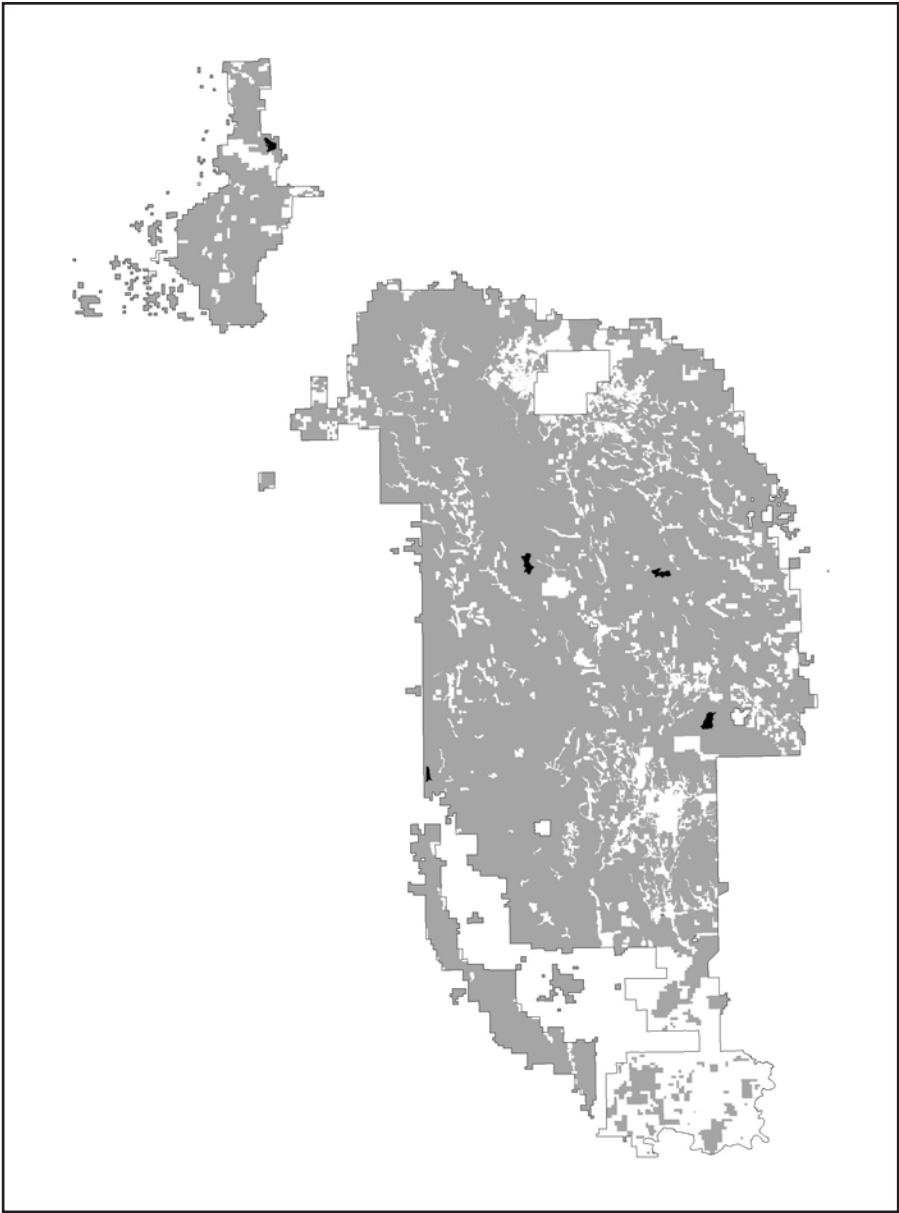
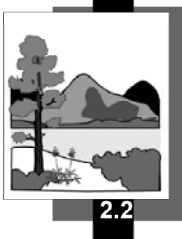


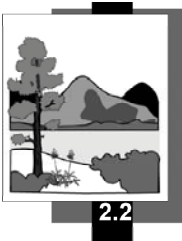
*Management Area 2.2 Research Natural Areas

Theme: Research natural areas form a national network of ecological areas designated in perpetuity for non-manipulative research, education, and biodiversity conservation. This prescription is applicable to both existing research natural areas and areas pending formal establishment.





Management Area 2.2	
Existing Area: Upper Pine Creek (included in M.A. 1.1 Black Elk Wilderness)	Establishment Pending: North Fork Castle Creek Canyon City Hay Creek (Analyzed as Geis Spring) Fanny/Boles
TOTAL = 850 acres	TOTAL = 2,276 acres (preliminary)
Total approximately = 3,126 acres (less than 1 percent of Forest)	



Setting: Research natural areas (RNAs) are selected to preserve a spectrum of relatively pristine areas that represent a wide range of natural variability within important natural ecosystems and environments (coniferous forest, shrubland, grassland, alpine, aquatic, and geological environments), and areas that have special or unique characteristics of scientific importance.

The setting is natural. The sights and sounds of people or management activities within the area will be infrequent, though they may be common in adjacent areas. There may be some evidence of research or study activities which are conducted using methods that are nondestructive and nonmanipulative. Plants, plant communities and animals rare in the state may be present.

Activities and Opportunities:

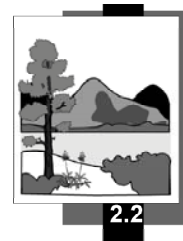
Dispersed Recreation	Non-motorized / Non-mechanized dispersed use including hunting and fishing is allowed without developments such as trails or signs consistent with Guideline 2.2-1002.
Research	Research methods are nondestructive and nonmanipulative.
Education	Opportunities are available to learn about natural processes using methods that are nondestructive and nonmanipulative.
Motorized Vehicles	Foot and horse travel only
Vegetation Management	Vegetation management including livestock grazing is used only as needed to conserve the biological characteristics for which the RNA was established using methods with the least impact on desired RNA ecological processes.
Mineral Development	Withdrawn from mineral entry through BLM process

Desired Future Condition: Vegetation, habitat, soil productivity, water quality, and ecological processes are generally expected to be within the range of natural variability and feature the vegetation communities for which the RNA was established.

The objectives of establishing research natural areas are contained in FSM 4063.

Management Area Goals and Objectives

2.2-401. *Establish research natural areas (RNAs) to form a long-term network of ecological reserves designated for non-manipulative research and education and the maintenance of biological diversity. As specified in the Record of Decision for the Phase II Amendment, include the following areas: Canyon City, Fanny/Boles, Hay Creek, and North Fork Castle. **GOAL**



2.2-402. *Prepare establishment records and management plans following Forest Service manual direction for those areas specified for designation as research natural areas within 3 years of the Phase II Amendment Decision. **OBJECTIVE**

Management Area Standards and Guidelines

Physical Elements:

General

2.2-1001. *Conserve the natural condition of the ecosystem, its processes, and any species or values for which the research natural area was established. **STANDARD**

2.2-1002. *Allow uses that maintain or improve the ecological characteristics for which the research natural area (RNA) was designated. If monitoring reveals that a use begins to affect the ecological characteristic, the use will be removed from the RNA. **GUIDELINE**

Minerals

2.2-1501. *Withdraw from mineral entry in conformance with Section 204 of Federal Land Policy and Management Act of 1976 (PL 94-579). All lease applications will have “no surface occupancy” stipulation. No mineral material permits will be issued. **STANDARD**

Biological Elements - - Flora:

Silviculture

2.2-2401. *Research natural areas will not be included in the suitable timberland base. **STANDARD**

Rangeland

2.2-2501. *Do not increase permitted livestock animal unit months or developments pending the research natural area (RNA) management plan in RNAs. Grazing suitability and desired vegetative conditions will be determined by the RNA management plan. **STANDARD**

2.2-2502. *The Upper Pine Creek Research Natural Area is designated unsuitable to livestock grazing. However, because the area is not fenced, occasional livestock use may take place. **STANDARD**

Biological Elements - - Fauna:

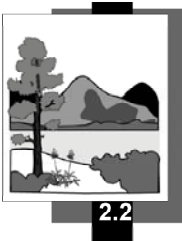
Wildlife and Fish

2.2-3201. *Allow habitat manipulation only for the protection of threatened, endangered, and sensitive species, or where it is necessary to perpetuate or restore natural conditions. **STANDARD**

Disturbance Processes:

Fire and Fuels

2.2-4101. *Use minimum impact suppression tactics when suppressing wildfire. **STANDARD**



Management Area 2.2

2.2-4102. *Use management-ignited prescribed fire when necessary to restore a natural fire regime, to achieve resource management objectives, or to reduce unnatural fuel loading. **STANDARD**

2.2-4103. *The use of natural control features and hand tools are the preferred means to confine, contain and/or control wildfires. **STANDARD**

Insects, Disease, and Non-native Invasive Species

2.2-4201. *Control populations of invasive, non-native plant and wildlife species. Use control measures that minimize threats to native species. **STANDARD**

Social Elements:

Recreation Opportunity Spectrum

2.2-5101. *The recreation opportunity spectrum class is “semi-primitive, non-motorized.” **STANDARD**

Developed Recreation

2.2-5201. *Use restrictions or closures under 36 CFR 219 Subpart B to protect the area from actual or potential damage due to public use. **STANDARD**

2.2-5202. *Allow pre-existing trails to be used for recreational and scientific or educational access except when they are a threat to the values for which the research natural area was established. **STANDARD**

Special Uses

2.2-5401. *Do not permit collection of special forest products. **STANDARD**

Scenery Management

2.2-5601. *The adopted scenic integrity objective is high. **GUIDELINE**

Administrative Elements:

Corridors

2.2-8301. *No new utility corridors or additional development within existing corridors will be permitted. **STANDARD**

Transportation System Management:

General

2.2-9101. *Prohibit motorized and mechanized use except when it provides necessary access for research or emergency purposes (e.g., human life, fire). **STANDARD**

2.2-9102. *Close or obliterate existing roads. **STANDARD**