

Brian Head Area Trails Master Plan



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DRAFT

Produced by:
Rivers, Trails &
Conservation
Assistance Program



Adopted 2010

Acknowledgements

Thanks to the Town of Brian Head’s Trails Master Plan Development Committee who includes the key partners within the planning process, including the following agencies, organizations, and businesses:

- Brian Head Town Council;
- Brian Head Planning Commission;
- Brian Head Chamber of Commerce;
- Brian Head Resort;
- Boy Scouts of America;
- Cedar Breaks National Monument, National Park Service;
- The Rivers, Trails, and Conservation Assistance Program of the National Park Service; and
- The US Forest Service, Dixie National Forest, Cedar City Ranger District.

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Signature Page

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Date

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Boy Scouts of America,

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U.S. Forest Service/Dixie National Forest, Rob MacWhorter

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Executive Summary

Several partners involved with this plan administer land in the region, including the Boy Scouts of America, Brian Head Resort, Cedar Breaks National Monument, Dixie National Forest, Iron County, and the Town of Brian Head. Other partners involved with the plan include: the Utah Patchwork Parkway Scenic Byway Committee members, local organizations, and businesses.

This plan is the result of a two year collaborative planning process (2009-2010) by the Town of Brian Head and its partners with assistance from the National Park Service, Rivers, Trails, & Conservation Assistance Program. The National Park Service provided the Town and partners assistance to complete a collaborative trail and interpretive plan.

The plan goals were to create a consistent, unified, and world-class trail system for the Town's residents and visitors; and to develop and create a Trails Master Plan and mapping system that is easy to use and encourages confident trail navigation. The completion of the Trails Master Plan is due to the commitment made by each partner. The decisions contained in this document were made by the Town and its partners based on a community planning and input process.

The project's vision, based on consensus of the partners, is:

"Brian Head and its partners will create and maintain a sustainable, environmentally sensitive, multi-use trail system that physically, intellectually and emotionally connects users with the area's recreational, natural, scenic and cultural resources."

Through this process, over 44 miles of trails have been located in the Brian Head Area and a plan has been developed for sustainable and consistent signing and development of the trails. This planning effort has accomplished the following:

- Creation of a Trails Committee for the Town of Brian Head that includes agency, organizations, businesses, and citizen representatives;
- Locating and mapping of 44 miles of trails within and surrounding the Town of Brian Head via mapping-grade GPS units;
- Analysis of the existing trails for tread, sign, and access needs;

- Development of design guidelines for future trail work that are aligned with Utah State Park and national organization standards;
- Development of an interpretation plan for the Brian Head Area and fourteen trailheads: and
- Policy analysis of the Town of Brian Head’s Land Management Code for which of the Town’s policies need to be updated to reflect the recommendations within this Trails Master Plan.

The priorities based on these accomplishments are clear. This plan recommends addressing priorities, as further detailed in Chapter 5: Plan Implementation, in the following order:

1. Acquire easements or access rights for the Town’s existing trails so the Town may advertise these trails to visitors and residents (as further detailed in Chapter 4: Existing Trails);
2. Clearly communicate the Town’s trails, their locations, and difficulty ratings to visitors and residents through multiple media outlets (see Appendix A: Interpretive Sign Plan); and
3. Implement the policy changes recommended within the Trails Master Plan (as further described in Chapter 5: Plan Implementation).

The optimal management solution would be to begin implementing each of these three priorities simultaneously including; 1) obtaining legal access to trails, 2) communicating trail locations, and 3) policy changes which are integral to the success of the Brian Head Area Trail System.

Through this plan, the Brian Head Area partners acknowledge what needs to be accomplished to advance the existing and proposed trail system, and the priority mechanisms to implement a successful trail system. This will allow the Brian Head Area to become a year-round destination for motorized and non-motorized recreation users, thereby helping the area’s long-term economy.

Brian Head Area Trails Master Plan

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1. Introduction

Brian Head

Geographic Area

The Brian Head Area is located in Southwestern Utah (Figure 1). The closest city, Cedar City, is located 20 miles from the Town of Brian Head. This plan covers an area administered by the Boy Scouts of America, Brian Head Resort, Dixie National Forest, Iron County, and the Town of Brian Head.

Brian Head is known as the highest resort town in America. There are drastic changes in elevation allowing visitors to experience five climatic zones as they travel along the Utah Patchwork Scenic Byway. This creates a unique opportunity for interpretation of cultural and natural history in the Area, and a wide variety of motorized and non-motorized recreation opportunities.



Figure 1: The Brian Head Area is located in southwest Utah, and provides for many recreational opportunities (Map courtesy of the National Park Service).

Brian Head Area Partners

During a two-year collaborative trail planning effort, a community partnership was formed between the following partners:

- Boy Scouts of America;
- Brian Head Resort;
- Dixie National Forest, Cedar City Ranger District, US Forest Service;
- Iron County; and
- National Park Service, Cedar Breaks National Monument.

Additional partners involved with the plan included:

- Brian Head Town Council;

- Brian Head Planning Commission;
- Brian Head Chamber of Commerce;
- Local businesses and interested citizens;
- National Park Service, Rivers, Trails and Conservation Assistance Program; and
- Utah Patchwork Parkway Committee members, a National Scenic Byway.

Need for a Trail System in the Brian Head Area

In 2009, the Town of Brian Head had a population close to 130 year-round residents, but boasts an estimated 500,000 visitors annually based on visitor statistics from Cedar Breaks National Monument, located 3 miles from the Town of Brian Head. The influx of visitation highlights the need for a comprehensive trail plan for the Brian Head Area in order to provide recreation opportunities for residents and visitors. The large influx of visitation in the winter is due to snowmobiling, skiing, and in the summer due to motorized recreation, mountain biking, and hiking. Based on the number of visitors to the area, there was a need to develop a coordinated motorized and non-motorized trail system.

In addition to the trail opportunities, the Brian Head Area provides for recreation opportunities including:

- The Utah Patchwork Parkway, State Route 143, a State and National Scenic Byway;
- National Forest and National Park administered public lands;
- Abundant, year-round recreational opportunities; and
- Unique history and culture within the State of Utah.

Due to trails and other recreational opportunities, the Brian Head Area partners can market the area, keeping visitors in the area for longer periods of time, increasing revenue for local businesses, and helping with economic development.

2. Plan Background and Planning

Brian Head Area Background

In a recounting of the history of the Town of Brian Head, Yvette Miles (1991) notes the Town (and Area) has a diverse history, ranging from early use by the Pauite tribes for small villages, hunting, and gathering to later agricultural operations that largely focused on cheese and butter production, ranching operations for raising sheep and cattle, and sawmill operations.

Skiing came to Brian Head in 1964, when Burt Nichols developed the first chairlift of what would later become the Brian Head Resort. The skiing industry continues to thrive today and is the largest business and tourist attraction within the Town. The Resort is anxious to expand their mountain biking business in the summer. This would provide increased visitation to help local businesses thrive year-round. In 1975, the Town incorporated and has since stayed a small town, with about 130 year-round residents.

Trail Planning

In 2009, the Town established a Trails Master Plan Development Committee (Ordinance No. 09-015) with the explicit purpose to accomplish the following tasks:

- a. Complete a Trails Master Plan for the Area with maps, sign design standards, and an interpretive plan;
- b. Prepare a proposed budget for the implementation of the Trails Master Plan; and
- c. Recommend proposed projects and ordinances necessary for the proposed adoption and implementation of the Trails Master Plan.

In addition to the Trails Master Planning efforts, the Town is currently rewriting its General Plan. The information contained in this plan will be incorporated into the Town's General Plan.

Conformance with Planning Documents

1. The Brian Head General Plan (in progress 2010) establishes the basis for an interconnected trail system within the Town of Brian Head connecting to Cedar Breaks National Monument to the south and the Dixie National Forest, which borders Brian Head on its west, south and eastern borders. The Brian Head General Plan identifies the need for a comprehensive trail system within the following chapters:

Chapter 3 - Description of the Town, Challenges and Opportunities:

- “Expanding the recreational opportunities while ensuring they do not conflict with each other in safety, noise, or needs:
 - Maintain Ski Resort terrain free of motorized vehicles.
 - Establish dedicated cross country ski areas.
 - Clearly identify OHV lay-down areas and trails.
 - Implement a Trails Master Plan for motorized and non-motorized uses, in cooperation with the US Forest Service and National Park Service.
 - Enhance the meadow to include trails, fishing, and educational opportunities” (page 5).
- “Improve the visitor experience through signs, lighting, and information to familiarize them with the community and the variety of recreational opportunities available to them” (page 5);

- “Enhance the integration between nature and development through design standards that are in harmony with the native vegetation, colors and materials” (page 5-6);
- “ Develop a four-season resort community through a variety of commercial opportunities that are compatible with the pristine high-mountain area” (page 6); and
- “Integrate recreational uses with the surrounding Dixie National Forest, Cedar Breaks National Monument, and Ashdown Gorge Wilderness Area, and develop programs and opportunities for mutual beneficial uses” (page 6).

Chapter 4 – Goals and Objectives of the General Plan:

- “Goal 4: Promote and encourage commercial development (the backbone of a recreational community) that provides year-round services and products desired and needed by increased populations, both permanent and transient” (page 7);
- “Goal 7: Special consideration should be given to project designs to preserve both the quality and quantity of open space within the community, which can be divided into three categories:
 - **Natural open space**, the unmodified forest environment provides opportunity for viewing abundant animal and plant species in their natural habitat.
 - **Recreational open space**, modified to accommodate recreational pursuits such as skiing, biking, and OHV use, provides designated areas to pursue these activities.
 - **Urban open space**, that space preserved and incorporated into developments for landscaping, winter snow storage, and gathering places, provides spacing within denser areas of development and access to community trails and maintain a quality experience in the community” (page 7);
- “Goal 8: To establish and promote a variety of recreational opportunities that covers a wide range of interests for all seasons. This will increase the number of days people will stay to recreate thus enhancing the visitor experience and commercial viability of the community” (page 7); and
- “Goal 9: Design, implement, and maintain a continuing, comprehensive, and cooperative surface transportation network. The system should facilitate the orderly, efficient, and safe movement of goods and services, pedestrians, and vehicular traffic throughout Brian Head and from outlying communities” (page 7).



Chapter 6, Section 5 - Open Space - Within this section, the following policies and implementation steps support this Trails Master Plan:

Policies:

1. "Preserve the quantity and quality of open space within the Town of Brian Head.
2. Ensure that building heights and mass do not clash with Open Space.

Implementation:

- a. Insure that regulations provide for open space preservation and integrated development.
- b. Encourage private property owners to establish preservation zones to maintain open space" (page 14).
3. "Establish trails and recreation areas that are intertwined with open space.

Implementation:

- a. Establish a Trails Master Plan that integrates trails with Open Space.
- b. Require development to establish trail systems that interconnect with the Town trails" (page 14).

Chapter 7 - Parks and Recreation

- "Goal: To establish and promote a wide variety of recreational opportunities that covers a range of interests for all seasons. This will increase the number of days people will stay to recreate, thus enhancing the visitor experience and commercial viability of the community.

Policy Number:

1. "Promote Brian Head as an affordable all-season recreation destinations with a wide variety of opportunities in order to draw new visitors to the area" (page 15).
3. "Increase convenience and accessibility through the linkage of roads, parking and the creation of paths for pedestrians, motorized and non-motorized uses.

Implementation:

- b. Adopt a Trails Master Plan and Recreation Master Plan to help focus resources for the greatest returns for all seasons" (page 15).
5. "Educate the public on the recreation opportunities in Brian Head and how to safely enjoy them" (page 15).
6. "Establish regulations that promote the safe enjoyment of recreational activities without jeopardizing the tranquility and pleasure of others" (page 15).

Implementation:

- a. "Develop improved signs and information pamphlets to inform visitors of recreation opportunities in the community" (page 15).

Chapter 8 - Traffic and Transportation - Specific implementation actions include the following:

- "Identify locations for recreational vehicle lay-down areas (parking lots) at trailheads" (page 16); and
- "Implement a comprehensive sign project to educate and promote safety and environmental preservation in Brian Head" (page 17).

Chapter 11 - Economic Development - One specific implementation action is identified within this chapter:

- "Promote development of Town trails and all-season recreational opportunities" (page 20).

Document Summary: Thus, with six chapters and numerous policy and implementation action items that support the Trails Master Planning effort, the Town and its partners will plan and implement a comprehensive and consistent trail system within the Town of Brian Head.

2. Utah Department of Transportation (UDOT) Emerging Areas Plan for Eastern Iron County Transportation (2009)

One of the four scenarios within the Emerging Areas Plan emphasizes the theme "Promote as a Tourist Destination." The plan identifies the following:

- "The area's rural character, historical significance, recreational opportunities and academic activities should be enhanced... Beautifying, revitalizing and growing walkable and safe downtowns are also priorities" (page 1).
- Action items that this Trails Master Planning effort are in conformance with include:
 - "Develop a biking loop connecting Parowan, Brian Head, Cedar Breaks National Monument and Cedar City" (page 1); and
 - "Evaluate implementing pedestrian and bicycle accommodations when new construction and reconstruction projects are scheduled, such as SR-56" (page 1).

Document Summary: This planning effort by UDOT will assist the Town of Brian Head and their partners implement portions of the Trails Master Plan, specifically those trails that are aligned with the UDOT rights-of-way, e.g. the Town Trail.

3. Iron County General Plan (1995)

The Iron County General Plan is the result of a comprehensive planning effort on behalf of Iron County and its incorporated and unincorporated areas. Specific sections of the general plan that support the Town of Brian Head's Master Trail Planning efforts include the following:

- General County Goals - Goal 11 - "To encourage a wide variety of recreational activities" (page 2);
- Goal LU6 (Land Use) - "Promote and facilitate public and private recreational, cultural, wilderness and wildlife opportunities compatible with local custom and culture" (page 29); and
- Goal LU10 - "Utilize streams and other bodies of water within Iron County as central recreational corridors and identify other significant natural features to be designated as open spaces, parks, and recreational opportunities" (page 30). Specific policies include the following:
 - Pol. LU 10.1 "Encourage multiple uses of public easements and public lands, such as the flood inundation areas within Iron County for recreational purposes" (page 30);
 - Pol. LU 10.2 "Encourage development of linear greenway systems (page 30);
 - Pol. LU 10.6 "Design trail routes, trailheads, and staging areas and designate trail uses to minimize impact upon adjacent property, neighborhoods, and fragile habitats (page 30).
 - Pol. LU 10.7 "Promote cooperation between local, state, and federal agencies in the extension and expansion of the user" (page 30).
 - Pol. LU 10.8 "Provide safe equestrian, bicycle, and pedestrian trail development along routes which are viable to the health and safety of the user" (page 31);
 - Pol. LU 10.9 "Provide trail access to scenic viewpoints and provide scenic overlooks and picnic areas along trail routes" (page 31); and
 - Pol. LU 10.10 "Pursue the development of a bike trail within the County which is complimentary to any existing or proposed trails within incorporated areas" (page 31).

- Goal LU12 - “Develop a system of parks and recreational facilities and programs which provide recreational opportunities for all segments of the community through public/private cooperation” (page 31). Specific policies include the following:
 - Pol. LU 12.1 “Promote the development of a variety of park and recreation facilities which satisfy the recreational needs of all age groups and lifestyles and which satisfy the needs of the handicapped through compliance with ADA requirements” (page 31);
 - Pol. LU 12.5 “Encourage cooperation between public agencies and private development regarding the reservation of adequate acreage to satisfy the park and recreational goals of this plan and the community” (page 31); and
 - Pol. LU 12.7 “Require developers to improve and/or construct parks and recreational facilities (see LU 9.4)” (page 32).

Document Summary: Completed fifteen years prior to the Town of Brian Head’s Trails Master Plan, Iron County’s General Plan highlights the need for trails and recreational access in numerous chapters and policies. Following this plan, Iron County completed their Resource Management Plan.

4. Iron County Resource Management Plan (2009)

The Iron County Resource Management Plan, available at <http://ironcounty.net/departments/naturalresource/>, highlights issues of coordination applicable to this trails planning effort within the Town

- Element 3 - Iron County Positions and Policies - this section identifies the following Iron County priorities and considerations. Specifically priorities include, “Iron County cooperation and participation with agency planning and project implementation” (page 43);
- Desired Management Settings and Conditions - Section G - “The County continually seeks opportunities to actively participate with agencies’ project implementation, beyond planning participation. This may be done by bringing other resources to bear, including funding, where possible and in the interest of the County” (page 50); and
- Actions for Achieving the Desired Management Settings - Section G - “The NRAC [Iron County Natural Resources Advisory Council] and NRS [Iron County Natural Resources Specialist] will continually seek opportunities to actively participate with agencies’ project implementation, beyond planning participation. Bringing County or other partner resources to bear, including funding, where possible and in the interest of the County, will guide these considerations” (page 50).



Document Summary: Iron County’s Natural Resources Management Specialist Mike Worthen has participated in the planning process, ensuring coordination across jurisdictional boundaries. Continued coordination and cooperation should be a priority in implementing the Trails Master Plan.

5. Utah’s Patchwork Parkway Scenic Byway Corridor Management Plan (2008)

Two of the eight goals within the Scenic Byway Corridor Management Plan are addressed within this Trails Master Plan:

- “Additional turnouts identified in this plan will be constructed in order to provide interpretive opportunities and locations for slower traffic to pull out of the travel lane” (page 6); and
- “Opportunities to educate the traveling public on the significance of the livestock industry in colonizing/developing the area will be developed through an interpretive plan” (page 6).

More specific strategies for the corridor’s resources are supported via this Trails Master Planning effort, including the following:

- **Recreational resources** - Three strategies are provided to protect and enhance the recreational qualities of the parkway:
 - “Work with agencies and related businesses to provide recreational facilities that will accommodate travelers, including the physically challenged” (page 33);
 - “Continue to update and produce comprehensive recreational materials to provide important directional and safety information” (page 33); and
 - “Encourage the extension of the recreational season to a year-round calendar” (page 33).
- **Scenic resources** - “Work with federal, state, and local agencies to institute common and consistent design and color standards for signs, public and similar facilities, as well as interpretive exhibits and kiosks” (page 39).

6. Multiple partners and landowners in support: In addition to the public plans supporting the town’s efforts to develop an interpretive plan, numerous public and private organizations have participated in the planning process, including:

- Iron County;
- Dixie National Forest, Cedar City Ranger District, US Forest Service;
- Cedar Breaks National Monument, National Park Service;

- Brian Head Resort;
- Brian Head Chamber of Commerce;
- Numerous local businesses; and
- Private Citizens.

Each of these four documents and participating entities support this interpretive planning effort. In the next section, the Trails Master Planning process, visions and goals are outlined.

The Planning Process

In 2008, the Town of Brian Head applied to the National Park Service, Rivers, Trails, and Conservation Assistance Program (hereafter RTCA) for planning assistance to develop a Trails Master Plan. To address this need, RTCA and Brian Head formed a committee of interested parties and held several meetings in Brian Head. These interested parties include representatives from the following agencies and organizations:

- Brian Head Town Council;
- Brian Head Planning Commission;
- Brian Head Chamber of Commerce;
- Brian Head Resort;
- Iron County;
- Dixie National Forest, Cedar City Ranger District, US Forest Service;
- Cedar Breaks National Monument, National Park Service; and
- Numerous local businesses and interested citizens.

RTCA provided technical support for this collaborative planning effort. In July 2009, to assess the extent and legality of the existing trails within the Town and surrounding lands, RTCA and Town representatives carried out extensive GPS mapping of the existing trail system on all the partners' administered lands. From this physical assessment, RTCA, the Town of Brian Head, and its partners have proposed a coordinated system of trails, prepared maps, and spearheaded meetings with the trail committee to plan for trailhead access points and discuss trail design and sign standards.

From this planning process, vision, goal, and objective statements were developed (see next section, page 14). Additionally, in November 2009, the Town of Brian Head adopted an ordinance creating a trail committee and delineating the purpose and procedures for the trail planning process (see description of the ordinance and committee purposes on page 5).



Both the formal vision and goals statements as well as the creation of the trails committee have prompted widespread involvement in the planning process.

Vision and Goals of the Brian Head Area Trails Plan

To establish the direction the Trails Master Planning effort would take, RTCA facilitated the development of a series of vision and goal statements for the Brian Head Area Trails Master Plan. This set of vision, goals, and objective statements have guided the planning process since its inception and include the following statements:

Vision for the Brian Head Area Trails Master Plan:

Brian Head and its partners will create and maintain a sustainable, environmentally sensitive, multi-use trail system that physically, intellectually and emotionally connects users with the area's recreational, natural, scenic and cultural resources.

Goal 1: Integrate communities and partnerships into the Brian Head Area trail system vision.

Objective A: Coordinate with adjacent private & public landowners (e.g. County, Boy Scouts, private landowners, etc.) on trail locations.

Objective B: Develop Memorandum of Understanding (MOU's) between the following entities:

- Town and County
- Town and Ski Resort
- Town and US Forest Service (USFS)
- Town and Boy Scouts
- Town and Utah Department of Transportation (UDOT)
- Town and Scenic Byway
- Town and National Park Service (NPS)

Goal 2: Inventory existing trails, identifying land use conflicts and opportunities.

Objective A: Identify known trails via office data collection.

Objective B: Field GPS trails to determine ownership, locations, etc.

Objective C: Create maps illustrating trail locations, land use conflicts, and trail development needs.

Objective D: Identify all trail licenses, easements, fiscal ownership and potential conservation corridors within the Brian Head area.

Goal 3: With partners, develop a Trails Master Plan for the Brian Head area.

Objective A: Identify the on-the-ground trail needs, including land ownership, trail maintenance and development needs.

Objective B: Identify trail easements and/or property necessary to achieve the on-the-ground trail needs.

Objective C: Develop a sign plan, including interpretive, informational and directional signs, as a component of the Trails Master Plan.

Objective D: Develop an implementation and maintenance plan (including a budget) that identifies the steps needed to achieve the plan.

Objective E: Develop a non-motorized and motorized trails map with the plan, that identifies existing trail and future trail needs.

Objective F: Develop trail construction standards and criteria within the trails plan.

Objective G: Obtain necessary land use approval for the development of trails.

Goal 4: Implement the Brian Head Area Trails Master Plan.

Objective A: Identify and create policy changes that will be necessary to meet the goals and objectives of the Trails Master Plan.

Objective B: Identify funding sources to implement the physical needs, e.g. sign or trail construction, identified in the Trails Master Plan.

Objective C: Acquire property, easements, and licenses as needed.

Objective D: Start construction.

Objective E: Annually transition two trail licenses to easements.

Accomplishments to Date

As the planning process between the Town of Brian Head, RTCA, and the partners was initiated in 2009, accomplishments within the list of goals and objectives have already been achieved. To date, the following objectives, organized by goal, have been completed:

Goal 1: Integrate communities and partnerships into the Brian Head Area trail system vision.

- A draft MOU has been developed and is currently being adapted to meet each partner's needs; and trail locations have been documented via GPS and recorded in a Geographic Information System (GIS) database.

Goal 2: Inventory existing trails, identifying land use conflicts and opportunities.

- Trail locations have been documented via GPS and recorded in a Geographic Information System (GIS) database;
- Ownership and locations of each of the trails within the Brian Head Area Trail System have been identified;
- Draft maps have been developed that illustrate trail locations, land use conflicts, and trail development needs; and
- All trail licenses and easements currently documented have been collated into a database.

Goal 3: With partners, develop a Trails Master Plan for the Brian Head area.

- On-the-ground trail needs have been identified for a majority of trails within the Brian Head Area Trails system;
- Trail easements that are needed to legally advertise the existing trails have been recorded in a database;
- A sign plan, including interpretive, informational, and directional signs, has been developed and is a component of this Trails Master Plan (see Appendices A & B);
- An implementation section and maintenance needs are included within this plan;
- A comprehensive map that illustrates motorized and non-motorized trails has been developed and is included within this plan;
- Trail construction standards and criteria have been developed and are included within this plan (see Chapter 3, page X);
- Concept planning at individual sites within the plan have been provided for site design efforts; and
- Town staff are actively pursuing land use approvals for trail development.

3. Brian Head Trails Design Guidelines

Brian Head Area Trail Types

The table below indicates the six trail types within the Brian Head Area Trails System. In this chapter, each of the six trail types is described in detail.

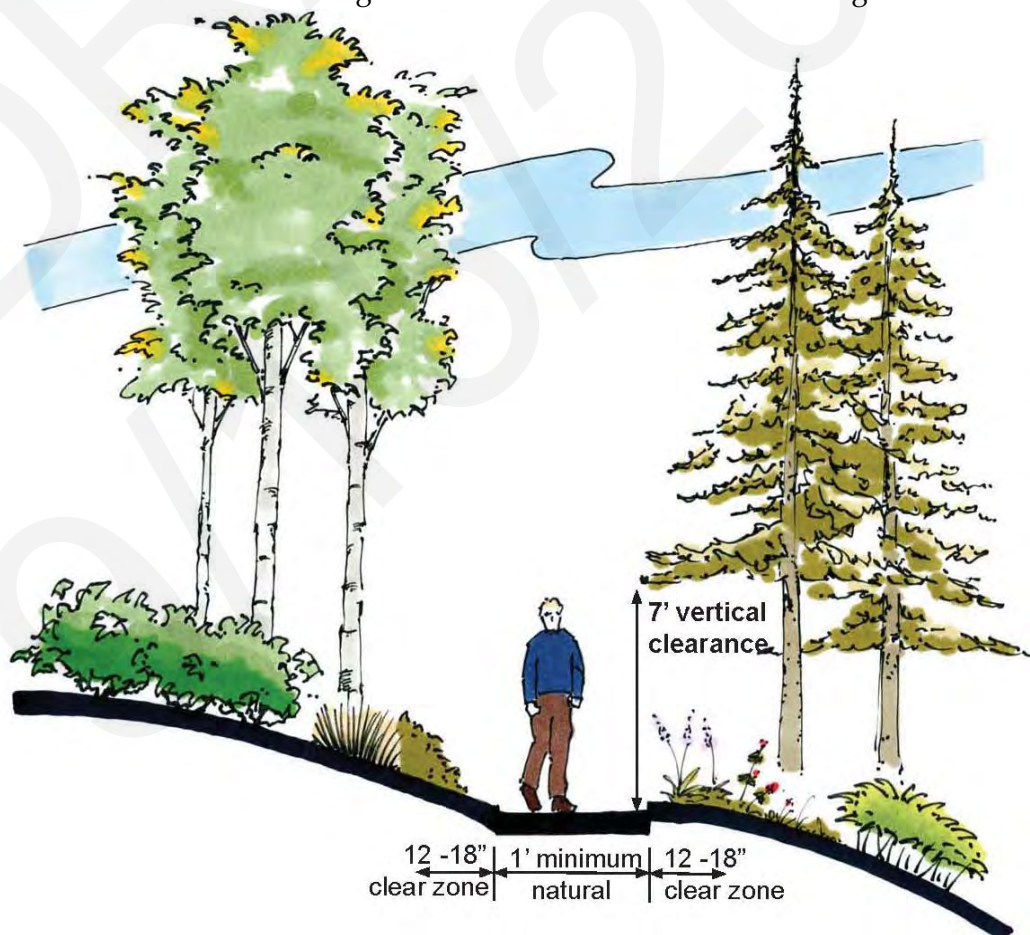
Trail Type	User Activities	Surface	Tread Width	Vegetation Clearance
Non-Motorized				
Non-Motorized Summer	Hiking, Biking	Natural	1 ft. minimum Note: trails must be 3-4 ft. minimum width to be eligible for Utah State Park Grant funding. ¹	7 ft. Vertical 12"-18" Horizontal
Paved Non-Motorized (Potentially Town Trail)	Hiking, Biking	Asphalt	10 ft. minimum	7 ft. Vertical 2 ft. Horizontal
Non-Motorized Winter	Snow-shoeing	Natural	3 ft. minimum	7 ft. Vertical 12"-18" Horizontal
Cross Country Ski (groomed)	Cross Country Skiing, Skijoring	Natural	8 ft. minimum	7 ft. Vertical 2 ft. Horizontal
Motorized				
Motorized Summer	OHV	Natural	10 ft. minimum	7 ft. Vertical 2 ft. Horizontal
Motorized Winter	Snow-machines	Natural	10 ft. minimum	7 ft. Vertical 2 ft. Horizontal

- NOTES: 1. See Utah State Parks reference in Appendix H
 2. Grade and Difficulty adapted from State of Minnesota, Department of Natural Resources, 2007.

Grade/Difficulty ²	Drainage	Comments
Easy - 5% avg., 15% max Moderate - 10% avg., 15% max Difficult - 15% avg., >15% max Extremely Difficult - > 20% avg. Note: trails must have a sustained grade of 8% or less and a max grade of 10% to be eligible for Utah State Park Grant funding. ¹	Sloped 2-5% to the downhill side	Trails must meet water management, switchback construction, and potentially other requirements to be eligible for Utah State Park Grant funding. ¹
Easy - 5% avg., 15% max Moderate - 10% avg., 15% max Difficult - 15% avg., 15% or more max Extremely Difficult - 20%+ avg. Note: trails must have a sustained grade of 8% or less and a max grade of 10% to be eligible for Utah State Park Grant funding. ¹	Sloped 2% to the downhill side	Trails must meet Sub-base, Asphalt, Weed Barrier, and potentially other requirements to be eligible for Utah State Park Grant funding. ¹
Easy - 4-10% avg., 12% max Moderate - 6-12% avg., 18% max Difficult - 12-14% avg., 18-20% max Extremely Difficult - >14% avg., >20% max	Sloped 2-5% to the downhill side	
Easy - 4-10% avg., 12% max Moderate - 6-12% avg., 18% max Difficult - 12-14% avg., 18-20% max Extremely Difficult - >14% avg., >20% max	Sloped 2% to the downhill side	Groomed in Winter
Easy - 8%, 15-25% max Moderate - 12%, 25-35% max Difficult - 15%, 35% max Extremely Difficult - >15% avg.	Sloped 2% to the downhill side	
Easy - 8% avg., 15-25% max Moderate - 12% avg., 25-35% max Difficult - 15% avg., 35% max Extremely Difficult - >15% avg.	Sloped 2-4% to the downhill side	Potentially groomed in winter

TRAIL TYPE **NON-MOTORIZED SUMMER TRAILS**

USER ACTIVITIES	Hiking, Biking
SURFACE	Natural
TREAD WIDTH	1 foot minimum Note: Trails must be 3-4 feet minimum width to be eligible for Utah State Park Grant funding.
VEGETATION CLEARANCE	7 feet Vertical 12"-18" Horizontal
GRADE/DIFFICULTY	Easy - 5% avg., 15% max Moderate - 10% avg., 15% max Difficult - 15% avg., >15% max Extremely Difficult - > 20% avg.
DRAINAGE	Sloped 2-5% to the downhill side
COMMENTS	Trails must meet water management, switchback construction, and potentially other requirements to be eligible for Utah State Park Grant funding.



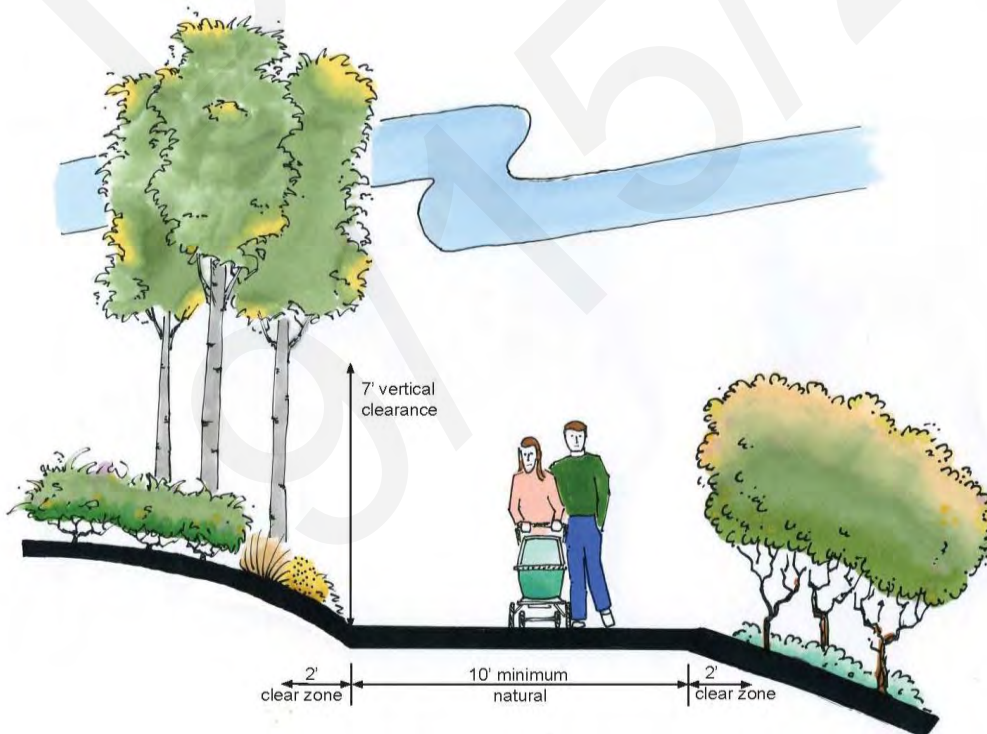
TRAIL TYPE PAVED NON-MOTORIZED TRAILS

USER ACTIVITIES	Hiking, Biking
SURFACE	Asphalt
TREAD WIDTH	10 feet minimum Note: Trails must be 3-4 feet minimum width to be eligible for Utah State Park Grant funding.
VEGETATION CLEARANCE	7 feet Vertical 2' Horizontal
GRADE/ DIFFICULTY	Easy - 5% avg., 15% max Moderate - 10% avg., 15% max Difficult - 15% avg., >15% max Extremely Difficult - > 20% avg.

Note: Trails must have a sustained grade of 8% or less and a max grade of 10% to be eligible for Utah State Park Grant funding.

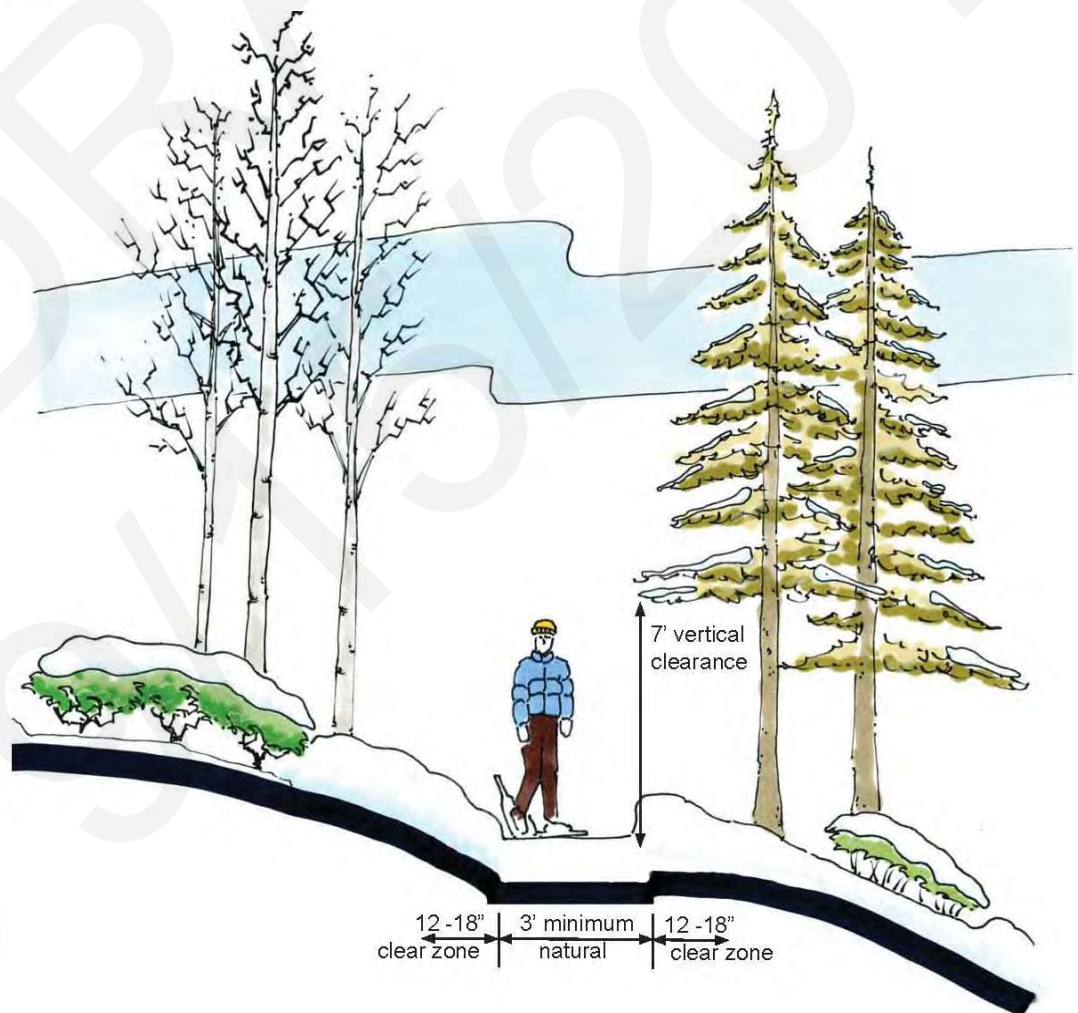
DRAINAGE Sloped 2% to the downhill side

COMMENTS Trails must meet Sub-base, Asphalt, Weed Barrier, and potentially other requirements to be eligible for Utah State Park Grant funding.



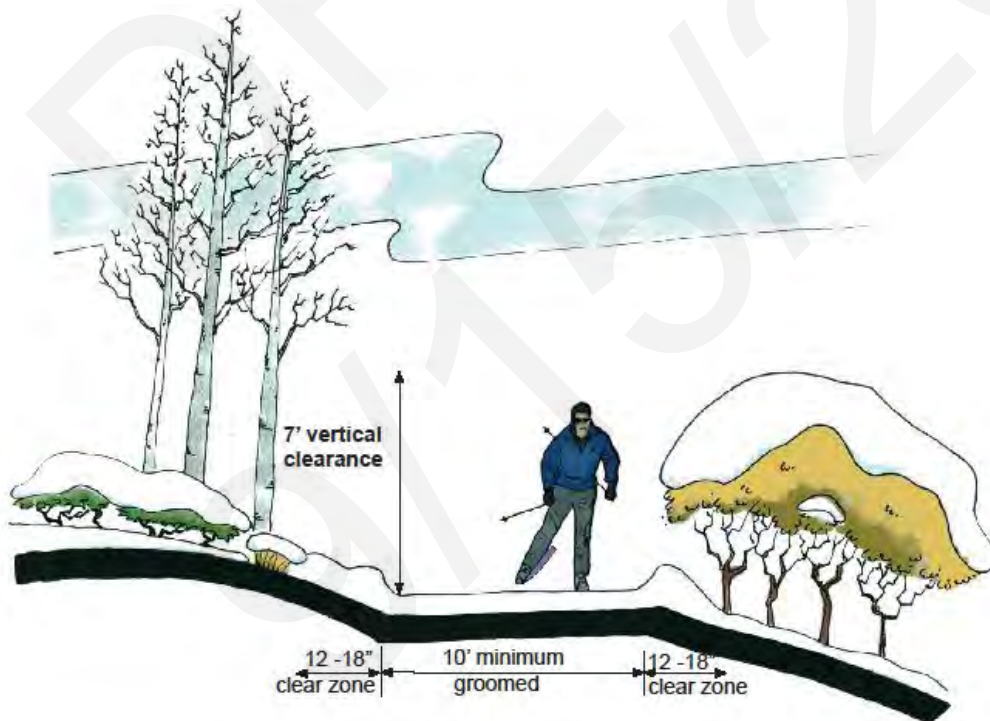
TRAIL TYPE **NON-MOTORIZED WINTER TRAILS**

USER ACTIVITIES	Snowshoeing
SURFACE	Natural
TREAD WIDTH	3 feet minimum
VEGETATION CLEARANCE	7 feet Vertical 12"-18" Horizontal
GRADE/ DIFFICULTY	Easy - 4-10% avg., 12% max Moderate - 6-12% avg., 18% max Difficult - 12-14% avg., 18-20% max Extremely Difficult - > 14% avg., >20% max.
DRAINAGE	Sloped 2-5% to the downhill side
COMMENTS	None.



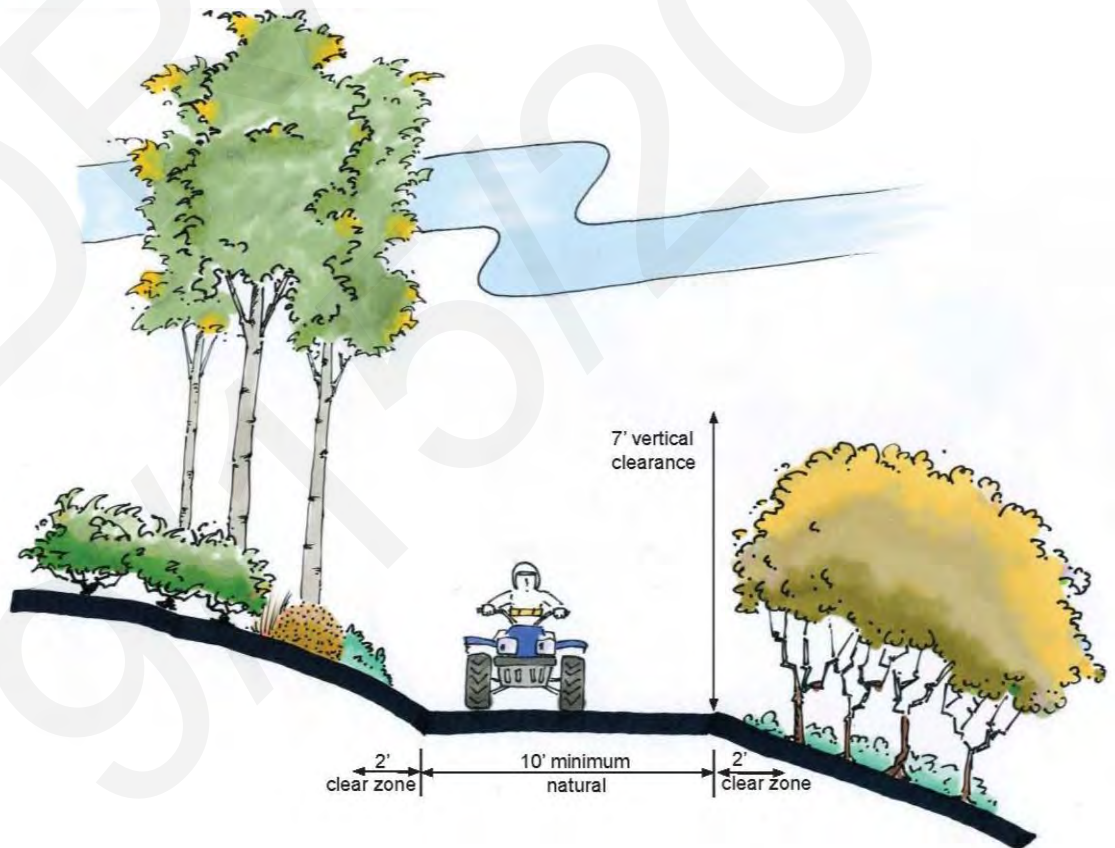
TRAIL TYPE CROSS COUNTRY SKI (GROOMED)

USER ACTIVITIES	Cross Country Skiing, Skijoring
SURFACE	Natural
TREAD WIDTH	8 feet minimum
VEGETATION CLEARANCE	10 feet Vertical 2 feet Horizontal
GRADE/ DIFFICULTY	Easy - 4-10% avg., 12% max Moderate - 6-12% avg., 18% max Difficult - 12-14% avg., 18-20% max Extremely Difficult - > 14% avg., >20% max.
DRAINAGE	Sloped 2% to the downhill side
COMMENTS	Groomed in winter.



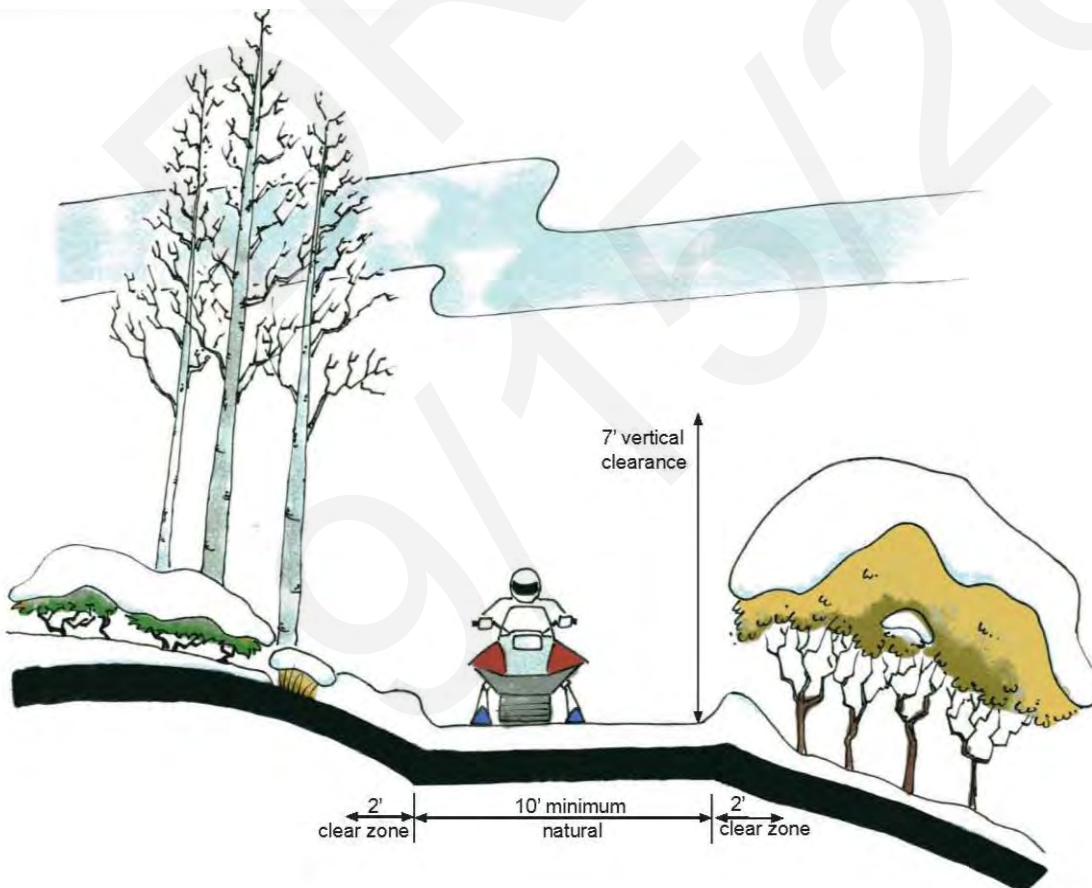
TRAIL TYPE MOTORIZED SUMMER TRAILS

USER ACTIVITIES	Off-Highway Vehicles (OHV)
SURFACE	Natural
TREAD WIDTH	10 feet minimum
VEGETATION CLEARANCE	7 feet Vertical 2 feet Horizontal
GRADE/ DIFFICULTY	Easy - 8% avg., 15-25% max Moderate -12% avg., 25-35% max Difficult - 15% avg., 35% max Extremely Difficult - > 15% avg.
DRAINAGE	Sloped 2% to the downhill side
COMMENTS	None.



TRAIL TYPE **MOTORIZED WINTER TRAILS**

USER ACTIVITIES	Snowmachines
SURFACE	Natural
TREAD WIDTH	10 feet minimum
VEGETATION CLEARANCE	7 feet Vertical 2 feet Horizontal
GRADE/ DIFFICULTY	Easy - 8% avg., 15-25% max Moderate -12% avg., 25-35% max Difficult - 15% avg., 35% max Extremely Difficult - > 15% avg.
DRAINAGE	Sloped 2-4% to the downhill side
COMMENTS	Potentially groomed in winter.



Trail Signs

Trail signs are one of the most critical parts of trail design. The most important aspect of trail signing is to provide the user with a safe experience. Trail signs can be divided into several categories:

Traffic Control Signs: These signs are typically part of the public works or transportation departments and are not addressed in a trails plan. These signs, however, are important in that they direct, inform, and influence vehicles in finding and safely accessing trails.

These signs include roadside signs that provide direction and route information to key trailheads.

Trailhead Kiosks: These signs provide the “you are here” orientation. They should get the user well oriented to all aspects of the trail including; safety and interpretive information, distance, trail type, and current trail conditions. More detailed information can be found in Appendix B.

Trail Markers: These signs provide more specific information on individual trails. They are further divided into two subcategories: Urban trails, and Backcountry trails. These signs are intended to indicate the route and reassure users that they are on the trail. They can also be used to influence travel by directing people to specific destinations and highlighting special features. More detailed information on Trail Markers can be found in Appendix B.

Trailhead Design

There are many factors that must be taken into consideration when designing trailheads. Many of these factors are focused on the safety of the user. These include:

- Visibility and Crime Prevention;
- Lighting;
- Safe ingress and egress;
- Traffic flow; and
- Surfaces and surface transitions.

Other factors are focused on the user experience. These include:

- Informational signs;
- Directional signs; and
- Amenities present at the trailhead.

Use patterns and usage numbers dictate the potential amenities that are located at the trailhead. These amenities can be extensive for high-use trails, and quite minimal for light-use trailheads. A potential list of amenities to consider are:

- Trash cans or trash bins;
- Benches;
- Picnic tables;
- Restrooms;
- Water fountains or faucets;
- Bike racks;
- Lighting; and
- Pet waste bag stations.

Finally, there are considerations that are typically transparent to the user. These considerations are focused on the maintenance of trails and trailhead and include:

- Accessibility of maintenance equipment including:
 - Mowing equipment;
 - Snow Plowing equipment;
 - Waste removal vehicles;
- Tree trimming equipment;
- Drainage;
- Surfaces and their maintenance; and
- Traffic control signs.

There is no comprehensive list of trailhead design considerations. Also, the trailhead design should be reevaluated periodically to reassess use patterns, user types, and maintenance considerations.

Universal Design & Accessibility

The Following is an excerpt from a document produced by the U.S. Department of Transportation – Federal Highway Administration regarding Universal Design. While many of trails in the Brian Head Area Trail System have limited access for persons with disabilities there are many factors that should be considered in general trail design that transcend ability levels.

“For user safety and satisfaction, the skills and abilities required to negotiate a trail must match the user's interests and expectations. All trail users, both with and without disabilities, tend to select experiences that suit their interests and abilities. Factors that influence the match between an individual and a particular trail include:

- The desired trail experience;
- The individual's abilities, skills, and expertise;
- The availability of equipment or assistive technology needed;
- The availability of additional expertise such as guides; and
- Whether the individual will be alone or with companions.

Many trail users seek experiences that are beyond the capabilities of most people. There are trails within existing trail systems that provide more than a significant challenge to such users. The challenge is to design trails that provide a unique experience without unique challenges.

The ability to plan, design, construct, and maintain trail experiences that match user needs for access is based on a strong commitment to integrate universal design strategies into every aspect of the trail development process. Focusing on only one aspect, such as the trail tread, is not sufficient. Every aspect of the trail experience must be considered, including the trail corridor, trailhead, and built facilities or amenities.

When planning trails, land management agencies should strive to create environments and experiences that are inclusive of people with and without disabilities. In some instances, this may require looking at the trail from another person's perspective. Designers should consider whether they would be able to enjoy the trail and benefit from all aspects of the trail experience if they were:

- Unable to hear;
- Using crutches;
- Unable to see;
- Using a wheelchair for mobility;
- Using a powered scooter for mobility;
- 90 years old;
- Lacking in energy;
- Not physically fit;
- 8 years old;
- Unable to concentrate;
- Unable to read; and
- Unable to read the local language



For newly constructed trails, the commitment to address accessibility issues should begin during the planning stages of the trail development process. For example, if sufficient right-of-way is not allocated to a trail during the initial stages of development, it is harder for designers to construct a trail that is safe for users traveling at different speeds. When access improvements are made to existing trails, designers should prioritize resources and try to make the most significant changes possible with the resources that are available.”

4. Existing Trails

Below is a table of the existing trails within the Town of Brian Head. In this section, each of these trails and details will be further described.

Trail Name	Trail Length	Trail Type	Ownership Issues	
			Ownership	No. of Easements Needed
1. <i>Town Trail</i>	2.31 miles (12,213.62 feet)	Unpaved Non-motorized	All in DOT ROW or owned by the Town of Brian Head	All in DOT ROW or owned by the Town of Brian Head
2. <i>Manzanita Trail</i>	2.37 miles	Unpaved Non-Motorized & Motorized	Town of Brian Head or within ROW's	0; All within Rights-of-Way, Town Property, or legal easements.
3. <i>Mosquito Loop Trail</i>	*Need to determine length	Unpaved Non-motorized	Town of Brian Head, Trail Easements, Ski Resort?	2
4. <i>Mosquito Lane/Scout Camp Loop</i>	*Need to determine length	Unpaved Non-motorized	Brian Head Ski Resort, US Forest Service, Boy Scouts of America	3; Need for longer-term easements established
5. <i>Navajo Loop Trail</i>	*Need to determine length	Unpaved Non-motorized	Easements, Town of Brian Head, ROWs	1; Pineridge Association, reroute through this piece may be possible if needed
6. <i>Town ORV Trail/Dry Lakes Road</i>	7.45 miles (12,214 feet)	Unpaved Motorized	Easements, Town of Brian Head, ROWs, US Forest Service	6
7. <i>Town Snowmobile Trail</i>	*Need to determine length	Unpaved Motorized	Easements, Town of Brian Head, ROWs, US Forest Service land	5
8. <i>Mountain Bike Park</i>	Varies	Unpaved, Non-Motorized	Brian Head Ski Resort, US Forest Service	Privately owned.

Trail Development Issues				Priority
Tread Issues	Trailhead Needs	Interpretive Sign Needs	Directional Sign ¹	
Slope issues; Potential for paving this trail	2 - Trailheads need to be developed at the north and south ends.	2 - At both trailheads	11 - Upgrade existing signs for consistency	High
None; Not to ADA standards	1 - Needs trailhead at town gravel pit	2 - one at the trailhead and one at the scenic vista	7 - Installation of new directional signs.	High
Routine maintenance at crossings	1 - Needs trailhead development,	1 - At the trailhead	Route needs to be assessed for directional sign needs in 2010 season.	Medium
Some issues along the trail, e.g., fallen trees.	1 (Minimum) - Need to determine best access points to this trail	1 - At the trailhead	Route needs to be assessed for directional sign needs in 2010 season.	Medium
Tread work is needed	1 - 2; north and south end of this trail	1 - At the trailhead	19- Need to upgrade existing signs for consistency (4) and install additional signs (15).	High
None identified	Needs to be determined	Needs to be determined	Route needs to be assessed for directional sign needs in 2010 season.	Medium
None identified	Needs to be determined	Needs to be determined	Route needs to be assessed for directional sign needs in 2010 season.	High
Routes needs to be assessed for tread issues in 2010 season.	Needs to be determined	1 - Giant Steps Lodge entry	Routes needs to be assessed for directional sign needs in 2010 season.	Low

¹ Note that all directional signs needs are estimates from a 2009 field survey and should be reevaluated each season.

TRAIL**TOWN TRAIL**

TRAIL LENGTH	2.31 miles (12,196.8 feet)
TRAIL TYPE	Unpaved, Non-motorized
OWNERSHIP	All in the Utah Department of Transportation Right-of Way or owned by the Town of Brian Head.
NUMBER OF EASEMENTS NEEDED	None; the length of the trail has public access.
TREAD ISSUES	Minimal tread issues on this trail; There are some slope issues (greater than 15% slope at the south end of the trail); and There is potential to pave this trail and increase portions of the trail to Universal Design standards.
TRAILHEAD NEEDS	2 Trailheads need to be developed at the north and south ends of the trail; at the north end, a parking area is needed whereas at the south end, redesign of the Bear Flat area can serve as a trailhead for the Town Trail and US Forest Service trails.
INTERPRETIVE SIGN NEEDS	2 Signs are needed, one at each newly established trailhead.
DIRECTIONAL SIGN NEEDS	11 signs were identified during the 2009 field season as needed to be upgraded for consistency with the trail system's standard.
PRIORITY	High This trail is one of the easiest and most frequently used, family-friendly trails within the Town of Brian Head. In addition, the Town has invested heavily into its construction and maintenance; upgrading and maintain this trail will remain a priority for the Town for years to come.



TRAIL**MANZANITA TRAIL**

TRAIL LENGTH	2.37 miles (12,513.6 feet)
TRAIL TYPE	Unpaved, Non-motorized
OWNERSHIP	All within Road Right-of-Way or owned by the Town of Brian Head.
NUMBER OF EASEMENTS NEEDED	None; the length of the trail has public access. Minor rerouting in 2010 removed any easement conflicts.
TREAD ISSUES	None noted during the 2009 field inventory.
TRAILHEAD NEEDS	1 Needs trailhead and directional signs to the trailhead at the Town gravel pit.
INTERPRETIVE SIGN NEEDS	2 Signs are needed, one at the trailhead and one at the scenic vista along the non-motorized portion of the trail.
DIRECTIONAL SIGN NEEDS	7 new signs were identified as needed for this trail in the 2009 field inventory.
PRIORITY	High The Manzanita Trail is another easier trail option within the Town of Brian Head. With the rerouting of the trail to avoid ownership conflicts, this is a trail the Town can immediately begin to improve for trail users. In addition, the scenic view from the trail is an excellent destination for trail users, which when advertised for and interpreted, will increase trail use.

TRAIL**MOSQUITO LOOP TRAIL**

TRAIL LENGTH	4.11 miles (21,700.8 feet)
TRAIL TYPE	Unpaved, Non-motorized
OWNERSHIP	Town of Brian Head, Trails Easements, Ski Resort and numerous private landowners.
NUMBER OF EASEMENTS NEEDED	2
TREAD ISSUES	Routine maintenance at crossings.
TRAILHEAD NEEDS	1 This site has trailhead development needs; the identification of adequate parking facilities and appropriate directional signs to guide users to and through the trail will be paramount to increased use of this trail.
INTERPRETIVE SIGN NEEDS	1 (At a minimum) Sign is needed at the trailhead entry off Burt's Road. A second interpretive sign may be recommended at an alternative trailhead, when a location is secured.
DIRECTIONAL SIGN NEEDS	This trail needs to be assessed for directional sign needs in 2010.
PRIORITY	Medium The priority for this trail is to establish permanent access for trail users, in order to obtain funding, and to design and construct the trail to the Town of Brian Head's trail design standards.



TRAIL**MOSQUITO LANE/
SCOUT CAMP LOOP**

TRAIL LENGTH	9.44 miles (49,843.2 feet)
TRAIL TYPE	Unpaved, Non-motorized
OWNERSHIP	Brian Head Ski Resort, US Forest Service, Boy Scouts of America, and County Rights-of-Way.
NUMBER OF EASEMENTS NEEDED	3 In addition to the easements needed, a long-term strategy for obtaining permanent access to this trail (via easements) should be developed.
TREAD ISSUES	Some trail hazards were noted along the trail in the 2010 field season, including fallen trees. Routing maintenance along this trail is recommended.
TRAILHEAD NEEDS	1 This site has trailhead development needs; the identification of adequate parking facilities (whether at Town Hall or another location) will increase the attractiveness of this trail to future users.
INTERPRETIVE SIGN NEEDS	2 Sign is needed at the trailhead entry off Burt's Road, or wherever parking is deemed appropriate for this trailhead.
DIRECTIONAL SIGN NEEDS	7 new signs were identified as needed for this trail in the 2009 field inventory.
PRIORITY	Medium Easement issues should be resolved prior to any additional trail work on the Mosquito Lane/Scout Camp Loop. However, due the extensive length and popularity of this trail, obtaining these easements as quickly as possible are a priority.

TRAIL**NAVAJO LOOP TRAIL**

TRAIL LENGTH	3.44 miles (18,163.2 feet)
TRAIL TYPE	Unpaved, Non-motorized
OWNERSHIP	Easements, Town of Brian Head, County Rights-of-Way
NUMBER OF EASEMENTS NEEDED	1 Easement crosses through a private subdivision; obtaining access via an easement or rerouting the trail is recommended.
TREAD ISSUES	Tread work is needed on this trail, especially as it crosses property owned by the Brian Head Ski Resort.
TRAILHEAD NEEDS	1 - 2 Trailheads are needed at the north and south end of this trail; the south end trailhead could be shared with the Bear Flat and Town Trail South trailheads.
INTERPRETIVE SIGN NEEDS	1 - 2 Sign is needed at the trailhead entry off the Navajo Lodge entry area to the trail. Interpretive signs at the south end of the trail can be shared with the Bear Flat and Town Trail South signs.
DIRECTIONAL SIGN NEEDS	19 signs were identified during the 2009 field inventory as needed for this trail; 4 of these 19 were identified as needing to be upgraded for consistency, whereas 15 were identified as new signs that are needed. Reassessing these numbers after the tread is completed along this trail is recommended.
PRIORITY	High With only one easement issue on this trail, and its connection to the Town Trail, developing this trail will be important for providing multiple trail options within the Town of Brian Head.



TRAIL**TOWN ORV TRAIL/
DRY LAKES ROAD**

TRAIL LENGTH	7.79 miles (41,131.2 feet)
TRAIL TYPE	Unpaved, Motorized
OWNERSHIP	Easements, Town of Brian Head, County Rights-of-Way, and US Forest Service lands.
NUMBER OF EASEMENTS NEEDED	6 Easements are not needed on Iron County Roads, as their use has been granted by OHVs as per Iron County Ordinance 195. Note, however, that Iron County designates an OHV (Off-Highway Vehicle) as "any motor vehicle 52 inches or less in width, having an unladen dry weight of 800 pounds or less, traveling on two or more low pressure tires having a seat designates to be straddled by the operator, and designed for, or capable of travel over unimproved terrain." Thus, this ordinance does not allow for the use of certain vehicles, e.g., side-by-sides, and the Town and its partners will need to work with the county to address this issue in the future.
TREAD ISSUES	No tread issues were identified in the 2009 field season.
TRAILHEAD NEEDS	Trailhead needs for the Town ORV trail were not assessed in the 2009 field season; the Town will need to assess if trailhead needs exist in 2010.
INTERPRETIVE SIGN NEEDS	Interpretive sign needs were not assessed in the 2009 field season.
DIRECTIONAL SIGN NEEDS	Route needs to be assessed for directional sign needs in the 2010 field season.
PRIORITY	Medium Easement issues should be resolved prior to any additional work on the Town ORV trail/Dry Lakes Road.

TRAIL**TOWN SNOWMOBILE TRAIL**

TRAIL LENGTH	7.78 - 10.96 miles
TRAIL TYPE	Unpaved, Motorized
OWNERSHIP	Easements, Town of Brian Head, County Rights-of-Way, US Forest Service Land
NUMBER OF EASEMENTS NEEDED	5
TREAD ISSUES	None identified in the 2009 field inventory; may need corridor clearings in locations, assess in 2010.
TRAILHEAD NEEDS	Needs to be determined.
INTERPRETIVE SIGN NEEDS	Interpretive sign needs for this trail were not assessed in the 2009 field season.
DIRECTIONAL SIGN NEEDS	Route needs to be assessed for directional sign needs in 2010.
PRIORITY	High The priority for this trail is to resolve the easement issues, as the Town of Brian Head has many amenities that are attractive to snowmobile users.



TRAIL**MOUNTAIN BIKE PARK**

TRAIL LENGTH	Varies from trail to trail
TRAIL TYPE	Unpaved, Non-motorized
OWNERSHIP	Brian Head Ski Resort, US Forest Service
NUMBER OF EASEMENTS NEEDED	None needed as the majority of these trails are in private ownership; long-term access agreements are recommended.
TREAD ISSUES	Tread issues in the Mountain Bike Park were not assessed in the 2009 field season.
TRAILHEAD NEEDS	None identified.
INTERPRETIVE SIGN NEEDS	An interpretive sign that tells the history of the Brian Head Ski Resort, which would be placed at the Giant Steps Lodge entrance, has been identified as a need.
DIRECTIONAL SIGN NEEDS	Directional sign needs were not assessed during the 2009 field inventory.
PRIORITY	Low As the majority of the trails within the Mountain Bike Park are privately owned and thus, managed by the Brian Head Ski Resort, they will be responsible for signage, construction, and maintenance of these trails.

5. Plan Implementation

Additional Planning Needs

As the partners move from community-scale planning of their trails to site design, additional planning needs will arise. Specifically, the following items should be addressed:

- As per the Iron County Supplement No. 1, 12-05 (page 129), Iron County will need to be provided with the location and dimensions of all property to be set aside for easements, including “equestrian, pedestrian and bicycle trails.”
- Federal planning, in accordance with the National Environmental Policy Act (NEPA) will need to be conducted on all trails that cross federal lands.

In addition to these specific needs, it is timely to address the Town of Brian Head’s Land Management Code to reflect the priorities and strategies identified in this Trails Master Plan.

Trail Development Priorities

As seen in Chapter 4, numerous trails within the Brian Head Area Trail System have minimal development needs and have no ownership issues. These trails, including the Town Trail and the Manzanita Trail, should be prioritized for construction and sign needs, as noted in Chapter 4.

However, from a community-wide perspective, the number one priority for the Town of Brian Head and its partners should be to acquire easements or other access options on the remaining trails within its system. Specifically, the Navajo Loop Trail only has one easement issue within its length; thus, meeting with this landowner (in this case, homeowner’s association) should be a high priority for the town.

Adequately communicating the trails within the Town of Brian Head and their locations and levels of difficulty is a second high priority for the Town. These communications should take the form of interpretive signs, directional signs, and trailhead kiosks to inform the trail systems’ users. -prioritize the trails themselves;



Finally, without a strong Land Management Code to support the vision expressed in the Town of Brian Head's General Plan, continued trail development in the Town will be limited. Thus, implementing the policy recommendations developed in this chapter should be a high priority for the Town.

Trail Access Types

Description of the following types of access

Easements,
-Licenses,
-MOUs

**To be completed by Brian Head Town
and added to the Trails Master Plan**

Estimated Construction Costs

Many factors influence the cost of constructing or improving trails.

- Type of trail,
- Type of terrain,
- Location of trail,
- Hand or mechanized tools,
- Professional or volunteer labor,
- Trail structures.

The type of trail has the most significant impact on trail cost, with separated path paved trails having the highest cost. Recent projects in Utah have seen costs ranging from \$235,000 to \$300,000 per mile for these types of paths.

IMBA provides the following table for estimates of constructing single track trails. These estimates are from 2004 and should be used as a guide only.

These cost ranges mirror those given by private trail construction companies as well as by the US Forest Service Enterprise Resource Team – Trails Unlimited.

Project	Cost
Trail Construction by Machine	Easy conditions: \$1 per foot/\$5,000 per mile Typical conditions: \$2.50 per foot/\$13,000 per mile Hard conditions: \$5 per foot/\$26,000 per mile
Trail Construction by Hand	Easy conditions: \$1 per foot/\$5,000 per mile Typical conditions: \$5 per foot/\$26,000 per mile Hard conditions: \$10 per foot/\$52,000 per mile
Switchback Construction	\$300 to \$1,000 per switchback
Wooden Bridge	\$20 to \$25 per square foot of decking
Metal Bridge	\$50 and up per square foot of decking
Trail Markers	\$5 to \$20 apiece

Maintenance Needs

**To be completed by Brian Head Town
and added to the Trails Master Plan**

DRAFT
9/15/2017

Policy Needs

Policy 1: Institutionalize a standard terminology to discuss trails within the Town of Brian Head.

In a review of the Town of Brian Head's Land Management Code, trails are referred to in nine different ways. Establishing a consistent language within this document will ensure future development projects can uniformly apply the Town's Land Management Code.

Action 1.1:

Amend Chapter 2: Definitions of the Brian Head Town Land Management Code to include the term "trail." Further, define trail by separating the categories into the trail types provided in Chapter 3 of the Brian Head Area Trails Master Plan.

Action 1.2:

Amend Chapter 7: Zone District Regulations to only refer to trails, non-motorized trails, or motorized trails as defined in the revised Chapter 2 of the Land Management Code (as per Action 1, above).

Policy 2: Increase consistency across all review stages for subdivisions with the Town of Brian Head.

The Town of Brian Head already requires trails to be dedicated as a part of new subdivision developments, therefore, the Town is doing an excellent job to increase recreational opportunities within the region. Increasing consistency across all policies and ensuring that all trails connect into the existing trail system will reinforce the concept of an integrated trail system the Town and associated partners have worked toward.

Action 2.1:

Amend Section 9.4.3 Standards for Review in the Brian Head Land Management Code to incorporate planning for trails within the schematic planning stage. Illustrations should include internal circulation patterns, identification of access points into and out of sites, and connections with existing trails within the Brian Head Area Trail System.

Section 9.4.3 Standards for Review should be revised as follows: "Adequate public services are available to meet the needs of the proposed subdivision, including roads, gas, electric, telecommunications, mail, police and fire protection, and schools and recreation. **The schematic plan should show trail-based connections, including internal circulation patterns, access points into and out of the subdivision, and proposed connections into the Brian Head Area Trail System.** If adequate services do not exist at the time of application, provision must be made for expansion of services concurrent to the subdivision development."

Policy 3:

Update the Brian Head Town Design Guidelines to include the design guidelines presented in the Brian Head Area Trail Master Plan.

A standard and consistent manner in which to design and construct trails within the Town of Brian Head and the surrounding area will establish a uniform trail experience for visitors and residents. A suite of design guidelines for all of Brian Head Area’s Trail Types, standard Kiosk design, and trail logo are presented in Chapter 3: Brian Head Area Trails Design Guidelines. Additional elements, such as how to increase accessible trail options, should be included in plan updates.

Action 3.1:

Adopt the Brian Head Area Trails Master Plan.

Action 3.2:

Amend the Land Management Code to incorporate the design guidelines presented in Chapter 3 of this planning document. The Town can either add a section under Chapter 12: General Design Standards for Construction and Development or amend text within the code. Specific recommendations would include the following:

- Amend Section 12.13.2.c to read as follows: “Recreational easements are required for all proposed motorized and non-motorized trails, ski runs or open space to promote recreational opportunities in the community unless otherwise approved by the Planning Commission. Easements shall be required during land use approval (i.e. zone change, subdivision, building permit) for existing trails, ski runs and open space established by historic use (Section 12.15.2.a). **Minimum easement widths should conform to the design guidelines as presented in the Brian Head Area Trails Master Plan, Chapter 3: Brian Head Area Trails Design Guidelines.**”
- Amend Section 12.15.1 to include a sub-section „c“ to read as follows: **“Design and construction specifications for trails within the Brian Head Area should conform to the design guidelines presented in the Brian Head Area Trails Master Plan, Chapter 3: Brian Head Area Trails Design Guidelines.”**

Policy 4:

Work with Iron County to amend their ordinances and planning documents to recognize the Brian Head Area Trails Master Plan and align with the standards contained within the area plan.

Policy 4.1

As the Brian Head Area Trails Master Plan goes beyond the Town's boundaries, the Town of Brian Head should work with Iron County to ensure the policy and trail recommendations put forth in the area plan are continued when developments occur in the County. As soon as the Town of Brian Head adopts the Brian Head Area Trails Master Plan, the Town should work with Iron County to petition County council to adopt the Brian Head Area Trails Master Plan which includes portions of Iron County. This would require any development that occurs within the mapping boundaries of the Brian Head Area Trails Master Plan to follow the design and planning guidelines associated with the plan. This will assist developers and the Town in providing a consistent trail system and standard development practices for development in areas covered in the plan.

Action 4.1a:

The Town will work with Iron County to have the Brian Head Area Trails Master Plan adopted as an area plan.

Policy 4.2:

The Town will work with Iron County to have the County adopt similar ordinances to Brian Head in respect to trails to ensure trails are incorporated into all future development projects. In this manner, future trail systems can extend even beyond the boundaries of the trail planning effort.

Action 4.2:

The Town will work with Iron County to share ordinance language so similar language is used in both the Town and County ordinances. This will create consistency among the partners involved with the trail plan and encourage the use of the same standards outside the boundaries of the planning area.

Policy 4.3:

Ensure trail and regulation consistency across jurisdictions for motorized users. Currently, Iron County's Ordinance 195 limits OHV use on Iron County roads to motor vehicles 52 inches or less in width. However, the US Forest Service allows for vehicles up to 68 inches in width. The Town will petition the County to adopt the US Forest Service standard motorized vehicle width to ensure a consistent approach to motorized recreation, so ordinances and regulations do not conflict.

Policy 5:

Identify all possible funding sources for building and strengthening the Brian Head Area Trail System.

The Town of Brian Head and associated partners will continue to work with the area's private and public landowners. Collaboration amongst these entities will increase the Town and Area's funding for the Brian Head Area Trail System.

Action 5.1

Establish a Town sponsored funding source dedicated to building and strengthening the Brian Head Area Trail System. Possible sources include the Town's capital improvement program or profits from the sale or lease of the Town's property.

Action 5.2

Pursue funding opportunities from federal, state, and private grants. The Town and its partners should submit funding requests for the Area's high priority trail projects.

Action 5.3

Continue to establish private and public partnerships to strengthen the Brian Head Area Trail System. Many organizations and agencies illustrated their commitment to the Brian Head Area Trail System throughout the planning process; the Town and its partners should continue to capitalize on this commitment through volunteer labor or funding to increase the trail systems' capacity in the future.

Policy 6:

Maintain a current Brian Head Area Trails Plan.

Any planning document should be considered dynamic in order to respond to the changing needs of the area. As the recommendations within this plan are implemented and the Town continues to grow, the priorities for the Brian Head Area Trail System will change.

Action 6.1:

Update the Brian Head Area Trail System Master Plan every five years.

Policy 7:

Incorporate these policies and recommended actions into the Brian Head General Plan.

As the Town of Brian Head is currently updating its general plan, the Town should incorporate these policy recommendations into their general plan document. Incorporating these recommendations will highlight the Town's commitment to a high quality and sustainable trail system within the Town of Brian head.

Action 7.1:

Incorporate the policies identified in the Master Plan policy section into the Brian Head General Plan.

Additional Recommendations

1. Formalize the planning committee for trails within the Town to meet on a negotiated schedule. The committee will be charged with updating the plan every five years, annually reviewing the priorities and making recommendations to the planning commission.

2. Increase media methods for informing residents and visitors of trails within the Brian Head Area.

Action – Develop a website on the city and chamber's website that include PDFs.

Action – Involve residents and visitors in trail events and activities, such as National Trails Day. This will provide an opportunity for residents to participate in trail maintenance and provide a sense of community ownership.

Action – Continue to work with local businesses to provide information about the area's trails as the Master Plan is updated.

Action – Create a trails information link on the Town's website that will provide the most up-to-date information on the area's trail conditions.



Appendices

Appendix A: BRIAN HEAD AREA INTERPRETIVE PLAN

The Brian Head Area Interpretive Plan is presented as a separate document. The following excerpt outlines the need for this document.

The Need for an Interpretive Plan

With a population of 130 year-round residents, the Town of Brian Head and its surrounding public lands support hundreds of miles of trails and an estimated 500,000 visitors annually (see Cedar Breaks National Monument visitation data, page 11, and Dixie National Forest visitation data, page 12). As the Town undergoes its Trails Master Planning process, it is timely to identify and plan for the interpretive needs that are associated with the town's assets, including, but not limited to, the following:

- The Utah Patchwork Parkway, State Route 143, which has State and National Scenic Byway designation;
- The extensive public lands that surround Brian Head;
- Its abundant, year-round recreational opportunities; and
- Unique history and culture within the State of Utah.

This appendix is the culmination of an effort to lend consistency and unity to the interpretive displays within the community of Brian Head and its surrounding public lands. While interpretive information is already in place in some areas within the region, this plan will provide the framework for a cohesive trail system with a consistent interpretive message to be implemented in present and future efforts.

Appendix B: TRAIL MARKING STANDARDS

Introduction

This appendix describes sign and marking standards for trails maintained and/or managed as part of the Brian Head Area Trail System (BHATS). It is meant to bring some uniformity to trail marking, make trails easy to identify, enhance user 'enjoy-ability' and increase safety when recreating on trails.

The BHATS markers will be consistent in appearance, providing information that is easy to understand. The markers will also be as unobtrusive as possible yet useful for trail identification, maintenance and safety.

Two types of trail marking standards are discussed in this appendix:

- Urban trails that are generally more heavily used and managed; and
- Backcountry trails, which need less management and marking.

Standards for urban trails differ from backcountry trails due to the reassurance some people need - to know they are on the right path and the distance to their next destination. Backcountry trail marking is placed less frequently, giving the user the sense they are in the backcountry, while still providing critical information, such as trail junctions and safety information. Many people think that marking a trail has one purpose: to indicate the route and reassure users they are on the trail. But, along heavily traveled trail sections, it serves to actually influence travel. In other words, blazes, signs, metal markers, posts, cairns when thoughtfully placed, can help guide people along the same path, especially in open woods or in alpine zones. Markers guide users along a single route, which in turn prevents trailside trampling and resource damage.

Types of Trail Markers

Standard trail markers:

The BHATS trails shall be marked with composite fiberglass flat posts available from several U.S. manufacturers listed below. These flexible and durable markers come in a variety of lengths (1' to 8' feet), are 4" inches wide (an industry standard), and provide a recessed surface for the application of 3" wide decals. The longer markers can be fitted with anchors to deter removal by vandals.

Potential Sources:

Rockart Signs and Markers

www.rockartsigns.com

Carsonite Composites

www.carsonite.com

Rhino Markers

www.rhinomarkers.com

Omega Marking Company

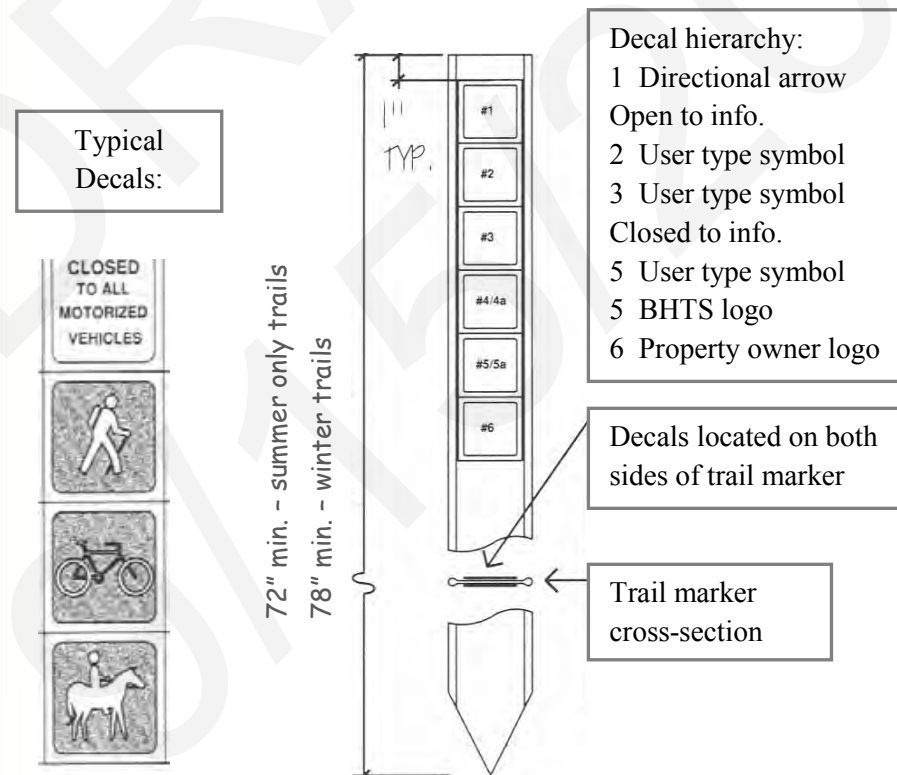
www.omegamarkingcompany.com

The information placed on these markers, in the form of decals or lettering has many functions and must carry several messages.

Examples of the markers signs are shown in the figure below. Their purpose is to achieve the following:

- Indicate what usage is allowed;
- Identify the trail and/or trail segment;
- Describe the accepted right-of-way hierarchy in which, for example, cyclists yield to runners and both yield to walkers and hikers;
- Indicate the distance and direction to the trailhead or other destination; or
- Provide regulatory information when necessary.

Figure 1. Typical Trail marking sign detail



The following are the types of information the BHTS may provide when marking trails:

Directional

- Arrows showing where trail goes;
- Colored or numbered markers that indicate trail routes within a system of trails.

Informational

- Example: "Private property - please stay on trail";
- Example: "Seasonal closure".

Reassurance

- Example: "Trailhead 1 mile " or "Trailhead" with an arrow pointing the way;
- Colored or numbered markers that indicate trail routes within a system of trails;
- Distance markers;
- GPS location (longitude and latitude).

Regulatory

- Example: "Winter use only";
- Example: "Seasonal closure".

Marking Trails

Marking Urban Trails

Placement of trail markers is a bit discretionary, but as a rule trail markers along urban trails are spaced more frequently than backcountry trails. They guide trail users along a route and provide detailed information about the hazards and trail use.

To start with, trailheads for urban trails have a standard kiosk/bulletin board type sign at the trailhead. In addition to the trailhead sign the entrance to the trail will be clearly marked and include the trail name, BHTS Logo, types of trail uses allowed, trail difficulty and special instructions. Markers along the trail or within a trail system need to provide direction and information, such as mileage to the trailhead or trail closures.

Direction and information:

At a minimum, directional and informational markers shall be placed in the following locations:

- Where the trail intersects with other trails or roads;
- Where the trail enters/leaves private property, informing users to stay on the trail; and
- Every 2 tenths (1000 feet +/-) of a mile along the trail route.

Trail segments within a trail system are marked with the name of the segment and directions, in text and/or graphic form (arrows) and are placed along the trail for quick recognition.

Trail closures:

Place "Trail Closed" markers at the trailhead and/or along the trail segments which are closed.

Marking Backcountry Trails

Trail markers for backcountry trails have just enough information to guide users along a selected route. The chance of a missed intersection is dramatically increased without trail markers; and in the backcountry it may cause dangerous consequences. Backcountry trailheads have a kiosk sign similar to the urban trails that identifies the trail name and shows the minimum information recommended for trailhead sign. Special considerations are made in backcountry areas. "Directional" signs, and signs showing trail names and destinations should be used sparingly; "interpretive" signs, those that label items or provide information of an historical or scientific nature, should not be used or limited in use.

For trails which cross large open areas and which are heavily used in winter it may be necessary to place markers more frequently and apply reflective tape or stickers that make the trail markers visible at night or in inclement weather.

Markers are spaced less frequently and allow for some sense of adventure. GPS locations may be included on the markers at trail intersections or important features.



Directional signs and/or trail name markers are placed in the following locations:

- Wherever there are intersections with other trails;
- Wherever there is trail braiding;
- Wherever the trail enters and departs private land; and
- About 1 mile apart.

Side trails that dead end at cabins (private or public), viewpoints, campsites or water sources should have a sign labeling that indicates that there is a dead end. Mark the main trail clearly in areas where there is trail braiding or confusing intersections.

Logo Design

As mentioned earlier, providing a consistent message is major priority for trail signs. Developing a logo that can be placed on kiosks as well as trail markers goes far in maintaining this consistency.

Logo costs can vary depending on the complexity. For example the following logo was chosen by the Brian Head Trail Committee and has a cost of \$.95-\$1.00. Adding another color to this logo increased the price to \$1.25-\$1.30.



Brian Head Logo designed by:
Rivers, Trails, & Conservation
Assistance Program

Appendix C: DIFFICULTY RATINGS

Difficulty ratings are subjective. They vary by user type and are often put into context of local conditions. There is a spectrum of methods used to determine difficulty ratings. They range from local knowledge and committee consensus to very detailed criteria that are more universally recognized.

In meeting with the Brian Head Trails Committee it was decided that difficulty ratings would be based on both local knowledge and some general criteria. The following table can be used as the basis for determining difficulty.

This table establishes general guidelines for difficulty ratings associated with hiking trails. Ratings used for individual trails should include additional descriptors consistent with their particular setting.

Aspect	Easiest	More Difficult/Intermediate	Very Difficult/Advanced
Grade	5% or less average 15% max. for short distance	10% or less average 15% for longer distance	15% or less average 15% or more
Tread Surface	Firm and stable	Mostly stable, with some variability	Widely variable, with some less stable footing
Obstacles	Avoidable or small, easy to get around	Larger and more frequent; requires some maneuvering to get around	Numerous and unavoidable, must be maneuvered around
Distance			
Elevation Gain			
Bridges	Minimum of 36" wide with railings where needed	Bridges minimum of 24" wide with railings where needed; short crossings may use stepping stones	Bridges 24" wide or narrower; often rustic design and more limited railings

The following example could be the result of using this method:

Town Trail	Rating: Easiest
<u>Length: 2.31 miles</u>	<u>Elevation gain: 502 ft</u>
<p>The Town Trail is a gravel trail that parallels State Highway 143 through the Town of Brian Head and the numerous amenities the area offers. On the north, the Town Trail connects with Aspen Drive and has a picnic bench at its northern terminus (just north of Aspen Drive). On the south, the trail terminates at Bear Flat (US Forest Service land), connecting to the Marathon Trail and other US Forest Service trails. The trail maintains a gentle grade throughout, with only one or two short, steep sections at the northern end of the trail.</p>	

Appendix D: FUNDING and ASSISTANCE RESOURCES

There are several funding sources available to the Brian Head Area that could help to implements various parts of this Trails Master Plan. The largest source of funding comes at the state level. However there are many local and National sources as well. Following is a list that is by no means exhaustive:

Utah State Parks
Off-Highway Vehicle Trails Program
Program Coordinator: Fred Hayes
fredhayes@utah.gov
801-538-7435
<http://stateparks.utah.gov/grants/ohv>
applications postmarked by May 1 of each year

Utah State Parks
Trails & Pathways Program
Program Coordinator: John Knudson
johnknudson@utah.gov
801-538-7344
<http://stateparks.utah.gov/grants/pathways>
applications postmarked by May 1 of each year

Utah State Byways
State Coordinator: Gael Hill
gael.hill@gmail.com
435-826-4584
<http://www.bywaysonline.org/grants/>

Utah Department of Transportation
Transportation Enhancements Program
Contact Info: Tom Boschert
tboschert@utah.gov
801-965-4175
[http://www.udot.utah.gov/main/f?p=100:pg:0:::::T,V:192,](http://www.udot.utah.gov/main/f?p=100:pg:0:::::T,V:192)

Utah Cultural Heritage Tourism Grants
Potentially for interpretation
Debbie Dahl
ddahl@utah.gov
801-533-3537
<http://culturalheritage.utah.gov/>

Appendix E: CONTACTS

Local Contacts

Brian Head Chamber of Commerce
259 S State Hwy. 143
Brian Head, UT 84719
435-677-2810

Cedar City Chamber of Commerce
581 N. Main St.
Cedar City, UT 84721

Cedar Breaks National Monument
2390 W. Hwy. 56, Suite 11
Cedar City, UT 84720
435-586-9451
Superintendent - Paul Roelandt

State Contacts

Iron County
82 N 100 E
Cedar City, UT 84720
435-865-5370

UDOT Region 2
2010 South 2760 West
Salt Lake City, UT 84104
Evelyn Tuddenham
801-964-4564

Utah State Parks
1594 West North Temple
Salt Lake City, UT 84116
801-538-7220

Utah Governor's Office of
Planning & Budget
Utah State Capitol - Suite 150
P.O. Box 132210
Salt Lake City, UT 84112
801-538-1027

Utah Office of Tourism
300 North State
Salt Lake City, UT 84114
801-538-1900

National Contacts

National Park Service
Rivers, Trails, & Conservation
Assistance Program - Utah
Marcy DeMillion - Community Planner
324 South State Street
Salt Lake City, UT 84111
801-741-1012 ext. 125

International Mountain Bicycling Association
Ryan Schutz, Mountain States Regional Director
303-545-9011 ext. 112

Ryan.schutz@imba.com

Trails Unlimited
Enterprise Resource Team -US Forest Service
Trail Design, Construction, and Maintenance
105A Grand Avenue
Monrovia, CA 91016
626-233-4309


Commercial Contacts

Alpine Trails, Inc.
Trail Design, Construction, and Maintenance
P.O. Box 2782
Park City, UT 84060
Troy Duffin, President
435-655-0779



Appendix F: EXAMPLE MOU

Agreement Number: IR-10-02



**Memorandum of Understanding
Between the
Utah Division of Forestry, Fire, and State Lands
and the
Brian Head Fire Department**

This memorandum of understanding is made by and between Brian Head Fire Department, hereinafter referred to as the "Department" or "District" as appropriate, and the State of Utah, Department of Natural Resources, Division of Forestry, Fire and State Lands, hereinafter referred to as "Division" as an addendum to the Iron County Cooperative Agreement. "Department" or "District" and "Division" shall hereafter be referred to jointly as "the parties".

PURPOSE OF THIS Memorandum of Understanding (MOU): to provide a mechanism for procurement, use and compensation for services provided by the fire department or district outside its jurisdictional area of responsibility to the State of Utah and its cooperators, pursuant to cooperative agreements, operating plans, closest forces agreements and suppression resource needs in support of fire suppression.

This MOU may also be used for the purposes of procuring personnel and equipment for the purposes of other fire management activities under the direction of the Division such as fuels mitigation and prescribed fire projects both inside and outside of the department or district's jurisdictional area. Any project work done for federal agencies must be done under the conditions of a separate agreement.

WITNESSETH:

WHEREAS it is in the best interest of the State of Utah and it's cooperators to have wildland fires detected and suppressed quickly before they become large and more difficult to control; and

WHEREAS the Department or District may have the capability to respond and suppress fires under the jurisdiction of the Division and/or its cooperators in a more timely and effective basis than any other assets or resources in the state; and

WHEREAS the Department or District may have the capabilities and resources to assist the Division with fire hazard mitigation projects that mutually benefit both parties;

WHEREAS the Department or District represents that it is a duly constituted fire department, fire district, or non-profit association or political subdivision of the State of Utah authorized to provide fire protection within the boundaries of the map attached hereto and by reference made a part hereof (Appendix A); and

1

Revised 2/25/2010

Appendix G: Ordinances

IRON COUNTY, UTAH ORDINANCE 195

AN ORDINANCE TO DESIGNATE AND REGULATE THE USE OF OFF-HIGHWAY VEHICLES, PURSUANT TO UTAH CODE 11 ANNOTATED, SECTION 41-22-10.1 UTAH CODE ANNOTATED, 1953 AS AMENDED.

WHEREAS, Iron County claims right and ownership of Class B and Class D roads designated on the County Road System (Iron County General Plan adopted by Ordinance 137 and dated October 10, 1995. Iron County RS2477 map- un-numbered p 51), pursuant to the right of ways granted in accordance with Public Law (Revised Statute) 2477 and Title 72, Utah Code Annotated, and

WHEREAS, the County desires to designate said Class B and Class D roads under their jurisdiction, on a map describing said roads, trails, and ways, as either open or closed to off-highway vehicle (OHV) use, and

WHEREAS, authority to designate such roads, trails and highways is given the County pursuant to Title 41 Chapter 22 Utah Code Annotated 1953 as revised 11/03, Section 41-22-1, and

WHEREAS, the County does hereby intend pursuant to Utah Code Section 41-22-10.5 to designate which County Class B and Class D roads are open or closed to public use for the purpose of allowing OHV operation as part of a county wide system of OHV roads.

WHEREAS, Iron County is desirous of cooperating with State and Local Agencies and with public land administrative agencies pursuant to their regulations and in accordance with State law to:

1. Designate roads open to OHV use;
2. Develop and maintain trails;
3. Develop and maintain parking areas;
4. Develop and maintain other related facilities appropriate to off-highway vehicle use;
5. Promote the safety, enjoyment, and responsible use of all forms of this recreational activity (Utah Code Annotated, Section 41-22-20).

6. Designate roads open to OHV use within City/Community boundaries for access to County designated roads and trails.

NOW THEREFORE, IT IS HEREBY RESOLVED AND ORDAINED AS FOLLOWS:

SECTION 1. DESIGNATION OF ROADS FOR OFF-HIGHWAY VEHICLES, DEFINITIONS (effective May 1,2001):

Iron County does hereby designate the roads shown on the attached map as open for public travel for OHV's (defined as all snowmobiles, motorcycles, and all terrain type vehicles, any motor vehicle 52 inches or less in width, having an unladen dry weight of 800 pounds or less, traveling on two or more low pressure tires having a seat designated to be straddled by the operator, and designed for, or capable of travel over unimproved terrain). The map, described as "Off-Highway Vehicle Road Map", is maintained by the Iron County Commission and may be changed, modified, or amended from time to time by Iron County.

SECTION 2. COMPLIANCE WITH ALL TRAFFIC LAWS:

Any person operating an off-highway vehicle is subject to all of the provisions of Title 41 Chapter 6 Utah Code Annotated, as amended, (Traffic Code) which include but is not limited to:

- a. No person under eight years of age will be allowed to operate an OHV on the Iron County Road system.
- b. OHV Operators between the age of eight through fifteen must possess an OHV education certificate issued by the Utah Division of Parks and Recreation.
- c. All operators sixteen years and older must possess a valid driver's license or OHV education certificate.
- d. All riders under eighteen years of age must wear a properly fitting, safety regulated helmet.
- e. No person under fourteen years of age may operate on any County Class B, (D) Road or trail as part of the system unless in the company of someone at least sixteen years of age with a valid drivers license or having an OHV Education Certificate in possession, and must be no further away from that person than communicating distance at any time.

SECTION 3. OPERATION OF VEHICLE ON HIGHWAYS:

No person may operate an off-highway vehicle upon any street or highway not designated as open to off-highway vehicle use, except:

- a. When crossing a street or highway and the operator comes to a complete stop

before crossing, proceeds only after yielding the right of way to oncoming traffic and crosses at a right angle.

- b. When loading or unloading any off-highway vehicle from a vehicle which shall be done with due regard for safety and at the nearest practical point of operation.
- c. When an emergency exists during any period of time and at those locations when operation of conventional motor vehicles is impractical or when the operation is directed by a peace officer or other public authority.

Snowmobiles may be operated on streets or highways which have been officially closed for the season to conventional motor vehicle traffic because snow removal is no longer provided for the season by the public authority having jurisdiction. (4.1-22-10.4)

SECTION 4. REGISTRATION:

All vehicles operated on the OHV road system must be either safety inspected and licensed by the Utah Division of Motor Vehicles, or registered as an OHV by the Utah Division of Motor Vehicles, or are duly registered by the appropriate agency in the state in which the owner of the vehicle is a resident.

Off-highway vehicles which are not registered in the State of Utah, must not be in the State more than fourteen (14) days in any year and must be owned by a non-resident. State safety certification is not required for non-Utah residents.

SECTION 5. VEHICLE EQUIPMENT REQUIREMENT:

An off-highway vehicle shall be equipped with:

- a. Brakes adequate to control the movement of and to stop and hold the vehicle under normal operating conditions.
- b. Headlights and taillights when operated between sunset and sunrise.
- c. A noise control device.
- d. Spark arresters.

SECTION 6. PROHIBITED USES:

- a. No person shall operate an Off Highway Vehicle: Over twenty-five miles per hour (25mph) on designated roads in the Iron County Road system.
- b. All traffic and other safety laws and rules apply to operation of off-highway

vehicles, including the prohibition from use of said vehicles while under the influence of alcohol or drugs (UCA 41-6-44).

- c. No person may operate an off-highway vehicle in connection with acts of vandalism, harassment of wildlife or domestic animals, burglaries, other crimes, damage to the environment which includes excessive pollution of air, water, or land, abuse of the water shed, impairment of plant or animal life, or excessive mechanical noise.
- d. No person shall operate or accompany a person operating an OHV upon privately owned land of any other person, firm, or corporation without permission from the owner, or person in charge.
 - (i) It is unlawful for a person to remain on private land upon request of the owner or person in charge to leave the properties.
 - (ii) This section does not apply to prescriptive easements.
- e. It is unlawful for any person to tear down, mutilate, or destroy any sign, sign boards, or other notice which regulates trespassing for purposes of operating an OHV; or to tear down, deface, or destroy any fence or other enclosure or any gate or bars belonging to such fence or enclosure.

SECTION 7. PENALTIES FOR VIOLATION:

Violation of the use of off-highway vehicles in violation of registration requirements or traffic codes, shall be penalized according to the violation in the traffic code.

Any person who violates any provision of this Chapter or the Rules promulgated elsewhere in this Chapter upon conviction is guilty of a Class C misdemeanor, unless another penalty is provided for in this Chapter, or laws of the State of Utah.

SECTION 8. PRIVATE LANDS:

This designation is not intended to include roads on private property, unless those roads are part of the County road system (and identified on the "Off-Highway Vehicle Road Map").

SECTION 9 REPEAL OF CONFLICTING ORDINANCES:

To the extent that any ordinances, resolutions or policies of Iron County conflict with the provisions of this ordinance, they are hereby amended to comply with the provisions hereof.

SECTION 10 SEVERABILITY:

In the event that any provision of this ordinance less than the entire ordinance is held invalid by a court of competent jurisdiction, this ordinance shall be deemed severable and such finding of invalidity shall not affect the remaining portions of this ordinance.

SECTION 11 EFFECTIVE DATE:

This ordinance shall take effect upon its passage by a majority vote of the Iron County Board of County Commissioners and fourteen (14) days following notice and publication as required by law.

PASSED AND ADOPTED BY THE BOARD OF COUNTY COMMISSIONERS OF IRON COUNTY, UTAH THIS 26TH DAY OF JANUARY, 2004.

**BOARD OF COUNTY COMMISSIONERS
IRON COUNTY, UTAH**

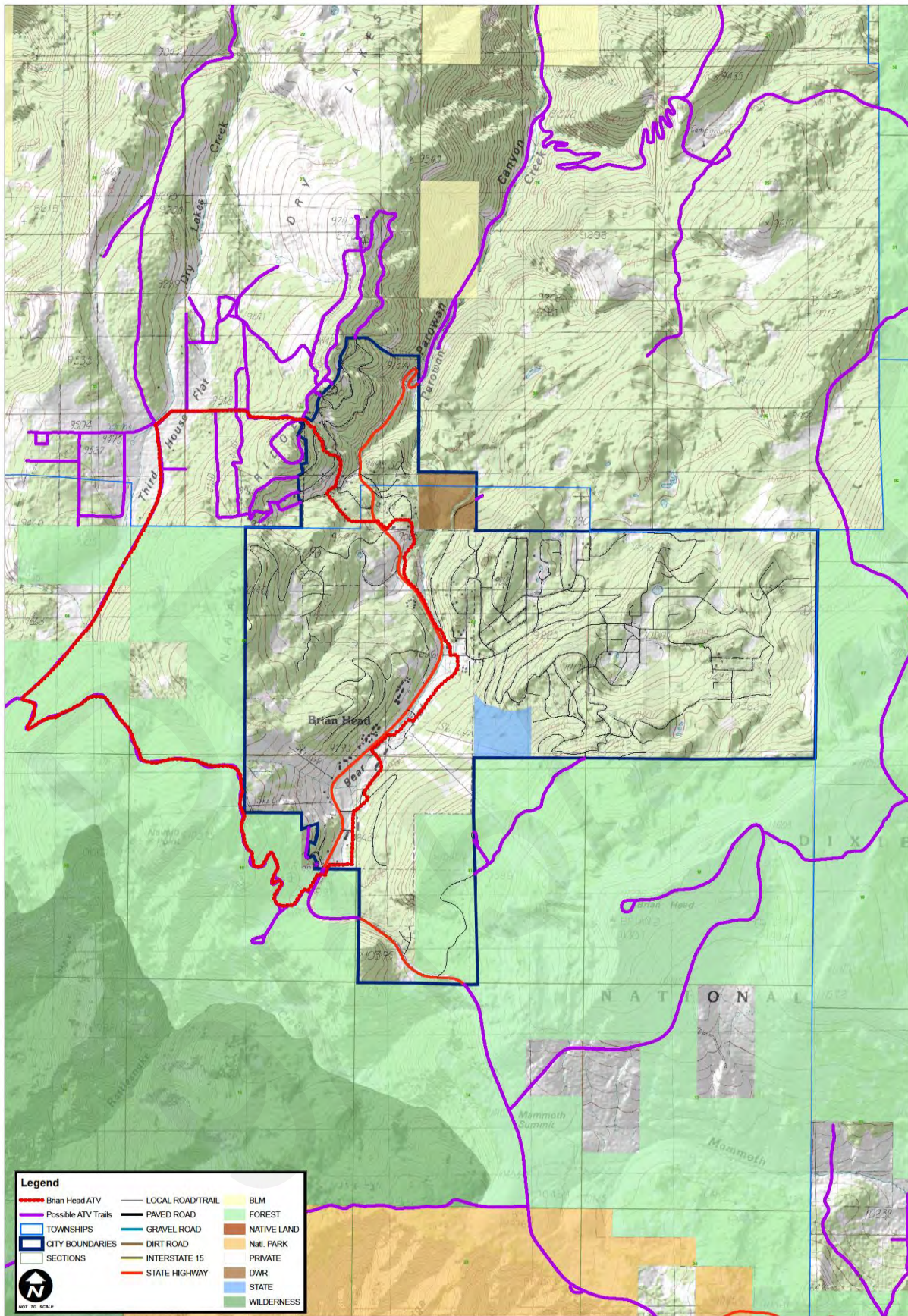
By: /s/ Wayne A. Smith
Wayne A. Smith, Chairman

ATTEST:

/s/ David I. Yardley
David I. Yardley,
County Clerk

VOTING:

Wayne A. Smith	<u>Aye</u>
Gene E. Roundy	<u>Aye</u>
Dennis E. Stowell	<u>Aye</u>





ORDINANCE NO. 09-015

AN ORDINANCE OF THE BRIAN HEAD TOWN COUNCIL PROVIDING FOR THE CREATION OF A TRAILS MASTER PLAN DEVELOPMENT COMMITTEE

WHEREAS, Brian Head Town received a Rivers, Trails, and Conservation Assistance Grant on November 21, 2008 to assist with the development of a Trails Master Plan; and

WHEREAS, a committee is needed to formulate the policies and strategies to develop a Trails Master Plan for consideration of adoption by the Town Council.

NOW, THEREFORE, BE IT ORDAINED BY THE BRIAN HEAD TOWN COUNCIL that:

1. Trails Master Plan Committee

Is hereby created as "Trails Master Plan Committee". The Committee shall consist of up to 11 members. They shall consist of two Town Council members, two Planning Commission Members, the RTCA Program Director, a Cedar Breaks National Monument employee, a Dixie National Forest employee, Brian Head Public Works Director, Brian Head Town Manager, Brian Head Chamber of Commerce Director, and a Brian Head Resort employee. The Town shall appoint a secretary which shall not be a voting member of the Committee. The members shall serve without any additional compensation from the Town for this position.

2. Term of Service, Removal and Vacancies

Members of the Trails Master Plan Committee shall be appointed by the Town Manager with the advice and consent of the Town Council. They shall serve for a term of not more than five years or until the Brian Head Trails Master Plan is adopted by ordinance (whichever comes first). Vacancies in the Committee occasioned by removals, resignations, or otherwise shall be filled for the unexpired term in the same manner as the original appointments. Ex-officio member may include individuals that the Town Manager deem necessary. They shall serve by the invitation of the Town Manager and shall have no vote.

3. Officers and Their Duties

At its first meeting, and annually at the first meeting of a new year, the Committee shall elect a Chairman, Vice-Chairman and any additional officers as necessary. The Chairman shall preside at the meetings, appoint sub-committees with the concurrence of the Committee, and generally perform the duties of a presiding officer. The Chairman shall have the right to vote. The Vice-Chairman or a Board member designated by the Chairman shall preside when the

Chairman is absent. The agenda for meetings shall be prepared by the Town Manager and RTCA Program Director.

4. Purpose and Duties of the Committee

The purpose and duties of the Committee are as follows:

- a. To prepare a Trails Master Plan for the Town with associated maps, sign design standards, and associated information relevant to a Trails Master Plan.
- b. Prepare a proposed budget for the implementation of the Trails Master Plan.
- c. Recommend proposed projects, and ordinances necessary for the proposed adoption and implementation of the Trails Master Plan.

5. Meetings and Procedures

The Committee may adopt rules and regulations not inconsistent with the law applicable to public bodies for governing of its meeting. The committee shall abide by the Utah Open Public Meeting laws as outline in U.C.A. Special meetings may be called at the request of the Town Manager or RTCA Program Director. A quorum for the transaction of business shall be a simple majority of the Committee Members. When vacancies occur, a simple majority of the remaining Committee members shall constitute a quorum. Minutes shall be kept at all meetings. Closed meetings may only be held for purposes authorized by U.C.A. 52-4-5, as amended.

6. Effective Date

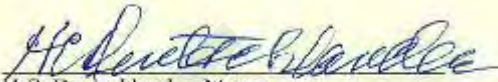
This Ordinance shall become effective upon a majority vote of the Town Council or 20 days after publication.

IN WITNESS WHEREOF, this Ordinance is passed by a majority vote of the Brian Head Town Council on this 13th day of October, 2009 by the following vote of its members:

Mayor H.C. Deutschlander	Aye
Councilperson Jim Ortler	Aye
Councilperson Tony Cocchia	Aye
Councilperson Hans Schwob	Aye
Councilperson Stewart Fauselt	Aye

Dated this 13th day of October, 2009.

BRIAN HEAD TOWN

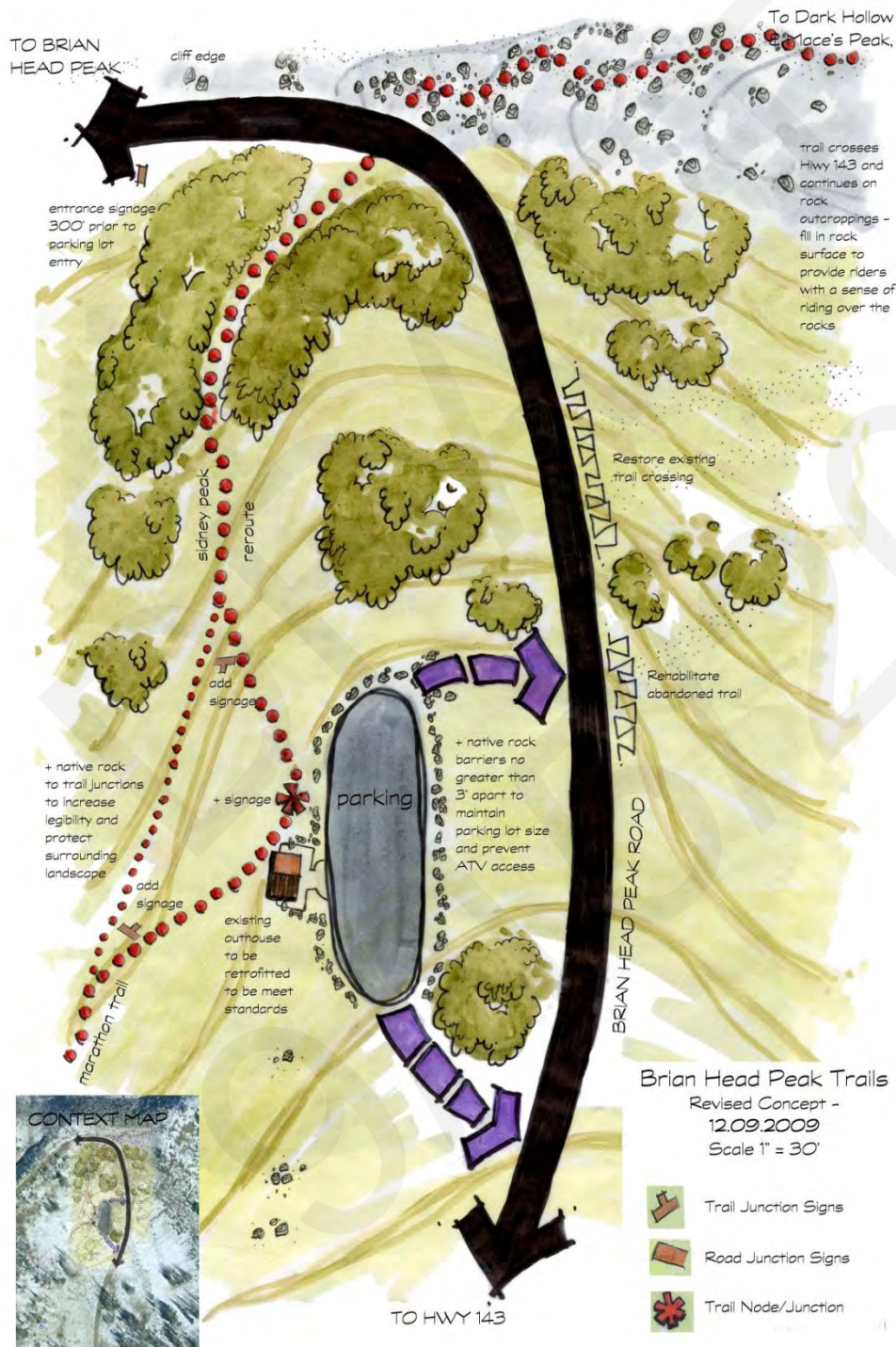

H.C. Deutschlander, Mayor

ATTEST:


Nancy Leigh, Town Clerk/Recorder

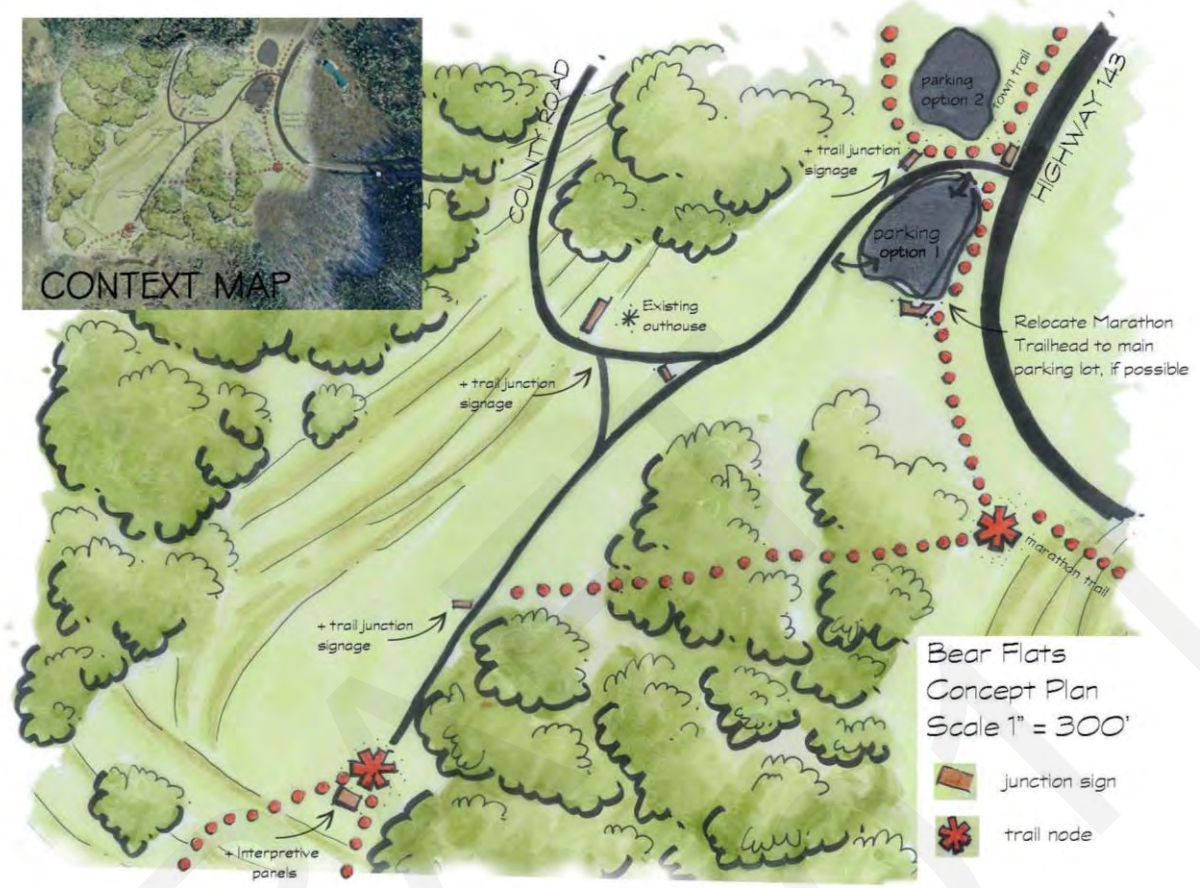


Appendix H: Trailhead Concept Plans





CONTEXT MAP

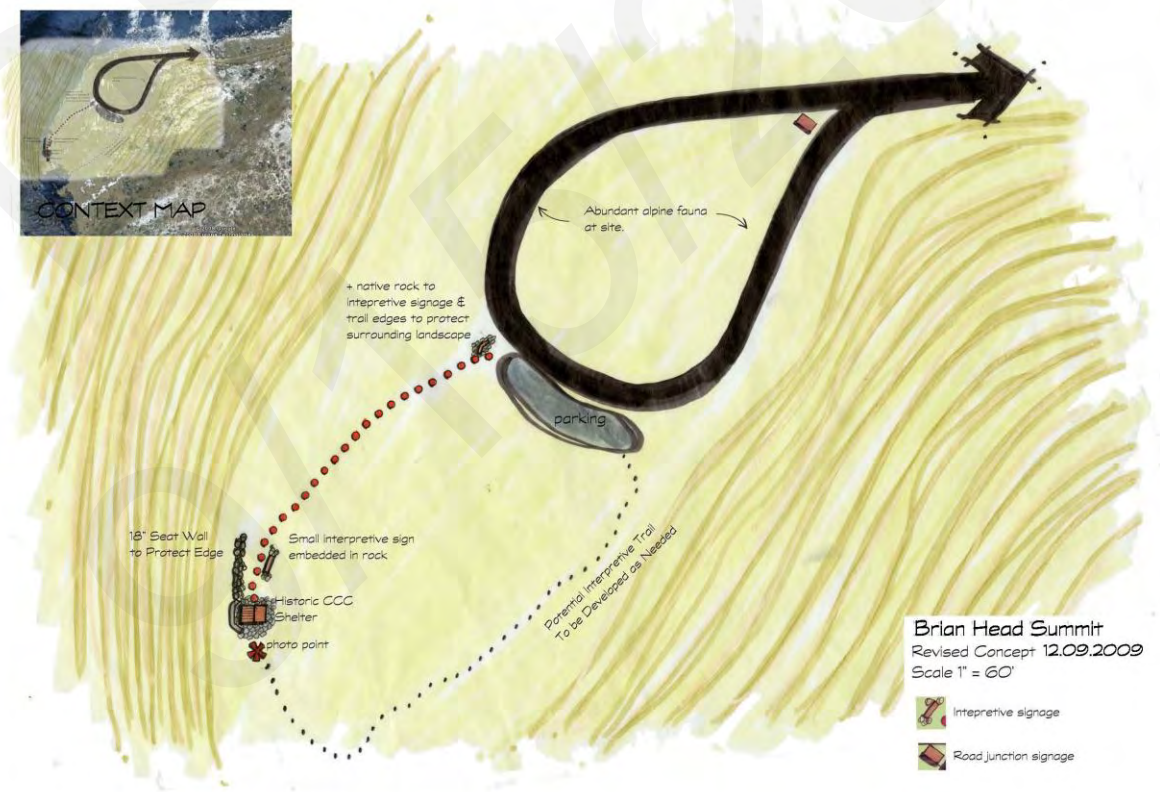


Bear Flats
 Concept Plan
 Scale 1" = 300'

-  junction sign
-  trail node



CONTEXT MAP



Brian Head Summit
 Revised Concept 12.09.2009
 Scale 1" = 60'

-  interpretive signage
-  Road junction signage



Appendix I: References

International Mountain Bicycling Association, Trails Solutions – IMBA’s Guide to Building Sweet Singletrack. 2007. Johnson Printing, Boulder , CO.

Matanuska-Susitna Borough, AK. MSB Trail Marking Standards. 11-15-05.

Minnesota Department of Natural Resources. Trail Planning, Design, and Development Guidelines. Minnesota Department of Natural Resources. 2006.

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