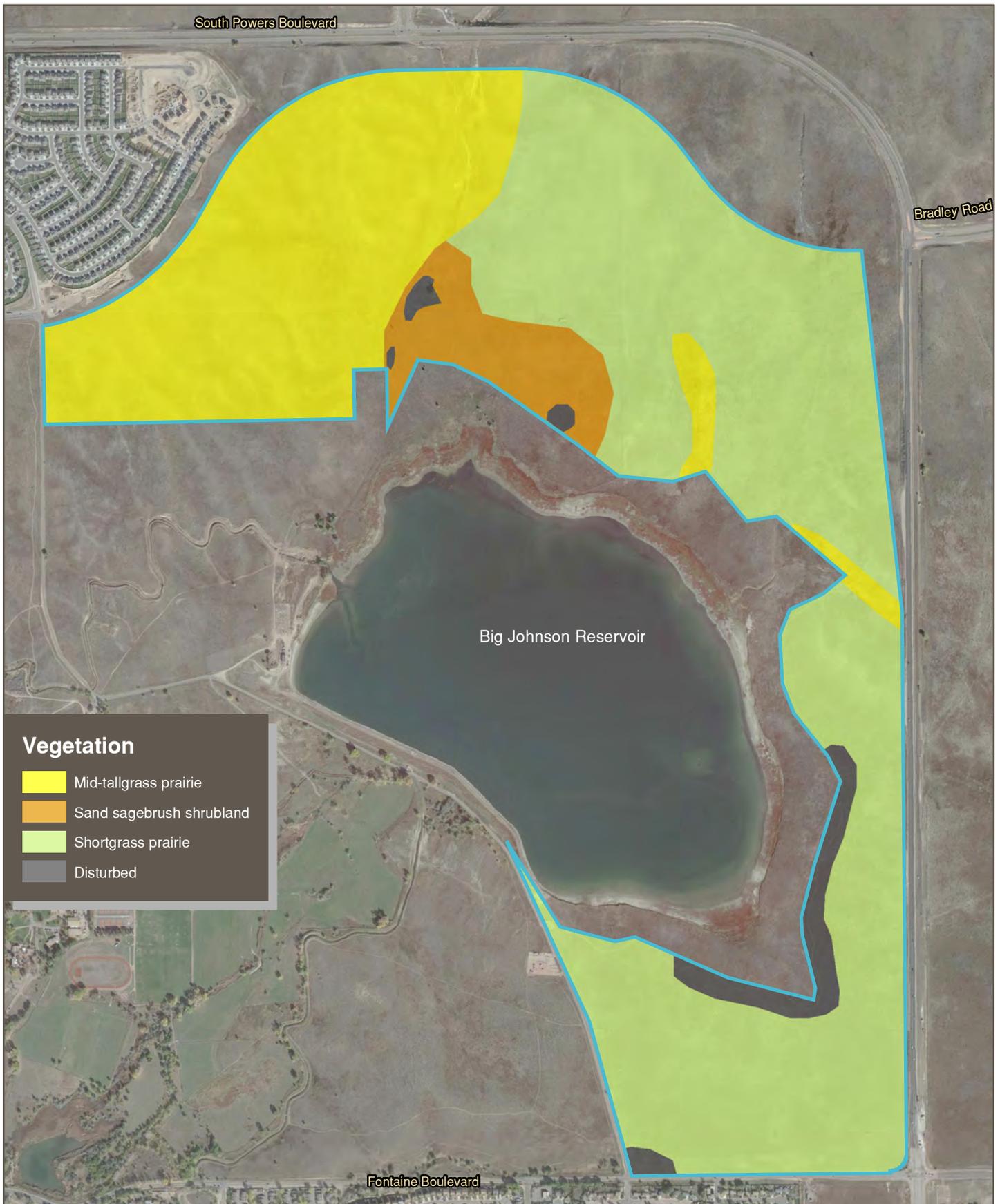


Figure 4. Vegetation

 Bluestem Prairie Open Space



Disturbed Areas

Disturbed areas include vegetation adjacent to the trail, patches dominated by noxious weeds, and areas dominated by introduced weedy species. These areas are the most prone to noxious weed infestations on Bluestem Prairie Open Space.

Noxious Weeds

Several noxious weed species are present on the Bluestem Prairie Open Space, based on field observations by city staff and by ERO in 2015. The Colorado Noxious Weed Act classifies noxious weeds in to three lists: List A species are mandated for eradication, List B species are targeted for weed management efforts to stop their continued spread, and List C species should be managed by effective weed management approaches based on local government



Patches of Canada thistle occur in moist areas on Bluestem Prairie Open Space

priorities. There are no known List A species on the Bluestem Prairie Open Space.

All completed noxious weed mapping is shown in Figure 5. Eight noxious weed species are known to occur within Bluestem Prairie Open Space, four of which are considered to be management concerns (because they are B-listed species):

List B Weed Species

- Canada thistle (*Cirsium arvense*)
- Diffuse knapweed (*Centaurea diffusa*)
- Musk thistle (*Carduus nutans*)
- Russian olive (*Elaeagnus angustifolia*)

List C Weed Species

- Cheatgrass (*Bromus tectorum*)
- Chicory (*Cichorium intybus*)
- Common mullein (*Verbascum thapsus*)
- Field bindweed (*Convolvulus arvensis*)

Wildlife Resources

Common Wildlife

Bluestem Prairie Open Space provides habitat for a variety of wildlife species that thrive in a functioning prairie ecosystem, including pronghorn, black-tailed prairie dog, and western burrowing owl.

In addition to prairie dog, other small mammals that are likely to occur on the property include northern pocket gopher, deer mouse, western harvest mouse, thirteen-lined ground squirrel, meadow and prairie vole, and house mouse. The most common member of the hare family observed on the property was the black-tailed jackrabbit. Coyote have also been frequently observed.

Numerous species of birds are likely to occur on the property during the course of the year including species typical of cottonwood riparian, herbaceous wetlands, and grasslands. Breeding birds observed during various site visits include western meadowlark, horned lark, lark bunting, killdeer, mourning dove, red-winged blackbird, and black-billed magpie. During the 2015 site visits, red-tailed hawk and bald eagle were observed foraging over the property.

Threatened and Endangered Species

Federally threatened and endangered species are protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). Significant adverse effects to a federally listed species or its habitat require consultation with the U.S. Fish and Wildlife Service (USFWS) under Section 7 or 10 of the Endangered Species Act (ESA). Candidate species are not yet listed as threatened or endangered, but may be listed in the future.

The USFWS indicates that there are several threatened or endangered wildlife species with potential for occurrence in El Paso County. However, based on the site visit, the property does not contain suitable habitat for any listed species (USFWS 2015).

Cultural and Historical Resources

The Colorado Cultural Resource On-line Database Compass, provided by the Colorado Office of Archaeology and Historic Preservation (OAHP), was used to conduct a search of cultural resources for Bluestem Prairie Open Space. This database contains information on documented federal or state studies or findings regarding any cultural resources. According to the search, no sites are located on Bluestem Prairie Open Space (OAHP 2015). Although no sites were identified through the OAHP search, other cultural or historic resources may occur on Bluestem Prairie Open Space.



Adjacent Land Uses

Current adjacent land ownership and uses surrounding Bluestem Prairie Open Space include the following:

Big Johnson Reservoir

The Fountain Mutual Irrigation Company owns about 427 acres immediately adjacent to the property to the west, which includes Big Johnson Reservoir. Public access to the reservoir is prohibited.



Big Johnson Reservoir lies to the west of Bluestem Prairie and provides valuable migratory bird habitat

Fountain Valley School

Located west of the southern portion of the property, across Goldfield Drive, the Fountain Valley School owns 1,100 acres as part of its campus.

Residential Development

A new residential development (Painted Sky at Waterview) abuts the property to the northwest. On the southeast side, a residential subdivision is located across Fontaine Boulevard from the property.

Colorado State Land Board

The Colorado State Land Board owns a 305-acre property to the east of Powers Boulevard. This property is leased for cattle grazing and has no public access.

Colorado Springs Municipal Airport

The land to the north of the property, north of Powers Boulevard, is owned and managed as part of the Colorado Springs Municipal Airport.

Undeveloped Land

Several parcels of private, undeveloped land are located adjacent to the property to the north, northeast, southeast, and east.

Visitor Use and Improvements

Visitor use to the property is limited to occasional walkers, runners, photographers, and bird watchers. Dogs are prohibited within the open space due to potential wildlife impacts.

A small trailhead along Goldfield Drive on the southwestern edge of the property provides public access. The trailhead includes spots for 13 cars, a kiosk with a map and regulations, and interpretive signs.

From the trailhead, a designated trail extends around the edge of the property to the east and north for about two miles. The trail was originally constructed to be a four-foot crusher fine surface, but has narrowed to about a two-foot tread due to light use and vegetation encroachment. In many places the crusher fines have been washed down onto the surrounding vegetation, contributing to weed infestations along the trail corridor. Several lightly used social trails extend from the end of the designated trail to the old ranching buildings and to a two-track road that extends to the northwest corner.

Several interpretive signs are placed along the trail, and are generally in poor condition.



Interpretive signs along the trail may need to be replaced or removed based on existing conditions

Resource Management Plan

Implementing this Management Plan will require identification and prioritization of management actions to accomplish the objectives and goals. These prioritized management actions should continue to be reviewed on an annual basis to determine yearly work programs given budget and staff constraints. Implementation of the Management Plan also needs to be balanced with other resource needs throughout the open space system. Many of the management actions will be implemented within the first few years, while others will take many years to accomplish. Some management actions are ongoing, some are short-term, and others are long-term, representing considerable investments of time and energy.

Resource Management Issues

Resource management issues are specific occurrences or situations, such as land use practices, visitor use, or noxious weed infestations that can compromise the conservation values of the property. Based on the site visits and public input during this process, management issues for Bluestem Prairie Open Space are listed below and addressed with management actions.

<p>Vegetation Management</p> <ul style="list-style-type: none">• Noxious weed management• Weed inventory and control• Grassland enhancement <p>Prairie Dog Management</p> <ul style="list-style-type: none">• Potential impacts from prairie dog colonies• Prairie dog monitoring and management options	<p>Dog Management</p> <ul style="list-style-type: none">• Maintenance and enforcement of “no dogs” <p>Visitor Experience</p> <ul style="list-style-type: none">• Protection of wildlife (especially bird) habitat• Balance of preservation and access <p>Trail Management</p> <ul style="list-style-type: none">• Designated (system) trails• Connections
---	--

All of these issues were considered during the management planning process. However, not all issues are directly addressed by the proposed management strategies. Some issues are more appropriately addressed as part of a separate Master Plan process, while others did not warrant a management response at this time.

Discussion of Key Management Issues and Strategies

Noxious Weed Management

Prioritization of weed management efforts is based on several factors. Attempting to control all the non-native species present within the Bluestem Prairie Open Space can be overwhelming and ultimately unsuccessful, so it is important to develop a strategy to ensure the most efficient use of resources. This type of strategy is built upon two principles. First, instead of managing against weeds, the philosophy is to manage for the desired target species and communities within Bluestem Prairie Open Space. With this spirit, the species that have been identified as management concerns are those that have the potential to threaten the survival of native communities. Second, to minimize the total, long-term weed control workload, the Parks, Recreation and Cultural Services Department will act to prevent new infestations and contain

the spread of plants with expanding ranges. Prioritization of weed management efforts considers legal mandates, weed biology, and species distribution.

In addition to legal mandates and weed biology, the existing distribution of weeds within Bluestem Prairie Open Space is of primary importance in prioritizing weeds for management activities. The analogy of a wildfire has often been used to describe the spread of noxious weeds. Using this analogy, small, isolated patches of weeds are generally considered a higher priority for control activities than large, well-established infestations. Small, isolated patches are easier to eradicate because there is a smaller distribution of plants, smaller seed bank, less-developed root system, and potentially, a desirable vegetation community. The Parks, Recreation and Cultural Services Department also notes species that are not yet within Bluestem Prairie Open Space, but are found nearby and could be problems if they spread to the property. The weed management program includes regularly monitoring Bluestem Prairie Open Space for these species in order to quickly detect and eliminate them if they ever do appear.

With this reasoning in mind, higher priority will be given to:

- Weeds with a specific management status designation of elimination
- Weed species that are new or relatively rare to the area or Bluestem Prairie Open Space
- Species not well established in surrounding areas
- Small infestations of species known to be highly invasive
- Infestations likely to spread because of location (e.g., road and trail side or drainages) or management activities (e.g., road and trail work)
- Infestations adjacent to or likely to spread into areas containing conservation targets
- Edges of large infestations

Lower priority will be given to:

- Large, well-established infestations for which there is little potential for eradication on Bluestem Prairie Open Space
- Species that are well established in surrounding areas and thus provide a constant seed source to Bluestem Prairie Open Space
- Species confined to disturbed areas
- Species that are easier to control relative to others

Grassland Management

Historically, grasslands co-evolved with various disturbance regimes such as fire and large-scale grazing. Fires worked at the landscape level and faced very few impediments. Large numbers of bison, pronghorn, and black-tailed prairie dogs roamed freely across the vast grasslands, in search of plentiful forage. On Bluestem Prairie Open Space, a relatively small site in an increasingly urbanized setting, prescribed burning and maybe even grazing are not practical. Therefore, some discrete mowing may need to be considered over the long term to retain plant vigor and diversity.

If used judiciously, mowing can act as a substitute for burning or grazing. A flail or mulching mower leaves the prairie looking tidy and makes the dead stems and leaves easier to break down. Mowing should be conducted in random patches and infrequently (once a year at most), except in the first couple of years when controlling weeds as discussed below. Mowing more frequently or along trails will, over the long term, favor annual weeds and kill native warm season grasses. Mowing should also be conducted with potential nesting songbirds in mind.

Annual weeds (e.g., Canadian horseweed, kochia, and Russian thistle) should be controlled by mowing before seed production. Mowing is most effective by using a tractor-mounted rotary or flail mower that mulches the cuttings. The blades should be adjusted to about 5 inches from the ground surface so as to avoid cutting most prairie seedlings as they become established. At some level, native grasses are recovering at Bluestem Prairie Open Space and mowing may be needed every few weeks in the first 2 or 3 years in selected locations. Initially, such frequent mowing is possible, as the prairie plants do not show much aboveground growth, preferring instead to put down a deep, extensive root system to help them survive in the long term. Either way, plant response should be closely monitored. After three or four years, the native grasses should be well-established and it is important to allow them to go to seed. As the grassland fills in and the amount of bare soil is reduced, annual weed populations should decline significantly. Keeping annual weeds under control will reduce competition with the native species, especially in the crucial first years. Annual weed populations decline substantially over time as the cover of native grasses increases. Control of annual weeds also will help Bluestem Prairie Open Space from becoming an eyesore to the neighborhood or a weed source to adjacent properties.

Trail and Access Management

Bluestem Prairie Open Space provides a unique and somewhat specialized experience for the visitor within the larger open space system managed by the Parks, Recreation and Cultural Services Department. The property represents a unique prairie remnant and was the TOPS Program's first open space acquisition of a grassland area. Placed within the context of the adjacent Big Johnson Reservoir, the property provides a vital stopover point for migratory birds as well important breeding habitat for grassland species. With this in mind, the Parks, Recreation and Cultural Services Department has been conservative with its trail construction and access management. The following general strategies are recommended to maintain and improve the trail infrastructure and visitor experiences on the property:

- Monitor the development and use of undesignated rogue trails on the property to understand the extent of rogue trails and the reasons they are created (i.e., desired connection or avoidance of other problem areas)
- Consistently and aggressively close problematic rogue trails, using fencing, signage, vegetation or visual obstructions as appropriate to limit continued use
- Complete trail maintenance and improvement projects to provide visitors with a clear and positive experience on the designated trail

While the overall trail and facility layout and circulation was determined in the Master Plan (Colorado Springs Parks, Recreation and Cultural Services Department 2002), this Management Plan includes a few specific recommendations to address various issues. These include ongoing management, short-term infrastructure maintenance, and additional trail build out. These focus areas and points are listed below and are shown on Figure 5.

1. Clearly establish the western extent of the existing trail. Monitor demand for trail access from the northwest corresponding to build out in the 2002 Master Plan.
2. Remove the ranch building and associated debris from the property. Secure the windmill tower and evaluate for potential use in situ as a raptor perch or nesting platform.

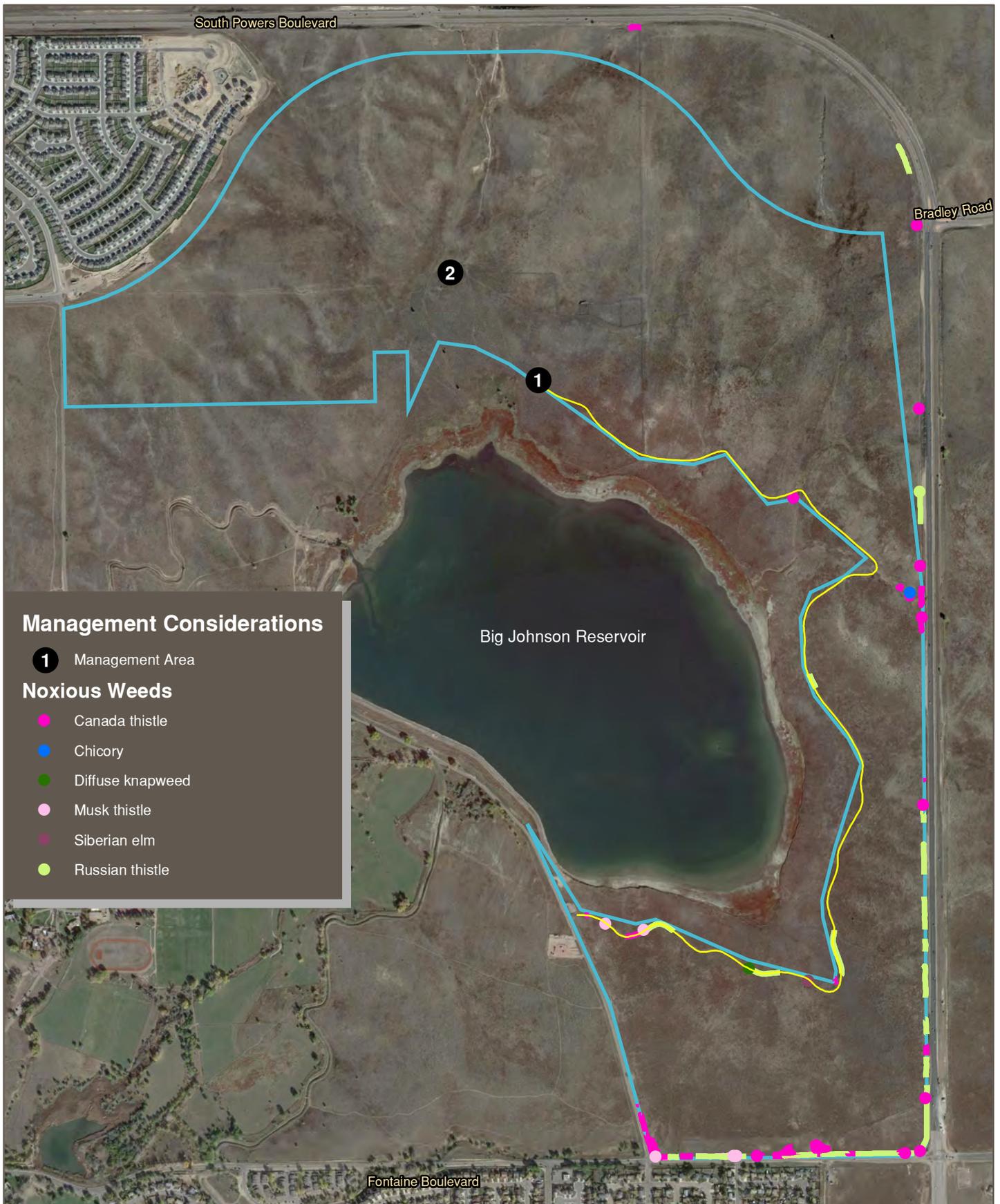


Figure 5. Management Considerations



Bluestem Prairie Open Space Designated Trail



CITY OF COLORADO SPRINGS

Black-Tailed Prairie Dog Management

One of the most important small mammals on the property in terms of its overall abundance, ability to alter habitat, and influence on associated wildlife species is the black-tailed prairie dog (“prairie dog”). Prairie dogs maintain a shortgrass vegetation community that is home to numerous species. Prairie dogs also provide reliable year-round food resources for both mammalian and avian predators.

In 2001, prairie dogs occupied the bowl in the southeastern corner of the property. The 2001 Baseline Inventory and 2002 Master Plan for Bluestem Prairie documented the prairie dogs and their importance. Management provisions for monitoring the prairie dogs, species legal status, and presence of other species (e.g., burrowing owl) were provided in the 2002 Master Plan. The 2002 Master Plan also suggested that occupied prairie dog habitat should remain separate and buffered from the footpath proposed along the edge of the property bordering the Big Johnson Reservoir. Both the 2001 Baseline Inventory and 2002 Master Plan were incorporated by reference into the 2003 Deed of Conservation Easement, Sections D and E.

D. The specific Conservation Values of the Property are documented in an inventory or relevant features of the Property ("Baseline Documentation"), which consists of reports, maps, photographs, and other documentation that provides an accurate representation of the Property at the time of this grant and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant. The Baseline Documentation is attached to and shall be incorporated into this Deed of Conservation Easement.

E. Granter intends that the Conservation Values of the Property be preserved and maintained in a manner consistent with the Big Johnson Master/Management Plan and through consistent land use patterns including, without limitation, those uses existing at the time of this Easement grant which do not significantly impair or interfere with those values.

Between 2001 and 2007, the occupied prairie dog habitat apparently expanded rapidly throughout the property. After that, the prairie dogs were all but wiped out due to a plague outbreak in 2007. The El Paso County Department of Health and Environment’s public health lab confirmed that fleas collected from the property tested positive for plague and dusted the insides of prairie dog mounds with an insecticide to kill all potentially plague-positive fleas. The expansion and plague outbreak, along with the importance of prairie dogs and their habitat, was documented in the 2008-2013 Bluestem Prairie Open Space Stewardship Plan.

The 2014 Monitoring Report (Palmer Land Trust 2014) described degradation of property due to prairie dogs, which “cover the entire south and east portions of the property, and are rapidly colonized [sp] large portions of the northwest part (were not there last year).” During the management planning process in September and November 2015, ERO did not observe these conditions. A review of the 2015 Monitoring Report (Palmer Land Trust 2015) indicated that the prairie dog population experienced rapid decline due to plague. The report also stated that, “prairie dogs seem to remain in small groups and will need monitoring, but at this time the management concern is closed” (Palmer Land Trust 2015; Appendix D).

Generally, 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 three alternatives are implemented. These alternatives—passive relocation, wild-to-wild relocation, and lethal control—are typically used in decreasing order of preference. This passive relocation protocol is a nonlethal land management activity designed to encourage prairie dogs to relocate to areas outside of their current occupation, but within the same property. Wild-to-wild relocation involves moving prairie dogs to another property entirely. And, lethal control involves extermination by one means or another. At present, there does not appear to be a mechanism under the terms of the Deed of Conservation Easement to manage (i.e., exterminate) prairie dogs.

As previously documented, prairie dogs and their habitat are specifically highlighted in the establishing documents for Bluestem Prairie Open Space. In addition, it is important to note that although the 2014 Monitoring Report (Palmer Land Trust 2014) described the potential dispersal of prairie dogs from Bluestem Prairie to adjacent properties, it is not the responsibility of the Parks, Recreation, and Cultural Services Department or any party to contain prairie dogs on their property. A significant amount of occupied prairie dog habitat also occurs on the Fountain Valley Irrigation Company’s property adjacent to Big Johnson Reservoir.

The preliminary management recommendations listed in Table1 (page 24) attempt to address prairie dogs as a potential management issue by initiating and formalizing an objective decision-making process. By evaluating historic colony boundaries and completing mapping of occupied habitat on an annual basis, the Parks, Recreation, & Cultural Services Department would establish objective baseline information upon which to base future management actions. The baseline information would not only document the expansion (and contraction) of the occupied prairie dog habitat, but also the use of occupied habitat by other species. For example, ERO observed three western burrowing owls within occupied prairie dog habitat in September 2015.

The combination of previous ground disturbance by prairie dogs and significant precipitation in the spring and into the summer (2015) created an ideal situation for the germination and establishment of annual weeds, especially Canadian horseweed, kochia, and Russian thistle. It should be noted that in areas of occupied prairie dog habitat and along the recreation trail margins, the native vegetation appeared healthier. This observation is consistent with the clipping action of prairie dogs and mowing operations that keep annual weeds at bay. Additional areas of grassland could potentially benefit from such mowing operations (see below); however, such areas would have to be strategically located away from occupied prairie dog habitat as to not facilitate animal dispersal.

The above supports the rationale of the overarching preliminary management strategy to, “monitor and track the size and density of occupied prairie dog habitat.” With the tracking of population and habitat use trends, additional management strategies could be developed in the future if deemed both necessary and in compliance with the establishing documents for Bluestem Prairie Open Space.

In an effort to establish “baseline” conditions, ERO mapped the distribution of prairie dogs on and directly adjacent to Bluestem Prairie Open Space in December 2015 (Figure 6). Based on the GPS mapping and subsequent GIS analysis, 100 acres of occupied (i.e., active) prairie dog habitat were mapped. Of the 100 acres of occupied habitat, 60 acres occur on Bluestem Prairie Open Space. The occupied habitat on Bluestem Prairie Open Space represents less than 10 percent of the total habitat available on the property.



Management Considerations

 Occupied (Active) Habitat 2016

Figure 6. Black-Tailed Prairie Dogs

 Bluestem Prairie Open Space  Designated Trail



CITY OF COLORADO SPRINGS

Resource Management Strategies

Management strategies for Bluestem Prairie Open Space, including goals, objectives, and actions are presented in the following table, along with the recommended timing and priority of implementation. A more detailed discussion of key management issues are presented below the table, on page 24.

For the purposes of this section of this Management Plan, the following terminology applies:

- **Goal** – Goals broadly describe the desired states for the future regarding resources and related issues. Goals lay the foundation for the objectives that provide guidance in the decision-making process.
- **Objective** – Objectives are the course of action intended to influence and determine the specific actions.
- **Action** – Actions describe some specific tasks that the City of Colorado Springs can take to accomplish the overall vision for the Bluestem Prairie Open Space.

Timing recommendations are defined as follows:

- **S – Short-term actions** – Should be completed within one year
- **L – Long-term actions** – Should be initiated or completed within five years
- **O – Ongoing actions** – Should be completed on an ongoing, annual basis indefinitely

Priority recommendations are defined as follows:

- **H – High priority actions** – should be accomplished first. These management actions are considered extremely important to the protection of the conservation values of Bluestem Prairie Open Space. High priority actions are directly related to the accomplishment of other resource objectives and goals.
- **M – Medium priority actions** – considered important, but not urgent, and meet a combination of other resource goals and objectives.
- **L – Low priority actions** – important, but not critical to resource protection needs. Low priority management actions do not have to be completed in the immediate future and primarily fulfill a specific resource goal or objective.

Table 1. Summary of Management Strategies for Bluestem Prairie Open Space

Management Strategies	Timing	Priority
VEGETATION		
Goal – Protect and enhance the quality, diversity, and health of native plant communities.		
Objective 1: Manage existing noxious weed infestations and prevent new weed infestations.		
<u>Action:</u> Complete comprehensive noxious weed inventory and mapping on an annual basis	O	M
<u>Action:</u> Complete and implement a system-wide noxious weed management plan, including specific treatment approaches for Bluestem Prairie Open Space	S	H
<u>Action:</u> Concentrate immediate weed management efforts along the trail, adjacent to the trailhead, along all fence lines, within the former agricultural building envelope, and along road rights-of-way surround the property	O	H
<u>Action:</u> Integrate weed management to all management practices, including reclamation of disturbed areas, use of weed-free materials, cleaning maintenance equipment from off-site, and monitoring project areas for new weed infestations	O	H
Objective 2: Manage trails to minimize the risk of weed introduction and spread, as well as habitat loss		
<u>Action:</u> Maintain the narrowed trail to a two-foot tread	O	M
<u>Action:</u> Time mowing operations along the trail to control annual weed seed production	O	H
Objective 3: Manage grasslands to retain plant vigor and diversity		
<u>Action:</u> Consider discrete mowing of grassland patches to manage annual weed establishment	O	H
<u>Action:</u> Monitor the spread of noxious weeds through the native grasslands by implementing the actions steps from Objective 1.	O	H
WILDLIFE		
Goal – Protect and enhance wildlife habitat on the property.		
Objective 1: Plan and implement management projects in a manner that protects and enhances wildlife habitat		
<u>Action:</u> Avoid habitat-disturbing activities (e.g., mowing) during the March–July breeding season for grassland songbirds	O	H
<u>Action:</u> Avoid disturbance (e.g., grazing and chemical spraying) during the breeding season for grassland birds	O	H
<u>Action:</u> Close, reclaim, and manage rogue trails to maintain unfragmented habitat for wildlife	O	H
<u>Action:</u> Work with friends groups, Audubon Society, schools, and other partners to collect data on wildlife observations, including bird counts and opportunistic reporting	O	M
Objective 2: Plan and implement a program to track the size and density of occupied prairie dog habitat		
<u>Action:</u> Review December 2015 mapping with the Palmer Land Trust	S	H
<u>Action:</u> Map occupied prairie dog habitat annually	O	H
<u>Action:</u> Monitor (count) prairie dog numbers and density annually	O	H
<u>Action:</u> Review historical aerial photos and map areas of prairie dog occupation	S	M

Management Strategies	Timing	Priority
<u>Action</u> : Prepare a technical memorandum documenting information and trends from previous actions for use in decision making	L	H
Objective 3: Plan and implement a program to document wildlife use of occupied prairie dog habitat		
<u>Action</u> : Conduct mountain plover surveys between May 1 and July 1	O	H
<u>Action</u> : Conduct burrowing owl surveys between March 1 and October 31	O	H
<u>Action</u> : Conduct grassland bird surveys between May 1 and July 1	O	H
TRAILS AND FACILITIES		
Goal – Manage trails and visitor use facilities to provide high-quality recreation experiences while protecting natural resource values		
Objective 1: Improve and replace trailhead signs and wayfinding to improve visitor experience, aesthetics, and compliance with regulations		
<u>Action</u> : Replace and consolidate signage at the trailhead	S	H
<u>Action</u> : Replace and update, or remove, interpretive signage within the property	S	H
<u>Action</u> : Assess and repair park signage on a regular basis	O	M
Objective 2: Implement ongoing maintenance and management projects, emphasizing visitor safety and resource protection		
<u>Action</u> : Develop an annual work plan for staff, volunteer, and contracted trail maintenance efforts	L	M
<u>Action</u> : Maintain fencing as a tool to deter trespass or inappropriate recreational access maintenance efforts	O	H
<u>Action</u> : Remove ranch buildings and associated debris	S	H
<u>Action</u> : Remove loafing shed and associated corral fencing	L	M
<u>Action</u> : Secure and evaluate windmill for removal or as perch site for raptors	L	H
VISITOR USE		
Goal – Provide visitor use experiences and opportunities that are enjoyable, safe, and appropriate while minimizing resource impacts and user conflicts.		
Objective 1: Continue to manage dog use on the property that prioritizes resource protection needs		
<u>Action</u> : Install and maintain clear signs affirming “No Dogs Allowed” at the trailhead	O	H
<u>Action</u> : Install and maintain clear signs affirming “No Dogs Allowed” on the fence line adjacent to development on the northwest side of the property	O	H
<u>Action</u> : Actively affirm and enforce dog regulations using a combination outreach materials, staff presence, and law enforcement	O	H
Objective 2: Manage visitor conflict through a variety of outreach and design tools		
<u>Action</u> : Monitor northwest corner, adjacent to neighborhoods, for inappropriate use (e.g., off-leash dogs, rogue trails, or dumping) or resource damage	O	H
<u>Action</u> : Continue to assess extending trail to neighborhoods in northwest corner of the property, to proactively provide sustainable trail access for new housing residents	L	M

Monitoring

Annual stewardship monitoring is conducted in partnership with the Palmer Land Trust under the terms of the conservation easement (Appendix A). The monitoring process is documented (i.e., reports, photographs, and maps) and tracked. Documentation generally includes site conditions relative to the enforceable terms of the easement.

Additional monitoring of specific resources and specific management issues may be necessary to document the ongoing trajectory of management issues and to determine how well management objectives are being met. Ongoing monitoring allows the City to make informed decisions about resource management priorities and projects, and provides a feedback mechanism that facilitates on-going learning about resource issues and improvement of techniques to address them.

The monitoring of specific resources and resource issues should be performed on a periodic and on-going basis. While some monitoring is based on informed observations (e.g., trail conditions), some requires more scheduled and rigorous surveys (e.g., noxious weeds). The following table provides a summary of monitoring tasks that are recommended to track the progress of the resource management strategies listed above.

Table 2. Summary of Monitoring Actions

Monitoring Actions	Frequency	Methods
Vegetation Monitoring		
<u>Action:</u> Inventory and map noxious weed infestations	Annually	Mapping, photos
<u>Action:</u> Survey trail corridor, fence lines, and disturbance areas for new noxious weed infestations	Annually	Visual inspection, point mapping
<u>Action:</u> Monitor grassland management areas for new noxious weed infestations and prairie dog use	Annually	Visual inspection
Wildlife Monitoring		
<u>Action:</u> Monitor the status of the black-tailed prairie dog colonies on the property	Annually	Survey
<u>Action:</u> Monitor for the presence of burrowing owls and mountain plover in or around the prairie dog colonies	Annually	Survey
<u>Action:</u> Monitor the status and condition of the red-tailed hawk nest or other raptor nests	Annually	Survey
<u>Action:</u> Track the results of annual bird surveys at the Big Johnson Reservoir (e.g., International Shorebird Surveys and Christmas Bird Count)	Annually	Work with local Audubon Chapter
Trail and Infrastructure Monitoring		
<u>Action:</u> Inventory and map rogue trail closures and new rogue trails on the property	Annually	Mapping, photos
<u>Action:</u> Monitor and evaluate the trailhead condition and vandalism	Monthly	Mapping, photos
<u>Action:</u> Document trail sections in poor, unsafe, or deteriorating condition	Annually	Visual inspection, point mapping, photos
<u>Action:</u> Evaluate informal access and use by the adjacent neighborhood in the northwest corner	Monthly	Visual inspection

References

- Carroll, Christopher and Timothy Crawford. 2000. Geological Map of the Colorado Springs Quadrangle, El Paso County, Colorado. Colorado Geologic Survey, Open File Report 00-3.
- Chronic, Halka and Felicie Williams. 2002. Roadside Geology of Colorado. Second Edition. Mountain Press Publishing Company. Missoula, MT.
- Colorado Historical Society, Office of Archaeology and Historic Preservation (OAHP). 2015. Compass Search. Denver, CO. December 21.
- Colorado Natural Heritage Program (CNHP). 2001. Survey of Critical Biological Resources, El Paso County, Colorado. Prepared for El Paso County Parks and Leisure Services.
- Colorado Springs Parks, Recreation, and Cultural Services Department. 2014. City of Colorado Springs Park System Master Plan. September 23, 2014.
- Colorado Springs Parks, Recreation, and Cultural Services Department. 2012. Big Johnson Open Space Master Plan: A Resource Management Guide.
- ERO Resources Corporation (ERO). 2008. Bluestem Prairie Open Space Stewardship Plan 2008-2013.
- ERO Resources Corporation (ERO). 2001. Big Johnson Open Space Existing Conditions Report.
- Natural Resources Conservation Service (NRCS). 2015. Web Soil Survey. Available at: <<http://websoil survey.sc.egov.usda.gov/App/HomePage.htm>>. Last accessed November 24, 2015.
- Palmer Land Trust. 2015. Conservation Interest Monitoring Report: Bluestem Prairie Open Space.
- Palmer Land Trust. 2014. Conservation Interest Monitoring Report: Bluestem Prairie Open Space.
- U.S. Fish and Wildlife Service (USFWS). 2015. IPaC Trust Resource Report – El Paso County, CO. IPaC Information for Planning and Conservation. Report generated November 25, 2015.

Appendices

Conservation Easement

Public Involvement Summary

Plant Species List

2015 Conservation Interest Monitoring Report



**DEED OF CONSERVATION EASEMENT
Bluestem Prairie Open Space**

NOTICE: THIS PROPERTY HAS BEEN ACQUIRED IN PART WITH A GRANT FROM THE STATE BOARD OF THE GREAT OUTDOORS COLORADO TRUST FUND ("GRANT"). THIS DEED CONTAINS RESTRICTIONS ON THE USE AND DEVELOPMENT OF THE PROPERTY WHICH ARE INTENDED TO PROTECT ITS OPEN SPACE VALUES. THE STATE BOARD OF THE GREAT OUTDOORS COLORADO TRUST FUND HAS FOUND THAT THE ADOPTION OF THESE DEED RESTRICTIONS IS IN THE PUBLIC INTEREST.

THIS DEED OF CONSERVATION EASEMENT is made this 4th day of September, 2003 by the City of Colorado Springs, a home rule city and Colorado municipal corporation having an address at 30 S. Nevada Avenue, Colorado Springs, Colorado ("Grantor"), in favor of the Palmer Foundation Land Trust, a Colorado nonprofit corporation, having an address at P.O. Box 1281, Colorado Springs, Colorado ("Grantee").

A. Grantor is the sole owner in fee simple of certain real property in El Paso County, Colorado, more particularly described in the attached Exhibit A (the "Property").

B. The Property possesses natural, scenic, open space, wildlife habitat and recreational trail features and values (collectively, "Conservation Values") of great importance to Grantor, the people of the City of Colorado Springs and the people of the State of Colorado.

C. In particular, the Property presents a unique opportunity to provide the people with open space, to protect wildlife habitat and to protect a remnant grassland ecosystem.

D. The specific Conservation Values of the Property are documented in an inventory or relevant features of the Property ("Baseline Documentation"), which consists of reports, maps, photographs, and other documentation that provides an accurate representation of the Property at the time of this grant and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant. The Baseline Documentation is attached to and shall be incorporated into this Deed of Conservation Easement.

E. Grantor intends that the Conservation Values of the Property be preserved and maintained in a manner consistent with the Big Johnson Master/Management Plan and through consistent land use patterns including, without limitation, those uses existing at the time of this Easement grant which do not significantly impair or interfere with those values.

F. Grantor further intends to convey to Grantee the right to preserve and protect the Conservation Values of the Property in perpetuity.

G. Grantee is a publicly supported, tax-exempt nonprofit organization, qualified under Section 501(c)(3) and 170(h) of the Internal Revenue Code of 1986, as amended, whose primary purpose is to foster, for the people of all ages, open space, park, recreation and leisure time facilities and opportunities, within the City of Colorado Springs, State of Colorado, and County of El Paso, State of Colorado, and areas surrounding or convenient thereto.

H. Grantee agrees to honor the Grantor's stated intentions and to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

IN CONSIDERATION of the mutual covenants, terms, conditions, and restrictions contained in this Easement and pursuant to the laws of the State of Colorado, in particular C.R.S. 38-30.5-101 *et seq.*, Grantor voluntarily grants and conveys to Grantee a Conservation Easement in perpetuity over the Property of the nature, character and extent set forth below ("Easement").

1. **Purpose.** The purpose of this Easement is to assure that the Property will be retained forever in a natural, scenic, open space condition and to prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property. Grantor intends that this Easement will confine the use of the Property to those activities consistent with the purpose of this Easement.

2. **Rights of Grantee.** To accomplish the purpose of this Easement, the following rights are conveyed to Grantee:

a. To preserve and protect the Conservation Values of the Property;

b. To enter upon the Property to monitor Grantor's compliance with and otherwise enforce the terms of this Easement. Grantee shall not unreasonably interfere with Grantor's use and quiet enjoyment of the Property; and

c. To prevent any activity or use of the Property inconsistent with the purpose of this Easement and to require the restoration of any damaged areas or features of the Property resulting from any inconsistent activity or use.

3. **Prohibited Uses.** Any activity or use of the Property inconsistent with the purpose of this Easement is prohibited. Without limiting the foregoing, this Easement shall, in particular, prohibit: (i) the construction or installation on the Property of buildings, structures or other improvements, and (ii) other material alterations of the Property's natural features, except those buildings, structures, improvements and/or alterations that are reasonably necessary for, and otherwise consistent with, the management of the Property by the City for open space purposes in a manner which preserves and protects the Property's Conservation Values. Further, without limiting this general prohibition, the following activities and uses are expressly prohibited:

a. **Construction of Buildings and Other Structures.** The construction or reconstruction of any building or other structure or improvement, except those existing on the date of this Easement, is prohibited except in accord with paragraphs (b) and (c) below. Grantor and Grantee recognize that this Property will be used for public open space purposes. Grantee is familiar with and hereby approves Grantor's open space master plans, as outlined in the attached Exhibit B. Grantee acknowledges that the City's management of the Property for open space purposes will require construction of trails and a trailhead facility as identified in the master / management plan.

b. **Fences.** Grantor may repair or replace existing fences, or erect new fences necessary for the reasonable and customary management of wildlife, management of the grassland ecosystem including grazing of cattle, protection of sensitive natural resources, or for separation of ownership and uses. Grantor shall ensure that any fences do not adversely affect the Conservation Values or purposes of this Easement.

c. **New Structures and Improvements.** New buildings and other structures and improvements may be built with the advance written permission of Grantee. Grantee must give such permission within a reasonable time unless Grantee determines that the proposed building, structure or improvement will substantially diminish or impair the Conservation Values of the Property.

d. **Subdivision.** Any division or subdivision of title to the Property, whether by physical or legal process, is prohibited.

e. **Land Management.** The Property must be operated and managed in accord with a land management plan prepared and accepted with the mutual consent of Grantor and Grantee. The land stewardship plan will be updated every five (5) years and distributed to the parties.

Grantor recognizes the importance of good resource management and stewardship for current and future generations. To this end, all uses of the Property shall be conducted using standard management and stewardship practices, which shall include compliance with governmental noxious weed control regulations.

f. **Mining.** The mining or extraction of soil, sand, gravel, rock, oil, natural gas, fuel or any other mineral substance is prohibited.

g. **Paving and Road and Trail Construction.** No portion of the Property may be paved or otherwise covered with concrete, asphalt or any other paving material, nor may any road, trailhead, or trail except those identified in the master/management plan without the advance written permission of Grantee. Grantee must give permission within a reasonable time unless Grantee determines that the proposed paving, construction, or location of any road or trail will substantially diminish or impair the Conservation Values of the Property or is otherwise inconsistent with this Easement. Permission shall not be unreasonably withheld.

h. **Timber Harvesting.** Trees may be cut to control insects and disease, to control invasive non-native species and to prevent personal injury and property damage. Dead trees may also be cut and removed for firewood or other uses on the Property. Commercial timber harvesting on the Property shall be prohibited.

i. **Water Rights.** Grantor shall retain and reserve the right to use water rights sufficient to maintain and improve the Conservation Values of the Property and shall not transfer, encumber, lease, sell or otherwise separate water rights necessary and sufficient to maintain and improve the Conservation Values of the Property from title to the Property.

j. **Motorized Vehicles.** Use of snowmobiles, all-terrain vehicles, motorcycles or other motorized vehicles off of roads or travelways, except for agricultural or property maintenance purposes, is prohibited.

k. **Signage or Billboards.** No commercial signs, billboards, awnings or advertisements shall be displayed or placed on the Property, except for no trespassing signs, appropriate and customary signs notifying the public of the status of ownership of the Property, directional signs to public entrances to the property and reasonable and necessary signs containing rules or restrictions on public use of the Property. No signs shall materially or adversely affect the Conservation Values of the Property.

l. **Trash.** The dumping or uncontained accumulation of any trash, refuse or debris on the Property is prohibited.

m. **Commercial or Industrial Activity.** All commercial or industrial uses of the Property are prohibited except in accord with Paragraph 3(n), below.

n. **Feed Lot.** The establishment or maintenance of a feed lot is prohibited. For purposes of this Easement, feed lot is defined as a permanently constructed and confined area or facility within which the Property is not grazed or cropped annually, and which is used and maintained for purposes of feeding livestock. Nothing in this paragraph shall prevent Grantor from grazing cattle for the purposes of grassland ecosystem management or from leasing pasture on the Property for the grazing of livestock owned by others, provided grazing activities do not adversely affect the Conservation Values of the Property or the purposes of this Easement.

4. **Reserved Rights.** Grantor reserves to itself, its successors and assigns, all rights accruing from ownership of the Property, including the right to engage in or to permit or invite others to engage in all uses of the Property not expressly prohibited and not inconsistent with the purpose of this Easement.

5. **Notice of Intention to Undertake Certain Permitted Actions.** The purpose of requiring Grantor to notify Grantee prior to undertaking certain activities is to afford Grantee an opportunity to ensure that the activities are designed and carried out in a manner consistent with the purpose of this Easement. Whenever notice is required, Grantor shall notify Grantee in writing

not less than sixty (60) days prior to the date Grantor intends to undertake the activity. Notice shall describe the nature, scope, design, location, timetable, and any other information material to the proposed activity in sufficient detail to permit Grantee to make an informed judgement of its consistency with the purpose of this Easement.

6. **Grantee's Approval.** Where Grantee's approval is required, Grantee must grant approval or withhold approval in writing within sixty (60) days of receipt of Grantor's written request. Grantee's approval may be withheld only upon a reasonable determination that the action as proposed would be inconsistent with the purpose of this Easement.

7. **Enforcement.** Grantee shall have the right to prevent, correct or require correction of violations of the terms and purposes of this Easement. Grantee may enter and inspect the Property for violations. If Grantee finds what it believes is a violation, Grantee shall immediately notify Grantor and the State Board of the Great Outdoors Colorado Trust Fund ("the Board") in writing of the nature of the alleged violation. Upon receipt of this written notice, Grantor must either (a) restore the Property to its condition prior to the violation or, (b) provide Grantee a written explanation of the reason the alleged violation should be permitted. If the Grantor offers justification for permitting the alleged violation, both parties agree to meet as soon as possible to resolve this difference. If a resolution cannot be achieved at the meeting, both parties agree to meet with a mutually acceptable mediator to attempt resolution. When Grantee determines an ongoing or imminent violation could irreversibly diminish or impair the Conservation Values of the Property, Grantee may, at its discretion, take appropriate legal action. Grantor must discontinue any activity that could increase or expand the alleged violation during the mediation process. Should mediation fail to resolve the dispute, Grantee may again, at its discretion, take appropriate legal action. If a court with jurisdiction determines that a violation is imminent, exists, or has occurred, Grantee may request a temporary or permanent injunction. A court may also issue an injunction to require Grantor to restore the Property to its condition prior to the violation.

Grantee may bring an action to recover any damages to which it may be entitled for violation of the terms of this Easement for injury to any Conservation Value protected by this Easement, including damages for the loss of scenic, aesthetic or environmental values. Grantee's remedies described in this paragraph 7 are cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity.

Any costs incurred by Grantee in successfully enforcing the terms of this Easement against Grantor, including, without limitation, costs of suit and attorneys' fees, and any costs of restoration necessitated by Grantor's violation of the terms of this Easement shall be borne by Grantor. If Grantor prevails in any action to enforce the terms of this Easement, Grantor's costs of suit, including, without limitation, attorneys' fees, shall be borne by Grantee, but only if the mediator, arbitrator, or judge, as applicable, determines that the Grantee's position was frivolous or substantially without merit.

8. **Grantee's Discretion.** Enforcement of the terms of this Easement shall be at the discretion of Grantee. Any forbearance by Grantee to exercise its rights under this Easement in the event of a breach of this Easement shall not be deemed or construed to be a waiver by

Grantee of the breach or of any subsequent breach of the same or any other term of this Easement or of any of Grantee's rights under this Easement. Grantee's delay or omission in exercising any right or remedy upon Grantor's breach shall not impair any right or remedy or be construed as a waiver.

9. **Waiver of Certain Defenses.** Grantor hereby waives any defense of laches, estoppel, or prescription. The parties agree that the statute of limitations applicable to contract shall apply to any proceeding to enforce this Conservation Easement. Grantor hereby specifically waives any defense available to Grantor pursuant to C.R.S. 38-41-119.

10. **Acts Beyond Grantor's Control.** No event shall be construed to entitle Grantee to bring any action against Grantor for injury to or change in the Property resulting from causes beyond Grantor's control, including, without limitation, fire, flood, storm, drought, and earth or underground water movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes. The parties also understand and agree that Grantee shall not be entitled to bring any action against Grantor related to any change in the property resulting from actions taken or required by the Colorado Department of Public Health and Environment.

11. **Access.** In accord with the Code of the City of Colorado Springs 2001, as amended, the general public shall have access to the Property, as appropriate. The Grantor specifically reserves the right to close access to the Property in the interest of the public health, safety and welfare in accord with Section 4.2.103 of the Code of the City of Colorado Springs 2001, as amended or recodified. Grantee recognizes the existence of utility easements permitting the holders to access the easements and conduct reasonable maintenance.

12. **Costs and Liabilities.** Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to ownership, operation, upkeep and maintenance of the Property, including weed control and eradication and including adequate self insurance coverage. Pursuant to CRS 38-26-105 (Public Works Contractor Bonds) and to *Flaugh v. Empire Play Products, Inc.*, 402 P. 2d 932 Colo. 1965, the Property shall be kept free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantors. Grantor is responsible for: (1) the negligent actions of its officials, employees and agents in the performance or failure to perform incident to this Easement, (2) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause unless due solely to the negligence of Grantee; and (3) the presence or release of hazardous or toxic substances on, under or about the Property; and shall be responsible for all liability, claims, demands, damages, or costs caused thereby. It is agreed that such liability shall not exceed any applicable limits set forth in the Colorado Governmental Immunity Act now existing, or as may hereafter be amended, nor confer any benefits to any person not a party to this Agreement. By agreeing to this provision, the Grantor does not waive or intend to waive the limitations on liability which are provided to the Grantor under the Colorado Governmental Immunity Act, 24-10-101 *et seq.*, C.R.S. In assuming responsibility for the negligent acts or omissions of its own officials, agents and employees in the performance or failure to perform incident to this Agreement, the Grantor in no way assumes responsibility for the gross negligence or intentional misconduct of the employees or agents of

Grantee. Grantor hereby waives any and all rights to any type of express or implied indemnity or right of contribution from the State of Colorado, Grantee, its officers, agents or employees, for any liability resulting from, growing out of, or in any way connected with or incident to this Easement. For the purpose of this paragraph, hazardous or toxic substances shall mean any hazardous or toxic substance that is regulated under any federal, state or local law. Without limiting the foregoing, nothing in this Deed shall be construed as giving rise to any right or ability in Grantee or the Board, nor shall Grantee or the Board have any right or ability, to exercise physical or managerial control over the day-to-day operations of the Property, or otherwise to become an operator with respect to the Property within the meaning of The Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

13. **Condemnation or Other Extinguishment.** If this Easement is taken in whole or in part by the exercise of the power of eminent domain, or if circumstances arise in the future that render the purpose of this Easement impossible to accomplish, this Easement can only be terminated or extinguished, whether in whole or in part, by judicial proceedings in a court of competent jurisdiction. Each party shall promptly notify the other when it first learns of such circumstances, and shall also notify the Board of those circumstances. The amount of the proceeds to which Grantee shall be entitled, after the satisfaction of prior claims, from any sale, exchange or involuntary conversion of all or any portion of the Property subsequent to easement termination or extinguishment, shall be determined, unless otherwise provided by Colorado law at the time, in accord with paragraph 14 below. In the event of condemnation or termination, the Board shall be entitled to receive that portion of the net proceeds of condemnation or sale of the Property which is equal to a fraction, the numerator of which is that portion of the Board's Grant attributable to the purchase price for the Property and the denominator of which is the full purchase price for the Property.

14. **Proceeds.** This Easement constitutes a real property interest immediately vested in Grantee, which the parties stipulate to have a fair market value (FMV) determined by multiplying the FMV of the Property unencumbered by the Easement (minus any increase in value after the date of this Easement attributable to improvements) by the ratio of the value of the Easement at the time of this Easement to the value of the Property, without deduction for the value of the Easement, at the time of this Easement. The values at the time of this Easement shall be those values used to calculate the deduction for federal income tax purposes allowable by reason of this grant, pursuant to Section 170(h) of the Internal Revenue Code of 1986, as amended. For the purposes of this paragraph, the ratio of the value of the Easement to the value of the Property unencumbered by the Easement shall remain constant.

15. **Grantee Assignment.** This Easement is transferable, however Grantee may only assign its rights and obligations under this Easement to an organization that is (a) a qualified organization at the time of transfer under Section 170(h) of the Internal Revenue Code of 1986, as amended (or any successor provision then applicable), and the applicable regulations promulgated thereunder, (b) authorized to acquire and hold conservation easements under Colorado law, and (c) approved as a transferee by the Board, its successors or assigns. As a condition of transfer, Grantee must ensure that the conservation purposes of this Easement continue to be carried out by the transferee. The Board retains the right to compel Grantee to

assign its rights and obligations under this Easement to another organization if Grantee ceases to exist or fails or refuses to enforce the terms and provisions of this Easement.

16. **Subsequent Grantor Transfers.** Grantor agrees to incorporate the terms of this Easement into any deed or other legal instrument by which it divests itself of any interest in the Property, including without limitation, a leasehold interest. Grantor further agrees to give written notice to Grantee and the Board of the transfer of any interest at least thirty (30) days prior to the date of the transfer. Grantor's failure to perform any act required by this paragraph will not impair the validity of this Easement or limit its enforceability in any way.

17. **Notices.** Any notice, demand, request, consent, approval or communication contemplated by this Easement shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:	City of Colorado Springs Director of Parks and Recreation and Cultural Services 1400 Recreation Way Colorado Springs, CO 80905
Copy to:	City Attorney's Office 30 South Nevada Avenue, Suite 510 Colorado Springs, CO 80903
To Grantee:	The Palmer Foundation Executive Director P.O. Box 1281 Colorado Springs, CO 80901
To the Board:	Executive Director State Board of the Great Outdoors Colorado Trust Fund 1600 Broadway, Suite 1650 Denver, CO 80202

or to other addresses as the parties may designate by written notice to the other.

18. **Recordation.** This instrument will be recorded with the deed to the Property and other documents evidencing Grantor's acquisition of the Property with the El Paso County, Colorado, Clerk and Recorder. Grantee may re-record it at any time as may be required to preserve its rights in this Easement.

19. **General Provisions.**

a. **Controlling Law.** The interpretation and performance of this Easement shall be governed by the laws of the State of Colorado, and the Charter, City Code, Ordinances, Rules and Regulations of the City of Colorado Springs, Colorado, a home rule city and Colorado municipal corporation. Court Jurisdiction shall exclusively be in the

District Court for the Fourth Judicial District of Colorado.

b. **Liberal Construction.** This Easement shall be liberally construed to effect the purpose of the Easement and the policy and purpose of C.R.S. 38-30.5-101, *et seq.* If any provision in this Deed of Conservation Easement is found to be ambiguous, an interpretation consistent with the purpose of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid. The Recitals at the beginning of this Easement are not mere surplusage but are an integral part of the Easement and are incorporated into the body of this Easement.

c. **Severability.** If any provision of this Easement, or its application to any person or circumstance, is found to be invalid, the remaining provisions of this Easement, or its application to other persons or circumstances shall not be affected.

d. **Entire Agreement.** This Deed of Conservation Easement sets forth the entire agreement of the parties with respect to the Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Easement, all of which are merged in this Easement.

e. **No Forfeiture.** Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

f. **Successors.** The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the parties and their respective successors and assigns. This Easement shall continue as a servitude running in perpetuity with the Property.

g. **Termination of Rights and Obligations.** A party's rights and obligations under this Easement terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

h. **Captions.** The captions in this Deed of Conservation Easement have been inserted solely for convenience of reference, are not a part of the Easement and have no effect upon its construction or interpretation.

i. **Amendment.** Should an amendment to or modification of this Easement become appropriate, Grantor and Grantee are free to jointly amend this document. However, the prior written approval of any amendment or modification of this Easement must be obtained from the Board. No amendment may affect the qualifications or validity of this instrument under any law. Any amendment or modification must be consistent with the conservation purposes of this Easement and may not affect its perpetual duration. Any amendment must be written, signed by both parties and the Board or its successors or assigns, and recorded in the records of the El Paso County Clerk and Recorder.

j. **Termination of the Board.** In the event that Article XXVII of the Colorado Constitution, which established the Board, is amended or repealed to terminate the Board or merge the Board into another entity, the rights and obligations of the Board under this Easement shall be assigned to and assumed by another entity as provided by law, or in the absence of such direction, by the Colorado Department of Natural Resources or its successor.

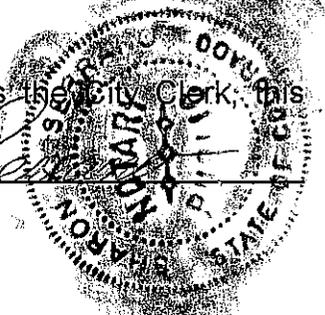
k. **Merger.** No merger shall be deemed to have occurred hereunder or under any documents executed in the future affecting this Deed of Conservation Easement unless the parties expressly state that they intend a merger of estates or interests to occur and the parties have also obtained the prior written consent of the Board approving such merger of estates or interests.

INTENTIONALLY LEFT BLANK

STATE OF COLORADO)
) ss:
COUNTY OF EL PASO)

Acknowledged before me by Kathryn M Young as the City Clerk, this 12th day of September, 2003.

Sharon K. Searles
Notary Public

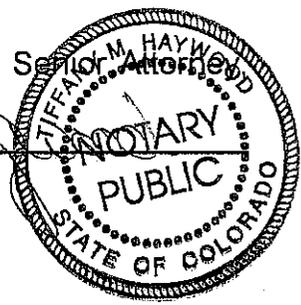


My Commission Expires:
April 6, 2006

STATE OF COLORADO)
) ss:
COUNTY OF EL PASO)

Acknowledged before me by Tiffany M. Haywood as the Senior Attorney, this 12th day of September, 2003.

Tiffany M. Haywood
Notary Public

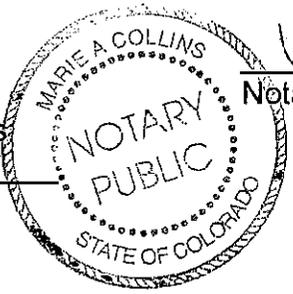


My Commission Expires:
~~MY COMMISSION EXPIRES~~
01/19/2004

STATE OF COLORADO)
) ss:
COUNTY OF EL PASO)

Acknowledged before me by Paula J. Wenham, as President of the Palmer Foundation Land Trust, this 11th day of September, 2003.

Marie A. Collins
Notary Public



My Commission Expires:
07/17/06

EXHIBIT A
(Property Description)

A TRACT OF LAND LOCATED IN A PORTION OF SECTIONS 7, 8 AND 17, ALL IN TOWNSHIP 15 SOUTH, RANGE 65 WEST OF THE 6TH P.M., EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 17, THENCE S89°33'35"W, A DISTANCE OF 66.65 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD AS RECORDED IN BOOK 5307 AT PAGE 1472 OF THE RECORDS OF SAID EL PASO COUNTY; THENCE S00°29'10"E ALONG SAID WESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 123.46 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION:

THE FOLLOWING THREE (3) COURSES FOLLOW SAID WESTERLY RIGHT-OF-WAY LINE OF POWERS BOULEVARD:

1. THENCE S00°29'10"E A DISTANCE OF 4956.30 FEET TO A POINT OF CURVE TO THE RIGHT;
2. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 150.00 FEET, A DELTA ANGLE OF 89°44'44", AN ARC LENGTH OF 234.95 FEET, WHOSE LONG CHORD BEARS S44°23'11"W A DISTANCE OF 211.66 FEET;
3. THENCE S00°29'15"E A DISTANCE OF 20.00 FEET TO THE NORTHERLY RIGHT-OF-WAY LINE OF FONTAINE BOULEVARD, SAID POINT ALSO BEING 30.00 FEET NORTHERLY OF THE SOUTH LINE OF SAID SECTION 17;
4. THENCE S89°19'30"W ALONG SAID NORTHERLY RIGHT-OF-WAY LINE (WHICH IS PARALLEL WITH AND 30.00 FEET NORTHERLY FROM THE SOUTH LINE OF SAID SECTION 17), A DISTANCE OF 2355.26 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD, NOW KNOWN AS GOLDFIELD ROAD;

THE FOLLOWING TWO (2) COURSES FOLLOW SAID EASTERLY RIGHT-OF-WAY LINE:

5. THENCE N15°25'04"W A DISTANCE OF 1466.75 FEET;
6. THENCE N24°42'58"W A DISTANCE OF 1806.78 FEET TO INTERSECT THE BOUNDARY OF RESERVOIR NO. 2 OF THE FOUNTAIN VALLEY LAND AND IRRIGATION COMPANY AS RECORDED IN BOOK 601 AT PAGE 303 OF THE RECORDS OF SAID EL PASO COUNTY;

THE FOLLOWING TWENTY-SEVEN (27) COURSES FOLLOW THE BOUNDARY LINE OF SAID RESERVOIR NO. 2:

7. THENCE S32°12'54"E A DISTANCE OF 924.08 FEET;
8. THENCE S75°19'04"E A DISTANCE OF 515.80 FEET;
9. THENCE N77°26'37"E A DISTANCE OF 187.14 FEET;
10. THENCE S66°19'29"E A DISTANCE OF 919.38 FEET;
11. THENCE S75°25'08"E A DISTANCE OF 812.75 FEET;
12. THENCE N08°41'16"E A DISTANCE OF 108.57 FEET;
13. THENCE N14°08'30"W A DISTANCE OF 499.73 FEET;

J. Patrick Kelly El Paso Cty, CO
Doc 10/05/2000 \$0.00 Page 08:51
Rec \$40.00 6 of 8
200120591

14. THENCE N03°26'05"W A DISTANCE OF 160.07 FEET;
15. THENCE N13°56'16"E A DISTANCE OF 500.24 FEET;
16. THENCE N17°29'03"E A DISTANCE OF 792.03 FEET;
17. THENCE N26°31'00"W A DISTANCE OF 258.07 FEET;
18. THENCE N38°34'34"W A DISTANCE OF 498.42 FEET;
19. THENCE N20°33'54"W A DISTANCE OF 291.80 FEET;
20. THENCE N02°58'22"W A DISTANCE OF 440.23 FEET;
21. THENCE N21°04'56"E A DISTANCE OF 249.83 FEET;
22. THENCE N64°32'48"E A DISTANCE OF 339.51 FEET;
23. THENCE N49°52'23"E A DISTANCE OF 261.12 FEET;
24. THENCE N49°22'07"W A DISTANCE OF 826.63 FEET;
25. THENCE S80°23'15"W A DISTANCE OF 276.70 FEET;
26. THENCE N39°37'30"W A DISTANCE OF 589.63 FEET;
27. THENCE S72°24'15"W A DISTANCE OF 309.92 FEET;
28. THENCE N83°37'39"W A DISTANCE OF 499.89 FEET;
29. THENCE N52°37'21"W A DISTANCE OF 460.29 FEET;
30. THENCE N54°36'42"W A DISTANCE OF 999.94 FEET;
31. THENCE N64°11'58"W A DISTANCE OF 357.54 FEET;
32. THENCE N82°16'37"W A DISTANCE OF 328.11 FEET;
33. THENCE S24°06'20"W A DISTANCE OF 672.91 FEET TO A POINT ON THE BOUNDARY LINE OF A TRACT OF LAND AS DESCRIBED IN BOOK 1556 AT PAGE 272 OF THE RECORDS OF SAID EL PASO COUNTY;

THE FOLLOWING FOUR (4) COURSES FOLLOW THE BOUNDARY LINE OF SAID TRACT IN BOOK 1556 AT PAGE 272:

34. THENCE N01°00'50"W A DISTANCE OF 527.88 FEET;
35. THENCE S88°58'37"W A DISTANCE OF 299.96 FEET;
36. THENCE S01°00'56"E A DISTANCE OF 447.35 FEET;
37. THENCE S88°59'09"W A DISTANCE OF 2824.84 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF BRADLEY ROAD;

38. THENCE N01°02'36"W ALONG SAID EASTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 895.11 FEET TO A POINT ON A NON TANGENT CURVE TO THE LEFT;
39. THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT WITH A RADIUS OF 2105.00 FEET, A DELTA ANGLE OF 50°18'41", AN ARC LENGTH OF 1848.40 FEET, WHOSE LONG CHORD BEARS N54°02'21"E A DISTANCE OF 1789.59 FEET;
40. THENCE N28°53'00"E A DISTANCE OF 349.75 FEET TO A POINT OF CURVE TO THE RIGHT;
41. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 1895.00 FEET, A DELTA ANGLE OF 60°25'32", AN ARC LENGTH OF 1998.51 FEET, WHOSE LONG CHORD BEARS N59°05'46"E A DISTANCE OF 1907.17 FEET;
42. THENCE N89°18'32"E A DISTANCE OF 1051.99 FEET TO A POINT OF CURVE TO THE RIGHT;

43. THENCE ALONG THE ARC OF SAID CURVE TO THE RIGHT WITH A RADIUS OF 1895.00 FEET, A DELTA ANGLE OF $53^{\circ}55'04''$, AN ARC LENGTH OF 1783.27 FEET, WHOSE LONG CHORD BEARS $S63^{\circ}43'56''E$ A DISTANCE OF 1718.20 FEET;
44. THENCE $S36^{\circ}46'24''E$ A DISTANCE OF 297.03 FEET TO A POINT OF CURVE TO THE LEFT;
45. THENCE ALONG THE ARC OF SAID CURVE TO THE LEFT WITH A RADIUS OF 1645.00 FEET, A DELTA ANGLE OF $53^{\circ}38'50''$, AN ARC LENGTH OF 1540.25 FEET, WHOSE LONG CHORD BEARS $S63^{\circ}35'49''E$ A DISTANCE OF 1484.60 FEET;
46. THENCE $N89^{\circ}34'46''E$ A DISTANCE OF 105.49 FEET;
47. THENCE $S06^{\circ}24'05''E$ A DISTANCE OF 3312.25 FEET TO THE TRUE POINT OF BEGINNING OF THIS DESCRIPTION.

THE ABOVE TRACT OF LAND CONTAINS 646.94 ACRES, MORE OR LESS.

J. Patrick Kelly El Paso Cty, CO
10/05/2000 08:51
Doc \$0.00 Page
Rec \$40.00 8 of 8

200120591

Bluestem Prairie Open Space Management Plan
Community Workshop
December 8, 2105

Discussion Comments and Questions by Issue Category

Do you have any questions about any of the preliminary management strategies presented and discussed tonight? Is anything missing that you believe is important to include? Do you have any comments about any of the strategies?

Vegetation Management

- Can you compare the amount of noxious weeds today to several years ago? Have they increased dramatically? Are they in new areas?

Wildlife Management/Structures and Infrastructure

- Is there going to be a more active Management Plan in place for the prairie dog population? Palmer Land Trust is asking for the Management Plan to speak to this issue and have an action plan, not just monitoring.
- Does Palmer Land Trust have a specific prairie dog management plan?
- Check for owls in the barn-like structure.
- Why remove the windmill – is it dangerous? Is it a good raptor roosting post?
- What is being done now for the burrowing owls and mountain plovers? The plan says “additional” – are there active surveys? Aiken Audubon Society would love for the City and ERO to consider their volunteer help for surveys/tracking/bird counts.

Visitor Use

- Do you think the trail in the master plan could be in the “weedy area” in the northwest corner?
- The parking lot does attract hanging out and undesirable activities.

Other – City staff asked participants “Should the City encourage increased use?”

- The perception is that it is not well-used.
- Maybe connecting the trail to the neighborhood areas might increase use.
- Very few people in the open space.
- A loop trail would be more likely to draw hikers.
- Seems underused.
- Have seen people with dogs leave when they see the signs.
- Weeds are a big concern.
- More nearby development will increase use and people may want to walk their dogs there.
- What drove the no-dogs policy?

Bluestem Prairie Open Space Management Plan

Community Meeting

December 8, 2105

Verbatim Individual Response Form Responses

Do you have any comments about any of the preliminary management strategies presented and discussed today?

The following comments were submitted by one individual:

- Would like you to focus on noxious weed removal/containment in order to preserve the integrity of the grassland.
- The prairie dog community seems to have waxed and waned over the years, and has basically kept itself in check. Prairie dog towns can provide habitat for burrowing owls. The owls are now nesting on the site, and at least 16 were seen this year.
- Please try to spray early in the season, if you must, before nesting begins, and be particularly mindful of ground nests. April-May would be optimal.
- Please use “best practices” when it comes to any actions/policies regarding birds.
- Consider asking Aiken Audubon to help with bird surveys, nest mapping, etc.

Bluestem Prairie Open Space Plant Species

				Vegetation Community Type			
Common Name	Species Name	Synonym	Sand Sagebrush	Shortgrass Prairie	Mid-Tallgrass prairie	Disturbed Areas	
Native Annual or Biennial Forbs							
curlycup gumweed	Grindelia squarrosa		■	■		■	
fetid marigold	Dyssodia papposa					■	
field sagewort	Oligosporus pacificus	O. campestris ssp. caudatus	■	■			
mountain tansymustard	Descurainia incana	Descurainia richardsonii				■	
narrowleaf goosefoot	Chenopodium leptophyllum					■	
pygmyflower rockjasmine	Androsace septentrionalis			■			
spreading fleabane	Erigeron divergens			■	■		
wavyleaf thistle	Cirsium undulatum		■	■	■		
Introduced Annual or Biennial Forbs							
burning-bush	Bassia sieversiana	Kochia scoparia, K. sieversiana	■			■	
Canadian horseweed	Conyza canadensis		■			■	
common mullein	Verbascum thapsus		■			■	
lambsquarters	Chenopodium album					■	
musk thistle	Carduus nutans ssp. macrolepis			■			
prickly lettuce	Lactuca serriola		■			■	
prickly Russian thistle	Salsola australis	Salsola iberica	■			■	
tall tumblemustard	Sisymbrium altissimum		■	■		■	
Native Annual Grasses							
little barley	Critesion pusillum	Hordeum pusillum		■		■	
sixweeks fescue	Vulpia octoflora	Festuca octoflora		■			
Introduced Annual Grasses							
cheatgrass	Anisantha tectorum	Bromus tectorum	■	■	■	■	

	Common Name	Species Name	Synonym	Vegetation Community Type			
				Sand Sagebrush	Shortgrass Prairie	Mid-Tallgrass prairie	Disturbed Areas
Native Perennial Forbs							
	bractless blazingstar	Nuttallia nuda	Mentzelia nuda			■	
	common starlily	Leucocrinum montanum			■		
	crested pricklypoppy	Argemone polyanthemos		■		■	
	Cuman ragweed	Ambrosia psilostachya var. coronopifolia			■		
	fineleaf hymenopappus	Hymenopappus filifolius		■	■		
	hairy false goldenaster	Heterotheca villosa			■		
	Hooker's Townsend daisy	Townsendia hookeri			■		
	lambstongue ragwort	Senecio integerrimus			■		
	manyflowered stoneseed	Lithospermum multiflorum			■	■	
	mountain bladderpod	Lesquerella montana			■		
	narrowleaf stoneseed	Lithospermum incisum				■	
	prairie thermopsis	Thermopsis rhombifolia				■	
	purple milkvetch	Astragalus agrestis			■		
	sanddune wallflower	Erysimum capitatum			■	■	
	scarlet beeblossom	Gaura coccinea			■		
	scarlet globemallow	Sphaeralcea coccinea			■		
	shaggy dwarf morning-glory	Evolvulus nuttallianus			■		
	slimflower scurfpea	Psoraleidium tenuiflorum	Psoralea tenuiflora			■	
	twogrooved milkvetch	Astragalus bisulcatus		■		■	
	upright prairie coneflower	Ratibida columnifera			■		
	white sagebrush	Artemisia ludoviciana		■		■	
	wild tarragon	Oligosporus dracunculus ssp. glaucus	Artemisia dracunculus ssp. glaucus	■	■	■	
Introduced Perennial Forbs							
	alfalfa	Medicago sativa					■
	curly dock	Rumex crispus					■
	field bindweed	Convolvulus arvensis		■			■

	Common Name	Species Name	Synonym	Vegetation Community Type			
				Sand Sagebrush	Shortgrass Prairie	Mid-Tallgrass prairie	Disturbed Areas
Native Perennial Cool Season Grasses							
	green needlegrass	Nassella viridula	Stipa viridula			■	
	needle and thread	Hesperostipa comata	Stipa comata			■	
	sleepygrass	Achnatherum robustum	Stipa robusta			■	
	western wheatgrass	Pascopyrum smithii	Agropyron smithii		■	■	
Native Perennial Warm Season Grasses							
	big bluestem	Andropogon gerardii				■	
	blue grama grass	Chondrosom gracile	Bouteloua gracilis		■	■	
	buffalograss	Buchloe dactyloides	Bouteloua dactyloides		■		
	galleta grass	Hilaria jamesii			■		
	little bluestem	Schizachyrium scoparium	Andropogon scoparium			■	
	purple threeawn	Aristida purpurea			■	■	
	sideoats grama	Bouteloua curtipendula				■	
Native Subshrubs							
	broom snakeweed	Gutierrezia sarothrae		■	■	■	■
	prairie sagewort	Artemisia frigida		■		■	
Native Shrubs							
	rubber rabbitbrush	Chrysothamnus nauseosus	Ericameria nauseosa			■	■
	sand sagebrush	Oligosporus filifolius	Artemisia filifolia	■			
Native Trees							
	plains cottonwood	Populus deltoides ssp. monilifera				■	
Introduced Trees							
	Russian olive	Elaeagnus angustifolia					■
	Siberian elm	Ulmus pumila					■
Native Succulents							
	nylon hedgehog cactus	Echinocereus viridiflorus		■		■	
	twistspine pricklypear	Opuntia macrorhiza		■	■	■	
Native Agavoids							
	soapweed yucca	Yucca glauca		■	■	■	■



Palmer Land Trust
102 S. Tejon St. #360
Colorado Springs, CO 80903

TEL [719] 632-3236
FAX [719] 434-3666

**CONSERVATION INTEREST
MONITORING REPORT**

BLUESTEM PRAIRIE OPEN SPACE

COUNTY: El Paso
DATE OF GRANT: 9/4/03
SIZE: 646 acres

VISIT DETAILS

DATE OF LAST MONITORING VISIT: 7/23/14
DATE OF THIS VISIT: July 29, 2015
STATUS: OK

CURRENT OWNER: City of Colorado Springs
IS CONTACT INFORMATION CORRECT? Yes
HAS PROPERTY TRANSFERRED SINCE LAST VISIT? No
ARE THERE PLANS TO SELL OR TRANSFER THE PROPERTY? No

WAS OWNER/REPRESENTATIVE CONTACTED PRIOR TO VISIT? Yes, John Stark via emails and text messages.

DOES THE MONITOR HAVE A PRIOR RELATIONSHIP WITH THE LANDOWNER? IF SO, PLEASE DESCRIBE:
No

DID THE OWNER/REPRESENTATIVE MEET WITH THE MONITOR? Yes
DID THE OWNER/REPRESENTATIVE ACCOMPANY THE MONITOR? Yes

LEAD MONITOR: Lee Derr - Monitoring Contractor
DID THE LEAD MONITOR REVIEW ALL RELEVANT DOCUMENTS: Yes
OTHERS PRESENT: None

DID THE OWNER / REPRESENTATIVE HAVE ANY QUESTIONS OR CONCERNS PRIOR TO THE MONITORING VISIT? No

AREA INSPECTED: Drove the entire perimeter. Drove the trails to photopoints. See GPS
TIME SPENT ON THE PROPERTY: 2.25 hours

PROPERTY INFORMATION

BRIEFLY DESCRIBE THE GENERAL CONDITION OF THE PROPERTY: The Prairie dog population experienced rapid decline due to bubonic plague. The Division of Wildlife was aware of this. The decline of the prairie dogs, which had greatly denuded the areas proximal to villages, in addition to the wet Spring, has resulted in an abundance of plant regeneration. Many areas are returning to native species and some are heavily grown with weeds (thistle, horseweed (*Conyza Canadensis*)). Hopefully the mid-grass prairie species will continue to do well by re-establishing and recolonizing the bare spots associated with the drought and prairie dogs.

HOW IS THE PROPERTY CURRENTLY BEING MANAGED / USED? Public Open Space

HAVE THERE BEEN ANY MAJOR NATURAL EVENTS ON THE PROPERTY? Loss of prairie dogs and increased moisture

HAVE THERE BEEN CHANGES TO ADJACENT LAND THAT COULD AFFECT THE PROPERTY? Development continues to encircle the property on the north and west.

INFRASTRUCTURE / IMPROVEMENT CHANGES

HAVE ANY NEW MAJOR IMPROVEMENTS [BUILDINGS, ROADS] BEEN BUILT IN LAST YEAR? No

HAVE ANY NEW INFRASTRUCTURE OR MINOR IMPROVEMENTS BEEN BUILT IN THE LAST YEAR? No

HAVE THERE BEEN ANY MANAGEMENT CHANGES IN THE LAST YEAR? Raptor roosting poles have been added to the Open Space to encourage raptor control of Prairie Dogs. Patches of Canada thistle were mowed prior to seed production. A buffer space adjacent to the trail was mowed to permit better use of trails.

ARE THERE PLANS FOR NEW MAJOR IMPROVEMENTS [BUILDINGS, ROADS] IN THE UPCOMING YEAR? No

ARE THERE PLANS FOR NEW INFRASTRUCTURE OR MINOR IMPROVEMENTS IN THE UPCOMING YEAR? No

ARE THERE PLANS FOR MANAGEMENT CHANGES IN THE UPCOMING YEAR? Yes, 2016 management plan update under development.

COMMON CONCERNS

DESCRIBE ANY COMMON CONCERNS THAT EXIST ON THE PROPERTY: Construction litter remains a problem in the North and West areas adjacent to the new development. John put a lock on the gate in the NW corner. Prior to that 4 wheelers were accessing property. Canada thistle is present in patches and is being managed. *Conyza canadensis*, an annual weed, is abundant. Prairie Dogs seem to remain in small groups and will need monitoring, but at this time the management concern is closed. Prairie dogs remain in these locations: east side of pond mostly between easement line and pond; east side along Powers Blvd in isolated pockets. Vegetation makes abandoned burrows and village areas difficult to see unless directly above.

WATER FEATURES

ARE THERE WATER FEATURES ON OR IMPACTING THE PROPERTY? Big Johnson Reservoir is adjacent to the Open Space, but not on the easement property. It is owned by the Fountain Mutual Ditch. Small swales are productive areas due to the subsurface moisture.

IF YES, ARE THEY BEING USED? Wildlife use the water available

HAVE THERE BEEN CHANGES TO WATER FEATURES ON THE PROPERTY? The detention pond adjacent to the housing development is completed and will be adding surface and subsurface flow to the property. This may contribute to the moisture in the swale.

COMPLIANCE

BASED ON YOUR BEST JUDGMENT ARE THE TERMS OF THE EASEMENT OR DEED RESTRICTIONS BEING MET? OK

COMMENTS: N/A

PHOTO DOCUMENTATION

<u>PHOTO-POINT</u>	<u>COMMENT</u>
Bluestem Prairie OS 2015_PP01	Repeat of baseline PP08, from corner fence in southeast corner. A looking N, B looking E, C looking S, D looking W.
Bluestem Prairie OS 2015_PP02	Repeat of 2014_S03. A looking N, B looking E, C looking S, D looking W. Grasses recovering.
Bluestem Prairie OS 2015_PP03	Repeat of 2014_S04, from corner in fence. A looking N, B looking E, C looking S, D looking down at grass. Mid grass prairie species recovering.
Bluestem Prairie OS 2015_PP04	Repeat of baseline PP32, from corner fence in southeast corner. A looking N, B looking E, C looking S, D looking W.
Bluestem Prairie OS 2015_PP05	From ridge. A looking N, B looking E, C looking S, D looking W.
Bluestem Prairie OS 2015_PP06	Repeat of baseline PP21, from ridge. A looking N, B looking E, C looking S, D looking W.
Bluestem Prairie OS 2015_PP07	Near baseline PP13. A looking N, B looking E, C looking S, D looking W.
Bluestem Prairie OS 2015_PP08	Approximation of baseline PP19-20. A looking N, B looking E, C looking S, D looking W.
Bluestem Prairie OS 2015_PP09	Repeat of baseline PP17, from NW fence corner. A looking E, B looking S.
Bluestem Prairie OS 2015_PP10	Repeat of baseline PP14, from fence line. A looking N, B looking E, C looking W.
Bluestem Prairie OS 2015_PP11	Repeat of baseline PP28, from SW fence corner, Goldfield and Fontaine. A looking N, B looking NE, C looking E.
Bluestem Prairie OS 2015_PP12	Repeat of 2014_S02, from fence corner, Fontaine and Powers. A looking N, B looking NW, C looking W.
Bluestem Prairie OS 2015_PP13	Repeat of 2014 S01, from Powers Blvd. Overlooking detention pond from neighboring development. A looking E, B looking SE, C looking S.
Bluestem Prairie OS 2015_S01	Area with remnant prairie dog village and lots of burrowing owls. A looking N, B looking E, C looking S.

SIGNATURES

PREPARED BY:

 _____

Lee Derr, Monitoring Contractor

DATE: July 29, 2015

Date Prepared

REVIEWED BY:

 _____

Stephanie Thomas, Director of Land Stewardship

DATE: December 18, 2015

Date Reviewed

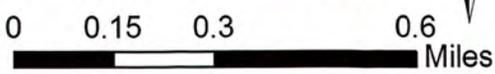


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Geomapping, Aerogrid, IGN, ICP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Bluestem Prairie Open Space

Palmer Land Trust Monitoring Map

LRF DERR
2015



Maps are for graphical purposes only. They do not represent a legal survey. While every effort has been made to ensure that these data are accurate and reliable within the limits of the current state of the art, Palmer Land Trust makes no warranty, expressed or implied, nor does the fact of distribution constitute such a warranty.
Produced April 3, 2015