

Executive Summary

NORTH TABLE MOUNTAIN PARK MANAGEMENT PLAN



Jefferson County Open Space Mission

To provide a living resource of open space lands and waters throughout Jefferson County for the physical, psychological, recreational and social enjoyment of present and future generations.

Executive Summary: North Table Mountain Park Management Plan

Park Location and Description

North Table Mountain Park is located northeast of the City of Golden and north of State Highway 58. The Park is currently undeveloped and consists of 1,970 acres comprised of eight separate acquisition projects: Argentine Mine; Clark; Coors; Frisco; Ramstetter Estate; Lafarge; Metz; a donation from Coors and a subdivision dedication.

North Table Mountain is a flat-topped mountain with very steep side slopes that rise almost 1,000 feet above the surrounding plains. The mountain is the result of four lava flows that originated from the Ralston Dike, which is located about two miles northwest of the mountain.

Park Vision

North Table Mountain Park serves as a respite from the pressures that are encountered from living in an ever-expanding urban environment. The Park is part of the Front Range Mountain Backdrop/Foreground Preservation area and therefore, development and management activities will take this designation into consideration, as well as the visual impacts on the surrounding area and the visual experience of the park user. The Park will also have as its highest priority the protection of its natural resources while also providing trail opportunities. This management strategy reflects Jefferson County Open Space's mission of balancing human use with resource conservation and reflects comments received from the Ad Hoc Committee's information gathering and those public comments submitted to Open Space over time, most notably from the two public open house sessions. This effort is accomplished through the application of Management Unit Designations (MUDs) upon the landscape, which define a spectrum of recreational opportunities, environmental education and interpretation opportunities as well as natural and cultural resource conservation efforts. North Table Mountain Park contains two designations, each emphasizing a different priority for the provision of recreational opportunities and protection of the Park's natural resources.

Although the Natural Area encompasses the majority of the Park, maintaining the natural and remote character of the Park is the primary vision. The Park has been designated a Natural Heritage Conservation Site by the Colorado Natural Heritage Program (CNHP). The mountain contains several different types of environmental communities, a fairly large resident deer population, a waterfall and several different wildlife habitat types, including shore and critical cliff nesting areas. Water is a significant resource for the dry mesa of North Table Mountain, especially from a biodiversity perspective. Therefore, the major drainage areas in the Natural Areas have been illustrated on the Concept Plan (Figure #3) for ease of appropriate management of this significant resource.

Rock climbing will not be allowed on the northern and northeastern cliff faces of North Table Mountain Park because they are located within a designated Sensitive Area, but

other areas of the Park may be suitable for rock climbing pending further study. Some climbing areas may need to be seasonally closed to protect cliff nesting.

Two primary trailhead parking areas are planned for the Park and will be located off of 58th Avenue to the north and along State Highway 93 to the west. A third trailhead parking area to the southeast may be developed in the future at the bottom of Cottonwood Canyon and will be assessed with adaptive management. Parking is also available off-site at Tony Grampas Park.

Two Sensitive Areas have been designated on the Park. One area contains a plant community known as a lichen rock garden. This area was identified by the Colorado Natural Heritage Program's survey and is designated Sensitive because of its fragile nature and rare occurrence. In order to protect this area from trampling by people who desire to reach the highest point on the mountain, an interpretive trail will be constructed within an assigned Natural Area. This trail will be limited to hikers only who will be required to stay on the trail. The interpretive signage will help educate users about this special area. The other Sensitive Area is located on the slopes of the northern portion of the Park and was designated for the protection of the cliff faces and provides critical habitat for breeding, foraging, resting, mating and hiding for various wildlife species, especially birds.

Portions of the landscape are needed with little to no disturbance for species to continue to occupy and utilize the entire landscape. Part of the vision is to leave a large portion of the habitat area undisturbed, which is primarily in the area of the central mesa top area.

Although not designated as Sensitive Areas, there are other significant habitat communities that were identified during the 2006 vegetation and avian studies that may require additional protective management (e.g. shrubland, grassland and riparian areas). These areas fall within the designated Natural Areas and have been designated a Special Protection Area. Included in these designated areas are parts of the grassland and shrubland communities on the west slopes of the mesa. Trails in this area of the Park will be limited as much as possible. Included in this area designation are parts of both Brewery and Cottonwood Canyons, which contain good shrub and cliff habitat. Due to the dense vegetation and terrain features and the presence of the existing trails, very little off-trail use is expected in these areas. Based on the recommendation from both the vegetation and avian studies, a trail should have minimal impact on the local resources. However, additional monitoring will be used to determine if additional protection of the areas is needed.

The trail-based recreational opportunity concept for the Park revolves around providing a trail that would circle the perimeter of the Park and connect with other trails that will cross over the top of the mountain, forming several loop trail opportunities. Separated access for users from the west trailhead will minimize conflict and will require cooperation with the City of Golden. Additional segregated access has also been suggested for the eastern side of the Park. This does not appear necessary at this time due to the anticipated low number of trail users and since it would conflict with the overall trail plan of providing an outside trail loop and smaller inside park loops. In addition, the design of the trail should eliminate blind corners, which will also reduce user conflicts. The eastern access will be monitored for user conflict and the need for

separated access will be assessed. The majority of the trails will be natural surface and open to all user types. A hard surface trail providing regional trail connections will be located along State Highway 93 and will connect with trails in the City of Golden, Van Bibber Creek and the TableRock subdivision. In addition, a connection will be made to the Fairmount Trail and to Golden's Tony Grampsas Park, which will require cooperation with the City of Golden.

To protect natural resources, seasonal closures will be utilized where appropriate. In particular, the trail to the north east mesa will be established as an out and back trail, seasonally closed to protect nesting habitat and require users to stay on the trail. The continuation of this trail will be assessed in the future to determine if the trail should be connected to another trail to form a loop. Because the Park is part of the Front Range Mountain Backdrop/Foreground Preservation area and to limit the amount of disturbance to the ground, existing roadbeds will be utilized as trails where possible to avoid additional scarring of the landscape. Old roadbeds that are not used for trails or service roads will be reclaimed.

This Plan is in general agreement with the Ad Hoc Committee's Core Concepts of 1) Maintain natural ecosystem processes in the Park; 2) Minimize trail disturbances; 3) Separate access by user groups; 4) Accommodate neighborhoods. Please see Appendix F for additional details.

Natural and Cultural Resources

After centuries of weathering, North Table Mountain has been transformed into an area that contains several different types of habitat. These habitat types include grasslands, shrub communities, lichen rock gardens, riparian, shore and cliff habitat.

Over the years human activities and non-native plant introduction (invasion) have altered many of the native plant communities. There are two identified areas where the plant communities still have a resemblance to the native plant community that once existed on the mountain. In 2006, a vegetation study of the Park was commissioned by an Ad Hoc Committee and seven significant plant communities were identified. In 1993, the Colorado Natural Heritage Program classified this mountain as one of only 27 Natural Heritage Conservation Sites in the County. The needle and thread grass (Stipa comata) and lichen rock garden communities that are found in the Natural Heritage Conservation Sites are considered rare within Colorado. There are a number of other communities that exist on the mountain that add to the great biodiversity of species that can be found there. Although human activity has occurred on the mountain over the years, it is still considered good quality habitat.

In 2006, an Ad Hoc Committee commissioned a vegetation study of the Park and the following eight plant communities were identified: 1) Wet meadow; 2) Riparian forest; 3) Riparian shrubland; 4) Foothills prairie; 5) Mixed foothills shrubland – skunk bush; 6) Mixed foothills shrubland – mountain mahogany; 7) Lichen rock; 8) Exotic grassland. The report goes on to say that although the area has been degraded by human use, there are still several good condition grasslands worthy of protection or special consideration. The main threats to maintaining these plant communities in good

condition appear to be potential trampling by park users, introduction of weeds and the enhancement of existing weed growth because of soil enrichment from animal feces and urine. Recommendations presented in the report are summarized as follows:

- 1) Re-sample vegetation transect after five years to document changes in conditions;
- 2) Prohibit off-trail use;
- 3) Locate any new trails outside of significant vegetation areas;
- 4) Control weeds.

The re-sampling of the vegetation transects may be one of the studies incorporated into the Resource Evaluation Management processes used to monitor changes on the Park. There are two trails where staying on the trail regulations will be required. Through trail design techniques, off trail occurrences will be minimized and occasional or minor disturbances are unlikely to damage plants according to the vegetation report. Locating all trails outside of significant vegetation areas is not possible. However, management techniques will be employed to address the Special Protection Areas. For example, trails in Cottonwood Canyon will not be placed within riparian areas, but when necessary, will cross them as close to ninety degrees as possible. Efforts will also be made to skirt around other significant areas when possible. Weed management is a base maintenance item for the Park and will be managed by the Open Space Natural Resource section in conjunction with the County's Weed and Pest Management Specialist, who enforces Jefferson County's Noxious Weed Management Plan, as required by the Colorado Noxious Weed Act.

The four lava flows that formed the most prominent geological features of the mountain have resulted in sheer cliffs surrounding it. The second of the lava flows contained zeolite crystals that formed in gas pockets as the lava cooled. The cliffs formed by the lava flows are over one hundred feet high in places and account for approximately five miles of cliff habitat.

Golden eagles, red-tailed hawks and prairie falcons are known to nest in these cliffs along with a number of other species that require this type of habitat. The location of this mountain along the Front Range is important to migrating raptors that pass through this area in the spring and fall. The abrupt change in elevation from the surrounding plains to the top of the mountain with its sheer cliffs and deep canyons makes this an ideal area for raptors. A study, also commissioned by an Ad Hoc Committee and conducted in 2006 by the Rocky Mountain Bird Observatory recorded 52 species of birds. Cassin's sparrows and grasshopper sparrows were found and are more typical found in the tall grass habitats further east on the plains. A colony of white-throated swifts were also found nesting in the cliff habitats. The shrubland and cliff habitats are of importance and should be monitored, to support these species in an area where the foothills and plains meet.

The mountain is home to a resident population of about 80 to 100 mule deer. These animals also use the dense shrub communities on the slopes and the deep canyons formed by drainages. Deer typically move back and forth between this mountain, the foothills to the west and Clear Creek to the south. In the spring, elk from the foothills are known to cross State Highway 93 and spend time on the western part of the mountain. An occasional mountain lion has been spotted and a small prairie dog colony exists on the top of the mountain in addition to a larger one in the northwestern part of the Park.

In 2006, A Breeding Bird Inventory, found bird species typical of their associated habitat types for this area and also some unique species which included the Cassin's and grasshopper sparrows. The main avian habitats identified on the Park were grasslands, shrublands and cliffs. There was also a small component of riparian habitat along the drainages. The Rocky Mountain Bird Observatory, who conducted the inventory did make several recommendations for the management of the habitats and they are as follows: 1) Minimize additional trail cuttings; 2) Restrict mesa top trail use from late May through July; 3) Cut no new trails through any shrubland communities; 4) Monitor cliff-nesting raptors and enforce seasonal closures; 5) Map nesting areas for the white-throated swifts and violet-green and cliff swallows, and consider closing area to climbing from early May through July; 6) Dogs should be leashed and under direct human control; 7) The expanded trail system will pose little in the way of disturbance to nesting birds and their habitat if visitors keep to proposed trails.

The proposed trail system for the Park proposes to minimize new trail development by utilizing as much of the existing old roads as possible. There will be two trail sections, that will require users to stay on the trail to further protect these areas. Efforts will be made to avoid or minimize disturbance through significant vegetation areas where possible. The ongoing monitoring of the cliff nesting areas of the Park is covered under the base maintenance practices of the Natural Resource section. Existing Park Rules and Regulations require that dogs be leashed at all times.

Water is an important part of the ecology of North Table Mountain Park. Shore birds and ducks can be found around the three ponds that dot the top of the mountain. The largest of these ponds is approximately two acres. These ponds are fed by springs and runoff from the surrounding area and may contain water year-round. The ponds are located at the headwaters of two of the three major drainages on the mountain. These drainages are shown on the Concept Plan (Figure #3) and form narrow bands of riparian vegetation that almost bisect the mountain. On the mesa top, most of these drainages contain mesic (wetland) grasses and forbs with scattered willows and cottonwood trees. As the drainages leave the mountain top, one forming a large waterfall, they flow into a deep canyon and support a denser riparian shrub and woodland community. In addition to these drainages, there are several springs that dot the side slopes below the cliffs. These springs form pockets of dense riparian vegetation among what is otherwise a xeric (dry) habitat. North Table Mountain is bordered on the north by Van Bibber Creek and on the south by Clear Creek, both of which are major wildlife movement corridors.

A Class III Cultural Resource Inventory of the Park was conducted in 2001 and 2004. The inventories identified four prehistoric isolated finds, two historic isolated finds, eight historic sites, five previously recorded historic sites, five previously recorded prehistoric sites and a segment of the previously recorded Union Pacific, Denver and Gulf railroad grade. None of these resources are recommended as eligible for National Register consideration.

Visitation and Use Trends

A wide variety of data is collected throughout the Open Space system to establish amount of use and types of use on the different parks. This information is collected

through a variety of methods, including mechanical counters, visitor surveys and observations.

Although no recreational improvements have occurred on North Table Mountain, it is not closed to public use. There are over 11 miles old roadbeds on the Park. In addition, there are numerous social trails that have formed over the years. The public has historically used the mountain for horseback riding, hiking, biking and rock climbing on the southwestern cliffs. Access to the Park has been from both public and private access areas. People also access the top of the mountain from the City of Golden's parkland and the Access Fund (climbing) property.

Development of the Park's trails and parking areas will allow more people to utilize the mountain. In addition, planned residential development adjacent to the Park will increase the number of walk-in visitors from the local community. Based on the number of parking spaces to be made available and the estimated number of walk-in users, the annual visitation for this Park is not expected to exceed 55,000.

Park Capacity

Establishing a park capacity is based on the idea that there is a point or threshold to the number of visitors to a park after which sustainability of its wide range of social and environmental benefits begins to diminish. When a park's capacity has been reached, there may arise a need to limit or allocate recreation use. Capacity limits may be imposed to enhance public safety and health, protect a park's natural and cultural resources and/or to facilitate the provision of quality recreational experiences. The two studies, noted above, should be utilized along with staff studies and reconnaissance, for establishing capacity, monitoring and adaptive management.

Visitation capacity is determined by monitoring the quality of the park's natural and cultural resources, facilities, including trails, and visitor satisfaction. Recreational and resource capacities are guided by each park's specific management objectives and largely managed by public information and education, and by facility design capacity (e.g., number of parking spaces). Other management options, such as the imposition of group size limits and area closures, may also be implemented. There are multiple objectives, which will be monitored and assessed with adaptive management techniques.

Based on data collected from other parks within the Open Space system that are comparable to North Table Mountain Park, the number of groups using the trails are expected to range from two to fourteen per mile of trail. In order to provide a visitor experience consistent with the Park's vision, parking will be developed to accommodate a maximum capacity of seven user groups per mile of trail. If all user groups were equally spread over the Park's trail system at maximum capacity; it would equate to one user group every 750 feet along the trails.

Management Units

Open Space lands are classified into management units according to ecosystem and cultural resource protection requirements and their capability and suitability to provide

opportunities for visitor experiences. This classification scheme assists Open Space staff in maintaining ecological integrity through a framework for the area-specific application of policy directions such as resource management, appropriate activities and research. As such, management units provide direction for the activities of park staff and park visitors alike.

Open Space staff have adopted three land classifications, only the first two of which are utilized on North Table Mountain Park:

- 1) **Sensitive Areas** are those that are very special, fragile and highly valued for their natural or cultural features. Preservation and protection are the paramount considerations for these areas. Visitation to these areas is limited, controlled and typically monitored through a registration permit system. Two Sensitive Areas have been designated to protect the lichen rock garden community, cliff areas and other critical habitat areas on North Table Mountain Park.
- 2) **Natural Areas** are relatively large areas where ecological processes dominate and humans can typically experience a sense of solitude and remoteness. North Table Mountain Park's Natural Area makes up the bulk of the Park area.
- 3) **Parkland Recreation Areas** provide opportunities for a wide variety of passive outdoor recreation experiences while ensuring the long-term sustainability of the natural resources. There are no Parkland Recreation Areas designated for North Table Mountain Park.

There is also an overlay zone that may be applied to any of the above Management Unit Designations and is classified as a **Special Protection Area**. These are areas that contain natural, cultural and/or historical resources or other park resources that are deemed significant and that face a real or potential threat of being negatively impacted without special management measures. Guidelines on how each **Special Protection Area** will be managed have been established in the **Management Directions** (Chapter IV) and include identifying key resources or issues.

Park Operations

On-site management of North Table Mountain Park is predominantly the responsibility of Open Space's Park Services section. The Park Services section and each of its subsections utilize operational documents to guide their management activities. A list of these documents can be found in Appendix B.

Park Issues and Management Approaches

Attached is the Concept Plan, Appendix A and the Management Directions (a portion of Chapter IV) which describes the major issues that have been identified by Open Space staff and the management approaches selected to respond to those issues. Unique to this Park process was an Ad Hoc Committee that formed at the end of 2005 to provide cooperative involvement in the formulation of this Management Plan. Their report, dated July 2007, is attached and hereby incorporated as Appendix F.