

# SHAPE

SEPTEMBER 2008





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## Section 1: Introduction

### PURPOSE OF THIS DOCUMENT

*Shape*, the third phase of the Belvoir Ranch Master Planning process, provides a conceptual master plan for future improvements at the Ranch and Big Hole, and policies for managing the properties for the benefit of future generations.

The Master Plan identifies conceptual locations for land uses identified by the City and through the public process. The plan strives to conserve and preserve a significant open space amenity for future generations of Cheyenne residents. Creating such a plan guides and accommodates the evolving desires of the community and economic development pressures over a long period.

*Shape* builds on the existing conditions inventory and site development principles previously presented in the Plan's companion *Snapshots* and *Structure* documents. The fourth document, *Build*, describes how improvements might be phased over time, estimates capital development and operations and maintenance costs, and suggests strategies for implementation.

### PURCHASING THE BELVOIR RANCH AND THE BIG HOLE PROPERTIES

Located 16 miles west of Cheyenne, Belvoir Ranch and The Big Hole together consist of 18,800 acres with an additional 3,400 acres of land leased from the State of Wyoming.

The 2003 purchase of Belvoir Ranch was funded by the City of Cheyenne Board of Public Utilities (BOPU) to expand the City's water supply, and by the Department of Public Works, for a possible landfill site. Purchase of the Ranch property allows for expansion of the City's infrastructure as it grows, as well as for compatible recreation. Additionally, the City has



*Aerial view looking south towards The Big Hole. The Big Hole Outlook Area is one of the five Ranch Development Districts which will be discussed in more detail in Section 4 of Shape.*

identified potential economic benefit from other types of development that are compatible with the Ranch's natural features.

The Big Hole was purchased in 2005 from The Nature Conservancy, which holds a conservation easement on the property. It consists of 1,000 acres of rim property and 800 acres of spectacular red rock canyon scenery. It is part of a regional area identified as the Laramie/Foothills Mountain to Plains project, which is sponsored by Larimer County, CO, the City of Fort Collins, The Nature Conservancy, and the Legacy Land Trust.

The property will remain natural, allowing selected low-impact activities such as hiking or horseback riding. The Big Hole will be managed through a partnership between the City of Cheyenne, Larimer County, and The Nature Conservancy.



Public comment was recorded from each of the Public Meetings.

## A COMMUNITY-DRIVEN PLANNING PROCESS

The community-defined *Vision2020* established the strategic direction for the foundation for *PlanCheyenne*, the Cheyenne Area Development Plan. In keeping with previous Cheyenne planning efforts for *Vision2020* and *PlanCheyenne*, a community driven planning process was used. Cheyenne residents helped establish the land use program elements and guided their final location on the Master Development Plan. All suggested visitor experiences and land uses presented by the public were carefully considered and evaluated for compatibility with the Vision for the Ranch.

The goal of opening Belvoir Ranch to the citizens of Cheyenne and the general public is to allow them to recreate, appreciate, and contemplate the heritage of the region that is ingrained into the landscape and makes Cheyenne unique.



Potential land use and recreational opportunities were evaluated with a dot-voting exercise at a public meeting.

## HOW TO USE THIS DOCUMENT

This document includes the following sections:

- The *Vision for Stewardship of Belvoir Ranch and The Big Hole* section establishes an overarching framework for the Master Development Plan;
- *Ranch Master Plan Elements* summarizes key components of the Plan, including access and circulation, recreational activities, trails and trailheads, parking, conservation elements, ranching, water resources, energy development, and educational opportunities.
- The *Ranch Development Districts* section provides additional detail on potential activities that might be offered in each zone. The sidebars and enlargement maps provide a quick way for readers to easily grasp the essence of proposed improvements.
- *Sustainable Stewardship: Policies for Managing Belvoir Ranch* provides guidelines for “adaptive management” of public use on the Ranch, as well as the Ranch landscape and property itself.
- Finally, *Land Acquisition* provides guidance for future potential expansion of the ranch property.



Consultants presented site opportunities and constraints to citizens at a public meeting.

## Section 2: A Vision for Stewardship of Belvoir Ranch and the Big Hole



Wildflowers overlooking Lone Tree Creek; The Big Hole; Cattle drinking in an existing reservoir; Ranch Headquarters with the City of Cheyenne in the distance.

### A VISION FOR STEWARDSHIP OF BELVOIR RANCH AND THE BIG HOLE

The community's vision for Belvoir Ranch and The Big Hole is an enduring statement about the value and significance of these properties and how they should be preserved and managed. It is a statement about a desired future, that should inspire and motivate, even though fully realizing the vision may take many years.

Finally, a good vision statement is inclusive, flexible enough to support many ideas and points of view. The Cheyenne community's vision for Belvoir Ranch is summarized in the box to the right.

### A Vision For The Belvoir Ranch

*Belvoir Ranch is a unique and significant piece of Cheyenne's rich cultural heritage and regional open space system.*

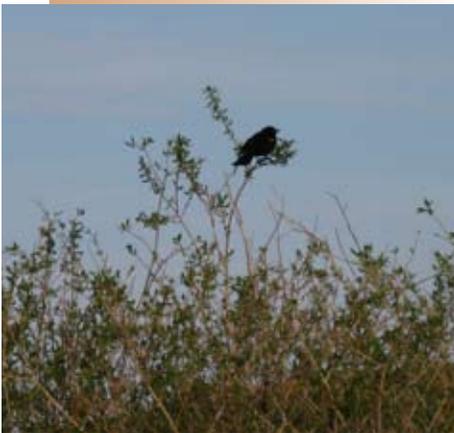
*To be responsible stewards of the land, City of Cheyenne and the Board of Public Utilities are seeking to manage it as a sustainable "working landscape" that contributes to the area's economy and its quality of life.*

*The Ranch shall be managed as a community asset and legacy, balancing uses and resources in such a way as to sustain its unique landscape character and heritage, for generations to come.*





Aerial view of Lone Tree Creek



The Ranch provides abundant bird viewing opportunities.

## CORE DESIGN PRINCIPLES

The vision for stewardship is supported by detailed design principles that are presented in *Structure*, and by a series of policies for managing resources and public use that are presented later in this document. Core design principles are summarized below.

### Principle 1

*Minimize new disturbance to the site and landscape.*

- ✦ **“Tread lightly on the land”** is a core precept guiding any future development at Belvoir Ranch and The Big Hole. The community is supportive of low-impact activities that do not mar the inherent qualities of the properties. The City and State lands comprising the properties will be planned and managed as one contiguous, 23,600-acre parcel, subject to State Land Board requirements described later in this document.

### Principle 2

*Preserve and protect key natural features and habitat.*

- ✦ The properties’ natural features — the rolling high prairie and red rock canyon, long views to the mountains, creeks and draws, big game and small mammals, birds of prey and songbirds — are the many reasons that they are so beloved by Cheyenne residents. It is important that they be protected and preserved for the enjoyment of future generations. To support this objective, a permanent land use plan will be negotiated with The Nature Conservancy to provide recreational access to The Big Hole, and the properties will be planned and managed in concert with the adjacent Red Mountain Open Space and Soapstone Prairie Natural Area.

### Principle 3

*Protect, enhance and interpret natural and cultural resources.*

- ✦ Once these resources are degraded or lost, they cannot be readily, if ever, replaced.

**Principle 4**

*Make education and interpretation a key component of Ranch activity.*

- ✦ Interpretive signage, programs, and permanent facilities, such as a Cheyenne Legacy Museum/Mountain to Plains Interpretive Center, can tell the story of the properties’ pre-historical, historical, and contemporary cultural heritage and regional ecosystem.

**Principle 5**

*Provide for compatible public use, both in activities and in intensity of use, that does not overwhelm the properties’ essential features and qualities.*

- ✦ Belvoir Ranch was acquired to support multiple objectives, including fulfilling Cheyenne’s future water needs, and possibly its solid waste management requirements. These functions are provided for in the plan, along with compatible recreational opportunities and possibilities for “green” energy generation. Grazing, an essential feature of the Ranch since 1874, will remain a vital component of the landscape.

**Principle 6**

*Design facilities using sustainable, “green building” principles.*

- ✦ The “built environment” — visitor centers, campgrounds, picnic areas, interpretive displays, and the like — will shape visitors’ experiences of Belvoir Ranch and The Big Hole, and demonstrate the City’s commitment to a high-quality experience. Through careful attention to materials and construction methods, the City can also demonstrate its commitment to low-impact, “green” development.

**Principle 7**

*Implement improvements that are economically sustainable.*

- ✦ While the tendency is often to equate sustainability with environmental objectives alone, economics — particularly maintenance and capital repair/ replacement costs — are also important considerations.



*Ponnequin Wind Farm southeast of The Belvoir Ranch*



*Missile Silos on the Ranch are a significant part of its Cold War history.*



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## Section 3: Ranch Master Plan Elements

### INTRODUCTION TO THE BELVOIR RANCH MASTER DEVELOPMENT PLAN

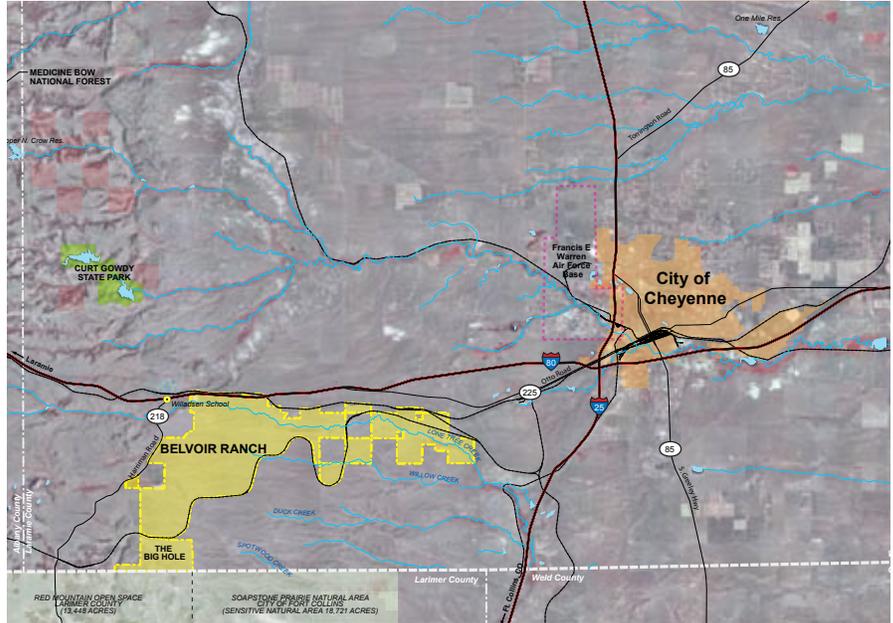
Belvoir Ranch is a spectacular and vast property, significantly larger than the land incorporated within the City of Cheyenne municipal boundaries. Undeveloped public high prairie open space that comprises the Ranch is truly unique. It is an exciting opportunity that few other municipalities share.

The Board of Public Utilities (BOPU) was instrumental in the acquisition of Belvoir Ranch for the development of sub-surface water resources for the City of Cheyenne. The BOPU supports water management on the Ranch for scenic, recreation, and municipal water supply.

The Plan offers a framework for the City and public to use as a tool to establish and implement visitor experience preferences over the future decades. Two development phasing plans, a 5-year and 15-year, will be presented in **Build**. They will show what could be developed within those periods.

Implementation of the Master Development Plan for the Ranch will be based on user studies to establish visitor expectation levels and hierarchy for phasing construction. Implementation shall also include cooperative planning with regional recreation agencies: Curt Gowdy State Park and Medicine Bow State Park/ Veedauwoo, to develop complementary facilities to create a wider variety of activities for users and a regional destination for selected activities such as mountain biking, hiking, horseback riding and rock climbing (scrambling).

The following sections address the Master Development Plan in detail.



*Belvoir Ranch is significantly larger than the land incorporated within the City of Cheyenne.*

## SUMMARY OF THE MASTER DEVELOPMENT PLAN

The Master Development Plan map illustrates proposals for possible future activities at the Ranch and The Big Hole. They include:

- The proposed locations for future water supply lines and wells to address City needs, as well as the site and access road for a possible landfill.
- Recreational activities, including fishing, swimming, hiking, biking, horseback riding, camping (RV, tent, and primitive backcountry sites), a links-style golf course, a freeride mountain bike park, frisbee golf, and archery practice areas.
- Special events, which could be staged at the former missile silo site or at a new Retreat/Conference Center.
- Educational opportunities, offered at a potential Visitor Center, through interpretive exhibits within each development district, or through special activities like chuckwagon or trail rides or guided tours.
- Reservoir storage for Cheyenne’s water supply; reservoirs could also provide for passive recreational use, like fishing and swimming.
- Opportunities for continued ranching and grazing, to maintain the site’s heritage as a “working landscape.”
- Opportunities for possible wind energy and/or solar power generation.

These facilities are reached from four primary access roads, including Belvoir Road, which traverses the site, and three secondary, controlled access roads that terminate at specific activity areas. A network of short- and long-loop trails, provides opportunities for novice and experienced hikers, bicyclists, and horseback riders.

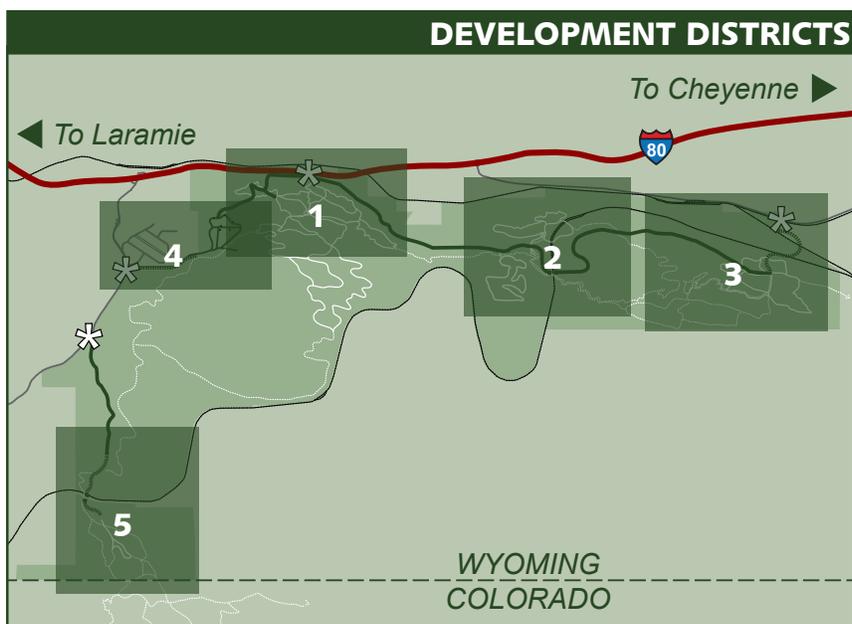
These proposals were developed and reviewed with extensive public and stakeholder input. A number of additional proposals were also considered and, for reasons noted below, deemed as not appropriate for inclusion at this time.

- Active sports, such as a skatepark, paintball course, horse race track, or BMX track, were viewed as incompatible with site character.
- Venues for large-scale special events, such as a rodeo or air show, were viewed as being located too far from the City’s population center to be suitable.
- Motorized vehicle courses, for ATVs and moto-cross, for example, were also deemed as incompatible with the site’s character and could possibly result in permanent degradation to the landscape. (Policies governing motorized use are discussed extensively in Section 5 of this document.)

- A suggested business park along I-80, considered as infeasible because of topographic and roadway access constraints.
- Suggested housing along I-80, considered infeasible due to the distance from major population centers and lack of services.
- Biofuel production, viewed as infeasible due to water requirements and unsuitability of soils to support suitable plants.
- A coal-fired power plant, considered but public opinion was much more strongly in favor of “green energy” production, from an environmental standpoint.

Belvoir Ranch and The Big Hole have been planned as five discrete activity areas, shown on the key map below, and discussed further in Section 4.

1. **The Belvoir Gateway Village** serves as the gateway into the Ranch. It is the most intensely developed zone and will accommodate a large volume of visitors with a high level of service.
2. **The West Reservoir Area** will be developed as a family-oriented water-related activity area.
3. **Belvoir Meadows** is envisioned as a family-oriented animal-related activity area.
4. **The Missile Site** could provide a future venue to stage special events and educational opportunities, or with extensive renovation could become an Air Force Museum,...
5. **The Big Hole Gateway and Rim** will remain rustic, offering opportunities for hiking, horseback riding, and scenic viewing.





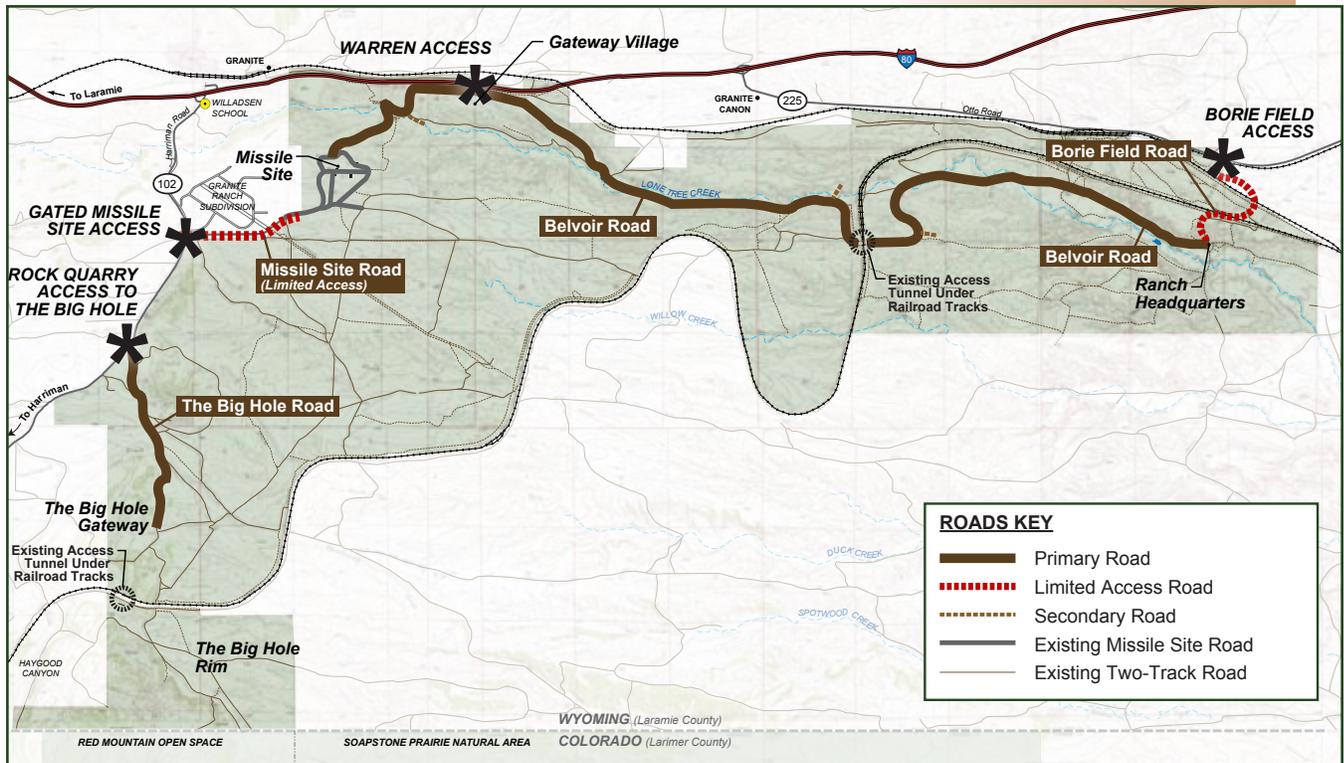
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**INSERT MASTER DEVELOPMENT  
PLAN MAP  
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## RANCH ACCESS AND ROADWAYS



Ranch access and circulation is provided through the following primary roadways:

### *Belvoir Road*

This primary route runs east/west to link the Belvoir Gateway Village with the activity cluster at the Ranch Headquarters. Tentatively named Belvoir Road, this route provides general public access to camping, the reservoirs, links golf course, trailheads, equestrian center and equestrian trails. This main route could also connect with existing ranch roads that would otherwise not be opened for public access, to provide an opportunity for a guided “driving tour.”

### *Limited Access Roads*

Two limited access roads, located off of Harriman Road, are also planned to provide access into the Ranch. A third entrance off Otto Road is desired to provide access to the eastern end of the Ranch.

**Missile Site Road** – The existing paved missile site access road off Harriman Road will be generally

reserved for Ranch/City maintenance and operations needs. The entry will be gated and used as an entrance for public access to special events and educational activities at the Missile Site. This entry will not be available for daily public access.

**The Big Hole Road** – Vehicles will be permitted open access at the Rock Quarry entrance off Harriman Road to reach The Big Hole Gateway and Rim. This road should be gravel to contribute to the rustic experience of visiting The Big Hole. It is assumed that public access across State land (Section #36) will be negotiated to maintain this access for public use.

**Borie Field Road** – The private access at Borie Field will remain operational for Ranch personnel to access the Ranch Headquarters and equestrian center/dude ranch from Otto Road. This entry will not be a public road unless legal access is gained and substantial design improvements are made to three railroad crossings, as discussed later in this section. However, equestrian trail use of the existing route may be allowed.



Existing two-track road

### Secondary Roads

Secondary roadways will be developed to provide access to key activity areas. These roadways may be paved or unpaved depending on intended types of use, but will likely be gravel due to low anticipated traffic volumes. The intent is that these roadways will terminate at the activity area and will not provide “through routes” to the rest of the Ranch.

### Two-Track Roads

Existing “two-track” Ranch roads will remain operational for Ranch and emergency vehicle use only. Selected two-track routes will also be designated for back-country equestrian trail use in addition to infrequent use by Ranch vehicles. No infrastructure improvements are recommended for these routes.



Grade-separated railroad crossing

### Railroad Crossings

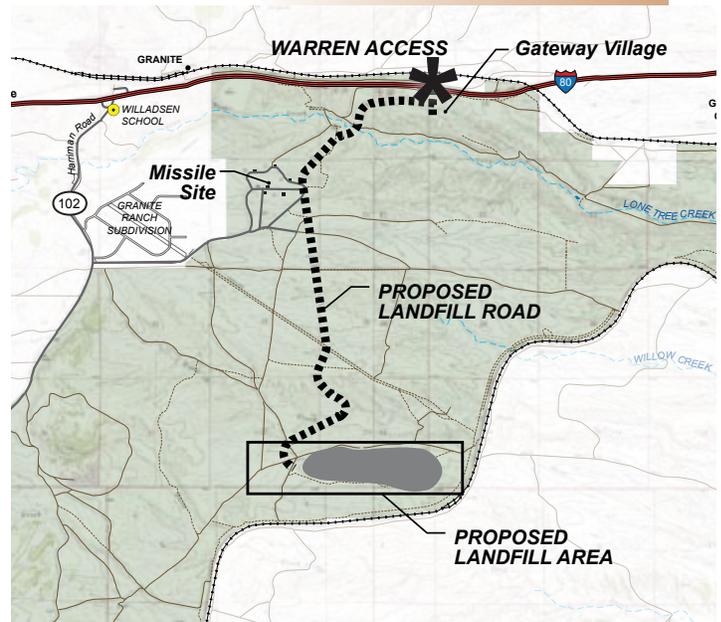
All users of The Belvoir Ranch – public and private, motorized and non-motorized – will be limited to crossing the Union Pacific Railroad line (UPRR) at designated locations. Appropriate gate/fence systems will be required at each legal railroad crossing to provide access to the crossing point while restricting access to the UPRR right-of-way. Existing Ranch roads that route within and immediately parallel to the UPRR right-of-way will not be available for public use.

All publicly accessible railroad crossings will be grade-separated. No new at-grade railroad crossings are proposed as part of the land use plan. Existing culverts may need to be retrofitted to better accommodate increased levels of vehicular and/or trail use.

### The Landfill Road

If the landfill is developed at the proposed location, trucks plan to use a designated north/south road running five miles from the Warren Exit to the proposed landfill site, along an alignment previously identified. This special purpose roadway will be designed to meet landfill truck needs, and can also be used for ranching and wind farm access. Public use of the road will be prohibited.

Additional fencing will be required along the landfill road for safety reasons. Appropriate berming and landscaping will also be needed to screen the landfill road from view of the Belvoir Gateway Village, proposed recreational facilities such as campgrounds and trails, and interpretive/research activities planned for the missile site.



Proposed Landfill Road alignment was determined during the public process conducted for landfill feasibility prior to the Belvoir Ranch Master Plan.

### Eastern Edge Entrance

Public vehicular access is desired at Borie Field, due to its proximity to the Meadow Area and Ranch Headquarters. However, the general public cannot be accommodated on the existing private bridge over the Union Pacific Railroad, nor on roads across private properties currently used by Ranch operations. Likewise, public access cannot be accommodated from the Borie access located off Otto Road due to the need to cross multiple railroad tracks at grade.

A future formal eastern entrance to the Ranch is desired. The feasibility of replacing the existing Borie Field overpass or developing a new road heading west from I-25 at a future date should be explored. If determined feasible, a public access road in either location should be developed as a primary road to access the activity cluster in the Meadow Area. This will not significantly alter the overall Belvoir Ranch land use plan, but development of either alternative for primary access will increase the amount of vehicular traffic on site, as the Belvoir Road will provide a connection between two arterial roadways. The required Belvoir Road design standard will therefore likely need to be upgraded with the increase in traffic volumes, and strategies such as traffic calming will need to be considered.

As developments to the east of Belvoir Ranch are reviewed by the City, strong consideration should be given to evaluating connectivity of the properties.



Borie Fields overpass - requires obtaining public access easements and bridge reconstruction.



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## RECREATIONAL OPPORTUNITIES

Diverse recreational opportunities are proposed for Belvoir Ranch. The intensity of development and activity types have been specifically structured to be compatible with resource values and conditions in each of the five Development Districts. A multi-use trail system connects the districts so a larger area of the Ranch and beyond can be explored and appreciated based on visitor fitness and desires.

Belvoir Ranch will significantly add to the recreation opportunities in the region. Located six miles from Curt Gowdy State Park and adjacent to Red Mountain Open Space/Soapstone Prairie Natural Area, it has the potential to become a collective draw for destination recreation activities, in particular, mountain biking. With these facilities, the region's mountain biking popularity could eventually become similar to Fruita, Colorado and Moab, Utah.

Recreational activities envisioned on the Ranch include the following:

### *Hiking and Trail Running*

Hikers are anticipated to be one of the main user groups visiting the Ranch. Purpose-built trails will originate in each of the Development Districts, and longer loops will interconnect throughout the Ranch.

Opportunities for interpretive trails focusing on a variety of unique cultural and ecological resources will be provided. Interpretive trails will be ADA accessible.

### *Mountain Biking*

Single-track biking challenges will include areas of rough terrain, cross country epic rides, and technical freeride. The Mountain Bike Freeride Park is expected to be a regional magnet.

### *Horseback Riding*

Based at the equestrian center, (existing Ranch Headquarters) a system of trails is proposed to cross the Ranch, connecting to trailheads in all Development Districts, primitive backcountry campsites, and The Big Hole. Trails will be provided for users of all riding levels.

## Recreation Activities Envisioned for Belvoir Ranch

- ✦ *Hiking and Trail Running*
- ✦ *Mountain Biking*
- ✦ *Horseback Riding*
- ✦ *Picnicking*
- ✦ *Camping*
- ✦ *Birding and Wildlife Watching*
- ✦ *Special Facilities*



*Hikers admire the views.*



*Equestrian trails might be organized at the Ranch.*

3



*The Ranch is well-suited for backcountry camping experiences.*

*Picnicking*

Picnicking facilities will be provided in several locations. Picnic structures for both individual tables and groups will provide shade to improve visitor experience. Picnic areas will also include vault toilets and trash receptacles.

*Camping*

A recreation vehicle (RV) campground is proposed to be built near the I-80 interchange/Warren Access, providing full-service facilities for Ranch visitors and vacationers traveling through the state.

Tent camping is proposed at two locations – near Lone Tree Creek on the west end of the Ranch and at the proposed West Reservoir site. Campgrounds will be primitive and have group and individual sites, some with ADA accessibility. Fire-rings for open fires will be provided if sites are made fire-safe. Restrooms will also be provided.

The Ranch is well suited for backcountry camping experiences due to its vast size and very minimal human constructs. Backcountry camping is generally limited to Federal lands, and thus Belvoir Ranch offers a unique opportunity to supplement available facilities. Backcountry camping opportunities will include both hiking and equestrian designated-sites.



*Sitings of big game animals, such as the antelope shown above, enhance the visitors' experience on the Ranch.*

*Birding and Wildlife Watching*

Birding and wildlife watching will be staple recreation activities on the Ranch. The size of the property, when considered with adjoining open space in Colorado and the diversity of biological communities, provides a high quality birding/wildlife watching visitor experience. A large assortment of wildlife has been documented including antelope, mule deer, porcupine, eagles, falcons, Great-horned and Burrowing Owls, Swift fox, elk, coyotes, bear, mountain lions, and rattlesnakes.

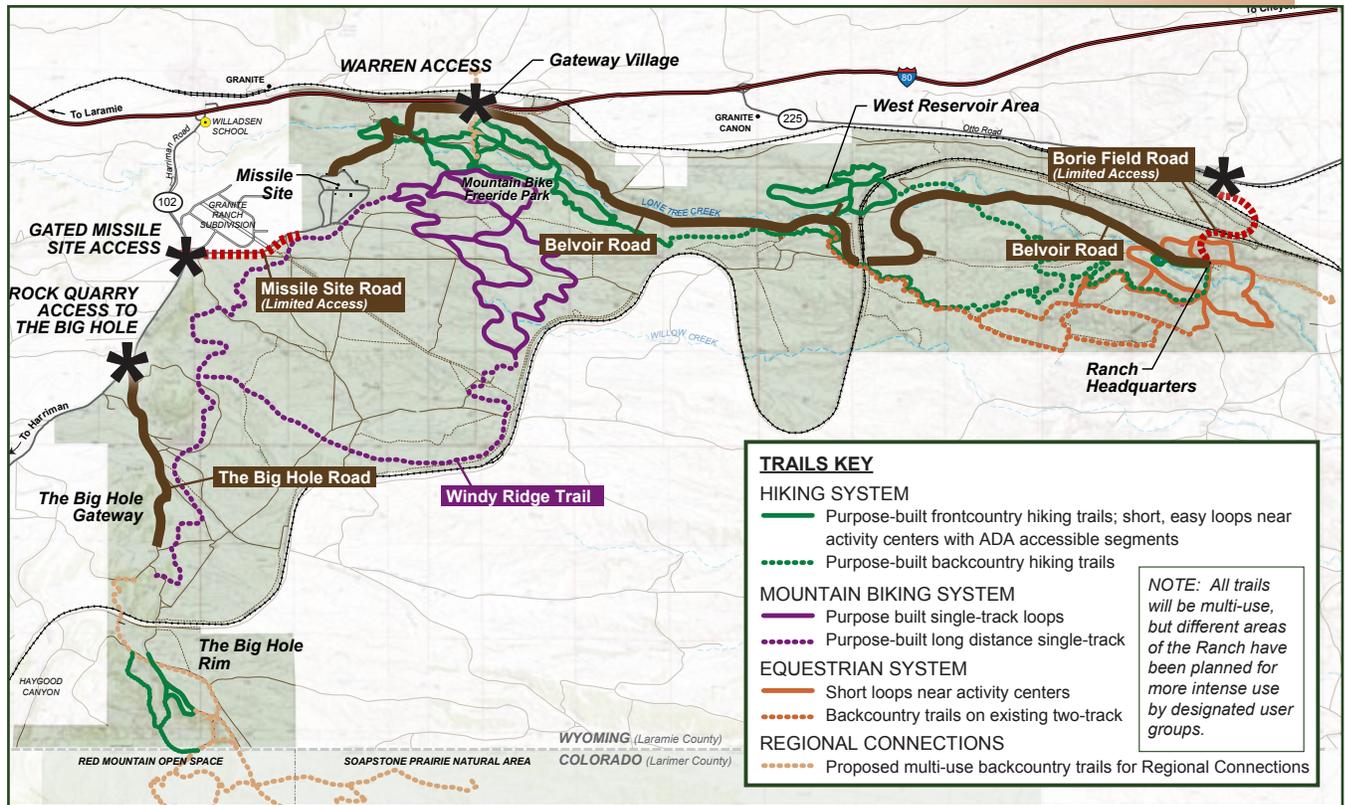
*Special Facilities*

A links-style golf course is proposed for the West Reservoir Area. A retreat/conference center is proposed for the Gateway Village district. Each facility will be a unique activity for the region and draw visitors from a large area.



*Special facilities proposed on the Ranch include a Visitor Center at the Gateway Village.*

## BELVOIR RANCH AND THE BIG HOLE TRAILS



One of the benefits in acquiring Belvoir Ranch is the provision of additional, publicly-accessible open space for Cheyenne residents. Through the Belvoir Ranch Master Plan process, the public has expressed a desire to appreciate the natural beauty and ecosystems of this upland prairie environment on foot, bike and horseback.

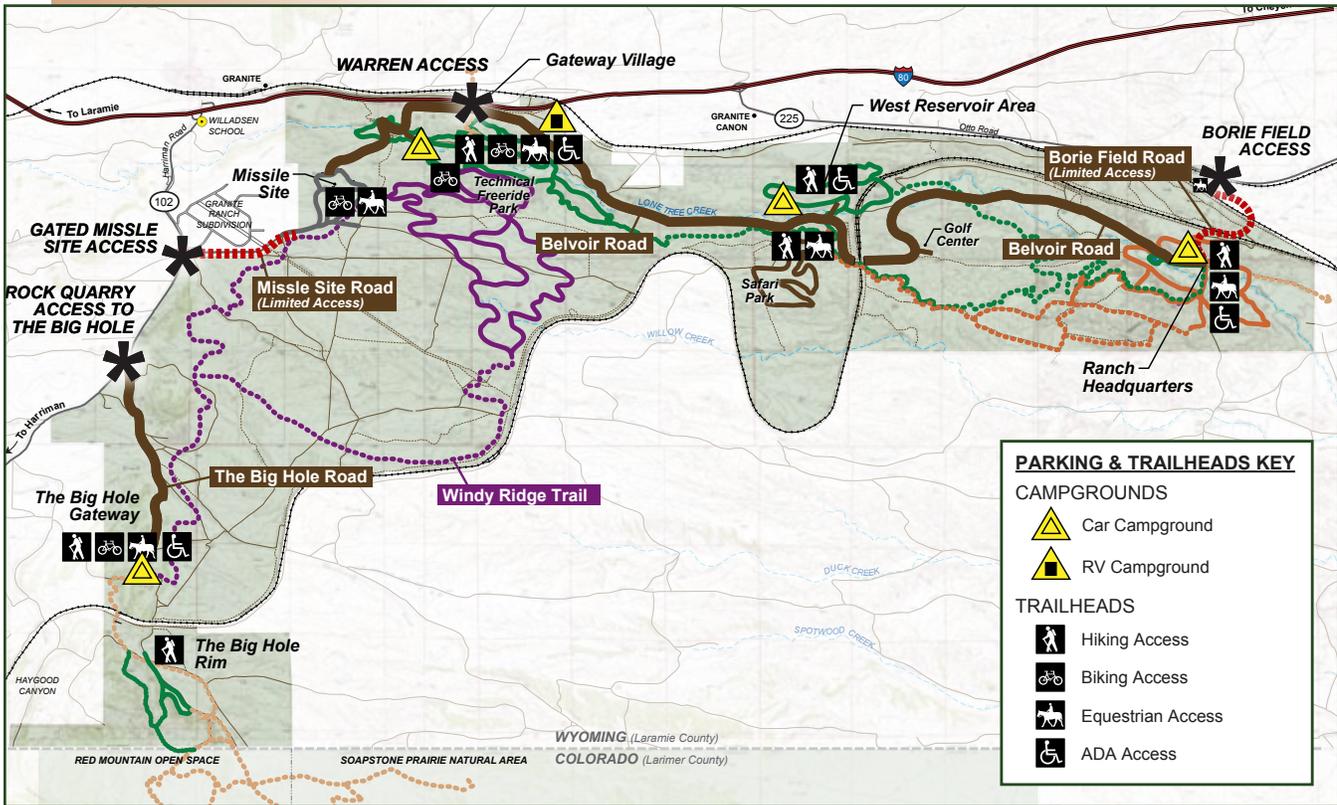
Three separate but integrated trail systems are planned to serve hikers, mountain bikers and equestrian user groups at Belvoir Ranch. The trail systems are laid out in a manner that will be compatible with the current working Ranch landscape, and can transition to more active use as selected areas are developed for additional recreation and revenue generation purposes. The map above overlays proposed roads and trails onto the existing pasture system. It is envisioned that trail closures would be necessary when pastures are occupied by cattle, and that pastures would be gated to avoid unauthorized access.

Selected multi-use trails will be allowed on The Big Hole property, but will follow more stringent resource conservation and management principles established for the abutting Colorado properties by The Nature Conservancy, Larimer County Parks and Open Lands, and the City of Fort Collins Natural Areas Program.



Mountain biking trail system at Belvoir Ranch will be developed similar to trails in Curt Gowdy State Park - shown above. (photo courtesy of Kevin Rokke)

**PARKING AND TRAILHEADS**



*Trailheads shall be signed for appropriate and inappropriate uses.*

Vehicular parking will be provided at numerous areas within each of the five activity areas. Additionally, there will be smaller-scale parking at trailheads for vehicles and at equestrian trails for horse trailers. ADA accessible trails will be served with ADA parking.

Designated parking areas are one element in an overall strategy to managing the carrying capacity, or acceptable levels of human use, on an open space site. On the Belvoir Ranch, limiting parking will be challenging due to the expanse of wide-open prairie where vehicles can informally park along roadways when trailhead parking lots are full. Ongoing management and monitoring of acceptable levels of site use, adequate parking quantities, and parking enforcement policies will be necessary.

## CONSERVATION

### *Natural and Cultural Resources*

Belvoir Ranch is a unique and biologically diverse site with an abundance of wildlife and plant life. The Ranch supports hundreds of species of plants and animals. Birding and watching both large and small mammals, reptiles, and amphibians will be an activity enjoyed by many visitors, though it will be important to ensure that appropriate buffers are maintained between humans and wildlife, and that key migration corridors, and foraging and breeding areas, are protected through seasonal closures or more stringent restrictions where necessary.

A variety of vegetation ecosystems occur on the Ranch: Mixed Grass Prairie, Wyoming Big Sagebrush, Xeric Upland Shrub, Ponderosa Pine, and Riparian Corridor. The Ranch is predominately comprised of the high prairie grassland, a globally rare ecosystem. The 200-acre Riparian Habitat Wildlife Extension Agreement with the U.S. Fish and Wildlife Service will be continued for the study and protection of the Colorado Butterfly Plant (current agreement to expire 2019).

There is evidence that humans have prized the area for over 12,000 years with near continuous habitation. More recent occupants have been Native Americans, homesteaders, ranchers and the Air Force Missile Base. Each has left traces of their activities. The Office of the Wyoming State Archaeologist performed a Class 1 archaeological survey of the Ranch, identifying several cultural sites. As improvements are slated for development, additional, more intensive and detailed cultural and archaeological resource studies will need to be completed to identify resource types and locations, and to develop appropriate strategies for preserving artifacts and avoiding impacts due to human use.



*A ground nest is one of the many unique treasures visitors might find on the Ranch.*



*Ute ladies'-tresses, Colorado butterfly plant, and Preble's meadow jumping mouse are supported by riparian habitats such as found along Lone Tree Creek.*



*Historic homestead remnants include a windrow of willows.*



*Visitors cherish breathtaking views such as the red rock outcrops contrasting with lush mountain mahogany along the West side of the Ranch.*



*Ranching operations on Belvoir Ranch is part of its historical legacy.*

### *Open Space*

Open space can be valued based on its benefits associated with scenic backdrops and buffers, passive and active recreational resources, and preservation of traditional resource-based land uses such as farming and ranching. These broad benefits can be measured by quality of life indicators, enhanced property values, and the ability to create a sustainable land ethic for Cheyenne’s future.

It is estimated that Cheyenne’s population will more than double within the 30-year timeframe of the Belvoir Ranch Master Plan. *PlanCheyenne* has identified the need for additional open space as population grows. The significant natural landscape and environmental habitat, coupled with the historic cultural resources found on Belvoir Ranch, will be preserved as open space. Ranching operations that historically utilized the Ranch are a compatible use for open space preservation.

### **RANCHING**

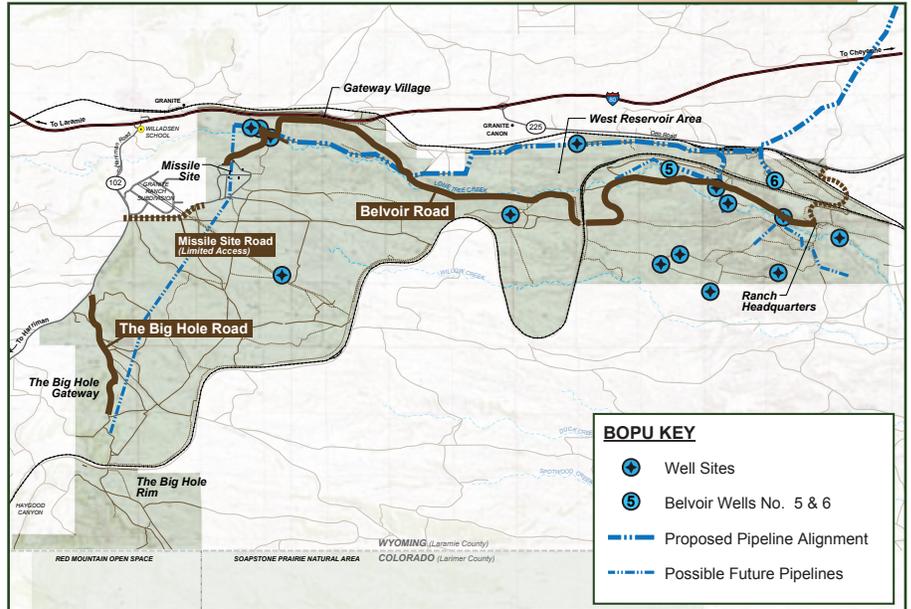
Belvoir Ranch is currently leased for ranching operations and is part of Cheyenne’s historical legacy. Ranching is an activity the community would like to maintain as part of the “working landscape” goal for the Ranch. Management of ranching operations will evolve as recreation and economic development plans are implemented. Available financial resources and community priorities will affect what and when specific development occurs and how it affects ranching.

### PUBLIC UTILITIES: WATER RESOURCES AND SOLID WASTE LANDFILL

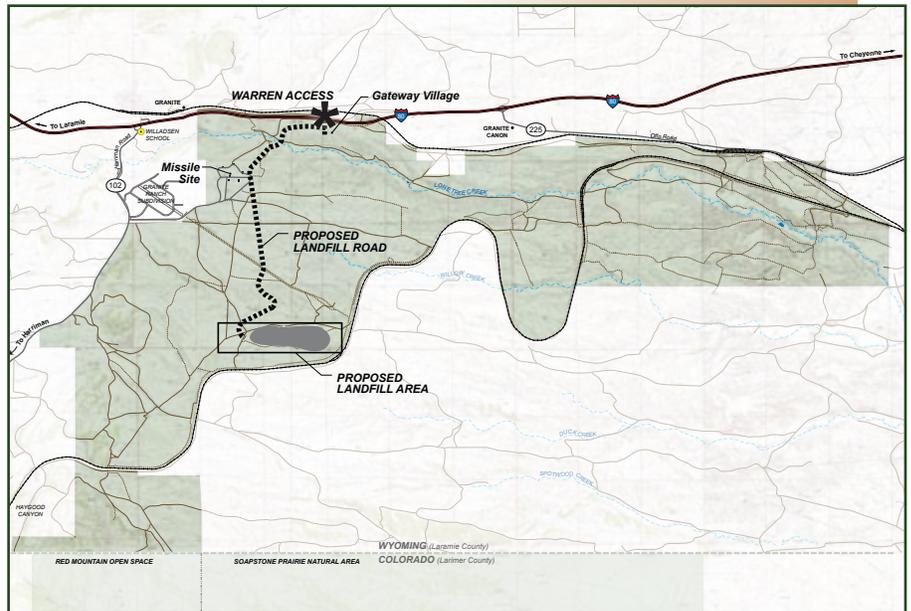
Subsurface water resources will be developed by the Board of Public Utilities (BOPU) for municipal supply. The BOPU has completed preliminary studies identifying potential well sites and interconnecting pipe corridors traversing the northern portion of the Ranch. This plan will be implemented in phases, as City water needs increase.

Cheyenne’s Public Works Department also contributed to the purchase of the Ranch. A solid waste landfill site has been identified on the Ranch and may provide municipal solid waste management needs in the future.

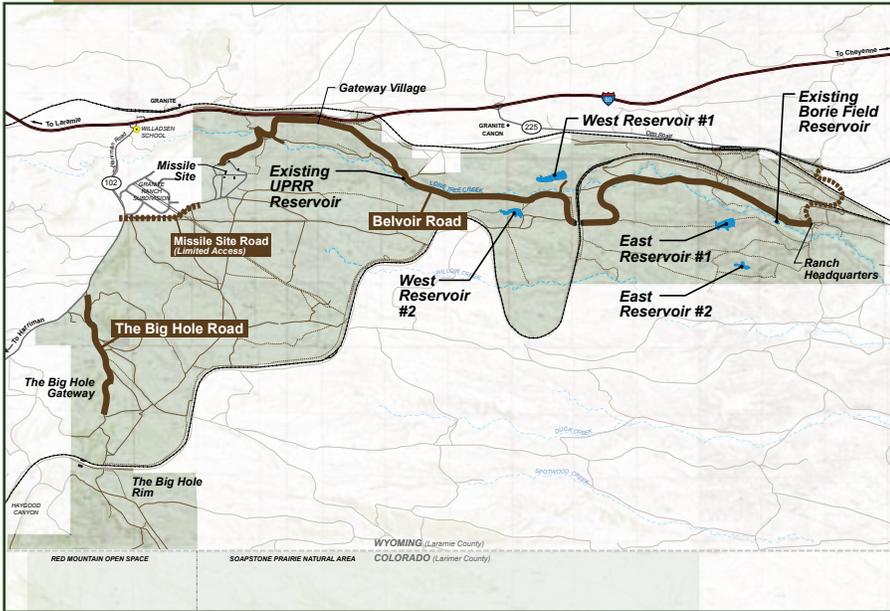
A five-mile haul road alignment originating at the Warren exit was identified in the feasibility study. The final location of the haul road will be determined based on development at the Belvoir Ranch Gateway Village and conference center site. The haul road should be located where it has the least environmental impact and visual and noise impact on visitors of the Ranch. If the road is constructed, landscape buffers, such as berms, would be implemented to screen it from view.



Potential well sites and pipe corridors have been identified by the BOPU for municipal water supply.



Potential landfill site and road have been identified by Cheyenne’s Public Works Department.



### SURFACE WATER - RESERVOIRS AND LONE TREE CREEK

Recreational use of the subsurface water supply on the Ranch is consistent with the overall water resource management goals established by the Board of Public Utilities. The Master Development Plan identifies areas that are most suitable for surface reservoirs, based on topography and location relative to potential wells and water supply lines. Engineering feasibility studies will need to be performed at each location before further development planning can proceed. The reservoirs may

Four reservoirs have been proposed in the Belvoir Ranch Master Development Plan.

perform municipal water supply functions such as pre-treatment or storage, and serve as water supply for fire suppression, in addition to recreation.

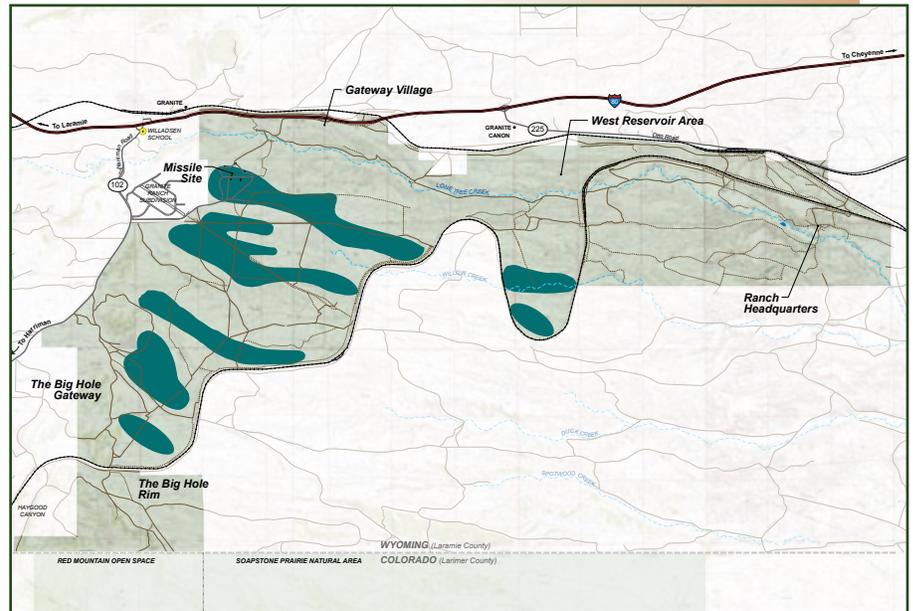
If recreation uses are allowed, the reservoirs could provide scenic, fishing, and swimming opportunities and wildlife habitat. No motorized boating will be allowed on the existing or proposed reservoirs, though non-motorized boats, like canoes, paddle boats, or “belly boats” for fishing, could be permitted.

The plan identifies suitable locations for surface reservoirs, but does not imply that they will be constructed. Additional engineering studies, as well as the level of public support and cost, will need to be undertaken and considered in the decisionmaking process.

Historically, Lone Tree Creek was a perennial trout stream with greenback and cutthroat trout. The stream is now dry most of the year. The notion of reestablishing the Creek for recreational fishing has been proposed. Preliminary study indicates the notion of reestablishing the creek is impractical due to significant lowering of the water table since the historical perennial flow. However, to support that conclusion, a hydrological sustainability and water management study is required.

## WIND ENERGY AND/OR SOLAR POWER GENERATION

Electricity generation using wind turbines, and/or solar panels, has been proposed as a compatible use and a “green” way to support the City’s energy requirements on the Ranch. The site is classified as an excellent candidate for a wind farm due to the topography and wind quality. Seven ridge areas totaling approximately 3,500 acres have been identified as optimal and are shown on the Plan.



Seven ridge areas (shown above in blue) have been identified as optimal for wind generation.

While wind power generation is possible on all seven ridgelines, priority is given to the four northern-most ridgelines, given the ecological, recreational, scenic and cultural resource value of the southern ridgelines and the impacts that could result if wind power was developed there. Additional evaluation of potential resource impacts will be necessary as part of the feasibility assessment.

The limiting factor to development is the lack of transmission lines serving the site, and more detailed engineering feasibility studies will need to be conducted. And while wind turbines are compatible with cattle grazing, the suitable areas are within the existing Hunter Management Area. Because hunting with firearms can pose a security risk for the wind turbines, compatibility of these activities will need to be studied further.

The property also offers opportunities for solar energy “harvesting” on south-facing slopes. Compatibility of this use with grazing and hunting will also need to be evaluated further.

## EDUCATION/INTERPRETIVE OPPORTUNITIES AND SCIENTIFIC RESEARCH

A strong emphasis on education and interpretive opportunities is a key component of the Plan. The wide diversity of cultural historic sites, plant and wildlife ecosystems, combined with interesting terrain/topography, geology, and scenery, provide sources for a variety of themes and topics for educational activities and interpretive walks.



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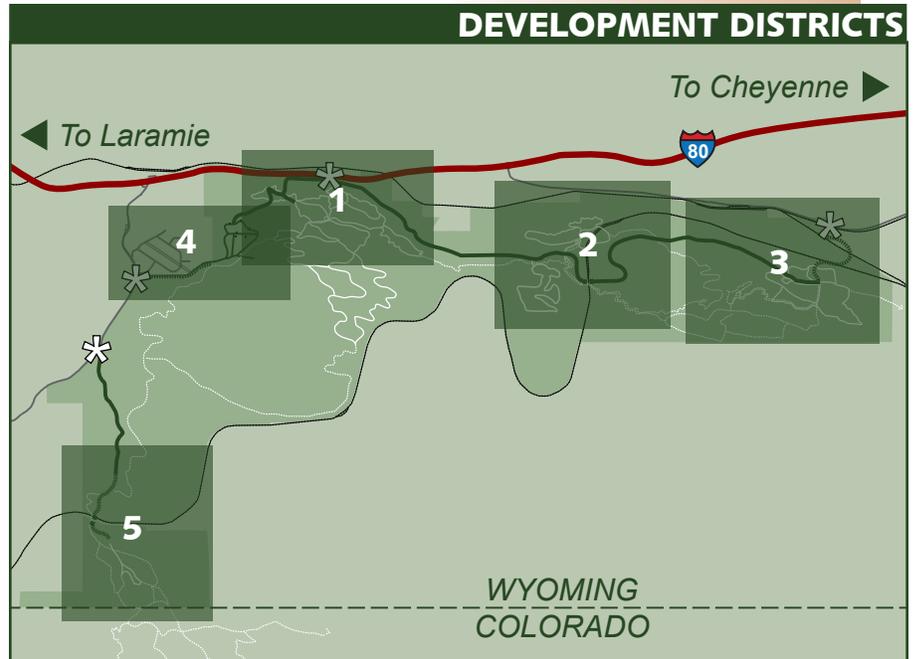
## Section 4: Ranch Development Districts

### OVERVIEW

Five Development Districts, or activity areas, have been defined based on terrain, water features, flora and fauna habitat, ranching activities, existing infrastructure, proximity to highway access and proposed recreation activities. Each District is a destination within the Ranch and will provide facilities that will engage visitors for long periods.

Development in each district will occur over many years and will be reflective of community demand, priorities, and available funds. Development Phasing Plans, presented in the *Build* phase of the Master Plan, will suggest how improvements can be accomplished most cost-effectively to address public priorities.

The following sections describe activities proposed for each District.



*Belvoir Ranch Development Districts include:*

1. *Belvoir Gateway Village*
2. *The West Reservoir Area*
3. *Belvoir Meadows*
4. *The Missile Site*
5. *The Big Hole*



Facilities located at the 'front door' will reflect the rural character of the Ranch.

## Belvoir Gateway Village Activities

- ✦ Rest stop amenities
- ✦ Recreation vehicle (RV) campground
- ✦ Retreat/conference center
- ✦ Tent campground
- ✦ Mountain bike freeride park
- ✦ Hiking trails
- ✦ Horseback riding
- ✦ Wedding/events area
- ✦ Winter Recreation: sledding, cross-country skiing, snowshoeing

## 1. BELVOIR GATEWAY VILLAGE

### *The Ranch's Front Door*

Situated at the I-80 Warren Exit, Belvoir Gateway Village is the primary access point into the Ranch. It is the only available access point along the 13-mile northern boundary that has direct access to the Ranch without crossing the Union Pacific Rail Road tracks. It is envisioned as the front door to the Ranch and western gateway to the City of Cheyenne. It will function as a highway rest stop, support visitors to the Ranch and the City of Cheyenne, and serve as a Rural Center supporting outlying rural residents. It will provide parking (including horse trailers), restrooms, fuel, limited convenience/grocery and public services.

Need for a Rural Center was determined and a location identified, nearby at Harriman Road and I-80, in the 2001 Laramie Comprehensive Plan. This site will meet those needs. The primary facilities will be open year-round. During the winter, it will be the access point and trailhead for winter related recreation activities on the Ranch such as sledding, cross-country skiing, snowshoeing, and horseback riding.

### *Parking & Trailheads*

The existing truck parking facility on the north side of I-80 will remain. Truck related services will not be provided at Belvoir Gateway. Vehicle parking will be encouraged at the Village to reduce the amount of traffic on the Ranch. Trailheads to equestrian, mountain biking and hiking trails will be located nearby. There will also be trail access leading directly to the Mountain Bike Freeride Park.

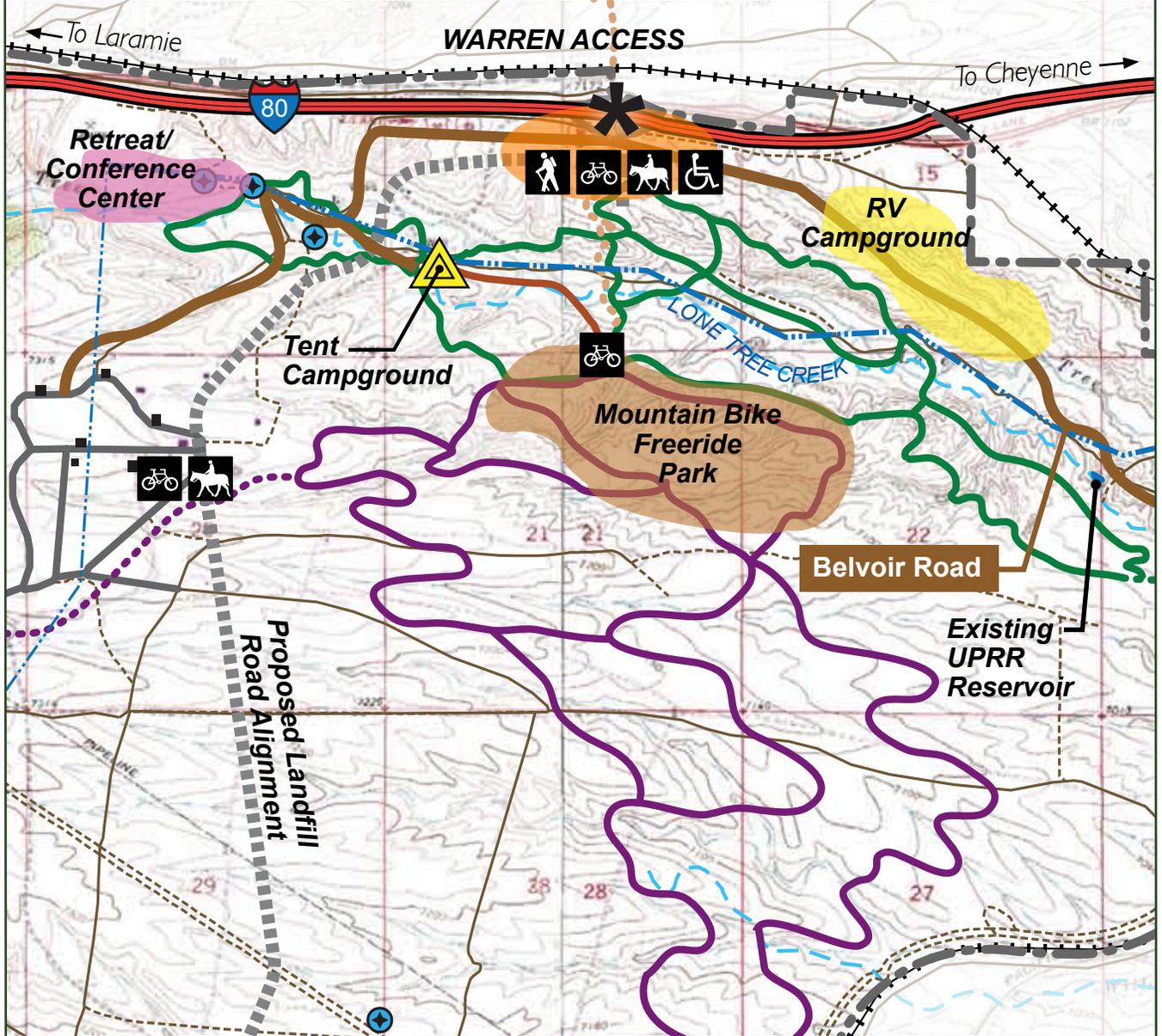
Belvoir Gateway Village parking will be based upon commercial land uses. Trail-user parking will include 30 car spaces and 7 bus/horse trailer spaces.

### *Activities*

Venues and activities proposed for Belvoir Gateway Village will include a recreation vehicle (RV) campground, retreat/conference center, car tent campground, mountain bike freeride park, and wedding/events area.

Located on the upper plateau near the Gateway Village, the RV campground will accommodate 30 vehicles in the first phase (total buildout of 50) with pull through sites. It will provide full services, including water hookups, sanitary dump station, and electricity. It may include Wi-Fi or other support technology. If demand warrants, it will be open year around but not provide full hook-ups in the winter. The facilities will provide ADA accessible toilets, showers, picnic tables with shelters, fire rings and a community Ranch overlook with picnic tables and shelter.

**BELVOIR GATEWAY VILLAGE**



**LEGEND**

	Ranch Planning Boundary	<b>TRAILS:</b>	
	Access Point		Hiking - Frontcountry
	Gated Access		Hiking - Backcountry
	Campgrounds		Mtn. Biking - Single Track
<b>TRAILHEADS:</b>			Mtn. Biking - Long Dist. Single Track
	Hiking / Mtn. Biking		Equestrian - Frontcountry
	Equestrian / ADA Accessible		Equestrian - Backcountry
<b>BOPU:</b>			Regional Connections
	Large Existing Well	<b>ROADS:</b>	
	Prop. Pipeline Alignment		Primary Road
	Possible Future Pipelines		Limited Access Road
			Interstate
			Major Road
			Graded Road
			Existing Trail or 2-Track Road
			Railroad
			Major Creek

**KEY MAP**

The key map shows the location of the Belvoir Gateway Village (indicated by a grey rectangle) relative to Laramie and Cheyenne. It also shows the Interstate 80 and the Wyoming/Colorado border. A scale bar indicates 0, 1000, 2000, and 4000 feet. A north arrow is present.

Scale Approximate

A rustic campground along Lone Tree Creek (Lone Tree Creek Campground) near the conference center will have 15 tent sites with parking. The campground will provide level pads, picnic tables, and vault toilets. Native species of trees will be planted to provide shade and privacy. There will be trailheads for hiking, equestrian, and mountain biking. The mountain biking trail will connect to the Technical Freeride Park. The trailheads will have additional parking for 20 cars, 7 equestrian trailers, and a small corral.

A mountain bike freeride park will be located on the geologic formation cut by the Lone Tree Creek drainage. It will be designed to provide a variety of challenging topography to host a range of biking skill levels. The primary access points will be at a trailhead near Lone Tree Creek Campground and at the Belvoir Gateway Village.

### *The Built Environment*

Visitors will be welcomed to the Gateway Village with a monumental and memorable landmark sign. The entrance will incorporate hard and soft landscaping that supports the theme and character established in the Village. Wayfinding signage will guide visitors throughout the Village and direct them to facilities on the Ranch. Being the “front door” to both the Ranch and the City, the entrance and Village will be designed to shape positive impressions of the community.

Multiple small buildings will establish a “village” character that allows flexibility for growth of additional facilities as activity level on the Ranch grows. Specialty shops, open seasonally, could cater to specific recreation activities such as camping or mountain biking. A Cheyenne Visitor’s Center will be a significant component. It will serve to welcome visitors to both the Ranch and the City and provide an Interpretive Center. A City Parks and Recreation maintenance building serving the western portion of the Ranch could be part of the complex.

Placemaking for the Ranch and City gateway will be dependent on the architectural expression and formalistically could be in either historic vernacular or contemporary. Architectural style should reflect the established spirit and context of the locale and the wind-swept semi-arid landscape. Architectural features that could be incorporated include: false-front parapet wall, local red brick, roof pitches that easily shed snow, minimum decorative ornamentation, and standing seam metal roofs.

An Interpretive Center planned for the site will celebrate the history of the Ranch and the City of Cheyenne, and will include a range of educational/interpretive exhibits and displays. The proposed Center could include the Cheyenne Legacy Museum including the Mountains to Plains Project. It could also house archaeological artifacts collected on the Ranch that need preservation and protection.

A proposed Retreat/Conference Center could be nestled in the Lone Tree Creek draw near the historic William Williams Homestead site. It will be in the picturesque and quiet noise shadow of I-80, and is envisioned to have a fully equipped central lodge and associated camper cabins, which could be rented independent of events at the lodge. Separate lodging allows flexible expansion of facilities based on demand. The lodge will be designed for winter use for year around programming. Weddings and other special events could be staged at the facility.

### *Trails*

A system of loop trails will provide for easy, short-distance hiking and biking that connects the proposed retreat/conference center, car campground, mountain bike Technical Freeride Park, RV campground, and the Belvoir Gateway Village.

Trail user support facilities, supplying maps and provisions, will be provided at the Belvoir Gateway Village entrance since it will be the primary access point for the majority of trail users. Bicycle rentals and repair services as well as additional Village amenities are planned.

Belvoir Ranch will be closed to vehicular access from November to April. However, walk-in access will be permitted at Belvoir Gateway Village for cross-country skiing, snowshoeing, and other winter trail activities.

Trails will avoid routing within ¼ mile of the known Golden Eagle's Nest and/or will implement seasonal closures during nesting, between February 1 and August 31.

### *Education and Interpretive Opportunities*

Site amenities associated with the Retreat/Conference Center will include information/interpretive kiosks and signage, ADA accessible interpretive trails, picnic tables and shelters, wildlife viewing area with spotting scopes, and trailheads to other areas of the Ranch.



*Family-oriented water-related activities are envisioned in the West Reservoir Area.*

## West Reservoir Area Activities

- ✦ Fishing
- ✦ Swimming
- ✦ Picnicking
- ✦ Tent camping/group camping
- ✦ Hiking trailhead with stacked loops for a range of abilities and ADA accessibility
- ✦ Equestrian trailhead
- ✦ Frisbee golf
- ✦ Playground
- ✦ Archery practice area
- ✦ Wildlife viewing/Birding
- ✦ Links golf course

## 2. THE WEST RESERVOIR AREA

### *Water Fun*

Areas that are best suited for surface reservoirs that could provide for water supply and recreational needs have been identified based on topography and location relative to potential wells and water supply lines. Of numerous locations on the Belvoir Ranch site, the areas shown on the map have been deemed most favorable, based on the factors noted above and proximity to other centers of activity.

If recreational uses are allowed, West Reservoir #1 is envisioned as the primary family-oriented water-related District on the Ranch. The reservoir will not only provide scenic and recreation opportunities but also allow for the creation of wetland and riparian wildlife habitat at the water's edge. The focus is on creating family-friendly environments with a variety of uses. Other potential recreational activities could include a frisbee golf course, playground, and archery practice area.

West Reservoir #2, a second reservoir south of Belvoir Road, will be trail accessible only. It is planned to provide backcountry camping and picnicking experiences for hikers. No structured development will be provided.

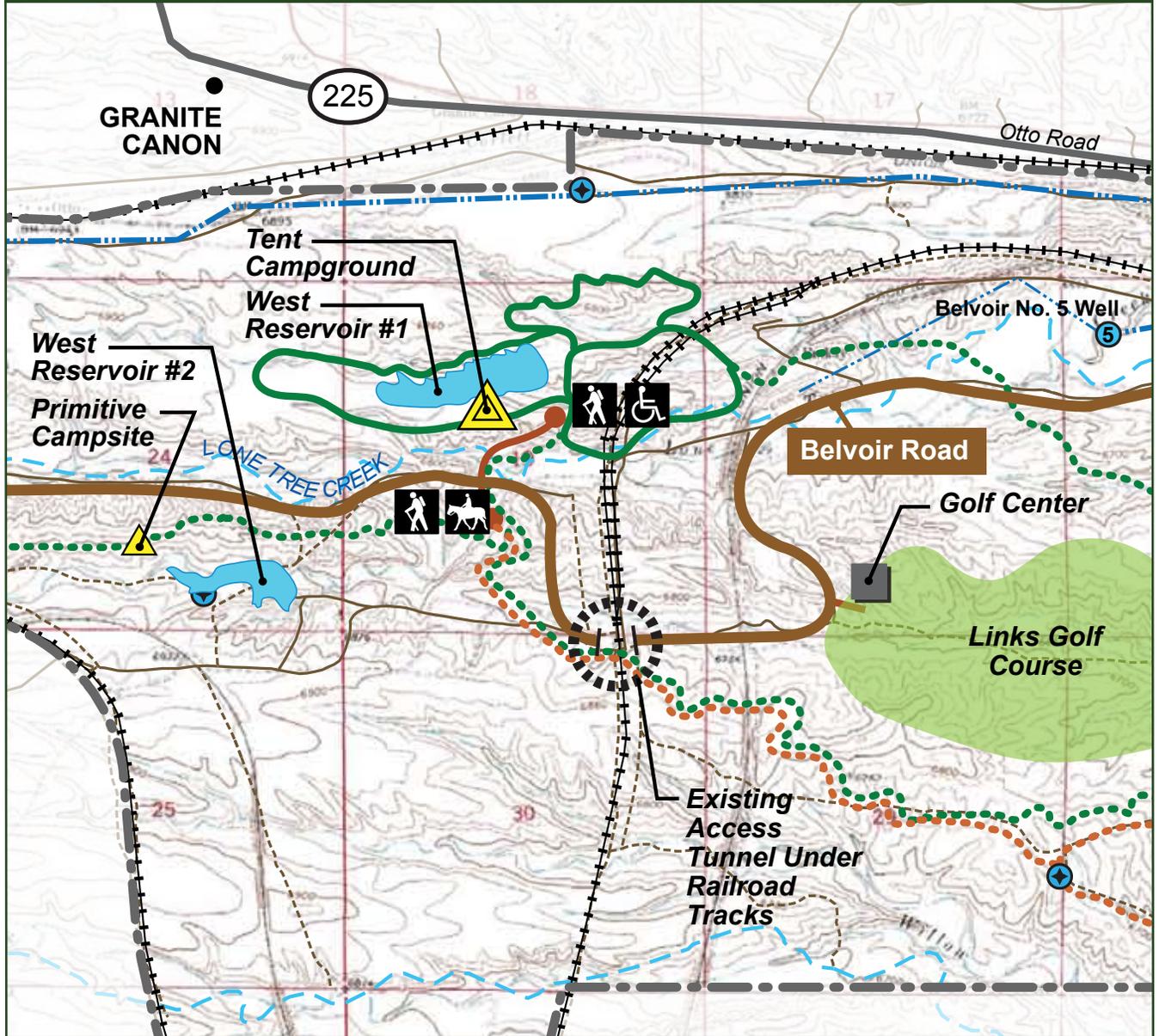
While suitable locations have been identified, this does not imply that any or all of these reservoirs will be constructed; rather, the plan identifies suitable locations for these activities, should they be deemed desirable based on level of public interest, engineering feasibility, cost, and support from the Board of Public Utilities. If the reservoirs are not constructed, this area could still provide low-impact recreational opportunities such as hiking and camping.

Dark sky is one of the quality characteristics of the vast high prairie of Belvoir Ranch. To preserve that quality, no electricity will be provided to the West Reservoir District with the exception of the golf course clubhouse area.

### *Access and Parking*

Direct access from Belvoir Gateway Village to this area without having to pass through a culvert under the railroad allows for easy accessibility for private vehicles and horse trailers. Belvoir Road, a one-lane road under the railroad track, will connect to the golf course site and continue on to The Meadows area. Parking will be provided at the swimming beach (20 car, 3 handicap, 2 school bus), picnic areas (27 car, 4 handicap), campground (20 cars) and trailheads (20 car, 5 horse trailer).

**WEST RESERVOIR AREA**



**LEGEND**

Ranch Planning Boundary	<b>TRAILS:</b>
Access Point	Hiking - Frontcountry
Gated Access	Hiking - Backcountry
Campgrounds	Mtn. Biking - Single Track
<b>TRAILHEADS:</b>	Mtn. Biking - Long Dist. Single Track
Hiking / Mtn. Biking	Equestrian - Frontcountry
Equestrian / ADA Accessible	Equestrian - Backcountry
<b>BOPU:</b>	Regional Connections
Large Existing Well	<b>ROADS:</b>
Prop. Pipeline Alignment	Primary Road
Possible Future Pipelines	Limited Access Road
Railroad	Interstate
Major Creek	Major Road
	Graded Road
	Existing Trail or 2-Track Road

**KEY MAP**

0 1000 2000 4000 Feet

Scale Approximate

### *Activities*

If recreation uses are allowed, the reservoirs could provide fishing and swimming opportunities. Fishing structures and wildlife/birding observation blinds will help reduce impacts to natural areas. No motorized boating will be allowed on any of the existing or proposed reservoirs, though canoes, paddle boats, and “belly boats” for fishing could be allowed.

Covered picnic shelters for both individual tables and groups will be constructed and will also incorporate supporting parking areas and restrooms. Consideration must be given to the placement of the picnic structures, restrooms, kiosks, and parking areas, so that they do not adversely impact scenic views. Wildlife-safe trash receptacles should be used.

Considerable public interest has been expressed in a links-style golf course and clubhouse. Links-style golf is by nature minimalistic. The course design embraces the native, existing, treeless terrain; requires minimal irrigation; and blends into the surrounding viewshed. The existing xeric grassland co-mingles with the xeric grasses of the links design. Preliminary investigation has been completed and a suitable site for an 18-hole course, has been identified and shown on the plan.

### *Trails*

A stacked-loop hiking trail system will be developed extending out from West Reservoir #1. Three loop trails will provide easy front-country hiking in a variety of terrain including along the water's edge, elevated above the riparian corridor, and utilizing two existing culvert crossings under the Union Pacific Railroad to route through the Star Mill Pasture. Additional hiking routes will increase in difficulty and length as users move further out from the trailhead onto backcountry hiking trails that lead to the equestrian center to the east and campgrounds to the west.

### *ADA-Accessible Trails*

The loop around West Reservoir #1 will be developed as an Americans with Disabilities Act compliant facility. A flat, well-groomed crusher-fines trail will also be well suited for use by strollers, young children, and inexperienced bicyclists.

### *Education and Interpretive Opportunities*

An interpretive trail with signage is planned to surround West Reservoir #1 and will focus on the littoral and riparian ecosystem and geology unique to this part of the Ranch.



### **The Meadows Activities**

- ✦ *Equestrian Center and horse boarding facility*
- ✦ *Picnic shelters for families and groups*
- ✦ *Tent camping – rustic with covered picnic tables*
- ✦ *Wagon rides/chuck wagon dinners*
- ✦ *Hiking trailhead with stacked loops and backcountry trails*
- ✦ *Equestrian trailheads with stacked loops and backcountry trails*
- ✦ *Backcountry campsites – hiking & camping with your horse*
- ✦ *Swimming*
- ✦ *Fishing*
- ✦ *Playground*
- ✦ *Frisbee golf*

## **3. BELVOIR MEADOWS**

### *The Ranch Animal Experience*

Belvoir Meadows is an area on the eastern end of the Ranch centered on the existing Ranch Headquarters complex. Its primary natural feature is a broad riparian habitat and sub-irrigated alluvium created by a free-flowing well into existing reservoir and Lone Tree Creek basin. The Ranch Headquarters, including corrals, barns, housing, water facilities, and pastures, will be preserved and utilized for an equestrian center and other animal-based recreation activities.

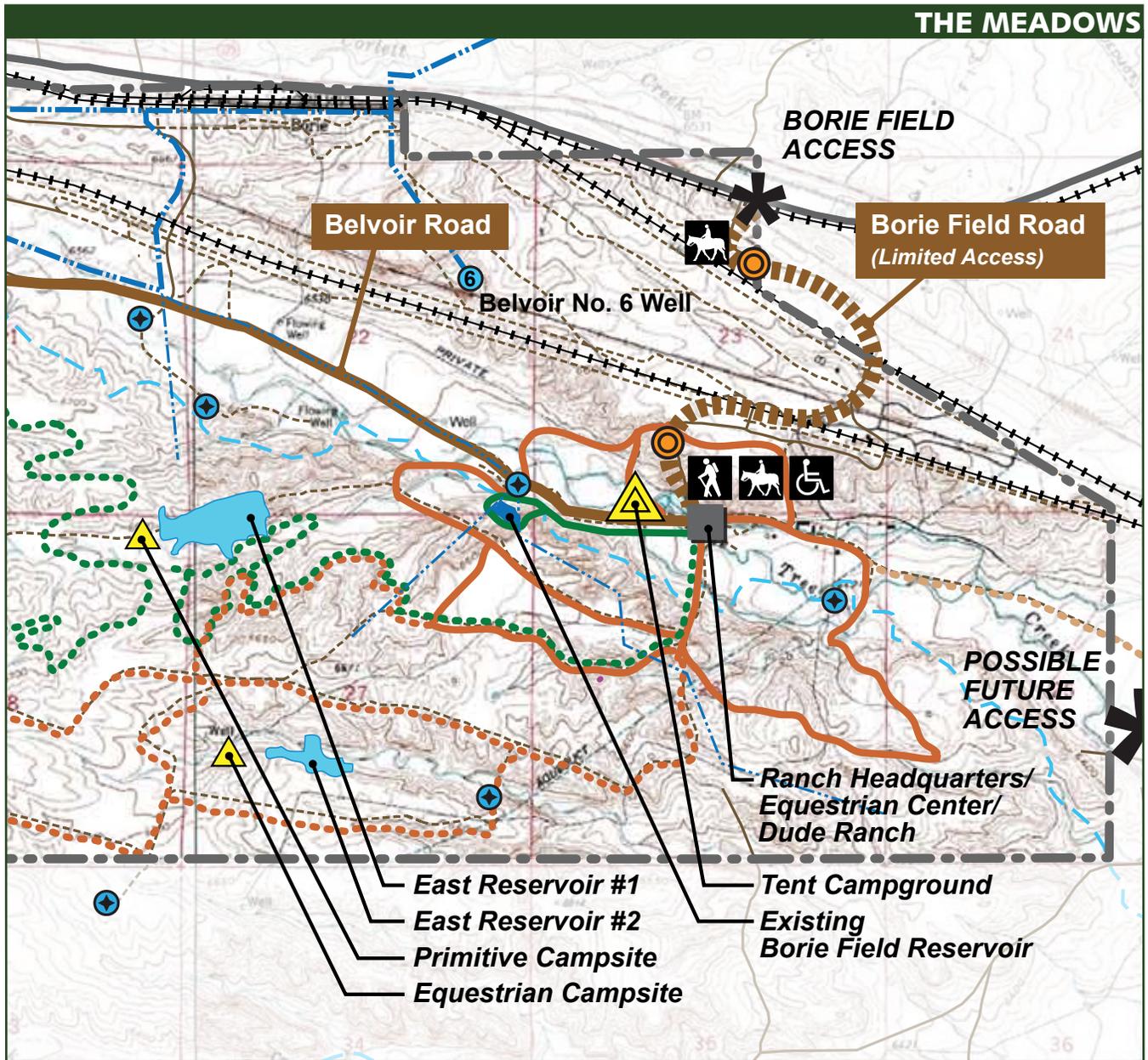
The Ranch Headquarters is also a vital component of the ranching operations. Incoming cattle are delivered to the Ranch at this location in the spring. Haying in the meadow pastures is the best on the Ranch.

Subject to the same caveats for the West Reservoir area, two constructed reservoirs have been proposed in The Meadows area (Meadows Reservoir #1 and #2), one frontcountry with structured recreation facilities and the other backcountry for primitive camping/picnicking. If recreation uses are allowed, the frontcountry reservoir, Reservoir #1, will host a variety of family-friendly recreation activities, including a possible playground and frisbee golf course.

### *Access and Parking*

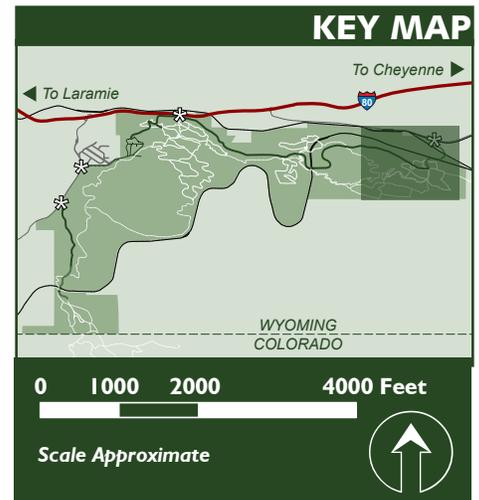
Public vehicle access to this District will be from the west via the improved Belvoir Road. The existing Borie and Borie Field entrances will remain limited to Ranch, City, railroad and utility vehicles only. Ideally, the City will eventually be able to establish access to The Meadows from Otto Road and build the required viaduct infrastructure to cross the multiple railroad tracks. Access into the Ranch from the east is also very desirable, as it will solve multiple internal vehicular circulation challenges, safety issues and greatly improve accessibility. As development proposals are brought forward for City review, opportunities for access and connectivity from the east side should be explored.

**THE MEADOWS**



**LEGEND**

	Ranch Planning Boundary	<b>TRAILS:</b>	
	Access Point		Hiking - Frontcountry
	Gated Access		Hiking - Backcountry
	Campgrounds		Mtn. Biking - Single Track
<b>TRAILHEADS:</b>			Mtn. Biking - Long Dist. Single Track
	Hiking / Mtn. Biking		Equestrian - Frontcountry
	Equestrian / ADA Accessible		Equestrian - Backcountry
<b>BOPU:</b>			Regional Connections
	Large Existing Well	<b>ROADS:</b>	
	Prop. Pipeline Alignment		Primary Road
	Possible Future Pipelines		Limited Access Road
			Interstate
			Major Road
			Graded Road
			Existing Trail or 2-Track Road
			Railroad
			Major Creek



### *Activities*

The reservoirs planned for the District will provide scenic and recreation opportunities and enhanced riparian and wetland wildlife habitat at the water's edge. Location of both reservoirs is based on topography conducive for dammed reservoir construction, and being out of the Lone Tree Creek flood plain and flowline.

Meadows Reservoir #1 is envisioned for frontcountry water-related recreation activities appealing to a wide range of visitors. Reservoir #2 is planned to provide backcountry camping and picnicking for trail users. No structured development will be provided at Meadows Reservoir #2.

Birding and wildlife viewing is excellent in the Meadow reservoir environment and viewing blinds and interpretive displays will be constructed in strategic locations. There are a large number of songbirds, waterfowl, pelicans, cormorant, and Great Blue Heron. It is also a good area to observe Mule deer fawning.

### *The Built Environment*

Existing Ranch Headquarters infrastructure will be the core of recreation opportunities in this district. An equestrian center and animal related activities, and a possible horse boarding facility, are proposed to be developed around the core. The existing facilities will continue to be utilized by ranching operations.

### *Trails*

***Equestrian Trails*** - An equestrian center will be developed at the current Ranch Headquarters. From this activity base, a stacked-loop trail system will accommodate equestrian trail users of varying skill and experience levels.

An interim equestrian-only trail shall be developed from a trailhead located on the northern edge of the Ranch at the Borie Field entrance. This trail will need to use the existing viaduct over the UPRR Main Line tracks, an existing at-grade internal roadway crossing, and an existing culvert under the UPRR 3rd Track. Access easements across private property will also need to be negotiated as the existing ranch access road, and at-grade railroad crossing in Section #24 are located off Belvoir Ranch property.

Interim use of the backcountry hiking trails and/or the future roadway alignment will provide long-distance trail opportunities to reach the Ranch Headquarters until a formal entrance is provided on the eastern edge of the ranch.

Trails will be routed to minimize disturbances to the Lone Tree Creek riparian corridor, and will be located in upland terrain to protect wetlands/sensitive environments.

Trails will also be routed to minimize disturbances to the existing hay meadow, a revenue-generating agricultural use. Proposed equestrian trails are intended to follow existing roads across the riparian corridor from the Ranch Headquarters in route to higher ground. No new equestrian trails are proposed within the meadow fields.

### *Existing Conservation Area*

Within The Meadows is a 200-acre conservation area for the study and protection of the Colorado Butterfly Plant. The Riparian Habitat Wildlife Extension Agreement with the U.S. Fish and Wildlife Service expires in 2019. Habitat protection is a requirement; development will be outside of conservation area or minimally impact it for interpretive trails or trail crossings.

### *Education and Interpretive Opportunities*

Wetland and riparian lowland ecosystems will be the focus of interpretive and educational opportunities in this district. Other interpretive topics might include ranching and cultural history. An educational classroom could be offered for schoolchildren supported by a variety of interpretive displays, signage, kiosks, brochures, and audio tours.



### Missile Site Activities

- ✦ Archery Range / Events
- ✦ Athletic biking and/or running races, multi-sport “epic” event races
- ✦ Firearm Events
- ✦ “Roundup Days”
- ✦ Mountain biking and mountain bike freeride park events
- ✦ Horseback riding
- ✦ Youth group
- ✦ Music
- ✦ Cultural events
- ✦ Outdoor Classrooms
- ✦ Seasonal wildlife viewing and birding activities
- ✦ Temporary RV and tent camping for special events and ongoing education projects.

## 4. THE MISSILE SITE

### *A Special Activity Area*

Located on the west end of the Ranch near Harriman Road is the former Atlas Missile site. With suitable improvements, structural stabilization of the former silos, and perhaps adaptive reuse of the structures, this area could serve as a venue for an education center, special events area, and historical/cultural landscape interpretation.

### *Access and Parking*

Vehicle access off Harriman Road, via an existing paved road, will be gated to provide a mechanism for fee collection for special events and to control unauthorized entry onto the Ranch. Monumentation and signage at the gateway will celebrate the unique identity of the Ranch. Flexible auto parking will be provided in fields, based on size of special events, with space for bus/trailer parking to accommodate school groups and tours.

### *The Built Environment*

The Atlas Missile silos have been decommissioned and stripped of salvageable materials. The structures themselves remain recognizable. There may be potential for adaptive reuse of some of the buildings to house educational or interpretive facilities, or perhaps an Air Force Museum, with appropriate modifications to address public safety and health considerations.

The silos, which feature deep pits and other hazards, should be fenced to maintain public safety while a comprehensive environmental and structural evaluation is completed, and costs of cleaning up contaminants and rehabilitating the structures, are estimated. These additional studies will provide the necessary information to evaluate whether the structures can be salvaged and rehabilitated, or whether cost and feasibility considerations will preclude further public access unless they are demolished.

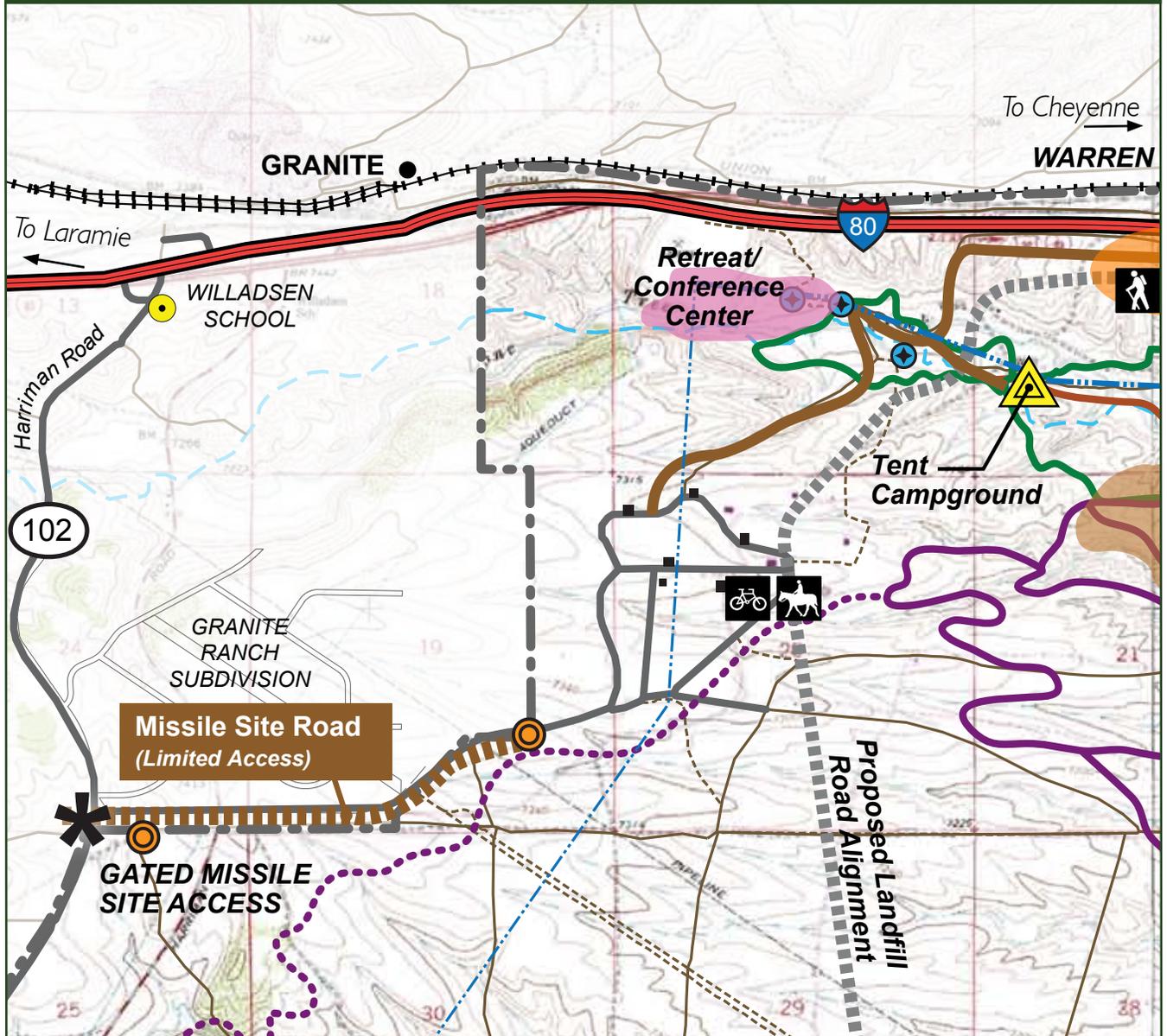
### *Trails*

Trailheads for biking and equestrian use are intended to connect to the mountain bike freeride park and the Ranch wide trail systems. One multi-use trail is proposed to skirt the eastern edge of the Missile Site along the Windmill and Lone Tank pasture fence lines. Daily trail access to restroom facilities provided at this site may be permitted, but such access shall be capable of being closed off during special events.

### *Education and Interpretive Opportunities*

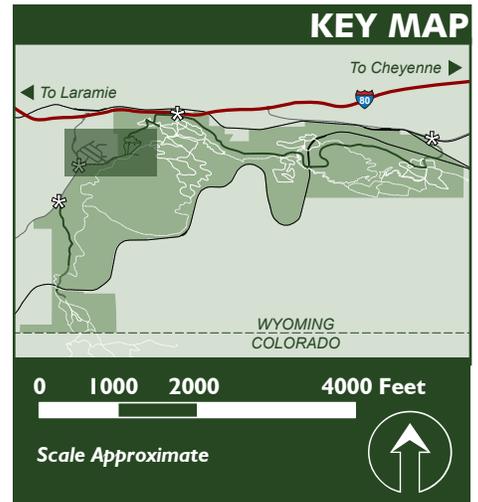
Numerous educational opportunities for university research include archaeology, rangeland ecology and management, environmental studies and agricultural economics. Educational and interpretive opportunities for outdoor classrooms for school groups and the general public could be developed.

MISSILE SITE



**LEGEND**

Ranch Planning Boundary	<b>TRAILS:</b>
Access Point	Hiking - Frontcountry
Gated Access	Hiking - Backcountry
Campgrounds	Mtn. Biking - Single Track
<b>TRAILHEADS:</b>	Mtn. Biking - Long Dist. Single Track
Hiking / Mtn. Biking	Equestrian - Frontcountry
Equestrian / ADA Accessible	Equestrian - Backcountry
Equestrian / ADA Accessible	Regional Connections
ADA Accessible	<b>ROADS:</b>
<b>BOPU:</b>	Primary Road
Large Existing Well	Limited Access Road
Prop. Pipeline Alignment	Interstate
Possible Future Pipelines	Major Road
	Graded Road
	Existing Trail or 2-Track Road
	Railroad
	Major Creek





### **The Big Hole Gateway Activities**

- ✦ Scenic Viewing / Overlook
- ✦ Hiking
- ✦ Mountain Biking
- ✦ Horseback Riding
- ✦ Primitive Camping
- ✦ Parking and Trailheads
- ✦ Picnicking
- ✦ Outdoor Classroom
- ✦ Interpretive Cultural Trails

## **5. THE BIG HOLE**

### *Geologic Grandeur*

The Big Hole is a significant geological feature with regional significance. The larger portion of The Big Hole, which is south of the state line, is shared with Red Mountain Open Space managed by Larimer County, Colorado. Belvoir Ranch is the northern terminus of an extensive interstate trail system that originates in Colorado. Management of visitors and the open space will involve a collective effort between Larimer County and the City of Cheyenne.

Supporting facilities for visitors will be developed just north of the tracks in the Big Hole Gateway, which is an area of less sensitive environmental, visual and cultural resource impact. Access to and development within The Big Hole Gateway district will include modest user services, including a primitive campground, parking, and trailheads.

### *Access*

Four miles of natural surface entry road will be constructed, leading to the Big Hole Gateway. Agreements with Union Pacific will be required to develop trail access through the culvert, connecting to the Big Hole Rim.

### *Activities and the Built Environment*

#### ***The Big Hole Gateway Development***

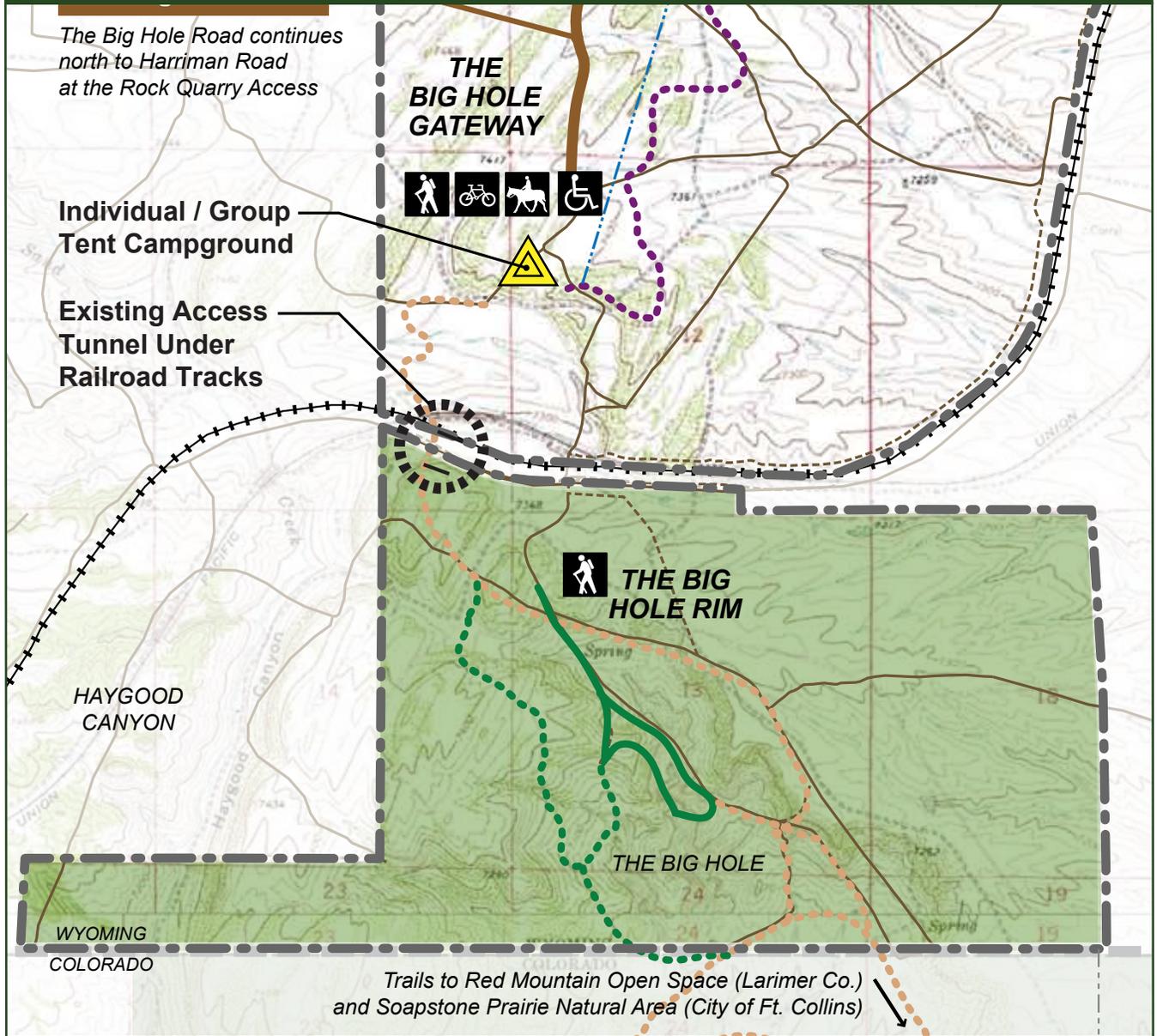
The gateway, two and a half miles from Harriman Road, will serve backcountry access. Campsites shall consist of a parking area, level area for tent camping and picnic table. A hand operated (windmill, solar or combination) pump will provide basic needs for visitors and their livestock. No open fires will be allowed.

Camping activities will continue to be evaluated on a periodic basis following implementation, to ensure compatibility with management and patrolling policies applicable to the Soapstone Ranch and Red Mountain Open Space properties in Larimer County.

The gateway is within an identified cultural resource area. Interpretive signage should be provided that describes the significance of the area, as well as penalties for removal or damage of artifacts. before any gateway improvements are constructed, a more detailed cultural resource inventory would need to be completed to identify the extents and types of artifacts and strategies for preserving them as well as preventing degradation from public use.

Originating at the gateway will be equestrian, hiking, and mountain biking trailheads that connect to The Big Hole overlook and other areas of the Ranch.

**THE BIG HOLE**



**LEGEND**

	Ranch Planning Boundary	<b>TRAILS:</b>	
	Access Point		Hiking - Frontcountry
	Gated Access		Hiking - Backcountry
	Campgrounds		Mtn. Biking - Single Track
<b>TRAILHEADS:</b>			Mtn. Biking - Long Dist. Single Track
	Hiking / Mtn. Biking		Equestrian - Frontcountry
	Equestrian / ADA Accessible		Equestrian - Backcountry
<b>BOPU:</b>			Regional Connections
	Large Existing Well	<b>ROADS:</b>	
	Prop. Pipeline Alignment		Primary Road
	Possible Future Pipelines		Limited Access Road
			Interstate
			Major Road
			Graded Road
			Existing Trail or 2-Track Road
			Railroad
			Major Creek

**KEY MAP**

0 1000 2000 4000 Feet

Scale Approximate

## **The Big Hole Gateway Campground Amenities**

- ✦ *Fifteen primitive tent sites with parking*
- ✦ *Five rustic tent sites with picnic tables and parking*
- ✦ *One group site for 25 people max. (6 tents) All with adjacent parking (totaling 30 spaces)*
- ✦ *Two vault toilets*
- ✦ *Additional parking for 15 vehicles, one school bus, and 6 horse trailers*

### ***The Big Hole Rim Improvements***

The Big Hole rim is a special place. From the rim, mule deer, elk, bear, mountain lion, eagles, vultures, hawks, falcons, bobcats, rattlesnakes, fox, and a variety of other species have been observed. Hiking, equestrian, and mountain biking trails will lead from the rim into The Big Hole and beyond.

Any proposed development shall only occur on the rim plateau, set back at least 20 feet from the edge; this might include an overlook, interpretive, regulatory and wayfinding signage, and trailheads. Trailhead and overlook facilities should be designed so that they are set back far enough to ensure there are no sight lines from the bottom of The Big Hole. Other than trail development, no facilities will be developed below the rim.

### ***Trails***

#### ***Non-Motorized Trail Use***

Hiking, mountain biking and horseback riding will be designated as on-trail only to increase user safety and prevent resource damage. All trails located south of The Big Hole trailhead and campground will be multi-use, unless identified for hiking-only due to steep slopes, erosive soils or sensitive microenvironments. A new hiking-only trail will be developed from the Big Hole Rim Pasture dropping into the canyon to connect with the multi-use system.

On multi-use trails, the 12-heartbeat rule will be implemented to reduce trail impact by limiting group size to no more than 12 people or 6 people and 6 animals, for example. Horses will be prohibited from areas of rare or sensitive plant communities to protect against weed seed dispersal. Horse-drawn carriage use will also be prohibited, except along roads open to public vehicle use.

Trails in the Big Hole will not be paved, oiled, or sealed with calcium carbonate or other chemical coatings. Natural materials will be used. Seasonal closures will be implemented that match those in force on adjacent Larimer County open space properties.

#### ***Trail-Accessibility***

Providing a wide variety of users with an opportunity to experience the Big Hole is a desirable goal. Designing a trail with a gradual slope will provide easy access to the Big Hole Rim from the Big Hole Gateway.

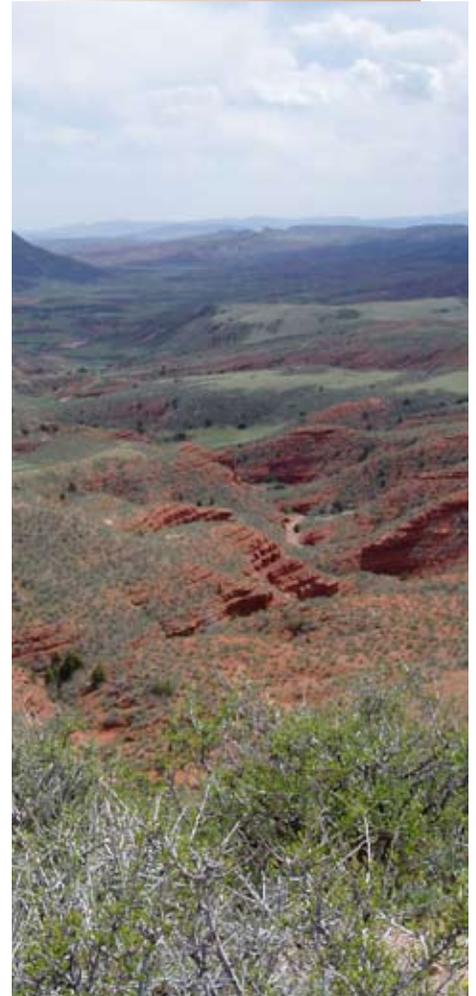
### *Multi-Use Trails*

Multi-use trails should be routed along existing two-track routes wherever possible to minimize habitat disturbance. New segments of multi-use trail should be designed to equestrian standards to accommodate multiple uses by hikers and bikers. Connections should be made with the regional hike/bike/equestrian trail system planned for Red Mountain and Soapstone.

### *Education and Interpretive Opportunities*

Numerous cultural and natural resource interpretive opportunities are planned for both The Big Hole Gateway and Rim areas. Educational and interpretive opportunities for outdoor classrooms for school groups and the general public will be developed.

Cultural history interpretive trails and signage will focus on the prehistory peoples and homesteading of the Ranch. Natural resource interpretive trails will focus on the unique geology of the area as well as the biological habitat. Educational opportunities for university archaeological research occur along the rim of The Big Hole.



*View of The Big Hole from the Rim.*



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## Section 5: Sustainable Stewardship: Policies for Managing Belvoir Ranch

To ensure sustainable stewardship of the Ranch and Big Hole properties, a series of management policies have been developed to address public use, safety and security, ranch and landscape management, and the built environment. These are discussed below.

### **PUBLIC ACCESS AND USE**

**Policy 1.1:** Properties will be opened to public access year round, with limited seasonal closures.

In general, the Ranch shall be open to public access year-round from dawn to dusk. Specific activity areas may allow overnight use by permit. Vehicular access will not be permitted from approximately November 1 to mid-April, or adjusted annually based on snow conditions. Walk-in visitors will be allowed to access the Ranch from Belvoir Gateway Village for winter uses.

**Policy 1.2:** Dogs are allowed, on leash, in designated areas that are staffed by campground hosts and/or volunteer rangers. An exception is made for service dogs. Allowing dogs to run off-leash will be punishable with a fine.

**Policy 1.3:** No off-road or off-trail uses are permitted, except in designated recreation areas.

Hikers, equestrians, and bicyclists are required to stay on designated trails to minimize the creation of “social trails” and the spread of invasive weeds.

A system of gates and cattle guards will be maintained that permits vehicular and trail user access between pastures, while maintaining the integrity of ranching operations and containing animals within designated areas.

**Policy 1.4:** All-terrain vehicles (except where in use by Ranch staff or rangers), off-road motorbikes, snowmobiles, and motorized boats are prohibited. The intent is to prevent impacts from potential off-trail uses, and minimize noise impacts.

**Policy 1.5:** Rock climbing is permitted only in designated areas. Rock climbing is not permitted in areas with raptor nesting sites, or in areas with identified or suspected cultural resources and artifacts.

**Policy 1.6:** Campsites and trails will be closed as conditions warrant.

Camping will be by permit only to regulate and monitor use. Tent and backcountry campers are required to bring their own sources of water. “Leave No Trace” principles will be enforced. Open fires are not permitted in the backcountry.

**Policy 1.7:** Trails will be closed to accommodate seasonal movement of cattle, or during hunting season, or during nesting and breeding seasons.

Temporary or seasonal closures of selected areas of the Ranch may be implemented for movement of cattle for ranching operations, noxious weed control, calving or breeding seasons, and other similar reasons. Notification of closures will be provided at all trailheads, entry points, and recreation areas (including campgrounds) to minimize traffic to trailheads that are closed.

**Policy 1.8:** Encourage education and interpretation of Ranch history and ecology, through a variety of methods. These could include self- or naturalist-led interpretive walks on the established trail system; guided hikes into areas not otherwise accessible to visitors; interpretive field trips for school groups; and community service learning events. Support these activities with a variety of media, including signage, iPod programs, and web-based programs.

## **PUBLIC SAFETY AND LAW ENFORCEMENT**

**Policy 2.1:** Volunteer rangers and campsite hosts will be hired will aid in monitoring the ranch. Their mission is to promote the safety of visitors while ensuring the protection of Ranch resources. Rangers and hosts will be responsible for educating visitors about rules, regulations and resource protection, issuing warnings and citations, monitoring for misuse, and summoning assistance from the Laramie County Sheriff’s Department in illegal and emergency situations. Rangers will be trained to patrol on foot, mountain bike, or horseback.

**Policy 2.2:** The Wyoming Game and Fish Department will continue to enforce hunting and fishing related activity.

**Policy 2.3** The Laramie County Sheriff Department will continue to provide law enforcement support in addressing criminal activities.

**Policy 2.4:** Public access will be limited to designated roads; use of fire roads and non-designated railroad crossings will be prohibited.

All limited-access roads shall be signed as restricted from public use, and gateways to these areas shall be of a different design than those used on the public roadways.

Agreements will be negotiated for existing at-grade crossings to remain open for use by ranch and emergency vehicles, and for reopening an at-grade crossing of the UPRR 3rd Track that is currently closed between Section #12 and #13, for emergency access to The Big Hole.

**Policy 2.5:** Illegal dumping will be prohibited and punishable by a fine.

**Policy 2.6:** Create an emergency response plan incorporating several departments and agencies to ensure visitor safety. The plan should include Global Positioning System (GPS) coordinates for significant Ranch features, given the large size of the Ranch. All rangers and campsite hosts will be trained in basic emergency medical techniques and will be able to stabilize patients until they can receive medical attention.

**Policy 2.7:** Depending on circumstances, accident victims may be required to pay for some or all of the costs of rescue.

## **RANCH AND LANDSCAPE MANAGEMENT**

**Policy 3.1:** Continue The Lone Tree Creek Hunter Management agreement with Wyoming Game and Fish Department's Private Lands Public Wildlife Access Program.

The agreement includes restricted access for recreational archery hunting of antelope and deer and firearm hunting of antelope. Wyoming Game and Fish Department shall continue to regulate, monitor and enforce the hunting privileges.

Coordinate hunting zone restrictions or closures of public activity areas during hunting season.

**Policy 3.2:** Existing cattle management infrastructure shall be optimized for cattle unloading in Harriman, Rock Quarry Meadow, and Borie pastures and cattle loading at the Main Headquarters and Missile

Base. Other existing cattle management facilities shall be utilized as long a practical.

**Policy 3.3:** Develop Best Management Practices (BMPs) objectives with Laramie County Conservation District, U.S.D.A. Natural Resources Conservation Service, the Cheyenne Cycling Club, and other agencies and universities. In lease agreements require tenants conform to the Belvoir Ranch Management Plan including all BMPs.

**Policy 3.4:** Control timing for grazing to prevent damage to stream bank when most vulnerable. Manage grazing to maintain healthy riparian and littoral vegetation to protect banks and limit sedimentation and eutrophication. Ensure grazing plans limit livestock access in sensitive riparian corridors and littoral zones for protection of biological resources and weed management.

Monitor the watershed (pastures, trails, roads, drainages) regularly to check for excessive erosion and deterioration.

**Policy 3.5:** Fence cattle out of significant cultural resource areas to prevent erosion, damage and/or loss of cultural features.

**Policy 3.6:** Establish guidelines for off road driving on the part of ranching staff or livestock operators that will minimize natural resource impact.

**Policy 3.7:** Develop a trail closure plan that regulates visitor use in seasons when cattle are being pastured.

**Policy 3.8:** Develop and implement weed management BMPs. These may include BMPs for trail design that minimize the spread of invasive weeds, and spot spraying and controlled burns in selected areas. Efforts should be coordinated with the Red Mountain Open Space Weed Management Plan.

**Policy 3.9:** Suppress wildfires on the Belvoir Ranch high prairie, as grassland burning encourages noxious weed invasion.

## THE BUILT ENVIRONMENT

- Policy 4.1:*** All built facilities (structures, gateways, signage) shall be designed to be compatible with the site's character.
- Policy 4.2:*** Materials and facilities shall be designed to minimize maintenance and capital repair expenditures.
- Policy 4.3:*** Lighting shall be minimized to reflect "Dark Sky" principles.
- Policy 4.4:*** Signage shall provide necessary regulations and wayfinding, but should be kept to a minimum.
- Policy 4.5:*** All utilities shall be located underground where feasible to preserve key views.



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## Section 6: Land Acquisition

### LAND ACQUISITION

Most of the land surrounding Belvoir Ranch is ranchland, held in large ownership parcels greater than a section, 640 acres. These large landholdings are less likely to be subdivided for rural residential lots as long as ranching remains viable.

Prime reasons supporting strategic acquisition of properties adjacent to the Belvoir include buffering open space and critical viewsheds, maintaining and improving wildlife habitat and corridors, and improving ranching capacity and other economic development opportunities. Also important are gaining access to the east end of the Ranch and connectivity to expanded recreation opportunities.

The City should consider acquisitions as opportunities arise. Areas of particular importance are Haygood Canyon to the southwest and land south to the state line. Acquisition plans should also include State held land to the south and east. Land acquisition efforts should be coordinated with other municipal agencies including the Board of Public Utilities to maximize return on investment and community benefit.

Conservation easements are also a useful strategy. Adjacent property owners and land conservation partners should be encouraged to protect lands by placing them under conservation easements.

Finally, “land swaps” or strategic sales of low-value areas of the Ranch could be considered. Any sale or exchange of property should only be undertaken if it can improve the Ranch by acquiring parcels of better quality that meet the needs and goals of an evolving community resource.



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