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1. Overview

This conceptual plan provides guidance and recommendations for the creation of a shared-use trail system adjacent to Silverton, Colorado, directly north of Cement Creek Road. The planning area's working name is Baker's Park. The system will serve pedestrians and bikers with both dual-direction trails and single-direction, mountain-bike optimized trails, providing opportunities for a wide range of users to experience the outdoors.



The concept plan maps out an approximate 30 total miles of trails, of which about 24 miles will be shared use, and nearly 6 miles will be one-way trails specifically designed for mountain biking only. A well-organized trail system with a balance of dual-direction and singledirection trails will help manage traffic and mitigate potential user conflict while fostering a solid shared-use trail community.

The final design will include options for all users, from hikers to trail runners and beginner to advanced level mountain bikers. Among many advantages, the trail system will offer health and economic benefits, provide recreation opportunities, foster community involvement and identity, supply educational experiences, and preserve open space.

About IMBA

The International Mountain Bicycling Association (IMBA) is a 501(c)(3) nonprofit educational association whose mission is to create, enhance, and protect great places to ride mountain bikes. Since 1988, IMBA has been bringing out the best in mountain bicyclists by encouraging conservation-minded riding, volunteer trail work, cooperation among different trail user groups, and grassroots advocacy. We join forces with land managers, trail advocates, and community members to implement innovative trail management solutions.

Based in Boulder, Colorado, and with staff distributed across the country and the world, IMBA meets its goal to create great mountain bike experiences through its Trail Solutions program. Trail Solutions is the international leader in singletrack development. Our wealth of expertise has allowed us to develop guidelines for the creation of sustainable, enjoyable trails and bike parks that have influenced land management agencies around the world and have frequently been adopted as best practices.

Silverton Singletrack Society

The Silverton Singletrack Society is a regional chapter of IMBA, organized to promote mountain biking in Silverton by building, improving, and maintaining sustainable mountain bike trails. Their vision is for Silverton to become a world-class mountain biking destination, with the Baker's Park trails comprising a part of the overall system. They contribute to the economic wellbeing of Silverton and San Juan County by helping to make mountain biking a significant tourist attraction. The Silverton Singletrack Society also organizes events that bring people together to build friendships and community. They establish cooperative relationships with other clubs, trail users, and land managers to bring the benefits of trails and outdoor recreation to their region.





TRAIL SOLUTIONS

2. Project Goals and Objectives

The goal of the following plan is to develop a progressive trail network of shared-use and bike-optimized trails that offers beginner to advanced level mountain biking as well as pedestrian opportunities. As trails are developed and mileage increases, visitation from residents and regional trail users will increase.



This trails concept plan is crafted to ensure trails and features will be designed and built in a sustainable manner and meet recreation, conservation, and education objectives. The trail system will create a progression of experiences and challenges as trail users explore the system in more depth with each visit. Individual segments will provide consistent and expected experiences.

The design of the system will be similar to that of a well-planned ski trail system, with a collection of easier/green, more challenging/blue, most challenging/black, and expert/red trails, appealing to a broad cross section of off-road bicyclists, from family-oriented entry-level riders to highly skilled enthusiasts. Providing progressive riding opportunities will help showcase modern trail design and construction, provide a wider variety of trail types within the area, and allow for responsible recreational use with minimal natural and historical resource impacts. The network should be enhanced by efficient way-finding signage and a variety of recreational amenities.



The objectives of the trails concept plan are:

- Lay the groundwork of a successful shared-use trail system that appeals to a wide spectrum of visitors, including pedestrians and mountain bikers.
- Increase the availability of mountain bike-optimized trails in the area.
- Ensure a wide variety of difficulty levels are represented, including beginner/green, intermediate/blue, advanced/black, and expert/red.
- Highlight the natural beauty of the northern San Juan Mountains with manageable climbs, alignments, and destinations on shared-use trails that allow users to experience the unrivaled terrain and incredible views in the area.
- Foster partnerships with all trail users (motorized and nonmotorized) to devise an extended network where everyone has an enjoyable experience.
- Direct trail users to designated corridors to minimize the confusion of trail access crossing private property.
- Connect the trail system to the town for easy and equitable access to outdoor recreation for the community.
- Create a trail system that is environmentally and socially sustainable, while educating users about the importance of the unique alpine landscape and mining history.
- Provide economic, health, and other benefits to San Juan county residents. For more information on the benefits of mountain bike trails, see Appendix B.

60 million adult Americans ride a bike each year, and bicycling creates major economic growth in the United States:

- Contributes \$133 billion annual contribution to the U.S. economy.
- Supports nearly 1.1 million jobs across the U.S.
- Produces \$53.1 billion annually in retail sales and services.

A <u>2018 economic impact study</u> released by the Walton Family Foundation describes in detail the \$137 million benefit from trails in Northwest Arkansas to the Arkansas economy in 2017, of which \$27 million came from tourism dollars.



3. Design Development Recommendations

Parking and Trailheads

The trail system will have three parking areas to provide ample space for cars and access to various zones. Parking Area 1 will be located at Memorial Park, on the east side of town, connecting the trail system directly to town and providing easy access for users to walk, bike, or drive to the trails. Parking Area 2 will sit at the bottom of Cement Creek Road, adjacent to zones 1 and 2. Parking Area 3 will be located on the west side of Cement Creek at Hub D, adjacent to Zone 3.





Zone 1

Zone 1 is situated on the Aspen Face, the south-facing, aspen-dappled slopes directly above the north end of town, along the base of Storm Mountain. The Aspen Face has excellent traditional singletrack trail potential that promises to showcase fall colors, rocky slopes, and big views. This zone is relatively unscarred by man and machine, and trail design here should prioritize hiding turns and legs, where possible, to maintain the natural look and feel of the landscape. The trail will provide a gentle climb to the top and an exciting return descent.



Zone 1 is not suitable for dense mountain bikespecific trail development due to probable visual impact and steepness of terrain. On the east side of the Aspen Face, the terrain becomes steeper and includes cliff areas. Zone 1 will have the lowest trail density and will be a high priority to begin trail construction.

There is a potential for 8-9 miles of shared-use trails for biking and hiking but not equestrian use in Zone 1. They will be intermediate to advanced mountainbike skill levels, and some of the trails may be single direction to mitigate user conflict.

Construction in Zone 1 will utilize a combination of hand building and small machines to minimize disturbance and visual impact.



Zone 2

The Chasms, an expanse of dense forests, naked ridges, and eroded chasms along the southwestern base of Storm Mountain, will make up Zone 2. This area comprises the ridgelines, moderate slopes, dense fir and spruce forests, and chasms directly west of and adjacent to the Aspen Face. Zone 2 provides links between the Aspen Face, Hancock Gulch, and Storm Mountain Ridge.



The trails here will consist of traditional backcountry singletrack but with gentle turn landings or bermed turns for descending trails. Beginner or intermediate climbs should hold grade with gentle frequency and amplitude of grade dips. Trail density will be moderate.

The majority of trails in Zone 2 will be shared-use, dual-direction alignments with some trails managed as preferred direction for mountain bikers. The trails will be intermediate to advanced

mountain-bike skill levels with potential for an easy, beginner link on the lower slopes. Similar to Zone 1, there is a potential for 8-9 miles in this zone.

The beginner and intermediate trails will be machine built, while the advanced trails may need a hand build or small-machine build to ensure a narrow, singletrack experience. Final trail design across the chasms will depend on good rock anchors and avoiding typical avalanche debris zones. Overall, the lower slopes have moderate to gentle side slopes but will likely require several watercourse crossings.



Zone 3

West of the Chasms, the gentle glades and meadows of Zone 3 encompass Hancock Gulch. Relatively low-angle slopes, good soils, and moderate forest cover make up the landscape, with a few wet areas that will have to be avoided. The zone uses County Road 70/Hancock Road, which is an unpaved jeep road, as a main artery. The road is probably too steep and eroded for motorized vehicles to shuttle bikes uphill but adequate for trail construction, maintenance, and emergency access.

Zone 3, with approximately seven miles of trail, will be made up of mountain-bike optimized gravity trails using hubs and clusters to divide trails into progressive segments. Most of the trails will be bike-specific, one-way descents with some gentle, shared-use, dual-direction climbs. The zone will have a high trail density with beginner, intermediate, advanced, and expert mountain bike-skill level routes. The build here is a high priority.





Zone 4

Storm Mountain Ridge, the slopes and ridges along the southern shoulder of Storm Mountain, make up Zone 4. Similar to Zone 1, this area has excellent singletrack trail potential in the range of three to four miles. Users can enjoy rocky terrain and big views, and trail design here should prioritize hiding turns and legs, where possible, to maintain the natural look and feel of the landscape. The higher elevation in this zone provides a classic alpine singletrack experience and introduction to exposure.

The alpine setting of Zone 4 makes it best suited for low trail density and advanced mountain bike-skill level trails. The trails will be shared use for biking and hiking but not equestrian use. Single-direction trails may be designated to mitigate user conflict. If this zone has space for a short alpine loop, the loop should include a gentle climb.

This zone has the best potential for any future trail access from Baker's Park towards the existing Boulder Gulch and South Fork Trails.

Trails in Zone 4 should be hand built to minimize visual impact and preserve a narrow, singletrack experience. This zone has a low priority for building.





4. Next Steps

The most important next step is to define exact access points, trailheads, parking hubs, staging areas, viewpoints, and other points of interest. Once these hubs are pinpointed, trail corridor design begins, typically by mapping, collecting GPS data points, and finally flagging potential corridors deemed acceptable by the land manager.

It is optimal to flag the corridors just before the review team is available to physically tour the flag line, so as not to lose flags from sunlight, wind, animal, human, and other natural elements. Design and flagging costs will depend on conditions, accessibility, terrain, time of year, and other factors. An initial 8- to 18 -mile trail clearance goal is a good target for the first season of trail design and construction.

Construction can be provided by a combination of professionals and volunteers, using machines and hand tools. Skilled mountain bike trail builders should work on the mountain bike-optimized and gravity trails. A good rule of thumb: A builder can only build to their riding ability; if you can't ride it, you shouldn't build it.



5. Trail Construction Cost Opinion

The following cost opinion is based purely on concept planning done to date with limited field specific observations. Design and construction priorities are in accordance with desired user experience and timing of typical snowmelt. Phase 1 priorities include Zone 1 and proximal machine-built portions of Zone 2, so as to create a loop on the southwest facing slopes of Boulder Mountain. Phase 2 would add family-friendly, bike-optimized segments of Zone 3, while including vital links high and low across Zone 2. If SSTS determines that Zone 3 is a higher priority due to the experiences that Zone 1 provides, that design and construction can be moved up with considerations that Zone 3 most likely melts out later in the season.

Phase 1

Trail Mileage: 8-10 miles

Trail Design: 2 TS Staff 8-10 days, \$16,000 to \$20,000 includes expenses (lodging, meals, mileage, field supplies)

Construction Costs per mile: \$30,000 - \$50,000

Construction Cost Opinion: \$240,000 To \$500,000

Phase 1 (Trails in Zone 1 and partial Zone 2) - Total Mileage: 8-10 miles, Trail Design: 8-10 days

- Trail 1: 2.25 miles, intermediate, shared use, dual-direction. Machine build.
- Trail 2: 2.5 miles, intermediate, shared use, preferred MTB climb. Machine build.
- Trail 3a: 3 miles, intermediate, shared use, preferred MTB descent. Machine build.
- Trail 3b: .35 miles, intermediate, shared use, preferred MTB descent. Machine build.



Phase 2

Trail Mileage: 12-15 miles

Trail Design: 2 TS Staff 12-15 days, \$24,000 - \$30,000 includes expenses (lodging, meals, mileage, field supplies)

Construction Costs per mile: \$40,000 - \$65,000

Construction Cost Opinion: \$480,000 - \$975,000

Bridges: factor in 4-6 medium span (8- to 12-foot) bridges for beginner climbing Trails 5 and 6, \$40,000 - \$90,000

Additional field-based details needed to outline specific trail segment development.

Phase 2 Trails in Zone 2 – Total Mileage: 7-8 miles, Trail Design: 8-9 days

- Trail 5: 1 mile, beginner, shared use, preferred MTB climb for short term. Machine build.
- Trail 6 (6a, 6b, 6c): 4 miles, beginner, shared use, preferred MTB climb. Machine build.
- Trail 4a (from Trail 3a to Trail 11): 2 miles, advanced, singletrack, shared use. Machine or hand build with youth corps and SSTS volunteers including TS guidance.
- Trail 11: .5 mile, advanced, singletrack, shared use. Machine or hand build with youth corps and SSTS volunteers including TS guidance.

Phase 2 Trails in Zone 3 – Trail Design: 4-6 miles Trail Design: 5-7 days

- Trail 8 (8a, 8b): 1.55 miles, beginner, MTB only, family gravity flow. Machine build.
- Trail 7 (7a, 7b): 2.75 miles, intermediate, MTB only, family gravity flow/jump. Machine build.



Other potential trails pertaining to Phases 1 and 2

- Trail 10 (Zone 1): 1 mile, intermediate, shared use, predominate descending direction for MTBs. Trail would be located below fill slope of Cement Creek Road. Machine build. Alternate link to mitigate user conflict between Zone 3 and Zone 1.
- Trail 9 (Zone 3): 2 miles, advanced, MTB only, jump trail. Machine build. Purpose of providing a stand-alone, advanced/expert level gravity trail that is "destination worthy."
- Trail 4b, 4c (Zone 2): 3 miles, advanced MTB descent, traditional singletrack. Hand build. Provides SSTS a community building trail project to showcase chasms and ridges along west slopes of Boulder Mountain.

Future Phases

Trail Mileage: 4-5 miles

Trail Design: 2 TS Staff 5-6 days, \$10,000 - \$16,000 includes expenses (lodging, meals, mileage, field supplies)

Construction Costs per mile: TBD

Construction Cost Opinion: TBD

Additional field-based details needed to outline specific trail segment development.

Future phase trail in Zone 2

• Trail 12: 0.75 mile, advanced, shared use, predominate descending direction for MTBs. Traditional narrow singletrack with modern turns and alternative line with bike optimized (rock structure) features. Machine or hand build with youth corps and SSTS volunteers including TS guidance.

Future phase trail in Zone 4

• Trail 13: 3.5 mile, advanced to expert, shared use, dual direction. High alpine traditional harrow singletrack MTB climb/descent with fortified rock turns and features. Machine or hand build with youth corps and SSTS volunteers including TS guidance.



6. Summary

The Baker's Park area provides a tremendous opportunity to build a progressive, modern trail system in spectacular subalpine terrain with immediate access from the town of Silverton. Creating the proposed trail network of shared-use and mountain bike-optimized trails will guarantee a unique destination, drawing visitors from throughout the area and giving local residents an exhilarating outdoor activity close to home. Future connectivity could allow access to nearby trail systems, forming a larger web of regional trails.

Baker's Park has the potential to offer a wide array of trail experiences and showcase a myriad of eco zones. Trail users will enjoy everything from sunny aspen-dappled slopes to shaded dark timber, barren exposed ridges and alpine wildflower meadows. The landscape is conducive to everything from traditional shared-use trails to modern bike-optimized flow trails. The overall concept includes a range of trail skill levels fostering family-friendly recreation with options for beginners to advanced users, while considering



some single-direction trails to mitigate potential user conflict. Progression will be widely available, and this concept plan spells out a thoughtful approach to implementation that encourages the growth of riders and a shared-use trail community.

Currently, there are fewer than 10 miles of official singletrack trails open to mountain biking in Silverton. The construction of the Baker's Park trail system will provide some much-needed mileage of shared-use trails for hikers and bikers, as well as mountain-bike flow trails that are rapidly growing in popularity.

In addition, a well-designed trail system can stimulate a local economy by increasing activity within the resident population as well as attracting visitors from outside. With continued support from groups like the Silverton Singletrack Society and government agencies, San Juan County can expect to enjoy a significant boost in economic, health, social, and environmental benefits kindled by a standout trail system.



7. Appendixes

Appendix A: Overall Trails Concept Plan



Appendix B: Benefits of Mountain Bicycling Trails

Promoting Active and Healthy Lifestyles

The benefits of mountain biking may start on the trails, but they don't end there. Learning to ride a bike is a rite of passage. Bikes and the sport of mountain biking provide a multitude of opportunities to teach children valuable lessons that will carry into adulthood.

Obesity is at a high, while activity levels among Americans are plummeting. With its progressive nature and way of stimulating the senses, mountain biking is appealing, especially to youth, and provides an excellent form of recreation for reversing the trend toward poor health. Since riding a bike provides excellent cardio conditioning, improves strength and coordination, and burns several hundred calories an hour, it is an activity as appealing to parents as it is to kids.

The unstructured play that mountain biking provides inspires people to explore and appreciate the natural world, leading to positive associations with outdoor activities and exercise.

Mountain biking allows individuals to advance at their own pace, so kids looking for a challenge can have just as much fun as children who are more interested in exploring the scenery. Riding in nature provides an environment where children can work on their skills, have fun, and pedal their bikes without parents having to worry. Mountain biking is a crossgenerational endeavor, accessible to all ages and levels of physical fitness. Going for a trail ride is an excellent way for parents to do more than support their children's activities, it's a way to share the experience. Every ride is an







opportunity to create a healthy lifestyle and pass on lessons that are best learned through experience.

Several studies on physical activity have indicated that proximity to recreational facilities, such as trails, is a predictor for physical activity. Simply put, if there are walking and biking trails nearby, then residents are more likely to use them and therefore be healthier. Physical health and exposure to nature also benefit mental health, reducing stress and increasing happiness. In addition, individual and community health translate to economic benefits by decreasing healthcare costs.

Contributing to Economic Growth

A well-designed trail system can stimulate economic growth by increasing activity within the local population as well as attracting visitors from outside. Trails can generate business in retail sales and services, support jobs, provide sustainable growth in rural communities, and produce tax revenue. Access to trails also correlates to a higher quality of life, thus making the community more desirable and capable of attracting new businesses and workers to an area.

IMBA assists local communities in increasing mountain bicycling tourism as a sustainable, renewable source of economic development. A mountain biking destination is one that attracts tourists to an area for the benefits of the mountain biking experience; provides visitors with all of the amenities needed to compliment, ease, and enhance their visit; and in turn creates word of mouth about the community that will draw new and repeat visits.

According to the Outdoor Industry Alliance, mountain bicyclists represent approximately 3.4 percent of the US population, or nearly 10.6 million participants. IMBA's own research indicates that enthusiasts, who represent a portion of this overall number, travel extensively within a four-hour range and will typically devote one week per year specifically to travel to reach mountain bicycling destinations. Same-day visitors spend approximately \$35 per day in local communities while destination visitors spend closer to \$193 per day (due in part to lodging and increased meal purchases).

While mountain bicyclists are certainly willing to travel to ride, they will only do so if their destination contains a key ingredient: high-quality trails. These trails must be of a sufficient length and contain a variety of experiences, such as traditional singletrack, bike-optimized singletrack, bike parks, and shuttle options. The competition for these destination-quality locations is slowly increasing over time



A case study in Cable, Wisconsin, clearly illustrates how a community can benefit from offering a world-class bicycling experience. Construction of new bicycle trails in Cable resulted in:

- Increased property values.
- Increased spending on bicycle related goods.
- 35 jobs created annually, adding \$523,000 to total employee compensation.
- Nearly \$1.3 million impact related to spending from mountain bicyclists.



Fostering Community Identity and Involvement

Public trails provide outdoor community spaces that encourage public engagement. For instance, involving community members in the planning, building, and maintaining of trails fosters community pride and social involvement. In order to maintain sustainable trails, care of the trail system can be managed by local enthusiasts and rely on an organized membership base. Volunteering to help with trails provides an opportunity for area residents to connect with each other and with the terrain and land that surround them. IMBA members donate nearly one million volunteer hours to trails throughout North America every year, making volunteerism a large part of trail culture.

Trails and parks also provide informal opportunities for people to meet and interact with others in a natural setting. Connection to nature is paramount to maintaining the health of the



environment and making the outdoors relevant and accessible to all. Trails serve a diverse population and cultivate unity and stewardship in the community. **Trails**



can even revitalize blighted areas, for example, turning landfills into bike parks, gravel pits into trailheads, or roadsides into pathways.



Preserving Open Space

Trails make communities better places to live by preserving and creating open spaces for recreation. They provide an outdoor escape from our busy lives and a corridor of greenspace within developed areas. Greenways function as hands-on environmental classrooms for people of all ages, providing opportunities to enjoy nature close up. Visitors may see everything from birds to ladybugs, who often make their homes in these greenways. With its abundant plant life, open spaces can decrease pollution, protect water quality, and reduce soil erosion. In addition, trail systems increase active transportation, reducing traffic, noise, and, again, pollution. Economic growth and property values are also tied to open space as buyers are generally willing to pay more for property located close to parks and open space. The recreation, health, economic, and environmental benefits of trails can contribute to an overall enhanced quality of life in nearby communities.



Appendix C: General Trail Planning and Design Guidelines

The following are guidelines for the construction and maintenance of future trails. The natural environment is dynamic and unpredictable. The nature of recreational trails and roads, the desired user experience, and the constant forces acting on natural surface trails and roads make strict standards untenable and undesirable. As such, the guidelines below are simply that: best management practices that should be followed within environmental constraints.

Shared-Use Trails

These natural surface trails typify what most people envision when they hear the word trail. Shared-use trails will see both bike and foot traffic, so care should be taken to avoid obstacles or features such as jumps that might exclude some user types. Shared-use trails have a narrow tread width to reduce user speed. Mountain bikers call these narrow trails singletrack trails.



Mountain Bike-Optimized Trails

Bike-optimized trails are geared to mountain bike use while still providing an enjoyable experience for other user groups. Entire trails may be optimized for bike use, or particular segments, most often downhill portions, may be geared to riders and limited to travel in one direction. Bike-optimized features such as berms, rollers, and drops enrich the riding experience by adding fun and providing opportunities for riders to build their skills.

Flow trails are purpose-built bike trails with specific features to enhance the riding experience and provide challenge. They harness gravity so that riders feel as though they are flowing through a succession of exhilarating features from top to bottom. These trails are directional, in order to promote optimal circulation patterns, maximize the visitor experience, and minimize user conflict.

Stacked Loops

Stacked loops enable individual users and groups of riders to enjoy trails of different skill levels. Each rider can find trails that match their skills and progress. In a stacked-loop system,



the loops that are closest to the trailheads are more inviting to children, beginners, or families and the loops further out cater to more advanced riders. This creates a progression of experiences and challenges as users explore the trails in more depth and improve their skills. This is also a proven risk management tool. Putting the difficult segments further out of reach of beginners and giving riders time and distance to warm up before reaching those technical segments provides a level of safety in the system.

Progressive Hubs

Hubs are dispersion and collection points such as trailheads or major trail intersections that allow riders to "chose their own route" based on their experience level and comfort with the trail style. This also provides a great experience for groups that are made up of riders of different ability levels, where they can meet up at multiple points during a descent.

Progressive hubs give users more trail options for varying skill levels at each hub, allowing for skill level diversity. A rider may start out on a beginner trail and then graduate on to a more difficult trail at the next hub. At many intersections, there is the option to change the trail difficulty or continue on the same difficulty level.

This practice spreads out visitors and helps reduce trail user conflict. Signage includes difficulty levels at every hub and wherever necessary in the trail system to help users choose trails based on their skill levels and desired experience.

Trailheads

Well-placed trailheads and parking lots contribute to a successful trail system. Trailheads should be located in areas of lower elevation, as most trail users prefer outbound climbs with inbound descents back to the parking area. This also helps mitigate risk by allowing fatigued riders an easier route back to their starting point. This is especially true for mountain bikers, and necessary for families and beginners. Trailheads should offer information useful for the trail users, including trail maps, location information, emergency contact details, and volunteer information.

Sustainable Trails

A sustainable trail balances many elements. It has little impact on the environment; resists erosion through proper design, construction, and maintenance; and blends with the surrounding area. A sustainable trail also appeals to and serves a variety of users. It is designed to provide enjoyable and challenging experiences for visitors by managing their expectations effectively. Following sustainable trail design and construction guidelines allows for high-quality trail and education experiences for users while protecting the land's sensitive resources. If wildlife and habitat zones are a concern, seasonal trail closures can be put in place.



For additional trail design, construction, and maintenance techniques, refer to *Trail Solutions: IMBA's Guide to Building Sweet Singletrack*. These guidelines are appropriate for any hike, bike, or equestrian trail.

Signage

The development of a mountain bike trail network requires the development of a comprehensive system of signs. Signs are the most important communication tool between land managers and trail users. A well-implemented and maintained signage system enhances the user experience by helping visitors navigate the trail network and providing information about the area. Signage also plays a critical role in managing risk and deploying emergency services.

Recommended signage for the trails should be simple, uncluttered, and obvious; with a sign at every major intersection to help users stay on track. Signs should meet the needs of all users, from the daily trail user to someone who is experiencing the trails for the first time. In order to serve the variety of visitors, sign placement should be strategic and frequent. Because signs can intrude on the natural outdoor experience, balancing competing interests is key to developing a successful signage program.

Sign Types

A variety of signs can be created to help users identify trails and their location, select routes, remain confident in their trail choices, guide users to destinations and key points of interest, and provide information on regulations and allowed uses. Signage can also be interpretative; helping visitors learn about responsible recreation and trail etiquette, learn about resource protection, and reduce risk and hazards.

Informational signs: Usually positioned at the trailhead and major intersections. Provide details such as trail length and difficulty. These include trailhead identification signs (from a road); signs at a trailhead kiosk with a complete map and description of all the nearby trails and facilities, local regulations, emergency contact information, and educational messages; trail intersection signs; waymarks; difficulty rating signs; and trail length or elevation gain and loss signs.

Regulatory signs: Delineate rules, such as prohibited activities, direction of travel, or other restrictions.

Directional signs: Provide navigational information.

Warning signs: Warn trail users of upcoming hazards or risks. These include visitor rules and regulations signs, allowed activities, road and trail intersections, and emergency signs.

Educational signs: Provide guidelines for responsible recreation and trail etiquette.

Interpretive signs: Describe natural or cultural resources. These include educational and responsible use signs.