CHAPTER 4
THE DENVER MOUNTAIN PARKS SYSTEM
Chapter 4 The Denver Mountain Parks System

4.A. Systemwide Recommendations

Recreation Recommendations

Background

Today, those who visit the Denver Mountain Parks (DMP) represent a broad cross section of people in demographics, where they reside, and how far they travel to enjoy these mountain lands. Visitors to the Mountain Parks are cosmopolitan—a true mix of cultures and languages. With the exception of African-Americans being underrepresented, the Mountain Parks reflect the same diversity of age and ethnicity as occurs at Denver’s urban parks. Although visitors to the Mountain Parks represent the spectrum, many come from low to middle income households.

Typically one third of those who visit either a Denver Mountain Park or another county open space park are Denver residents. Another third reside in the county in which the park is located. The last third are visitors from other counties along the Front Range, visitors from other parts of the state and nation, and international visitors. Together, mountain open space lands owned by Denver, Jefferson County, Douglas County, and Clear Creek County are used reciprocally. Together, they are a regional Front Range open space system where each county provides its own lands and facilities for the enjoyment of its own residents, recognizing that these lands are also enjoyed by all visitors.

"The Denver Mountain Park system cannot be considered alone as a recreation area, for it is so linked up with government recreation areas and mountain resorts that the visitor might spend weeks in exploring this great play region without having exhausted its capabilities for giving enjoyment."

The Denver Regional Council of Governments (DRCOG) projects growth in the Front Range to increase by 38%, which will result in the region’s population increasing from 2.3 million in 2000 to more than 3.2 million people by the year 2020.

The population of the City and County of Denver is projected to increase by nearly 132,000 residents (or by more than 25%) during the next 20 years, reaching 657,000 persons. As communities get built closer and closer to Denver Mountain Parks, the search for local active recreation sites intensifies.

Important qualities of the DMP, according to park visitors, are:

- a family-friendly environment
- the beauty of the natural scenery
- trails

—Marketing Support Survey, 2007
The Denver Mountain Parks offer an incredible range of opportunities just minutes from downtown Denver: everything from hiking through a high plains prairie as bison graze nearby, to picnicking next to a foothills stream, to listening to a popular band in a world renowned outdoor amphitheatre. Many visitors enjoy unique qualities that can only be experienced in a specific Mountain Park such as the amphitheatre and sandstone formations at Red Rocks Park or the panoramic view of Daniels Park and the living history of Buffalo Bill’s Museum and Grave. The solitude of the Mountain Parks and the opportunity to experience bird and wildlife habitat draw many users. Hiking, walking and running on more than 40 miles of trails, of which 20 miles are hiking only trails, is the single most popular recreation activity. Complementing Denver’s trails are the adjacent open space lands of Jefferson, Clear Creek, and Douglas County that offer many miles of multiple use trails where mountain biking is an important activity.

Mountain meadows, stream edges, rustic shelters, and scenic waysides are popular sites for picnicking, making this the second most popular recreation activity in the DMP after hiking. Picnicking in groups and with family is a longstanding tradition in the picnic parks. Some families have returned to the same sites each year for 20 or 30 years.

**Challenges and Opportunities**

As the population increases, the demand for natural places that enrich the spirit and exercise the body intensifies. Having these parks close to home becomes even more valuable as gas prices increase and respect for the environment becomes mainstream. This is especially true for Denver residents who cannot afford trips deeper into the mountains. This variety of experiences is exhilarating, but it also presents special challenges to Denver. The problem facing all providers of parks and open spaces is how to offer the highest quality recreational experience for visitors, while protecting these significant lands and facilities for future generations.

**Users**

- More than two million people visit Denver Mountain Parks each year, including Red Rocks.
- One third of visitors reside in Denver, another third in the county, and the last third come from across the state and nation.
- International visitors travel from all corners of the world to visit Summit and Echo Lake Parks, Red Rocks, Winter Park, and Buffalo Bill Museum and Grave.

What diminishes the recreational experience in the DMP is the condition of the parks. Many of the system’s roads, picnic sites, shelters, and trails have changed little since the 1940s. Park facilities that support recreation have been minimally upgraded since the loss of the mill levy funding in the 1950s (see Chapter 3, Funding and Organizational Recommendations). Many restrooms and picnic tables are run down. Additional shelters and amenities are needed. Partnerships with other agencies have allowed new improvements, but the entire system is in need of infrastructure upgrades to bring the parks to a standard of care that is consistent with today’s recreational expectations.

**Connecting Kids to Nature**

Opportunities to expose more people of all ages, but especially children, to the mountain parks are a priority. As Richard Louv argued in his groundbreaking book *Last Child in the Woods*, a direct link exists between the restorative powers of nature and the health and welfare of our current and future generations. Research has established the benefits of contact with nature. Providing more opportunities for wildlife viewing, fishing, camping, exploring, geocaching, and survival skills are needed. New facilities for lifelong learning, youth camps, overnight programs, leadership programs, and partnerships with Denver Public Schools or interested nonprofits should be explored. Additional picnic sites, trails, access to streams and lakes, and improvements to existing facilities are also needed in the picnic parks to continue to provide the settings that encourage interaction with nature.
The Regional Trails Plan for the Denver Mountain Parks System
Trails
Trail use, particularly by those wanting to hike, bike, and run, is on the rise. The DMP are already popular for hiking only trails that offer breathtaking scenery and solitude. The rigorous Beaver Brook Trail in the Clear Creek corridor was built by Denver in 1917 in conjunction with the Colorado Mountain Club. More miles of hiking trails, with access to picnic sites and parking, and special destinations like Chief Hosa Lodge, are needed to meet the growing demand. DMP also are a key player in the regional open space system and demand for multiple use trails. Mountain biking is steadily increasing. The management and design of many adjacent open space lands have made them better suited to support mountain biking. But where possible, DMP can provide critical links in a multi-use regional trail, such as the proposed I-70 corridor.

Accessibility and New Uses
DMP need to accommodate the aging population and increasing number of people with disabilities. All the facilities need to be evaluated and upgraded to be accessible. Also, requests for new or expanded recreational activities in Denver Mountain Parks are made periodically, such as for camping, rock climbing, dogs off leash areas, more mountain biking, and even community facilities.

Each request should be evaluated against criteria (page 66) to determine the appropriateness and viability of a new activity (is this a sport or activity to stay?) as well as its compatibility with the character of the specific park and protection of its historical, cultural, or natural resources. Potential rock climbing areas, for example, currently have no public access to them. But if access were acquired, the areas first would be studied for impacts on raptors before any new

"Then comes Echo Lake, lying serenely quiet at the foot of Mt. Evans, 10,600 feet above sea level. On the shores of Echo Lake is Echo Lake Lodge, a delightful place to stop for rest and refreshments. It is a favorite place to spend the night for those who want to see the glories of a sunrise from the top of Mt. Evans. Ten miles farther up this lofty mountain road is Summit Lake, 12,740 feet high, in a glacier-scooped hollow on the side of Mt. Evans."

—DMP brochure text, 1940s
BEHAVIORAL MAPPING STUDIES

During the summer of 2007 observers spent time in the mountain parks documenting behavior of park users. Observations included type of use (hiking, picnicking, fishing, etc.), specific areas of use, and size of groups. By speaking with park users when possible, observers were able to identify languages, dress and customs, and residency.

- Weekend users outnumber weekday users by more than 2 to 1, and picnicking is the number one weekend activity.
- Mountain Parks users are family oriented, and represent many different ethnicities and ages.
- Many parks have loyal generational followings of Denver residents. Park users noted that they have been coming to the park for 30 years.
- Most users to the parks use a small area of the parks.
- The same areas tend to be used on weekends and on weekdays.
- Park users generally prefer to be close to the water, and in the shade.
- Picnickers will choose picnic areas within 100 feet of their car whenever possible.

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LEGEND: Visitor Group

Approximately 164 visitors in the park

Behavioral mapping at Echo Lake, one summer day 2007
The Denver Mountain Parks

The System

Park, Lookout Mountain, and Echo Lake on Mt. Evans. Upgrading these historic and iconic places to be of the highest quality and most authentic experience is essential in continuing the legacy of Denver’s “Switzerland of the Rockies.”

Systemwide Recommendations

A. Upgrade the system’s physical infrastructure to better connect residents and tourists (especially families) with nature, and to provide basic amenities and an improved recreational experience.

B. Connect kids of all ages with nature by creating additional facilities for youth camps, lifelong learning centers, overnight programs, and leadership programs at those parks that can best accommodate these facilities.

C. Upgrade existing park facilities including roads, trails, picnic areas, and parking to improve the visitor experience and to provide settings that encourage interaction with nature.

D. Provide more restroom facilities where needed. Integrate new restrooms with existing picnic and trail sites and ensure that they comply with Design Guidelines.

E. Continue implementing the 2001 DMP District-Wide Needs Assessment in upgrading historic facilities for recreation use.

F. Evaluate adding park facilities for youth camps and overnight programs at certain parks, such as Newton Park, Genesee, and Katherine Craig Park.

G. Consider developing a new Denver Public Schools overnight outdoor experience in the DMP for elementary school age children. Balarat, the DPS current outdoor lab located in Boulder County, then could be used for a new program serving middle and high school students. Balarat’s access and remoteness can be a difficulty for younger children and some families.

REGIONAL TRAILS MASTER PLAN

Denver Mountain Parks are open lands within the larger open space networks of the four counties in which they are located. The goal of the Regional Trails Master Plan is to provide direction on the best points of connection that are envisioned on DMP lands. Final alignments will need close collaboration with the trail planners from the other counties.

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- Provide more restroom facilities where needed. Integrate new restrooms with existing picnic and trail sites and ensure that they comply with Design Guidelines.
- Continue implementing the 2001 DMP District-Wide Needs Assessment in upgrading historic facilities for recreation use.
- Evaluate adding park facilities for youth camps and overnight programs at certain parks, such as Newton Park, Genesee, and Katherine Craig Park.
- Consider developing a new Denver Public Schools overnight outdoor experience in the DMP for elementary school age children. Balarat, the DPS current outdoor lab located in Boulder County, then could be used for a new program serving middle and high school students. Balarat’s access and remoteness can be a difficulty for younger children and some families.
Connect Kids with Nature

- Expand Park facilities for youth camps
- Expand overnight programs
- Create leadership opportunities

“When an Easterner thinks of Denver, the thought is linked inseparably with the grandeur of the Rocky Mountains. Located within twenty miles of Denver, but hitherto inaccessible except by road and trail, it’s a climax of scenic beauty—mountains and plains—unsurpassed in America or Europe. At present it has little, if any commercial value: improved by making it easily accessible, its value will run into millions of dollars annually.”

—What the Mountain Parks Mean for Denver, The City of Denver, 1913.
C. Provide recreational experiences that complement Denver’s urban park experiences and are compatible with the character of Denver Mountain Parks, that meet the needs of Denver residents and visitors, and that contribute to the regional recreational and open space system of the Denver Front Range.

- Develop new hiking trails for those individual parks where trails have been lost or where appropriate.
- Develop new picnic sites with possible new shelters where appropriate.
- Develop controlled access to streams and lakes.
- Use criteria to evaluate new recreational uses or proposed changes in recreation use for their compatibility with the unique character of the mountain park settings. Research potential new sites.
- Use criteria to evaluate certain existing recreational uses for their compatibility with their Mountain Park setting. Evaluate according to the criteria, determining if the use is the highest and best use for its setting, and whether it is sensitive to the system’s natural, cultural, and scenic resources. (p 66)
- Work with regional partners to plan for and acquire access to appropriate DMP Conservation/Wilderness areas that could provide limited recreation.

D. Provide regional trail connections to adjacent open space lands by adding new multiple-use trails and work with other agencies to implement the regional trail system.

- Develop multiple use trails to connect the DMP to the regional open space system.
- Work with local groups to implement the I-70 Bike Trail, a multiple use trail, in Genesee Park along U.S. I-70.

E. Create a wayfinding system for the DMP to clearly identify parks and park facilities and to provide direction on access points, associated facilities, and rules and regulations.

- Provide a comprehensive system that includes signs, brochures, trail and park maps, and web site information.
- Identify, through signage and maps, designated trails, trailheads, picnic sites, and associated parking in the parks.
- Direct visitors to underused sites to alleviate overuse.
F. Provide a high quality experience for visitors and expand tourism opportunities by rehabilitating the historic park shelters, lodges, and structures to offer an authentic mountain park setting.

- Research and enhance all the historic sites, starting with Buffalo Bill Grave and Museum. Analyze their uses, seasons, roles as ‘gateways,’ and interpretive experiences to highlight their ability to celebrate the American West.

### RECREATION EVALUATION CRITERIA

1. Are the type of use, level of activity, and location consistent with the mission and goals? Are there any land restrictions or legalities that restrict or prohibit the use?

2. Is there a demonstrated demand for the use within Denver Mountain Parks?

3. Is the use compatible with the system and the park’s existing recreation experiences?

4. Are there additional or elevated safety concerns? Are staffing and management levels adequate to meet the maintenance and operations for the type of use, level of activity, or location?

5. Does the type of use, level of activity, or location have significant impact on the natural resources, cultural/historic resources, or character of the park?

“Westward along the mountain tops the highway winds on gentle grades, through well-kept public camp and picnic grounds, through a great municipal game preserve containing herds of buffalo (bison), elk and deer. One of the many branch highways leads past lovely mountain lakes above timberline and to the summit of Mt. Evans, 14,259 feet high. The main circle road descends to Bear Creek, where, at Evergreen, within thirty miles of Denver, but in the heart of the Rockies, the city has built a municipal golf course and a large lake.”

—DMP brochure text, 1940s
Cultural Resources Recommendations

Background
Cultural resources are the important features in the Denver Mountain Parks that were created by people or associated with history. Ranging from early roads built on original Native American trails to the Red Rocks Amphitheatre, they are key to the parks’ character, design appeal, and ability to convey the history and story of Denver and the West. Vestiges of Native American and early settlers’ influence on the land remain in the form of early routes, trails and roads, and structures.

In Genesee Park, the 1860 Patrick House and its outbuildings, currently used for park staff housing and park maintenance, were originally built as a wayside along a toll road. Colorow Point, named for Chief Colorow, is the smallest DMP park site at 0.537 acres. Its setting high on an escarpment overlooking the foothills of Golden is thought to have been a sacred site for area tribes. It’s likely that other important archaeological remnants such as sacred sites also remain.

Roads continue to be important. In 1912, Denver commissioned the renowned landscape architect Frederick Law Olmsted Jr. from Brookline, Massachusetts, to plan and design an extensive Mountain Park system in the nearby Colorado foothills. Olmsted proposed setting aside 41,000 acres of state, federal, and private lands for their scenic and natural beauty, to be preserved from development. His strongest proposal was the “provision of a system of first-class roads,” to connect these lands and make them accessible to the people. Olmsted’s road designs followed the principles of naturalistic landscapes made popular by his father, and were in keeping with his design philosophy of the “curative power of natural scenery.”

“[Denver Mountain Park] road system entices the motorist, but the real outdoor enthusiast will be found on the trail, footing it merrily in mountain boots and khaki, alive to the whisper and stir of little creatures, the penciled chipmunk or chattering gray squirrel, the birds of shy habits. The trail system is being extended each year, for the city government desires to foment hiking clubs with their experienced leaders, their rules on pack and garb and their knowledge of wood lore.”

—Denver’s Mountain Parks, What the City Has Done in Five Years to Bring Wilderness Charm to the Masses, Denver Municipal Facts, April 1918.
Constructed between 1912 and 1941, the Denver Mountain Parks are a rural park and parkway system...parks interconnected by scenic drives...planned and designed by Frederick Law Olmsted, Jr., nationally recognized landscape architect; S.R. DeBoer, Denver landscape architect; and Jules Jacques Benedict and Burnham Hoyt, prominent Denver architects. The unique linkage of mountain parks and scenic drives preserved scenic and recreational mountain resources, expanded the vision of parks and parkways, and set the stage for regional open space planning in Colorado.”

—National Register of Historic Places nomination

Olmsted planned the scenic drive through Genesee Park and the curving road up Lookout Mountain – the Lariat Trail built by ‘Cement’ Bill Williams. Over the next several years, Denver built or assisted with building roads from Denver to Golden and Morrison, the Bear Creek Canyon Road, and roads to Bergen Park and to Squaw Pass. The Mountain Park loops were designed to be experienced by car, with careful road alignments designed to capture the incredible views and scenery.

While Denver was completing its first class system of mountain roads, it also was building shelters and buildings. Between 1914 and 1918, many stone shelters, park buildings, well houses and monuments were completed. Several of these structures were designed by Jules Jacques Benois Benedict, one of Denver’s foremost architects, including the prominent Chief Hosa Lodge at Genesee Park. Benedict’s other work included the Washington Park Boat House in Denver, and the summer White House on Mount Falcon for President Wilson, which was never built. The designers used indigenous materials and simple forms to integrate structures with the natural setting. Each structure was crafted to take advantage of its setting, to capitalize on views and sight lines, and to respect natural features. They were built with fine workmanship and attention to detail.

During the 1930s and early 1940s, the State Parks Division of the National Park Service (NPS) oversaw extensive work in the DMP done by young men from around the country in the Civilian Conservation Corps (CCC) and local men in the Works Progress Administration (WPA) program. The NPS landscape architects and architects created a general development plan for the DMP and master plans for nine parks. The CCC workers lived in special camps built for them, including the main Morrison Camp near Red Rocks and the camps at Genesee Park (now Katherine Craig) and Chief Hosa. The Morrison Camp
remains almost intact. The shelters, trails, and roads built by the CCC and WPA convey the NPS design ideals of carefully siting structures into the dominant natural and scenic character, naturalistic principles of landscape design, use of native materials, and a focus on landscape preservation and harmonization of built features.

Their most significant work was the remarkable construction of the Red Rocks Amphitheatre, designed by renowned Denver architect Burnham Hoyt. Patterned after Europe’s finest outdoor amphitheaters, Hoyt designed his theater to work with the site, in a slightly asymmetrical form with a sweeping upward arc that afforded breathtaking views and wonderful acoustics. Using indigenous materials including Colorado sandstone from Lyons, Hoyt exemplified the practices of naturalistic design. In 2003, a new visitor center was completed in Burnham Hoyt’s originally envisioned, but never built, agora at the top of the historic amphitheatre.

In addition to Red Rocks Amphitheatre, the roads, distinctive lodges, and shelters built between 1912 and the 1940s are recognized as nationally and locally important. Nine of the Denver Mountain Parks
and the most prominent scenic drives are listed on the National Register of Historic Places. Red Rocks, too, is joined by the Mt. Evans road and the Buffalo Bill grave and Pahaska Tepee in attracting more than a million visitors from around the world each year. These cultural resources make Denver Mountain Parks special and different and are the basis of their appeal to heritage tourists.

**Challenges and Opportunities**

The Mountain Parks include more than 20 architecturally significant and historically important structures ranging from small stone well houses to stone and timber lodges. In addition to the well known structures are the many roads, picnic sites, and trails that are original park features.

*A major challenge for Denver is to adequately maintain, enhance, and market these historic assets for both Denver residents and tourists.*

It requires consistent reinvestment over time. The return to the City is in the experiences the parks provide as well as the economic benefit from the growing tourism sector. The 2001 DMP District-Wide Needs Assessment analyzed most of the major structures and features and provides recommendations for their protection and improvement. The assessment identified approximately $12 million in needed improvements for just the structures, for their immediate stabilization and critical life safety compliance. As of 2008, $2 million worth of that work had been completed. One outstanding key recommendation is to develop site master plans for 14 Mountain Parks to guide their stabilization and improvement. Funding for this level of planning has not been allocated, and improvements to the parks have continued on an as-needed basis.

How to repair and build new structures in ways that are compatible with these historic resources also is a challenge. For example, restoration of existing structures requires attention to scale and materials. Consequently, Design Guidelines for the DMP were developed as part of this Master Plan and exist as a separate report. See Chapter 3 for a short summary of those Guidelines.

**Systemwide Recommendations**

A. Preserve historic features and structures including original roads, trails, structures, and buildings.
   - Continue implementing the 2001 DMP District-Wide Needs Assessment through immediate stabilization measures and by restoring and rehabilitating significant features and structures.
   - Conduct archaeological investigations and/or historic research as a regular part of the planning, design, and construction process.

B. Complete a system-wide assessment and plan of potential uses and roles for all of the major historic lodges and structures, including the Morrison CCC Camp, the Patrick House, and the Daniels Park ranch buildings.

C. Rehabilitate the architecturally significant structures for their highest and best uses, referring to DMP Design Guidelines.
The Denver Mountain Parks: The System

The Lariat Trail

- assessing and rehabilitating the historic Morrison CCC camp.
- analyzing and assessing the integrity and role of Katherine Craig CCC Camp and plan for nonprofit or City use.

D. Rehabilitate the park stone houses and their settings for continued use as park shelters and picnic sites.

E. Assure that new construction and enhancements of existing features do not diminish the design integrity and legacy of the system.
- Follow the Denver Mountain Park Design Guidelines for all projects and refer to the historical written and graphic archives.
- Pursue Denver Historic Landmark Commission designation for the system.

Capitalize on these buildings’ unique architecture, setting, and fabulous views. Analyze and study conceptual ideas, such as:

- rehabilitating Chief Hosa Lodge, the Trading Post, or Pahaska Tepee and their grounds as the gateway to the Mountain Parks system or to have greater interpretive roles.

- rehabilitating Pahaska Tepee at Lookout Mountain Park as part of the greater enhancement of the Buffalo Bill Museum and Grave.

- rehabilitating Echo Lake Lodge at Echo Lake Park for expanded uses.

- assessing and rehabilitating the historic ranch buildings at Daniels Park for public access.
The Denver Mountain Parks

The System

Natural Resources Recommendations

Background

The DMP system is a microcosm of Colorado’s ecosystems. The DMP begin as low as 5,700 feet above sea level at Deer Creek Canyon. Daniels Park, at 6,600 feet, is a rocky mesa of Gambel’s oak and mixed prairie grassland. The system rises to a high alpine cirque at an elevation of 12,830 feet at Summit Lake Park. Summit Lake is, in fact, the highest city park in the nation and the headwaters of Bear Creek. In between, all of Colorado’s ecosystems are represented—plains-foothills transition zone, foothills zone, montane zone, subalpine zone, and alpine zone.

Some of Colorado’s and the country’s most striking geology occurs in the DMP. From east to west, they provide a cross section of Colorado’s Front Range geologic history, characterized by alternating periods of mountain uplift and erosion occurring over several hundred million years. The dramatic Pennsylvanian and Permian sandstone formations of Red Rocks Park are probably the best known. Rising to the west, most lands are underlain by Precambrian metamorphosed sedimentary and volcanic rocks of early and middle Proterozoic age. In valley bottoms, Quaternary deposits of alluvial sand and gravel and colluvium (sediment deposits at the bottom of slopes) have accumulated on top of bedrock.

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The Front Range foothills landscape where most of the parks are located is dissected by streams that tumble through sinuous canyons. The major streams that flow through the parks are Clear Creek, Beaver Brook, Bear Creek, Cub Creek, Little Cub Creek, North and South Turkey Creek, and Deer Creek. These streams and the land that encompasses their watersheds are critical in providing water and ensuring water quality for Denver’s Front Range communities. All of these streams ultimately reach the South Platte River.
With such diversity in elevation and life zones throughout the Mountain Parks, there is an equally diverse range of vegetation and biological communities. The lower elevations where plains foothills transition zone occurs in places such as Daniels and Red Rocks parks are characterized by open grasslands on lower slopes, mesa tops interspersed with shrublands, and plains riparian communities in stream corridors. Between 8,000 and 10,000 feet in elevation, the mixed pine forests of the montane zone occur. Ponderosa pine and Douglas-fir communities dominate lower slopes. As elevations rise, monotypic lodgepole pine forests with patches of Engelmann spruce, blue spruce, and subalpine fir occur. Higher elevation ridges are dominated by limber and bristlecone pine. Large, contiguous stands of aspen dominate north-facing slopes and valleys with abundant moisture, while open meadows can be full of wildflowers.

Above 10,000 feet, the moisture-rich subalpine zone begins, with stands of Engelmann spruce and subalpine fir that are broken by lush wet meadows and rocky slopes. The primeval forests typically include an understory of shrubs including willow thickets, shrubby cinquefoil, red-berried elder, bush honeysuckle, and thimbleberry. Meadows, wetland bogs, and forest openings include a diverse array of colorful wildflowers. At the upper end of the subalpine zone, forests give way to limber and bristlecone pine on rocky, windswept slopes just below timberline, at about 11,000 feet. Above timberline, the alpine zone supports a rich array of vegetation that survives extreme conditions and short growing season. Rocky soils are interspersed with alpine tundra—a diverse mix of low-lying grasses, perennial sedges, wildflowers, and mosses.

The varied DMP landscapes are critical for their important habitat for mammals (such as deer, elk, mountain lion, black bear, and mountain goat), for fisheries, and for raptors. Important wetlands, riparian areas and wet meadow communities, old growth forests, rare or significant plant communities, and cliff habitats occur throughout the system.
Challenges and Opportunities

Early Denver leaders set aside the DMP to protect their scenic beauty for future generations. This action protected the system’s significant natural resources and important habitat. Their environmental role for the region is as important as the recreational experience. Watershed protection, as only one example, is key to the quality and quantity of drinking water for Denver. In many ways, the creation of DMP is the earliest Greenprint Denver environmental action in the City’s history. The visionary move to protect lands close to Denver from development and industry even predates the nationwide open space movement by decades.

The challenge today, with impacts such as urban growth, climate change, and recreation demands, is how to protect these resources for today and the future while providing recreational access.

Over the years, management of the natural resources in the DMP has included forest management, wildfire control including thinning for fire mitigation and beetle control, weed control, bison and elk management, and stream control. With a small staff and limited resources, DMP has managed the system’s natural resources through partnerships with the other counties, USDA Forest Service, National Park Service, Colorado State Forest Service, Colorado Division of Wildlife, Department of Agriculture, Colorado State Parks Land and Water Conservation Funds, and eight Fire Departments. Obviously wildlife and natural resource issues don’t recognize political boundaries.

Many of the heavily wooded DMP have a Forest Management Plan (FMP) in place, most of which were completed by the Colorado State Forest Service in the late 1980s and early 1990s. The mountain pine beetle epidemic is expected to reach the DMP resulting in extensive areas of dead lodgepole pine followed by patchy forests and a period of regrowth.

Long-term issues that threaten ecosystems and habitat include social trails and trampling (particularly in riparian areas), unauthorized vehicle use, illegal dumping, encroachment from neighboring properties, damaged fencing, unnecessary fencing or other barriers for wildlife, erosion, noxious weeds, forest health issues, and incompatible use of neighboring properties.

Denver also lags behind other open space providers in the creation of the tools needed to manage the system’s natural resources, such as a comprehensive baseline inventory for the entire system and system-wide and individual natural resource plans for each park.
Natural Resources Recommendations

A. Protect important riparian habitat including wetlands, wet meadows, and riparian communities. Recognize that users enjoy physical access to water, and that any habitat protection should include designated areas where access is appropriate.
   - Implement measures to reduce the impacts of public use, particularly social trails, on riparian habitat areas.
   - Identify areas that are appropriate for public use and areas that should be protected as riparian habitat areas.
   - Create and install a system to mark and identify the boundaries of the DMP.

B. Create an interagency collaboration to restore Bear Creek. Bear Creek is a critical stream corridor, designated Important Bird Area, and watershed that provides drinking water, protects significant aquatic and riparian habitat, and offers a unique scenic resource.

C. Close social trails and restore vegetation
   - Identify and close problematic social trails that damage sensitive areas, cause significant erosion, or contribute to the expansion of social trails.
   - Where appropriate, design and designate new sustainable trails in order to close social trails.
   - Manually obliterate the trail tread while revegetating the area with native species.
   - Carefully place signage and obstacles where access or crowds are a problem.
D. Incorporate natural resource protection strategies in system-wide and individual park improvements.
   - Design and build recreational and site improvements that can better accommodate heavy recreational use (such as constructed access to the creeks and fencing of protected areas).
   - Evaluate any proposed new recreational use or facility against its impact on the natural resources, or on the significance and integrity of those resources.
   - When new uses or facilities are proposed, closely assess the specific areas that would be affected, documenting any sensitive resources. For example, a rare plant or wetland survey may be necessary to help determine the appropriate location of a trail, structure, or other facility, while raptor surveys may be needed to inform decisions about proposed uses (such as rock climbing).

E. Conduct a comprehensive baseline inventory for the entire system.
   - Build on the work developed through the master planning process.
   - Continue inventories as projects are developed in individual parks.
   - Create and continually update a GIS system to document the baseline inventories, including the work of the master plan.

F. Develop an ongoing resource management planning approach to assist in protecting the resources.
   - Develop specific resource management plans for individual parks or by areas with similar resources (or system-wide) to clearly articulate resource management goals and identify specific management actions and tools to achieve them.

G. Develop and document an integrated weed management strategy for the entire DMP system that builds on past successes while providing a framework to respond to future challenges.
   - Develop project-specific studies to further identify significant resources in the parks and to respond to specific plans or proposals.
   - Develop monitoring protocols to track the effectiveness of management actions (such as weed control or social trail restoration) and a process to evaluate the results of the monitoring and to guide and plan subsequent actions.
   - Use an integrated biological, mechanical, and chemical approach, prescribed fire, and any other appropriate tools.
   - Continue ongoing weed monitoring and collaborative relationships with the Colorado Department of Agriculture, County Weed and Pest Management Program.
NOTABLE NATURAL RESOURCES

Geologically diverse:
- Summit Lake lies at the base of a cirque carved into the hard granite of Mount Evans by glacial activity.
- Daniels Park encompasses a mesa top capped with light-colored sandstone layers of the Denver Formation, 65 million years in age.
- The Fountain Formation at Red Rocks Park is 300 million years old, next to Precambrian basement rocks more than 1.7 billion years old.

Diverse ecological zones:
- Summit Lake Park, located above timberline at 12,830 feet (below the summit of Mount Evans), is the only DMP located in the alpine zone. It forms the headwaters of the Bear Creek watershed.
- Echo Lake Park, located at 10,600 feet, is the only DMP within the subalpine zone, although the upper portions of Hicks Mountain and Snyder Mountain also show characteristics of this zone.
- Most of the parks occur in foothills and montane forests and riparian habitats ranging from 6,000 to 9,000 feet in elevation.

A variety of wetlands:
- The alpine wetlands around Summit Lake include soil hummocks dominated by willows and sedges and several species of mosses and ferns (CNHP 2007); they form the headwaters of Bear Creek.
- Echo Lake is in the Chicago Creek drainage, a tributary to Clear Creek. The 10,000-year-old subalpine wetland (fen) at Echo Lake Park is an important feature dominated by willows and sedges.
- Montane wetlands at the west end of Evergreen Lake provide important habitat for waterfowl and marsh birds.

Biological diversity:
- Echo Lake Park also has high biodiversity significance with occurrence of globally vulnerable plant species (reflected moonwort, Mingan’s moonwort, and western moonwort) and communities (montane woodlands).
- Within Red Rocks Park, the landscape ranges from plains riparian to mixed shrublands and scattered ponderosa pine or aspen trees.
- Bergen Peak provides a good example of a lodgepole pine forest.
- Old-growth ponderosa pine occurs in Bergen, Bell, and Genesee Parks. Berrian Mountain shows diverse montane zone communities.
H. Continue proactive monitoring and stewardship of forest resources to minimize wildfire risk and proactively manage forest health.

- Work with the Colorado State Forest Service to update Forest Management Plans for individual parks.
- Consider incorporating forest management goals into a comprehensive, system-wide planning tool. Continue to develop collaborative relationships with counties, local fire districts, Arapaho-Roosevelt National Forest, and other partners to coordinate forest management goals and implementation efforts.

I. Continue efforts to improve wildlife habitat and reduce conflict between wildlife and humans.

- Manage litter problems in the parks by removing open waste containers and replacing or re-configuring them to be bearproof or resistant to wildlife.
- Phase out the Elk Enclosure in Genesee Park, which interferes with wild elk migration in collaboration with the Colorado Department of Wildlife (CDOW).
- Continue improving streams for fish habitat.
- Inventory and study raptor populations at accessible, good quality rock outcrops that may have future potential for rock climbing.

J. Develop and maintain collaborative relationships with other agencies and organizations that have a mutual interest in the management of natural resources in the Denver Mountain Parks. These relationships are important for sharing management experience, identifying unique opportunities to improve service or reduce costs, leveraging outside resources (i.e., volunteers or grant funding) and implementing projects of regional interest.

Key partners include Jefferson County Open Space, Clear Creek County Open Space, Douglas County Open Space, Evergreen Park and Recreation, Highlands Ranch Metro District Open Space, and Arapaho-Roosevelt National Forest. Other partners include the State Forest Service, Department of Agriculture, and Division of Wildlife, local fire districts; conservation organizations, and many others.