

**River Bluffs Open Space  
Resource Management and Implementation Plan**

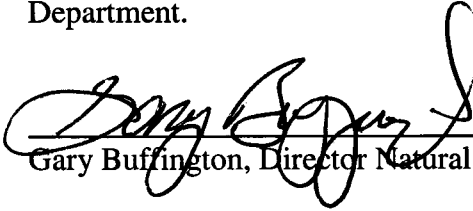


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**Larimer County Natural Resources Department  
August 2008**

**Adoption of the  
Resource Management and Implementation Plan  
For River Bluffs Open Space**

The Resource Management and Implementation Plan for River Bluffs Open Space was recommended for adoption by the Larimer County Open Lands Advisory Board on July 24, 2008 and adopted by the Director of the Larimer County Natural Resources Department.



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Gary Buffington, Director Natural Resources Department

8-11-08

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Date

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# INTRODUCTION

## 1.1 Purpose and Objectives of the Plan

River Bluffs Open Space (River Bluffs) is part of a greater vision for the Cache la Poudre River (Poudre River) corridor identified in the 2001 Open Lands Master Plan to protect natural, visual, open space, and agricultural values. River Bluffs was acquired in February 2004 with the intent to protect the riparian area of the Poudre River, native vegetation and wildlife habitat and to provide non-motorized outdoor recreation opportunities. Specifically, this property will extend the Poudre River Trail north from State Highway 392 and help connect communities from Greeley to Bellvue with a regional trail. A Poudre River Trail that connects Greeley to Fort Collins has been planned since the 1970's and is a section of the Colorado Front Range Trail, planned from Wyoming to New Mexico.

This property was purchased, in-part, with funds from Great Outdoors Colorado (GOCO) and therefore, is subject to a deed restriction held by the City of Greeley. The deed restriction required completion of an initial stewardship plan, named the 2004 River Bluffs Open Space Stewardship Plan. The River Bluffs Open Space Resource Management and Implementation Plan updates and expands on the 2004 stewardship plan by addressing recreation management as well as identifying and defining management targets.

Management targets are specific natural, agricultural, recreational and educational features or themes of River Bluffs, chosen to represent the resource protection and management priorities of the property. These targets are the basis for carrying out conservation and restoration actions and providing fulfilling and enriching visitor experiences.

Managing River Bluffs based on these targets will ensure the conservation of native biodiversity, the preservation of agricultural land and provide visitors an opportunity to gain a greater sense of place through educational, enjoyable and safe recreational opportunities.

The purpose of this document is to: 1) describe the existing conditions of River Bluffs; 2) provide the opportunities, constraints and planning issues related to this open space; and 3) develop specific implementation strategies that will direct the management and use of River Bluffs in the future.

The management objectives of River Bluffs are to:

- Protect and enhance the natural and agricultural resources located on the site, including the western bluffs, riparian areas and agricultural fields and the ecological processes and management decisions that sustain them;
- Provide and promote safe, enjoyable recreation opportunities while minimizing detrimental impacts upon natural, cultural, and visual resources;
- Provide educational opportunities regarding the natural and historic resources located on the site and the importance of responsible use and stewardship of land and water.

## 1.2 Public and Agency Involvement

This plan was developed with extensive public input. Public meetings, neighboring landowner correspondence and local and state agency involvement were utilized to ensure public support for this project. Particularly, the vision for the trail and trailhead and role of natural resource protection were developed with public input.

The first neighborhood meeting took place at the Ptarmigan Country Club on February 20, 2008 at the request of Ptarmigan Homeowner's Association. The purpose of this meeting was to discuss preliminary plans for River Bluffs and seek input. All neighbors living adjacent to River Bluffs were also contacted about the preliminary plans for River Bluffs and invited to attend the first public meeting on February 21, 2008. Additionally, landowners within a ½-mile radius of River Bluffs were invited to the first public meeting. This meeting was held at the Poudre River REA in Windsor and the management plan process was introduced along with a proposed trail alignment and trailhead location. Existing conditions of the property were presented, and the public's visions, issues and concerns regarding River Bluffs were identified. Twenty-two people attended the meeting, excluding Open Lands staff.

The second public meeting was held on July 10, 2008 as an open house. Participants of the first public meeting were invited to the second public meeting and a press release was sent to advertise the meeting. Copies of the draft management plan were available for review and displays were provided of the management targets, alignment of the trail and trailhead and design of the trailhead. In addition, the draft plan was available on the Larimer County Natural Resource Department website for approximately two weeks prior to the July 10 public meeting. Public comment was accepted until July 16, 2008. Sixteen people attended the second public meeting, excluding Open Lands staff.

In addition to public workshops, the draft management plan was reviewed by the Open Lands Advisory Board and a technical advisory group (listed below). The Technical Advisory Group comprises various staff and outside agency specialists to provide expert and diverse input.

<b>Core Planning Team</b>	<b>Specialty/Role</b>	<b>Agency/Organization</b>
Jeffrey Boring	Resource Management & Project Manager	Larimer County Open Lands
K-Lynn Cameron	Recreation and Open Space Planning	Larimer County Open Lands
Windy Kelley	Assistant Project Manager	Larimer County Open Lands
Charlie Gindler	Agriculture/Lease Management	Larimer County Open Lands
Maxine Guill	Weed Management	Larimer County Weed District
Meegan Flenniken	Resource Management	Larimer County Open Lands
Rob Novak	Education	Larimer County Open Lands
Joe Temple	Senior Civil Engineer	Larimer County Engineering
Kyle Arend	Senior Civil Engineer	Larimer County Engineering
Travis Rollins	Rangering/Park Management	Larimer County Open Lands
<b>User Groups &amp; Subject Experts</b>	<b>Specialty/Role</b>	<b>Agency/Organization</b>
Wayne Sundberg	Local history	Local Historian
Jason LaBelle	Archeologist	Colorado State University

Stephanie Neid	Ecology and Conservation	Colorado Natural Heritage Program
Ellen Wohl	River Ecology	Colorado State University
Robert Ward	Western Water Law and Poudre River History	Poudre River Heritage Alliance
Ginny Lightsey	Trail User	Poudre River Trail Alliance
Larry Rogstad/Brandon Muller	Wildlife Management	Colorado Division of Wildlife
Karen Scopel	Conservation Easement Holder	City of Greeley

## 2. EXISTING CONDITIONS

### 2.1 Overview

River Bluffs is located southeast of Fort Collins, west of Windsor and north of State Highway 392 (Figure 1, Appendix C). A general legal description of the property is as follows: Southwest Quarter of Section 13; Township 6 North and Range 68 West of the 6th P.M. County of Larimer, State of Colorado.

Based on completed surveys, River Bluffs is composed of two parcels, a 7.030 acre property along CR 3 and a 154.24 acre property bounded by CR 32E to the north and State Highway 392 to the south. The parcels are adjacent and combine to make the property 161.27 acres. River Bluffs was purchased by Larimer County from the City of Fort Collins Utilities Department for its natural and agricultural values and for the purpose of extending the Poudre River Trail and building a regional trailhead.

State Highway 392 is the main thoroughfare from Windsor to I-25 and therefore, highly visible to motorists. River Bluffs provides a nice visual setting, the Poudre River and the cottonwoods that line the banks and the oxbow are visible from State Highway 392. The western bluffs are also prominent and visually separate the property from Ptarmigan Subdivision to the west. The agricultural fields, particularly the western field, are also a pleasant scene and are obvious to motorists as they travel along 392.

In addition to these visual qualities provided by River Bluffs, this area also offers a buffer between the gravel mining operations occurring to the east and north of the property. River Bluffs allows for views of the Poudre River in an un-mined state, which is not common east of Fort Collins. The visual significance of River Bluffs may increase in the future, as the property is located in the town of Windsor's urban growth area and may be one of the last remaining open spaces in this area.

#### a. Purchase History, Encumbrances, Easements and other Restrictions

The Larimer County Open Lands Program acquired River Bluffs for \$1,920,000 in February 2004. Dollars from the Poudre-Big Thompson Legacy Grant (Great Outdoors Colorado) in the sum of \$1,200,000 were allocated towards the purchase of the property.

## Encumbrances and Easements

Several Easements exist on River Bluffs, including the following:

- Right-of-way to Greeley Irrigation Company (shared portion) located on north-central portion of the Property
- Right-of-way for relocating an irrigation ditch, granted to John Brinkman, affecting portions of the Property
- Right-of-way for a pipeline for the transportation of oil, gas, and the products thereof, granted to Wyco Pipe Line Company.
- Right-of-way for a ditch granted to Poudre Extension Canal and Reservoir Company, affecting portions of the Property
- Right-of-way for power lines and utilities without the benefit of a recorded easement as shown on ALTA/ACSM Land Title Survey

## Land and Water Conservation Fund

Land and Water Conservation Fund designation was transferred from the Larimer County Big Thompson Parks to River Bluffs in 2004 due to the decision to sell these small Big Thompson Parks. Stipulations associated with this transfer include:

- All projects on-site must comply with Federal statutes, regulatory requirements and policies.
- Facilities must be ADA accessible within reason
- All projects must be reviewed by the State Historic Preservation Office
- Site must be marked with a LWCF sign

## Fences

Existing fencelines include a barbed wire fence which spans the perimeter of the property. Additional fencelines are in place to separate the grazing pastures and agricultural fields from the Poudre River, the western bluffs and riparian areas. A fenceline also encloses the northwest portion of the property where hay is stacked and the northeast corner of the property, where livestock may have been kept. Figure 2 (Appendix C) shows the location of existing fence lines.

## Water Rights

Purchase of this property included one share (4.5 acre feet) of the Boxelder Ditch, one right (23 acre feet) on the Fossil Creek Reservoir, and one right (8 shares or 120 acre feet) of the New Cache la Poudre Irrigation Company. The New Cache water is generally available for a short period of time, in mid-May, during the beginning of the snow melt season (Trowbridge, 2008). Additionally, two Weld County taps were purchased and located on the property.

## Mineral Rights

The westernmost 7-acre parcel of the property has no mineral rights remaining. Larimer County retains 78.75% of mineral rights on the remainder of the property.

## Environmental Assessment

A Phase I Environmental Assessment was conducted in September 2002 for the River Bluffs (Terracon/Paul 2003). There is no evidence of any previous environmental inspections, environmental site assessments or environmental violations on site.

### b. Adjacent Land Use

River Bluffs is bordered on the south by State Highway 392. South of 392 are the Frank State Wildlife Area and residential development. Additionally, directly south of the property and Highway 392 is a segment of the Poudre River Trail that continues 22 miles to Island Grove Park in Greeley. To the west of River Bluffs is the Ptarmigan Subdivision, including a large golf course bordering the northwest side of the open space. To the north of the open space are large tracts of private land which lay in Windsor's growth management area. To the east is private land which is predominately used for gravel mining.

### c. Access, Circulation and Traffic.

There are three entrance points to River Bluffs, 1) off CR 3 approximately 500 feet south of the intersection with CR 32 E, 2) off SH 392 approximately 750 feet west of the Poudre River crossing and, 3) off 32E approximately 1,600 feet east of the intersection with CR 3. Each of these access points can be used for maintenance, education, scientific, patrol and management activities, but access will need to be coordinated with the Open Lands Program as these entrances are locked.

A new access point will be located off CR 3, approximately 600 feet south of the intersection with CR 32E. This will be the entrance to the Poudre River Trailhead and will also serve as the entrance to the western agriculture field. Once completed, the trailhead will be open from dawn to dusk, 365 days a year. This entrance will replace the entrance off CR 3 approximately 500 feet south of the intersection with CR 32 E.

### d. Public Facilities, Utilities and Services

In its undeveloped state, there are no public facilities or utilities available at River Bluffs. Fire protection and public safety services are available and described below. Two water taps exist on the property, one in the northwest corner of the property and one near the entrance off CR 32E. The taps were placed to provide livestock water and to allow future water line expansions and installation of a water fountain for the trailhead.

## Fire Protection

Fire protection is ultimately the responsibility of the Larimer County Sheriff's Department. The area, however, is also served by the Windsor-Severance Fire Protection District.



## Public Safety

The Larimer County Sheriff's Department is responsible for law enforcement. Larimer County Ranger Staff are responsible for the education and enforcement of regulations. Rangers assist the Sheriff's Department and other law enforcement agencies in responding to and preventing criminal activity on the open space. Rangers and staff will also be available to provide visitor assistance and emergency and medical needs. The Poudre Valley Hospital Ambulance Service responds to more serious medical emergencies while rescues and searches are conducted by the Larimer County Search and Rescue Team of the Sheriff's Department.

## **2.2 Natural and Agricultural Resources**

### a. General Information

#### Climate

River Bluffs is located on the western edge of the Great Plains and therefore has a highly variable, semi-arid climate. The climate data used to characterize River Bluffs was recorded in Windsor and is generally reflective of conditions at this site (Weather Channel, 2008).

The average maximum daily temperature from June to August is 83 degrees Fahrenheit. High temperatures may exceed 100 degrees, but nights are cooler with an average low from June through August of approximately 53 degrees Fahrenheit. Winters are generally cold but are characterized by temperature swings. January is the coldest month with an average daily maximum of 42 degrees and an average minimum of 15 degrees.

Average annual precipitation is 15.84 inches, with the highest amount of precipitation occurring in May, 2.60 inches. Average annual snowfall is approximately 3.5 inches or 22 percent of total precipitation.

#### Topography/Geology/Soils

The property is predominately flat, except for the bluff on the western 1/3 of the property. Elevation ranges from 4,790 feet along the Poudre River to the highest point, 4,910 feet along the bluffs at the southwest corner.

The geologic substrate dominating the eastern portion of the property is generally Upper Holocene Post-Piney Creek Alluvium. This dark-gray, sandy to gravelly alluvium predominately underlies floodplains of major streams and terraces less than 10 feet above stream level.

Upper Cretaceous Pierre Shale is the primary formation to the west of the Poudre River. This formation is divided into several subtypes, two of which exist on this property. Most notable is the Upper Transitional Member, which consists of friable sandstone and soft shaly sandstone, containing thin-bedded sandy shale and large calcareous sandstone concretions. This member is about 2,000 feet thick, and occurs in the agricultural fields west of the Poudre River and extends

into portions of the western bluffs. The other subtype that exists at the far western edge and on the bluff is the Upper Shale Member, which has a thickness of approximately 2,800 feet. This member contains gray, concretionary silty shale.

Based on the Soil Survey of Larimer County Area, Colorado by the USDA-SCS (1980), the prevalent soil associations are:

Table Mountain-Paoli-Caruso association: Deep, nearly level, well drained to somewhat poorly drained loams, fine sandy loams, and clay loams that formed in alluvium; on flood plains, low terraces, and bottom lands.

Otero-Nelson-Tassel association: Shallow to deep, nearly level to moderately steep, well drained sandy loams and fine sandy loams that formed in materials weathered from sandstone and in alluvium modified by wind; on uplands and fans.

Soil types located on the western bluffs include:

- Tassel sandy loam – This gently sloping to moderately steep soil occurs on uplands and includes some small areas of soils with sandstone fragments on the surface and outcrops of sandstone. Runoff is medium to rapid, and the hazard of erosion is severe.
- Otero-Nelson sandy loam – This complex consists of gently sloping to moderately steep soils on uplands. It is about 50 percent Otero sandy loam and 35 percent Nelson sandy loam. Runoff is medium to rapid, and the hazard of erosion is severe.
- Ascalon sandy loam – This gently sloping soil is on uplands, and includes minor areas of Otero soils. Runoff is medium, and the hazards of wind and water erosion are moderate.

Soil types located along the riparian corridors include:

- Riverwash – This unit is highly variable, mixed, water-washed sand and gravel deposits, common next to stream channels. These areas are flooded each year, generally in the spring or summer. There is little forage protection and consequently little value for grazing.
- Table Mountain loam – This level soil is on low terraces and bottom lands, and includes some areas of soils with a surface layer of sandy loam. Runoff is slow, and the hazard of erosion is slight. This soil is flooded or receives overflow in places.

Soil types associated with the agricultural fields include:

- Loveland clay loam – This level soil is on low terraces and flood plains. Runoff is slow, and the hazard of water erosion is slight.
- Caruso clay loam – This level soil, which includes some areas of Loveland soils, is on low terraces and bottom lands. Runoff is slow, and the hazard of erosion is slight.
- Otero sandy loam – This deep, well-drained, nearly level soil is found on uplands and fans. Runoff is medium, and the hazard of erosion is moderate.

## Hydrology

The Poudre River flows through River Bluffs, from the northwest to the southeast property boundary. The property contains an oxbow which is now predominantly cattail wetlands lined by large cottonwood trees. The southern ½ of the river was channelized in the late 1960s/early 1970s to

direct flow beneath the State Highway 392 bridge. Channelizing the river isolated the floodplain from the river and now the former floodplains serve as uplands.

The entire Poudre River Basin has experienced paramount change since the settlement of the West and these changes have affected the Poudre River as it flows through River Bluffs. The following descriptions of the historic and present conditions of the Poudre River were written for the sections of the Poudre River in Fort Collins, but can also be applied to the Poudre River through River Bluffs. These descriptions were taken from Fort Collins Staff (2008):

#### Historic Condition of the Poudre River

Prior to European settlement, the Poudre River was characterized by the influence of high spring flows and periodic flood and flood related events followed by significantly lower flows later in the year. These high flows continuously reworked channel and floodplain sediments creating a diversity of in-channel and riparian habitats. Native wildlife and flora in the river ecosystem were adapted to and highly dependent on periodic patterns of disturbance. High flows also allowed for the movement of species from tributaries into the main channel and between the inner channel and riparian floodplain.

#### Current Condition of the Poudre River

The Poudre River system has been highly modified by river management, utilization and flood protection. The sum effect of river channelization, bank armoring and lower average peak flows has reduced the river's capacity to scour banks, transport and deposit sediment, and interact with the floodplain. Native microorganisms, insects, fish, and vegetation have decreased in diversity since pre-settlement times, while non-native species have increased, with pollutant tolerant aquatic fauna predominating. Despite these changes, the roles of existing peak spring flushes and periodic flood years are believed critical to the survival of native wildlife and flora.

Based on a wetland classification conducted along Larimer County's Front Range in 1996, the wetlands located along the Poudre River oxbow are both high quality and highly sensitive. Wetlands were scored based on four criteria: overall wetland importance, quality, sensitivity and rating. The wetland complex located on River Bluffs received the highest score possible in all four criteria categories (Cooper and Merritt, 1996).

Fossil Creek flows into the Poudre River from the west. This creek has also been channelized from its original course. The alteration of the Poudre River's and Fossil Creek's natural flow regime has compromised the ecological integrity of the riparian areas at River Bluffs. As feasible, removing impediments to the natural flow of water within the Poudre River and Fossil Creek will help restore ecological processes and improve wildlife habitat.

There is a small pond (approximately 4 acres) on the property which provides additional habitat for wildlife, primarily waterfowl, shorebirds and amphibians. There is also a small network of irrigation ditches used to irrigate the fields to the east and west of the Poudre River. Figure 2 (Appendix C) shows the location of ditches found on River Bluffs.

## Vegetation

River Bluffs includes a wide range of wildlife habitat and plant communities. Vegetation types present on River Bluffs have been categorized into the western bluffs, riparian areas and foothills grassland complex. See Appendix A, Table 2 for a list of plant species found at River Bluffs.

### Western Bluffs

The bluffs support a predominantly native flora of common upland prairie grassland and forb species including buckwheat (*Eriogonum effusum*), Wild rye sp. (*Elymus elymoides*), yucca (*Yucca glauca*), fringed sage (*Artemisia frigida*), three-awn (*Aristida purpurea*), skeleton weed (*Lygodesmia juncea*), golden aster (*Heterotheca* c.f. *canescens*), scurfpea (*Psoralidium tenuiflorum*), broom snakeweed (*Gutierrezia sarothrae*) and needle-and-thread grass (*Stipa comata*). There are also numerous shrub species including four-wing saltbush (*Atriplex canescens*), three-leaf sumac (*Rhus trilobata*), rabbitbrush (*Chrysothamnus nauseosus*) and mountain mahogany (*Cercocarpus montanus*). This area is underlain by sedimentary parent material, therefore, Bell's twinpod (*Physaria bellii*) might be expected in this area, but none have been found.

### Riparian Areas

Approximately ½-mile of the Poudre River runs through River Bluffs and comprises the predominant riparian area. In addition, a portion of Fossil Creek flows through the property and discharges into the Poudre River. The riparian corridor has been deeply channelized in the southern ½ of the site, isolating the river from its floodplain, which probably once included most of the property. Dominant native riparian vegetation include sandbar willow (*Salix exigua*), plains cottonwood (*Populus deltoides* ssp. *Monilifera*), peach-leaf willow (*Salix amygdaloides*), prairie cordgrass (*Spartina pectinata*), blue vervain (*Verbena hastata*), switchgrass (*Panicum virgatum*), saltgrass (*Distichlis spicata*) and boxelder (*Acer negundo*).

### Agricultural Fields

River Bluffs includes two irrigated fields, an east and west field. The western agricultural field (45 acres) is cultivated for hay production using Boxelder water rights. The rights to the agriculture fields have been leased to Royal Vista Equine, Inc. for hay production and horse grazing since 1994.

Currently, the western hay field is irrigated for a mixed hay crop with 2-3 cuttings per year. Royal Vista cultivates and hays the alfalfa for their operation, storing the hay on approximately five acres on the northwest corner of the property. Royal Vista also grazes 20-30 horses on the western field following the haying season.

The eastern agriculture field has one preferred water right in Fossil Creek Reservoir and one perpetual water right in the New Cache La Poudre Irrigation Company. Irrigation water is not reliable and 2008 was one of only a few years in which water was available. The eastern field

is grazed under a year to year lease. Signs of overgrazing have been observed in the eastern agriculture field, including barren soils, dusty conditions and large amounts of manure.

Overgrazing discourages native plant establishment and growth and creates an eyesore. The allowable animal unit months (AUM's) on the eastern field has ranged from 40 – 60 AUMs from May 1 to December 1, dependant on weather conditions and ability to irrigate the pasture. In 2008, AUMs were dropped to 40, to reduce the likelihood of overgrazing. Park Managers will monitor field conditions throughout the grazing period and will work with the lessee to relocate animals as needed.

### Foothills Grassland Complex

The foothills grassland complex comprises the flatter portions of the property, particularly along the toe of the bluff's slope and in surrounding areas that have not been planted in hay. The grassland complex consists of a variety of grass and forb species including needle-and-thread (*Stipa comata*), big bluestem (*Andropogon gerardii*), blue grama (*Bouteloua gracilis*), buffalo grass (*Buchloe dactyloides*), green needlegrass (*Stipa viridula*), pussytoes (*Antennaria rosea*), spike fescue (*Festuca* sp.), oatgrass (*Danthonia spicata*), prickly-pear cactus (*Opuntia maccorhiza*), prickly poppy (*Argemone polyanthemos*), bee plant (*Cleome serrulata*), blazing star (*Liatrus punctata*), buckwheat (*Eriogonum effusum*), timothy (*Phleum pratense*), Kentucky bluegrass (*Poa pratensis*), fringed sage (*Artemisia frigida*), scurfpea (*Psoralea tenuiflora*), western wheatgrass (*Agropyron smithii*) and coneflower (*Ratibida columnifera*).

### Rare or Endangered Species

In 2002, the Colorado Natural Heritage Program (CNHP) conducted a site visit of River Bluffs to inventory any significant plants, plant communities or wildlife present. No CNHP elements were found on the property.

### Exotic Plants and Noxious Weeds

Many exotic plants have established as a result of historic land uses including farming, grazing and introductions from surrounding areas. Known exotics at River Bluffs include cheatgrass (*Bromus tectorum*), smooth brome (*Bromus inermis*), crested wheatgrass (*Agropyron cristatum*), tamarisk (*Tamarix ramosissima*), field bindweed (*Convolvulus arvensis*), Canada thistle (*Cirsium arvense*), musk thistle (*Carduus nutans*), leafy spurge (*Euphorbia esula*), field pennycress (*Thlaspi arvense*), kochia (*Kochia iranica*), Russian thistle (*Salsola iberica*), Russian knapweed (*Centaurea repens*), Russian olive (*Elaeagnus angustifolia*), houndstongue (*Cynoglossum officinale*), Chinese elm (*Ulmus pumila*), Scotch thistle (*Onopordum acanthium*) and Reed canarygrass (*Phalaris arundinacea*). While all of these exotics are actively monitored and controlled by the Weed District, Canada thistle, musk thistle, leafy spurge, Russian knapweed, and tamarisk are regulated by Larimer County.

## Wildlife

River Bluffs supports a variety of wildlife including numerous mammal, bird, fish, and amphibian species. Specific mammals such as mule deer, coyotes, foxes, raccoons and skunks inhabit the site. Rattlesnakes, lizards, and other reptiles can be found in the hills on the western edge of the property.

Raptors, including bald eagles, red-tailed hawks, golden eagles, and owls are often visible at River Bluffs. Red-tailed hawks and great horned owls have nested in cottonwoods near the oxbow of the Poudre River. Waterfowl including ducks, geese, great-blue herons, and a variety of migratory songbirds inhabit the wetlands. River Bluffs is classified by the Colorado Division of Wildlife as duck winter range.

There is a prominent boxelder tree on-site that contains a large cavity, in which many owl pellets have been found. In addition, an active bald eagle nest, one of only 3-4 active bald eagle nests located in Larimer County, is found less than ¼ mile away, on an adjacent property to the north.

## Rare or Endangered Wildlife

According to consultation with the Division of Wildlife, potential Preble's meadow jumping mouse (*Zapus hudsonius preblei*) habitat is located within River Bluffs. Larimer County hired a consultant in the summer of 2004 to complete a trapping survey and submitted a report to the United States Fish and Wildlife Services (USFWS) for clearance. No Preble's were trapped and the property was cleared by the USFWS for 1 year from the trapping date. Any activities planned to occur within the riparian area after August 17, 2005 will require future follow-up trapping or a request for continuation from the USFWS.

## **2.3 Cultural Resources**

River Bluffs has been farmed since at least the 1950's according to aerial photos. The Jacoby family owned River Bluffs and farmed it for many years, growing sugar beets, corn and alfalfa. At the north boundary of the property a foundation still remains of the Jacoby family home.

An archaeological reconnaissance of River Bluffs was completed by Jason LaBelle, CSU Department of Archaeology in 2008. The report found that four prehistoric sites have been recorded near the western bluffs, three of which were recorded in 1994 as part of C-DOT project. The fourth site, Kaplan-Hoover bison kill, was located south of River Bluffs. All prehistoric artifacts found have been associated with the western bluffs, as this was likely a food production area given its high campsite potential. Isolated flakes, biface/knife fragments, bone fragments and a fire hearth were found during the 1994 survey.

In May 2008, additional prehistoric materials were noted near the bluff, including chipped stone, micro-flakes, a possible hearth, fire-cracked and reddened rock and a small piece of arrowhead. These findings indicate that the bluff area was probably a long-standing tool resharpening site (LaBelle, 2008).

Additionally, a metal cable and concrete structure is located on site, across the former channel of the Poudre River. Based upon interpretation by a local historian, this structure was likely used as a water conveyance structure in the early 1900's.

### **3. OPPORTUNITIES, CONSTRAINTS, AND PLANNING ISSUES**

#### **3.1 Overview**

During the management planning process, input was received from the public, a Technical Advisory Group, the Open Lands Advisory Board and staff regarding the opportunities, constraints, and planning issues of River Bluffs. These issues have been divided into five key components: 1) natural; 2) agricultural; 3) recreational; 4) cultural; and 5) educational.

#### **3.2 Natural Resource Opportunities, Constraints, and Planning Issues**

##### Natural Resource Opportunities

- Maintain and enhance natural resource areas including the western bluffs and riparian areas
- Enhance wildlife habitat, which will enable continued use of the area by wildlife
- Restore the Fossil Creek riparian area and stabilize Fossil Creek's streambanks
- Evaluate the potential to improve the ecological integrity of the Poudre River by restoring a more natural flow regime and reconnecting the river and floodplain
- Mimic the historic herbivory patterns of bison and other animals in the riparian areas by allowing intermittent grazing by livestock

##### Natural Resource Constraints and Planning Issues

- Open space users may disturb wildlife, in particular, mammals and nesting or foraging raptors
- Introduction of noxious weeds and other non-native species
- Lack of natural processes such as flooding
- Inability to control upstream water quality or discharge
- Impacts Poudre River channel modifications may have to downstream properties or structures
- Cooperation with federal, state and local agencies and the public needed to pursue channel modification projects
- Dogs may disturb wildlife
- Restoration projects may be costly and time intensive

### **3.3 Agriculture Opportunities, Constraints and Planning Issues**

#### County-wide Changes in Agriculture Land use

According to Larimer County and the U.S. Department of Agriculture, the number of farms in Larimer County increased from 1978 to 2002. The total number of acres in farmland, however, dropped by 10% over this same timeframe, from 574,451 to 521,599. These data suggest that Larimer County is losing farmland and that farms are getting smaller (Compass of Larimer County, 2002).

#### Agriculture Opportunities

- Develop an agricultural management plan to prevent overgrazing
- Demonstrate sustainable farming and/or grazing practices to the public
- Continue farming practices to help sustain local agriculture markets
- Evaluate the potential to produce local farm products, including local food, by developing a community supported agriculture operation or other sustainable food production, processing and distribution system

#### Constraints and Planning Issues

- Overgrazing agriculture fields may introduce weeds, promote soil loss and create dusty conditions
- Overgrazing riparian areas may create barren areas, stimulate weedy growth, introduce water borne pathogens, displace wildlife or accelerate streambank erosion
- Agricultural activities, including operating and maintaining the irrigation ditches, may conflict with recreational users
- Agricultural/farming production relies on irrigation water that may not be reliable
- Normal agriculture practices may temporarily affect the use of trails
- New trail construction will require the relocation of fences
- Activities such as de-horning, calving, roping, and branding will be conducted off-site
- Monitoring utilization of fields and riparian areas and augmenting sustainable animal unit month (AUM) guidelines to prevent overgrazing
- Reducing agriculture and recreation user conflicts

### **3.4 Recreation Opportunities, Constraints and Planning Issues**

#### Recreation Use and Demand

The Front Range continues to grow rapidly and use of existing open spaces continues to rise. According to the Annual Estimates of the Population for Incorporated Areas and Counties for July 1, 2007, published in April 2008 by the U.S. Census Bureau, the population of Larimer County is 287,574, of which 47% live in Fort Collins. The U.S. Bureau of Census also estimates the population of Windsor and Greeley to be 17,310 and 90,306, respectively (U.S. Census Bureau).



As urban areas in Larimer County expand, a greater emphasis may be placed on developing close, convenient recreation opportunities. Recreation at River Bluffs will be centered on the Poudre River Trail and will be accessible from neighboring communities, via a bicycle or other non-motorized mode of transportation.

The Poudre River Trail has been envisioned by the public for over 30 years and sections of trail were constructed in Fort Collins and Greeley years ago. Completing the trail, from its current terminus at State Highway 392, to Harmony Road, became Larimer County's highest Open Lands Program priority in 2008. Extending the Poudre River Trail through River Bluffs will help facilitate the completion of the trail to Harmony Road and eventually to the CSU Environmental Learning Center, where the trail will be complete and over 40 miles in length.

### Recreation Opportunities

- Running, biking, walking and other non-motorized recreation
- Birdwatching and other wildlife viewing
- Construct a 1/2-mile extension to the Poudre River Trail
- Construct a 30-vehicle capacity trailhead
- Develop trail-related education opportunities
- Include ADA-accessible trail and trailhead amenities
- Enhance non-motorized commuting opportunities in Northern Colorado
- Improve public health by diversifying exercise opportunities
- Rest area for bike commuters, including basic trail amenities

### Constraints and Planning Issues

- Multiple uses on the trail may result in user conflict
- Motorized access of the trail for maintenance purposes by agricultural field lessee, ditch company, or county staff may lead the general public to believe the trail is open for motorized recreation
- Development of social trails
- Dogs off leash
- Popularity of trail may lead to declining visitor experience
- Appropriate level of signage and educational materials
- Maintenance costs of trail amenities
- Fishing on the property could displace wildlife and contribute to littering of sensitive natural resource areas
- Trail and trailhead layout, visibility and appearance may affect adjacent landowners and/or users satisfaction of the area's aesthetic value
- Overflow parking onto the street may cause traffic difficulties and impact adjacent landowners
- Prohibiting equestrian-use on this section of the Poudre River Trail may disappoint members of the community

### **3.5 Cultural Resource Opportunities, Constraints and Planning Issues**

The cultural resources located on River Bluffs are either archaeological resources or related to the historic agricultural use of the property. Many of the artifacts are presumed to have already been removed from the site by collectors. Additionally, because of the proximity of the Poudre River Trail to the location of the remaining artifacts and the threat of illegal collection, it is not advised that these resources be interpreted at this time.

The remaining cultural resources will be presented as agricultural resources and will be captured in the education sections of this plan.

### **3.6 Education Opportunities, Constraints and Planning Issues**

#### Education Opportunities

- Developing an education plan for River Bluffs
- Partner with the Poudre River Heritage Alliance to highlight the role the Poudre River played in the development of western water law and the prior appropriation system of water rights
- Highlight the evolution of irrigation systems, including the historic water conveyance structure located on site
- Highlight natural resource themes including the ecology of the western bluffs or riparian areas
- Highlight trail ethics
- Expand the Volunteer Naturalists and Trail Ranger Assistants programs to this area
- Engage the local community in education programs, particularly youth

#### Constraints and Planning Issues

- Appropriate level of signage and education materials
- Highlighting features of the property that are not accessible
- Develop guided hikes with volunteers

## **4. MANAGEMENT PLAN**

### **4.1 Overview**

This section of the River Bluffs Open Space Resource Management and Implementation Plan focuses on the management targets that were identified by the Technical Advisory Group, staff, Open Lands Advisory Board, or during public meetings. Management targets are specific natural, agricultural, recreational and educational features or themes of River Bluffs, chosen to represent the resource protection and management priorities of the property. These targets are the basis for carrying out conservation and restoration actions and providing fulfilling and enriching visitor experience.

The management targets for River Bluffs are: 1) Western Bluffs, 2) Riparian Areas, 3) Agriculture Fields, 4) Poudre River Trail and Trailhead and 5) Education. Managing River Bluffs based on these targets will ensure the conservation of native biodiversity, the preservation of agricultural land and provide visitors an opportunity to gain a greater sense of place through educational, enjoyable and safe recreation opportunities.

These five management targets, while addressed separately, are interrelated and will likely impact and influence each other. A description of the management zones that surround these targets are described and a summary of the implementation steps needed to protect and enhance these targets are provided below.

a. Open Lands Master Plan and River Bluffs Management Objectives

Larimer County's Open Lands Master Plan, developed in 2001, highlights the need to protect land like River Bluffs. The Open Lands Master Plan identifies the Poudre River Corridor as a priority for open space protection for its natural, visual and open space values. The plan also highlights the importance of wetlands for wildlife habitat, flood attenuation and water quality.

Additionally, the Open Lands Master Plan highlights the need to develop regional trail corridors, like the Poudre River Trail. The plan suggests the need to acquire appropriate land, easements and rights-of-way to develop a non-motorized regional trail system. The plan also proposes that regional trails should extend through a widely varied landscape and may be used for recreation as well as transportation. Finally, the plan suggests that regional trails may connect existing trails, public lands and existing communities and that they may be located in the vicinity of river and stream corridors.

The Poudre River Corridor and regional trail concepts highlighted in the Open Lands Master Plan shaped the management objectives developed for River Bluffs. These objectives are:

- Protect and enhance the natural and agricultural resources located on the site, including the western bluffs, riparian areas and agricultural fields and the ecological processes and management decisions that sustain them;
- Provide and promote safe, enjoyable recreation opportunities while minimizing detrimental impacts upon natural, cultural, and visual resources;
- Provide educational opportunities regarding the natural and historic resources located on the site and the importance of responsible use and stewardship of land and water.

The management objectives, targets and zones are designed to balance resource protection with public access and recreation. All recreation activities will be limited to the Poudre River Trail or will be coordinated as guided hikes. The trail and other developed areas were located in areas that have already been modified, such as along dirt roads or cut and fill areas. Agricultural activities will be limited to the fenced agriculture fields or will be monitored closely within natural resource areas to avoid overgrazing and resource damage.

River Bluffs will be patrolled by Rangers and Trail Ranger Assistants, to ensure that visitors are staying on trail and that none of the management targets are being damaged. If it is determined in the process of providing safe and enjoyable recreation opportunities, the management targets at River Bluffs are adversely impacted, additional fencing, patrolling or education efforts will be developed. Specifically, installing fences along the western edge of the Poudre River Trail and along the trailhead may reduce the likelihood of visitors developing social trails or hiking across the western bluff. Also, any guided hikes will be evaluated including the number, frequency, timing and group-size to reduce or minimize impacts wildlife or other natural resources. The protection of resource values will take precedence over recreation opportunities in the western bluff, riparian or agricultural areas.

## **4.2 Management Targets**

The five management targets are divided into four categories, based on the prevailing features or themes of each target. The categories are: 1) Natural Resource Targets, 2) Agricultural Targets, 3) Recreation Targets and, 4) Education Targets.

A management target may also be subdivided into nested targets. Nested targets are species or ecological communities whose conservation needs are subsumed by a management target. Examples of nested targets include the Poudre River Corridor, Fossil Creek Corridor and Raptors. These targets are nested within the Riparian Areas management targets because they are all tied to the riparian areas on site.

### Natural Resource Management Targets

The Natural Resource Management Targets are listed in Figure 3 and mapped in Figure 4 (Appendix C). These targets include the Western Bluffs and Riparian Areas throughout the property. The Western Bluffs was selected as a management target because it composes a steep, fragile plant community that is uncommon in eastern Larimer County. Although no endangered or special concern species have been located here, the plant community is uncommon, particularly in the ravines, due to the presence of 4-5 shrub species and the mixture of native grasses. The ravines are also steep and the entire bluff is sandy and composed of mobile soils.

This bluff area is also the location of the majority of prehistoric materials found on site. An archaeological reconnaissance completed on the bluffs found that this area was probably a longstanding campsite/food production area. Allowing public access in the Western Bluffs would damage this fragile area and jeopardize the loss of these prehistoric artifacts.

The Riparian Areas management target primarily consists of the Poudre River Corridor. Approximately, ½-mile of the Poudre River meanders through the property from the northwest to the southeast. The northern ½ of this section of the Poudre River provides excellent wildlife habitat, has a forested floodplain and has excellent natural resource values. The southern ½ of the river has been channelized and the floodplain has been disconnected from the river. This area of the river lacks an intact riparian forest and has diminished natural resource values.

The wetlands located within the Poudre Corridor also warrant protection. Based on a wetland classification conducted along Larimer County’s Front Range in 1996, the wetlands located along the Poudre River oxbow are both high quality and highly sensitive. Wetlands were scored based on four criteria: overall wetland importance, quality, sensitivity and rating. The wetland complex located on River Bluffs received the highest score possible in all four criteria categories (Cooper and Merritt, 1996).

Additional nested targets within the Riparian Areas management target include the Fossil Creek Corridor and Raptors. Fossil Creek has also been channelized and is significantly altered. Based on historic aerial photos, Fossil Creek meandered throughout the River Bluffs property and discharged into the Poudre River south of the current location of State Highway 392. Presently, Fossil Creek flows from the Ptarmigan Golf Course through a short section of its historic alignment, before flowing northeast into the Poudre River.

Fossil Creek lacks a riparian forest and it behaves more like an irrigation ditch than a dynamic stream. Although the ecological integrity of Fossil Creek has been significantly altered, it is a nested target because of the potential it has to provide wildlife habitat, reduce waterborne pollutants and enhance connectivity with the Poudre River riparian area.

The riparian areas at River Bluffs have also been noted for the avian biodiversity they support. Bird species observed on site or in neighboring areas include great-horned owls, red-tailed hawks and bald eagles. Although raptors are protected by the Migratory Bird Treaty Act, these birds are sensitive to human encroachment and therefore are included as a nested target in the Riparian Areas management target.

<b>Management Targets</b>	<b>Nested Targets</b>	<b>Significance</b>
<b>Western Bluffs</b>		Steep and fragile soils; Plant community uncommon in eastern Larimer County.
<b>Riparian Areas</b>	Poudre River	Exceptional wildlife habitat and movement corridors. Riparian areas are also rare in Colorado.
	Fossil Creek	Once restored, the creek could provide adjacent wildlife habitat and enhance riparian corridor connectivity. Riparian areas are rare in Colorado.
	Sensitive birds/raptor species	Nest sites; Role raptors play as top predators; recreational birdwatching opportunities.

Figure 3. Natural Resource Management Targets.

## Agriculture Resource Management Targets

The Agriculture Resource Management Target is listed in Figure 5 and mapped in Figure 6 (Appendix C). This target includes the preservation of and support for continued farm and/or ranching activities. River Bluffs has been farmed for decades and the management of the agriculture fields for the production of hay, other farm products or livestock grazing ensures the continued historic use of this property.

Agricultural use of the property will be primarily limited to the east and west agriculture fields and annual leases will outline the acceptable uses and other stipulations of the agreement. Limited grazing in the riparian area will also be allowed intermittently, at a frequency and duration that does not negatively impact the ecological integrity of the Riparian Area management target.

River Bluffs is also the only open space with senior water rights protected by Larimer County. This asset distinguishes River Bluffs and coupled with its location in an urbanizing area, makes it a good candidate for a community supported agriculture or other local food production operation. With local support, River Bluffs could increase community self-sufficiency and strengthen the local economy by providing locally grown produce or farm products.

<b>Management Target</b>	<b>Significance</b>
<b>Agriculture Fields</b>	Protect local agricultural economy, continue historic land-use, and provide opportunities for community supported agriculture.

Figure 5. Agriculture Management Target.

## Recreation Management Target

The Recreation Management Target is listed in Figure 7 and mapped in Figure 6 (Appendix C). This target includes the Poudre River Trail and Trailhead located on River Bluffs. Recreation will be limited to this trail and trailhead unless public demand calls for additional trails. If public demand for natural surface trails develops, they will be located in an area that does not negatively affect the management targets.

The Poudre River Trail is a regional trail priority highlighted in over 15 local and regional plans. Larimer County is partnering with the Towns of Windsor and Timnath, the City of Fort Collins, Great Outdoors Colorado and Colorado State Parks, Colorado Department of Transportation, North Front Range Metropolitan Planning Organization, Poudre River Trail, Inc. and others to complete the trail from State Highway 392 to the CSU Environmental Learning Center, west of I-25. The completion of the Poudre River Trail on River Bluffs and the construction of the 392 underpass will anchor the trail north of 392 and help facilitate the completion of the trail to Fort Collins. Once completed, the entire Poudre River Trail will be over 40 miles in length.

The River Bluffs section of the Poudre River Trail will be approximately ½-mile in length and will connect to the Bison Arroyo section of the trail south of State Highway 392, via an underpass. The trailhead will include a 30-car parking lot and basic trail amenities, including a vault toilet, entry sign, kiosk, 1-3 picnic tables, 1-4 trash receptacles, water fountain, bike rack and an air compressor.

These amenities will be phased based on demand and availability. During the first phase of construction, the trail will end at the trailhead. Future trail expansion may involve extending the trail through River Bluffs and crossing the Poudre River with a pedestrian bridge.

Extending the trail from the trailhead will allow the trail to continue north and eventually connect to the Wal-Mart located at Harmony Road and I-25. A trail underpass is being built beneath Harmony Road, by Timnath. Fort Collins is managing the project north of Wal-Mart and to the CSU Environmental Learning Center.

Larimer County is pursuing trail easements with landowners north of River Bluffs and the Open Lands priority is to locate the trail on the east side of the river. An eastern alignment will allow for views of the Rocky Mountains and the Poudre River Corridor and will separate the trail from the noise and traffic of County Road 5 and I-25.

In the interim, while trail easements are being negotiated with landowners or trails are being constructed, Open Lands will pursue the construction of bike lanes or other non-motorized routes along County Road 32E and County Road 5. These temporary alignments will provide temporary access to Harmony Road.

Management Target	Significance
<b>Poudre River Trail and Trailhead</b>	Extend the regional Poudre River Trail, a section of the Colorado Front Range Trail. Link communities throughout Northern Colorado with a regional trail. Provide an important non-motorized recreation and bike commuting opportunity. Create a multi-modal trailhead with basic amenities to enhance the trail experience and increase trail accessibility.

Figure 7. Recreation Management Target.

Education Management Target

The Education Management Target is listed in Figure 8. This target focuses on the development of interpretative themes about the history of the property and surrounding landscape and the natural resources located on site. This target includes agriculture and natural resource nested targets. The agriculture nested target may focus on the loss of irrigated agriculture land along the Front Range. Interpretative materials may also focus on the Poudre River and the critical role it played in the development of the prior appropriation system of water rights or the evolution of irrigation systems across the Front Range. If a community supported agriculture or other local farming operation is established on site, education themes could focus on developing a sustainable food production, processing or distribution system.

The natural resource nested target will likely focus on the Western Bluffs and Riparian Areas management targets. The ecology of the Western Bluffs and Riparian Areas are extremely different, plants and animals that inhabit the wet, cool riparian area are not adapted to the dry and exposed micro-climate of the western bluff. These ecological adaptations could be highlighted along the trail or during guided hikes. Riparian Areas also provide services that benefit humans, such as filtering

pollutants and providing wildlife watching and recreation opportunities. The services that riparian areas provide humans could also be included in educational materials. Finally, if Fossil Creek is restored to minimize bank erosion and enhance the connectivity of the riparian forest, educational materials could be developed to highlight improvements to Fossil Creek, such as the increase in native plant cover and shade.

Management Target	Nested Targets	Significance
<b>Education</b>	Agriculture	Loss of irrigated agriculture along the Front Range. Historical value of the Poudre River and role it played in the development of the prior appropriation system of water rights. The evolution of water conveyance, possibly contrasting flood irrigation, use of siphon tubes or center pivot irrigation.
	Natural Resource	The ecology of the Western Bluffs and Riparian Areas are different and provide an excellent example of the adaptations needed by plants and animals to survive in each area. Riparian Areas also provide services that benefit humans, such as filtering pollutants and providing wildlife watching opportunities. Educational signs that highlight improvements to Fossil Creek Corridor during restoration.

Figure 8. Education Management Target.

### 4.3 Management Zones

Management zones are areas that include and surround each management target. The main purpose of management zones is to generate proposed management costs for each open space.

Annual management costs for all management and regular maintenance of River Bluffs are projected based on management zones, with the most developed zones corresponding to the highest management cost per acre. The costs to manage River Bluffs will be funded through Help Preserve Open Space sales tax dollars.



In total, for the 161 acres which will be kept in county fee ownership, annual management costs for River Bluffs are projected to be approximately \$13,000. Maintenance dollars will cover the cost of Rangers and regulation enforcement, weed management, administration, fence repair, trash removal, education, and revegetation as needed. Additional improvement projects outside this scope, such as the restoration of Fossil Creek or the Poudre River may require additional funds.

Another purpose of developing management zones for River Bluffs is to provide guidance for allowable activities within different areas of the open space. Management zones may delineate sensitive natural resource areas and include buffers to protect these areas. Zones may designate recreation areas and other areas where visitor use will be directed. Five management zones have been defined for River Bluffs: Primitive/Sensitive Resource, Agriculture/Non-Sensitive Resource, Developed, Access and Frontcountry.

#### Primitive/Sensitive Management Zone

This zone is designed for important, highly sensitive biological, cultural and geological resources that could easily be disturbed by uses that are allowed in other management zones. The two natural resource management targets, Western Bluffs and Riparian Areas, are designated within the Primitive/Sensitive Resource Management Zone. The Western Bluffs contain fragile soils and cultural artifacts and is very sensitive to public access and human use. The Riparian Areas management target contains sensitive biological resources including raptor nests and wetlands. The Riparian Areas target was also given a 200-meter buffer within its management zone to safeguard it from activities that may displace wildlife or damage the integrity of the riparian area.

#### Agricultural/Non-Sensitive Resource Management Zone

The agricultural fields on River Bluffs were designated as Agricultural/Non-Sensitive Resource Management Zones because these areas still contain important resources, but are not as sensitive as other areas of the property. Specifically, heavy machinery is used to farm the agriculture fields and livestock are grazed here.

#### Developed Management Zone

This zone is restricted to the trailhead area on the property, where most of the facilities will be located. Facilities that may be located in the Developed Zone include a vault toilet, water fountain, air pump, kiosk, and picnic tables. This zone has the highest management costs per acre, because of the costs associated with maintaining these facilities.

#### Access Management Zone

This zone includes the access road to the trailhead which follows an existing dirt road. Although the Access Zone may be a source of weeds, litter and other management challenges, it is buffered from the Western Bluffs and Riparian Areas by agricultural areas.

## Frontcountry Management Zone

The Frontcountry Zone includes the paved Poudre River Trail. This regional trail will generate pedestrian traffic and is expected to displace wildlife and introduce weeds within a limited distance of the trail. Therefore, a 15-meter buffer was included on both sides of the trail within this zone. The management cost of the Developed Zone will be applied to this zone since the trail will be concrete and may require a higher cost to manage than a natural surfaced trail.

### **4.4 Management of Natural Resource Targets**

Natural Resource Management Targets include the Western Bluffs and Riparian Areas. The ecology, key attributes, current status, threats and impacts to these areas are very different. Therefore, the management strategies needed to sustain the ecological integrity of these areas are different.

#### a. Western Bluffs

The western bluffs located on River Bluffs historically extended south along the Poudre River. Areas such as the Kaplan-Hoover bison kill site, south of State Highway 392, indicate that these bluff areas were used by Native Americans as hunting areas, campsites and food production areas. Most of these bluff areas have not been protected; in fact, the only remaining section of the Kaplan-Hoover bison kill site is in a vacant lot of a housing development (LaBelle, 2008). Protecting the Western Bluffs will ensure that a portion of this unique landscape feature and site of pre-historic activity will remain as the surrounding areas develop.

Vegetation management of the Western Bluffs will focus on reducing the cover of non-native plants. River Bluffs has been incorporated into Larimer County's Weed Management Plan and non-native plants have been inventoried and mapped. Section 2.2 of this plan lists the non-native plants known to occur on site. Crested wheat and smooth brome are two of the most common non-native plants found on the bluff. Russian knapweed is also known to be located near the bluffs and may be found here upon further investigation.

The plant community will be defined by developing a multi-metric tool to measure the ecological integrity of the Western Bluffs, including plant cover metrics such as the cover point-intercept method or the Daubenmire method for measuring canopy cover. Once baseline data are available for the Western Bluffs, specific management strategies will be developed to reduce non-native plant coverage.

The current health of the Western Bluffs is rated good, based on the predominant native plant composition and lack of ecological threats. The key attribute of the Western Bluffs are geologic and native plant composition. These attributes are the basic aspects of a target's biology or ecology that, if missing or altered, would lead to the loss of the target over time. The geology of the western bluffs is crucial to the plant community located here; with different soil types or structures, different plant communities are likely to develop.

Threats to the Western Bluffs include fragmentation and erosion from the development of trails and changes in the composition of plants from the invasion of non-native plants and inadequate weed management. The primary management strategies for the Western Bluff target are to prevent the development of planned or social trails through the bluff area and maintain an aggressive weed management program. Figure 9 outlines the key attributes, threats, sources of threats and management strategies for the Western Bluffs.

<b>Management Target (Current Status)</b>	<b>Key Attributes</b>	<b>Threat/Impact</b>	<b>Source of Threat/Impact</b>	<b>Management Strategy</b>
Western Bluffs (Good)	Geologic and native plant composition	Fragmentation; Erosion; Changes in plant composition	Trails; Introductions of weeds; Inadequate weed management	Prevent the development of planned/social trails through the bluff area and maintain an aggressive weed management program.

Figure 9. Key attributes, threats, sources of threats and management strategies for the Western Bluffs.

### Implementation Steps

- Prevent public access to the Western Bluffs through Ranger patrols, education or fencing
- Develop an Ecological Integrity Assessment (EIA) for the Western Bluffs and begin collecting baseline plant cover data in 2009
- Continue aggressive weed management

#### b. Riparian Areas

Riparian areas comprise a large portion of River Bluffs today and historically dominated this site. Both the Poudre River and Fossil Creek riparian systems meandered throughout this site. When these flowing waters were rerouted in the 1960s and 1970s, their floodplains were reduced and the integrity of the riparian area was compromised.

Although the Poudre River section through River Bluffs is significantly altered as compared to historic conditions, it still provides critical wildlife habitat and composes an ecosystem that is rare in Colorado. According to Rocchio (2006), riparian areas account for only 1% of the Colorado landscape, but because of the availability of water, are often more productive than adjacent uplands.

Three nested targets are included in the Riparian Areas management target. Nested targets are species or ecological communities whose conservation needs are subsumed by a management target. The nested targets of the Riparian Areas management target include: Poudre River Corridor, Fossil Creek Corridor and Raptors.

The vegetation of the Poudre River Corridor needs to be studied. The plant community will be defined by developing a multi-metric tool to measure the ecological integrity of the Poudre River Corridor, including plant cover metrics such as the cover point-intercept method or the Daubenmire method for measuring canopy cover. Based on feedback from the Weed District and site visits conducted by the Technical Advisory Group, Canada thistle, reed canarygrass and dalmatian toadflax inhabit the Poudre River Corridor.

Although this nested management target has been altered significantly and is not weed free, it still provides excellent habitat and is given a current health rating of good. The key attributes of the Poudre River Corridor nested target are riparian corridor vegetation composition and continuity and a natural flow regime. These attributes are the basic aspects of a target's biology or ecology that, if missing or altered, would lead to the loss of the target over time. The composition of the vegetation, the continuity of the riparian forest and the remaining flow regime are all basic features or natural forces that are fundamental to this target's ecology.

The major threats to this target are continued altered flow regimes, forest fragmentation, lack of forest disturbance, loss of canopy cover, loss of vegetated buffer width and weeds. The sources of these threats include drought, upstream reservoir and water diversion projects, development of trails and incompatible grazing.

Management strategies that could be used to reduce these threats include allowing intermittent grazing by livestock in the riparian area to mimic historic herbivory patterns, protecting in-stream flows by commenting on development proposals that may impact flows and ensure mitigation measures are included in the proposals and maintaining an aggressive weed management program, including continued removal of Russian olive and tamarisk. Grazing should be scheduled to help control Canada thistle and to avoid exposure of lactating animals to herbicides. These strategies are feasible and could reduce the likelihood of many of the threats.

Additional strategies that will improve the integrity of the Poudre River Corridor include restoring channel morphology by securing instream water rights and developing gaps in the stream bank to allow the formation of secondary channels during flood flows. These legal and hydrological strategies are not as feasible as weed control and cattle grazing, but may have a more fundamental impact on the riparian area over time.

Fossil Creek Corridor is also a nested target within the Riparian Areas management target. This stream has also been significantly modified on the River Bluffs property. The stream serves as an outlet to Fossil Creek reservoir, is a water hazard for the Ptarmigan golf course and was rerouted on River Bluffs to reduce its floodplain. Due to these major threats to the integrity of this target, the current status of the Fossil Creek Corridor is given a poor rating. Fossil Creek is established as a management target because of its potential to provide adjacent wildlife habitat and enhance riparian corridor connectivity.

The key attributes of Fossil Creek are riparian corridor vegetation composition and continuity. The major threats to its ecological integrity are altered flow regimes, forest fragmentation, lack of forest disturbance, loss of canopy cover, loss of vegetative buffer width, bank erosion and weeds. The

sources of these threats include drought, upstream water diversion projects or operations that modify flows, development of trails, lack of restoration attention and incompatible grazing.

The management strategies that will abate these threats include working with a stream restoration organization to develop a restoration plan for the Fossil Creek Corridor. The plan will include stabilizing streambanks and restoring a vegetated buffer around the creek. An aggressive weed management program will need to be maintained, especially if the site is disturbed to plant seedlings. Additional restoration actions may include developing agreements with upstream partners to manage water flows for ecosystem functioning, including peak flows in early summer, pursuing reductions in nutrient pollution from upstream landowners.

The final nested target in the Riparian Areas management target is Raptors. Raptor species observed on site or in neighboring areas include great-horned owls, red-tailed hawks and bald eagles. For such a relatively short section of the Poudre River, the diversity of raptor species at River Bluffs is high. For this reason, the Raptors management target was given a good rating for current status.

The key attribute for the Raptors target is riparian corridor connectivity. Generally these birds prefer large trees in riparian forests. The biggest threats to this target are loss of habitat, nest loss, nest looting and flushing birds off the nest. The sources of these threats include forest fragmentation from social or planned trails, loss of habitat due to depleted flows or other disturbance that results in the loss of the forest canopy and disturbance by visitors during the breeding season.

The management strategies that will reduce the likelihood of these threats include locating trails or other developed areas away from riparian areas and nest buffers and working with volunteers to monitor nest sites. Figure 10 outlines the nested targets, key attributes, threats, sources of threats and management strategies for the Riparian Areas management target.

Management Target	Nested Targets (Current Status)	Key Attributes	Threat/Impact	Source of Threat/Impact	Management Strategy
Riparian Areas	Poudre River Corridor (Good)	Riparian corridor vegetation composition and continuity; Natural flow regime	Altered flow regimes; forest fragmentation; lack of forest disturbance; loss of canopy cover; loss of vegetative buffer width, weeds	Drought, upstream reservoir/water diversion projects that alter natural flows; development of trails, incompatible grazing	Allow intermittent grazing by livestock in riparian area to mimic historic herbivory patterns. Protect in-stream flows by commenting on development proposals that may impact flows and ensure mitigation measures are included in the proposals. Maintain an aggressive weed management program, including continued removal of Russian olive and tamarisk. Restore channel morphology by finding partners to develop a habitat improvement plan that could include restoration actions such as securing instream water rights and developing gaps in the stream bank to allow the formation of secondary channels during flood flows. The plan could also include improvements to the wetland and pond areas of the riparian area.

	Fossil Creek (Poor)	Riparian corridor vegetation composition and continuity	Altered flow regimes; forest fragmentation; lack of forest disturbance; loss of canopy cover; loss of vegetative buffer width; bank erosion; weeds	Drought; upstream water diversion projects or operations that modify flows; development of trails; lack of restoration attention; incompatible grazing	Work with a stream restoration organization to develop a restoration plan for the Fossil Creek Corridor. The plan will include stabilizing streambanks and restoring a vegetated buffer around the creek. An aggressive weed management program will need to be maintained, especially if the site is disturbed to plant seedlings. Additional restoration actions may include developing agreements with upstream partners to manage water flows for ecosystem functioning, including peak flows in early summer, pursuing reductions in nutrient pollution from upstream landowners.
	Raptors (Good)	Riparian corridor continuity	Loss of habitat; nest loss; nest looting; flushing birds off nest	Forest fragmentation from social or planned trails; loss of habitat due to depleted flows or other disturbance that results in the loss of the forest canopy and disturbance by visitors during the breeding season	Locate trails or other developed areas away from riparian areas and nest buffers and work with volunteers to monitor nest sites

Figure 10. Key attributes, threats, sources of threats and management strategies for the Riparian Areas.

### Implementation Steps

- Develop an Ecological Integrity Assessment (EIA) for the riparian areas and begin collecting baseline plant cover data in 2008
- Once 3 years of baseline data are collected, develop a habitat improvement plan for the Poudre River Corridor
- Work with the lessee to schedule grazing of the riparian areas and monitor site to prevent overgrazing

- Review development proposals that may impact flows and ensure mitigation measures are included in the proposals
- Maintain an aggressive weed management program
- Work with a stream restoration organization to develop a restoration plan for the Fossil Creek Corridor
- Locate trails or other developed areas away from riparian areas and nest buffers and work with volunteers to monitor nest sites

#### **4.5 Management of Agriculture Targets**

The Agriculture Management Target includes the agriculture fields located on the property. These fields compose approximately 40% of the property and have been a historical land use of River Bluffs since, at least, the 1950s. Currently, Larimer County has two leases for the agricultural property at River Bluffs. The lease with Royal Vista Equine, Inc. is a 5 year lease (through March 2009) and includes the western agriculture field and northwest corner of the property where hay is stacked. The eastern field has been leased to Ken Knievel previously, but was leased to Royal Vista Equine, Inc. in 2008. This is an annual lease.

The western field receives sufficient water for 2-3 cuttings of hay each year. Additionally, following hay production, Royal Vista grazes approximately 50 horses in the field to feed on hay clippings, generally from October to December.

The eastern field has water rights but they are not senior and water has not been available consistently in the last 5-10 years. This field was formerly planted in alfalfa, but is now sparsely vegetated due to lack of water, consumption by prairie dogs and possible overgrazing. Canada thistle is also common in the south end of this pasture.

The key attributes of the agriculture fields are water availability and range management. Without sufficient water supply, neither of the fields can be irrigated and the threat of weeds or overgrazing is increased. The western field has senior water rights and has received water annually; however, if these rights are sold or water becomes unavailable, the productivity of the western field will decline.

The current condition of the western field is good, because of the annual cover crop and protection of soil. The current condition of the eastern field is poor, because of the lack of vegetation, bare spots, weeds and manure. The barren nature of the eastern field is also due to the presence of prairie dogs. Raptor perches have been installed to encourage predation, but the expansion of the colony continues to denude the field.

The major threats to agricultural use of the property are insufficient water, inability to find a lessee and weeds. Royal Vista is a horse breeding operation located less than one mile west of River Bluffs. As the surrounding landscape becomes more developed, this facility could relocate and it may be more difficult to find a lessee. If a community supported agriculture or other local food operation is sought, additional threats to the target will develop, possibly including finding a site manager, advertising and finding seeding, weeding and harvesting labor.



The sources of these threats include drought, efficiency of irrigation ditches degrade and agricultural market values decline or disinterest from the agricultural community. The management strategies needed to reduce these threats include maintaining an active agricultural lease on all fields, work with staff or NRCS to develop a grazing plan for the eastern field, monitor utilization of the eastern field and decrease AUMs if needed, continue aggressive weed management, investigate the possibility of increasing water availability to the eastern field and investigate the possibility of developing a community supported agriculture opportunity. Figure 11 outlines the nested targets, key attributes, threats, sources of threats and management strategies for the Agriculture Fields management target.

<b>Management Target (Current Status)</b>	<b>Key Attributes</b>	<b>Threat/Impact</b>	<b>Source of Threat/Impact</b>	<b>Management Strategy</b>
Agriculture Fields (West Field – Good, East Field – Poor)	Water availability and range management	Insufficient water; no lessee; weeds	Drought; efficiency of irrigation ditches degrade; agricultural market values decline or disinterest from agricultural community	Maintain an active agricultural lease, work with staff or NRCS to develop a grazing plan for the eastern field, monitor utilization of the eastern field and decrease AUMs if needed, continue aggressive weed management, investigate the possibility of increasing water availability to the eastern field and investigate the public interest and feasibility of developing a community supported agriculture opportunity.

Figure 11. Key attributes, threats, sources of threats and management strategies for the Agriculture fields.

### Implementation Steps

- Work with current lessee to extend lease or find another lessee
- Sustain good relationship with lessee and follow up on issues quickly , modify lease in future if needed
- Work with staff or NRCS to develop a grazing plan or AUM designation for grazing areas
- Monitor utilization of the eastern field and decrease AUMs if needed to reduce barren soil
- Revegetate abandoned dirt road that was used to access the western agriculture field
- Continue aggressive weed management
- Investigate the possibility of increasing water availability to the eastern field and revegetating
- Investigate public interest and feasibility of community-based agricultural opportunities

#### 4.6 Management of Recreation Targets

River Bluffs was bought, in part, to anchor the Poudre River Trail and a trailhead north of State Highway 392 and to facilitate the completion of the trail from Greeley to Fort Collins. The location of the trail and trailhead were discussed with staff, the Technical Advisory Group, the Open Lands Advisory Board, with adjacent landowners and during public meetings. The location of these improvements were determined based on protecting the natural resource and agricultural management targets. The trailhead was also located to minimize visibility of the Ptarmigan subdivision and golf course and State Highway 392. Care was also taken to reduce visibility of the trailhead by the Ptarmigan community.

Recreation will be limited to this trail and trailhead unless public demand calls for additional trails. If public demand for natural surface trails develops, they will be located in an area that does not negatively affect the management targets. Additional trails and other recreation opportunities will be evaluated when this plan is updated, in 5-10 years.

The River Bluffs section of the Poudre River Trail will be approximately ½-mile in length and will connect to the Bison Arroyo section of the trail south of State Highway 392, via an underpass. The trailhead will include a 30-car parking lot and basic trail amenities, including a vault toilet, entry sign, kiosk, 1-3 picnic tables, 1-4 trash receptacles, water fountain, bike rack and an air compressor. These amenities will be phased based on demand and availability.

The trail and trailhead will be open to the public from dawn to dusk, 365 days a year. An electric gate will be set throughout the year to open at dawn and close at dusk. A motion sensor in the parking lot will open the gate after dark to allow visitors to exit the trailhead and avoid being trapped over night.

The key attributes of the Poudre River Trail and Trailhead are to make the trail safe, enjoyable and popular. As the Windsor and Timnath areas of Larimer County grow, this section of the Poudre River Trail will grow in popularity. It's also important that the trail is safe and accessible by a variety of demographics, including children and the elderly.

When feasible, the trail will be consistent in design with connecting trails. Fence types, width and type of concrete and other amenities will be consistent when possible. The trail and trailhead will be ADA accessible and all county codes will be met during and after construction. Signs with the Great Outdoors Colorado (GOCO) and Land and Water Conservation Fund (LWCF) logos will be displayed on site to meet funding requirements.

Threats to the Poudre River Trail and Trailhead are vandalism, incompatible trail use, off-hour use and off-trail use. These threats could come from trail users that park at the trailhead or ride/walk in from off-site. Vandalism has not been a serious problem along the trail through Windsor, based on feedback received from the Poudre River Trail, Inc. Trail Manager. Incompatible trail use, such as by an ATV, could cause an injury or reduce a visitor's enjoyment of the trail. Off-hour use, such as after dark, could lead to resource damage or illicit activities. Off-trail use, especially along the bluff area is likely, as the concrete trail will be located adjacent to the western bluff.

The management strategies that will reduce the likelihood of these threats include regular patrolling by Rangers or Volunteer Ranger Assistants. Designing and building the trail with public input and educating the public on accepted uses of the trail will also help prevent prohibited uses of the trail and potential conflicts with neighbors. Providing necessary trailhead amenities, such as a toilet and water fountain and updating the educational displays seasonally will make the trail experience more enjoyable. Figure 12 outlines the nested targets, key attributes, threats, sources of threats and management strategies for the Recreation management target.

<b>Management Target</b>	<b>Key Attributes</b>	<b>Threat/Impact</b>	<b>Source of Threat/Impact</b>	<b>Management Strategy</b>
Poudre River Trail and Trailhead	Safety, good design, basic amenities	Vandalism, incompatible trail use, off-hour use, off-trail use	Trail users	Patrol trail regularly, design and build a trail with public input, provide necessary trailhead amenities and update educational displays seasonally.

Figure 12. Key attributes, threats, sources of threats and management strategies for the Poudre River Trail and Trailhead.

### Implementation Steps

- Complete survey of the property to develop construction drawings
- Work with lessee and Central Colorado Water Conservancy District during the development of the construction drawings to ensure adequate access to the agriculture fields and irrigation ditch and to provide livestock water
- Get signed agreement from City of Greeley that construction plans do not violate the conservation easement
- Coordinate the completion of the Preble’s report
- Stake trailhead location and provide site visit to Ptarmigan community
- Develop trail and trailhead in 2009
- Develop underpass and install amenities along trail and trailhead in 2010
- Open trail to the public in 2010 or 2011
- Recreation activities will be limited to the Poudre River Trail and Trailhead unless advertised as a guided hike
- Assess the demand and location of additional recreation activities on site
- Patrol trail with Ranger staff or Volunteer Ranger Assistants
- Post trail rules along the trail or within the trailhead
- Install fences, if needed, to prevent off-trail use of the Western Bluffs
- Horseback riding is prohibited, grazing of livestock is allowed in designated areas
- Motorized use of the trail is prohibited, except for official business
- Driving on site will be limited to the Poudre River Trail and Trailhead and existing access points along CR 32E and State Highway 392; vehicles will be parked at these entrance points and activities will be conducted on foot, when feasible
- No overnight use is allowed
- Dogs are allowed on leash

## 4.7 Management of Education Targets

Providing education activities that enrich visitors' experience is an important management goal of River Bluffs. Educational materials may include kiosks, signs, or brochures, or may be dynamic and interactive, such as guided hikes. Open Lands will develop an education plan for River Bluffs that outlines the appropriate educational themes and resources for the site.

Education may focus on two targets, agricultural and natural resources. The agricultural nested target may focus on the loss of irrigated agriculture land along the Front Range, the Poudre River and its role in the development of the prior appropriation system of water rights, or the evolution of irrigation systems across the Front Range. The water conveyance structure located across the former Poudre River channel and the suction tube system used on site could be interpreted as part of a description of the evolution of irrigation systems. If a community supported agriculture or other local farming operation is established on site, education themes could focus on developing a sustainable food production, processing or distribution system.

The natural resource nested target will likely focus on the Western Bluffs and Riparian Areas management targets. The ecology of the Western Bluffs and Riparian Areas are extremely different, plants and animals that inhabit the wet, cool riparian area are not adapted to the dry and exposed micro-climate of the western bluff. These ecological adaptations could be highlighted along the trail or during guided hikes.

Riparian Areas also provide services that benefit humans, such as filtering pollutants and providing wildlife watching and recreation opportunities. The services that riparian areas provide could also be included in educational materials. Finally, if Fossil Creek is restored to minimize bank erosion and enhance the connectivity of the riparian forest, educational materials could be developed to highlight improvements to Fossil Creek, such as the increase in native plant cover or reduction in turbidity.

Other than the water conveyance structure across the former Poudre River channel, few historic features are located on site. The foundation of a house is located on the north side of the property, off CR 32E and prehistoric artifacts have been located atop the western bluff. Neither of these features may warrant interpretation. The foundation of the original house may not be located near future extensions of the Poudre River Trail or may not be suitable for interpretation. Artifacts located on the bluff are also too distant from the trail and interpreting them may welcome theft or artifact collecting. Accessing the bluff to see these artifacts would also fragment and damage the Western Bluffs management target.

An archeological reconnaissance of the western bluff suggested that the bluff area should be surveyed by a qualified archaeologist (LaBelle, 2008). This survey may find additional artifacts that could be collected and interpreted off site, such as at the Fort Collins Museum.

The key attributes, threats and management strategies for the agricultural and natural resource nested education targets are listed in Figure 13.

<b>Management Target</b>	<b>Nested Targets</b>	<b>Key Attributes</b>	<b>Threat/Impact</b>	<b>Management Strategy</b>
Education	Agriculture	Water conveyance structure; agricultural fields	Failure to develop an education plan for River Bluffs, dilapidation and vandalism of the water conveyance structure or educational signs	Partner with the Poudre Heritage Alliance and local school groups to develop an education plan for River Bluffs. The location and content of the signs should also be discussed with the lessee prior to installation. Regular patrolling by Rangers and Volunteer Ranger Assistants will also help reduce the threat of vandalism. In addition, local historians should be consulted to determine if historic structures need to be stabilized
	Natural Resources	Riparian Areas and Western Bluffs	Failure to develop interpretative materials about the natural resources located on the property, vandalism of signs or kiosks; degradation of natural resources so they are not worthy of interpretation	Work with school groups when developing education plan, develop appropriate interpretative signs and provide guided educational programs

Figure 13. Key attributes, threats, sources of threats and management strategies for the Education target.

### Implementation Steps

- Work with the Poudre Heritage Alliance and local school groups to complete an education plan for River Bluffs
- Complete an archeological survey of the site, determine if and where prehistoric artifacts should be interpreted
- Review content and location of signs with lessee to ensure signs will not affect farming activities and to build good will
- Develop and install educational materials for kiosk before opening of trail and trailhead
- Incorporate River Bluffs in Open Lands’ Volunteer Naturalist and Trail Ranger Assistant Programs
- Include River Bluffs and the Poudre River Trail into Open Lands’ “Adopt-A-Trail” Program

### **4.8 Summary of Implementation Steps and Phasing**

A tabular summary of implementation steps, prioritized by proposed timelines are provided below.

Summary of Implementation steps for the River Bluffs Open Space

Implementation Steps	Cost Estimate	2008	2009	2010 and beyond	Responsible program*
<b>Western Bluffs</b>					
Prevent public access to the Western Bluffs through Ranger patrols, education or fencing	Fencing: \$5-10/foot			X	Open Lands Program
Develop an Ecological Integrity Assessment (EIA) for the Western Bluffs and begin collecting baseline plant cover data in 2009	N/A		X		Open Lands Program
Continue aggressive weed management		X	X	X	Weed District
<b>Riparian Areas</b>					
Develop an Ecological Integrity Assessment (EIA) for the riparian areas and begin collecting baseline plant cover data in 2008	N/A	X			Open Lands Program
Once 3 years of baseline data are collected, develop a habitat improvement plan for the Poudre River Corridor	Minimal			X	Open Lands Program
Continue aggressive weed management		X	X	X	Weed District
Work with the lessee to schedule grazing of the riparian areas and monitor site to prevent overgrazing	N/A	X	X	X	Open Lands Program
Review development proposals that may impact flows and ensure mitigation measures are included in the proposals	N/A	X	X	X	Open Lands Program
Work with a stream restoration organization to develop a habitat improvement plan for the Fossil Creek Corridor	Minimal		X		Open Lands Program
Locate trails or other developed areas away from riparian areas and nest buffers and work with volunteers to monitor nest sites	N/A		X	X	Open Lands Program
<b>Agriculture Targets</b>					
Work with current lessee to extend lease or find another lessee	N/A	X	X	X	Open Lands Program

Implementation Steps	Cost Estimate	2008	2009	2010 and beyond	Responsible program*
Sustain good relationship with lessee and follow up on issues quickly , modify lease in future if needed	N/A	X	X	X	Open Lands Program
Work with staff or NRCS to develop a grazing plan or AUM designation for areas that allow grazing	N/A	X	X	X	Open Lands Program
Monitor utilization of the eastern field and decrease AUMs if needed to reduce barren soil	N/A	X	X	X	Open Lands Program
Revegetate abandoned two-track dirt road that was used to access the western agriculture field	Variable		X	X	Open Lands Program
Continue aggressive weed management		X	X	X	Weed District
Investigate the possibility of increasing water availability to the eastern field and revegetating	N/A		X	X	Open Lands Program
Investigate public interest and feasibility of community-based agricultural opportunities	N/A			X	Open Lands Program
<b>Recreation Targets</b>					
Complete survey of the property to develop construction drawings	N/A	X		X	Engineering
Work with lessee and Central Colorado Water Conservancy District during the development of the construction drawings to ensure adequate access to the agriculture fields and irrigation ditch and to provide livestock water	N/A	X	X		Open Lands Program
Get signed agreement from City of Greeley that construction plans do not violate the conservation easement	N/A		X	X	Open Lands Program
Coordinate the completion of the Preble's report	Variable	X		X	Open Lands Program
Stake trailhead location and provide site visit to Ptarmigan community	N/A	X			Open Lands Program

Implementation Steps	Cost Estimate	2008	2009	2010 and beyond	Responsible program*
Develop trail and trailhead in 2009	\$266,613		X		Open Lands Program/Engineering
Develop underpass and install amenities along trail and trailhead in 2010	\$1,427,760			X	Open Lands Program/Engineering
Open trail to the public in 2010 or 2011	N/A			X	Open Lands Program
Assess the demand and location of additional recreation activities on site	N/A			X	Open Lands Program
Patrol trail with Ranger staff or Volunteer Ranger Assistants	N/A			X	Open Lands Program
Install fences, if needed, to prevent off-trail use of the Western Bluffs	N/A		X	X	Open Lands Program
<b>Education Targets</b>					
Work with the Poudre Heritage Alliance and local school groups to complete an education plan for River Bluffs	N/A			X	Open Lands Program
Complete an archeological survey of the site, determine if and where prehistoric artifacts should be interpreted	Minimal		X		Open Lands Program
Review content and location of signs with lessee to ensure signs will not affect farming activities and to build good will	N/A			X	Open Lands Program
Develop and install educational materials for kiosk before opening of trail and trailhead	Minimal		X		Open Lands Program
Incorporate River Bluffs in Open Lands' Volunteer Naturalist and Trail Ranger Assistant Program	N/A			X	Open Lands Program
Include River Bluffs and the Poudre River Trail into Open Lands' "Adopt-A-Trail" Program	N/A			X	Open Lands Program



## 5. APPENDIX A: Species Lists

**Table 1**  
**Potential wildlife species located at River Bluffs Open Space**

Common name	Scientific name
Mule deer	<i>Odocoileus hemionus</i>
Mountain lion	<i>Felis concolor</i>
Coyote	<i>Canis latrans</i>
Short-horned lizard	
Red-tailed hawk	<b><i>Buteo jamaicensis</i></b>
Elk	<i>Cervus canadensis</i>
White-tailed deer	<i>Odocoileus virginianus</i>
Least chipmunk	<i>Eutamias minimus</i>
Uinta chipmunk	<i>Eutamias umbrinus</i>
Preble’s meadow jumping mouse	<i>Zapus hudsonius preblei</i>
Golden-mantled squirrel	<i>Citellus lateralis</i>
Hispid pocket mouse	<i>Perognathus hispidus</i>
Deer mouse	<i>Peromyscus maniculatus</i>
Rock mouse	<i>Peromyscus difficilis</i>
Mexican woodrat	<i>Neotoma mexicana</i>
Prairie vole	<i>Microtus ochrogaster</i>
Porcupine	<i>Erethizon dorsatum</i>
Red fox	<i>Vulpes fulva</i>
Raccoon	<i>Procyon lotor</i>
Striped skunk	<i>Mephitis mephitis</i>
Cottontail rabbit	<i>Sylvilagus nuttalli</i>
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>

**Table 2: Plant species identified at River Bluffs Open Space**

Scientific Name	Common Name
<b>Trees</b>	
Plains Cottonwood	<i>Populus deltoides</i> ssp. <i>monilifera</i>
Peach-leaf Willow	<i>Salix amygdaloides</i>
Boxelder	<i>Acer Negundo</i>
Crack Willow	<i>Salix fragilis</i>
Sandbar Willow	<i>Salix exigua</i>
<b>Grasses</b>	
Prairie Cordgrass	<i>Spartina pectinata</i>
Switchgrass	<i>Panicum virgatum</i>
Needle-and-Threadgrass	<i>Stipa comata</i>
Saltgrass	<i>Distichlis spicata</i>
Bulrush	<i>Schoenoplectus</i> c.f. <i>lacustris</i>
Buffalograss	<i>Buchloe dactyloides</i>
Big Bluestem	<i>Andropogon gerardii</i>
Green Needlegrass	<i>Stipa viridula</i>
Spike Fescue	<i>Leucopoa kingii</i>
Kentucky Bluegrass	<i>Poa pratensis</i>
Timothy	<i>Phleum pretense</i>
Bushy Buckwheat	<i>Eriogonum effusum</i>
Three square	<i>Scirpus americanus</i>
Sand Dropseed	<i>Sporobolus cryptandrus</i>
Reed Canarygrass	<i>Phalaris arundinacea</i>
Witchgrass	<i>Panicum capillare</i>
Rush sp.	<i>Juncus</i> sp.
Arctic Rush	<i>Juncus articus</i>
Three-awn	<i>Aristida purpurea</i>
Western Wheatgrass	<i>Agropyron smithii</i>
Blue Grama	<i>Bouteloua gracilis</i>
Wild-rye	<i>Elymus elymoides</i>
<b>Forbs</b>	
Milk Vetch	<i>Astragalus</i> spp.
Fringed Sage	<i>Artemesia frigida</i>
White Dutch Clover	<i>Trifolium repens</i>
Bullrush	<i>Scirpus</i> spp.
Skeleton Weed	<i>Lygodesmia juncea</i>
Prickly Pear Cactus	<i>Opuntia maccorhiza</i>
Blue Vervain	<i>Verbena hastata</i>
Bee Plant	<i>Cleome serrulata</i>
Prickly Poppy	<i>Argemone polyanthemos</i>
Golden Aster	<i>Heterotheca</i> c.f. <i>canescens</i>
Pussytoes	<i>Antennaria rosea</i>
Blazing Star (gayfeather)	<i>Liatrus punctata</i>
Coneflower	<i>Ratibida columnifera</i>
Buckwheat	<i>Eriogonum effusum</i>

Yucca	<i>Yucca glauca</i>
Scurfpea	<i>Psoraleidium tenuiflorum</i>
<b>Shrubs</b>	
Rabbitbrush	<i>Chrysothamnus nauseosus</i>
Winterfat	<i>Krascheninnikovia lanata (formerly Ceratoides lanata)</i>
Broom Snakeweed	<i>Gutierrezia sarothrae</i>
Snowberry	<i>Symphoricarpos occidentalis</i>
Three-leaf Sumac	<i>Rhus trilobata</i>
<b>Non-Native Species</b>	
Tamarisk	<i>Tamarix pentandra</i>
Russian Olive	<i>Elaeagnus angustifolia</i>
Broadleaf Cattail	<i>Typha latifolia</i>
Burdock	<i>Arctium minus</i>
Chinese elm	<i>Ulmus pumila</i>
Cheatgrass	<i>Bromus tectorum</i>
Redtop	<i>Agrostis gigantea</i>
Goosefoot	<i>Chenopodium spp.</i>
Quackgrass	<i>Agropyron repens</i>
Leafy Spurge	<i>Euphorbia esula</i>
Musk Thistle	<i>Carduus nutans</i>
Field Pennycress	<i>Thlaspi arvense</i>
Intermediate Wheatgrass	<i>Agropyron intermedium</i>
Russian Knapweed	<i>Centaurea repens</i>
Crested Wheatgrass	<i>Agropyron cristatum</i>
Russian Thistle	<i>Salsola iberica</i>
Scotch Thistle	<i>Onopordum acanthium</i>
Kochia	<i>Kochia iranica</i>
Smooth Brome	<i>Bromus inermis</i>
Canada Thistle	<i>Cirsium arvense</i>
Field Bindweed	<i>Convolvulus arvensis</i>
<b>Agricultural Field (improved grass pasture)</b>	
Smooth Brome	<i>Bromus inermis</i>
Alfalfa	<i>Medicago sativa</i>
Western Wheatgrass	<i>Agropyron smithii</i>



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DEED OF CONSERVATION EASEMENT  
JACOBY PROPERTY

NOTICE: THIS PROPERTY HAS BEEN ACQUIRED IN PART WITH A GRANT ("GRANT") FROM THE STATE BOARD OF THE GREAT OUTDOORS COLORADO TRUST FUND ("BOARD"). 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 10th day of February, 2004 by Larimer County, Colorado, having an address of 200 West Oak, Ft. Collins, CO 80521 ("Grantor") in favor of the City of Greeley, Colorado, a Colorado home rule Municipality under the laws of Colorado, having an address at 1000 10<sup>th</sup> Street, Greeley, Colorado 80631 ("Grantee").

RECITALS:

- A. Grantor is the sole owner in fee simple of certain real property in Larimer County, Colorado, as more particularly described on Exhibit A attached hereto and incorporated by this reference (the "Property"), which encompasses approximately 160 acres.
- B. The Property possesses agricultural, educational, natural, recreational, scenic, ecological and wildlife values (collectively, "Conservation Values") of great importance to Grantor, and the people of the State of Colorado.
- C. In particular, there are Conservation Values including but not limited to:
  - 1. Agricultural values including irrigated alfalfa pastures and native pastures;
  - 2. Educational values such as the future potential for public access via a regional trail that may include educational signs, brochures, field trips, and other educational programs;
  - 3. Recreational values including future potential for development of a regional trail connection, trailhead, restroom, sign kiosk and other associated open space passive recreational amenities;
  - 4. Scenic values including the view corridor along the Poudre River and maintenance of a visual separator in the growing Windsor, Ft. Collins, Loveland corridor;
  - 5. Ecological values representing native shortgrass foothills and riparian and wetland areas (including approximately 1/2 mile of the Poudre River, a small segment of Fossil Creek, a shallow pond and a former oxbow of the Poudre River);
  - 6. Wildlife values, including native mammals, rodents, amphibians and reptiles, fish and other aquatic wildlife, and migratory and breeding birds.
- D. Grantor intends that the Conservation Values of the Property be preserved and maintained through use of the Property by the continuation of land use patterns including, without limitation, those

TNFC

✓ - Please read the Charter of the Larimer County Board of Commissioners

2 relating to agriculture, including grazing in accordance with a management plan in cooperation with the Natural Resource Conservation Service, existing at the time of this grant, that do not significantly impair or interfere with the Conservation Values of the Property.

- E. Grantor further intends, as Owner of the Property, to convey to Grantee the right to preserve and protect the Conservation Values of the Property in perpetuity.
- F. Grantee is a political subdivision of the State of Colorado, and as such qualifies under C.R.S. 38-30.5-104(2) to accept and hold conservation easements.
- G. Grantee agrees by accepting this Easement to use its best efforts to honor the intentions of Grantor stated herein and to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

NOW, THEREFORE, in consideration of the above and the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to the laws of the State of Colorado, and in particular C.R.S. Section 38-30.5-101 et seq., Grantor hereby voluntarily grants and conveys to Grantee a conservation easement in gross in perpetuity over the Property of the nature and character and to the extent hereinafter set forth ("Easement").

1. Purpose. It is the purpose of this Easement to assure that the Property will be retained forever in its agricultural, educational, recreational, scenic, ecological and wildlife values 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 such activities, including, without limitation, those involving agricultural, recreational, scientific research, educational and land stewardship activities, as are consistent with the purpose of this Easement.
2. Baseline Documentation Report. The parties acknowledge that a written report which documents an accurate representation of the Property's current condition, will be prepared, reviewed, and approved by both parties within six months of the date of this Easement (the "Baseline Documentation Report"). A copy of the Baseline Documentation Report will be on file with both parties and by this reference made a part hereof. The parties acknowledge that the Baseline Documentation Report is intended to establish the condition of the Property subject to the Easement as of the date written above.

The parties further agree that, in the event a controversy arises with respect to the condition of the Property as of the conveyance date of the Easement, or compliance with or violation of any term or provision of this Easement, the parties may use the Baseline Documentation Report and any other relevant or material documents, surveys, reports, and other information to assist in resolving a controversy.

3. Rights of Grantee. To accomplish the purpose of this Easement the following rights are conveyed to Grantee by this Easement:
  - a. To preserve and protect the Conservation Values of the Property;
  - b. To enter upon the Property at reasonable times in order to monitor Grantor's compliance with and otherwise enforce the terms of this Easement; provided that such entry shall be upon prior reasonable notice to Grantor and Grantee shall not unreasonably interfere with Grantor's use and quiet enjoyment of the Property;

- h
- c. To prevent any activity on or use of the Property that is inconsistent with the purpose of this Easement.
  - d. To require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.
4. Land Management. The Property shall be operated and managed in accordance with a land management plan prepared and accepted with the mutual consent of Grantor and Grantee, which plan shall be initially agreed upon within one year of the date of this Easement and shall be updated at least every five years.
5. Prohibited Uses. Any activity on or use of the Property inconsistent with the purpose of this Easement is prohibited. Without limiting the generality of the foregoing, 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 Deed, is prohibited except in accordance with Paragraphs (b), (c) and (g) below. Under no circumstances shall any commercial or recreational building, structure or improvement be built on the Property, including but not limited to, athletic fields, golf courses or ranges, race tracks, airstrips, helicopter pads, or shooting ranges.
  - b. Fences. The construction or reconstruction of any fence, except to repair or replace existing fences, build new fences for purposes of reasonable and customary management of livestock and wildlife, to build new fences for separation of ownership and uses or to separate trails from agricultural areas and control public access.
  - c. New Structures and Improvements. Grantee acknowledges that is the intent of Grantor to construct public restroom and drinking water facilities on the property. Such facilities and other new buildings and other structures and improvements may be built with the advance written permission of Grantee. Grantee shall 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. Timber Harvesting. Timber harvesting on the Property shall be prohibited. Trees may be cut to control insects and disease, to control invasive non-native species, and to prevent personal injury and property damage. Trees may also be cut as part of a forest health management effort or a fire control or fire mitigation effort, which is consistent with recommendations of a public fire protection agency and/or the Colorado State Forest Service.
  - f. Mining. The mining or extraction of soil, sand, gravel, rock, oil, natural gas, fuel, or any other mineral substance (including moss rock and flagstone) is prohibited.
  - g. Paving and Road and Trail Construction. Grantor intends to construct one or more trails for the Poudre River Trail corridor through the Property. This segment will provide trail connectivity from Fort Collins to Windsor to Greeley. The trails may be constructed with asphalt, concrete, natural materials or other paving materials. Grantor will also construct a trailhead and parking area to accommodate public access. Any trail, trailhead, or parking area may be constructed with prior written approval of Grantee. Grantee shall give such permission within a reasonable time, unless Grantee determines that the proposed trail, trailhead, or parking area will substantially diminish or impair the Conservation Values of the

- X Property or is otherwise inconsistent with this Deed, and such permission shall not be unreasonably withheld. No other portion of the Property shall be paved or otherwise covered with concrete, asphalt, or any other paving material.
- h. Trash. The dumping or uncontained accumulation of any kind of trash or refuse on the Property including but not limited to household trash and hazardous chemicals, is strictly prohibited. The dumping or accumulation of other farm-related trash and refuse produced on the Property is permitted, provided that such dumping is not inconsistent with the preservation and protection of the Property's Conservation Values. However, this shall not prevent the storage of agricultural products and by-products on the Property in accordance with all applicable government laws and regulations.
- i. Water Rights Included. The Property includes any and all water and water rights beneficially used on the land described in Exhibit A that are owned by the Grantor, and all ditches, headgates, springs, reservoirs, water allotments, water shares and stock certificates, contracts, units, wells, easements and rights of way associated therewith (the "Water Rights"). The Water Rights include surface water rights and groundwater rights, whether tributary, nontributary or not-nontributary, decreed or undecreed including, but not limited to, those water rights or interests specifically described in Exhibit B attached hereto. The parties agree that it is appropriate to include the Water Rights in this Easement pursuant to C.R.S. § 38-30.5-102. Grantor shall retain and reserve the right to use the Water Rights or that portion 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 itself.
- j. Motorized Vehicles. Motorized vehicles may only be used for agricultural, scientific research, educational, recreational (access road and trailhead parking area only) emergency services, patrol, or property-maintenance purposes and in a manner that does not substantially diminish or impair the Conservation Values of the Property. Use of snowmobiles, all-terrain vehicles, motorcycles, or other motorized vehicles for any other purpose is prohibited.
- k. Commercial or Industrial Activity. No industrial or commercial uses shall be allowed on the Property, provided, however, that this limitation is not intended to prohibit those activities expressly permitted in this easement.
- l. Signage or Billboards. No commercial signs, billboards, awnings, or advertisements shall be displayed or placed on the Property, except for appropriate and customary ranch or pasture identification signs, "for sale" or "for lease" signs alerting the public to the availability of the Property for purchase or lease, "no trespassing" signs, signs regarding the private leasing of the Property for hunting, fishing or other low impact recreational uses, and signs informing the public of the status of ownership. Grantor will be installing signage that is necessary for management purposes and controlling access. A kiosk or other educational signs may also be displayed at the trailhead and along the trail. No signs shall materially adversely affect the Conservation Values of the Property. Grantee shall erect one or more signs visible from the nearest public roadway, or from an alternative location approved by GOCO, identifying the Board's Grant and investment in this Easement to the public.
- m. Development Rights. Grantor hereby grants to Grantee all development rights except as otherwise expressly reserved by Grantor herein, and the parties agree that such rights are hereby released, terminated and extinguished, and may not be used on or transferred off of the Property to any other property adjacent or otherwise used for the purpose of calculating permissible lot yield of the Property or any other property.

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6. Reserved Rights. Grantor reserves to itself, and to its personal representatives, heirs, successors, and assigns, all rights accruing from its ownership of the Property, to engage in or permit or invite others to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the conservation purposes of this Easement. Without limiting the generality of the foregoing, the following rights are expressly reserved:
  - a. maintenance, stabilization, replacement, or restoration of existing wildlife areas, springs, fences, and pastureland. Grantor may also repair or replace existing fences.
  - b. agriculture, educational programs, natural history interpretation, and scientific research;
  - c. management of land to control erosion, growth of weeds and brush, rodent pests, insects and pathogens, fire danger and other threats, consistent with applicable laws and regulations and in keeping with maintenance of the Conservation Values of the property;
  - d. vehicular access on established and approved roads for maintenance, management, and emergency services, by the Grantor and/or its personal representatives, heirs, successors and assigns.
  - e. trails a trailhead parking area, restrooms and drinking water facilities for public use may be constructed and utilized by Grantor in such locations as are mutually determined by Grantor and Grantee.
  - f. grantor reserves the right to lease the Property to a third party for agricultural purposes.
7. Notice of Intention to Undertake Certain Permitted Actions. The purpose of requiring Grantor to notify Grantee prior to undertaking certain permitted activities is to afford Grantee an opportunity to ensure that the activities in question 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 60 days prior to the date Grantor intends to undertake the activity in question. The notice shall describe the nature, scope, design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit Grantee to make an informed judgment as to its consistency with the purpose of this Easement.
8. Grantee's Approval. Where Grantee's approval is required Grantee shall grant or withhold its approval in writing within sixty (60) days of receipt of Grantor's written request therefor. Grantee's approval may be withheld only upon a reasonable determination by Grantee that the action as proposed would be inconsistent with the purpose of this Easement.
9. Enforcement. Grantee shall have the right to prevent and correct or require correction of violations of the terms and purposes of this Easement. Grantee may enter the Property for the purpose of inspecting for violations. If Grantee finds what it believes is a violation, Grantee shall immediately notify Grantor and the Board in writing of the nature of the alleged violation. Upon receipt of this written notice, Grantor shall either (a) restore the Property to its condition prior to the violation or (b) provide a written explanation to Grantee of the reason why the alleged violation should be permitted. If the condition described in clause (b) above occurs, both parties agree to meet as soon as possible to resolve this difference. If a resolution of this difference cannot be achieved at the meeting, both parties agree to meet with a mutually acceptable mediator to attempt to resolve the dispute. When, in Grantee's opinion, Grantor's actions could irreversibly diminish or impair the Conservation Values of the Property, Grantee may take appropriate legal action including obtaining a temporary restraining order. Grantor shall discontinue any activity which could increase or expand the alleged violation during the mediation process. Should mediation fail to resolve the dispute, Grantee may, at its discretion, take appropriate legal action. If a court with jurisdiction determines that a violation is imminent,



- exists, or has occurred, Grantee may get an injunction to stop it, temporarily or permanently. A court may also issue an injunction to require Grantor to restore the Property to its condition prior to the violation.
10. Costs of Enforcement. Any costs incurred by Grantee in 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.
  11. Grantee's Discretion. Enforcement of the terms of this Easement shall be at the discretion of Grantee, and any forbearance by Grantee to exercise its rights under this Easement in the event of any breach of any term of this Easement by Grantor shall not be deemed or construed to be a waiver by Grantee of such term 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. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantor shall impair such right or remedy or be construed as a waiver.
  12. Waiver of Certain Defenses. Grantor hereby waives any defense of laches or prescription, including any defenses available under C.R.S. §38-41-119, et seq. As between Grantor and Grantee hereto, Grantor waives any defense of estoppel except as to Grantor's obligations and requirements stated herein.
  13. Acts Beyond Grantor's Control. Nothing contained in this Easement shall be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Property resulting from causes beyond Grantor's control, including, without limitation, fire, flood, storm, and earth 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.
  14. Access. Grantor shall permit public access to the Property on such terms and conditions as Grantor deems appropriate, provided that such access does not impair the Conservation Values of the Property.
  15. Costs and Liabilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Property, including weed control and eradication and including the maintenance of adequate comprehensive general liability insurance coverage. Grantor shall keep the Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor.
  16. Hold Harmless. To the extent permitted by law, and without waiving the defenses and limitations of liability provided by the Colorado Governmental Immunity Act as now in place or hereafter amended, Grantor shall hold harmless, indemnify, and defend Grantee, the Board, and their directors, officers, employees, agents, and contractors and the heirs, personal representatives, successors and assigns of each of them (collectively "Indemnified Parties") from and against all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, demands, or judgments, including, without limitation, reasonable attorneys' fees, arising from or in any way connected with: (1) 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 when the indemnified party performs a duty under this Easement, unless and only to the extent the negligence of any of the Indemnified Parties was a proximate cause; (2) the obligations specified in Paragraph 15, Costs and Liabilities, herein; and (3) the presence or release of hazardous or toxic substances on, under or about the Property, unless caused or released by the Indemnified Parties. 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

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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.

17. Real Property Interest. This Easement constitutes a real property interest immediately vested in Grantee. The parties agree that fair market value of this Easement relative to the fair market value of full fee title to the Property will be determined if needed at a later date by an appraisal. The appraisal shall be prepared in accordance with the guidelines for preparing a qualified professional appraisal that are contained in Section 170(h) of the Internal Revenue Code of 1986, as amended. For the purposes of this Easement, the ratio of the value of the Easement to the value of the Property as unencumbered by the Easement shall remain constant.
18. Condemnation or Other Extinguishment. If this Easement is taken, in whole or in part, by 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 party and the Board in writing when it first learns of such circumstances. The Board shall be entitled to receive sixty-two point five (62.5%) of the fair market value of the unencumbered property at the time of the condemnation or other extinguishment.
19. Assignment. This Easement is transferable, but Grantor directs, and Grantee hereby agrees, that Grantee may only assign its rights and obligations under this Easement to a qualified governmental entity of the State of Colorado ("governmental entity") that is (a) authorized to acquire and hold conservation easements under Colorado law, and (b) approved in writing as a transferee by the Board in its sole discretion. The Board may disapprove of the transfer for any reason, including but not limited to, the holder's desire to sell its interest in the Property. As a condition of such transfer, Grantee shall require that the conservation purposes that this Easement is intended to advance continue to be carried out. Grantee shall provide the Board with a written request to assign the Easement at least forty-five (45) days prior to the date of the assignment transaction. The Board shall have the right to require Grantee to assign its rights and obligations under this Easement to a different governmental entity if Grantee ceases to exist or for any reason fails or refuses to enforce the terms and provisions of this Easement. If Grantee ceases to exist prior to an assignment of this Easement, then the Easement shall automatically revert to a governmental entity designated by the Board that is authorized to acquire and hold conservation easements under Colorado law.
20. Subsequent transfers. Grantor shall incorporate the terms and conditions of this Easement in any deed or other legal instrument by which it divests itself of any interest in all or a portion of the Property, including, without limitation, conveyance of a leasehold interest to a third party. Grantor further agrees to give written notice to Grantee and the Board of the transfer of any interest at least forty-five (45) days prior to the date of such transfer. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way.
21. Additional Board Refund. The Board's Grant has provided partial consideration for Grantor's acquisition of fee title to the Property; therefore, any voluntary sale, conveyance, transfer, or other disposal of all or any portion of Grantor's interest in the Property shall constitute a material change to the Grant that shall require prior written Board approval and may require a separate refund to the Board (the "Additional Board Refund") in addition to any payment that the Board may be entitled to receive under Paragraphs 17 and 18 above.

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(A) The amount of the Additional Board Refund due to GOCO shall be determined by the ratio of GOCO's Grant divided by the original purchase price for the Fee Title Interest; b) then by multiplying the result by Grantor's net proceeds from the Sale; and c) adding interest figured from the Grant payment date at the Prime Rate published in the Money Rates section of the Wall Street Journal that is most current on the effective date of the Sale. GOCO may, in its sole discretion, waive the requirement for payment of interest or reduce the amount of interest due at the time of the Sale. The Additional Board Refund shall be paid to GOCO in cash or certified funds on or before the effective date of the Sale.

(B) Possible Exception to Refund Requirement. If a Sale occurs to a third party that is eligible to receive GOCO open space funding, and GOCO has provided written approval of the Sale, Grantor shall not be required to pay GOCO an Additional Board Refund, unless GOCO determines in its sole discretion that one or more other aspects of the Grant have changed that reduce the Grant's scope from that of the original Grant as approved by GOCO. For example, if the Grantor proposed that the Grant would include public access to the Property and the sale, transfer, or other conveyance of the Fee Title Interest will result in substantially the same amount and type of public access, GOCO will deem that a material change in the Grant's scope has not occurred and Grantor shall not be required to pay GOCO an Additional Board Refund. However, if GOCO determines in its sole discretion that one or more other aspects of the Grant have changed that reduce the Grant's scope from that of the original Grant as approved by GOCO, such as when a Sale occurs to a third party that is ineligible for GOCO funding, Grantor shall pay GOCO a refund in accordance with Paragraph 21(A) above.

22. Notices. Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor:

Director  
Larimer County Parks & Open Lands Department  
1800 South County Road 31  
Loveland, CO 80537

To Grantee:

City of Greeley  
1000 10<sup>th</sup> Street  
Greeley, Colorado 80631

To the Board:

Executive Director  
State Board of the Great Outdoors Colorado Trust Fund  
1600 Broadway, Suite 1650  
Denver, CO 80202

or such other address as either party or the Board from time to time shall designate by written notice.

23. Grantor's Title Assertion. Grantor asserts that Grantor has good and sufficient title to the Property, free from all liens and encumbrances securing monetary obligations, and hereby

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promise to take no actions which will encumber the property or cloud the title.

24. Subsequent Liens on the Property. No provisions of this Easement shall be construed as impairing the ability of Grantor to use this Property as collateral for subsequent borrowing, provided that any mortgage or lien arising from such a borrowing would be subordinated to this Easement.
25. Recording. Grantee shall record this instrument in timely fashion in the official records of each county in which the Property is situated, and may re-record it at any time as may be required to preserve its rights in this Easement.
26. General Provisions.
  - a. Controlling Law. This easement shall be governed by the laws of the State of Colorado.
  - b. Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to affect the purpose of this Easement and the policy and purpose of C.R.S. §38-30.5-101 et. seq. If any provision in this instrument 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.
  - c. Severability. If any provision of this Easement, or the application thereof to any person or circumstance, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.
  - d. Entire Agreement. This instrument 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 herein.
  - e. No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.
  - f. Non-Merger. No merger shall be deemed to have occurred hereunder or under any documents executed in the future affecting this 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.
  - g. Successors. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property.
  - h. Termination of Rights and Obligations. Provided that the Board has consented to a transfer, 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.
  - i. Captions. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

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- j. Amendment. If circumstances arise under which an amendment to or modification of this instrument would be appropriate, Grantor and Grantee are free to jointly amend this instrument; provided that no amendment shall be allowed that will affect the qualifications of this instrument under any applicable laws; and provide that the prior written approval of the board shall be required. Any amendment must be consistent with the conservation purposes of this instrument and may not affect its perpetual duration. Any amendment must be in writing, signed by both parties, and recorded in the records of the Clerk and Recorder of Larimer County, Colorado.
  
- k. Termination of the Board. In the event that Article XXVII of the Colorado Constitution, which established the State Board of the Great Outdoor Colorado Trust Fund, is amended or repealed to terminate the Board or merge the Board into another entity, the rights and obligations of the Board hereunder shall be assigned to and assumed by such other entity as provided by law, but in the absence of such direction, by the Colorado Department of Natural Resources or its successor.

TO HAVE AND TO HOLD this Deed of Conservation Easement unto Grantee, its successors, and assigns forever.

IN WITNESS WHEREOF Grantor and Grantee, intending to legally bind themselves, have executed this Deed of Conservation Easement on the day and year first above written.



ATTEST:  
*[Signature]*  
Deputy Clerk of the Board

GRANTOR

BOARD OF COUNTY COMMISSIONERS  
OF THE COUNTY OF LARIMER

By: *[Signature]*  
Chair

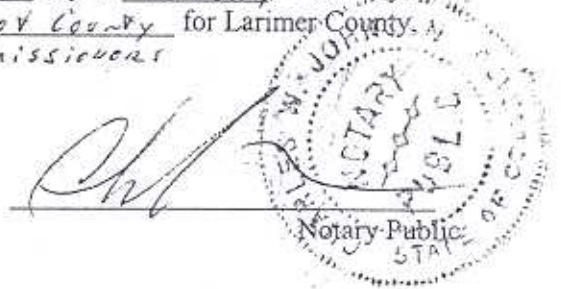
STATE OF COLORADO

) ss.

COUNTY OF LARIMER

The foregoing instrument was acknowledged before me this 6th day of February, 2004 by Kathay Kennels, as Chair, Board of County Commissioners for Larimer County, Colorado

Witness my hand and official seal  
My commission expires: 8-18-04



GRANTEE

THE CITY OF GREELEY, COLORADO

By: *[Signature]*  
Mayor

APPROVED AS TO LEGAL FORM:

By: *[Signature]*  
City Attorney



*[Signature]*  
Deputy

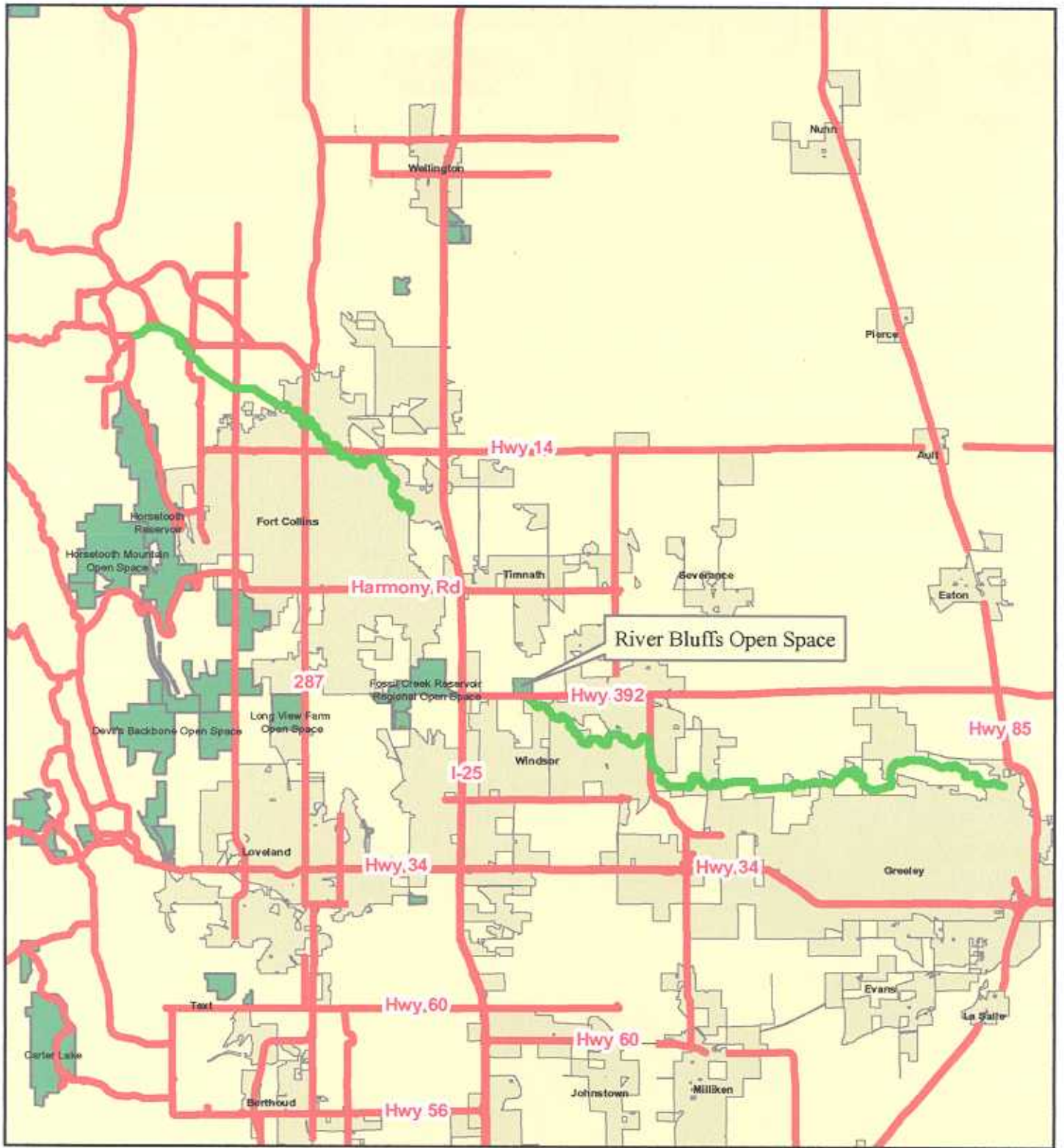
APPROVED AS TO SUBSTANCE:

By: *[Signature]*  
City Manager

AVAILABILITY OF FUNDS:

By: *[Signature]*  
Director of Finance

Appendix C: Map Figures  
 Figure 1. Location of River Bluffs.



**Legend**

- Poudre River Trail
- Highways
- Larimer County Parks and Open Lands
- Cities



Figure 2. Location of existing fences and ditches.

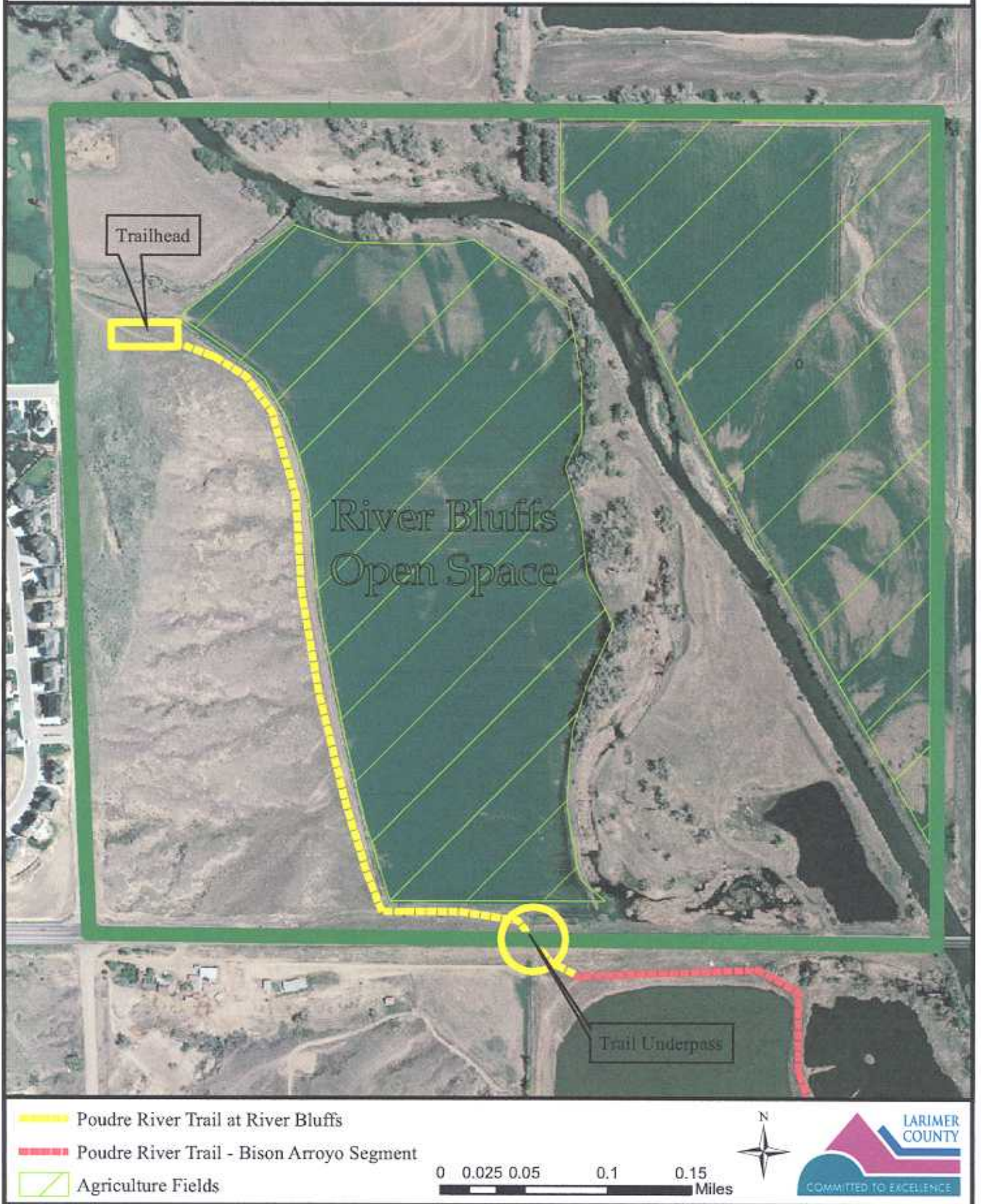




Figure 4. Natural Resource Management Targets.



Figure 6. Agriculture and Recreation Targets.



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