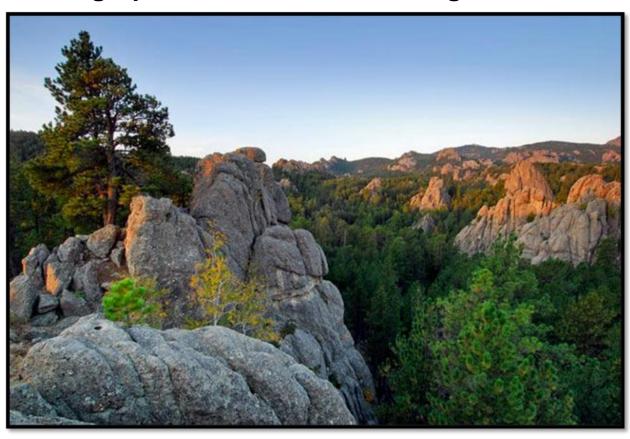
Rocky Mountain Region / Black Hills National Forest

June 2022

# **Black Hills National Forest**

## **Draft Forest Assessment:**

# **Existing Special and Potential Designated Areas**



Black Hills National Forest. (USFS, 2021).

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## **Chapter 1. Introduction**

## What is an Assessment Report?

The Black Hills National Forest (Black Hills NF) is managed by the U.S. Forest Service (USFS), an agency of the U.S. Department of Agriculture (USDA). The mission of the USFS is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations. The National Forest Management Act requires all National Forests to develop a land and resource management plan (forest plan) to guide management actions and decisions. The current Black Hills NF forest plan was approved in 1997 and has been amended twice, in 2001 and 2005. The National Forest Management Act requires that these forest plans be periodically updated. To revise the current forest plan, the Black Hills NF has identified and evaluated existing information about relevant ecological, economic, and social conditions, trends, and sustainability and how those conditions relate to management direction in the forest plan. This preliminary draft assessment report documents findings for aquatic, riparian, and groundwater dependent ecosystems.

#### **Resource Overview**

This document is an assessment of the current known and potential designated area resources and uses in the Black Hills NF, or the "plan area". Designated areas are specific areas or features within the Black Hills NF that have been given a permanent management designation to maintain a unique special character or purpose (36 CFR 219.19).

Within the Black Hills National Forest, there are several types of designated areas. These areas fall into various categories, generally dependent upon the intended purpose. Such areas can be landscape scale, such as the Black Elk Wilderness Area, or more specific sites such as a research natural area. These areas typically have different management direction than the rest of the forest in order to maintain the characteristics for which they were designated. This assessment addresses current conditions and issues of designated areas in the Black Hills NF and the existing direction as described in the current forest plan. Designated areas include areas that are:

- Statutorily designated by Congress (e.g., Wild and Scenic Rivers, Wilderness or Wilderness Study Areas, Special Management Areas),
- Administratively designated by the Chief of the Forest Service, the Secretary of Agriculture or
  other agencies and departments (e.g., critical habitat under the Endangered Species Act, roadless
  areas, national historic landmarks, national recreation trails, research natural areas, nationally or
  Forest Service-designated scenic byways), and
- Administratively designated by the Regional Forester (e.g., botanical, geologic, scenic, zoological, paleontological, historical, or recreational values).

## **Chapter 2. Resource Assessment**

#### **Importance**

#### **Wilderness Requirements**

Concerns about expanding settlement and increasing population led to the establishment of the Wilderness Act by Congress in 1964. The Wilderness Act gave Congress the ability to designate certain lands to be managed "for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness." (16 U.S.C. 1131§2(a))

However, wilderness designation shall not cause interference with the purposes for which national forests are established or with the Multiple-Use Sustained-Yield Act and should be considered supplemental to these established protections. Overall, Wilderness Areas should be administered so that they may be "devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use." (16 U.S.C. 1131§4(a))

Considerations of multiple-uses and ecosystems services for Wilderness Areas include:

- Protection of watersheds
- Habitat for wildlife
- Maintenance of soil and water quality
- Opportunities for outdoor recreation

Typically, commercial enterprises, permanent roads, mechanized/motorized equipment, permanent structures, and aircraft are prohibited in wilderness areas. However, special provisions can be made to support effective wilderness area management. For example, commercial enterprises such as outfitters may be allowed to operate within wilderness boundaries in support of recreational purposes and temporary roads may be utilized to perform special maintenance needs.

#### **Condition and Trends**

#### **Congressionally Designated Areas**

Existing congressionally designated areas in the Black Hills NF include one wilderness and one wildlife preserve (table 1). While one national monument, one national park, and one national memorial also exist within and/or adjacent to the Black Hills NF, they are not under the management of the National Forest. Of the other potential types of Congressionally designated areas, there are no special management areas, national scenic and historic trails, wild and scenic rivers, national heritage areas, national recreation areas, interstate highways, or national scenic areas in the Black Hills NF.

#### Table 1. Congressionally and presidentially designated areas in the Black Hills NF

[Sources: Wilderness.net (2017); USDA Forest Service (2020a) Land Areas of the National Forest System.]

Name	Total Acres	Acres in the Black Hills NF Boundary	Lead Jurisdiction
Black Elk Wilderness	15,350	15,350	Black Hills NF, Hell Canyon RD
Norbeck Wildlife Preserve	46,100	39,050	Black Hills NF, Hell Canyon RD

#### Black Elk Wilderness

The Black Hills NF is home to one congressionally designated Wilderness Area, the Black Elk Wilderness, covering 15,354-acres, or 1.1% of the Forest. First established as part of the Norbeck Wildlife Preserve in 1920, it was designated by Congress in 1980 through the Colorado Wilderness Act and is managed by the Hell Canyon Ranger District.

The Black Elk Wilderness is named after an Oglala Lakota spiritual leader and is sacred to many American Indians. Precambrian rock formations and thick ponderosa pine forests create ample climbing and hiking opportunities, making it a very popular recreation area for locals and tourists. Prominent landmarks within the wilderness include the highest point in the United States east of the Rocky Mountains, Black Elk Peak (7,244').

In 2005, the Forest Service began the 10-Year Wilderness Stewardship Challenge, which sought to improve the agency's management of designated wilderness areas. Each wilderness area was scored on a 0-10 scale for 8 separate elements, with a score of 60 out of 100 meaning the wilderness area was managed to minimum standard. The managing Forest then seeks to improve management in order to improve element scores. Region 2, which includes the Black Elk Wilderness, has taken a slightly different approach. Rather than improving the score of all elements concurrently, they are focusing the majority of their effort on one element at a time.

In 2016, this program was renewed for another 10 years through 2025 as the Wilderness Stewardship Performance), with 15 elements. These elements and their components are standardized across the Forest Service, to provide consistency across the nation. Forests must select 10 of these elements for each wilderness area based on management needs and goals. Each element is valued at 10 points. Within each element various actions are required to gain points. Elements generally require an inventory of conditions, an action plan to make corrections and improvements, and actions taken to correct the conditions. For example, the element related to Recreation Sites calls for the following actions: 2 points for an inventory of campsites, 4 points for a plan to correct unacceptable impacts, and 10 points for correcting the impacts and regularly monitoring the condition. The minimum standard remains 60 points out of 100 (USDA Forest Service 2020b). Wilderness Stewardship Performance Elements and Scores from 2015-2021 are contained in table 2.

Table 2. Wilderness stewardship performance elements and scores for Black Elk Wilderness

Category	Element	2015	2016	2017	2018	2019	2020	2021
	Invasive Species	2	2	2	4	4	4	4
Natural	Air Quality Values							
Naturai	Natural Role of Fire							
	Fish and Wildlife							
Lindavalanad	Recreation Sites							
Undeveloped	Trails	4	6	6	8	6	8	8
Untrammeled	Agency Management Actions	0	2	2	2	2	2	2
	Solitude Opportunities	6	6	6	8	8	8	8
Opportunities	Primitive / Unconfined Recreation							
Other Features	Cultural Resources	10	10	10	10	6	6	6
Consist Dravisions	Livestock Grazing							
Special Provisions	Outfitter-Guide	8	10	10	10	10	10	10
	Workforce Capacity	4	4	6	6	6	8	
Administration	Education	2	4	4	2	2	2	2
Administration	Wilderness Character Base	8	8	8	8	8	8	8
Additional Requirements	Wilderness Boundaries and 4 4 4 4 4 4 4 Upward Reporting		4	4	4			
Total Score		54	56	58	62	56	60	60

#### Norbeck Wildlife Preserve

Originally named Custer State Park Game Sanctuary, the Norbeck Wildlife preserve is a 46,096-acre area originally set aside through the efforts of Peter Norbeck, a South Dakota conservationist and politician for the protection of game animals and birds. Designated by Congress through the Norbeck Organic Act in 1920, the sanctuary was renamed in 1949 to honor the man who created it. While specific species were never defined in the original Act, focus species have since been identified and include five big game species such as Rocky Mountain Elk and Bighorn Sheep, and seven bird species such as the Mountain Bluebird and the Ruffed Grouse. The Peter Norbeck National Scenic Byway was established in 2001 and circumnavigates the Preserve and provides scenic views for visitors as well as recreational access for some of the most rugged terrain in the Black Hills.

#### Wild and Scenic Rivers

There are currently no designated Wild and Scenic Rivers in the Black Hills NF. However, eligibility evaluation for the Black Hills NF is being conducted as part of the current forest plan revision efforts, consistent with the final directives of the 2012 Planning Rule (Forest Service Handbook [FSH] 1909.12, Chapter 80). In 1997 sixteen river segments totaling 120.6 miles were found to be eligible for inclusion in the NWSRS. It has been 25 years since the previous eligibility evaluation, and some changed circumstances exist that warrant review of all sixteen potentially eligible stream segments. The current review has found 21 streams totaling 144.7 miles to be eligible for inclusion in the NWSRS. Please refer

to Potential Wild and Scenic River designation section on page 11 of this report for a description of this evaluation.

#### **Administratively Designated Areas**

Other types of outstanding resources that are not congressionally designated can be designated through other administrative means by the Forest Service or other agencies. These areas include experimental forests or range areas, inventoried roadless areas, national historic landmarks, research natural areas (RNA), special interest areas, scenic byways, and significant caves and are listed in table 3. There are no designated areas for critical habitat under the Endangered Species Act, national natural landmarks, or wild horse and burro territories in the Black Hills NF.

#### Table 3. Administratively designated areas in the Black Hills NF

[Sources: USDA Forest Service (2020a, 2022), American Trails (2022), SouthDakota.com; nps.gov; usda.gov]

Name	Total Acres/Miles	Acres/Miles in the Black Hills NF Boundary
Experimental Forests	3,400	3,400
Research Natural Areas	3,160	3,160
Inventoried Roadless Areas	29,875	29,875
National Historic Landmarks	0	0
Scenic Byways (Miles)	110	105
Special Interest Areas	1,400	1,400
Significant Caves	Unknown*	Unknown*
Botanical Areas	7,460	7,460

<sup>\*</sup>There are hundreds of caves throughout the Black Hills NF. However, policies are in place to protect these cave locations for the safety of the caves; therefore, specifics on acres are not available.

#### **Experimental Forests**

#### Black Hills Experimental Forest

Located approximately 7 miles north of the Pactola Visitor Center and 20 miles northwest of Rapid City, this 3,400-acre forest was established in 1961 to develop practices for maximum production of high-quality lumber. It now also provides an area for research on soil moisture relationships, game habitat, livestock forage production, snow totals and melt, streamflow, among others.

#### Research Natural Areas

#### Upper Pine Creek Research Natural Area

The Upper Pine Creek Research Natural Area (RNA) consists of 883 acres and was administratively designated in 1932. It is located within the Norbeck Wildlife Preserve and Black Elk Wilderness. The area also shares 2.5 miles of boundary with Mount Rushmore National Memorial and 7.2 miles of boundary with Custer State Park.

#### North Fork Castle Creek Research Natural Area

The North Fork Castle Creek RNA located in western South Dakota on the Mystic Ranger District was designated in 2012. This area is in a higher elevation, heavily forested, central part of the Black Hills. The RNA supports a rather diverse array of vegetation types representative of the upper elevation interior of the central Black Hills. The RNA covers a total of 798 acres entirely on National Forest System lands.

#### Canyon City Research Natural Area

The Canyon City RNA located in western South Dakota on the Mystic Ranger District was designated in 2012. This area is in the higher elevation, heavily forested, central part of the Black Hills. The Canyon City RNA lies in a somewhat isolated canyon of Rapid Creek drainage about 2 miles upstream from Silver City and the west end of Pactola Reservoir. The RNA supports a diverse array of vegetation types representative of the upper elevation interior of the central Black Hills. The RNA covers a total of 588 acres entirely on National Forest System lands.

#### Hay Creek Research Natural Area

The 577-acre Hay Creek RNA is generally located on the north end of the Bear Lodge Mountains, part of the Black Hills, in Crook County, northeastern Wyoming and was designated in 2012. The RNA is about 19 miles north of Sundance, Wyoming. This area is in the higher elevation, heavily forested, northeastern part of the Bear Lodge Mountains. The area encompasses a deep, sheltered, forested valley with well-developed woodland and forest vegetation, including stands of paper birch (*Betula papyrifera*). The Hay Creek RNA is currently used for watershed protection, wildlife habitat, and recreation. The Geis Irrigation Reservoir on the Middle Fork of Hay Creek is located on private land downstream from the Black Hills National Forest boundary. The Hay Creek RNA is located in a headwaters landscape that has been grazed and logged since settlement. The vegetation in the study area currently has limited grazing and logging use, most likely because of the restrictive features of the area such as steep slopes, wetlands, and dense vegetation growth.

#### Fanny/Boles Research Natural Area

Designated in 2012, the Fanny/Boles RNA is located in Custer County, SD on the Hell Canyon Ranger District of the Black Hills National Forest, approximately 8 miles east-southeast of Newcastle, WY. The area is comprised of 313 acres, primarily ridge top, with broken terrain and steep slopes. Very visible limestone outcrops form the canyon rims. There are no perennial streams or riparian vegetation present in the RNA. The principle distinguishing feature of natural diversity represented in the Fanny/Boles RNA is the vegetation community dominated by mountain mahogany shrubland and provides a good representation of natural variability for mountain mahogany/skunkbrush community. This is one of the nine specific plant series selected as targeted types within the Black Hills National Forest (USDA Forest Service 2005b).

#### Inventoried Roadless Areas

Roadless areas are defined by the 2001 Roadless Rule as "any area, without the presence of a classified road, of a size and configuration sufficient to protect the inherent characteristics associated with its roadless condition" (36 CFR 219.36). There are currently approximately 15,000 acres of inventoried roadless areas within the Black Hills National Forest and are outlined in table 4.

#### Table 4. Roadless areas within the Black Hills NF

[Source: USDA Forest Service (2005).]

Туре	Name	Acres
Wilderness	Black Elk	13,420
Roadless Area	Sand Creek	9,950
Roadless Area	Beaver Park	5,110
Sacred Site Area	Inyan Kara	1,400
Total		29,880

#### Sacred Sites

The USDA Forest Service identifies sacred sites as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, and Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such as site" (USDA Forest Service 2016). These sites are eligible for the National Register of Historic Places as historic properties of religious and cultural significance to Indian tribes.

The Black Hills are a sacred landscape and traditional spiritual homeland for the Lakota, Dakota, Cheyenne, and Arapaho tribes and contain numerous sacred sites and Traditional Cultural Properties (TCPs). These may be specific points on the landscape or geographic forms such as mountain peaks, high ridges, hills, springs, hot springs, caves, large glacial erratics, fossil outcrops, and other natural landscape features. Areas with rock art, stone effigies, and round stones far from water are also sacred to Plains groups. Many of these locations are important landscapes for vision quests, places of power, or the dwellings of spirit animals in Arapaho, Lakota, and Cheyenne beliefs and oral history (Sundstrom 1997, 2019). For the Ponca, Kiowa, and Cheyenne, the Black Hills is an important stop during their migration stories (Parks and DeMallie 1992).

Specific sacred locations within the Black Hills are extensive and include Bear Butte, Wind Cave National Monument, and Bear's Lodge (Devils Tower). Bear Butte is the most sacred place for Cheyenne traditional beliefs and the location of origin stories that form the basis of their most important religious ceremony, the Sacred Arrows. Bear Butte is sacred for all tribes with ties to the Black Hills. While not a comprehensive list, other known sacred locations specifically in the Black Hills NF for the Lakota, Dakota, Cheyenne, Arapaho, Kiowa, Plains Apache, Arikara, and Mandan include (Sundstrom 1997, 2019, Albers et al 2003):

- Black Elk Peak (Harney Peak)<sup>1</sup>,
- the Race Track (Red Valley),
- Buffalo Gap,
- Craven Canyon,
- Red Canyon,
- Gillette Prairie.
- Reynolds Prairie,

<sup>&</sup>lt;sup>1</sup> The U.S. Board of Geographic Names officially changed the name to Black Elk Peak from Harney Peak on August 11, 2016.

- Danby Park,
- Hot Springs-Minnekahta area,
- Inyan Kaga Mountain,
- Black Buttes,
- White Butte,
- Rapid Creek Valley,
- Sundance Mountain (Cheyenne),
- medicine wheel site (Cheyenne), and
- Stone Buffalo Horn (Cheyenne).

#### National Recreation Trails

The National Trails System Act of 1968 created the National Trails System to connect landscapes, communities, and people across landscapes for recreation, conservation, and interpretation. The system includes National Scenic Trails, National Historic Trails and National Recreation Trails. The Black Hills NF does not currently contain any congressionally designated National Scenic Trails or National Historic Trails, however, several National Recreation Trails designated by the Regional Forester are located in the plan area.

#### Centennial Trail

The Centennial Trail is a 111-mile-long backcountry trail jointly maintained by the USFS, BLM, NPS, and South Dakota Department of Game, Fish, and Parks. The trail ranges in elevation from 3,200 feet to 5,800 feet. Designated in 2005, the trail provides a full range of non-motorized uses such as hiking, horseback-riding, and mountain biking through open high plains, forest, meadow, riparian areas, and rock outcrops. Of the nearly 84 miles found on USFS land, one 15-mile segment between Pilot Knob Trailhead and Dalton Trailhead is open to ATV users. The trail passes through two state parks, lands managed by the Burau of Land Management (BLM), Wind Cave National Park, and the Black Hills NF.

#### Flume Trail

The Flume Trail was designated in 1979 and is an 11-mile out and back hiker- only backcountry trail. The trail features historical artifacts from the Rockerville Flume, which carried water during the mining boom of the 1880s. It is maintained by the USFS.

#### Lost Cabin Trail

This 14.7-mile backcountry loop trail is maintained by the USFS and was designated in 1979 for backcountry use. The trail ranges in elevation from 5,100 to 6,400 feet and passes within 5 miles of Mount Rushmore National Memorial. It is used primarily by hikers and equestrians.

#### George S. Mickelson Trail

Designated in 2004, this 114-mile state-maintained trail features gentle slopes and easy access. Most of the trail runs through National Forest System land, but some sections do pass through privately-owned land. It is primarily used by bicyclists and for walking, running, and hiking.

#### National and State Scenic Byways

#### Peter Norbeck National Scenic Byway

The Peter Norbeck National Scenic Byway runs a total of 70 miles in the area, 19.6 directly across Black Hills NF lands. The loop road consists of three state highways and one U.S. highway, travels through six rock tunnels, rock outcrops, and mountains. It takes approximately four hours to drive the entire byway. Mount Rushmore, Sylvan Lake, the Needle's Eye, Harney's Peak, and Cathedral Spires rock formations are points of interest along this famous byway.

#### Spearfish Canyon Scenic Byway

The 22-mile-long Spearfish Canyon Scenic Byway takes approximately 40 minutes to complete. Nineteen miles are within the Black Hills NF, providing views of waterfalls and towering canyon walls that make this a favorite drive in the area. Currently a State and National Forest Scenic Byway, this scenic drive has been nominated as a National Scenic Byway.

#### Special Interest Areas

#### Inyan Kara Mountain

Inyan Kara Mountain is located in the Wyoming portion of Black Hills NF. It was a landmark to early travelers in the area in the late 1800s and is sacred to local American Indian Tribes. It was added to the National Register of Historic Places in April 1973.

#### Significant Caves

Hundreds of caves are located throughout the Black Hills NF. However, the location of these caves is confidential, for the protection of the caves. Two caves described below, have been designated as significant, but are not under the management of Black Hills NF. Several other caves are located throughout and adjacent to Black Hills NF on private property and are managed independently by the landowners.

#### Jewel Cave National Monument

Initially explored for its mining possibilities in 1900, it was soon realized that the beautiful, but low economic value, of the calcite crystals within Jewel Cave contained more potential as a tourist attraction. However, difficulty in accessibility and lack of interest from tourists led to the sale of the cave to the government and its official designation as a national monument in 1908. Currently over 209 miles of Jewel Cave are mapped, approximately 5% of the total expanse of Jewel Cave. The monument is managed by the NPS and contains 1,273 acres.

#### Wind Cave National Park

Wind Cave is located in the southern Black Hills and was well known by native tribes as an entrance to the spirit world. It was first explored for minerals in the late 1800s and was designated a National Park in 1903. Wind Cave was the first cave to achieve such a designation in the world. Containing 149 miles of known cave (as of 2019) it is one of the largest and complex caves in the world. The park also includes 33,851 acres of land.

#### **Botanical Areas**

Botanical areas (table 5) are defined as "a unit of land that contains plant specimens, plant groups, or plant communities that are significant because of their form, color, occurrence, habitat, location, life history, arrangement, ecology, rarity, or other features" (Forest Service Manual 2372.05). Management focuses on protection and conservation of the botanical attributes of these areas and in some cases, they are used for public education.

Table 5. Botanical areas within the Black Hills NF

[Source: USDA Forest Service 2022.]

Botanical Area	Acreage
Bear/Beaver Gulches	3,410
Black Fox Valley	760
Dugout Gulch	650
Englewood Springs	165
Higgins Gulch	515
McIntosh Fen	300
North Fork Castle Creek	265
Upper Sand Creek	1,395
Total	7,460

#### **Potential Congressionally Designated Areas**

The Black Hills NF is in the process of identifying and inventorying lands that may be suitable for inclusion in the National Wilderness Preservation System using the size, adjacency, and road improvements criteria outlined in the Forest Service Handbook. See FSH 1909.12 Chapter 70, 71.21 and 71.22a.

#### **Potential Wilderness Area Inventory Results**

The resulting areas and acres are summarized in table 6 and are shown on Map 1 (Appendix A). The overall results include the following:

- One stand-alone area, Inyan Kaga, is less than 5,000 acres. Inyan Kaga was included due to its isolation, remoteness, and inaccessibility (US Forest Service, 2007)
- Other areas less than 5,000 acres in size were included because they are adjacent to Black Elk Wilderness Area
- Forestwide, 38,353 acres are included in the wilderness inventory map.

Lands shown on the inventory map do not imply designation or recommendation for inclusion in the National Wilderness Preservation System or necessarily convey or require a particular kind of management.

The next step in the wilderness recommendation process is to evaluate each area on the inventory map for wilderness characteristics. Evaluation of wilderness characteristics is done using five criteria set forth in the Wilderness Act of 1964 and required in the Forest Service Handbook final directives FSH 1909.12, Chapter 70, Section 72.1. A summary of these five criteria is as follows:

- Evaluate the degree to which the area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable (apparent naturalness).
- Evaluate the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation. The word "or" means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.
- Evaluate how an area of less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.
- Evaluate the degree to which an area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value. These values are not required in an area to be present, but their presence should be identified and evaluated where they exist.
- Evaluate the degree to which the area may be managed to preserve its wilderness characteristics.

Over the next several months, each area of the inventory will be evaluated for these criteria based on direction from FSH 1909. 12 Chapter 70. Supporting information that is identified during the evaluation phase will be used to evaluate and assess the area.

Table 6. W	/ilderness	inventory	results
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Inventory Polygon	Ranger District	Size	Acres	Comment
01	Bearlodge Ranger District	Larger than 5K acres	5,627	
02	Bearlodge Ranger District	Larger than 5K acres	12,389	
03	Northern Hills Ranger District	Larger than 5K acres	5,212	
04	Hell Canyon Ranger District	Wilderness Adjacent	1,295	
05	Hell Canyon Ranger District	Wilderness Adjacent	185	
06	Hell Canyon Ranger District	Wilderness Adjacent	95	
07	Hell Canyon Ranger District	Wilderness Adjacent	7	
08	Hell Canyon Ranger District	Wilderness Adjacent	1,656	
09	Hell Canyon Ranger District	Wilderness Adjacent	14	
10	Hell Canyon Ranger District	Larger than 5K acres	5,142	
11	Hell Canyon Ranger District	Larger than 5K acres	5,422	
12	Bearlodge Ranger District	Smaller than 5K acres	1,309	Inyan Kara

#### **Potential Administratively Designated Areas**

#### Potential Wild and Scenic River Designation

The National Wild and Scenic Rivers Act Section 5(d)(1) requires that, "consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas" during land management planning. To meet this requirement, Forest Service units conduct a systematic evaluation of river segments to determine if they are eligible for designation under the National Wild and Scenic Rivers Act. A wild and scenic river study process is composed of three main phases: eligibility, classification, and suitability. Only eligibility and preliminary classification is addressed in this report. If a river is found eligible, it will be managed under the appropriate wild, scenic, or recreational river management area direction to protect those values that made it eligible and the characteristics that established its preliminary classification. A final classification will be assigned during the comprehensive river management planning process required by the Act if the river is designated by Congress.

Prior to being recommended to Congress as potential additions to the National Wild and Scenic River System (NWSR), eligible rivers must also be found to be suitable for designation. A suitability study is not required as part of the 2012 Planning Rule and would only be undertaken in certain circumstances. The Black Hills National Forest (NF) will initiate a suitability evaluation when:

- Strong local interest or support is demonstrated for wild and scenic river designation,
- Congress expresses interest in a specific river for wild and scenic river designation, and/or
- A proposed project would alter the free-flowing character of a stream, such as by impoundment, or would affect the resources that made the stream eligible.

Any future suitability evaluation will follow procedures outlined in FSH 1909.12-15-1 – Land Management Planning Handbook Chapter 80 – Wild and Scenic Rivers. This process will consider possible alternatives to inclusion of the river in the National Wild and Scenic River System in terms of social and economic values, effects on other resources, and effects on private lands and other uses of the area. If a river segment is found suitable, the agency recommends it to the administration, which may recommend suitable rivers to Congress for inclusion in the system. If a river is determined to not be suitable, then it is no longer considered eligible for inclusion in the National Wild and Scenic River System (NWSRS).

The Forest Service cannot administratively designate a river via a planning decision or other agency decision into the NWSRS, and no segment studied is or will be automatically designated as part of the NWSRS. Only Congress can designate a wild and scenic river.

Sixteen streams/stream segments, totaling 120.6 miles, were found to be eligible for inclusion in the NWSRS in the 1997 revision, and were classified accordingly. The eligible water bodies included 8.5 miles of "Wild" rivers (all located in the Black Elk Wilderness), 15 miles of "Scenic" rivers, and 97.1 miles of "Recreational" Rivers.

Informed mostly by an increase in recreation, adding more areas for designated area status will aid in the protection of the individual areas. However, the additional management necessary for added designated areas may increase budget costs, making implementation difficult.

#### Potential Valuable Ecosystems Not Currently Protected by Designation

See Terrestrial Ecosystems Assessment and Aquatic, Riparian, and Groundwater-dependent Ecosystems Assessment for more information.

#### Black Hills Montane Grassland

Black Hills montane grassland vegetation occurs only in the Black Hills and is rare locally as well. While there is extensive grassland habitat on the Black Hills Limestone Plateau, most stands are partially or largely non-native. Only eight of the 78 Black Hills montane grasslands surveyed in 2011 and previous projects ranked high in ecological integrity assessment and are listed in table 7. Due to limited global distribution, rarity of native stands, significant habitat loss in the past, continued habitat loss, and low level of protection afforded remaining stands, Black Hills montane grassland vegetation is considered "critically imperiled" on a global and local basis. Conservation of montane grassland may be better realized without RNA designation as it would allow for proper management activities to reduce the encroaching and invasive species. In addition, while these grasslands are found in all of the RNAs, protection of these areas through designation would not appreciably increase the extent or distribution of this type of grasslands Forestwide. A designation as a Botanical Area would be appropriate.

Table 7. High-ranking Black Hills montane grasslands

Site Name	Overall Rank	EIA Summary
Gillette Canyon, Upper	Α	Mostly native species; indicator grasses common; graminoids dominant, with good forb diversity. Some limited areas of native increaser species.
Smith Draw South	А	Dominated by montane grassland indicator species with appropriate forb diversity. Only small patches of non-natives. No significant concentrations of native increaser species.
Lemming Draw, Upper	А	Large continuous areas of native grassland with indicator species well-represented. Non-natives present but not a significant component. No significant concentrations of native increaser species.
Redbird Canyon South	А	Large continuous areas of native grassland with indicator species well-represented. Non-natives present locally but not enough to down-rank. Some concentrations of native increaser species, restricted to old disturbances.
West Hell Canyon, Upper	Α	Most areas with good coverage of native grassland; some with more non- natives, but natives dominant. Limited presence of native increaser species.
Gillette Canyon Headwaters	В	Large continuous areas of native grassland with indicator species well-represented. Non-natives present locally. Local concentrations of native increaser species, especially on old disturbances.
Redbird Canyon at Sixmile	В	Large continuous areas of native grassland with indicator species well-represented. Non-natives present locally. Some areas with concentrations of native increaser species.
Lemming Draw, Lower	В	Native grassland with few non-natives. Old surface disturbances and concentrations of native increaser species are down-ranking factors.

#### Wetland Habitat

Wetland habitats are arguably some of the most productive and biologically diverse lands in the forest and aid greatly in carbon sequestration goals. Designation of additional wetland areas, fens, and rare peatland ecosystems would help to safeguard rare species that are emphasized as in need of protection by Black Hills NF. Based on National Wetlands Inventory data and the *Aquatic, Riparian, Groundwater-Dependent Ecosystems Assessment*, there are approximately 5,800 acres of wetland habitat within the Forest boundary. While the forest plan generally applies standards and guidelines to conserve and protect these areas, approximately 3,538 acres are in private ownership (Black Hills NF GIS Riparian Coverage) and use from improper livestock grazing and off-road recreational use is resulting in detrimental effects to these fragile ecosystems, not only within the wetland itself, but further downstream as well. More specific information about potentially unique systems should be gathered.

#### Potential Unique and Sustainable Recreational and Scenic Areas

As mentioned above, the designation of 120.6 miles of Wild and Scenic River would protect 97.1 miles of "Recreational" Rivers. Inclusion of these sections of river for special designation status would provide for a more sustainable recreational opportunity on the river(s).

In addition, climbing has become a popular sport in the Black Hills NF. In particular, Wrinkled Rock climbing area located on State Highway 244 adjacent to the west boundary of Mount Rushmore National Memorial, provides diverse opportunities for climbing at all levels. Spearfish Canyon is also increasingly popular, featuring Sunshine Wall which, as its name suggests, is a favorite location for climbing in the winter.

#### Potential Unique Educational, Historic, Cultural, and Research Areas

The National Register of Historic Places identifies and protects America's historic and archeological resources and is authorized by the National Historic Preservation Act of 1966. To qualify, a property must be nominated and then reviewed by the state's historical preservation office and National Register Review Board for recommendation certification. The nomination then moves to the National Park Service for final review and listing. The process generally takes less than six months. The Black Hills NF has listed, or identified for designation, the following areas as Historic Places based on their historic or cultural characteristics. Refer to the *Cultural and Historic Resources Assessment* for more information.

#### **National Historic Landmarks**

#### Historic Fire Lookouts

Fire towers were originally constructed across Black Hills NF after devastating fires ripped through the area in 1910. While not officially designated in the National Register of Historic Places, two historic fire towers located within the Black Hills NF, The Custer Peak Fire Lookout and the Cement Ridge Fire Lookout, have been listed on the National Historic Lookout Register since the early 1990s. These towers are important examples of the history of the Civilian Conservation Corps (CCC) and their involvement in the area during the Great Depression.

#### Black Elk Peak Lookout Tower

Black Elk Peak Lookout Tower, previously known as Harney Peak Lookout, was built by the CCC in 1939 and sits upon South Dakota's highest point, 7,242-foot Black Elk Peak. It was used as a fire lookout until 1967 and was added to the National Register of Historic places in 1982.

#### Old Harney National Forest Ranger Dwelling

Also being considered for the National Register of Historic Places is the Old Harney National Forest Ranger Dwelling. This historic cabin was originally built sometime between 1938 and 1940 by the CCC and now serves as an office for Forest firefighters.

#### **American Indian Cultural Sites**

#### Inyan Kara Mountain

Inyan Kara Mountain is located on the Wyoming portion of Black Hills NF. It was a landmark to early travelers in the area in the late 1800s and is sacred to local American Indian Tribes. It was added to the National Register of Historic Places in April 1973.

#### Potential Specific Designated Areas Identified by Other Local Governments

Cultural resource sites and cultural landscapes are among the areas of importance that have been identified by tribes. These include individual sites as well as landscapes made up of sites, landforms, and natural resources that form traditional landscapes.

These areas, along with specific sacred locations within the Black Hills are extensive and are discussed in the *Areas of Tribal Importance Assessment*.

Extensive public engagement that will occur during the Black Hills Forest plan revision process may also identify a need for other designated areas.

#### **Potential Contributions of Additional Designated Areas**

Sustainability in the context of designated areas places an emphasis on valuing, protecting, and preserving special areas and their unique benefits for present and future generations. A variety of designated areas are present in the Black Hills NF, the most prominent of which in terms of acreage and spatial distribution across the Forest, is wilderness. A substantial amount of literature addresses the values, contributions, and benefits of wilderness. The concepts and findings in the literature extend to other designated areas and protected public lands in the Forest, including roadless areas, scenic byways, and research natural areas.

With respect to economic sustainability, rural areas with natural resource amenities, like wilderness, experience higher regional economic growth rates than rural areas without natural resource amenities (Deller et al. 2001). Similarly, the west's most popular national parks, monuments, wilderness areas, and other public lands offer a competitive advantage in attracting employees to the region's growing high-tech and services industries (Holmes and Hecox 2004).

#### Potential Ecological Roles Supported by Special Designation

The ecological roles that additional designations could play in providing habitat or connectivity for at-risk species is an area where more information is needed. See the assessment of threatened, endangered, proposed and candidate species, and potential species of conservation concern for more information on species at risk.

## **Management**

#### **Established Designated Area Management, Use, and Restrictions**

The Black Hills NF forest plan guides all resource management activities in the Forest. The forest plan subdivides the Forest into eight general categories to better define management goals, such as those that see extensive human use (Category 8) to those that are relatively undisturbed (Category 1). Overall management goals and objectives align with the level of protection necessary to maintain current conditions within these categories and implementation of these goals and objectives varies depending on the annual budgeting process. Designated areas on Black Hills NF fall into Categories 1 through 5 and are outlined below.

Category 1 includes the Black Elk Wilderness and is the highest level of natural setting found in the Forest. Little to no human intervention can be found. Travel is non-motorized with rare exceptions to restore portions of the wilderness when restoration is necessary.

Category 2 focuses on conservation of areas that encompass rare ecological settings and serve as reference areas important for adaptive management strategies. Research Natural Areas fall into this category. Human influence is not very evident and travel is generally non-motorized.

Category 3 allows for more human influence than the previous two categories, but generally natural ecological processes are valued over management intervention. Travel for motorized vehicles is allowed but varies between location within Category 3 areas. Inyan Kaga Mountain and Botanical Areas are in Category 3.

Category 4 areas are highly managed but overall ecological system processes are maintained. Motorized transportation is common as evident by the presence of the Spearfish Canyon and Peter Norbeck Scenic Byways. Category 5 is maintained in a similar fashion to Category 4 areas. However, rather than manage

the whole ecological system within that category equally, some areas within Category 5 sections see high human use, requiring more intensive management. Designated areas within this category include Norbeck Wildlife Preserve (Category 4) and Black Hills Experimental Forest (Category 5).

#### Consistency of Current Forest Plan Management with Other Plans

The Black Hills NF provides specific management direction for each designated area through its categorical classification system which aligns the level of management expected for each designated area with that found in the assigned category. In general, more intensive management is reserved for high use areas, while wilderness areas receive very little intervening management.

Other plans and policies guiding management within the Black Hills NF include:

- Management plans for adjacent National Park Service lands,
- Management plans for adjacent BLM lands,
- Management plans for adjacent State recreation areas and parks, such as Custer State Park,
- The Forest Service Handbook, and
- The Forest Service Manual.

Any areas within the Black Hills NF included as a special designation should be guided not only by the Black Hills NF forest plan, but also by any comprehensive plans within the plans/policies listed above. These plans are not currently specifically referenced in the current Black Hills NF plan. Referencing any specific management strategies found in additional comprehensive plans by example will help to strengthen management objectives and goals outlined in the Black Hills NF forest plan. Currently, there are no known conflicts where the management plans cannot be implemented because of language in any of the above referenced plans/policies.

# **Chapter 3. Public Participation in the Planning Process**

This section may have some placeholders until after the public has had chance to review the assessment reports and the Black Hills has completed other public engagement activities.

#### **Public Interest**

Most likely to be affected by or interested in this topic are municipalities or communities within or adjacent to the plan area, owners of private land within or adjacent to the plan area concerned with access and special uses, and members of the public concerned with access to the plan area.

As part of the Phase II Amendment process, a series of assessments were conducted, including an assessment of research natural areas. The assessment specified nine candidate research natural areas, but only four were advised for designation in the record of decision. Montane grassland communities were one of the research natural areas not selected and are still unrepresented by special designation. While outside the scope of the aforementioned published document, the Black Hills NF is undertaking a new wilderness and wild and scenic rivers inventory and evaluation process as part of the current forest plan revision that may result in additional and/or different areas being recommended for designation. Changes in land status, such as new land acquisitions since the current forest plan, will be reflected in the required wilderness process.

#### **Future Involvement**

Pending additional outreach, this section will answer how do stakeholders want to be informed about this topic as the planning process proceeds.

#### **Public Information Needs**

Pending additional outreach, this section will answer what is confusing about this topic and what follow-up could improve understanding?

## **Chapter 4. Conclusions**

Many designated areas within the Black Hills NF are important economic drivers of the region, contributing to jobs in the form of tourism dollars. For example, Wild and Scenic River eligibility evaluation for the Black Hills NF is again being conducted as part of the current forest plan revision efforts, consistent with the final directives of the 2012 Planning Rule (FSH 1909.12, Chapter 80). Designation as a Wild and Scenic River would protect applicable sections of the river from any activities that would significantly harm the river's character and valuable habitat. Additional benefits, such as an added economic driver for tourism in the area, would likely be increased through this designation.

Recent increases in tourism, especially OHV use (see *Recreation* Assessment) will likely affect the ecological sustainability of the area. Additional designations may be beneficial to increase the management protection of areas that are degraded due to increased public use.

## **Chapter 5. Need for Change**

These findings will inform the need to change the current Black Hills NF forest plan. Identifying needs for change to the current plan is an iterative process and this draft assessment report may identify preliminary needs to change, which be further refined during subject matter expert, cooperating agency, and public review of these documents. The iterative nature of this process will make clear which plan components in the current forest plan are proposed to be changed and which are not during the development of the revised forest plan.

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## Appendix A. Map

The following map is provided as a separate PDF document on the forest plan revision <u>assessment</u> <u>webpage</u> for the Black Hills National Forest.

Map 1. Designated areas map