OPEN SPACE BOARD OF TRUSTEES

Wednesday, November 13, 2013 at 6:00 p.m.

Council Chambers, 1777 Broadway

MEETING AGENDA
(Please note that times are approximate.)

6:00 I. Approval of Minutes

6:05 II. Public Participation for Items Not on the Agenda

6:15 III. Director's Updates
A. Boards and Commissions Committee Update
B. Beech Property Management Plan (included)
C. Flood Update

7:15 IV. Matters from the Board

7:30 V. Adjournment

*Public Participation

MEMORANDUM

TO: Open Space Board of Trustees

FROM: Michael D. Patton, Director
Mark D. Gershman, Environmental Planning Supervisor
Kacey K. French, Environmental Planner

DATE: November 13, 2013

SUBJECT: Open Space and Mountain Parks and Boulder County Parks and Open Space Joint Property Management: Beech Property Management Plan

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Executive Summary
The Beech Property Management Plan (Attachment A) was completed in fulfillment of a requirement in the "Boulder County and City of Boulder Jointly Owned Open Space Management Intergovernmental Agreement." The primary purpose of the plan is to document how Open Space and Mountain Parks (OSMP) will manage the jointly-owned property and to provide Boulder County Parks and Open Space (BCPOS) with a plan describing OSMP's management.

There are two main components of the Beech Property Management Plan. The first describes the existing conditions including, but not limited to, vegetation composition, wildlife habitat, hydrology, recreation resources and visitor access. The second component of the plan focuses on the policy and plan guidance which provides the answer to the question of how OSMP staff will manage the property. The plan and policy guidance is provided by:

- The Boulder City Charter
- Boulder Valley Comprehensive Plan
- Open Space Long Range Management Policies
- Grassland Ecosystem Management Plan (Grassland Plan)
- Visitor Master Plan (VMP)

Background
The "Boulder County and City of Boulder Jointly Owned Open Space Management Intergovernmental Agreement" (Appendix A of Attachment A) states a plan describing the ecological, agricultural and recreational management of the properties shall be created by the respective lead agency, in this case, OSMP.

OSMP lands are managed on a landscape scale, taking into account a larger area than a single property. Therefore, OSMP plans are not typically property specific but rather structured to address larger areas (e.g. grasslands, forests or trail study areas). ***In keeping with the organization and structure of OSMP's current visitor and resource management plans, the Beech Property Management Plan does not contain or propose any new recommendations or***

management actions, but instead summarizes and compiles the applicable recommendations and management strategies from existing plans.

BCPOS was provided a copy of the Beech Property Management Plan with the opportunity to comment. BCPOS staff reviewed and commented on the plan, stating it is consistent with the county's management goals and is acceptable.

ATTACHMENT
Attachment A: Beech Property Management Plan

BEECH PROPERTY MANAGEMENT PLAN

City of Boulder
Open Space and Mountain Parks

October 2013

Developed in Fulfillment of Commitments in the Boulder County/City of Boulder Intergovernmental Agreement on the Management of Properties Held Jointly in Fee (2005)

OPEN SPACE AND MOUNTAIN PARKS MISSION & CHARTER

Open Space Mountain Parks Mission:

The Open Space and Mountain Parks Department preserves and protects the natural environment and land resources that characterize Boulder. We foster appreciation and use that sustain the natural values of the land for current and future generations.

ARTICLE XII. OPEN SPACE

Sec. 176. Open space purposes – Open space land.

Open space land shall be acquired, maintained, preserved, retained, and used only for the following purposes:

(a) Preservation or restoration of natural areas characterized by or including terrain, geologic formations, flora, or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or that represent outstanding or rare examples of native species;

(b) Preservation of water resources in their natural or traditional state, scenic areas or vistas, wildlife habitats, or fragile ecosystems;

(c) Preservation of land for passive recreational use, such as hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing;

(d) Preservation of agricultural uses and land suitable for agricultural production;

(e) Utilization of land for shaping the development of the city, limiting urban sprawl, and disciplining growth;

(f) Utilization of non-urban land for spatial definition of urban areas;

(g) Utilization of land to prevent encroachment on floodplains; and

(h) Preservation of land for its aesthetic or passive recreational value and its contribution to the quality of life of the community.

Open space land may not be improved after acquisition unless such improvements are necessary to protect or maintain the land or to provide for passive recreational, open agricultural, or wildlife habitat use of the land. (Added by Ord. No. 4996 (1986), 1, adopted by electorate on Nov. 4, 1986.)

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PURPOSE

The purpose of the Beech Management Plan is to describe the ecological, agricultural, and recreation management of the jointly owned Beech property. This plan is intended to fulfill the provision described in section III of the *Boulder County and City of Boulder Jointly Owned Open Space Management Intergovernmental Agreement (IGA)* (2005), Appendix A, which states a plan describing the management of the jointly owned property shall be created by the Lead Agency. The City of Boulder, Open Space and Mountain Parks (OSMP) is the Lead Agency for the Beech property.

GENERAL DESCRIPTION

The Beech property encompasses 1,200 acres, mostly grasslands at the base of the foothills. Beech is located within one of the largest patches of mixedgrass prairie on Boulder Open Spaces lands. U.S. 36 (North Foothills Highway) bisects the property into a 680 acre parcel on the east side of the highway (East Beech) and a 520 acre plot on the west side (West Beech).

LOCATION AND ACCESS

The Beech property is located in central Boulder County just north, approximately a half mile, from the Boulder city limits (Figure 1). Please see Appendix B for the legal description of the property. Neva Road (CR #34) is the northern boundary for the East Beech. There is informal parking in Colorado Department of Transportation (CDOT) right-of-way. Left Hand Valley Reservoir is located along a portion of the eastern boundary.

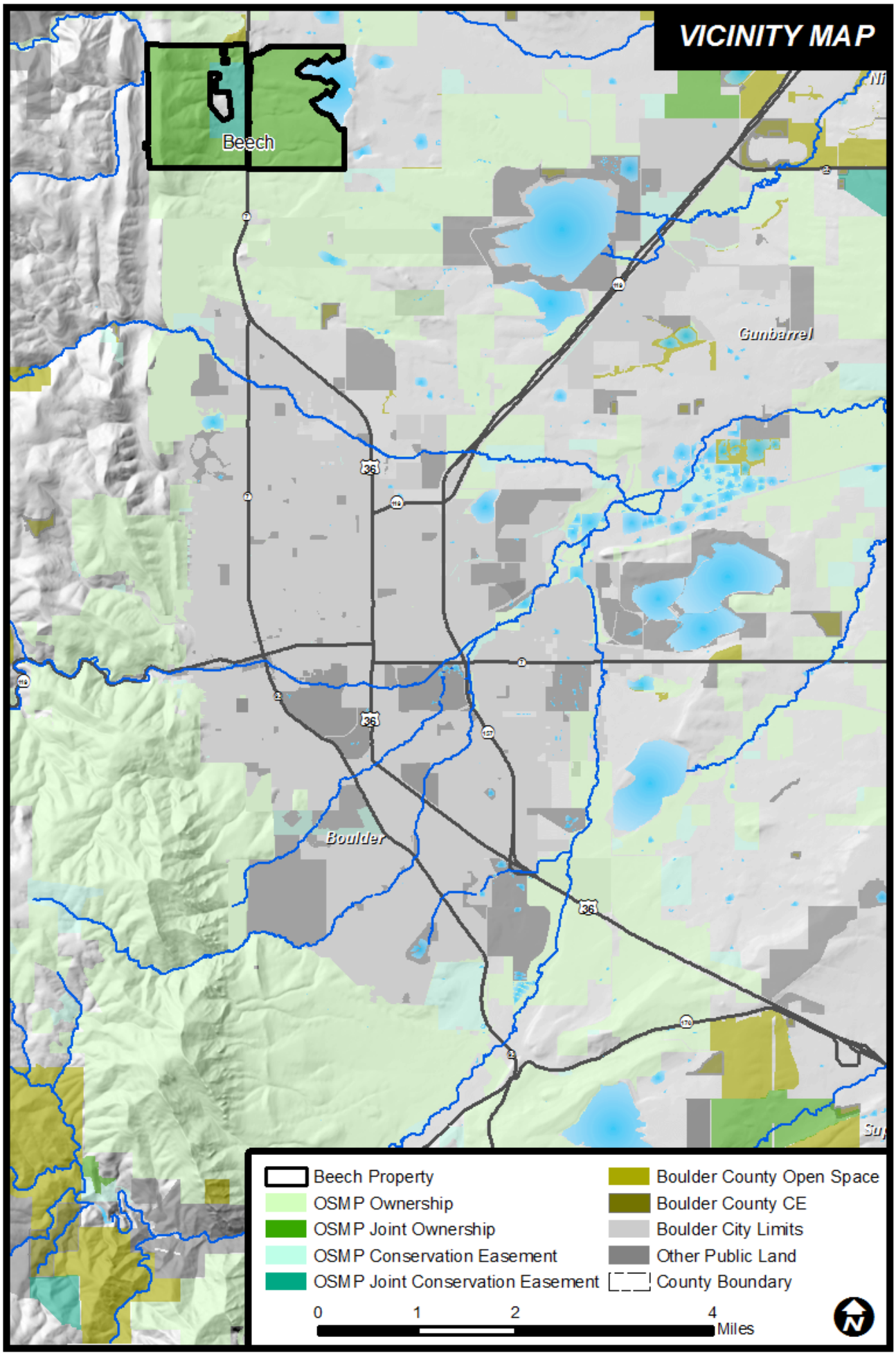
ACQUISITION AND OWNERSHIP

The Beech property was purchased in 1988. The purchase price was $1,500,000 and includes all minerals, oil, and gas. Boulder County provided $250,000 at closing and the City of Boulder executed a promissory note and a deed of trust for the balance of $1,250,000 with an interest rate of 7.75%. The payments were made over a 20 year period, ending in 2008. The first six payments of $48,437.50 were made by Boulder County; the remaining 14 payments of $191,636.76 were made by the City of Boulder.

LANDSCAPE CONTEXT

The Beech property is bordered by OSMP lands to the north and south and residential subdivisions to the west and east. The majority of the Beech property is zoned agricultural however, the Foothills Business Park, on which the City of Boulder, OSMP and Boulder County, Parks and Open Space (POS) own a conservation easement, is zoned Light Industrial.

Figure 1: Vicinity Map



NEIGHBORING PROPERTIES

The properties adjacent to the Beech Property include (Figure 2):

- An in-holding of private property, the Foothills Business Park owned by Raytheon Holding LLC. The City of Boulder, OSMP and Boulder County, POS hold a conservation easement on the majority of the parcel.
- The Nejezchleb, Schneider, and Boulder Land Irrigation & Power I properties to the south owned by the City of Boulder, OSMP.
- Private property (Old Stage Settlement subdivision) to the west.
- Private property and the Joder property owned by the City of Boulder, OSMP to the north.
- The Lefthand Valley Reservoir owned by the Lefthand Ditch Company and private property (Lake Valley Estates subdivision) to the east.

TOPOGRAPHY

The topographic relief of the Beech property is 1356' with the high point of 6671'elevation located on the hogback in the southwestern corner of the property and the low point of 5315' elevation located in the southeastern corner of the property. The property is characterized by long, parallel north-south ridges separated by valleys. The gradual rising slopes on the east side of the ridges and the shorter, steeper back slopes to the west produce the characteristic "hogback" appearance of the ridges. There are no other hard formations east of the hogback, and consequently it forms the eastern edge of the Rocky Mountains.

GEOLOGY

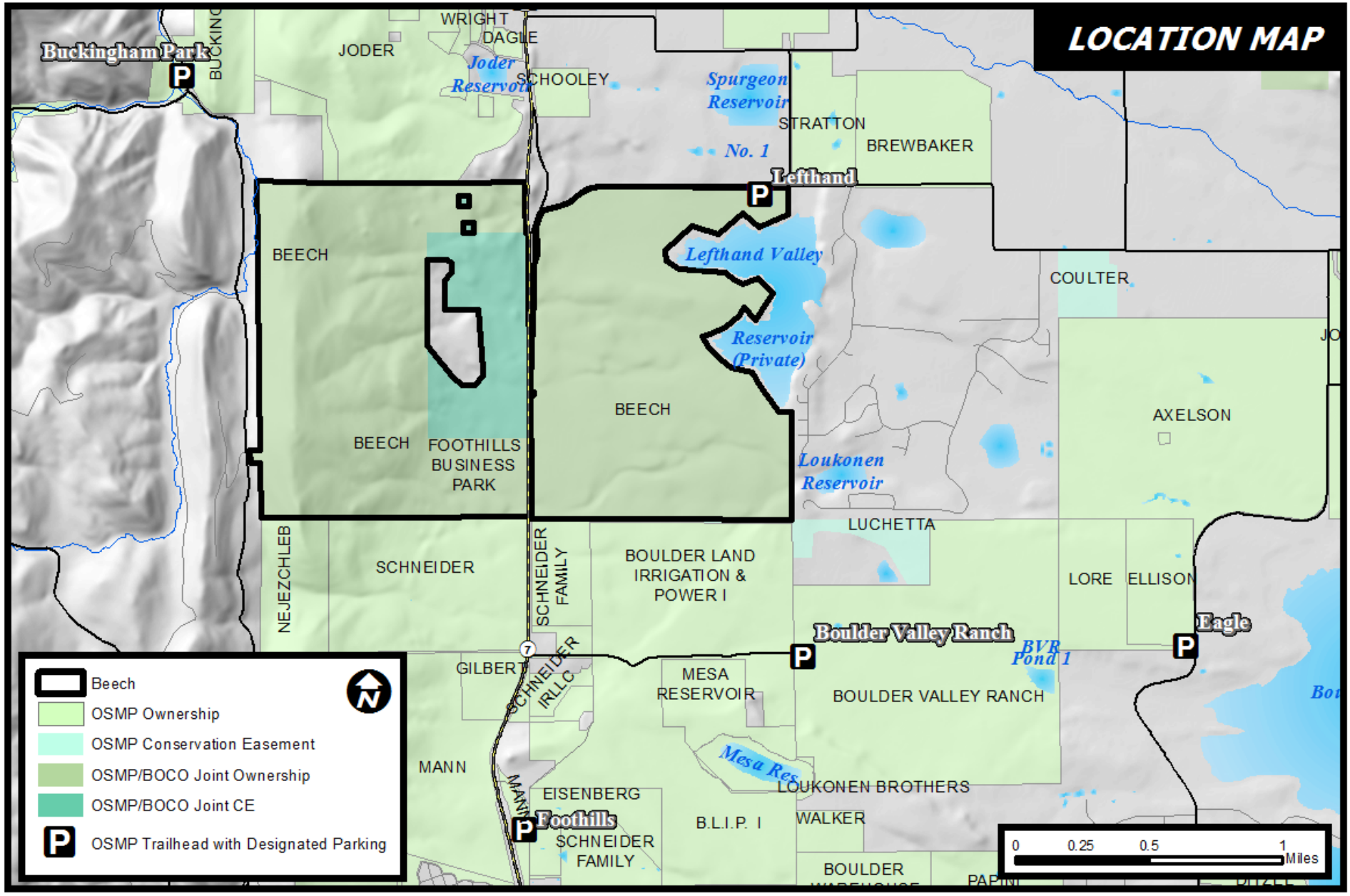
The individual layers of sedimentary rock consist of several types of sandstone, shale, and some limestone. The oldest exposed layers are the red sandstone beds of the lower part of the Early Triassic Lykins Formation. The formation is composed of about 550 feet of pale reddish-brown to moderate reddish-brown fine grained sandstone and siltstone. The youngest layers that are exposed are sandstone beds of the middle part of the Late Cretaceous Pierre Shale. This formation is about 7,000 feet thick, but only the lower part is exposed and is composed of sandy siltstone, silty to fine grained sandstone, and claystone.

The hogback is called the Dakota Hogback because it is held up by the relatively hard sandstones of the Dakota Group. Shale outcrops of the Niobrara and Pierre geologic formations, associated with shale barrens[1] occur on the Beech property.

On the property is the Six-Mile Fold which is of special interest to geologists. The Six-Mile Fold owes its name to a long asymmetrical anticline and syncline which might easily go unnoticed to an observer in the field, but which is prevalent when observed from the air. The Six-Mile Fold was the result of the uplifting of the Front Range and Rocky Mountains. Folding and warping occurred where the stress of the slow continuous uplift exceeded the elasticity of the rocks and faults and fractures resulted. (Heaslet & Wilder)

[1] See pg. 5 for additional information on shale barrens and the associated vegetation.

Figure 2: Location Map



SOILS

The relatively abrupt elevation rise marks a change in soils composition; the higher elevations and hogbacks in West Beech are composed of stony loams. The lower lying areas are underlain by a variety of clay loams, sandy loams, and cobbly clay loams interspersed with terrace escarpments along the edges of the various intermittent streams (Figure 3).

HYDROLOGY

There are five prominent drainages, several unnamed intermittent streams and numerous seeps located on the property (Figure 4). All but a small portion of the property drains to the east into the adjacent Left Hand Valley Reservoir and Loukonen Reservoir.

WATER RIGHTS AND IRRIGATION IMPROVEMENTS

There are no irrigation improvements or ditches on Beech. There are no water rights associated with the intermittent streams.

VEGETATION

The dominant cover type on East Beech is mixedgrass prairie. On West Beech the mixedgrass communities combine with xeric tallgrass prairie and riparian areas to form a biologically rich foothills grassland mosaic (Figure 5).

Mixedgrass prairie communities on East Beech are dominated by western wheatgrass, needle and threadgrass, New Mexico needlegrass, and big bluestem (Figure 6). The xeric tallgrass prairie is predominately located on West Beech and is characterized by big bluestem, little bluestem, prairie dropseed, sun sedge, and Porter aster. Shrubs such as ill scented sumac and yucca are prevalent with ponderosa pine on the most western parts of the property. Tallgrass prairie is considered rare and imperiled globally, and is one of the most endangered vegetation types in the world (Hoekstra et al.2005).

Bell's twinpod, a globally rare, state imperiled, Front Range endemic plant, occurs exclusively in shale barrens in Boulder and Larimer County (Kothera 2006) (Figure 7). The shale barrens on Beech provide habitat for a large portion of the Bell's twinpod population along the northern Front Range. The flora of shale barrens also includes a variety of forb species, grasses and small shrubs. Two rare plant communities, the Indian Ricegrass Shale Barrens and the New Mexico Feathergrass Herbaceous associations, are also affiliated with the shale barrens.

On West Beech the invasive plant of greatest management concern is Dalmatian toadflax. Mediterranean sage, which is the most prevalent, along with common teasel and myrtle spurge are also present and mandated for eradication by the Colorado Noxious Weed Act. East Beech has a higher concentration of invasive species, especially along the intermittent drainages; Mediterranean sage, myrtle spurge, and yellow toadflax are the highest priority for managing as they are mandated by the state for eradication.

Figure 3: Soils Map

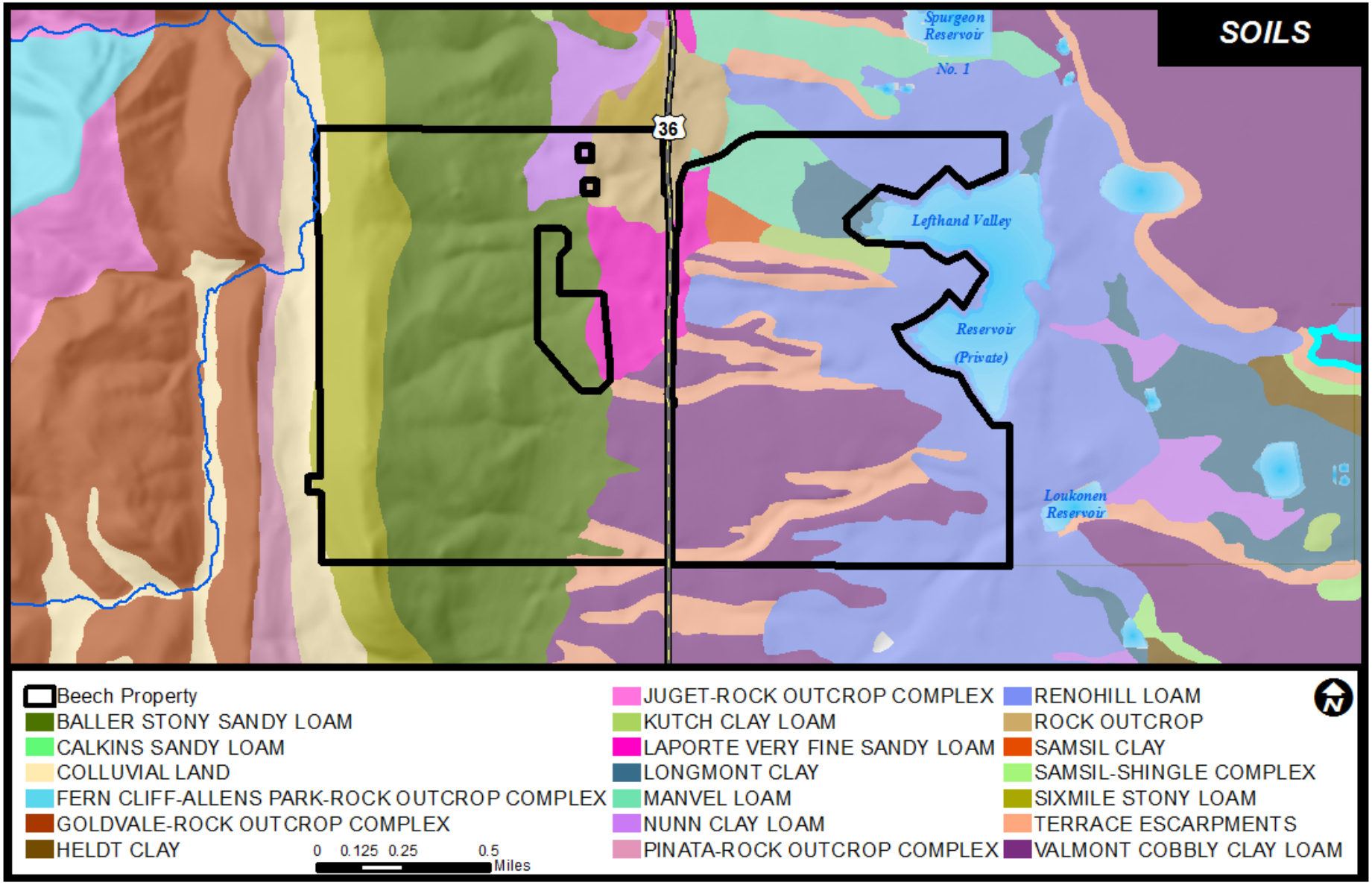


Figure 4: Hydrology Map

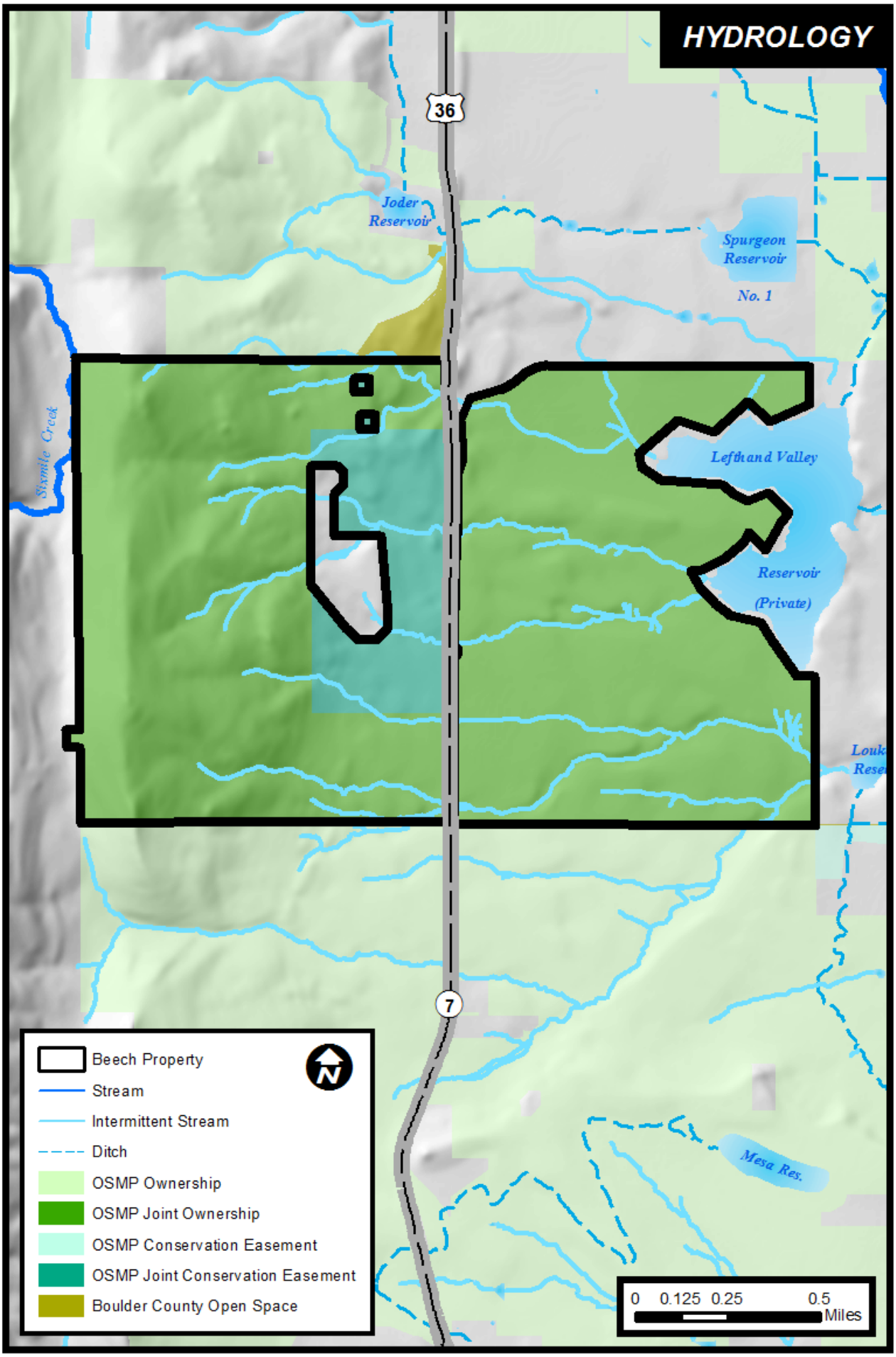


Figure 5: Ecological Systems

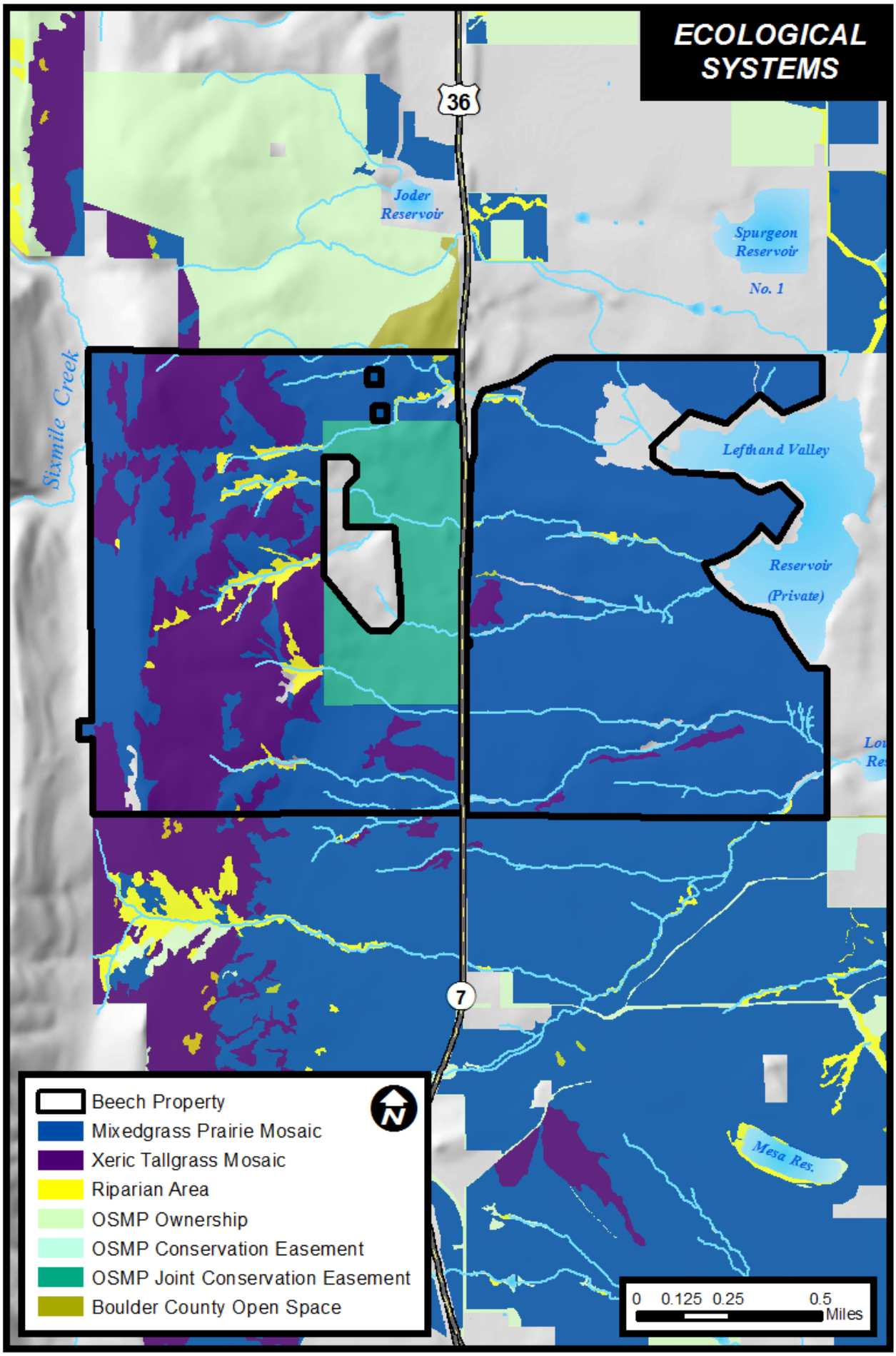


Figure: 6 Vegetation Alliances

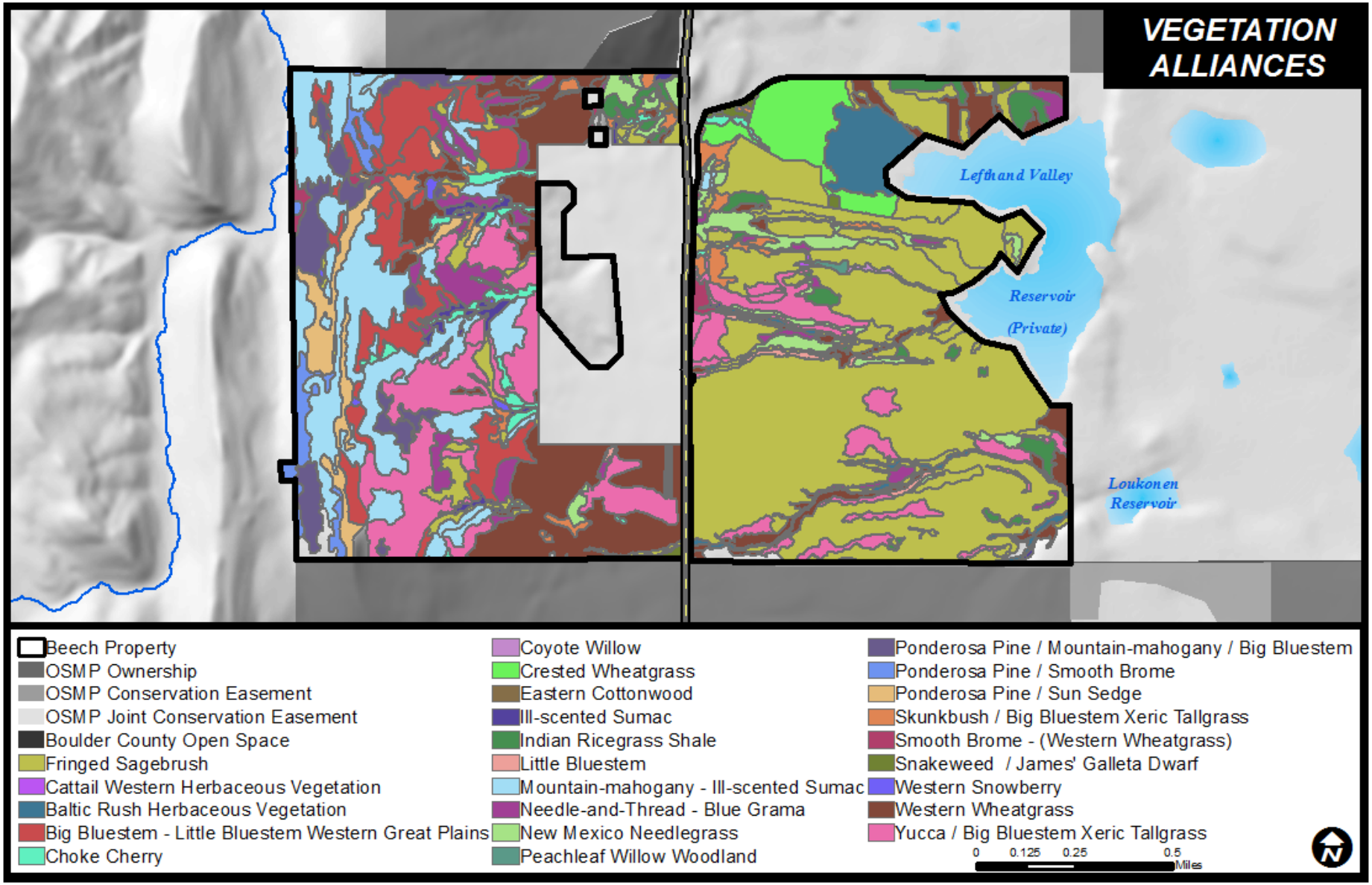
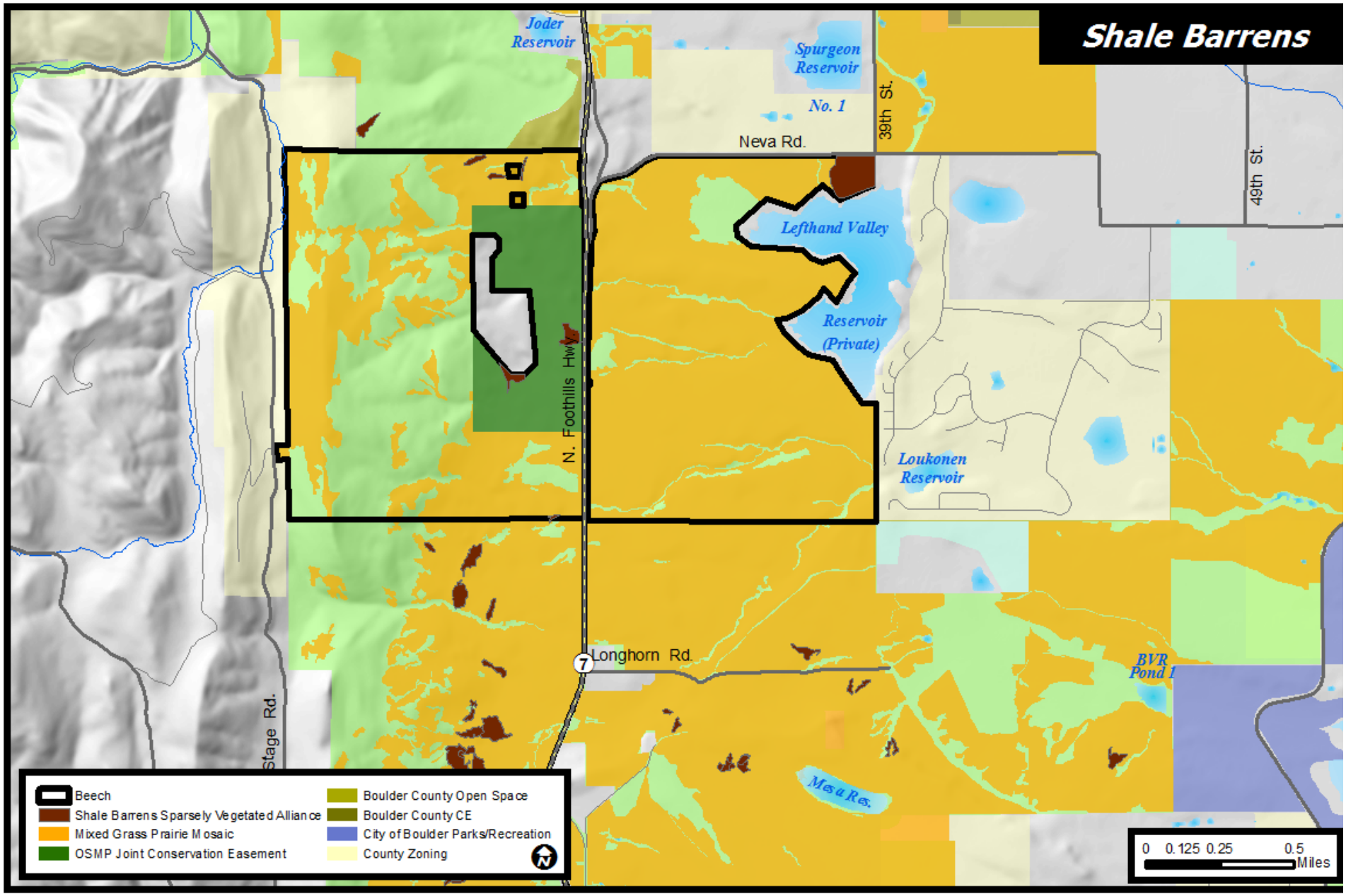


Figure: 7 Shale Barrens



WILDLIFE

A variety of habitat types can be found on Beech, and because of this, the property supports a considerably high level of wildlife diversity. Staff monitoring and outside researchers have documented the presence of rare butterflies, birds, snakes, mule deer, mountain lions, red fox, and elk. Golden eagles and ferruginous hawks have been observed foraging in the prairie dog colonies on Beech and long-eared owls have been observed roosting in the area.

In 2005, approximately 250 acres of the Beech property was inhabited by prairie dogs. Since then, an active epizootic of sylvatic plague dramatically reduced the number of occupied areas. In 2012, approximately 100 acres were inhabited by prairie dogs. Black-tailed prairie dogs have far-reaching impacts on the grasslands they inhabit and their presence provides prey and landscape structure necessary for the presence of associated species. Because of these far-reaching effects, prairie dogs are often considered "keystone" species (Kotliar et al. 1999, Hoogland 2006). Burrowing owls, American badgers, ferruginous hawks, and golden eagles are animal species associated with intact prairie dog colonies.

OSMP staff deployed five trail cameras on Beech (n=4) and an adjacent property (Schneider, n=1) in March 2012 to learn more about which wildlife species use the area. Below is a list of species, along with the number of photos taken of each species. Interestingly, the cameras caught a few photos of white-tailed deer, a species more common in grassland riparian areas than the foothills.

Complete species list from all five camera locations:

1) American robin (3)
2) Black bear (9)
3) Black-billed magpie (123)
4) Bobcat (43)
5) Brown thrasher (1)
6) Cottontail (61)
7) Coyote (476)
8) Dog (4)
9) Elk (73)
10) Fox squirrel (1)
11) Horse (16)
12) Human (43)
13) Mountain lion (1)
14) Mule deer (749)
15) Northern flicker (1)
16) Raccoon (18)
17) Red fox (8)
18) Rock squirrel (25)
19) Striped skunk (225)
20) Spotted towhee (1)
21) Western scrub jay (3)
22) White-tailed deer (3)
23) Wilson's snipe (1)
24) Woodrat (2)

Butterflies

Overall, Beech provides high-quality habitat for butterflies and skippers. Lepidoptera surveys were conducted by the Colorado Natural Heritage Program (CNHP) on Beech in 1997 (Pineda) and then again in 2013 (Sovell). Other researchers who surveyed butterflies on Beech include Collinge (2000) and Armstead (2003). Several CNHP-tracked species were observed during these surveys including the arogos skipper, two-spotted skipper, dusted skipper, crossline skipper, and ottoe skipper. Other grassland dependent butterflies found on Beech, and tracked by OSMP include the uncas skipper and garita skipper.

Snakes

Beech also provides high-quality habitat for snakes, including prairie rattlesnakes, milk snakes, black-headed snakes, and racers. In 2012 and 2013, the Center for Snake Conservation (CSC) conducted a survey of snake abundance and distribution in the area. In 2013, CSC and OSMP staff began a pilot study to monitor rattlesnake movement and habitat

use by attaching VHF-transmitters to individual snakes. This study, as well as snake abundance and distribution surveys, will continue in 2014.

Birds

OSMP conducted breeding bird surveys on Beech from 2008-2013. Staff visited 17 established transects twice between 1 June and 15 July of each year. As an attest to the diversity of the landscape, 58 species were detected including representatives of each habitat type: shrub-nesting birds like spotted towhees and blue-gray gnatcatchers were detected, as were forest-dwelling birds like plumbeous vireo and western wood pewee, grassland dependents like grasshopper and vesper sparrows were detected in the flats, and rock wrens were heard on the rocky outcrops and hogbacks. Below is a table representing all bird species detected from 2008-2012 on Beech and the number of individuals of each species.

Complete List of Bird Species Found on Beech

		Plumbeous vireo (2)
American crow (2)	Common grackle (1)	Red crossbill (1)
American goldfinch (8)	Common raven (1)	Rock wren (33)
American kestrel (10)	Common yellowthroat (3)	Red-tailed hawk (4)
American robin (5)	Dark-eyed junco (2)	Red-winged blackbird (10)
Bank swallow (5)	Downy woodpecker (1)	Say's phoebe (1)
Barn swallow (10)	Eastern kingbird (2)	Sage thrasher (1)
Black-billed magpie (15)	Grasshopper sparrow (19)	Song sparrow (1)
Blue-gray gnatcatcher (9)	Green-tailed towhee (3)	Spotted towhee (88)
Brown-headed cowbird (6)	Hairy woodpecker (1)	Steller's jay (3)
Black-headed grosbeak (1)	House finch (4)	Townsend's solitaire (1)
Blue grosbeak (2)	Horned lark (15)	Vesper sparrow (102)
Brewer's blackbird (8)	House wren (3)	Violet-green swallow (1)
Brewer's sparrow (3)	Lark sparrow (89)	Western kingbird (14)
Broad-tailed hummingbird (11)	Lazuli bunting (55)	Western meadowlark (188)
Bullock's oriole (10)	Lesser goldfinch (12)	Western tanager (4)
Canada goose (8)	Mountain bluebird (8)	Western wood-pewee (15)
Cassin's sparrow (8)	Mourning dove (50)	White-throated swift (6)
Chipping sparrow (5)	Northern Rough-wingeswallow (1)	Yellow-breasted chat (18)
Cliff swallow (24)	Pine siskin (1)	Yellow warbler (1)

LAND USE

Federal, state and local agencies developed agricultural land designations to prioritize lands for agricultural preservation (sometimes referred to as "prime farmland"). These are generally irrigated lands with adequate water supply. Figure 8 shows the significant agricultural lands on the Beech property. A portion of East Beech was historically tilled. However, no agricultural uses are currently present.

During the 1950's Beech Aircraft Inc., a subsidiary of defense contractor Raytheon Corp., established and operated a missile-fueling operation on the property and manufactured subassemblies for the aerospace industry. In 1987 Beech moved all operations except the missile fueling to other Beech facilities out of state.

In 1991, Boulder County Parks and Open Space staff discovered contaminated ground water near an old disposal pit west of Highway 36. It was found that contaminated ground water surfaces in one of the drainages and in seeps off site. In 1995, after investigation, Raytheon Corp. began monitoring and mitigating the contamination on Beech. The monitoring and mitigation efforts are ongoing. A summary of the contamination and monitoring is provided in Appendix C.

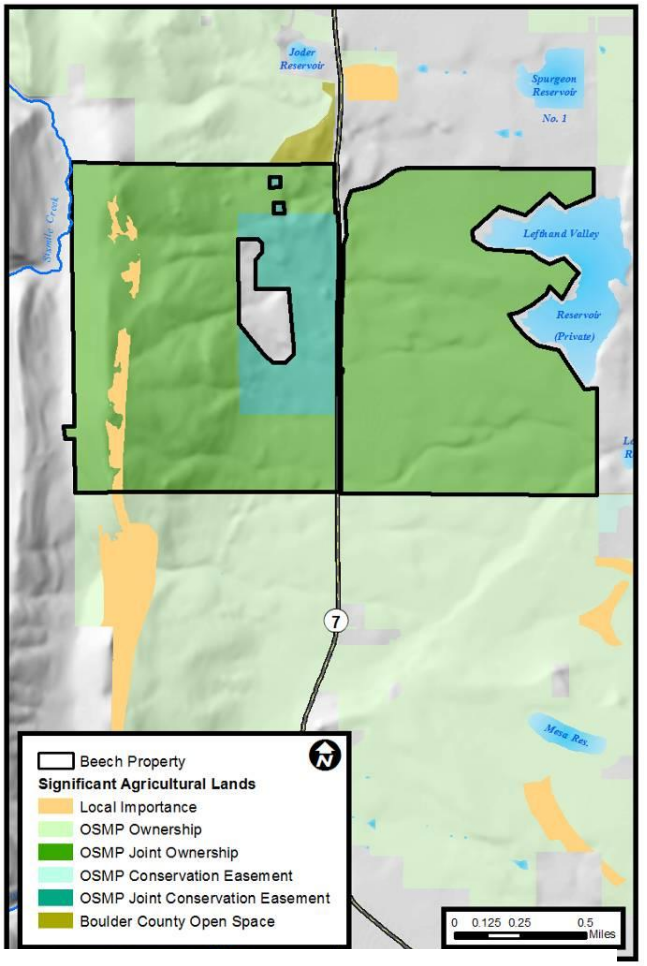


Figure 8: Significant Agricultural Lands

RECREATION RESOURCES AND VISITOR ACCESS

The Lefthand Trail runs north south through the eastern portion of East Beech and along the perimeter of the Lefthand Reservoir. The trail continues south onto OSMP property and connects into a larger network of trails, the Boulder Valley Ranch. The Lefthand Trail provides opportunities for hiking, biking, and horseback riding. Dogs, if leashed, are allowed (dogs not permitted off trail).[2] Boulder County Parks and Open Space maintains a bathroom and the reservable picnic shelter on West Beech which were recently updated and relocated to make them more accessible to visitors traveling on the Lefthand Trail.

The Lefthand Trailhead is located off Neva Road along the northern perimeter of East Beech. There is a neighborhood access point from the Lake Valley Estates subdivision in the southeast corner of East Beech. Visitors can also access the property by parking farther south at the Boulder Valley Ranch Trailhead.

[2] Leash requirement vary on the adjoining trails.

There is no visitor infrastructure (trails, trailheads, access points, etc.) on West Beech. A permit is required for off-trail travel on West Beech.[3] There is no charge for the permit and it is available on line or at the OSMP administrative offices.

Public access is prohibited from the area surrounding one of the drainages and an area in the northeast corner of West Beech due to ground water contamination.

IMPROVEMENTS

Improvements include fencing that exists along the entire perimeter of the property.(Figure 9) A recreation area was built by Beech Aircraft Inc. on East Beech. It covers approximately 20 acres and includes a large group pavilion with a fireplace, vault restrooms, ball diamond, volleyball court, horseshoe pit, and water/electric service. There is also an old corral on East Beech.

There are several miles of dirt/gravel roads on West Beech that were built and used by Beech Aircraft Inc. There is a double explosion bunker west of the industrial site as well as several unidentified structures and structural remains including an 80' pole and cable structure, foundation remains, and miscellaneous building materials. There are also two waste disposal sites adjacent to the northern boundary and two water storage tanks. There are seven wells and three stock watering tanks (used by wildlife now).

On the east side of the property there was a skeet shooting area near the entrance to the picnic/recreation area. It has been dismantled. However, lead shot and clay pigeon pieces still remain in the field.

[3] West Beech is designated as a Habitat Conservation Area (HCA). Off-trail travel in HCAs is only allowed via an off-trail permit. Please see the Visitor Master Plan guidance for more information OSMP's management designations including HCA's on page 29.

Figure 9: Visitor Access Map

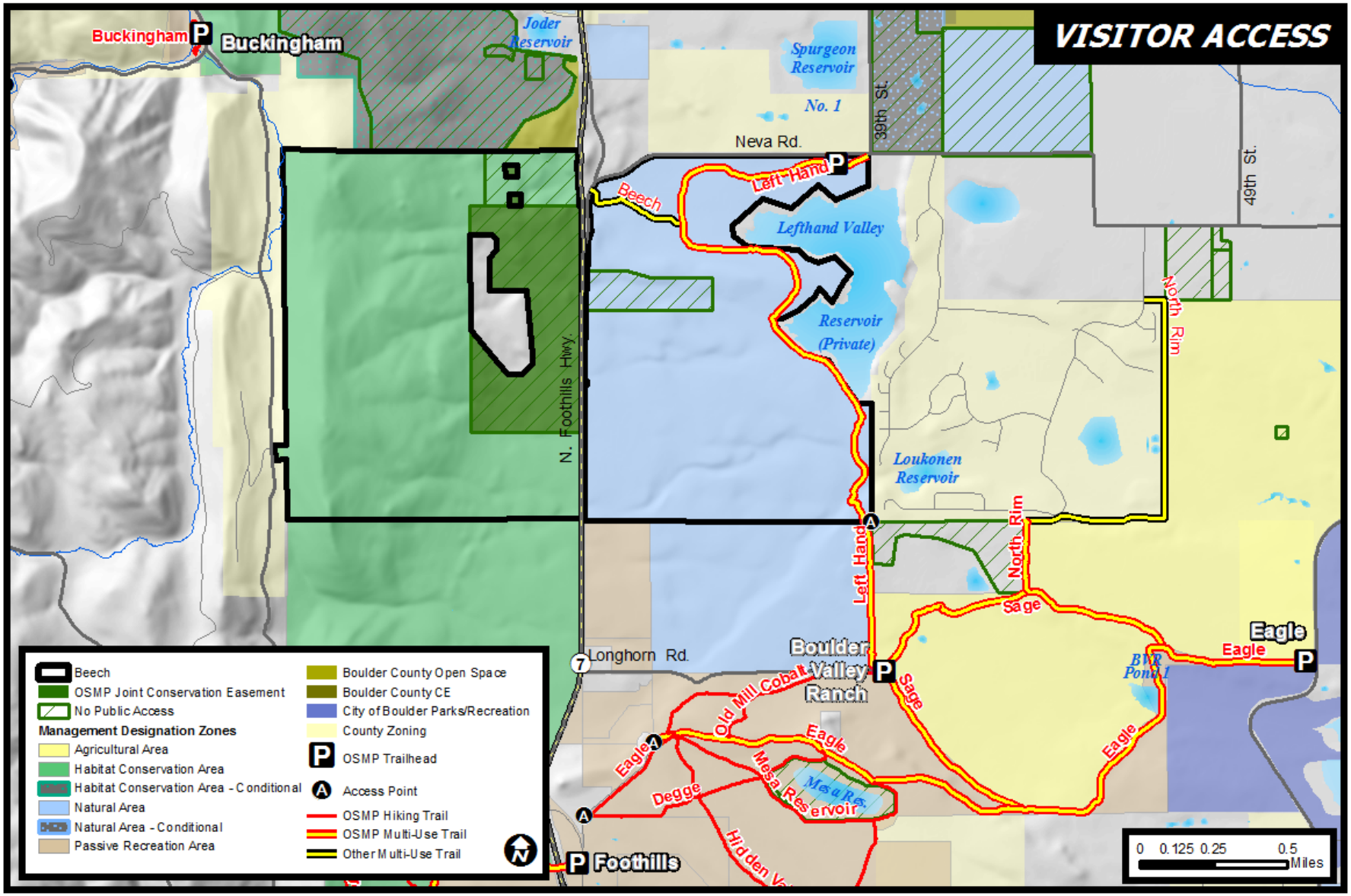
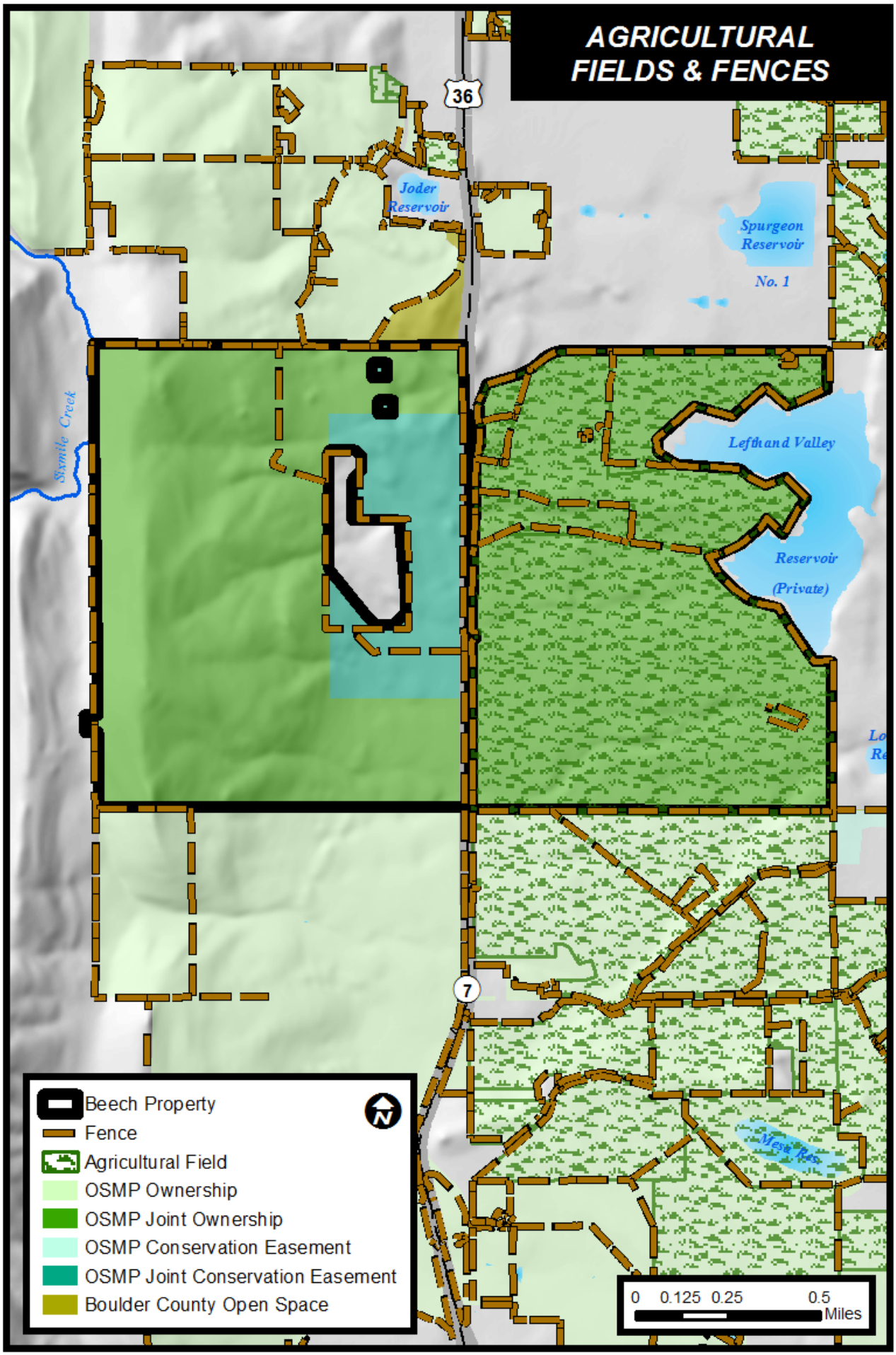


Figure 10: Agricultural Fields and Fences



POLICY AND PLAN GUIDANCE

Guidance for managing the Beech property is provided in several existing plans and policy documents that clarify how the City of Boulder will manage open space properties and provide services, including sustainable natural resource conservation and passive recreation. These planning documents include:

- Boulder City Charter
- Boulder Valley Comprehensive Plan
- Open Space Long Range Management Policies (LRMP)(OS, 1995)
- Grassland Ecosystem Management Plan (OSMP, 2009)
- Visitor Master Plan (VMP) (OSMP, 2005)

The Boulder City Charter, Boulder Valley Comprehensive Plan, and Open Space LRMP provide broader policy guidance while the Grassland Ecosystem Management Plan and VMP provide more specific policies and guidance for specific –on-the-ground management actions. A North Trail Study Area (TSA) plan is scheduled to be completed in the next several years. TSA plans were identified in the VMP as area-specific plans to establish implementation strategies that improve the visitor experience and provide a sustainable trail system while protecting natural and cultural resources.

Figure 11 illustrates the relationship of the OSMP adopted plans and policy documents. The figure shows a hierarchy of plans from general to more specific.

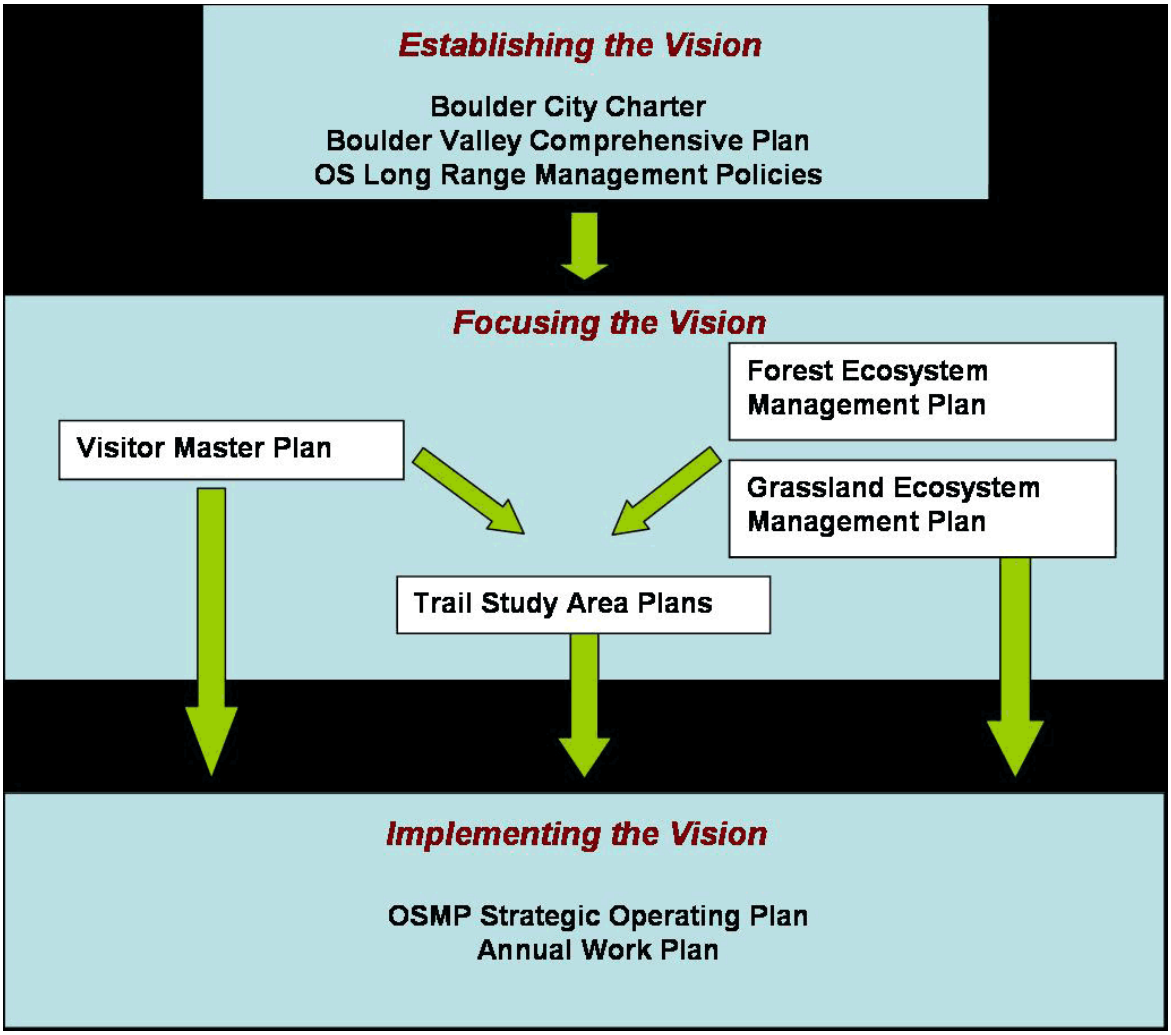


Figure 11: Relationship of OSMP Plans

BOULDER CITY CHARTER

Section 176 of *Boulder's City Charter* was established by public election. It lists the purposes for which open space land can be acquired, maintained and used. The full text of this section of the charter can be found on the inside cover of the plan.

BOULDER VALLEY COMPREHENSIVE PLAN

The City of Boulder and Boulder County have agreed upon a set of land use and management goals and policies to implement a shared community vision for the Boulder Valley. These goals and policies comprise the *Boulder Valley Comprehensive Plan* (BVCP). The BVCP states a clear intention for the City to preserve the agricultural and natural values of the lands and waters of the Boulder Valley through the acquisition and management of open space. The property is located in Area III of the BVCP as a Rural Preservation Area.

OPEN SPACE LONG RANGE MANAGEMENT POLICIES

The *Open Space Long Range Management Policies* (LRMP) were approved by City Council in 1995 and provide specific direction about program goals, decision-making processes, and management techniques. Chapters IV and V of the LRMP address natural resource management and agricultural management respectively. Chapters IX and X of the LRMP address the management of passive recreation and visitor facilities.

GRASSLAND ECOSYSTEM MANAGEMENT PLAN

The Grassland Ecosystem Management Plan (Grassland Plan) focuses on the conservation of OSMP lands dominated by mixedgrass and xeric tallgrass prairie. The Grassland Plan provides a framework for on-the-ground management actions, public policies and land and water acquisition priorities to conserve the ecological values of Boulder's grasslands and ensure on-going agricultural production. The Grassland Plan was accepted by City Council in 2010. The following section summarizes or contains excerpts of the Grassland Plan that are relevant to the management of the property.

Grassland Plan Targets

The Grassland Plan identifies "conservation targets," aspects of biological diversity that serve as the basis for setting objectives, taking action and measuring success. Five of the eight grassland targets are found on the Beech property:

- Mixedgrass Prairie Mosaic
- Xeric Tallgrass Prairie
- Black-tailed Prairie Dogs and Associates
- Wetlands
- Riparian Areas

Each of the conservation targets includes habitat for many species of plants and animals as well as a variety of plant associations. Some are of conservation concern, meaning that a species is threatened or endangered according to state or federal law, that they are considered rare or imperiled by the Colorado Natural Heritage Program, or that they have been found to be rare or in need of special conservation action at the local level. Appendix B of the Grassland Plan lists the species of conservation concern found in the targets along with their conservation status ranking. The species of concern are "nested" beneath the conservation target(s) with which they are associated. Nested targets should be conserved if the conservation targets with which they are associated are conserved.

In order to assess the viability of the conservation targets, a number of key attributes for each conservation target were identified. Key attributes are aspects of the target, which if altered, could result in the improvement, degradation or loss of the target. Indicators were also developed to track the status of the key attributes and targets over time. The key attributes and indicators for the targets on the Beech property are listed in Appendix C.

Table 1 summarizes the viability assessment for each of the targets on the Beech property and identifies a range of acceptable conditions. The assessment is organized by size, condition, and landscape context. For more details on the assessment please refer to Chapter III and Appendix D of the Grassland Plan.

Table 1: Summary Viability Assessment and Acceptable Conditions

Conservation Target	Size	Condition	Landscape Context	Overall Viability Rank
Mixedgrass Prairie Mosaic	Maintain at Good • at least one habitat block over 2,000 acres	Maintain at Good • stable populations (extent) of Bell's twinpod • weed species dominance <3% Improve to Good • occurrence of sensitive butterflies >10% • occurrence of grassland dependent butterflies >50% • weed species prevalence <9% • 75% of sampled sites with: ○ native species relative cover >88% ○ native species richness >33 ○ conservative species richness >17 ○ bare ground <10% ○ derived PIF score ≥3.9	Improve to Good • >50% of target experiencing 5-30 fire return interval • >60% of large (>247 acre) habitat blocks with singing male grasshopper sparrows	Fair
Xeric Tallgrass Prairie	Maintain at Fair • at least one block of habitat over 1,000 acres	Maintain at Good • weed species dominance <3% • no decrease in extent: ○ grassyslope sedge ○ dwarf leadplant or ○ prairie violet • 75% of sampled sites with: ○ butterfly host plant cover ≥8% Improve to Good • occurrence of sensitive butterflies >10% • occurrence of grassland dependent butterflies >50% • weed species prevalence <9% • 75% of sampled sites with: ○ native species relative cover >90% ○ native species richness ≥22 ○ conservative species richness >12 ○ bare ground <26%	Improve to Good >50% of target experiencing 5-30 fire return interval	Fair

Conservation Target	Size	Condition	Landscape Context	Overall Viability Rank
		derived PIF score ≥3.9		
Black-tailed Prairie Dogs and Associates	Maintain at Good • 800-3,137 acres occupied by prairie dogs	Maintain at Good • >2 prairie dog colonies with successful nesting by burrowing owls Improve to Good • >50% of colonies with territorial horned larks • generalist predators at 50% of colonies in grassland preserves ***and*** sensitive predators at 25% of colonies	Maintain at Good • >70% of land occupied by prairie dogs in protected status Improve to Good • all grassland preserves with prairie dog occupancy from 10-26%	Good

Wetlands	Key Attributes or Indicators Not Identified	Maintain at Good
		• on-going management for ULTO
		• presence of ULTO
		Improve to Good
		• > 50% of suitable habitat with native frogs and no non-native frogs
		• RAM weed species dominance < 3%
		• RAM weed species prevalence <9%
		• 75% of sampled sites with native relative cover ≥ 67%
		• 75% of sampled sites (ponds) with Secchi disk depth > 1.5 m
		• 75% of sampled sites (ponds) with total phosphorus concentrations of < 20 Ug/L
			Maintain at Good
			• 75% of wetlands:
			  ○ within 656 ft (200 m) of nearest wetland or riparian area
			Improve to Good
			• 75% of sampled sites:
			  ○ with buffer width > 165 ft (50 m)
			  ○ undesignated trail density in northern leopard frog habitat blocks < 13.4 ft/acre (10m/ha)
				Fair

Riparian Areas and Creeks	Key Attributes or Indicators Not Identified	Maintain at Good • no increase in aquatic nuisance species Improve to Good • >50% of suitable habitat with native frogs and no non-native frogs • weed species dominance <3% • weed species prevalence <9% • >50% of recruitments sites with cottonwood seedling	Maintain at Good • 2 or more successful bald eagle nests • 75% of sampled sites: ○ within 656 ft (200 m) of nearest wetland or riparian area Improve to Good • 75% of sampled sites:	Poor

Conservation Target	Size	Condition	Landscape Context	Overall Viability Rank
		• 75% of sampled sites: ○ fish IBI score >44 ○ macroinvertebrate IBI score >50 ○ exceed state water quality standards for dissolved oxygen ○ have total phosphorus concentrations less than 0.07 mg/L ○ instream habitat metric >10 ○ native plant relative cover ≥67% ○ derived PIF score ≥20	○ with buffer width > 165 ft (50 m) ○ undesignated trail density in northern leopard frog habitat block < 13.4 m/ha (10 m/ha) • no impediments to fish passage • improvement to instream flow • 1 or more overbank flooding events	

Best Opportunity Analysis

A best opportunity analysis was completed in the Grassland Plan to determine where the best opportunities exist to conserve each of the targets. These Best Opportunity Areas (BOA) will be used to prioritize where conservation action is implemented. There are multiple BOAs on the Beech property.

Upland Grassland Complex

The Mixedgrass Prairie Mosaic and Xeric Tallgrass Prairie were combined for the best opportunity analysis, referred to as the Upland Grassland Complex. Figure 12 illustrates the best opportunities for conservation and restoration of the Upland Grassland Complex. The conservation areas were selected because they:

- Represent concentrations of best quality vegetation areas,
- Are large, contiguous grassland habitat blocks including multiple conservation targets and nested target habitat,
- Have good restoration potential and landscape context.

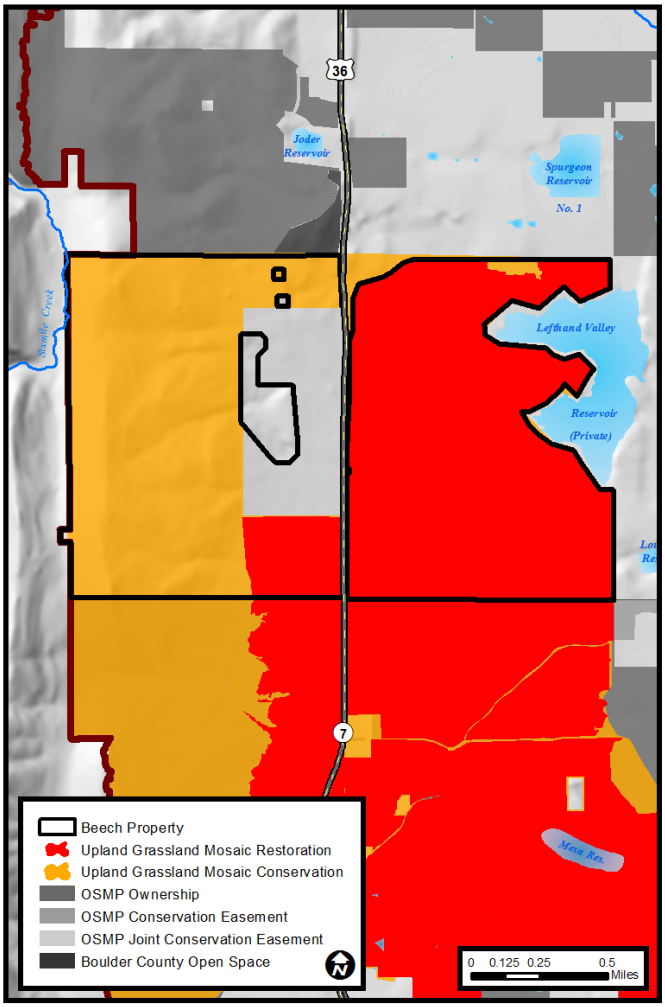


Figure 12: Upland Grassland Complex BOA

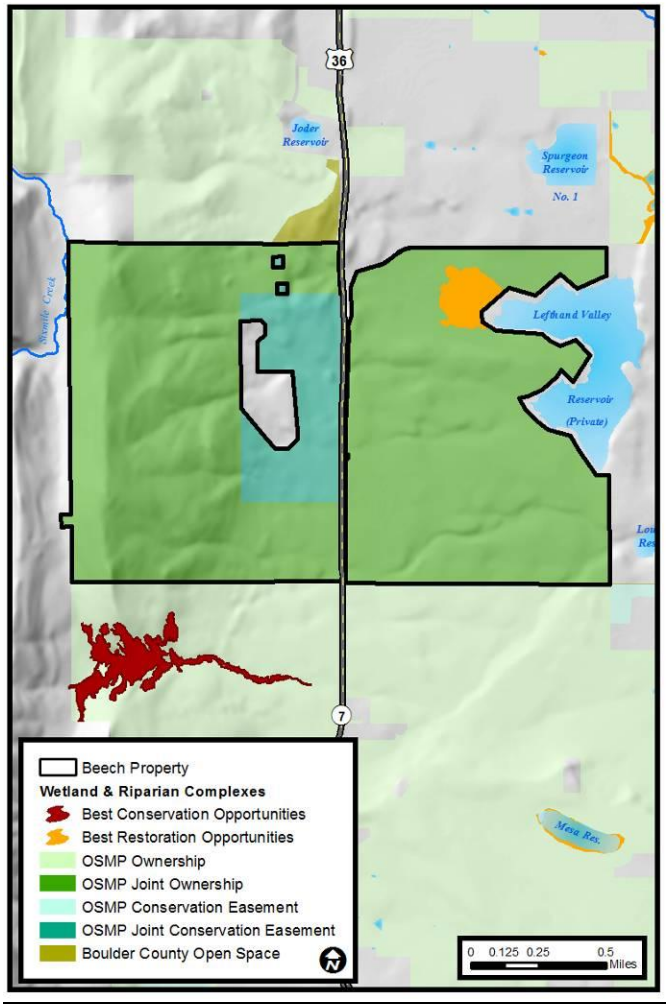


Figure 13: Riparian BOA for Conservation and Restoration

Wetlands and Riparian Areas

Figure 13 shows the approximate location of the wetland best opportunity restoration area on the Beech property. The wetland area was identified as a BOA for restoration because:

- Remnants of previously high functioning ecosystem exist,
- The indicator ratings were "fair" or better,
- It is in an area where partnerships are possible, and
- It is an area where restoration has been successful in the past and additional efforts would likely be effective.

Black Tailed-Prairie Dog and Associates

The best opportunity analysis for conserving the black-tailed prairie dog and its associates considers the habitat needs of the prairie dog and the needs of associated species. The best opportunity to conserve prairie dogs and their associates also integrates compatibility with other Grassland Plan targets and adjacent land use.

OSMP developed a black-tailed prairie dog Habitat Suitability Model using information about vegetation type, slope, soil texture and soil depth. The model predicts where the most suitable black-tailed prairie dog habitat occurs. Figure 14 shows the distribution of habitat suitability ratings on the Beech property. A detailed description of the habitat suitability model is included in Appendix H of the Grassland Plan.

A majority of the Beech property was designated as a Grassland Preserve (Figure 15). Grassland Preserves are considered the best opportunity to conserve prairie dogs and their associated species. In most cases, prairie dogs will be allowed to persist without removal in Grassland Preserves. However, removal will be allowed for the purposes of maintaining existing irrigation facilities such as headgates, ditches, lateral ditches, reservoirs, and irrigated fields.

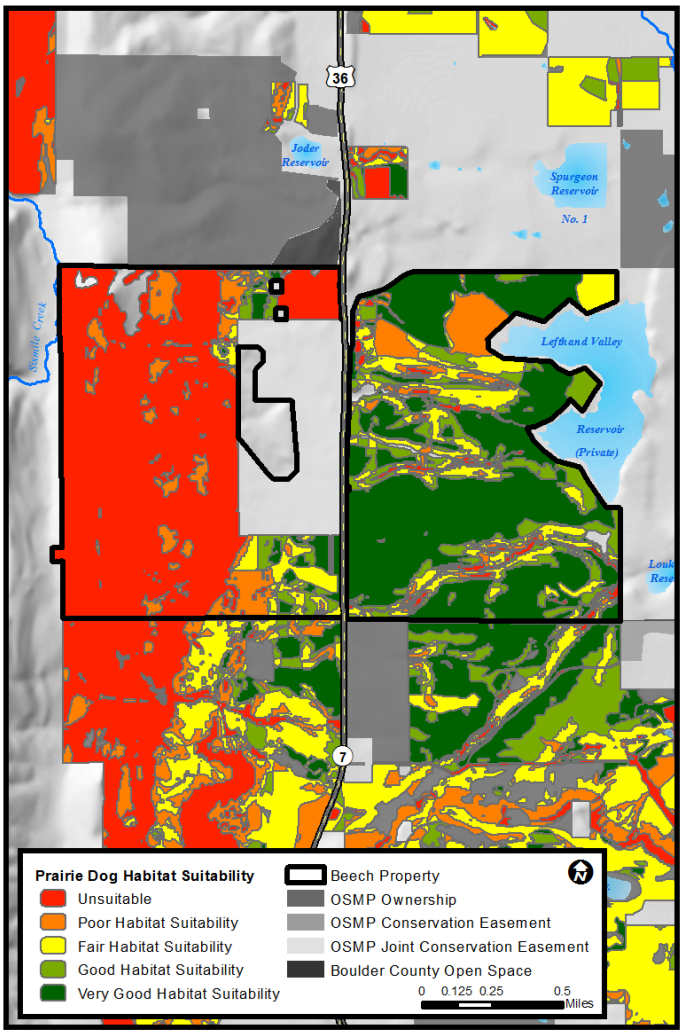


Figure 14: Black Tailed Prairie Dog Habitat Suitability

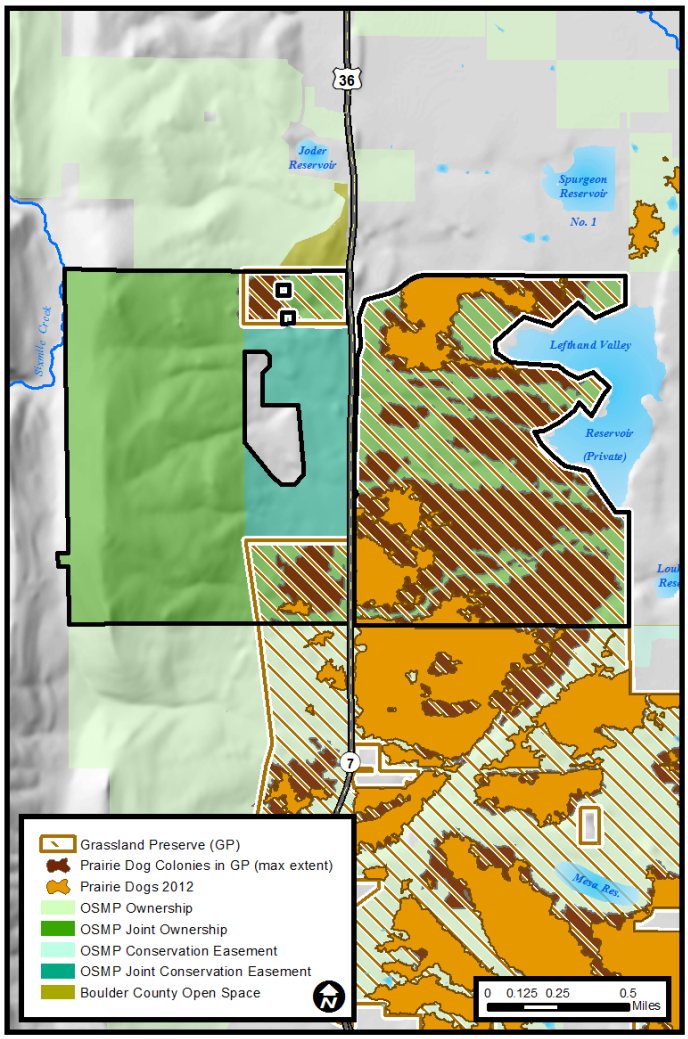


Figure 15: Grassland Preserve/ BOA to Conserve Prairie Dogs

Conservation Issues

Each of the targets has been degraded to some extent and face a variety of conservation issues. Table 2 summarizes the conservation issues affecting the targets found on the Beech property. Each conservation issue is ranked according to its scope and the severity of its effect upon each target. Chapter IV and Appendix F of the Grassland Plan provides details of the conservation issue assessment rankings.

Table 2: Conservation Issues and Rankings for the Grassland Plan Targets found on Beech

Conservation Issue	Mixed Grass Prairie Mosaic	Xeric Tallgrass Prairie	Black-Tailed Prairie Dog and Associates	Wetlands	Riparian Areas
Incompatible Trails/Recreation	High	High	Very High	Very High	High
Incompatible Surrounding Land Use	High	High	Very High	High	Very High
Incompatible Dog Management by Guardians	High	High	Very High	High	Medium
Invasive Plant Species	High	High	Medium	High	High
Invasive Animal Species				Very High	High
Incompatible Water Management/Use				Medium	Very High
Inappropriate Fire Management	High	High			
Incompatible Agricultural Practices	Medium	Low	High	High	Medium
Incompatible Prairie Dog Activity (Grazing/Burrowing)	High	Medium			
Sylvatic Plague			High		
Deferred Maintenance of Irrigation Infrastructure				Low	
Great Horned Owls					Medium
Conservation Issue Status for Targets	Very High	High	Very High	Very High	Very High

Conservation Strategies

The Grassland Plan identified 13 objectives for addressing the conservation issues. Like objectives were packaged, creating Grassland Conservation Initiatives. The following section presents the Grassland Plan initiatives along with the associated conservation objectives.

Initiative 1: Large Block Habitat Effectiveness

The focus of this initiative is to improve the conservation value of large habitat blocks so they are more likely to sustain the Grassland Plan targets.

Conservation Objective 1.1

By 2019, establish prairie dog, prairie dog commensal and prairie dog predator populations and population distribution within the range of acceptable variation.

Conservation Objective 1.2

By 2019, increase the bird conservation scores to at least 3.9 for the Mixedgrass Prairie Mosaic and Xeric Tallgrass Prairie.

Conservation Objective 1.3

By 2019, increase the frequency of singing male grasshopper sparrow to 60% within habitat block over 247 acres (100 ha) in the Mixedgrass Prairie Mosaic.

Initiative 2: Ecological Restoration

This initiative focuses on improving ecological processes and conditions to acceptable levels as defined by the viability indicator ratings for the eight Grassland Plan targets. These improvements will benefit both ecological viability and agricultural sustainability.

Conservation Objective 2.1

By 2019, reduce non-native plant species in Best Opportunity Areas of the Xeric Tallgrass, and Mixedgrass Prairie Mosaic targets to achieve at least a “Good” rating for prevalence.

Conservation Objective 2.2

By 2019, achieve “Good” rating for all vegetation composition and structure indicators in Best Opportunity Areas.

Conservation Objective 2.3

By 2019, increase fire frequency so that 50% of Upland Grassland Complex Best Opportunity Areas will have burned within the acceptable fire return interval.

Initiative 3: Aquatic Systems Management

This initiative focuses on wetlands, riparian areas, creeks and ponds.

Conservation Objective 3.1

By 2019, evaluate and restore riparian hydrology in Best Opportunity Areas.

Conservation Objective 3.2

By 2019, evaluate and restore wetland, riparian, and aquatic habitat in Best Opportunity Areas.

Conservation Objective 3.3

By 2015, increase by three the number of bullfrog-free ponds on OSMP managed lands supporting northern leopard frogs.

Conservation Objective 3.4

Prevent an increase in the extent and diversity of aquatic nuisance species in the Grassland Planning Area.

Conservation Objective 3.5

By 2019, reduce the undesignated trail density in northern leopard frog habitat blocks to at most 13.4 ft/ac (10m/ha).

Initiative 4: Agro-Ecosystems

This initiative focuses on sustaining agricultural uses while integrating agricultural and ecological conservation objectives.

Conservation Objective 4.1

Continue agricultural operations on OSMP lands to address the Charter purposes of OSMP.

Conservation Objective 4.2

Establish or continue agricultural management practices that support habitat for Ute ladies'-tresses orchid, bobolinks and other species of conservation concern.

Thirty-five strategies were identified in the Grassland Plan to achieve the objectives. Twenty-five of the 35 strategies are relevant to the management of the Beech property (Table 3). More detail about the strategies is included in Appendix L of the Grassland Plan.

Table 3: Grassland Plan Strategies Relevant to the Management of Beech

Strategy #	Strategy
1	Develop a safe and effective prescribed fire program for the Grassland Planning Area
4	Minimize the adverse effects of trail development in areas of special conservation value or sensitivity within the Grassland Planning Area, as part of TSA planning
7	Identify high-value grassland bird nesting areas and consider enacting seasonal protection measures through the TSA planning process, and, when necessary, prior to TSA planning
11	Develop a protocol to coordinate relocation of prairie dogs onto OSMP lands that is compatible with both the Urban Wildlife Management Plan and the Grassland Plan
12	Establish specific indicators and acceptable ranges of variation to fill information gaps
13	Treat non-native plant species in the grassland planning area using appropriate integrated pest management techniques
14	Establish, maintain, remove and exclude prairie dog colonies in accordance with prairie dog management designations
17	Collaborate with neighboring land management agencies to establish compatible land management practices
18	Create a large block of conserved grassland in the northern portion of the OSMP land system through acquisitions and management agreements.
19	Promote conservation of the Grassland Plan targets by increasing awareness of grassland values and conservation issues

Strategy #	Strategy
22	Construct or maintain hunting perches near reservoirs and prairie dog colonies to encourage use by raptors
23	Construct and maintain alternate nesting structures for sensitive raptors in best opportunity sites
24	Consider closing, restoring and discouraging the (re) establishment of undesignated trails in areas of special conservation value or sensitivity as part of the TSA planning process, and if necessary, prior to TSA planning
25	Consider establishing on-leash requirements in areas of special conservation value or sensitivity as part of the TSA planning process, and, if necessary, prior to TSA planning
26	Consider providing additional no-dog opportunities to protect areas of conservation value and sensitivity as a part of TSA planning
29	Establish and support the survival of plains cottonwoods and diverse and abundant shrub communities in riparian areas
30	Remove trees from grasslands at 75% of best opportunity sites
31	Treat wetlands dominated by non-native or invasive species using appropriate integrated pest management techniques
32	Participate in native fish recovery efforts with the Colorado Division of Wildlife
35	Assess changes to agricultural and water management in the Northern Grassland Preserve to achieve sustainability of numerous Grassland Plan targets.

Monitoring

The Grassland Plan established the following monitoring objectives to track the conservation targets:

- Evaluate the effectiveness of the strategies in achieving OSMP's conservation objectives.
- Track the current status of the conservation issues.
- Track the current status of the conservation targets viability.

Appendix D contains a list of the indicators selected to fulfill the monitoring objectives noted above. (OSMP staff will need to establish additional indicators to fill in information gaps.) In addition to listing the indicators, Appendix D summarizes how and when the monitoring will occur, and establishes a priority for the monitoring. Staff gave a "Very High" ranking to the indicators associated with grassland vegetation composition and structure, grassland nesting birds, establishment prairie dog protection and native frog presence. "High" ranked monitoring indicators includes those associated with rare plant species, sensitive birds, prairie dog associates, agricultural production and condition, aquatic faunal communities and habitat, non-native plant species and fire return interval.

OSMP will also coordinate with monitoring and data collection activities of other agencies and community groups.

VISITOR MASTER PLAN

The Visitor Master Plan (VMP), adopted by City Council in 2005, developed a framework that provides the goals and policies to deliver recreational facilities and services in a manner consistent with the conservation of natural and cultural resources.

The VMP organized OSMP lands into one of four management area designations. The management area designations provide the framework for determining the level of resource protection, what recreational opportunities are allowed and where, and the level of trail and facility development. West Beech was designated as a Habitat Conservation Area (HCA) and East Beech was designated as a Natural Area. There are goals that apply to the different management areas. The following sections will summarize the goals for HCAs and Natural Areas.

Habitat Conservation Areas

In HCAs the emphasis is on protecting high quality habitats while providing a more remote visitor experience.

The VMP identified 5 goals for HCAs:

- Maintain, enhance, and/or restore naturally functioning ecological systems.
- Maintain, enhance, and restore habitat for species of concern identified in the Boulder County and the Boulder Valley Comprehensive Plans.
- Provide public access and passive recreational opportunities that foster appreciation and understanding of ecological systems and have minimal impacts on native plant communities and wildlife habitats or other resources.
- Eliminate all undesignated trails, unless they are made part of the designated trails system or provide specialized access to appropriate low-use conditions.
- Where sustainable infrastructure exists, continue to allow public access to appropriate destinations.

Natural Areas

There are varying levels of visitor use in Natural Areas. Natural Areas can be both close to and remote from development and the conditions of natural ecosystems are variable--many areas have ecological systems in good condition, some have more evidence of human use and impacts.

The VMP identified four goals for Natural Areas:

- Accommodate low-impact visitor activities where adequate trails exist or can be built, and resource impacts can be minimized.
- Provide opportunities for passive recreational and educational activities that require topographic relief or a natural setting (e.g., hang/paragliding, climbing/bouldering, nature study, scenic viewing).
- Protect the quality of natural and agricultural resources (especially where high value resources exist).
- Eliminate undesignated trails when they are redundant or damaging to resources.

The VMP also identified management strategies for each management area designation. The management strategies for HCAs and Natural Areas are summarized in Table 4.

Table 4: VMP Management Strategies for HCAs and Natural Areas

Management Strategies for Habitat Conservation Areas and Natural Areas		
Management Issue	**HCA Strategy**	**Natural Area Strategy**
On-Trail Visitor Use	Require on-trail use except: (1) in a limited number of designated off-trail activity areas; or (2) if an off-trail permit is obtained for OSMP-sponsored activities or other limited and approved public use. Consider/provide designated on-trail access to selected destinations.	Encourage on-trail use. Require on-trail use insensitive areas and/or at specific times, unless an off-trail permit is obtained.
Trail Functions, New Trails, and Interconnected Trail System	Minimize new trails and trail density; locate new trails to minimize impacts on habitat quality. Consider designating/building trails that: • Do not impinge upon ecological systems • Provide appropriate access • Include appropriate linkages and connections	Build and maintain a hierarchy of trails that encourage visitors to travel on-trail and minimize impacts. New trails to important destinations will be considered. Improve and construct sustainable trail linkages to create an interconnected trail system.
Trail Design for Level of Use	Design and construct trails and other facilities to sustain a low level of visitor use.	Design and construct trails and other facilities to sustain a variable level of visitor use.
Undesignated Trails	High priority for management of undesignated trails. Minimize new undesignated trails. Management action for existing undesignated trails include: • Evaluate best management actions • Designate • Re-route • Close and reclaim	Variable priority for management of undesignated trails. Minimize new undesignated trails. Management actions for existing undesignated trails include: • Evaluate best management actions • Designate • Re-route • Close and reclaim • Retain undesignated trails • Monitor newly established or developing undesignated trails
Access to Areas Normally Closed to Visitors	Provide guided educational hikes in areas normally closed to visitor or require permits for off-trail use.	Provide guided educational hikes in areas normally closed to visitors.
Dog Management	Dogs are required to be on-trail, with some exceptions	Visitors are strongly encouraged to keep dogs on-trail.

Management Strategies for Habitat Conservation Areas and Natural Areas		
Management Issue	**HCA Strategy**	**Natural Area Strategy**
	allowing on-corridor voice-and-sight control. Dog management is predominantly on-leash. Dogs on-leash, dogs prohibited, dogs on-corridor voice-and-sight control, or seasonal dog requirements may be implemented.	Dog management is predominantly voice and- sight control. Dogs on-leash, dogs prohibited, or seasonal dog requirements may be implemented.
Nighttime Use	Trailhead parking prohibited 11 p.m. to 5 a.m. and a nighttime curfew encouraged one hour after dusk to one hour before dawn.	Trailhead parking prohibited 11 p.m. to 5 a.m.
Emphasis for Education and Enforcement Activities	Target educational and enforcement services to support on-trail visitor use and foster appreciation and protection of natural resources.	Target educational and enforcement services to reduce visitor conflict, foster appreciation and protection of the OSMP environment, and support resource protection.
Visitor Services and Facilities Matched to Level of Use	Provide a low level of visitor services and facilities, except those supporting basic protection and maintenance services.	Provide a moderate level of visitor services and facilities.

The VMP also provides guidance on implementation, and organizes recommended policies and management strategies into initiatives. Included in the initiatives are recreation opportunities, trails and facilities, resource protection and user conflict reduction.

The policies associated with the *Recreation Opportunities Initiative* are:
Support for High-Quality Passive Recreation and Education. Foster visitor enjoyment, connection with the land, and shared stewardship.
Diverse Recreational Opportunities. Continue to provide a wide range of passive recreation and outdoor education opportunities that are appropriate in a natural area setting and compatible with protection of natural, agricultural, and cultural resources.
Services for People with Disabilities. Provide service and facilities that expand opportunities for people with disabilities to enjoy passive recreational and educational activities.

The policies and strategies associated with the *Trails and Facilities Initiative* are:
Support for Visitor Trails and Facilities. Provide trails and facilities that support a quality visitor experience and protection of resources.
Travel Opportunities. Provide opportunities for visitor travel to major recreational destinations on safe, enjoyable, and physically and environmentally sustainable trails that offer a variety of experiences and challenge levels.
On-Trail Travel. Encourage visitors to travel on trail by: 1) providing designated trails to major destinations and links between trails that give visitors opportunities for longer-distance trail experiences and 2) providing education, signs, and maps.
Multi-Use Trails. Provide trails where visitors are permitted to travel using various options (e.g. on foot, on bike, on horseback, with dog, etc.), when travel options are compatible and environmentally sustainable.
Loop Trails. Provide options for visitors to travel on loop trails, where practical, feasible, and environmentally sustainable.
Physical Accessibility. Design trails and other visitor facilities to be accessible for people with disabilities when and where appropriate.
Trailheads. Provide safe and convenient trailheads, with periodic refurbishment or redesign as visitor needs change.
Alternative Modes. Provide facilities and services to visitors to encourage their use of alternate transportation modes (e.g. bike racks, co-location of trailheads and transit stops, etc.)
Infrastructure Priorities. Give priority to visitor infrastructure improvements that provide for visitor safety, maintain existing trails and facilities, improve physical and environmental sustainability, and protect resources. Build new trails and facilities, as needed and as financial resources allow.
Sustainable Maintenance. Implement a trail and facility maintenance program that is cost effective in meeting sustainability standards over the long term.
Facility Location and Design. Locate and design trails and facilities that are physically and environmentally sustainable, with the following requirements: Under normally scheduled maintenance and normal wear and tear, the trail or facility remains in an acceptable condition that provides intended access, safety, and visitor enjoyment and minimizes negative impacts on the environment such as accelerated drainage, erosion, spread of weeds, and others.
Integration. Integrate the goals of engendering stewardship, aesthetics, and resource protection into trail and facility design.
Funding for Infrastructure. Increase the overall level of funding for maintenance and construction of trails and other facilities over time, in order to “catch up” in deferred maintenance and enhance the visitor experience with improved infrastructure.

The policies associated with the *Resource Protection Initiative* are:

Resource Protection. While supporting high-quality visitor opportunities, take actions to prevent resource degradation and support restoration of native populations and ecological systems. The minimum objective of management actions is to "do no harm." Where recreational activities may, will, or could harm the environment, OSMP shall avoid, minimize, and mitigate impacts. Restricting visitor activities will be a last resort.

Sustainability. Support management actions that ensure long term, sustainable passive recreational experiences and natural values. To be sustainable in the long-term, visitor use must not:

- Degrade the integrity and diversity of natural, agricultural, and cultural resources
- Detract from the quality of recreational experience
- Overwhelm the capacity of facilities to provide acceptable levels of service

Management strategies will be directed at ensuring that future passive recreational experiences and the condition of the natural environment are of the same quality or better than they are today.

Managed Access. Strengthen management of visitor access to maintain acceptable, and reduce unacceptable, conditions related to the visitor experience, visitor infrastructure, and resource protection. Implement a system of "managed access" that maintains the quality of both the visitor experience and resources.

Protection of Sensitive Areas. Direct visitor use to appropriate areas and away from sensitive areas. Some uses or levels of visitor use may need to be limited or not allowed, in order to protect natural, agricultural, and cultural resources.

Designation of Activity Areas. Designate appropriate areas for specific passive recreational activities and identify areas where specific activities are not appropriate and will be prohibited, in order to protect the quality of visitor experience and preserve and protect resources.

Resource Conservation Design. Integrate resource conservation goals into guidelines for facility design, construction, and maintenance of trails, trailheads, and other visitor facilities.

Special Use and Commercial Use. Implement administrative oversight of special use activities and commercial operations through discretionary permit processes.

Review of New Activities. Evaluate whether or not "new" recreational activities are "passive" and appropriate on OSMP lands.

Prerequisites for New Properties. Complete site management plans and provide appropriate infrastructure for newly acquired properties before opening them for public access.

Competitive Events. Prohibit competitive events on Open Space and Mountain Parks lands because of unacceptable visitor and resource impacts.

The policies associated with the *User Conflict Reduction Initiative* are:

Conflict Reduction among Visitor Activities. Provide education and outreach services, publicize and enforce regulations, and construct infrastructure improvements that reduce conflict among visitors.

Targeted Areas for Conflict Reduction. Target efforts aimed at reducing visitor conflicts to areas with concentrated visitor use or congregation of specific activities that may lead to conflict.

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ORDINANCE NO. 7432

AN ORDINANCE ADOPTING THE BOULDER COUNTY AND CITY OF BOULDER JOINTLY OWNED OPEN SPACE MANAGEMENT INTERGOVERNMENTAL AGREEMENT.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BOULDER, COLORADO:

Section 1. The city council hereby adopts and approves the intergovernmental agreement, titled "Boulder County and City of Boulder Jointly Owned Open Space Management Intergovernmental Agreement," included as Attachment A and incorporated herein by this reference.

Section 2. The mayor is directed to sign the Boulder County and City of Boulder Jointly Owned Open Space Management Intergovernmental Agreement

Section 3. This ordinance is necessary to protect the public health, safety, and welfare of the residents of the city, and covers matters of local concern.

Section 4. The council deems it appropriate that this ordinance be published by title only and orders that copies of this ordinance be made available in the office of the city clerk for public inspection and acquisition.

INTRODUCED, READ ON FIRST READING, AND ORDERED PUBLISHED BY TITLE ONLY this 6th day of September, 2005.

By: _____
Mayor

Attest:

_____
City Clerk on behalf of the
Director of Finance and Record

READ ON SECOND READING, PASSED, ADOPTED, AND ORDERED PUBLISHED BY TITLE ONLY this 20 day of September 2005.

By: _____
Mayor

Attest:

_____
City Clerk on behalf of the
Director of Finance and Record

ATTACHMENT A

BOULDER COUNTY AND CITY OF BOULDER JOINTLY OWNED OPEN SPACE MANAGEMENT INTERGOVERNMENTAL AGREEMENT

THIS INTERGOVERNMENTAL AGREEMENT ("Agreement") by and between the City of Boulder, a Colorado home-rule municipal corporation (the "City") and the County of Boulder, a body corporate and politic of the State of Colorado (the "County") (collectively the "Parties") is made and entered into on this ___ day of _____, 2005.

WITNESSETH

WHEREAS, pursuant to Sections 29-1-203 and 30-11-410, C.R.S. as amended, local governments may cooperate or contract with one another to provide any function or service lawfully authorized to each of the cooperating or contracting units when such agreements are authorized by each Party to the agreement with the approval of the governing body and are encouraged to cooperate to promulgate regulations regarding the use and provision of regulatory enforcement for land within their respective ownerships and jurisdictions; and

WHEREAS, the Parties jointly own certain open space properties identified in Exhibit A attached hereto and incorporated herein by reference ("the Properties") and as legally described in Exhibit B attached hereto and incorporated herein by reference, and agree that it is in the best interest of the Parties and the citizens of the City and the County to further clarify their responsibilities with respect to management of the Properties; and

WHEREAS, the Parties intend to improve management of jointly owned open space by identifying a lead agency ("Lead Agency") for each of the Properties and to provide that the Lead Agency's rules, regulations, policies and plans shall control for those Properties to which it has been entrusted with management authority. The Lead Agency shall be either the City of Boulder's Open Space and Mountain Parks Department ("OSMP") or Boulder County's Parks and Open Space Department ("BCPOS"); and

WHEREAS, the Parties wish to affirm their existing and successful management relationship on jointly owned properties; and

WHEREAS, to the extent of any conflict, this Agreement shall replace the conditions of all previous agreements between the Parties relating to the identification of a lead land management entity and the handling of property management and management expenses or revenues, as well as regulatory or policy jurisdiction, such as purchase agreements, management plans and/or conservation easements for the following properties:

Beech
Beech Aircraft (aka Beech)
Foothill Business Park (aka Beech)
Superior Associates (aka Telleen)
Arsenault (aka Mayhoffer/Singletree)
Cito Company
Imel
Suitts (aka Suitts North)
Turunjian

IBM (aka IBM-Monarch); and

WHEREAS, the Parties have previously agreed to convert their separate interests in the Beech and Suitts properties into undivided fee ownership with mutual conservation easements.

NOW THEREFORE, in consideration of the above recitals and the mutual covenants and commitments herein, the Parties agree as follows:

I. PROPERTIES

The Properties shown on Exhibit A shall be managed in accordance with the terms and conditions of this Agreement. The Lead Agency for each of the Properties shall be as indicated on Exhibit A and set forth below:

City of Boulder Open Space and Mountain Parks Management	Approximate Acreage
Beech	1,267
Superior Associates (Telleen)	955
Total Approximate Acreage (City Lead)	**2,222**

Boulder County Parks and Open Space Management	Approximate Acreage
Arsenault (Mayhoffer/Singletree)	169
Cito Company	148
Imel	576
Suitts	142
Turunjian	58
IBM – Monarch	186
Total Approximate Acreage (County Lead)	**1,279**
Total Approximate Acreage Joint Fee Ownership Properties	**3,501**

II. PROPERTY USE

Use of the Properties shall be consistent with the purpose of existing acquisition agreements and in accordance with an approved management plan for each of the Properties.

III. PROPERTY MANAGEMENT

A. Rules, Regulations, Policies, and Plans

The rules, regulations, policies, and plans of the Lead Agency, as the Lead Agency is identified in Exhibit A, shall apply to each open space property jointly owned by the Parties. Notwithstanding the designation of a Lead Agency, the Parties shall retain their respective rights and responsibilities of land use review as otherwise provided by law. To the greatest extent possible, the Lead Agency management plan shall be consistent with existing conservation easements. In addition, neither Party shall accept any

grant or other approval that encumbers or obligates the property unless it first obtains the written consent of the other Party.

B. Property Management Plan

A plan describing the ecological, agricultural and recreational management of the Properties shall be created and approved by appropriate staff for each of the Properties by the respective Lead Agency no later than January 1, 2008. The Party that is not the Lead Agency for any individual Property shall be provided with notice as to any draft management plan and the opportunity to comment upon the draft before such plan is finalized. A Lead Agency Party may amend a management plan, provided that it shall first allow an opportunity for comment and consultation to the other party.

C. Management Costs

Property management expenses, including but not limited to maintenance and capital improvement costs, if any, shall be the responsibility of the Lead Agency. The Lead Agency will be entitled to the fees and revenues generated from all activities on Properties under its management, including but not limited to agricultural leases.

Meetings between the Parties may be held from time to time to discuss property improvements and funding needs. The cost of major property improvements shall be shared to the degree and in the amount agreed to in separate written agreements between the Parties.

In the event of any flood, fire or wind damage, or other catastrophic event on any Property, expenses or costs of restoration of the Property will be evaluated on a situation by situation basis and the Parties will meet to explore efficiencies and determine the appropriate, timely and mutually acceptable resolution.

D. Enforcement

Patrol and enforcement of rules, regulations, policies and plans shall be the responsibility of the Lead Agency or its assigns.

IV. NOTICE

Any notice sent from one Party to another pursuant to this Agreement shall be in writing and addressed as follows:

To the County:	Director of Parks and Open Space Department Boulder County P.O. Box 471 Boulder, CO 80306-0471
With a Copy to:	Boulder County Attorney P.O. Box 471 Boulder, CO 80306-0471

To the City:	Boulder City Manager P.O. Box 791 Boulder, CO 80306-0791
With a copy to:	Boulder City Attorney P.O. Box 791 Boulder, CO 80306-0791

V. LIABILITY

Subject to the provisions of the Colorado Governmental Immunity Act, each Party assumes liability for injury to persons and damage to property arising out of its occupancy and maintenance of the sites. Nothing contained in this Agreement shall constitute any waiver by the City or the County of the provisions of the Colorado Governmental Immunity Act or any other immunity or defense provided by statute or common law.

The City and the County certify that they are self-insured for property and general liability coverage, including errors and omissions to the limits set forth in the Colorado Governmental Immunity Act.

Each Party agrees to notify the other of any defects or potential defects, dangerous conditions or potential dangerous conditions, claims or potential claims from damage or injury that come to its attention in connection with its usage. Within fifteen (15) days after any litigation commenced against either Party that contains allegations against the other, the Parties will meet to explore efficiencies and determine the course of action in providing a defense, including, but not limited to, the potential for a join defense.

The Lead Agency shall be solely responsible for any costs or liabilities arising out of environmental conditions (such as hazardous waste contamination) that have been created or exacerbated by the conduct of the Lead Agency.

VI. AMENDMENTS

This Agreement contains the entire agreement of the Parties and any amendment may take place only upon the approval adopted by the governing body of each of the Parties after notice and hearing as required by law, other than those management plan amendments delegated to staff in Section III. B.

VII. SEVERABILITY

If any portion of this Agreement is held by a court of competent jurisdiction to be unenforceable as to any Party, the entire Agreement shall be terminated, it being the understanding and intent of the Parties that every portion of the Agreement is essential to and not severable from the remainder.

VIII. BENEFICIARIES

The Parties, in their corporate and representative governmental capacities, are the only entities intended to be the beneficiaries of the Agreement and no other person or entity is so intended or may bring any action, including a derivative action, to enforce the Agreement.

IX. GOVERNING LAW AND VENUE

This Agreement shall be governed by the laws of the State of Colorado, and venue shall lie in the County of Boulder. To the extent that any local law or ordinance of either Party conflicts with the provisions of a Lead Agency management plan, the local law or ordinance shall not be applied and an exemption in such local law or ordinance shall be in effect. To the extent of any conflict, Lead Agency management plans authorized by this Agreement shall supersede the terms of any conservation agreement applicable to the Properties that are the subject of this Agreement, provided however that there shall be no waiver or estoppel of either Party's ability to enforce any conservation agreement upon termination of this Agreement, and any period of limitations shall be tolled during the term of this Agreement.

X. WAIVER OF BREACH

A waiver by any Party or the breach of any term or provision of this Agreement shall not operate to be construed as a waiver of any subsequent breach by either Party.

XI. AGREEMENTS

Nothing in this Agreement shall affect any other agreements between the City and the County now in effect but shall replace, void, and supersede any and all existing or former joint maintenance language, management delegation, management expenses, and lease revenues contained in the specific purchase agreements and conservation easements listed in Paragraph I of this Agreement.

XII. TERM AND EFFECTIVE DATE.

This Agreement shall become effective upon the date set forth above after signature of an authorized representative of the governing bodies of each of the Parties. The term of this Agreement shall be ten years from its effective date. The Agreement may be renewed or terminated only upon the mutual written agreement of the Parties.

WHEREFORE, the Parties have entered into the foregoing Agreement to be effective on the date first above written.

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CITY OF BOULDER

By: _____
Mayor

ATTEST:

_____
City Clerk on behalf of
the Director of Finance and Record

Approved as to Form:

_____
Ariel Pierre Calonne
City Attorney

Date: _____

COUNTY OF BOULDER
Board of County Commissioners

By: _____
Chair

ATTEST:

_____
Clerk to the Board

Approved as to Form:

_____
H. Lawrence Hoyt
County Attorney

Date: _____

K \osos\a-IGA Co.-City-Mgm7432.lna DOC

Beech/Beech Aircraft

LEGAL DESCRIPTION

PARCEL I:

A part of the South ½ of the South ½ of Section 30 and a part of Section 31, Township 2 North, Range 70 West of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Commencing at tht Southwest corner of said Section 31, from whence the Northwest corner of said Section 31, bears North 00°00' East, 5275.67 feet; thence South 89°22'45" East, along the South line of said Section 31; 74.50 feet to a point on the Easterly right-of-way line of North Foothills Highway (U.S. Highway No. 36) as it is presently fenced, monumented and occupied, the TRUE POINT OF BEGINNING; thence Northerly, along said Easterly right-of-way line as follows: North 00°07'50" East, 791.22 feet; North 00°09'28" East, 1586.84; North 39°23'36" East, 77.73 feet; North 00°31'29" West, 58.80 feet; North 50°15'18" West, 63.10, North 00°12'44" East, 304.63 feet; along the arc of a 5650.00 foot radius curve to the right, 197.03 feet, said curve being subtended by a chord bearing North 01°12'20" East, 197.02 feet; North 02°12'30" East, 397.04 feet; North 02°11'09" East, 1189.17 feet; along the arc of a 5810.00 foot radius curve to the left; 369.33 feet, said curve being subtended by a chord bearing North 00°19'43" East, 369.27 feet; North 17°25'09" East, 211.71 feet; North 02°10'28" West, 564.10 feet; North 21°30'47" East, 330.98 feet to the South right-of-way line of Neva Road, as it is presently fenced and occupied; thence Easterly along said South right-of-way line as follows: North 74°53'01" East, 423.27 feet; along the arc of a 603.00 foot radius curve to the left; 237.33 feet, said curve being subtended by a chord bearing North 63°36'30" East, 235.80 feet; North 52°19'59" East, 213.22 feet; along the arc of a 543.00 foot radius curve to the right, 360.32 feet, said curve being subtended by a chord bearing North 71°20'36" East, 353.75 feet; South 89°38'48" East, 3737.77 feet to its intersection with the boundary of the Left Hand Valley Reservoir property as it is presently fenced and occupied; thence along said boundary; as fenced and occupied as follows: South 00°20'04" West, 539.99 feet; South 66°44'18" West, 621.56 feet; North 48°46'45" West, 426.72 feet; South 48°48'55" West, 639.84 feet; North 72°53'19" West, 547.15 feet; South 49°00'08" West, 717.20 feet; South 06°28'49" East, 197.39 feet; South 56°16'27" East, 316.24 feet; South 85°22'06" East, 900.34 feet; South 49°59'24" East, 207.87 feet; South 63°20'30" East, 222.39 feet; North 68°39'40" East, 313.28 feet; South 44°36'12" East, 414.74 feet; South 38°32'04" West, 183.59 feet; South 30°25'25"

Continued....

LEGAL DESCRIPTION

CONTINUED

PARCEL I Continued:

West, 438.38 feet; North 43°47'47" West, 340.78 feet; South 29°15'09" West, 163.76 feet; South 50°33'36" West, 378.33 feet; South 63°48'45" West, 320.44 feet; South 81°34'51" West, 168.35 feet; South 29°21'59" East, 257.64 feet; South 43°55'23" East, 317.17 feet; South 51°57'42" East, 277.06 feet; South 75°36'52" East, 445.94 feet; South 30°23'39" East, 510.77 feet; South 34°48'18" East, 613.04 feet; North 89°58'17" East, 251.62 feet; to a point on the East line of the Southeast ¼ of said Section 31; thence South 00°03'06" West, along the East line of the Southeast ¼ of said Section 31, 2133.10 feet to the Southeast corner of said Section 31; thence North 89°22'45" West, along the South line of said Section 31, 2665.86 feet to the South ¼ corner of said Section 31; thence North 89°22'45" West, along the South line of said Section 31, 2471.40 feet to the TRUE POINT OF BEGINNING.

Grantor reserves to itself, its successors and assigns the following permanent easement for an existing water pipeline described as follows:

A 30 foot Wide Waterline Easement in the South ½ of the Southwest ¼ of Section 30, Township 2 North, Range 70 West of the 6th P.M., Boulder County, Colorado, being 10 feet East of and 20 feet West of the following described line:

Commencing at the South ¼ corner of said Section 30, from whence the Southwest corner of said Section 30, bears North 89°25'38" West, 2574.00 feet; Thence North 80°50'28" West, 1177.37 feet to the TRUE POINT OF BEGINNING; Thence North 07°22'22" West, more of less along the centerline of an existing water pipe line, 1072.43 feet to a point on the South right-of-way line of Neva Road.

Grantor reserves to itself, successors and assigns the following permanent easement for a new water line from the meter pit:

A 30 foot Wide Waterline Easement in the South ½ of the Southwest ¼ of Section 30, Township 2, North, Range 70 West, of the 6th P.M., Boulder County, Colorado, being 10 feet South of and 20 feet North of the following described line:

Commencing at the South ¼ corner of said Section 30, from whence the Southwest corner of said Section 30 bears North 89°25'38" West, 2574.00 feet; Thence North 79°45'04" West, 1163.50 feet to the TRUE POINT OF BEGINNING: Thence North 89°21'38" West, more or less along the centerline of an existing water pipe line, 1227.15 feet to a point on the East right-of way line of No. Foothills Highway (U.S. Highway No. 36).

Continued.....

LEGAL DESCRIPTION

CONTINUED

PARCEL II:

A part of the South ½ of the South ½ of Section 25, and a part of Section 36, Township 2 North, Range 71 West of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Beginning at the Southeast corner of said Section 36, from whence the Northeast corner of said Section 36, bears North 00°00' East, 5275.67 feet; thence North 89°52'47" West, along the South line of the Southeast ¼ of said Section 36, 2651.44 feet to the South ¼ corner of said Section 36, Thence North 89°52'42" West, along the South line of the Southwest ¼ of said Section 36, 2651.75 feet to the Southwest corner of said Section 36; thence North 00°24'51" West, along the West line of the Southwest ¼ of said Section 36, 2651.55 feet, to the West ¼ corner of said Section 36; thence North 00°24'08" West, along the West line of the Northwest ¼ of said Section 36, 2656.73 feet, to the Northwest corner of said Section 36; thence North 00°16'16" West, along the West line of the South ½ of the Southwest ¼ of said Section 25, 1328.96 feet to the Northwest corner of said South ½ of the Southwest ¼; thence South 89°26'41" East, along the North line of the said South ½ of the Southwest ¼, 2662.21 feet, to the Northwest corner of the South ½ of the Southeast ¼ of said Section 25; thence South 89°20'49" East, along the North line of the said South ½ of the Southeast ¼, 2681.41 feet to the Northeast corner of the said South ½ of the Southeast ¼; thence South 00°10'21" East, along the East line of said South ½ of the Southeast ¼, 991.93 feet to a point from whence the Southeast corner of said Section 25, bears South 00°10'21" East, 324.33 feet; thence North 89°52'47" West, parallel with and 5600 feet North of the South line of the Southeast ¼ of said Section 36; 1999.03 feet thence South 00°00' East, parallel with the East line of said Section 36, 5580.00 feet to a point 20 feet North of the South line of the Southeast ¼ of said Section 36; thence South 89°52'47" East, parallel with and 20 feet from the South line of the said Southeast ¼ of Section 36, 2000.00 feet to a point on the East line of said Section 36; thence South 00°00' East, along the East line of said Section 36, 20.00 feet to the POINT OF BEGINNING.

EXCEPT,

A Parcel in the South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Continued....

LEGAL DESCRIPTION

CONTINUED

Commencing at the Southeast corner of said Section 25, from whence the Southeast corner of Section 36, Township 2 North, Range 71 West, bears South 00°00" East, 5275.67 feet, thence North 53°52'35" West, 1433.79 feet to the TRUE POINT OF BEGINNING; thence South 90°00' West, 208.71 feet; thence North 00°00' East, 208.71; thence North 90°00' East, 208.71 feet, thence South 00°00' East, 208.71 feet to the TRUE POINT OF BEGINNING.

AND ALSO EXCEPT,

A Parcel in the South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Commencing at the Southeast corner of said Section 25, from whence the Southeast corner of Section 36, Township 2 North, Range 71 West, bears South 00°00' East, 5275.67 feet; thence North 00°10'21" West, along the East line of said South ½ of the Southeast ¼, 324.33 feet; thence North 89°52'47" West, parallel with and 5600.00 feet North of the South line of the Southeast ¼ of said Section 36, 1080.32 feet to the TRUE POINT OF BEGINNING; thence North 89°52'47" West, 208.71; thence North 00°07'13" East, 208.71 feet, thence South 89°52'47" East, 208.71 feet, thence South 00°07'13" West, 208.71 feet to the TRUE POINT OF BEGINNING.

AND ALSO EXCEPT

Any part of the South ½ of the South ½ of Section 25 and all of Section 36, Township 2 North, Range 71 West of the 6th P.M., Boulder County, Colorado, that lies South of the Fence Line that runs generally along the South line of said Section 36, and that lies West of the Fence Line that runs generally along the West line of said Section 36, and the West line of the said South ½ of the South ½ of Section 25, and that lies North of the Fence Line that runs generally along the North line of the said South ½ of the South ½ of Section 25.

AND ALSO EXCEPT

A Part of the South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Continued....

LEGAL DESCRIPTION

CONTINUED

Commencing at the Southeast corner of the said South ½ of the Southeast ¼, from whence the Northeast corner of the said South ½ of the Southeast ¼ bears North 00°10'21" West, 1316.26 feet; Thence North 00°10'21" West, along the East line of the said South ½ of the Southeast ¼, 324.33 feet to the TRUE POINT OF BEGINNING: Thence North 89°52'47" West, 50.81 feet to a point of the Westerly right-of-way line of No. Foothills Highway (U.S. Highway No. 36) as it is presently fenced, monumented and occupied; Thence Northerly, along said Westerly right-of-way line as follows: North 02°04'56" West, 695.33 feet; North 01°34'50" East, 246.96 feet North 05°56'37" West, 51.18 to a point on the North line of the said South ½ of the Southeast ¼; Thence South 89°20'49" East, along said North line, 71.58 feet to the Northeast corner of the said South ½ of the Southeast ¼; Thence South 00°10'21" East, along the East line of the said South ½ of the Southeast ¼, 991.93 feet to the TRUE POINT OF BEGINNING, containing 1.47 acres, more or less.

AND ALSO EXCEPT

A Part of the Southeast ¼ of Section 36, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Beginning at the Southeast corner of said Section 36, from whence the Northeast corner of said Section 36, bears North 00°00' East, 5275.67 feet; Thence North 89°52'47" West, along the South line of the said Southeast ¼, 40.00 feet to the Westerly right-of-way line of No. Foothills Highway (U.S. Highway No. 36) as presently fenced, monumented and occupied; Thence North 00°01'44" East, along said Westerly right-of-way line, 20.00 feet; Thence South 89°52'47" East, parallel with and 20.00 feet from the South line of the said Southeast ¼, 39.99 feet to a point on the East Line of the said Southeast ¼; Thence South 00°00' East, along said East line, 20.00 to the TRUE POINT OF BEGINNING, containing 800 square feet (0.02 acres).

Grantor reserves for itself, its successors and assigns a temporary easement for the reclamation of the waste disposal pits and a temproary access and appurtenances thereto, together with all rights and privileges as are necessary or incidental to the reasonable and property use of such easement, in and to, over, under and across the following described real property;

Continued....

LEGAL DESCRIPTION

CONTINUED

Description of a 2.3 Acre Temporary Clean-up Easement Around the Waste Disposal Pit

An Easement of 2.3 Square Acres in the South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Commencing at the Southeast corner of said Section 25, from whence the Southeast corner of Section 36, Township 2 North, Range 71 West, bears South 00°00" East, 5275.67 feet; Thence North 54°22'21" West, 1358.51' feet to the TRUE POINT OF BEGINNING: Thence South 90°00" West, 316.52 feet; Thence North 00°00' East, 316.52 feet; Thence North 90°00'East, 316.52 feet; Thence South 00°00' East, 316.52 feet to the TRUE POINT OF BEGINNING.

Description of 20.00 foot Wide Access Easement to the Waste Disposal Sites.

An Easement 20 feet Wide, 10 feet on both sides of the following described center line, in the South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Commencing at the Southeast corner of said Section 25, from whence the Southeast corner of Section 36, Township 2 North, Range 71 West, bears South 00°00' East, 5275.67 feet; Thence North 00°10'21" West, along the East line of the said South ½ of the Southeast ¼, 324.33 feet; Thence North 89°52'47" West, parallel with and 5600.00 feet North of the South line of the Southeast ¼ of said Section 36, 1388.43 feet to the TRUE POINT OF BEGINNING; Thence North 52°45'49" East, 112.29 feet; Thence North 33°39'58" East, 139.68 feet; Thence North 09°35'04" West, 124.49 feet; Thence North 23°08'22" East 81.70 feet, Thence North 30°11'39" East, 74.05 feet, Thence North 09°08'26" East, 72.86 feet to Point of Terminus.

Grantor will maintain the Property at its expense. Grantor hereby agrees that upon termination of this temporary easement by the parties hereto, the property shall be restored to its original condition at the expense of Grantor. Grantee herein agrees that no permanent structures or improvements shall be placed on said easement by it, its successors or assigns and that said use of such easement shall not otherwise be obstructed or interfered with during the reclamation of the waste disposal pit.

Continued....

LEGAL DESCRIPTION

CONTINUED

Grantor reserves for itself, its successors and assigns, a permanent, non-exclusive easement for the installation, construction, repair, maintenance, reconstruction, replacement of, reconfiguration of, increasing the number of, adding to and taking away of water storage tanks and underground water utility lines and appurtenances, without limitation and subject to Boulder County regulation, together with all rights and privileges as are necessary or incidental to the reasonable and proper use of such easement in and to, over, under, and across the following real property;

Description of One Acre Square Storage Tank Easement.

An Easement One Square Acre in the Northeast ¼ of Section 36, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Commencing at the Northeast corner of said Section 36, from whence the Southeast corner of said Section 36 bears South 00°00' East, 5275.67 feet; Thence North 00°10'21" West, along the East line of the said South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West, 324.33 feet; Thence North 89°52'47" West, parallel with and 5600.00 feet North of the South line of the Southeast ¼ of said Section 36, 1999.03 feet; Thence South 00°00' East, 438.74 feet; Thence South 86°30' West, 320.00 to the TRUE POINT OF BEGINNING: Thence South 00°00' East, 208.71 feet; thence South 90°00' West, 208.71 feet; Thence North 00°00' East, 208.71 feet; Thence North 90°00' East, 208.71 feet to the TRUE POINT OF BEGINNING.

Description of Access and Waterline Easement to Storage Tank Easement.

An Easement in the Northeast ¼ of Section 36, Township 2 North, Range 71 West, of the 6th P.M., Boulder County, Colorado, more particularly described as follows:

Commencing at the Northeast corner of said Section 36, from whence the Southeast corner of said Section 36, bears South 00°00' East, 5275.67 feet; Thence North 00°10'21" West, along the East line of the said South ½ of the Southeast ¼ of Section 25, Township 2 North, Range 71 West, 324.33 feet; Thence North 89°52'47" West, parallel with and 5600.00 feet North of the South line of the Southeast ¼ of said Section 36, 1999.03 feet; Thence South 00°00' East, 438.74 feet to the TRUE POINT OF BEGINNING; Thence South 86°30' West, 320.00 feet; Thence South 00°00' East, 91.78 feet; Thence North 80°00' East, 324.33 feet; Thence North 00°00' East, 55.00 feet to the TRUE POINT OF BEGINNING, containing 0.538 acres, more of less.

Continued....

LEGAL DESCRIPTION

CONTINUED.

Grantee herein for itself, its successors and assigns does hereby covenant and agree that no permanent structures or improvements shall be placed on said easement and right-of-way by itself or its successors or assigns, and that said use of such easement and right-of-way shall not otherwise be obstructed or interfered with.

Grantor will maintain the easement area and all improvements thereon at its expense. Grantor hereby indemnifies Grantee, its successors or assigns and will hold Grantor harmless against all claims and liability for damage, loss or expense caused by injury or death to any person or damage to property with respect to this easement and the improvements thereon. This easement shall be binding upon Grantee, its successors and assigns, its agents and lessees, and shall continue as a servitude running in perpetuity with the easement reserved above.

PARCEL III:
Lot 11,
OLDE STAGE SETTLEMENT, UNIT ONE,
County of Boulder,
State of Colorado.

APPENDIX C: SUMMARY OF GROUND WATER CONTAMINATION AND MONITORING

The contamination on the Beech property east of Foothills Highway was identified in 1991, and is associated with an area of natural ground-water discharge, referred to as the Seep #1 / Seep # 2 area (Figure 16). In this area, shallow downvalley ground-water flow within the Unnamed Drainage is forced to the surface as a result of a constriction in the depth and width of the valley floor associated with a prominent limestone bed at the top of the Niobrara/base of the Pierre Shale. Ground-water discharge in this area contains low concentrations of trichloroethene (TCE), and its decomposition product cis-1,2-dichloroethene (cis-1,2-DCE), and vinyl chloride.

A second area of ground-water discharge, Seep 5 (Figure 16) was discovered in 2002, on the Beech property north of the former Beech Aircraft Corporation (Foothills Business Park). Seep #5 is located within the bottom of a ravine near the toe of the Six-Mile Fold Anticline. The discharge at this location is associated with a deeper, confined ground-water flow system within the Fort Hays Limestone and Codell Sandstone and contains elevated concentrations of TCE, cis-1,2-DCE, and 1,1,2-trifluoroethane (Freon 113).

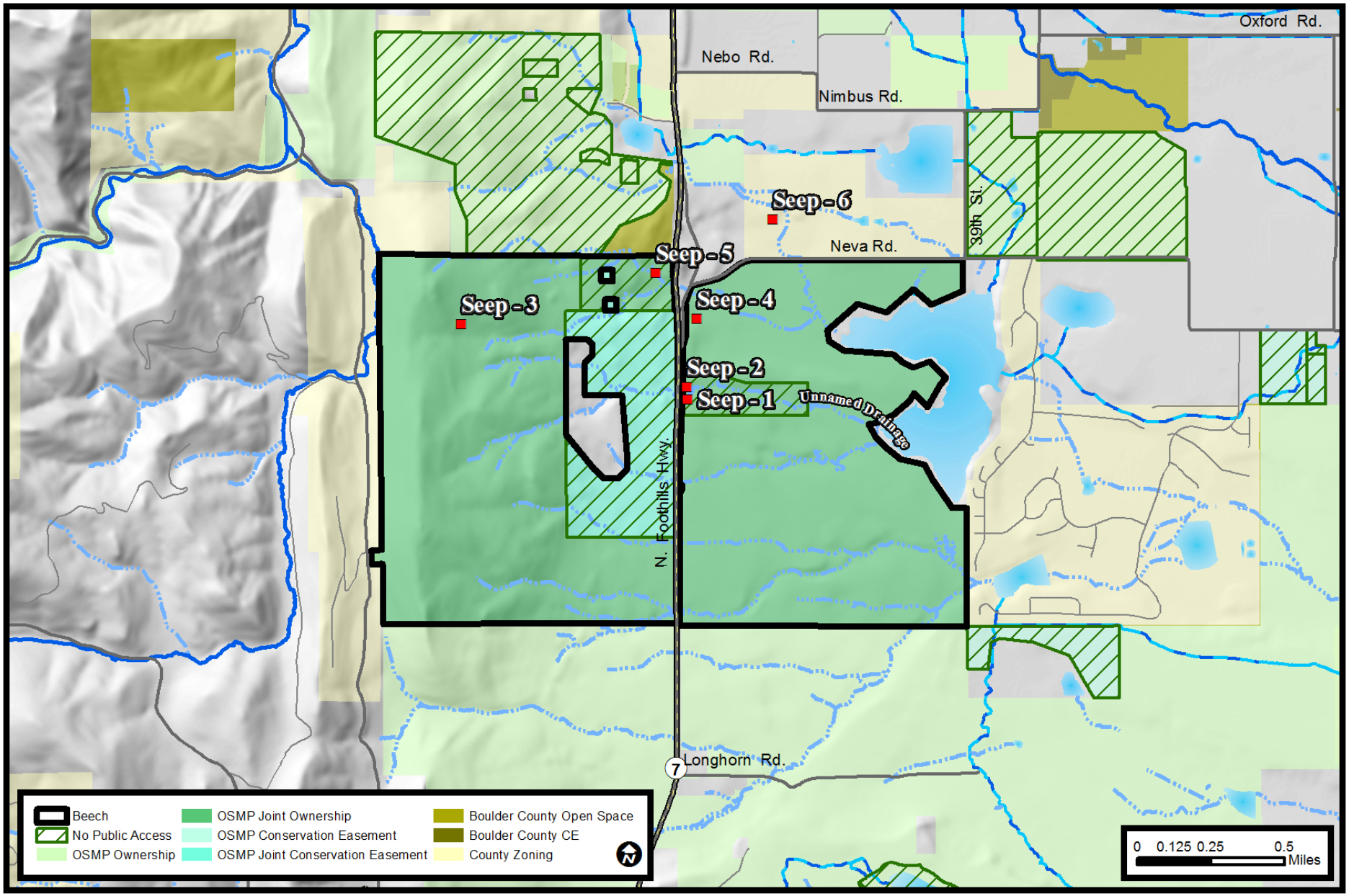
In order to address the off-site migration of volatile organic constituents (VOCs) in the shallow ground-water flow system within the unnamed Drainage, Raytheon Aircraft Company (RAC) installed and continues to operate mitigating measures. The first of the mitigating measures are 19 extraction wells which are operated to maintain hydraulic containment and for source removal. The wells are located in the primary source area which is a former surface impoundment used from the mid 1960s until about 1980 for the disposal of process wastes. The second mitigating measure consists of four extraction wells located at the down-gradient property boundary to intercept down-valley ground-water flow within the Unnamed Drainage.

There are also three monitoring wells both directly upgradient and downgradient of Seeps #1 and #2. The upgradient wells were installed to assess the depth of contamination and to monitor ground water quality. The downgradient wells were installed to assess the extent of the water quality impact within the Unnamed Drainage. As part of the ongoing investigation four additional wells have been installed on the Colorado Department of Transportation's (CDOT's) right of way along U.S. 36 and Neva Road, to minimize drilling activities on Open Space.

The well locations, site access, drilling conditions and procedures, material handling and disposal, drill site reclamation and other details were agreed upon by Harlan & Associates, Inc., the monitoring contractor and OSMP.

The monitoring results have indicated that the concentrations of VOCs in the ground water discharging at the seeps are continuing to decline over time.

Figure: 16 Seeps Map



APPENDIX D: KEY ATTRIBUTES AND INDICATORS FOR THE GRASSLAND PLAN TARGETS FOUND ON BEECH

Target	Key Attributes ○ **Indicators**
Mixedgrass Prairie Mosaic	Animal Species Composition ○ Percent occurrence of sensitive butterflies and skipper species ○ Percent occurrence of grassland dependent butterflies and skipper species ○ Percent target with acceptable bird conservation score Block/Complex Size ○ Size/distribution of blocks Fire Regime ○ Percent of target area experiencing an appropriate fire return interval Habitat Effectiveness ○ Proportion of habitat blocks over 100 ha with singing male grasshopper sparrows Vegetation Composition ○ Percent of target dominated by non-native species ○ Percent of target with prevalence of non-native species ○ Native species relative cover ○ Native species richness ○ Size of Bell's twinpod populations ○ Richness of selected conservative plant species Vegetation Structure ○ Absolute cover bare ground
Xeric Tallgrass Prairie	Animal Species Composition ○ Percent occurrence of grassland dependent & sensitive lepidopteron (2) ○ Percent target with acceptable bird conservation score ○ Relative cover of host plants for skipper/butterfly species of concern Block/Complex Size ○ Size/distribution of blocks Fire Regime ○ Percent of target area experiencing an appropriate fire return interval Vegetation Composition ○ Percent of target dominated by non-native species ○ Percent of target with prevalence of non-native species ○ Native species relative cover ○ Native species richness ○ Size of grassyslope sedge populations ○ Size of dwarf leadplant populations ○ Size of prairie violet population ○ Richness of selected conservative plant species Vegetation Structure ○ Absolute cover bare ground
Black-tailed Prairie Dog & Associates	Animal Species Composition ○ Number of colonies with successful burrowing owl nests

Target	Key Attributes ○ **Indicators**
	○ Predator community composition / abundance ○ Percent of colonies with territorial horned larks Block/Complex Size ○ Acres occupied by prairie dogs Prairie Dog Occupancy ○ Percent of total occupied land in protected status ○ Percent of grassland preserves with occupancy between 10 and 26%
Wetlands	Animal Species Composition ○ Native frog presence Connectivity ○ Buffer width ○ Distance to nearest wetland / riparian area ○ Undesignated trail density in northern leopard frog habitat blocks Hydrologic Regime Vegetation Composition ○ Management of Ute ladies-tresses orchid habitat ○ Percent of target dominated by exotic species ○ Percent of target with prevalence of exotic species ○ Native species relative cover Water Quality ○ Total phosphorus ○ Secchi disk depth
Riparian Areas	Animal Species Composition ○ Bird conservation score ○ Fish index of biotic integrity ○ Macroinverebrate index of biotic integrity ○ Native frog presence ○ Submerged aquatic nuisance species richness (0.5) (see Vegetation Comp.) Connectivity ○ Buffer width ○ Distance to nearest wetland/riparian area ○ Undesignated trail density in northern leopard frog habitat blocks ○ Impediments to fish passage (#) Habitat Effectiveness ○ Number of active bald eagle nest sites Habitat Structure ○ Physical instream and riparian metric Hydrologic Regime ○ Instream flow ○ Number of over-bank flooding events Vegetation Composition ○ Management of Ute ladies-tresses orchid habitat ○ Percent of target dominated by non-native species ○ Percent of target with prevalence of non-native species

Target	Key Attributes ○ **Indicators**
	○ Native species relative cover ○ Presence of populations of Ute ladies-tresses orchid Vegetation Structure ○ Cottonwood regeneration Water Quality ○ Total phosphorus ○ Dissolved oxygen

APPENDIX E: MONITORING INDICATORS (GRASSLAND PLAN)

Indicators	Priority	Methods	Frequency and Timing	Who monitors
Absolute cover bare ground	Very High	Point intercept method along 50 m transects plus complete species list from 100 m^2	Sampling season: July 15-August 31 Frequency: Annually for two years then three to five years break repeating pattern	staff, contractors
Native frog presence in suitable habitat	Very High	Visual encounter surveys augmented with aural breeding surveys	Aural sampling season: depends on species but generally late March through July Visual encounter sampling season: July through mid-September Frequency: Annual for both	staff, volunteers
Native species relative cover	Very High	Point intercept method along 50 m transects plus complete species list from 100 m^2	Sampling season: July 15-August 31 Frequency: Annually for two years then three to five years break repeating pattern	staff, contractors
Native species richness	Very High	Point intercept method along 50 m transects plus complete species list from 100 m^2	Sampling season: July 15-August 31 Frequency: Annually for two years then three to five years break repeating pattern	staff, contractors
Percent of occupied land in Grassland Preserves, Multiple Objective Areas or Prairie Dog Conservation Areas.	Very High	GPS mapping of prairie dog colonies	Sampling season: August-November Frequency: Annual	staff, volunteers
Percent of target with acceptable bird conservation score	Very High	Distance sampling of line transects	Sampling season: May 15-July 15 Frequency: TBD	staff
Proportion of habitat blocks over 100 ha with singing male grasshopper sparrows	Very High	Distance sampling line transects	Sampling season: May 15-July 15 Frequency: TBD	staff
Relative cover of host plants for skipper/butterfly species of concern (big bluestem and little bluestem)	Very High	Point intercept method along 50 m transects plus complete species list from 100 m^2	Sampling season: July 15-August 31 Frequency: Annually for two years then three to five years break repeating pattern	staff, contractors

Indicators	Priority	Methods	Frequency and Timing	Who monitors
Richness of selected conservative plant species	Very High	Point intercept method along 50 m transects plus complete species list from 100 m^2	Sampling season: July 15-August 31 Frequency: Annually for two years then three to five years break repeating pattern	staff, contractors
Acres in agricultural production	High	Database analysis	Annual report	staff
Average derived PIF score of sampled sites within selected drainages	High	Fixed distance point counts	Sampling season: May-July Frequency: Every other year or every third year	staff, volunteers
Grassland preserves with occupancy of prairie dogs between 10 and 26%	High	GPS mapping of prairie dog colonies	Sampling: August-November Frequency: Annual	staff, volunteers
Fish index of biotic integrity (IBI)	High	Methods developed during recent EMAP project	Sampling: TBD Frequency: Once every five years	staff, CDOW
Impediments to fish passage	High	GIS analysis	Annual report	staff
Macroinvertebrate index of biotic integrity (IBI)	High	Methods developed during recent EMAP project	Sampling: Mid-summer Frequency: Once every five years	staff, CDOW, contractors
Number of active bald eagle nest sites in the Grassland Planning Area	High	Visual observation	Sampling season: Nov. 1 through July 31 Frequency: Annual	staff, volunteers
Number of prairie dog colonies with successful nesting attempts by burrowing owls	High	Visual observation	Sampling season: March - October Frequency: Annual	staff, possibly volunteers
Percent of target area experiencing a 5-30 year fire return	High	GPS mapping and GIS analysis	Mapping will occur after fires. Analysis will occur on an annual basis.	staff
Percent of target area experiencing a 5-10 year fire return	High	GPS mapping and GIS analysis	Mapping will occur after fires. Analysis will occur on an annual basis.	staff

Indicators	Priority	Methods	Frequency and Timing	Who monitors
Percent of target dominated by exotic species (Rapid Assessment Mapping)	High	RAM	Sampling season: late June-early August Frequency: Once every five-ten years	staff
Percent of target with prevalence of exotic species (Rapid Assessment Mapping)	High	RAM	Sampling season: late June-early August Frequency: Once every five-ten years	staff
Physical instream and riparian habitat metric	High	Methods outlined in Barbour et al. 1999	Sampling season: June-October (growing season) Frequency: Once every five years.	staff
Predator community composition/abundance	High	Visual observation	Sampling season: TBD Frequency: Annual	staff, volunteers
Undesignated trail density within 200meters of northern leopard frog habitat blocks	High	GIS analysis	Sampling season: NA Frequency: Once every five years - on the same cycle as undesignated trail mapping	staff
Size distribution of large blocks	High	GIS analysis	Sampling season: NA Frequency: Once every five years	staff
Size of grassyslope sedge populations	High	CNHP/OSMP rare plant census methods	Season: June Frequency: once every five years (minimum)	staff, volunteers
Visual obstruction vegetation height-density (Robel pole measure)	High	Modified Robel pole or similar methodology	TBD	staff, contractors
Buffer width (vegetated area within 100 m of a creek)	Medium	Visual estimation or measurement	TBD	staff
Buffer width (vegetated area within 100 m of the wetland)	Medium	Visual estimation or measurement	TBD	staff
Cottonwood regeneration	Medium	Plots	TBD	staff

Indicators	Priority	Methods	Frequency and Timing	Who monitors
Distance to nearest wetland or riparian area	Medium	GIS analysis	TBD	staff
Irrigable land leased for agriculture	Medium	GIS and database analysis	Every other year	staff
Percent occurrence of CNHP-tracked grassland dependent butterflies and skipper species	Medium	TBD	Sampling season: May-August based on flight times which differ by species Frequency: Two consecutive years followed by three-seven years off repeating pattern	staff, contractors
Percent occurrence of grassland dependent butterflies and skipper species	Medium	TBD	Sampling season: May-August based on flight times which differ by species Frequency: Two consecutive years followed by three-seven years off repeating pattern	staff, contractors
Percent of colonies with territorial horned larks	Medium	Visual observation	Sampling season: May-July Frequency: Annual	staff, possibly volunteers
Species richness of sensitive breeding birds	Medium	Point counts	Sampling season: May-July Frequency: TBD	staff, volunteers
Submerged aquatic nuisance species richness	Medium	Visual surveys	Sampling season: July-August Frequency: TBD	staff
Dissolved oxygen (lotic--flowing water habitats)	Low	Dissolved oxygen meter	TBD	staff
Instream flows	Low	TBD	TBD	staff
Number of over-bank flooding events during late May through June measured every 5-10 years	Low	TBD	When it occurs	staff
Percent of wetlands in each class with idealized/prescribed/proper hydrologic regime.	Low	TBD	TBD	staff

Indicators	Priority	Methods	Frequency and Timing	Who monitors
Secchi disk depth (for ponds)	Low	Secchi disk sampling	TBD	staff
Total phosphorus (for ponds)	Low	Grab and/or composite samples	TBD	staff
Total phosphorus (lotic--flowing water habitats)	Low	Grab and/or composite samples	TBD	staff