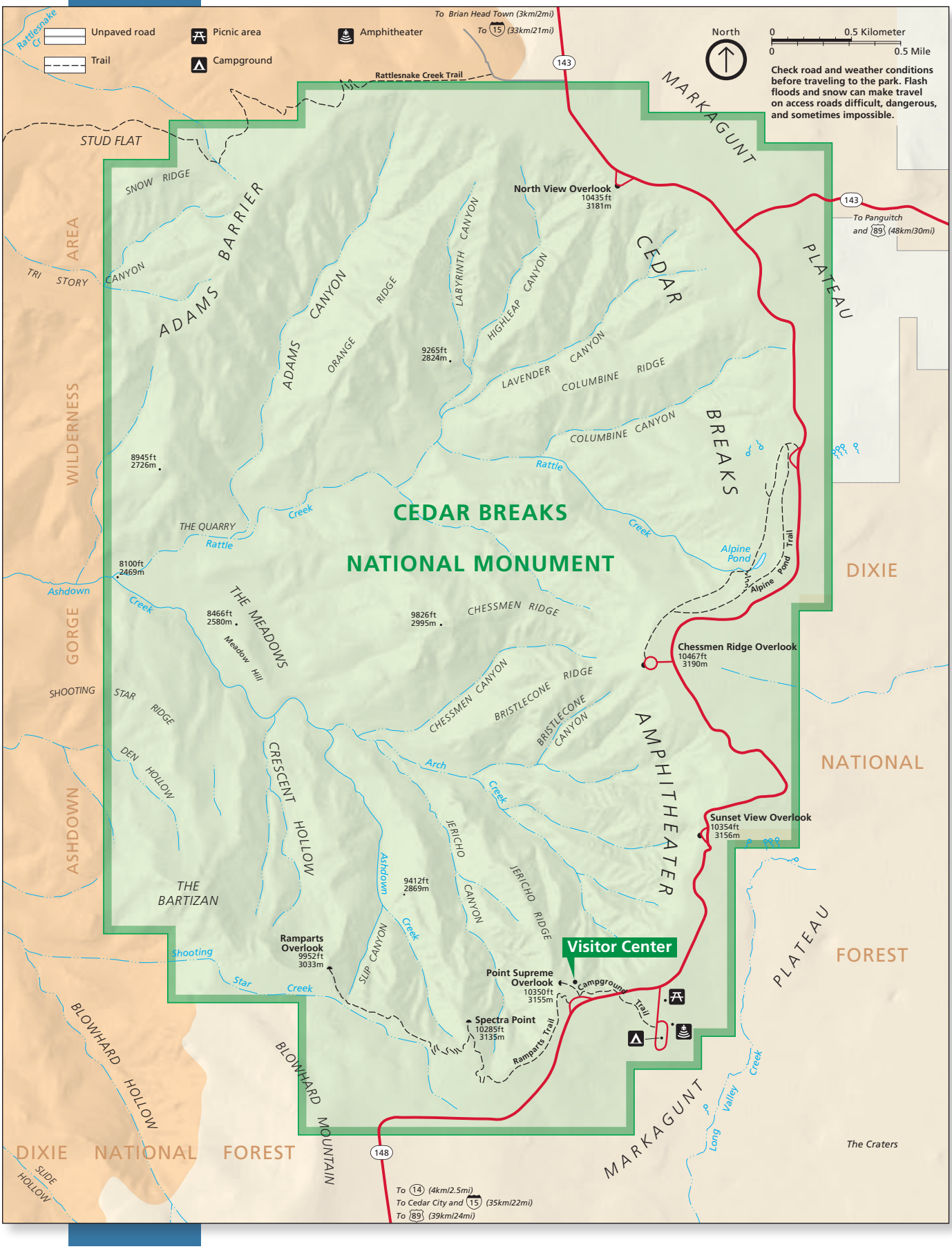
NATIONAL PARK SERVICE • U.S. DEPARTMENT OF THE INTERIOR

Foundation Document

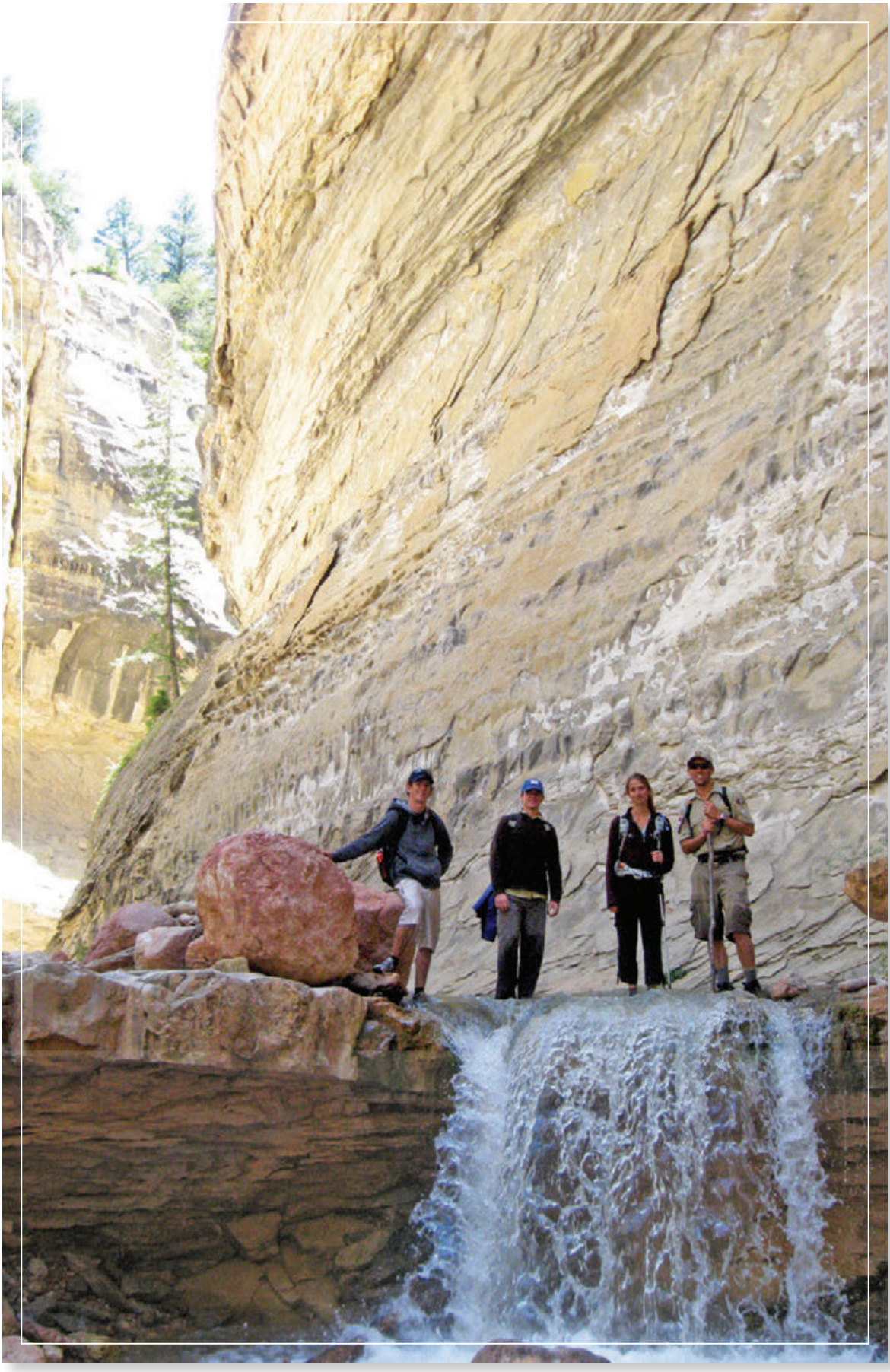
Cedar Breaks National Monument

Utah

November 2015


CEDAR BREAKS
NATIONAL MONUMENT
Visitor Center
Unpaved road
Trail
Picnic area
Campground
Amphitheater
North
0 0.5 Kilometer
0 0.5 Mile
Check road and weather conditions before traveling to the park. Flash floods and snow can make travel on access roads difficult, dangerous, and sometimes impossible.
To Brian Head Town (3km/2mi)
To 15 (33km/21mi)
Rattlesnake Creek Trail
143
MARKAGUNT PLATEAU
STUD FLAT
SNOW RIDGE
ADAMS CANYON
BARRIER AREA
TRI STORY CANYON
WILDERNESS
ADAMS CANYON
ORANGE RIDGE
LABYRINTH CANYON
HIGHLEAP CANYON
CEDAR BREAKS
LAVENDER CANYON
COLUMBINE RIDGE
COLUMBINE CANYON
North View Overlook
10435ft
3181m
To Panguitch and 89 (48km/30mi)
9265ft
2824m
8945ft
2726m
Rattle Creek
THE QUARRY
8100ft
2469m
Ashdown Creek
GORGE
THE MEADOWS
8466ft
2580m
Meadow Hill
9826ft
2995m
CHESSMEN RIDGE
Alpine Pond
Alpine Pond Trail
DIXIE NATIONAL FOREST
Chessmen Ridge Overlook
10467ft
3190m
SHOOTING STAR RIDGE
DEN HOLLOW
CRESCENT HOLLOW
CHESSMEN CANYON
BRISTLECONE RIDGE
BRISTLECONE CANYON
AMPHITHEATER
Arch Creek
JERICHO CANYON
JERICHO RIDGE
Sunset View Overlook
10354ft
3156m
ASHDOWN GORGE WILDERNESS
THE BARTIZAN
9412ft
2869m
Ashdown Creek
SLIP CANYON
Ramparts Overlook
9952ft
3033m
Shooting Star Creek
Point Supreme Overlook
10350ft
3155m
Campground
Trail
Spectra Point
10285ft
3135m
Ramparts Trail
BLOWHARD MOUNTAIN
BLOWHARD HOLLOW
SLIDE HOLLOW
148
To 14 (4km/2.5mi)
To Cedar City and 15 (35km/22mi)
To 89 (39km/24mi)
MARKAGUNT PLATEAU
Long Valley Creek
The Craters

Contents



Mission of the National Park Service

The National Park Service (NPS) preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The National Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

The NPS core values are a framework in which the National Park Service accomplishes its mission. They express the manner in which, both individually and collectively, the National Park Service pursues its mission. The NPS core values are:

- **Shared stewardship**: We share a commitment to resource stewardship with the global preservation community.
- **Excellence**: We strive continually to learn and improve so that we may achieve the highest ideals of public service.
- **Integrity**: We deal honestly and fairly with the public and one another.
- **Tradition**: We are proud of it; we learn from it; we are not bound by it.
- **Respect**: We embrace each other's differences so that we may enrich the well-being of everyone.

The National Park Service is a bureau within the Department of the Interior. While numerous national park system units were created prior to 1916, it was not until August 25, 1916, that President Woodrow Wilson signed the National Park Service Organic Act formally establishing the National Park Service.

The national park system continues to grow and comprises more than 400 park units covering more than 84 million acres in every state, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. These units include, but are not limited to, national parks, monuments, battlefields, military parks, historical parks, historic sites, lakeshores, seashores, recreation areas, scenic rivers and trails, and the White House. The variety and diversity of park units throughout the nation require a strong commitment to resource stewardship and management to ensure both the protection and enjoyment of these resources for future generations.

The arrowhead was authorized as the official National Park Service emblem by the Secretary of the Interior on July 20, 1951. The sequoia tree and bison represent vegetation and wildlife, the mountains and water represent scenic and recreational values, and the arrowhead represents historical and archeological values.

Introduction

Every unit of the national park system will have a foundational document to provide basic guidance for planning and management decisions—a foundation for planning and management. The core components of a foundation document include a brief description of the park as well as the park's purpose, significance, fundamental resources and values, other important resources and values, and interpretive themes. The foundation document also includes special mandates and administrative commitments, an assessment of planning and data needs that identifies planning issues, planning products to be developed, and the associated studies and data required for park planning. Along with the core components, the assessment provides a focus for park planning activities and establishes a baseline from which planning documents are developed.

A primary benefit of developing a foundation document is the opportunity to integrate and coordinate all kinds and levels of planning from a single, shared understanding of what is most important about the park. The process of developing a foundation document begins with gathering and integrating information about the park. Next, this information is refined and focused to determine what the most important attributes of the park are. The process of preparing a foundation document aids park managers, staff, and the public in identifying and clearly stating in one document the essential information that is necessary for park management to consider when determining future planning efforts, outlining key planning issues, and protecting resources and values that are integral to park purpose and identity.

While not included in this document, a park atlas is also part of a foundation project. The atlas is a series of maps compiled from available geographic information system (GIS) data on natural and cultural resources, visitor use patterns, facilities, and other topics. It serves as a GIS-based support tool for planning and park operations. The atlas is published as a (hard copy) paper product and as geospatial data for use in a web mapping environment. The park atlas for Cedar Breaks National Monument can be accessed online at: http://insideparkatlas.nps.gov/.

Part 1: Core Components

The core components of a foundation document include a brief description of the park, park purpose, significance statements, fundamental resources and values, other important resources and values, and interpretive themes. These components are core because they typically do not change over time. Core components are expected to be used in future planning and management efforts.

Brief Description of the Monument

Cedar Breaks National Monument (hereafter referred to as the monument) was established in 1933 by proclamation of President Franklin D. Roosevelt to preserve the spectacular cliffs, canyons, and features of scenic, scientific, and educational interest at the Cedar Breaks amphitheater. Colorful layers of rock and geologic formations such as fins, windows, arches, and "hoodoos" have been shaped by weathering and erosional processes. Hoodoos (tall spires of rock) are of special interest due to their irregular forms and alternating hard and soft sediment layers. The multicolored natural amphitheater that displays these hoodoos, 2,500 feet deep and nearly 4 miles wide, is composed of variegated pink cliffs eroded from the Claron Formation. Cedar Breaks forms the western escarpment of the Markagunt Plateau, delineating the boundary between the Colorado Plateau and the Basin and Range physiographic provinces. Some deposits in and adjacent to the monument demonstrate that this location was on the edge of the Markagunt Gravity Slide, the largest known feature of its kind on Earth. The monument encompasses 6,155 acres.

Elevations at the monument vary from 8,100 feet in the Ashdown Gorge on the western boundary to 10,662 feet in the northeastern section above the amphitheater. The majority of the area below the amphitheater's rim (4,830 acres of the monument) is managed as recommended wilderness and designated as a research natural area. Because the monument is at elevations over 10,000 feet, the weather can change dramatically and turn inclement at any time.

A large variety of plants and animals exist in the monument due to the wide range in elevation and micro-habitats. Mule deer and marmots are common, as well as porcupines, red squirrels, golden-mantled ground squirrels, long-tailed weasels, and chipmunks. Mountain lions, bobcats, elk, and other mammals live in the area but are seldom seen. The bristlecone pine can also be found in the high country, with some local specimens known to be more than 1,600 years old. The largest diameter bristlecone in the state of Utah is found near Spectra Point. Subalpine meadows dot the canyon rim with beautiful wildflower displays during the summer.

The monument lies within the traditional homeland of the Southern Paiutes, a land area that spans southern Utah, Nevada, and northern Arizona. According to their oral traditions, they have always been here. Archeologists have documented sites of ancestral American Indians or their habitations within and surrounding Cedar Breaks dating back more than 10,000 years. More recent history is represented in the monument's visitor center and ranger caretaker cabin, which demonstrate classic NPS rustic architecture. These structures are listed in the National Register of Historic Places and were built in the late 1930s by the Civilian Conservation Corps (CCC), a program that provided work for unemployed men during the Great Depression.

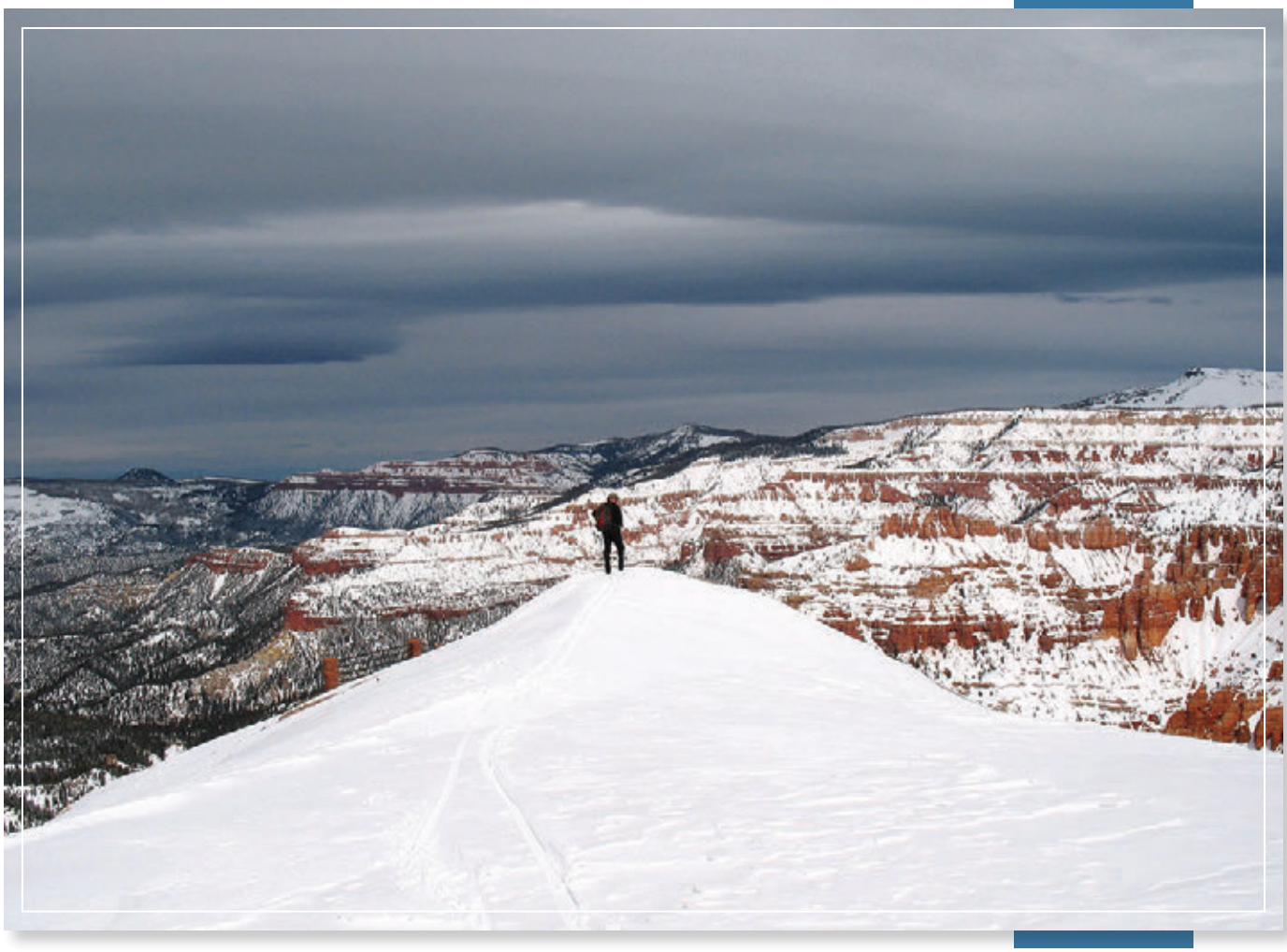
The monument attracts approximately 595,000 visitors each year. The monument's visitor facilities, all of which are on the rim, include a visitor center, campground, picnic area, overlooks, and trails. Most visitors recreate during the summer months and hike the trails, sightsee along the scenic monument highway, participate in interpretive programs, camp, and picnic. In the summer, the wildflowers come alive and are celebrated with the annual Wildflower Festival. The fall colors are stunning, while the southern Utah winters attract outdoor enthusiasts who like to ski, snowshoe, and snowmobile on designated routes. The main scenic drive closes to vehicular traffic after the first deep snowfall, usually in late November, and becomes the route for the groomed snowmobile trail. More than 167,000 visitors, or 25% of the monument's annual visitation, enjoy a variety of winter recreational opportunities from mid-October through May.

The region surrounding the monument is a popular year-round vacation destination, offering a variety of exceptional recreational opportunities. Nearby gateway communities of Brian Head, Parowan, Cedar City, and Panguitch host tourists from around the world as they visit the monument and the adjacent Dixie National Forest. The monument is managed as one of the three NPS units of the Zion Park Group, including Zion National Park and Pipe Spring National Monument. The efforts of many partners and volunteers are essential to protecting and sharing the stories of the Cedar Breaks National Monument and its outstanding resources.

Park Purpose

The purpose statement identifies the specific reason(s) for establishment of a particular park. The purpose statement for Cedar Breaks National Monument was drafted through a careful analysis of its enabling legislation and the legislative history that influenced its development. The park was established by presidential proclamation on August 22, 1933 (see appendix A). The purpose statement lays the foundation for understanding what is most important about the park.

At 10,700 feet on the western edge of the Colorado Plateau, Cedar Breaks National Monument preserves the multicolored geologic spectacle of the Cedar Breaks amphitheater, scenic vistas, and natural and cultural resources of scientific interest for public appreciation, education, recreation, and enjoyment.



Park Significance

Significance statements express why a park's resources and values are important enough to merit designation as a unit of the national park system. These statements are linked to the purpose of Cedar Breaks National Monument and are supported by data, research, and consensus. Statements of significance describe the distinctive nature of the monument and why an area is important within a global, national, regional, and systemwide context. They focus on the most important resources and values that will assist in park planning and management.

The following significance statements have been identified for Cedar Breaks National Monument. (Please note that the sequence of the statements does not reflect the level of significance.)

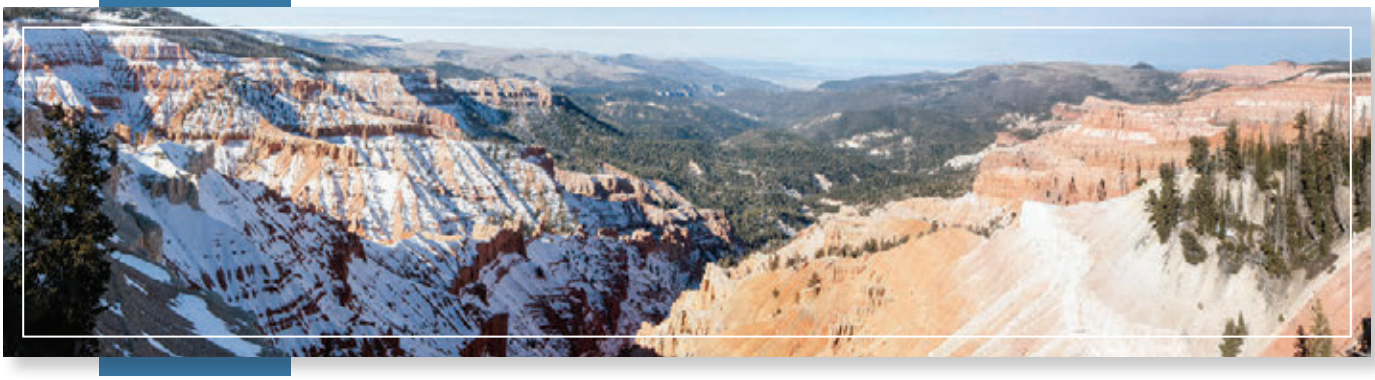
1. **Geology.** The rugged escarpment or "breaks" for which the Cedar Breaks National Monument was named are the result of recent tectonic uplift in highly erosive limestone strata that continues to shape this striking landscape and its features. Geologic strata exposed in the monument represent some of the youngest, and therefore the highest and last, in a sequence of sedimentary rocks that characterize the Colorado Plateau and that accumulated over 600 million years to a thickness of 15,000 feet.

2. **Physical geography.** The 2,500 foot westward-facing escarpment of the Cedar Breaks amphitheater presents a magnificent scene in brilliant colors of towering hoodoos, terraced cliffs, arches, bridges, deeply cut canyons, and exposed strata. The combination of an exceptional rate of erosion, high elevation, and brilliantly colored formations is distinctive among NPS units.

3. **High-elevation flora and fauna.** Cedar Breaks National Monument protects a variety of distinctive flora and fauna, including intensely beautiful wildflower displays, ancient bristlecone pines more than 1,600 years old, and subalpine wildlife. These species have adapted to the severity of climate and weather on the high elevations of the Markagunt Plateau, contributing to the resilience and integrity of the greater subalpine ecosystem.

4. **Peoples' use of the land.** Cedar Breaks protects evidence of some of the highest elevation prehistoric sites within the national park system, representing the astonishing ability of humans to adapt to extreme and at times harsh environments.

5. **Visitor experience.** Located at over 10,000 feet, Cedar Breaks offers opportunities to experience one of the most easily accessible high elevation units in the national park system. Visitors experience a diversity of recreational and educational opportunities within the quiet solitude, colorful beauty, dark night skies, and endless vistas of the monument, through cross-country skiing, snowshoeing, and snowmobiling, viewing the spectacular summer wildflowers and watchable wildlife, backcountry hiking red rock canyons and streams below the amphitheater, or appreciating the changing colors of autumn. The designated research natural area within the monument provides an important venue for researchers to study a relatively pristine area of the rapidly developing American West.



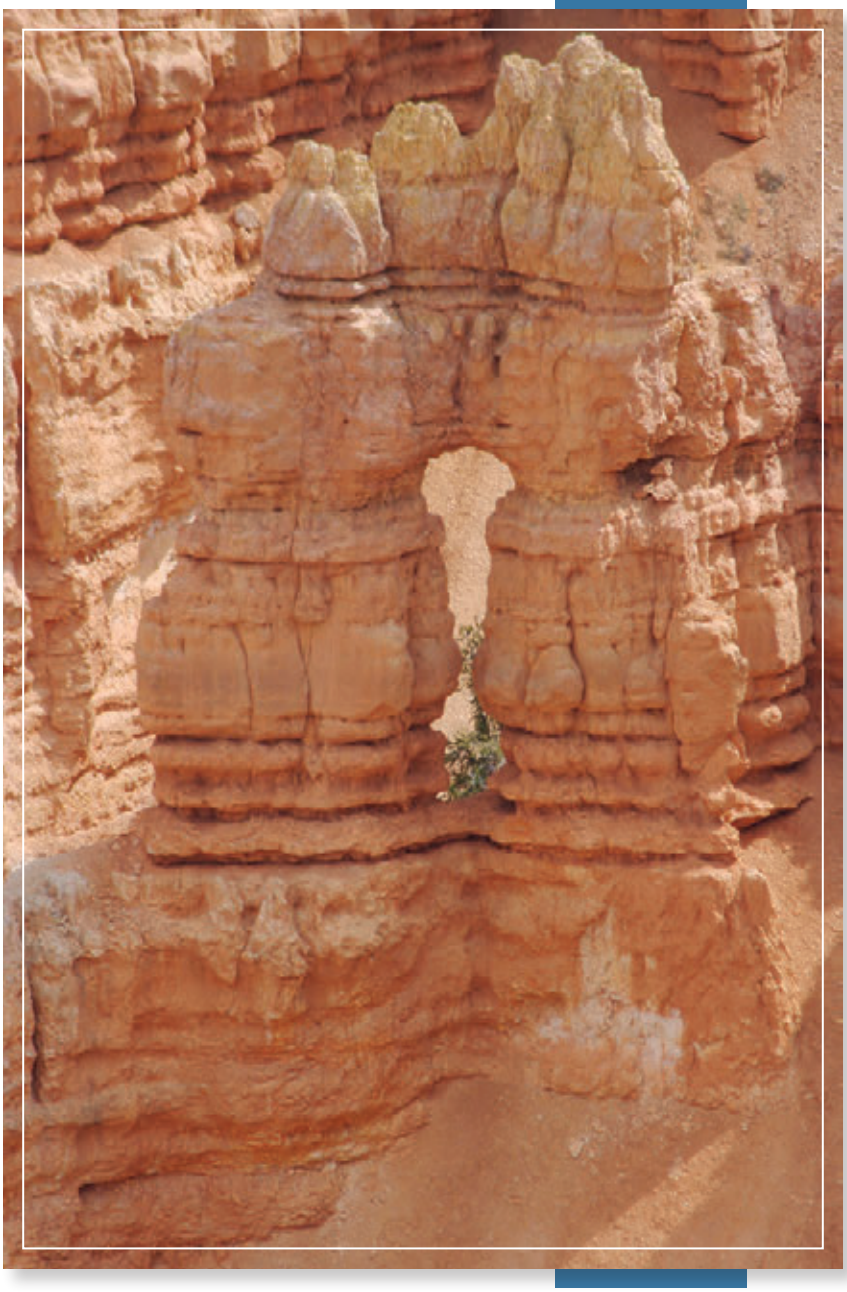
Fundamental Resources and Values

Fundamental resources and values (FRVs) are those features, systems, processes, experiences, stories, scenes, sounds, smells, or other attributes determined to warrant primary consideration during planning and management processes because they are essential to achieving the purpose of the park and maintaining its significance. Fundamental resources and values are closely related to a monument's legislative purpose and are more specific than significance statements.

Fundamental resources and values help focus planning and management efforts on what is truly significant about the monument. One of the most important responsibilities of NPS managers is to ensure the conservation and public enjoyment of those qualities that are essential (fundamental) to achieving the purpose of the monument and maintaining its significance. If fundamental resources and values are allowed to deteriorate, the park purpose and/or significance could be jeopardized.

The following fundamental resources and values have been identified for Cedar Breaks National Monument:

- **Geologic Resources.** Millions of years of sedimentation, followed by uplift and rapid erosion produced the exquisite landscapes of Cedar Breaks and continues to carve out the giant 2,500-foot-deep amphitheater that spans nearly 4 miles across. Visitors are drawn by the myriad spectacular rock shapes including columns, spires, hoodoos, windows, pedestals, bridges, alcoves, and canyons carved into the red, orange, and white fluvial and lacustrine strata of the Claron Formation. The processes that formed the breaks are continuing, fueled by tectonic uplift and the erosive forces of water, ice, and wind. Cedar Breaks is linked to other parks and monuments in the region by providing a bookend to the accumulation of sedimentary rock on the Colorado Plateau with the complementary bookend found at the bottom of Grand Canyon. The geologic processes illustrated at the edge of this plateau are an important piece of the larger geologic landscape of southwest Utah to which the monument's many stories and features are tied.



- **Plant and Animal Communities.** The protected environment at Cedar Breaks provides a relatively undisturbed area for plants and animals. Visitors have the opportunity to view wildlife typically found in subalpine ecosystems. The rim and geologic amphitheater display a broad array of flora in a relatively small area, ranging from ancient bristlecone pines to rare and endemic high-elevation plants. Lush meadows present an annual explosion of colorful wildflowers.
- **High-Quality Scenic Vistas, Dark Night Skies, and Soundscapes.** Clean air and largely undeveloped viewsheds allow visitors to find beauty year-round in the vivid colors of the amphitheater, dramatic rock formations, stunning vistas of towering Brian Head Peak and the more distant ranges. On the high plateau, alpine meadows brimming with wildflowers and ancient forests provide a stark contrast with the ruggedness found in views of the breaks. The dark and brilliant night skies and natural soundscapes at Cedar Breaks are of superb quality in part due to the high elevation and remote location of the monument.
- **Archeological Resources.** Cedar Breaks protects remnants of humanity's past. The Brian Head chert found in abundance within the monument has been an important resource for the many cultures that have utilized the landscapes of Cedar Breaks for millennia. The remnants of historic structures, prehistoric lithic scatters, tools, and other artifacts and features in the monument provide scientific value and insight into humanity's use of high-elevation landscapes from the end of the last ice age through the early 20th century.
- **Opportunities to Experience, Support, and Study the Resources.** Outstanding scientific interest as well as the opportunity for public recreation and appreciation influenced the establishment of the monument. Through vital partnerships and a variety of programs, visitors experience recreational and educational opportunities that foster invaluable connections to this place. Continued scientific research within the monument bolsters the ability to understand, interpret, and protect resources at Cedar Breaks National Monument.

Other Important Resources and Values

Cedar Breaks National Monument contains other resources and values that are not fundamental to the purpose of the monument and may be unrelated to its significance, but are important to consider in planning processes. These are referred to as "other important resources and values" (OIRV). These resources and values have been selected because they are important in the operation and management of the monument and warrant special consideration in park planning.

The following other important resources and values have been identified for Cedar Breaks National Monument:

- **Recommended Wilderness.** Seventy-eight percent of Cedar Breaks National Monument (4,830 acres) is protected as recommended wilderness, and this high-elevation landscape strongly exemplifies the qualities that comprise wilderness character. The largely pristine and primitive landscape provides opportunities for solitude and a natural haven for flora and fauna. The monument's designated research natural area, which shares the same boundaries as the recommended wilderness, further demonstrates the special pristine naturalness of this area and its importance for scientific research and education.
- **Historic Structures.** Beginning with early 20th century tourism development through today, the Civilian Conservation Corps, the Utah Parks Company, and now the National Park Service have provided facilities and access for visitors to experience the rich human history of this region. The visitor center and ranger cabin at Cedar Breaks are legacies of the Civilian Conservation Corps, still used by the monument to this day. Both structures are used daily by personnel and monument visitors during the summer months. While the small 900 square foot visitor center is often inadequate to meet the needs of over 595,000 annual visitors, it is believed to be the only CCC-constructed visitor center in the National Park Service that is still in active use today. A single shed also remains from the Cedar Breaks Lodge complex and stands as a monument to the Utah Parks Company and early 20th century tourism in the southwestern parks.

Interpretive Themes

Interpretive themes are often described as the key stories or concepts that visitors should understand after visiting a park—they define the most important ideas or concepts communicated to visitors about a park unit. Themes are derived from, and should reflect, park purpose, significance, resources, and values. The set of interpretive themes is complete when it provides the structure necessary for park staff to develop opportunities for visitors to explore and relate to all park significance statements and fundamental and other important resources and values.

Interpretive themes are an organizational tool that reveal and clarify meaning, concepts, contexts, and values represented by park resources. Sound themes are accurate and reflect current scholarship and science. They encourage exploration of the context in which events or natural processes occurred and the effects of those events and processes. Interpretive themes go beyond a mere description of the event or process to foster multiple opportunities to experience and consider the park and its resources. These themes help explain why a park story is relevant to people who may otherwise be unaware of connections they have to an event, time, or place associated with the park.

The following interpretive themes have been identified for Cedar Breaks National Monument:

- **Solitude.** The juxtaposition of the subalpine environment and the geologic amphitheater affords multiple opportunities to explore a wild place of solitude, beauty, and silence.
- **Wildlife/Vegetation.** Cedar Breaks provides opportunities to explore the intense struggle for life as the flora and fauna interact with this high-elevation environment in their efforts to survive.
- **Beauty.** The vibrant palette of colors in Cedar Breaks can be found in the interplay of rock and light, the explosion of wildflower blooms, the ever-changing weather, and other dynamic natural processes that contribute to the beauty of the monument.

- **Physical Geography.** As a result of geologic processes, the high elevation of Cedar Breaks offers a stark contrast from the surrounding desert and provides visitors with a different perspective as they experience the region.
- **Peoples' Use of the Land.** Through such activities as lithic tool manufacturing, livestock grazing, recreation, and tourism, the way in which people value the land at Cedar Breaks and the surrounding region is inextricably linked to geologic and natural processes. (Possible subthemes include the roles of the Civilian Conservation Corps, Utah Parks Company, and National Park Service.)
- **Geology.** The colorfully layered mineral-imbued scenic amphitheater of Cedar Breaks National Monument provides opportunities to explore and discover the forces of erosion, uplift, deposition, and volcanic activities that have occurred over millions of years, and that uplift and erosion continues to this day.
- **Wilderness.** The remote location, solitude, natural sounds and views, and the pristine dark night sky of Cedar Breaks reveal the character and beauty of true wilderness and the benefits of preservation and stewardship.
- **Night Sky.** The dark night sky at Cedar Breaks has deep natural, cultural, and scenic importance, a vanishing resource prominent in many visitors' values.

Part 2: Dynamic Components

The dynamic components of a foundation document include special mandates and administrative commitments and an assessment of planning and data needs. These components are dynamic because they will change over time. New special mandates can be established and new administrative commitments made. As conditions and trends of fundamental and other important resources and values change over time, the analysis of planning and data needs will need to be revisited and revised, along with key issues. Therefore, this part of the foundation document will be updated accordingly.

Special Mandates and Administrative Commitments

Many management decisions for a park unit are directed or influenced by special mandates and administrative commitments with other federal agencies, state and local governments, utility companies, partnering organizations, and other entities. Special mandates are requirements specific to a park that must be fulfilled. Mandates can be expressed in enabling legislation, in separate legislation following the establishment of the park, or through a judicial process. They may expand on park purpose or introduce elements unrelated to the purpose of the park. Administrative commitments are, in general, agreements that have been reached through formal, documented processes, often through memorandums of agreement. Examples include easements, rights-of-way, arrangements for emergency service responses, etc. Special mandates and administrative commitments can support, in many cases, a network of partnerships that help fulfill the objectives of the park and facilitate working relationships with other organizations. They are an essential component of managing and planning for Cedar Breaks National Monument.

For more information about the existing special mandates and administrative commitments for Cedar Breaks National Monument, please see appendix B.

Assessment of Planning and Data Needs

Once the core components of part 1 of the foundation document have been identified, it is important to gather and evaluate existing information about the park's fundamental and other important resources and values, and develop a full assessment of the park's planning and data needs. The assessment of planning and data needs section presents planning issues, the planning projects that will address these issues, and the associated information requirements for planning, such as resource inventories and data collection, including GIS data.

There are three sections in the assessment of planning and data needs:

1. analysis of fundamental and other important resources and values
2. identification of key issues and associated planning and data needs
3. identification of planning and data needs (including spatial mapping activities or GIS maps)

The analysis of fundamental and other important resources and values and identification of key issues leads up to and supports the identification of planning and data collection needs.

Analysis of Fundamental Resources and Values

The fundamental resource or value analysis table includes current conditions, potential threats and opportunities, planning and data needs, and selected laws and NPS policies related to management of the identified resource or value.

Fundamental Resource or Value	Geologic Resources
Related Significance Statements	Significance statements 1 and 2.
Current Conditions and Trends	**Conditions** • Geologic features are intact and processes continue in a natural manner with negligible impacts from visitor activities. The processes include an exceptionally high rate of natural erosion. The roads have the greatest impact, which are minimized by the relatively gentle topography on the rim and the adjacent watershed divide. • Water continues to naturally flow down through the amphitheater and its formations, unencumbered by dams or artificial augmentation. As a result, the tremendous transport of sediment that occurs through the breaks remains intact. • Surface water on the rim is naturally uncommon in spite of the abundant snowfall due to the extensive karst development in the Claron Formation. As such, water supplies for administrative uses are limited. • There is limited development around the natural features, largely due to the topography of the amphitheater, which limits access. • The Wasatch Ramparts are a distinct feature, accessed and viewed from Ramparts Trail. **Trends** • Climate change is predicted to include alterations to the amount and timing of precipitation, as well as an increase in average temperatures. These changes will, and likely are already, altering the erosional forces that continue to shape the amphitheater although the exact character of these changes is not predictable at this time. • The high degree of natural variability found in precipitation, flood events, and sediment transport in this setting will likely mask the impacts of climate change for some time. • Natural geologic processes continue to occur within the natural range of variability, largely unhindered by NPS management or external land uses. • In recent years there may be slightly increased visitation below the rim of the amphitheater where the majority of geologic formations exist; however, any impact appears to be slight.
Threats	• Given the rapid pace of erosion in the breaks, facilities near the rim will be threatened by failure of the cliffs and recession of the slopes along the rim. Decisions between hardening facilities against the erosion or moving them to or reconstructing them at a better location will be necessary. • Construction of roads and trails in the future could also impact the stability of a slope. Rock fall and slope failure is a potential hazard in places along the roads and trails of the monument. • Natural seismic activity is a risk because the Hurricane Fault (a few miles west) is capable of producing rare earthquakes up to a magnitude 7. • Fractures and sinkholes inherent in the Claron Formation pose threats to overlooks and other visitor facilities. • Climate change may pose a threat to the geologic features and processes in a number of ways, including alterations in the severity and frequency of the monsoons and winter storms (which would affect erosion rates and levels of snowfall), and changes in temperature and number of nights of freezing temperatures (which could alter freeze-thaw processes). • Changes in natural processes, such as fire, could affect the geologic features by reducing soil stability and snow capture and increasing runoff and erosion rates. • Potential future increases in visitation below the rim could increase impacts to geologic formations.

Fundamental Resource or Value	Geologic Resources
Opportunities	• Increase collection of scientific data through partnerships with nonprofit organizations, other federal or state agencies, or educational institutions such as Utah State University, Dixie State University, and Southern Utah University. • As few visitors experience the features from within the amphitheater, develop a small tactile walk-through model of the formations with appropriate textures and colors, or partner with the US Forest Service (USFS) to provide this experience at a more accessible nearby location. • Increase Americans with Disabilities Act (ADA) accessibility so visitors could view formations from the overlooks. • Ensure that any future monument development will not negatively alter natural processes or features (i.e., drainage problems from a newly constructed viewpoint).
Data and/or GIS Needs	• LiDAR for viewshed analysis and geological formations in the monument. • Monitoring weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts on monument resources, and to validate projected climate change futures over time. • Soil survey and GIS layers. • A survey of cave resources. • Spring inventory of lower Breaks.
Planning Needs	• Resource stewardship strategy. • Climate change scenario plan.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Clean Water Act of 1972 • Clean Air Act (42 USC 7470(2)) • 1988 Federal Cave Resources Protection Act • Endangered Species Act of 1973, as amended • National Environmental Policy Act • National Parks Omnibus Management Act of 1998 • Paleontological Resources Preservation (in the Omnibus Public Land Management Act) of 2009 • 36 CFR – Title 36 – Parks, Forests, and Public Property • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and other Natural and Cultural Resources" • Cedar Breaks National Monument Water Rights Settlement Agreement **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS *Management Policies 2006* (4.6.1, 4.6.2, 4.6.4 and 4.8.1.1) • Directors Order 77: *Natural Resource Management* • Directors Order 77-1: *Wetland Protection* • NPS *A Call to Action: Preparing for a Second Century of Stewardship and Engagement* • NPS *Natural Resource Management Reference Manual 77*

Fundamental Resource or Value	Plant and Animal Communities
Related Significance Statements	Significance statement 3.
Current Conditions and Trends	**Conditions** • The monument has a fairly diverse plant population for a relatively small area, in part due to the elevational gradient within the monument. • Plant communities include pinyon-juniper forests; ponderosa pine, blue spruce, and Douglas-fir overstory with Rocky Mountain maple, greenleaf manzanita, and/or Oregon grape understory; Engelmann spruce-subalpine fir overstory with monkshood, Oregon grape, and/or gooseberry understory; and subalpine meadows of grasses, sedges, and forbs. • At the edges of the cliffs, ancient bristlecone pine trees thrive in the harsh exposed environment to which they are well adapted. The oldest bristlecone pine known in the monument is about 1,700 years old. • A number of rare and endemic plants are found in the monument—most are naturally protected because they grow in areas that are hard to reach. • A large portion of the monument has been affected by the spruce bark beetle epidemic that has killed thousands of acres of Engelmann spruce stands on the Markagunt Plateau. This beetle kill has resulted in changes in the composition of the forest. • The most widespread invasive nonnative plants are dandelion and smooth brome. • Overall condition of the flora in the monument is good, with the vegetation at the bottom of the amphitheater being particularly healthy due to some recent understory burns. • Elk, mule deer, mountain lion, and black bear are the monument's dominant large animals, although sightings of mountain lions and bears are rare. The higher elevations provide habitat for marmot, badger, and porcupine. Middle elevations support gray fox and coyote. A large number of rodents and birds are also present. • Condors are seen occasionally in the monument and may be more frequently sighted if they become established in the Kolob Canyons area of Zion National Park. • The ephemeral ponds provide habitat for frogs and aquatic insects. • Overall condition of the fauna in the monument is good, with pika being the exception. Pikas are currently considered extirpated from the monument as habitat becomes marginalized due to climate change. • To date, invasive birds (like cow birds or starlings) that compete with native bird species have not been sighted in the monument. **Trends** • NPS staff have made progress toward controlling smooth brome and reseeding affected areas with native plants. • Animal populations are fairly stable, although some changes have been observed as to where animals are found seasonally within and around the monument.
Threats and Opportunities	**Threats** • Monument ecosystems are highly vulnerable to upslope vegetation shifts (i.e., plant species moving to higher elevations) due to projected climate change for the region, including changes in temperature and precipitation. • Introduction and spread of invasive plants by visitors, other traffic passing through the monument, and connectivity to other nearby land with larger invasive plant problems. Climate change may exacerbate the spread of some invasive species. • Increases in mean annual temperature, storm frequency and intensity, and drought events projected for the region could impact hydrology, water chemistry, and associated habitat/species.

Fundamental Resource or Value	Plant and Animal Communities
Threats and Opportunities	**Threats (continued)** • The many downed trees from beetle kill increase the risk of fire events and could cause changes in the vegetation community. • Social trailing could locally affect some of the rare plants along the rim of the amphitheater. • Some of the bristlecone pines may be adversely affected by many visitors touching or walking close to the trees. • Human-wildlife interactions (i.e., feeding wildlife or vehicle-animal collisions) increase with increased visitation. • Dogs are not allowed on unpaved trails; however, there have been some cases of dogs interfering with wildlife. • Increasing deer populations could have negative effects on vegetation. • Illegal poaching, tree harvesting, and plant collecting in the monument may become issues. **Opportunities** • Continue working with county weed management groups, particularly building a relationship with Iron County to work toward larger landscape health against invasive species. • Partner with Dixie National Forest to do invasive species control. • Educate visitors to prevent the spread of invasive pest species by bringing wood for campfires into the monument. • Work with local universities (like Southern Utah University flora class) to help assist in monitoring plants. Develop relationships with universities for students to do Master's or PhD research in the monument. • Provide opportunities for citizen science projects, where people can help discourage wildflower picking, record blooming times, etc.
Data and/or GIS Needs	• Continue monitoring pika population. • Assessment/monitoring of bristlecone pine health. • Continued invasive species monitoring and data collection. • Information about the successional stage of the forest following the beetle kill. • Phenology data for plants and animals. • Information about diversity and abundance of pollinators. • Monitoring population trends of rare and endemic plants. • Update wildlife species checklist. • Data on bat diversity and populations, including strategies for white nose syndrome prevention. • Animal radio-collaring projects to gather data on range. • Data on bird species presence and breeding bird species within the monument. • Monitoring weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts on monument resources, and to validate projected climate change futures over time. • Climate change vulnerability assessment for select resources.
Planning Needs	• Resource stewardship strategy. • Vegetation management plan. • Climate change scenario plan.

Fundamental Resource or Value	Plant and Animal Communities
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Endangered Species Act of 1973, as amended • National Invasive Species Act of 1996 • Lacey Act of 1900, as amended • Federal Noxious Weed Act of 1974, as amended • Clean Water Act of 1972 • Clean Air Act (42 USC 7470(2)) • 1988 Federal Cave Resources Protection Act • Executive Order 13112, "Invasive Species" • Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • Director's Order 18: *Wildland Fire Management* • Director's Order 77: *Natural Resource Management* • NPS *Management Policies 2006* (1.6, 4.1, 4.1.4, 4.4.1, 4.7.1, 4.7.2) • NPS *Wildland Fire Management Reference Manual 18* • NPS *Natural Resource Management Reference Manual 77*

Fundamental Resource or Value	High-Quality Scenic Vistas, Dark Night Skies, and Soundscapes
Related Significance Statements	Significance statements 1, 2, 3, and 5.
Current Conditions and Trends	**Conditions** • Scenic vistas are one of the top reasons people visit Cedar Breaks National Monument. • The monument provides and maintains ample overlooks and interpretive waysides are currently being installed throughout the monument to inform visitors about visible features. This infrastructure is in good condition. • Scenic vistas are currently impacted by the many trees downed due to beetle kill; Federal Aviation Administration radar installation; NPS water tanks; and the private inholding within Ashdown Gorge Wilderness. Cedar City is also visible from the monument. • Although dependent on air quality on a given day, views of long distances are frequently available and of good quality. • The scenic drive through the monument offers uninterrupted views of meadows, wildflowers, and other scenic views. • The monument has a relatively low anthropogenic light ratio as compared to other NPS units and most areas of the country. The good quality of the night skies means that the Milky Way is visible from horizon to horizon and may show great detail. Many constellations are visible and Zodiacal light (the faint glow at the horizon just before dawn or just after dusk) can be seen under favorable conditions). • The monument provides important habitat for nocturnal wildlife, and with limited outdoor nighttime lighting, the monument helps to preserve the natural night sky conditions of southern Utah. • To celebrate and share the beauty of the dark night skies, Cedar Breaks hosts a series of star parties throughout both the winter and summer seasons. NPS staff are also actively working with other nearby communities to educate them about the importance of night sky resources and how they can minimize light pollution to protect the night sky across the Colorado Plateau. • Soundscapes at the monument are important to the natural and cultural resources and to the visitor experience (i.e., minimizing noise to help better depict what the site would have been like previous to modern development). The monument's acoustic environment is predicted by the NPS Natural Sounds and Night Skies Division to be 1.1 decibels above the natural ambient sound level, although this was likely measured in the absence of snowmobile traffic. This means that that the listening area for wildlife and visitors is reduced by 22%, and may be further reduced during the winter presence of snowmobiles. Compared to parks throughout the national park system, this is a low number and shows a prominence of natural sounds at the monument. **Trends** • Increasing development in Cedar City (some of which is visible from the monument) is expected to continue into the near future. • Increasing frequency of fires and air pollution related to smoke and particulates. • There have been slight but negligible increases in light pollution from nearby developments. • The acoustic environment and soundscapes at the monument are gradually becoming more impacted by anthropogenic noise from slight increases in traffic.

Fundamental Resource or Value	High-Quality Scenic Vistas, Dark Night Skies, and Soundscapes
Threats and Opportunities	**Threats** • Increased development and vehicle, snowmobile, and air traffic near the monument negatively impacts the viewshed, acoustic environment and soundscapes, and night skies. • Air quality can be impacted by pollution from near and far urban centers and development and wildfires. Poor air quality negatively impacts scenic vistas from the monument. • Visible beetle-kill trees within and outside the monument are altering scenic vistas. • In the past, there has been some interest in leasing federal oil and gas to the west of the monument. Were development to occur, access roads, drill pads, facilities, and night lighting could impact monument viewsheds. The natural soundscape may also be impacted through potential construction of new access roads and associated increases in traffic and use of machinery. **Opportunities** • Work with local communities and regional groups to promote responsible and unobtrusive future development. • Work with local communities and outfitters on using the quietest snowmobiles possible. • Coordinate with Dixie National Forest fire management efforts to conduct prescribed burns in ways that would not impact the scenic vistas. • Work with Southern Utah University to establish a long-term air quality and weather monitoring station at the monument with students collecting and analyzing the data. • Investigate providing future trails that could allow visitors more diverse views from the monument, while ensuring the trail infrastructure does not negatively impact the viewshed or geologic features. • Work with the NPS Natural Sounds and Night Skies Division for help interpreting the night sky, acoustic environment, and soundscapes at the monument, as well as continued technical assistance. • Apply to the International Dark Sky Association for recognition as an International Dark Sky Park. • Continue working with astronomy clubs and universities to attend night sky programs. • Develop opportunities along existing trails to encourage visitors to enjoy natural sound/quiet. • Encourage the USFS and Bureau of Land Management (BLM) to recognize viewsheds from the monument in their land use planning, and in developing stipulations for mineral development.
Data and/or GIS Needs	• LiDAR for viewshed analysis and geological formations in the monument. • Air quality monitoring. • Continued soundscape monitoring. • Continue monitoring night sky condition.
Planning Needs	• Viewshed management plan. • Resource stewardship strategy.

Fundamental Resource or Value	High-Quality Scenic Vistas, Dark Night Skies, and Soundscapes
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • The Clean Air Act [42 USC 7470(2)] • National Parks Air Tour Management Act of 2000 • National Parks Overflight Act of 1987 (Public Law 100-91) • "Audio Disturbances" (36 CFR 2.12) • "What is the maximum noise level for the operation of a vessel?" (36 CFR 3.15) **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • Director's Order 47: *Soundscape Preservation and Noise Management* • NPS *Management Policies 2006* (1.4) "Park Management" • NPS *Management Policies 2006* (1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS *Management Policies 2006* (4.7) "Air Resource Management" • NPS *Management Policies 2006* (4.9) "Soundscape Management" • NPS *Management Policies 2006* (4.10) "Lightscape Management" • NPS *Management Policies 2006* (5.3.1.7) "Cultural Soundscape Management" • NPS *Management Policies 2006* (8.4) "Overflights and Aviation Uses" • NPS *Management Policies 2006* (8.2.3) "Use of Motorized Equipment" • NPS *Natural Resource Management Reference Manual 77*

Fundamental Resource or Value	Archeological Resources
Related Significance Statements	Significance statement 4.
Current Conditions and Trends	**Conditions** • An intensive survey of 2,318 acres within the monument, and additional acres surrounding the monument on lands administered by the Dixie National Forest, resulted in the discovery of 99 archeological sites and 32 isolated occurrences. • The monument is considered 100% inventoried for archeological sites, with all known archeological sites (99) documented. A smaller number of sites (5–6) are in the recommended wilderness. The majority of sites are not in highly erosive portions of the monument. • Current condition data exists for all sites. Sites, spatial data, and photographs are documented in the Archeological Sites Management Information System (ASMIS). In general, the majority of sites are in fairly good condition. • The majority of the sites appear to be associated with resource procurement and processing of locally available Brian Head chert, a high-quality lithic raw material used for making stone tools. • X-ray fluorescence analysis of obsidian artifacts indicates a decidedly Great Basin connection. Obsidian from four different locales is present at Cedar Breaks sites, dominated by obsidian from the Wild Horse Canyon area of the Mineral Mountains, Utah. • Archeological records are housed and maintained at Zion National Park. Duplicates are kept on-site at the monument for monument staff use. • Archeological collections are housed at Zion National Park. **Trends** • Archeological resources are generally stable.
Threats and Opportunities	**Threats** • Increases in mean annual temperature, storm frequency and intensity, and drought events projected for the region could impact archeological resources through erosional events, increase in fire frequency and burn intensity, and increase in invasive species. • Visitor-created social trails in areas known to have archeological resources may threaten those resources, most often without the visitor being aware of the threat. • Lack of consistent monitoring data makes it difficult to determine if visitors are negatively impacting archeological resources. • Fire hazards and tree hazards (such as fallen trees due to beetle kill) threaten existing archeological resources, although fallen trees will typically not be removed. **Opportunities** • A recently filled position at the monument is focused on managing and monitoring archeological resources. This position brings opportunities that were not previously available at the monument. Expertise and technical support to the resource technician is provided by Zion National Park staff. An internship focused on resources will begin next year. • Partner with Southern Utah University's new anthropology degree program to coordinate service learning and internship opportunities. • Develop monitoring packets with protocols for monitoring archeological resources and potential impacts, sourcing from current packets used by Zion National Park. Because monument staff are not currently able to consistently monitor resources, these packets could be incorporated into internships and partnerships with Southern Utah University and others. • Work with cooperating association Zion Natural History Association and Zion Canyon Field Institute to develop research and education workshop(s) related to archeological resources. Youth involvement could be part of these programs.

Fundamental Resource or Value	Archeological Resources
Threats and Opportunities	**Opportunities (continued)** • Partner with Dixie National Forest to coordinate archeological resources stewardship efforts. • Capture oral histories and institutional knowledge of individuals and technical experts in the area, as they relate to ethnographic use or importance of Cedar Breaks. This effort could be coordinated with Southern Utah University, which has oral history collection capabilities and collections. • Continue focusing efforts toward education opportunities related to archeological resources. For example, wayside exhibits about archeological resources are scheduled for completion and implementation at the writing of this document. • Pursue and implement components of the NPS Cultural Resource Challenge where possible. • Foster youth involvement to increase understanding, communicate relevancy, and promote stewardship.
Data and/or GIS Needs	• Consistent monitoring data on archeological resources. • Archeological overview and assessment. • Ethnographic overview and assessment. • Collect oral histories related to monument history and land use history. Prepare National Register of Historic Places (NRHP) nominations.
Planning Needs	• Resource stewardship strategy. • Finalize historic resource study.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • The Antiquities Act of 1906 • Historic Sites, Buildings, and Antiquities Act of 1935 • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • Archeological and Historic Preservation Act of 1974 • American Indian Religious Freedom Act of 1978 • Archaeological Resources Protection Act of 1979 • Native American Graves Protection and Repatriation Act of 1990 • Museum Act (54 USC 102501 through 102504) • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Executive Order 13007, "Indian Sacred Sites" • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" • Secretarial Order 3317, "Department of the Interior Policy on Consultation with Indian Tribes" • "Curation of Federally Owned and Administered Archeological Collections" (36 CFR 79) • "Protection of Historic Properties" (36 CFR 800) **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • Director's Order 28: *Cultural Resource Management* • Director's Order 28A: *Archeology* • NPS *Management Policies 2006* (chapter 5) "Cultural Resource Management" • *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*

Fundamental Resource or Value	Opportunities to Experience, Support, and Study the Resources
Related Significance Statements	Significance statements 1, 2, 3, 4, and 5.

Current Conditions and Trends	**Conditions**
	• **Recreation and Visitor Activities:**
	  • Most visitors recreate during the summer months and hike the trails, sightsee on the scenic monument highway, participate in interpretive programs, camp, picnic, and attend the annual Wildflower Festival.
	  • Ranger-led evening programs are offered during summer weekends in the campground.
	  • Winter visitors to the monument (25% of annual visitors) come to enjoy cross-country skiing and snowshoeing, visiting the winter ranger station "yurt" when open on the weekends, and snowmobiling on one groomed trail.
	  • The monument has a popular Junior Ranger program. These place-based activities encourage youth to explore their environment.
	• **Partnerships and Volunteers:**
	  • Cedar Breaks relies heavily on its partnerships in the community and on its robust volunteer program. Cedar Breaks operates an active Volunteer-In-Parks (VIP) program, with about 80–95 volunteers participating with varying levels of involvement. All divisions within the monument take part in the VIP program, which is directed by the chief of education and partnerships. A volunteer to the monument helps manage this powerful volunteer program.
	  • Cedar Breaks volunteers strongly support the management and operation of the monument as well as resource protection. Programs supported by the volunteer program include Camp Host Program, Winter Yurt Program, Star Parties, and Wildflower Festival. A few of the partnership and volunteer programs are described below.
	  • The monument fosters partnerships with the Cedar City/Brian Head Tourism Board, the Intergovernmental Internship Cooperative, Partners in the Parks, Retired Senior Volunteer Program, Sustainable Operations Partnership, and the Southern Utah Recycling Coalition, among others. Please see appendix F, "Partnership and Volunteer Programs" for more information about each of these programs.
	• **Scientific Research:**
	  • Promoting and supporting scientific research is a key component of the monument's enabling legislation. There are a number of significant and ongoing research projects being conducted within the monument that span a wide range of topics.
	  • One significant ongoing project with Utah State University is to monitor forest condition and demography over the long term. Through precise mapping of existing trees and tall shrubs, and annual surveys of mortality and regeneration, the researchers seek to understand how western forests are changing. In particular, the focus will be on the causes, rates, and consequences of tree mortality to understand the climatic and spatial correlates of forest change. The findings from this research will be directly applicable to land managers on the Colorado Plateau, and through comparison with other, similar forest demography plots around the world, the hope is to advance global theories of forest development.
	
	Trends
	• **Recreation and Visitor Activities:** Calendar year 2014 visitation at Cedar Breaks National Monument was over 760,000, which is the highest ever recorded and represents a 45% increase over 2010. This confirms recent trends that indicate that with nearby Bryce Canyon and Zion becoming increasingly over crowded, Cedar Breaks is likely to continue to experience significant increases in the foreseeable future. Monument staff has been creating more ways to experience the monument through electronic information and social media.
	• **Partnerships and Volunteers:** The monument staff continues to rely on partnerships and volunteers as vital to accomplishing its mission. Generally, the number of volunteers assisting the monument is relatively stable, although the volunteer programs see turnover from year to year according to individuals' availability.
	• **Scientific Research:** Requests for research permits have been increasing. One example is an increase in interest by the new Southern Utah University biology department faculty in performing research in the monument.

Fundamental Resource or Value	Opportunities to Experience, Support, and Study the Resources

Threats and Opportunities	**Threats**
	• **Recreation and Visitor Activities: I**ncreasing visitation numbers could create challenges for landscape preservation as the National Park Service tries to balance accommodation of the visitors without negatively impacting the monument's resources. Additionally, reduced staffing and law enforcement coverages limits the services the monument can provide to visitors.
	• **Partnerships and Volunteers:** Potential decline in volunteer base partially due to aging of volunteer population and a lack of a network to draw in new volunteers.
	
	Opportunities
	• **Recreation and Visitor Activities:**
	  • Continue to update and develop the monument website to be one of the primary points of visitor information and guidance.
	  • Plan and develop a set of visitor itineraries in cooperation with regional tourism centers, Southern Utah University, and parks within this regional area.
	  • Monitor wayfinding signs on highways and secondary roads to assure visitors are getting correct information on how to access the monument.
	  • Assess and expand the winter interpretive activities to include more snowshoe walks and additional winter interpretive programs. Build upon the current partnership with Dixie National Forest to enhance this winter program so that it benefits visitors to both the monument and adjacent forest lands.
	  • Pursue advanced interpretation of observed and projected climate-related impacts on the monument's natural and cultural resources.
	  • Expand or begin additional festivals at the monument (e.g., wildflower, night skies, stories of the past, fall nature festivals).
	• **Partnerships and Volunteers:**
	  • Expand available resources for the VIP program through special funding, partners, and Zion Natural History Association (ZNHA).
	  • Continue strong relationships with volunteer groups and partners.
	  • Implement the monument's comprehensive interpretive plan (2012) to increase coordination for interpretive programs and functions with monument partners and stakeholders.
	  • Collaborate on regional events publications (printed and electronic).
	  • Investigate opportunities for Southern Utah University students to earn required educational and experiential credit through interning at the monument (potentially through Southern Utah University Outdoor Engagement Center research projects or citizen science efforts).
	  • Explore an expanded partnership with the Brian Head community; this may include monument volunteers on site during winter months and/or other types of cooperation throughout the year.
	  • Expand partnership with the Iron County School District. Engage these professionals in assisting with the improvement of the Cedar Breaks Education Program. Investigate expanding this level of cooperation with other adjoining school districts as well.
	  • Expand relationship with Iron County Tourism to include coordination with training personnel.
	  • Continue dissemination of information about the monument through Iron County Tourism visitor center to tourists passing through the area. Encourage tourists to pair recreation in the monument with other activities in the county.
	• **Scientific Research:** The Southern Utah University Outdoor Engagement Center can help professors and students on campus understand the research needs of the monument and build a citizen science program.

Data and/or GIS Needs	• Continue periodic visitor use trends studies.

Fundamental Resource or Value	Opportunities to Experience, Support, and Study the Resources
Planning Needs	• Sustainable tourism master plan. • Regional transportation master plan. • Trails management plan. • Commercial / visitor services strategy. • Partnership strategy. • Develop and implement a strategic plan for Zion Park Group. • Research catalog / brochure of needs. • Regional visitor information strategy.
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the FRV** • Americans with Disabilities Act of 1990 (28 CFR 36) • Architectural Barriers Act of 1968 • Architectural Barriers Act Accessibility Standards 2006 • Rehabilitation Act of 1973 • 1998 National Parks Omnibus Act • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • Antiquities Act of 1906 • Archeological and Historic Preservation Act of 1974 • Archaeological Resources Protection Act of 1979 • American Indian Religious Freedom Act of 1978 • Historic Sites, Buildings, and Antiquities Act of 1935 • Museum Act of 1955, as amended • Native American Graves Protection and Repatriation Act of 1990 • Paleontological Resources Preservation Act of 2009 • 1988 Federal Cave Resources Protection Act • Endangered Species Act of 1973, as amended • National Invasive Species Act of 1996 • Lacey Act of 1900, as amended • Clean Water Act of 1972 • Clean Air Act of 1970, as amended • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Executive Order 13007, "American Indian Sacred Sites" • Executive Order 13112, "Invasive Species" • Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and other Natural and Cultural Resources" • Secretarial Order 3317, "Department of the Interior Policy on Consultation with Indian Tribes" • 36 CFR 79 "Curation of Federally Owned and Administered Archeological Collections" • 36 CFR 800 "Protection of Historic Properties" **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • NPS Concessions Management Improvement Act of 1998 • Director's Order 6: *Interpretation and Education* • Director's Order 24: *Museum Collections* • Director's Order 28: *Cultural Resource Management*

Fundamental Resource or Value	Opportunities to Experience, Support, and Study the Resources
Laws, Executive Orders, and Regulations That Apply to the FRV, and NPS Policy-level Guidance	**NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders) (continued)** • Director's Order 28A: *Archeology* • Director's Order 42: *Accessibility for Visitors with Disabilities in National Park Service Programs and Services* • Director's Order 77-2: *Floodplain Management* • NPS *Management Policies 2006* (2.3.1.4, 4.2, 5.1, 8.10, 1.6, 4.1, 4.1.4, 4.4.1, 4.7.2, 7, 8, 9, and 10) • NPS *Museum Handbook,* parts I, II, and III • NPS-75 *Natural Resources Inventory and Monitoring Guideline* • NPS *Natural Resource Management Reference Manual 77* • NPS *Transportation Planning Guidebook* • NPS *A Call to Action: Preparing for a Second Century of Stewardship and Engagement*

Analysis of Other Important Resources and Values

Other Important Resource or Value	Recommended Wilderness
Current Conditions and Trends	**Conditions** • The 4,830-acre recommended wilderness encompasses the entire amphitheater as well as small areas between the rim and the northern and southern boundaries of the monument. • All visitors to Cedar Breaks enjoy the wilderness in the form of the scenic views, but very few of them experience it from within. • There is only one trail leading from the rim down into the amphitheater through the nearby USFS Rattlesnake Creek Trail, though it starts just outside the monument boundary. Backcountry visitation is moderate but showing steady increases over the past 10 years. • Hiking the 9-mile Rattlesnake Creek Trail to access the amphitheater also provides access to the spectacular Ashdown Gorge. This trail leads backcountry visitors to a first-class backcountry wilderness experience that includes navigating the narrow red rock slot canyons and waterfalls found below the rim of the amphitheater. • The amphitheater portion of the monument, which makes up most of the wilderness, is also a research natural area that recognizes this area as a prime example of a work of erosion. NPS *Management Policies 2006* recognize research natural areas as areas that contain prime examples of natural resources and processes and significant genetic resources that have value for long-term observational studies or as control areas for manipulative research taking place outside the parks. • Due to the rugged topography of the wilderness area, this area hasn't been over grazed like many surrounding lands. • There are limited human-made noises audible from within the wilderness and relatively few overflights. • In general, the recommended wilderness is doing well due to the relative lack of accessibility, lack of developed trails, and restrictions on overnight camping. • Monument staff regularly monitor the wilderness using the Keeping it Wild wilderness character monitoring framework and refrain from taking unneeded management actions within the wilderness. **Trends** • In general, the wilderness character is fairly stable. • In recent years, there has been moderately higher visitation within the wilderness, as evidenced by fuller parking lots. However, more definitive data can be provided after updating trail counters.

Other Important Resource or Value	Recommended Wilderness
Threats and Opportunities	**Threats** • The response to lightning-caused fires has historically been immediate suppression, which threatens the untrammeled quality of wilderness. • Increase in mean annual temperature, storm frequency and intensity, and drought events projected for the region due to climate change could impact natural resources that comprise the wilderness characteristics, including increase in fire frequency/ intensity, changes in native species composition, increases in invasive species, and changes in hydrology. • Increased nutrient content from the presence of livestock or other activities on land outside the monument and altered chemical composition from winter application of salt to roads are just two of the possible impacts on water quality in the wilderness. • Impacts to the undeveloped quality include the creation of a long-term forest dynamics monitoring plot (involving installation of 375 marker stakes), a potential trail extension that would add approximately 0.75-mile of trail in wilderness where a social trail exists, and the potential installation of signs to discourage people from trampling rare plant communities. • Several human-made structures outside the recommended wilderness intrude on otherwise natural vistas, impacting the solitude or primitive and unconfined recreation quality of wilderness. Similarly, the prohibition on camping due to the amphitheater's status as a research natural area severely limits the opportunity for unconfined recreation. • Once the Ashdown Gorge hike is "discovered" by the visiting public, risks to the wilderness character on the adjoining Ashdown Gorge Wilderness (managed by the USFS Dixie National Forest) and proposed Cedar Breaks Wilderness will increase exponentially. With social media making it so easy to post information about these hidden gems, we have already had many more visitor inquiries in the past five years than in the previous five years. **Opportunities** • Continue partnering with Dixie National Forest and other agencies for concurrent management of wilderness areas, particularly for the Ashdown Gorge Wilderness. • Work with Dixie National Forest, the Bureau of Land Management, Southern Utah University, and private entities who also own land along the gorge to develop a permanent conservation and protection strategy. The goal would be to set in place a more unified management and monitoring effort to protect this important recreational resource. • Garner support for designation of the recommended wilderness area by Congress. First steps could be taken to garner local and regional support. • Partner with Aldo Leopold Wilderness Research Institute and the Arthur Carhart National Wilderness Training Center for appropriate research within the wilderness.
Data and/or GIS Needs	• Continue periodic visitor use trends studies. • Monitoring weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts on monument resources, and to validate projected climate change futures over time. • Climate change vulnerability assessment for select resources.
Planning Needs	• Wilderness stewardship plan. • Resource stewardship strategy. • Ashdown Gorge protection strategy. • Climate change scenario plan.

Other Important Resource or Value	Recommended Wilderness
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the OIRV** • The Wilderness Act of 1964 • The Clean Air Act (42 USC 7470(2)) • National Parks Air Tour Management Act of 2000 • National Parks Overflight Act of 1987 (Public Law 100-91) • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land and Other Natural and Cultural Resources" • "Audio disturbances" (36 CFR 2.12) **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • Director's Order 41: *Wilderness Stewardship* • Director's Order 47: *Soundscape Preservation and Noise Management* • NPS *Management Policies 2006* (chapter 6) "Wilderness Preservation and Management" • NPS *Management Policies 2006* (1.4) "Park Management" • NPS *Management Policies 2006* (1.6) "Cooperative Conservation Beyond Park Boundaries" • NPS *Management Policies 2006* (3.1) "Land Protection" • NPS *Management Policies 2006* (4.4.4.2) "Removal of Exotic Species Already Present" • NPS *Management Policies 2006* (4.7) "Air Resource Management" • NPS *Management Policies 2006* (4.9) "Soundscape Management" • NPS *Management Policies 2006* (4.10) "Lightscape Management" • NPS *Management Policies 2006* (8.4) "Overflights and Aviation Uses" • NPS *Management Policies 2006* (8.2.3) "Use of Motorized Equipment" • NPS *Keeping It Wild in the National Parks User Guide* • NPS *Wildland Fire Management Reference Manual 18* • NPS *Wilderness Stewardship Reference Manual 41* • NPS *Natural Resource Management Reference Manual 77*

Other Important Resource or Value	Historic Structures
Current Conditions and Trends	**Conditions** • Cedar Breaks visitor center and the ranger caretaker cabin are the two historic CCC structures built in the late 1930s. These structures exhibit classic NPS rustic architecture and are designed to appear as if they are a natural part of the environment. • The visitor center is still used for its original purpose. Critical deferred maintenance is fairly high on the visitor center structure including log-ends, sill logs and exterior windows. While a project is in place to address this need in fiscal year (FY) 16, the monument will need to continue to focus significant operation and maintenance dollars on this location to maintain it at an acceptable level and avoid failure of critical systems. • While the CCC-constructed, 900 square foot visitor center has great character and ambience, it is inadequate to serve the needs of the monument's 595,000 annual visitors. • The ranger caretaker cabin is still used as a residence, typically by law enforcement. Exterior and interior improvements and deferred maintenance have been addressed in recent years, but significant operation and maintenance money will need to be focused on this location to maintain it at an acceptable level long term. • Both structures are in fair condition. Condition reports exist for both structures. • The generator shed is the only remaining structure from the original Cedar Breaks Lodge, built in 1924 by the Utah Parks Company. The lodge was determined uneconomical to maintain and was torn down in 1972. In recent years, the generator shed was stabilized, drainage was improved, hazard trees were cleared, and a short spur trail and interpretive panel were added. **Trends** • In general, past and planned renovations made to the historic structures, as well as regular cyclic maintenance of the structures, have maintained the integrity of historically significant architectural features
Threats and Opportunities	**Threats** • The size of the historic visitor center cannot accommodate the current visitor levels to the monument, leading to potential overuse/wear and tear and diminished visitor experience due to congestion. The small 900 square foot structure is too small to provide exhibits and indoor interpretive education programming. • The location of the visitor center near the edge of the amphitheater causes soil instability and erosion to be a continuous threat to the stability of the visitor center. • Harsh winter conditions are hard on the building materials, resulting in degradation. • Pest management within the structures is an ongoing need. Rodents cause potential visitor and employee exposure to diseases due to urine and fecal droppings. Fecal droppings are scattered throughout the visitor center and among the books and souvenirs. • Increase in mean annual temperature, storm frequency and intensity, and drought events projected for the region could impact historic resources through storm events (soil erosion, wind damage), increase in fire frequency/intensity, and increase in invasive species. • Structural components are aging, meeting/exceeding life cycle expectancy. **Opportunities** • Enhance interpretation and outreach regarding historic structures. • Provide specialized training to monument staff, partners, and stakeholders to foster historic preservation skills, understanding, and stewardship. • Evaluate additional historic structures for inclusion in the List of Classified Structures and the National Register of Historic Places (i.e., water tanks, generator shed, Minnie's Mansion, and log cabin beyond Minnie's cabin).

Other Important Resource or Value	Historic Structures
Threats and Opportunities	**Opportunities (continued)** • Repurpose the water tanks (as planned) to create a visitor feature. • Incorporate elements from the original Cedar Breaks Lodge if a new visitor center is developed. • Provide a greater interpretive focus on the Cedar Breaks Lodge and on the sad but true story about the NPS decision to dismantle and remove the Gilbert Stanley Underwood designed lodge in 1972, including the generator shed and the water tanks. • Capture oral histories and institutional knowledge of individuals and technical experts in the area. This effort could be coordinated with Southern Utah University, which has oral history collection capabilities and collections.
Data and/or GIS Needs	• Add historic structures to the List of Classified Structures and nominate for National Register of Historic Places. • Collect oral histories related to monument history and land use history. • Prepare administrative history of the monument.
Planning Needs	• Resource stewardship strategy. • Historic structures reports for all historic properties. • Sustainable tourism master plan.
Laws, Executive Orders, and Regulations That Apply to the OIRV, and NPS Policy-level Guidance	**Laws, Executive Orders, and Regulations That Apply to the OIRV** • The Antiquities Act of 1906 • Historic Sites, Buildings, and Antiquities Act of 1935 • National Historic Preservation Act of 1966, as amended (54 USC 300101 et seq.) • Archeological and Historic Preservation Act of 1974 • Executive Order 11593, "Protection and Enhancement of the Cultural Environment" • Secretarial Order 3289, "Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources" • "Protection of Historic Properties" (36 CFR 800) **NPS Policy-level Guidance (NPS *Management Policies 2006* and Director's Orders)** • *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* • Director's Order 28: *Cultural Resource Management* • NPS *Management Policies 2006* (chapter 5) "Cultural Resource Management"

Identification of Key Issues and Associated Planning and Data Needs

This section considers key issues to be addressed in planning and management and therefore takes a broader view over the primary focus of part 1. A key issue focuses on a question that is important for a park. Key issues often raise questions regarding park purpose and significance and fundamental and other important resources and values. For example, a key issue may pertain to the potential for a fundamental or other important resource or value in a park to be detrimentally affected by discretionary management decisions. A key issue may also address crucial questions that are not directly related to purpose and significance, but which still affect them indirectly. Usually, a key issue is one that a future planning effort or data collection needs to address and requires a decision by NPS managers.

The following are key issues for Cedar Breaks National Monument and the associated planning and data needs to address them:

- **Climate Change.** Climate change is a far-reaching and long-term issue that will affect many aspects of Cedar Breaks National Monument. The combination of high elevation and a semiarid climate makes the Colorado Plateau, including the monument, particularly vulnerable to climate change. Climate models predict that over the next 100 years, the Southwest will become warmer and even more arid, with more extreme droughts. Warming-related changes that have been documented at the monument in the past eight decades include: an increase in annual mean temperature, a decrease in the average number of days below freezing, and an earlier average peak spring runoff than was seen 80 years ago. The mean annual temperature for the area is projected to increase 5.4°F–9.4°F by the end of the century. Expected changes with the highest degree of certainty include a longer growing season and similarly longer fire seasons; earlier snow melt and more winter precipitation falling as rain rather than snow; and more evaporation from plants, resulting in less groundwater recharge and reduced spring and stream flows. There will also probably be more large fires, invasion of warm-adapted nonnative species, and large-scale die-offs of vulnerable species during droughts. Less certain is the possibility that the summer monsoon might be stronger and there may be more El Niños, which would enhance winter precipitation. Greater year-to-year variability may also be experienced.

A warmer and drier landscape will mean a decrease in water resources, both surface and groundwater. Water is important for sustaining the existing ecological systems, geological processes, and cultural landscape at Cedar Breaks National Monument. These changes will affect a wide variety of monument resources and processes, including the diversity of high-elevation plant and animal species and pollinators (including the loss of species and establishment of new species), erosion/weathering rates, natural flow regimes, spring and riparian ecosystems, fire regimes, vegetation phenology, and the natural quality of wilderness character. A warmer and drier climate may accelerate weathering of monument structures. A drier landscape may increase the potential for wildland fire that could threaten historic structures and/or cultural sites. A warming climate could increase visitation and change visitation patterns and interests, requiring innovation to accommodate these changes (e.g., installation of shade structures, education on the changing climate and sustainability, etc.).

The monument staff seeks to pursue collaboration on climate change assessment and mitigation with the NPS Climate Change Response Program, the NPS Northern Colorado Plateau Network Inventory & Monitoring Program, monument partners and stakeholders, and other NPS units with similar vulnerable resources and threats.

Associated planning needs:

- Climate change scenario planning.
- Green parks plan.

Associated data needs:

- Climate change vulnerability assessment for select resources.
- Continue monitoring pika population.
- Assessment/monitoring of bristlecone pine health.
- Phenology data for plants and animals.
- Monitoring weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts on monument resources, and to validate projected climate change futures over time.
- Spring inventory of lower Breaks.

- **Increasing Visitation.** A noticeable increase in visitation to the monument has been seen in recent years. From 2010 to 2014 the monument has experienced a 45% increase in visitation. This increase is due to a combination of factors. As interest in and attendance of local community events and monument special events have become more popular, visitation to the monument has increased accordingly. Due to the popularity of large events hosted by nearby communities and the National Park Service, visitation often occurs in large waves rather than gradually over time. With an annual average visitation of 595,000 visitors, Cedar Breaks ranks in the top 15% of busiest units in the national park system. As described earlier in this document, it is anticipated that visitation will continue to grow in subsequent years. In recent seasons, visitation in the monument has shifted so that shoulder seasons, particularly the fall, which were once relatively quiet, are now very busy. Winter visitation of over 167,000 visitors now accounts for over 25% of annual visitors. Increased visitor use in the winter is complicated by the lack of a central, year-round visitor center, decrease in winter staff levels and the lack of fee collection in the wintertime. The lack of adequate year-round visitor facilities is already negatively impacting both resource protection and visitor experience. This overall increase in visitation can also be linked to a similar increase in visitation at nearby national parks such as Zion and Bryce Canyon. As visitors are displaced from those nearby parks due to crowded conditions, Cedar Breaks is a logical choice for visitors to travel to. As visitation in this region increases, the issue of high visitation, minimal park staffing levels, and inadequate year-round facilities will only intensify over time.

  An increase in visitation is not undesirable at the monument. Rather, a variety of issues are caused by increased visitation. Issues such as vegetation trampling and flower collecting, high traffic speeds, and vandalism threaten the fundamental resources and values of the monument. In addition, with increased use and influxes of larger crowds during short periods of time, the quality of the visitor experience is declining due to congestion, resulting in an inability to find parking, restrooms, and campsites. The personal attention NPS staff can give a visitor, which is an important part of the visitor experience, is declining. Monument volunteers must be relied on to provide support and assistance during monument events and other periods of high visitation.

  The amount of time that NPS staff spends attending to visitor-caused impacts (both intended and unintended), as well as the coordination of volunteers, detracts from their ability to accomplish critical tasks that would benefit visitors and further protect fundamental resources and values. Because law enforcement is shared with nearby park units, the ability to respond to immediate needs at Cedar Breaks is limited.

  Visitor facilities such as restrooms, year-round visitor center, parking, and interpretive displays are vital to providing a high quality experience at the monument. Current facilities have been inadequate for many years. The current visitor center cannot be operated year-round and does not have enough space to accommodate the high volume of visitors at the monument. It also lacks space for interpretive displays and concessions, nor can it provide shelter from the often harsh and rapidly changing weather at high elevation. Restrooms are limited and insufficient for the visitor traffic they receive, therefore requiring frequent attention from monument staff. The funding for improvements to current facilities or development of additional ones is partially lacking due to intense competition for project funds and a flat base budget. Monument revenue is only sufficient for funding some monument operations such as cost of collection. Due to the lack of formal entrance stations, visitors often do not pay an entrance fee. Low compliance rates for entrance fees have left the monument with increased costs but no significant increase in funds. Increasing fee compliance education with all monument visitors to increase fee revenue collected is needed. A long-term plan to install entrance stations needs to be developed, which also addresses local resident traffic access concerns. The personal attention that visitors receive from monument staff when fees are collected at the existing fee booth is highly effective and important to the visitor experience. The ability to continue positive monument staff interactions with visitors without sacrificing collected fee revenues is strongly desired.

Associated planning needs:

- Update development concept plan (1989), including fee compliance planning to include options for entrance stations.

Associated data needs:

- Compile case incident reports and reports from staff members about incidents that occurred where no law enforcement presence was available.

- Continue periodic visitor use trends studies.

- **Regional Sustainable Tourism.** Cedar Breaks National Monument and other regional national park units throughout southern Utah are in danger of becoming overcrowded, putting high priority visitor experience, resource conservation, and preservation efforts at risk. From roads to parking lots to visitor facilities to campgrounds and trails, the existing monument infrastructure does not have the carrying capacity to handle the estimated 50%–75% increases in visitation projected over the next 10 years in southern Utah. The local economy at the monument's closest gateway community of Brian Head and other communities throughout Iron County, Utah, depend heavily on tourism. Regional roads and transportation systems are not designed with the carrying capacity to handle all the additional traffic that will be generated by tourists and all of the associated business traffic necessary to provide an adequate level of services. Congestion and frustrated visitors will seek recreational park experiences elsewhere, and increased impacts on fragile monument resources will be the consequence of failing to address these challenges now.

  Recognizing these challenges, Cedar Breaks National Monument, Brian Head Town, and Iron County, Utah, are collaborating in FY 16 and FY 17 to develop a master plan that will provide the information and make the recommendations necessary to begin to address these issues. With the 100-year anniversary of the National Park Service on the horizon in 2016, this planning effort will help lay the foundation for developing a sustainable future for Cedar Breaks visitors, resources, and regional communities. The investment of time and partner-supplied funds for this legacy project will reap huge benefits for future visitors and monument stewards, will create stronger strategic relationships with our gateway community partners, and provide a framework to carry the NPS mission and conservation ethic into the next century.

  Associated planning needs:

  – Sustainable tourism master plan.

  – Regional transportation master plan.

- **Development and Uses Adjacent to the Monument.** The area surrounding the monument is largely undeveloped and the majority is managed by the US Forest Service; however, a patchwork exists of BLM, USFS, and NPS ownership, where a variety of different uses (i.e., hunting, grazing, ranching, and certain forms of recreation such as all-terrain vehicle (ATV) or snowmobile use) are allowed or restricted depending on which agency manages the land. The wilderness status of some of those lands also determines the uses that are relevant. Some additional threats include potential increases in nearby development, increases in highway traffic, and military and nonmilitary overflights. These issues contribute to negative impacts to multiple resources within the monument, including viewsheds, the acoustic environment and soundscapes, dark night skies, plants and wildlife, wilderness character, and the visitor experience at the monument.

  The monument will continue to work with and coordinate with neighboring communities of Brian Head, Panguitch, Parowan, and Cedar City, as well as other partners and agencies, for planning related to coordinated or regional transportation and trail systems, sustainable and unobtrusive development, and other measures to help protect the resources of the monument and the larger region.

  Associated planning needs:

  - Transportation planning to include visitor shuttles and developing a summer pedestrian and bike trail / winter cross-country ski trail between Brian Head and the monument.

  Associated data needs:

  - LiDAR for viewshed analysis and geological formations in the monument.

- **Operational and Environmental Sustainability.** Monument staff has taken many actions to promote and incorporate sustainability in the monument, including identifying a number of action items in the monument's 2013 Strategic Plan such as providing water refill stations, establishing stewardship behaviors with all staff related to re-using and recycling. The monument is also open to potential opportunities related to increased use of solar energy and furthering their water conservation efforts. However, adverse environmental impacts are still occurring, partially due to the lack of a local recycling center. More actions are needed to reduce waste, conserve energy and water, recycle materials, eliminate toxic materials, reduce/eliminate sources of air and water pollution, and adopt energy efficient and ecologically responsible materials and techniques.

  Additionally, the monument seeks to ensure that it is environmentally sustainable and can be operationally sustained into the future despite any changes in funding and staffing. One particular aspect of operational sustainability is ensuring that all existing and potential facilities can be regularly maintained and operated despite uncertainty related to funding and staffing.

  The monument will consider operational and environmental sustainability as a key decision criterion directing future construction, management, partnership, and coordination efforts.

  Associated planning needs:

  - Update the environmental management plan.

  - Five-county-wide integrated solid waste management plan.

  Associated data needs:

  - Total cost of facility ownership best management practices.

- **Operational Efficiencies and Relationship with the Zion Park Group.** Cedar Breaks National Monument is managed as part of the Zion Park Group, which also includes Zion National Park and Pipe Spring National Monument. Managing groupings of park units is intended to reduce operational redundancies; increase collaboration; and share staff and expertise, responsibilities, and funds. However, these groupings provide some challenges in addition to benefits.

  Sharing technical experts and specialized staff members with already large workloads makes it difficult at times to cover the needs of all three parks. The diversity among the park units, both in terms of resources, history, and issues, as well as the distance between the units, presents challenges to the management of the group. One recent success is that the monument currently shares one law enforcement ranger with the Kolob Canyons District of Zion National Park. This serves as an example of how sharing staff resources can be successful. Relationships among the staff of the three park units are positive and work effectively when staff members have adequate time to dedicate to each unit in the Zion Park Group. As working relationships grow, each of the parks learn more about the day-to-day operational needs of the other parks and presents opportunities for efficiencies.

  Requesting project or base funds to be shared among the three park units is a challenge and often confusing. Due to limitations with the web-based financial systems, one park must request, or sponsor, shared funds requests on behalf of all three units, often simplistically appearing as if they are requesting those funds for a single park. The inability to articulate or segment specific funding needs for each individual unit results in confusion within the financial system and prioritization process as to allocation among the three park units. Tracking shared base, fee revenue, and project funds or FTE allocated to the group has also been challenging. A specific administrative process is needed to ensure that each park's proportionate allocation is maintained.

  Additionally, the Zion Park Group must navigate how to share funds raised by the relatively new Zion National Park Foundation, which serves all three parks. In concert with the Foundation Board of Directors the parks need to develop an agreement and process as to how to request and share these funds.

  Associated planning needs:

  - Develop and implement a strategic plan for the Zion Group.

Planning and Data Needs

To maintain a connection to the core elements of the foundation and the importance of these core foundation elements, the planning and data needs listed here are directly related to protecting fundamental resources and values, park significance, and park purpose, as well as addressing key issues. To successfully undertake a planning effort, information from sources such as inventories, studies, research activities, and analyses may be required to provide adequate knowledge of park resources and visitor information. Such information sources have been identified as data needs. Geospatial mapping tasks and products are included in data needs.

Items considered of the utmost importance were identified as high priority and other items identified, but not rising to the level of high priority, were listed as either medium- or low-priority needs. These priorities inform monument management efforts to secure funding and support for planning projects.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Parkwide Issue?	**Planning Needs**	**Priority (H, M, L)**	**Notes**
Plant and Animal Communities	Vegetation management plan	H	It is recommended that all NPS units have a vegetation management plan, but the monument is currently operating under a categorical exclusion. This plan would include management strategies for bristlecone pines and beetle-killed spruce trees and legal requirements for the use of herbicides for invasive plants.
Parkwide Issue	Update development concept plan (1989), including fee compliance planning to include options for entrance stations	H	This update to the monument's 1989 Development Concept Plan (originally completed in tandem with the monument's general management plan) would provide a comprehensive look at existing and future monument infrastructure in order to accommodate increasing visitation, particularly related to the siting of potential entrance stations and a remodel of the parking area at the visitor center.
Parkwide Issue	Transportation planning to include visitor shuttles and developing a summer pedestrian and bike trail / winter cross-country ski trail between Brian Head and the monument	H	This plan would examine the feasibility, impacts, and implementation of a trail between the monument and Brian Head, functioning as a pedestrian and bike trail in the summer and a cross-country ski trail in the winter. There is strong partnership support for this effort and time and effort investments from partners are likely to help accomplish this plan, which would be consistent with the regional transportation master plan.
Parkwide Issue	Five-county-wide integrated solid waste management plan	H	This plan would provide guidance for a comprehensive waste prevention, recycling, composting, and disposal program working with other nearby NPS units, five counties' communities, and partners. There is a funded PMIS project being developed for FY 15–FY 16.
Parkwide Issue; Opportunities to Experience, Support, and Study the Resources	Partnership strategy	H	This strategy would provide a coordinated approach to seeking out, fostering relationships with, and managing volunteers and partners. This strategy is particularly important for the monument because a large portion of the work accomplished in the monument is done with the assistance of volunteers and partners.
Parkwide Issue; Opportunities to Experience, Support, and Study the Resources	Develop and implement a strategic plan for Zion Park Group	H	This plan would provide guidance regarding management and sharing staff, funds, foundation funds, and responsibilities with the Zion Park Group. The plan could also explore a more appropriate name for the "group" that is more inclusive and would recognize each park as a full partner. Addressing administrative obstacles would help the group achieve many of the operational efficiencies intended.
Geologic Resources; Plant and Animal Communities; Scenic Vistas, Night Skies, and Soundscapes; Recommended Wilderness; Archeological Resources; Historic Structures	Resource stewardship strategy	H	This strategic document develops strategies that will help monument staff achieve the desired natural and cultural resource conditions for the monument. This strategy focuses on identifying and tracking indicators of conditions, setting reference conditions and management targets, and recommending comprehensive strategies to achieve and maintain management targets over time, and assessing and updating these strategies periodically based on new information and the results of completed activities.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Parkwide Issue?	**Planning Needs**	**Priority (H, M, L)**	**Notes**
Historic Structures	Finalize historic resource study	H	This study is in its final draft stage prior to review and finalization. It outlines historic context, themes, topics, current knowledge about the monument, and identifies knowledge gaps that need to be filled.
Parkwide Issue; Opportunities to Experience, Support, and Study the Resources; Historic Structures	Sustainable tourism master plan	H	This plan would help determine how best to work with nearby communities and partners to provide sustainable tourism opportunities. For example, the monument and Brian Head could implement a shuttle service between the two areas so that visitors to the monument could use Brian Head's parking lots, hotels, and restaurant amenities. This would help economic development in the area, while lessening the impact of increased visitation to monument resources. See parkwide issue for "Regional Sustainable Tourism" for more information.
Parkwide Issue; Opportunities to Experience, Support, and Study the Resources	Regional transportation master plan	H	Cedar Breaks National Monument, Brian Head Town, and Iron County, Utah, are collaborating in FY 16 and FY 17 to develop a master plan to provide strategic guidance for transportation in the region. See parkwide issue for "Regional Sustainable Tourism" for more information.
Recommended Wilderness	Ashdown Gorge protection strategy	H	The Ashdown Gorge area has a multijurisdictional patchwork of ownership. Collaboration of multiple stakeholders is needed to develop a strategy for land management and resource protection in this unique area.
Opportunities to Experience, Support, and Study the Resources	Trails management plan	M	A trails management plan would guide the expansion, restoration, management, operations, and use of the trail system and its amenities into the future. In particular, this plan would provide planning and compliance for an additional trail and would help prioritize where and when new trails could be established in the future. This plan would also address restoration and management of visitor-created social trails in sensitive resource areas.
Opportunities to Experience, Support, and Study the Resources	Commercial / visitor services strategy	M	This strategy would address coordinating third-party commercial and visitor service activities with Brian Head such as cross-country skiing and snowmobile services.
Geologic Resources; Plant and Animal Communities; Recommended Wilderness; Parkwide Issue	Climate change scenario plan	M	This planning process would develop a range of plausible science-based scenarios of the future that informs development of climate change adaptation strategies that serve monument planning needs, resources, and visitors. It would help protect monument resources most vulnerable to climate change and would follow completion of the climate change vulnerability assessment. This effort will be complementary to the US Forest Service region-wide climate change vulnerability assessment and adaptation action partnership, with which the monument is a partner.
Parkwide Issue	Green parks plan	M	Green parks plan is a strategic plan for sustainable NPS operations that includes informing park staff and visitors about climate change and sustainability. This effort will be complementary to the US Forest Service region-wide climate change vulnerability assessment and adaptation action partnership, with which the monument is a partner.

Planning Needs – Where A Decision-Making Process Is Needed			
Related to an FRV, OIRV, or Parkwide Issue?	**Planning Needs**	**Priority (H, M, L)**	**Notes**
Parkwide Issue	Update the environmental management plan	M	This plan would describe specific actions that will be required to accomplish the monument's goals, objectives, and targets related to environmentally friendly operations and facilities. There is Washington Office support for park units to complete these plans, and it would be linked to the integrated solid waste management plan.
Scenic Vistas, Night Skies, and Soundscapes	Viewshed management plan	M	This plan would identify critical views within and beyond monument boundaries and recommend steps to preserve them for scenic and, as relevant, historic values.
Parkwide Issue	Total cost of facility ownership best management practices	L	The monument needs to develop best management practices for evaluating projects in development to ensure that they are sustainable fiscally and operationally. This would include costs of projects, prioritization of projects, position management, work plan, preparation and life-cycle analysis for continued maintenance of projects. All of this information should combine to help the monument assess the overall feasibility of projects and take into account increased operational costs and the monument's ability to maintain them at an acceptable level lacking additional operational funds. The monument should be able to prioritize new facilities and accept that the maintenance levels on other facilities may have to decrease to accommodate new obligations.
Opportunities to Experience, Support, and Study the Resources	Regional visitor information strategy	L	Due to the proximity of several other NPS units, a regional visitor strategy could help ensure efforts are not duplicated in disseminating information (trip planning, rules, and regulations) to visitors who plan to visit one or multiple NPS units.
Recommended Wilderness	Wilderness stewardship plan	L	This plan would build off the Cedar Breaks National Monument: A Report on Wilderness Character Monitoring (2014). The plan would set long-term goals and objectives, identify issues and opportunities, and provide a decision-making framework and appropriate actions to preserve and, if necessary, improve wilderness character now and into the future.
Historic Structures	Historic structure reports for all historic properties	L	These reports are the primary guides for treatment and use of a historic structure and its immediate environment. All plans for rehabilitation or restoration of any historic structure must be undertaken with an approved historic structure report.
Opportunities to Experience, Support, and Study the Resources	Research catalog / brochure of needs	L	This research catalog would help the monument advertise and promote research within the monument. It would help increase partnerships with educational institutions as well as provide the monument with information that NPS staff may not have the time to gather. This catalog could be posted on the research permit website or distributed through other venues.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Parkwide Issue?	**Data and GIS Needs**	**Priority (H, M, L)**	**Notes, Including Which Planning Need This Data Need Relates To**
Plant and Animal Communities	Continued invasive species monitoring and data collection	H	This effort would build off existing work and data, as well as in collaboration with the NPS Northern Colorado Plateau Network Inventory and Monitoring program. The monument is currently investing a time and effort into invasive species eradication, and continued monitoring is important to know if these efforts are making an impact.
Archeological Resources; Historic Structures	Collect oral histories related to monument history and land use history	H	Oral histories could be collected from Utah Parks Company employees, tribal members, other native and nonnative cultural groups, and state and federal employees. It is important to move quickly on this effort while the information is still available.
Scenic Vistas, Night Skies, and Soundscapes	Continue monitoring night sky condition	H	The monument is pursuing designation as an International Dark-Sky Park, potentially in collaboration with nearby partners. The monument needs to continue monitoring the night sky condition.
Parkwide Issue; Geologic Resources	Spring inventory of lower Breaks	H	Springs in the lower Breaks are numerous and little known. Initial survey work indicates that discharge points are numerous and subject to change due to erosion and deposition in this dynamic environment. This effort would include a flow monitoring strategy to assess future water supply targets and concerns.
Parkwide Issue; Plant and Animal Communities; Recommended Wilderness	Climate change vulnerability assessment	M	This assessment would help inform the climate change scenario plan. This effort will be complementary to the US Forest Service region-wide climate change vulnerability assessment and adaptation action partnership, with which the monument is a partner.
Parkwide Issue; Plant and Animal Communities	Phenology data for animals and plants	M	Information regarding plant and animal life cycle events and how these are influenced by seasonal and inter-annual variations in climate and other habitat factors. This data would focus on wildflowers (bloom and pollination times) and first siting of animals following hibernation or migration.
Parkwide Issue	Compile case incident reports and reports from staff members about incidents that occurred where no law enforcement presence was available	M	Due to the shared law enforcement position with Kolob Canyons, incidents often occur when no law enforcement ranger is immediately present. Proactively compiling information from other staff members present during incidents would ensure that details are not forgotten and would help inform future law enforcement needs.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Parkwide Issue?	**Data and GIS Needs**	**Priority (H, M, L)**	**Notes, Including Which Planning Need This Data Need Relates To**
Parkwide Issue; Opportunities to Experience, Support, and Study the Resources; Recommended Wilderness	Continue periodic visitor use trends studies	M	Two years of visitor surveys and trend data have been collected in partnership with Southern Utah University. One additional summer of data collection is already funded. However, this data needs to be compiled into a final document and peer reviewed with other universities or NPS entities. Additional data would be useful, including where visitors go, how long they stay in each area, social trails, and which access points visitors use to enter the recommended wilderness area from the base of the amphitheater. This data would need to be routinely collected and compiled to analyze trends—the information would inform ongoing monument management and future decision making such as the potential commercial / visitor service strategy.
Plant and Animal Communities	Update to wildlife species checklist	M	Wildlife species checklists for birds, insects, and mammals needs to be updated. In particular, the bird list is inaccurate and needs more current information.
Archeological Resources	Ethnographic overview and assessment	M	This study would review existing information on monument resources traditionally valued by tribal groups and/or other nonnative cultural groups. It would source information from archives and publications, interviews with community members and other constituents, and identify the need for further research. Some of this information has been collected, although it needs to be consolidated in one place and more oral histories need to be conducted. It is important these needs are met while the knowledge is still available.
Parkwide Issue; Plant and Animal Communities	Continue monitoring pika population	M	Potentially with assistance of the US Geological Survey and/or a future intern. The monument is currently monitoring for pika, both inside the monument and nearby. There are signs that a small population of pika still exists within the monument. Since this monitoring work has not been consistent until the past year or so, it is too early to tell whether the monument will locate populations they are unaware of.
Parkwide Issue; Geologic Resources; Plant and Animal Communities; Recommended Wilderness	Monitoring weather parameters (temperature, precipitation, storm events) to document observed climate change and impacts to monument resources, and on validate projected climate change futures over time	M	This information would particularly relate to geologic features and processes, but would also impact other resources. While there are weather stations outside the monument, they often aren't accurate for weather within the monument. This project would require a long-term commitment of monument staff or Southern Utah University to maintain and operate the equipment. The monitoring station should be sited near a power source so that the precipitation gage can be heated for accurate measurement of winter precipitation.
Geologic Resources	Soil survey and GIS layers	M	The last set of information related to soils is from the 1970s and needs to be updated to better inform monument management. The level of detail would be greater above the rim than below. Current geologic maps exist from 2004, 2006, and 2014.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Parkwide Issue?	**Data and GIS Needs**	**Priority (H, M, L)**	**Notes, Including Which Planning Need This Data Need Relates To**
Plant and Animal Communities	Information about diversity and abundance of pollinators	M	The monument may be a refugia for pollinator species in a time when they are being threatened on a larger scale. Their abundance and diversity is linked to the diversity of wildflowers at the monument in the summertime.
Plant and Animal Communities	Monitoring population trends of rare and endemic plants	M	This effort would build off existing inventory that provides baseline information.
Archeological Resources	Consistent monitoring data on archeological resources	L	This information would record impacts from natural events, climate change, and visitors. The monument currently does not have a consistent monitoring program for archeological resources, although baseline information has been gathered and Zion staff performs routine archeological site condition assessments.
Archeological Resources	Archeological overview and assessment	L	This study would provide a synthesis of existing archeological data and define cultural contexts and historical themes that may direct future archeological resource management projects and research.
Scenic Vistas, Night Skies, and Soundscapes	Continued soundscape monitoring	L	Baseline conditions of the soundscapes at the monument have been measured in 2012, and a final acoustical and monitoring report will be produced when analysis is complete. This report will provide an inventory of the sounds heard at each site, how often they are audible, and a record of the prevailing acoustic conditions during the monitoring periods (summer and winter). Continued soundscape monitoring would help illustrate any changes to the soundscape as compared to the existing baseline information.
Parkwide Issue; Plant and Animal Communities	Assessment/ monitoring of bristlecone pine health	L	This information would be important, particularly related to impacts from visitation and climate change.
Parkwide Issue; Geologic Resources; Scenic Vistas, Night Skies, and Soundscapes	LiDAR for viewshed analysis and geological formations in the monument	L	This effort would provide baseline information, but continued monitoring could show rates of change of the formations and viewsheds. This could also be accomplished through other more economical means like photogrammetry (making measurements from photographs).
Plant and Animal Communities	Information about the successional stage of the forest following the beetle kill	L	This effort would build off completed remote sensing of beetle kill trees.
Plant and Animal Communities	Data on bat diversity and populations, including strategies for white nose syndrome prevention	L	Similar efforts are being conducted in Dixie National Forest and other nearby areas.

Data Needs – Where Information Is Needed Before Decisions Can Be Made			
Related to an FRV, OIRV, or Parkwide Issue?	**Data and GIS Needs**	**Priority (H, M, L)**	**Notes, Including Which Planning Need This Data Need Relates To**
Plant and Animal Communities	Radio-collaring wildlife projects to gather data on range	L	This effort would build off existing deer radio-collaring efforts and would be expanded to other animals.
Plant and Animal Communities	Data on bird species presence and breeding bird species within the monument	L	This effort would build off the update to the wildlife species list to help monument managers determine how important the monument is as refugia for birds, as well as which species are nesting within the monument.
Historic Structures	Prepare administrative history of the monument	L	Administrative histories look at the history of the monument and analyze its establishment and administration, as well as NPS programs and policies. Because the historic resource study is almost finalized, this effort is a lower priority.
Archeological Resources	Prepare National Register of Historic Places nominations	L	National register nominations need to be prepared for archeological sites. These nominations would not change their management because they are already documented and protected. Therefore, this is not a high priority.
Historic Structures	Add historic structures to the List of Classified Structures and nominate for National Register of Historic Places	L	Some sites are both historic structures as well as archeological sites. These sites have already been evaluated but not nominated for the national register. These nominations would not affect how they are managed because they are already documented and protected. Therefore, this is not a high priority.
Geologic Resources	Survey cave resources	L	Cave resources are currently stable, but a survey would be nice to have. However, with limited resources this is not a high priority.
Scenic Vistas, Night Skies, and Soundscapes	Air quality monitoring	L	Bryce Canyon National Park has an air quality monitoring station whose data is interpolated for a visibility condition and trend at the monument with a high degree of confidence. Ozone conditions are derived from more distant monitors for conditions with medium degree of confidence and no trends. Additional collaboration with neighboring parks could be done to monitor ozone in the region to improve condition confidence.

Part 3: Contributors

Cedar Breaks National Monument

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Lyman Hafen, Zion Natural History Association, Executive Director

Appendixes

Appendix A: Presidential Proclamation and Legislative Acts for Cedar Breaks National Monument

Summary of Legislative History of Cedar Breaks National Monument

- Presidential Proclamation No. 2054, August 22, 1933 (48 Stat. 1705), established Cedar Breaks National Monument
- Act of March 7, 1942 (P.L. 77-485, 56 Stat. 141), revised boundary between the monument and the Dixie National Forest, as described
- Act of June 30, 1961 (P.L. 87-81, 75 Stat.198), revised boundary between the monument and the Dixie National Forest, as described
- Act of October 1, 1993 (P.L. 103-93, 107 Stat. 995), authorized acquisition by exchange of all school and institutional trust lands owned by the State of Utah within the National Park System. The act directs the Secretary to provide to the State of Utah a list of lands or interests in lands within the State of Utah for transfer to the State in exchange for the trust lands. All such exchanges shall be for equal value. As of the date of this act, however, there are no State owned lands in Cedar Breaks National Monument (full text is not included in this document)

Presidential Proclamation No. 2054, August 22, 1933 (48 Stat. 1705), established Cedar Breaks National Monument

CEDAR BREAKS NATIONAL MONUMENT—UTAH

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

August 22, 1933.

A PROCLAMATION

Cedar Breaks National Monument, Utah. Preamble.

WHEREAS it appears desirable, in the public interest, to exclude certain lands from the Dixie National Forest, Utah, and include said lands within a national monument for the preservation of the spectacular cliffs, canyons, and features of scenic, scientific, and educational interest contained therein:

Establishment of, from excluded lands of Dixie National Forest. Vol. 34, p. 225; Vol. 30, p. 34.

NOW, THEREFORE, I, FRANKLIN D. ROOSEVELT, President of the United States of America, by virtue of the power in me vested by section 2 of the act of Congress approved June 8, 1906 (34 Stat. 225), and the act of June 4, 1897 (30 Stat. 34), do proclaim and establish the Cedar Breaks National Monument and that, subject to all valid existing rights, the following-described lands in Utah be, and the same are hereby, excluded from the Dixie National Forest and included within the said national monument:

Description.

SALT LAKE MERIDIAN

T. 36 S., R. 9 W., sec. 15, S½SE¼;
sec. 22, E½, S½ lot 3, S½ lot 4, S½NW¼, and E½SW¼;
sec. 23, all;
sec. 24, W½E½, and W½;
sec. 25, W½E½, and W½;
sec. 26, all;
sec. 27, E½, and E½W½;
sec. 34, E½, and E½W½;
sec. 35, all;
sec. 36, NW¼NE¼, and lots 1 to 7 inclusive.

T. 37 S., R. 9 W., sec. 1, lot 4;
sec. 2, all (unsurveyed);
sec. 3, lots 1, 2, and 3;
sec. 10, N½NE¼, SE¼NE¼, NE¼SE¼, and NE¼NW¼;
sec. 11, N½ (unsurveyed), and N½S½;
sec. 12, W½NW¼.

Reserved from settlement, etc.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of this monument and not to locate or settle upon any of the lands thereof.

Supervision. Vol. 39, p. 535.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of this monument as provided in the act of Congress entitled "AN ACT To establish a National Park Service, and for other purposes", approved August 25, 1916 (39 Stat. 535), and acts additional thereto or amendatory thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE at the City of Washington this 22d day of August, in the year of our Lord nineteen hundred and thirty-three, and of the Independence of the United States of America the one hundred and fifty-eighth.

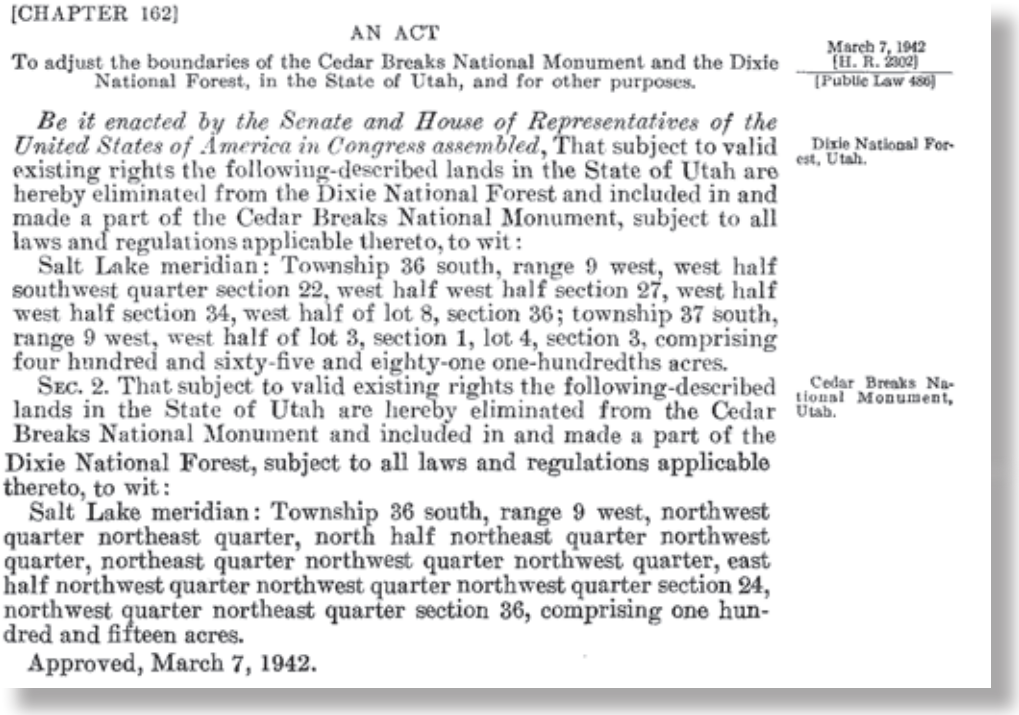
[SEAL]

FRANKLIN D ROOSEVELT

By the President:
WILBUR J. CARR
Acting Secretary of State.

[No. 2054]

Act of March 7, 1942 (P.L. 77-485, 56 Stat. 141), revised boundary between the monument and the Dixie National Forest, as described



[CHAPTER 162]

AN ACT

To adjust the boundaries of the Cedar Breaks National Monument and the Dixie National Forest, in the State of Utah, and for other purposes.

March 7, 1942
[H. R. 2302]
[Public Law 486]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That subject to valid existing rights the following-described lands in the State of Utah are hereby eliminated from the Dixie National Forest and included in and made a part of the Cedar Breaks National Monument, subject to all laws and regulations applicable thereto, to wit:

Dixie National Forest, Utah.

Salt Lake meridian: Township 36 south, range 9 west, west half southwest quarter section 22, west half west half section 27, west half west half section 34, west half of lot 8, section 36; township 37 south, range 9 west, west half of lot 3, section 1, lot 4, section 3, comprising four hundred and sixty-five and eighty-one one-hundredths acres.

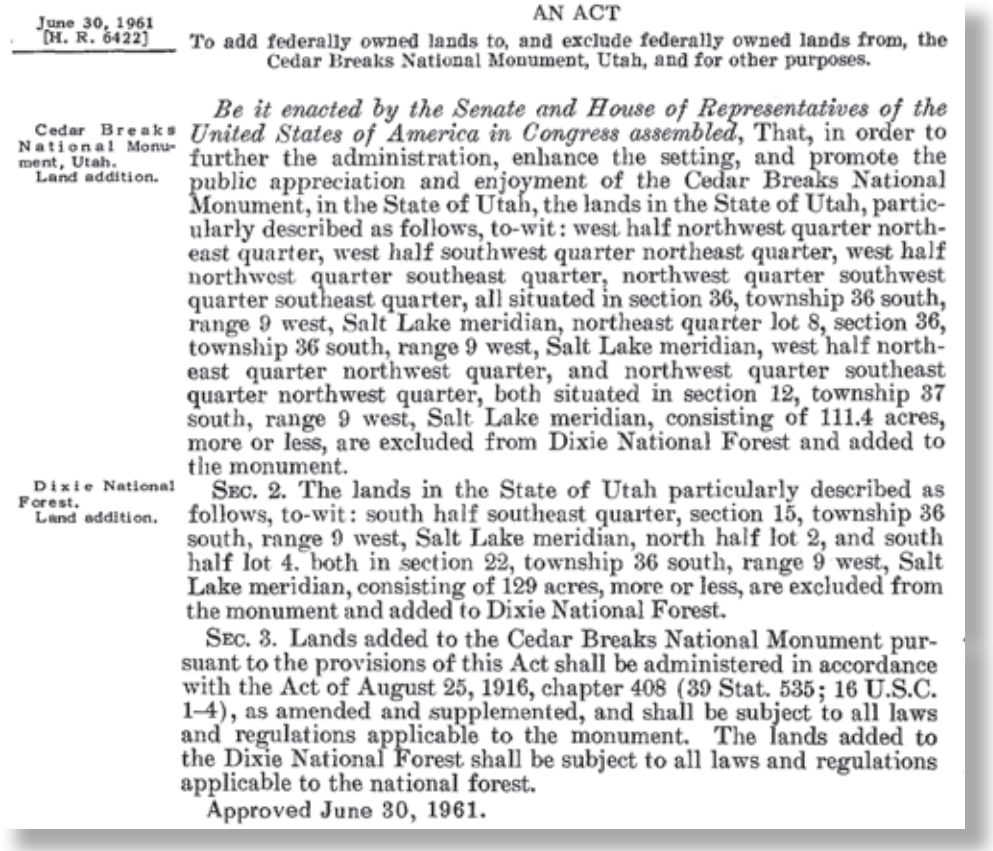
SEC. 2. That subject to valid existing rights the following-described lands in the State of Utah are hereby eliminated from the Cedar Breaks National Monument and included in and made a part of the Dixie National Forest, subject to all laws and regulations applicable thereto, to wit:

Cedar Breaks National Monument, Utah.

Salt Lake meridian: Township 36 south, range 9 west, northwest quarter northeast quarter, north half northeast quarter northwest quarter, northeast quarter northwest quarter northwest quarter, east half northwest quarter northwest quarter northwest quarter section 24, northwest quarter northeast quarter section 36, comprising one hundred and fifteen acres.

Approved, March 7, 1942.

Act of June 30, 1961 (P.L. 87-81, 75 Stat.198), revised boundary between the monument and the Dixie National Forest, as described



AN ACT

June 30, 1961
[H. R. 6422]

To add federally owned lands to, and exclude federally owned lands from, the Cedar Breaks National Monument, Utah, and for other purposes.

Cedar Breaks National Monument, Utah. Land addition.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in order to further the administration, enhance the setting, and promote the public appreciation and enjoyment of the Cedar Breaks National Monument, in the State of Utah, the lands in the State of Utah, particularly described as follows, to-wit: west half northwest quarter northeast quarter, west half southwest quarter northeast quarter, west half northwest quarter southeast quarter, northwest quarter southwest quarter southeast quarter, all situated in section 36, township 36 south, range 9 west, Salt Lake meridian, northeast quarter lot 8, section 36, township 36 south, range 9 west, Salt Lake meridian, west half northeast quarter northwest quarter, and northwest quarter southeast quarter northwest quarter, both situated in section 12, township 37 south, range 9 west, Salt Lake meridian, consisting of 111.4 acres, more or less, are excluded from Dixie National Forest and added to the monument.

Dixie National Forest. Land addition.

SEC. 2. The lands in the State of Utah particularly described as follows, to-wit: south half southeast quarter, section 15, township 36 south, range 9 west, Salt Lake meridian, north half lot 2, and south half lot 4. both in section 22, township 36 south, range 9 west, Salt Lake meridian, consisting of 129 acres, more or less, are excluded from the monument and added to Dixie National Forest.

SEC. 3. Lands added to the Cedar Breaks National Monument pursuant to the provisions of this Act shall be administered in accordance with the Act of August 25, 1916, chapter 408 (39 Stat. 535; 16 U.S.C. 1–4), as amended and supplemented, and shall be subject to all laws and regulations applicable to the monument. The lands added to the Dixie National Forest shall be subject to all laws and regulations applicable to the national forest.

Approved June 30, 1961.

Appendix B: Inventory of Special Mandates and Administrative Commitments

Special Mandates

Wilderness Recommendations

Pursuant to the directive in the 1964 Wilderness Act to evaluate federal lands for potential wilderness designation, 5,300 acres of Cedar Breaks National Monument were studied for inclusion in the National Wilderness Preservation System. A public hearing was held in Cedar City in December 1967 on a preliminary proposal to designate 4,600 acres as wilderness. A final recommendation for 4,370 acres to be designated as wilderness, including all of the land below the rim of the cliffs, or "breaks," was transmitted to Congress from the White House on April 28, 1971. On January 12, 1976, a revised recommendation added another 460 acres, bringing the total recommended wilderness to 4,830 acres, or 78% of the 6,154-acre monument. This recommendation still awaits action by Congress. NPS Director's Order 41 states that recommended wilderness lands under NPS jurisdiction will be managed as though they were designated wilderness.

Research Natural Area

The amphitheater portion of the monument, which makes up most of the wilderness, is also a research natural area that was so designated by the NPS as a prime example of a work of erosion. Research natural areas are part of a national network of sites designed to facilitate research and preserve natural features. Activities in research natural areas generally will be restricted to nonmanipulative research, education, and other activities that will not detract from an area's research values. However, research natural areas differ from wilderness in that recreation is not part of their purpose, so camping and trail construction are not allowed. Overall policy and management guidelines for research natural areas are found in the 1977 publication, *A Directory of Research Natural Areas on Federal Lands of the U.S.*

Allowance for Snowmobiling in Monument

Under 36 CFR 7.52, snowmobiling is allowed on the main monument road and parking areas in the monument during periods when snow depth prevents regular vehicular traffic. The monument superintendent determines the opening and closing dates for use of designated snowmobile routes each year. Routes will be open to snowmobile travel when they are considered to be safe for travel but not necessarily free of safety hazards. Visitor snowmobile use outside designated routes is prohibited.

Administrative Commitments

Title/Agency/ Organization	Purpose/Description	Expiration Date	Responsible Party
Memorandums of Understanding			
Grooming of snowmobile trail	An informal agreement exists but a formal agreement is recommended to provide specific details. The Cedar Breaks winter use trail is groomed by the Utah State Parks and most importantly connects the small section of in-park trail to a much larger snowmobile trail complex on Cedar Mountain.	Formal agreement needed	Utah State Parks and Recreation
Intergovernmental Internship Cooperative	Provide a work- and project-based internship and service-learning program to serve the southern Utah region by matching the needs of land management government agencies with college students and departments seeking meaningful opportunities.	1/9/14–1/9/17	Bureau of Land Management, National Park Service, Bureau of Indian Affairs, US Forest Service, Natural Resources Conservation Service, Paiute Indian Tribe of Utah, Kaibab Band of Paiute Indians, Utah Dept. of Natural Resources, Utah Dept. of Workforce Services, Dixie State University, Southern Utah University
Memorandums of Agreement			
Emergency medical services on request	Allow for mutual assistance between the Brian Head Town marshal and qualified NPS personnel to provide emergency medical services.	Informal, need to formalize	Brian Head Town Marshall
Cooperative Agreements			
Sale of convenience items	During the summer season, the ZNHA operates a bookstore in the Cedar Breaks visitor center for the sale of convenience items. The agreement with ZNHA is for all three units of the Zion Park Group.	Current	Zion Natural History Association
Fundraising agreement	The ZNHA conducts fundraising to benefit the Zion Park Group to accomplish educational and resource management projects.	Current	Zion Natural History Association

Title/Agency/ Organization	Purpose/Description	Expiration Date	Responsible Party
Cooperative Agreements (continued)			
Internships and youth programs through Colorado Plateau Cooperative Ecosystem Studies Units (CESU) National Network	Multiple cooperative agreements initiated through the Intergovernmental Internship Cooperative to accomplish work- and project-based internship and service-learning programs.	Varies by agreement	Bureau of Land Management, National Park Service, Bureau of Indian Affairs, US Forest Service, Natural Resources Conservation Service, Paiute Indian Tribe of Utah, Kaibab Band of Paiute Indians, Utah Dept. of Natural Resources, Utah Dept. of Workforce Services, Dixie State University, Southern Utah University
Zion Group Alliance for Education	Establishes a cooperative and mutually beneficial working relationship among the park units and the university. This relationship is to further the missions of all entities—protecting park resources and providing visitor opportunities to enjoy those resources, educating students about the resources, and providing opportunities to expand the knowledge of the resources and, for the university, to provide an excellent education through a diverse, dynamic, and personalized learning environment.	Expired, needs to be renewed	Zion Park Group (ZION, CEBR, PISP), Southern Utah University
General Agreements			
Zion Park Group	Management and cost and staff sharing between Zion National Park, Cedar Breaks National Monument, and Pipe Spring National Monument.		Zion National Park, Cedar Breaks National Monument, and Pipe Spring National Monument
Law enforcement ranger	Share a law enforcement position to support the visitor and resource protection operations in the Kolob Canyons District of Zion National Park and Cedar Breaks National Monument. Sharing this position supports a primary goal of the Zion Park Group to work together and make the most efficient use of available resources for the benefit of the group.	Current	Zion National Park, Cedar Breaks National Monument

Title/Agency/ Organization	Purpose/Description	Expiration Date	Responsible Party
General Agreements (continued)			
Water rights	Cedar Breaks National Monument Water Rights Settlement Agreement, dated April 24, 2000, recognizes federal reserved water rights: (1) for all surface and groundwater originating in and flow within the monument. The agreement also established a groundwater protection zone outside the monument to protect monument wetlands, and (2) for 2 acre-feet per year from the Sevier basin (Area 61) and 3 acre-feet per year from the Cedar City basin (Area 73) for administrative uses.	Current	Cedar Breaks National Monument
Special Park Uses			
Rocky Mountain Power	Provision of a powerline from the campground through the monument to serve Brian Head Ski Resort and other landowners in the vicinity.	Monument is currently working with Rocky Mountain Power and the IMR Regional Office to put a right-of-way in place	Rocky Mountain Power, Cedar Breaks National Monument
CenturyLink and Verizon	Provision of telephone and high speed Internet service for the monument.	Monument is working to determine the proper agreement / permitting mechanism	CenturyLink, Verizon, Cedar Breaks National Monument
Special use permits	Special use permits issues in 2014 included a community Snowmobile Poker Run, the Red Rock Relay race, the Tour of Utah Bicycle Race, and several commercial photography and fishing permits including the Eider Filming group and KUED Public Television.	Varies by permit	Varies by permit

Title/Agency/ Organization	Purpose/Description	Expiration Date	Responsible Party
Commercial Services			
Commercial use authorization	Zion National Park assists Cedar Breaks by processing commercial use authorization for the monument, as well as commercial use authorizations that jointly include Zion and Cedar Breaks. In 2014, there were two commercial use authorizations issued, one to Backroads Bicycle Tours and one to the monument's cooperating association (the Zion Natural History Association). As of this writing, there is interest by several snowmobile organizations to provide winter snowmobile tours through the monument.	Varies by commercial use authorization	Varies by commercial use authorization, Zion National Park, Cedar Breaks National Monument
Service Contracts			
Snow plowing	Utah DOT provides the necessary heavy grade equipment to remove snow from both travel lanes along the approximately 5 miles of State Hwy 148 within the boundary of the monument for safe vehicular use. UDOT will also provide a qualified equipment operator, fuel and transportation to accomplish the work. The state will bill for work that is completed for the National Park Service within the period of performance for each fiscal year.	9/30/16	Utah Department of Transportation (UDOT)
Other			
Solid waste and recycling removal	Compensation to Brian Head Town for solid waste and recycling removal from the monument, through an invoice and payment system.	Informal agreement	Brian Head Town
Research permits	For the management of research permits in Cedar Breaks National Monument and Zion National Park. These could range from single events to long-term monitoring projects.	Varies by permit	Varies by permit

Appendix C: Past and Ongoing Park Planning and Data Collection Efforts

Planning Documents and Data Collection Efforts	Date
Analysis of Water System – Cedar Breaks National Monument	1941
Master Plan Development Outline	1958
Mission 66 Master Plan Development Outline	1964
Wilderness Proposal	1967
Water Resources of Cedar Breaks National Monument, Iron County, Utah	1967
Wilderness Recommendations	1969
Spring Discharge at Cedar Breaks National Monument and Zion National Park, Southwestern Utah	1971
Interpretive Prospectus	1971
Final Environmental Statement / Proposed Wilderness Classification	1977
Cultural Resource Surveys of the Proposed D-2 Spring Developments 1979: Dry Camp Valley Spring, Anderson Spring, Rock Spring, Horse Valley Spring, Mud Springs	1979
Navajo Lake – Duck Creek Recreation Management Plan	1979
Draft Environmental Assessment / General Management Plan / Development Concept Plan	1983
National Register of Historic Places Nomination: Caretaker's Cabin, Cedar Breaks National Monument	1983
National Register of Historic Places Nomination: Visitor Center, Cedar Breaks National Monument	1983
Statement for Management	1983
Road Inventory and Needs Study	1984
Scope of Collections Statement	1986
Statement for Management	1986
General Management Plan / Development Concept Plan	1989
Statement for Management	1989
Statement for Management	1991
Simulation of Groundwater Flow and Water-Level Declines That Could be Caused by Proposed Withdrawals, Navajo Sandstone, Southwestern Utah and Northwestern Arizona	1992
Plant Community and Rare and Nonnative Species Distribution and Dynamics in Cedar Breaks National Monument	1992
Comprehensive Inventory of Utah's Forest Resources, 1993	1999
Statement for Management	1994
Strategic Plan	1997

Planning Documents and Data Collection Efforts	Date
A Research Design for the Archeological Survey of Cedar Breaks National Monument	1997
Baseline Water Quality Data, Inventory and Analysis	1999
Archeological Survey – 1998 Summary Report	1999
Inventory Study Plan for Vascular Plants and Vertebrates: Northern Colorado Plateau Network	2000
Geologic Road Log of Cedar Breaks National Monument	2000
Geology of Cedar Breaks National Monument, Utah	2000
High-altitude Archeological Investigations at Cedar Breaks National Monument, Utah	2001
Wildland-Urban Interface Fuels Management / Environmental Assessment	2001
Cretaceous and Early Tertiary Geology of Cedar and Parowan Canyons, Western Markagunt Plateau, Utah	2001
2001–02 Avian Inventory Final Report for Northern Colorado Plateau National Parks	2002
Paleontological Resource Inventory and Monitoring, Northern Colorado Plateau Network	2002
The Paleoecology of Red Valley Bog, Markagunt Plateau, Utah	2002
Northern Colorado Plateau Network Herpetofauna Inventory, 2002 Annual Report	2003
2001–02 Mammalian Inventory Final Report for Selected Northern Colorado Plateau Network Parks	2003
Northern Colorado Plateau Vital Signs Network and Prototype Cluster Plan for Natural Resources Monitoring	2003
Housing Management Plan	2003
Climate Monitoring Protocol for the Park Units in the Northern Colorado Plateau Network	2004
2004 Invasive Nonnative Plant Inventory, Northern Colorado Plateau Inventory and Monitoring Network	2004
Geologic Map of the Navajo Lake 7.5′ Quadrangle, Kane and Iron Counties, Utah	2004
Northern Colorado Plateau Inventory and Monitoring Network, Vital Signs Monitoring Plan	2005
The Road Inventory of Cedar Breaks National Monument	2005
Geologic Resource Evaluation Report	2006
Inventory and Classification of Selected National Park Service Springs on the Colorado Plateau	2006
Interim Geologic Map of the Cedar City 30′ x 60′ Quadrangle, Iron and Washington Counties, Utah	2006
Weather and Climate Inventory, Northern Colorado Plateau Network	2006
Vertebrate Species in Utah, Northern Colorado Plateau Network	2007

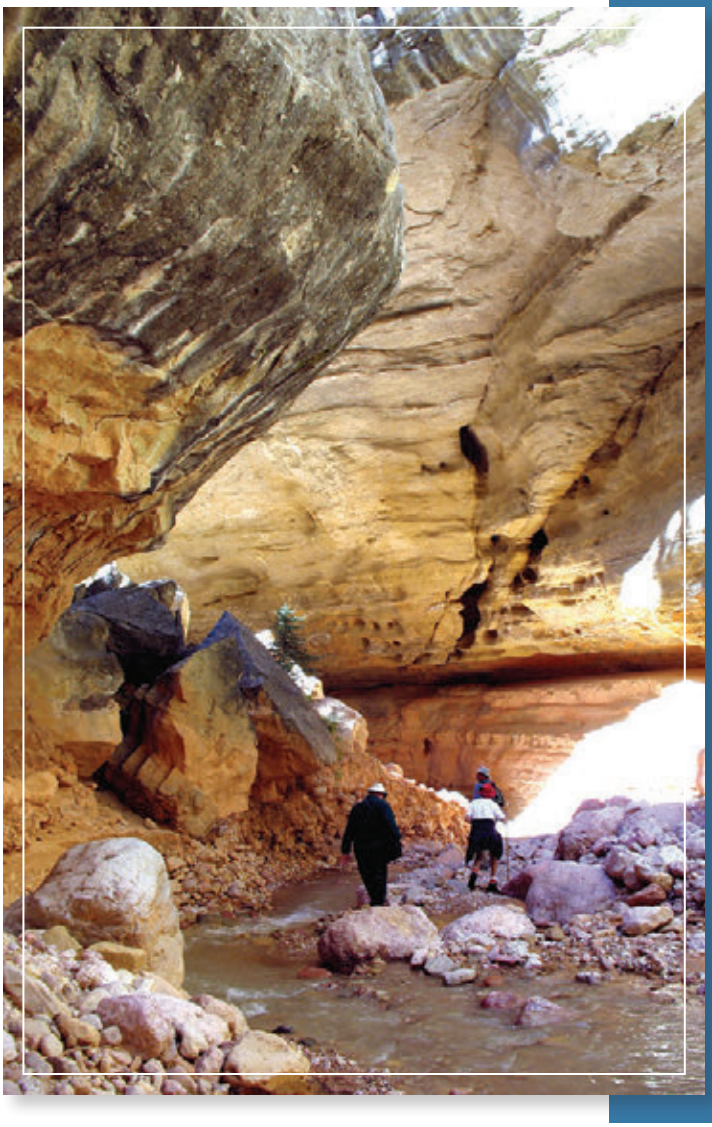
Planning Documents and Data Collection Efforts	Date
Geologic Hazard from Point Supreme Cliff Retreat	2007
Intermountain Region New Deal Resources: Research Findings for Cedar Breaks National Monument	2008
Annotated Checklist of Vascular Flora	2009
Survey of Rare Plants of Cedar Breaks National Monument, Final report	2009
Vascular Plant Flora of the Ashdown Gorge Wilderness Area and Additions to the Flora of Cedar Breaks National Monument	2009
New Vascular Plant Species Discoveries in the Northern Colorado Plateau Network: 2008 Update	2009
Air Quality Monitoring Protocol and Standard Operating Procedures for the Northern Colorado Plateau Network	2010
Air Quality Monitoring in the Northern Colorado Plateau Network, Annual Report 2009	2010
New Vascular Plant Species Discoveries in the Northern Colorado Plateau Network: 2009 Update	2010
An Overview of National Park Service Paleontological Resources from the Parks and Monuments in Utah	2010
Cedar Breaks Ranger Station / Environmental Assessment	2010
Remote Sensing of Vegetation Phenology and Snow-Cover Extent in Northern Colorado Plateau Network Parks, Status and Trends 2010	2011
Vegetation Classification and Mapping Project Report	2011
Vascular Plant Species Discoveries in the Northern Colorado Plateau Network: Update for 2008-2011	2012
Cedar Breaks National Monument Long-range Interpretive Plan	2012
W. Fertig and D. N. Reynolds, *The Contribution of Cedar Breaks National Monument to the Conservation of Vascular Plant Diversity in Utah*	2012
Cedar Breaks Spring Survey	2012
Climate Monitoring in the Northern Colorado Plateau Network, Annual Report 2011	2013
Integrated Upland Monitoring Protocol for the Park Units in the Northern Colorado Plateau Network	2013
Integrated Upland Monitoring in Cedar Breaks National Monument, Annual Report 2011 (Nonsensitive Version)	2013
Landscape Dynamics Monitoring Protocol for the Park Units in the Northern Colorado Plateau Network	2013
Recent Climate Change Exposure of Cedar Breaks National Monument, Resource Brief	2014
Cedar Breaks National Monument, A Report on Wilderness Character Monitoring	2014
Geologic Map of the Brian Head Quadrangle, Iron County, Utah	2014
Road Guide to the Geology of Cedar Canyon and Cedar Breaks National Monument	2014

Appendix D: Wilderness Character Narrative

A wilderness character narrative describes what is unique and special about a specific wilderness, organized by each of the qualities of wilderness character. The narrative is a positive, affirming description of a wilderness now and into the foreseeable future, and includes a description of major influences, including threats, on wilderness character. This wilderness character narrative is intended to familiarize readers with the tangible and intangible resources and values that combine to create the Cedar Breaks Wilderness. The narrative was created through collaboration with NPS staff and others and is a record of the shared understanding of wilderness character exemplified by Cedar Breaks National Monument, as well as the most significant threats to its wilderness character.

Untrammeled Quality

Nature seems to flaunt her freedom in the Cedar Breaks Wilderness. Boulders the size of cars are scattered across the landscape by the almost unimaginably powerful flow of water during spring snowmelt and summer storms. Fallen trees are swept away by the irresistible floods, only to be dumped as a towering jumble of bleached wood at a bend in the channel. Broad raceways are cleared of plant life and earthworks are built and destroyed as the shape of the land is redrawn from one season to the next. The violence of the changes wrought by the water and the frequency with which they occur set this place apart and give the human visitor a sense of insecurity and unpredictability: an unsettling feeling that anything could happen at any time. The overwhelming impression conveyed during a hike into the Cedar Breaks amphitheater is of the unfettered power of nature.



Natural forces have a free hand in the wilderness with one exception, and that is fire. The response to lightning-caused fires has historically been immediate suppression. The current fire management plan lists as an objective that fire should be restored to its natural ecological role, but Cedar Breaks is considered a moderate-risk area for allowing wildfires to burn because of its small size and the proximity of nonwild land, and public pressure and concern from nearby communities mean that suppression is still the most likely response. Fire is perhaps most apt to enter Cedar Breaks by spreading from a lightning strike in the Ashdown Gorge Wilderness, but as recently as 2012 two lightning-caused fires in Ashdown Gorge were immediately suppressed.

Natural Quality

There is a duality to the Cedar Breaks Wilderness as both a place of extreme dryness and a place defined by water. The crumbly red and white soils newly formed from weathered rock near the rim of the amphitheater support over a dozen rare species of plants: unassuming little dots of green that survive the desiccating forces of wind, sun, and winter cold by hugging the otherwise barren ground. These plants specialize in such environments, and their presence gives Cedar Breaks a rather unique flora. Little else can grow in these sites except bristlecone pines, their gnarled and half-dead trunks attesting to the constant battle for moisture they face despite their adaptations of phenomenally slow growth and far-reaching roots. But within the pink and orange cliffs are countless springs that send falls trickling and plummeting down the walls to streams that run through the gullies, so the sound of water is an almost constant accompaniment to hikers in the lower parts of the wilderness. The enormous amphitheater itself is the handiwork of water, the astounding result of millions of years of headward erosion by Ashdown Creek, a seemingly insignificant stream.

The water, although such a creative force in one respect, is surprisingly devoid of life. Naturally low in nutrients and subject to frequent violent floods that capriciously either scour the rocks clean, coat them with a layer of sticky orange mud, or rearrange them entirely, the creeks support little in the way of aquatic fauna or riparian vegetation. Instead they cut wide-open swaths of gravel, boulders, and empty water through the dry conifer woodlands. Perhaps partly due to this inhospitable riparian environment, the Cedar Breaks Wilderness is unusually free of invasive plants.

Climate change is an inescapable threat to the natural hydrological processes at work in Cedar Breaks, albeit one of unknown severity. Changing patterns of temperature and precipitation may result in reduced winter snow accumulation. This in turn would probably reduce groundwater recharging and therefore spring output. The wilderness may become a much quieter place. Much calmer, too, if the floods lessen in force and frequency. Without the constant substrate rearrangement, plants could take over the streambeds, drastically altering both appearance and ecology.

Also of concern is the potential for contamination of the waterways. It has been demonstrated that water absorbed into the ground in some areas outside the boundaries of Cedar Breaks flows underground to emerge in wilderness springs. Increased nutrient content from the presence of livestock or other activities on land outside the park and altered chemical composition from winter application of salt to roads are just two of the possible impacts on water quality.

Undeveloped Quality

There is an almost total absence of visible human influence in the Cedar Breaks amphitheater. There are no buildings, no bridges, no signs, and no trails. It could almost be one of those “lost valleys” of the B-movie realm where dinosaurs still roam. A wilderness without trails, without even cairns to provide direction, is surprising: a rare joy. Hikers can allow the land itself to guide their footsteps as their path is determined by natural features. Surrounded by wildness, they can feel their connection to nature increased. The portions of wilderness that lie above the rim are slightly less untouched than the amphitheater, but no motorized equipment is used anywhere in the wilderness. Dead trees are allowed to stand while they can and left to lie where they fall.

No development is expected within the amphitheater, because its status as a research natural area precludes the construction of trails, and without trails there is no need for signs or maintenance activities. A long-term forest dynamics monitoring plot was just created in the wilderness above the rim on the north end of the park, involving the installation of 375 marker stakes. Above the rim on the south end, a trail extension has been discussed that would add approximately 0.75-mile trail in wilderness, but there is already a well-established social trail in that area, so the impact of trail development could be minimized by following the same route. There is also a possibility that signs may be installed in this area to discourage people from wandering through rare plant communities.

Solitude or Primitive and Unconfined Recreation Quality

It is easy to feel utterly alone in the Cedar Breaks Wilderness. Except for the minor portion above the rim, it is rarely visited by anyone. Despite its relatively small size, it feels truly remote, disconnected from humanity. Even though most travel is probably concentrated in streambeds, because there are so many alternative routes fanning out to all points in the amphitheater, multiple parties could be exploring different drainages without ever detecting each other. Those who wander far enough from the streams that the sound of water disappears hear nothing but the wind in the trees, the insistent conversations of ruby-crowned kinglets, and the sweet music of hermit thrushes. The only footprints in the dirt are those of deer. At night, the protective ring of cliffs and ridges blocks out the glow of distant civilization, allowing the breathtaking depths of the star-filled sky to command attention.

Beyond the reach of cell phone towers and difficult to get into, it is a place that demands self-reliance, since an emergency rescue would not be quickly achieved. There are no permits required nor registers to sign, so there is no expectation that NPS staff would even be aware if someone failed to return. Without trails, hikers must seek their own paths. Most choose to travel along streambeds, jumping and scrambling over the rocks, forced to live in the moment by the necessity of thinking through and concentrating on every step lest a loose or slippery rock result in a potentially disastrous fall. There is a feeling that true exploration is possible: that perhaps no one has ever ventured up this gully before, or seen the cliffs from this ridge.

The one sour note in the wilderness experience in Cedar Breaks is struck by human-made structures intruding upon otherwise natural vistas. A Federal Aviation Administration radar installation dominates the peak of Blowhard Mountain just south of the park, its giant silver sphere visible on the horizon from much of the wilderness. Catching sight of that silver ball during a pause to admire the view temporarily shatters the feeling of remoteness and wildness. The Cedar Breaks visitor center on the rim and fences at the overlooks are also visible, though much less intrusive. A private inholding in Ashdown Gorge Wilderness, while very minimally developed at present, poses a significant threat in this regard. If extensive tree removal or building construction ever takes place there it will have a substantial impact on the viewshed from both wilderness and nonwilderness areas of the park.

Other threats relate to visitor use. The prohibition on camping due to the amphitheater's status as a research natural area severely limits the opportunity for unconfined recreation. However, there is also concern about future increased visitation and possible accompanying social trails and trash, and the inability to camp is likely to help keep visitation levels low. If people begin to camp in violation of the rules, then additional steps such as permit systems and law enforcement patrols may be instated.

Other Features of Value Quality

The geological formations and works of erosion that Cedar Breaks was created to protect are the dominant feature of the wilderness area. The upper parts of the wilderness are an otherworldly fantasy scape whose shapes and colors are ever-changing, subject to the whims of light and shadow. Impossibly smooth slopes of rosy soil fold into a geometrically precise pattern of multihued furrows dug by runoff. Rows of rocky spires and freestanding walls rise out of the valleys, inviting exploration, offering the chance to lose oneself among them. Lower down, travelers along the creeks and through the forests can see the cliffs at every turn in glimpses of brilliant color that call with the promise of mystery and marvel. And especially for those who enjoy the wilderness from outside its boundary, the amphitheater is the defining feature. In an approach from above, Cedar Breaks seems to tumble over the rim of the plateau, the deeply fissured pink, orange, white and purple cliffs a startling and breathtaking contrast to the placid green meadows above.

There are no known threats to the geological formations, and should any appear they would be swiftly addressed to the best of NPS ability. The monument's 2013 strategic plan supports the original intent of its founding: that its primary mission is to preserve the geological spectacle. However, climate change threatens the processes that underlie this natural wonder. Reduced precipitation may lead to decreased erosion by flowing water. Warmer temperatures may lead to less ice forming in cracks in the rock, the process by which chunks are broken off and new shapes sculpted. Cedar Breaks may become more of a static memorial to erosional processes and less the active display of nature's power that it is today.

Appendix E: Traditionally Associated Tribes

Confederated Tribes of the Goshute Indian Reservation
Confederated Tribes Tribal Council
PO Box 6104
Ibapah, UT 84034

Hopi Tribe of Arizona
Hopi Tribal Council
PO Box 123
Kykotsmovi, AZ 86039

Kaibab Band of Paiute Indians of the Kaibab Indian Reservation, Arizona
Kaibab Paiute Tribal Council
HC 65, Box 2
Fredonia, AZ 86022

Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada
Las Vegas Paiute Council
1 Paiute Drive
Las Vegas, NV 89106

Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada
Moapa Band of Paiutes Tribal Council
PO Box 340
Moapa, NV 89025

Navajo Nation, Arizona, New Mexico, and Utah
Navajo Nation Tribal Council
PO Box 9000
Window Rock, AZ 86515

Northern Ute Tribe
PO Box 190
Fort Duchesne, UT 84026

Paiute Indian Tribe of Utah
Paiute Tribe of Utah Tribal Council
440 North Paiute Drive
Cedar City, UT 84721

Paiute Indian Tribe of Utah, Cedar Band
Cedar Paiute Tribal Council
600 North 100 East
PO Box 235
Cedar City, UT 84721

Paiute Indian Tribe of Utah, Indian Peaks Band
Indian Peaks Paiute Tribal Council
940 West 526 South
Cedar City, UT 84721

Paiute Indian Tribe of Utah, Kanosh Band
Kanosh Paiute Tribal Council
476 South 700 West
PO Box 116
Cedar City, UT 84720

Paiute Indian Tribe of Utah, Koosharem Band
Koosharem Paiute Tribal Council
PO Box 205
Richfield, UT 84701

Paiute Indian Tribe of Utah, Shivwits Band
Shivwits Paiute Tribal Council
6060 West 3650 North
Ivins, UT 84738

Zuni Tribe of the Zuni Reservation, New Mexico
Pueblo of Zuni Tribal Council
PO Box 339
Zuni, NM 87327

Appendix F: Partnerships and Volunteer Programs

Cedar City / Brian Head Tourism Board

- The tourism bureau plays a vital role in Southern Utah's economy through its promotion of the area's destinations. The bureau includes Cedar Breaks and other area national parks in publications as well as their website. Visitors often include Cedar Breaks as part of their Cedar City visit, Shakespeare Festival experience, or Brian Head recreation after reading tourism materials or interacting with area tourism providers.

Intergovernmental Internship Cooperative

- Cedar Breaks was a founding member of the Interagency Internship Cooperative (IIC) youth engagement program, which provides a unique organizational structure to network and communicate, access, and share resources, and efficiently create and administer shared programs. The program develops public land leaders of tomorrow by being a centralized resource of committed and engaged partners who collaborate to provide relevant and meaningful educational experiences and career opportunities to university and other youth in the region and to meet partner needs for a diverse workforce. The IIC program encourages stewardship of and appreciation for the richness of the region's lands and resources.
- IIC partners include Southern Utah University, Dixie State University, and six NPS units, two Utah BLM District offices, two BLM-managed national monuments, the Dixie National Forest, Utah State Parks, the Natural Resources Conservation Service, the Bureau of Indian Affairs, and two Southern Paiute tribal governments.
- Cedar Breaks uses the Interagency Internship Cooperative to engage a number of interns throughout the year in meaningful work experiences in a variety of different fields, including administration, information technology, interpretation, wilderness character monitoring, maintenance, and resource management.
- At Southern Utah University, a student and faculty team also produced a series of video clips about the park that are displayed on a touch-screen monitor in the visitor center. The video clips cover a number of topics including winter recreation, geology, fall colors, night sky, and CCC history.
- Cedar Breaks also provides student practicum opportunities as part of the requirements for an outdoor recreation degree.
- From the inception of the internship cooperative, more than 45 former interns have been hired into positions in nearby federal land agencies and national and state parks.

Partners in the Parks

- An outdoor experiential learning program, Partners in the Parks, is sponsored by Southern Utah University and Cedar Breaks National Monument in cooperation with the National Collegiate Honors Council. The program offers unique opportunities for collegiate honor students and faculty, usually living and studying in urban areas, to experience national parks. On-site, in park "academic adventures" are led by university faculty and park personnel and include historical, scientific, and cultural topics unique to a given park. Since its inception in 2008, more than 400 college students have participated in 36 different NPS units across the country.

Retired Senior Volunteer Program (RSVP)

- Many of the monument's older volunteers participate in this program. Iron County Volunteer Center receives credit for contributed volunteer hours as well as the monument. Volunteers are eligible for mileage reimbursement.

Sustainable Operations Partnership

- The Sustainable Operations Partnership encourages the voluntary use of sustainable practices to reduce the risk of climate change. Partners include all of the 18 IIC partners, and each benefits from the use of sustainable practices while supporting renewable energy, water conservation, alternative fuels, wastewater reduction, and recycling, green purchasing, and sustainable leadership in regional communities.

Southern Utah Recycling Coalition

- Cedar Breaks was a founding member of the Southern Utah Recycling Coalition (SURC). The SURC vision is to institute a long-term recycling program in the five-county area of southern Utah for future generations. Their mission is to model good recycling behavior, promote conservation ethics, provide opportunities for others to recycle, research recycling needs and attitudes, and educate others about the full range of recycling benefits. The SURC works with our engaged community partners to educate the youth, community, decision makers, and businesses about recycling, to work toward establishing a materials recycling facility, to capitalize on economic opportunities, to coordinate resources, and to engage in ongoing research and assessment.

Intermountain Region Foundation Document Recommendation
Cedar Breaks National Monument

November 2015

This Foundation Document has been prepared as a collaborative effort between park and regional staff and is recommended for approval by the Intermountain Regional Director.

11/2/15

RECOMMENDED
Paul Roelandt, Superintendent, Cedar Breaks National Monument **Date**

11/12/15

APPROVED
Sue E. Masica, Regional Director, Intermountain Region **Date**

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

CEBR 154/130477
November 2015

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