

# APPENDIX 26

## ACEC Evaluations for the Price Resource Management Plan

### Introduction

Section 202 (c) (3) of the Federal Land Policy and Management Act (FLPMA) requires that priority be given to the designation and protection of areas of critical environmental concern (ACECs). FLPMA Section 103 (a) defines ACECs as public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.

The BLM requested nominations for areas that the public may see as being appropriately managed as ACEC criteria in the Federal Register, Vol. 66, No. 216, November 7, 2001, Notice of Intent, Environmental Impact Statement, Price Resource Management Plan, Utah.

Nominations for ACECs were reviewed by an interdisciplinary team of BLM specialists to see if they meet mandatory relevance and importance criteria.

### Relevance and Importance Criteria

To be considered for designation as an ACEC, an area must meet the requirements of relevance and importance as described in the Code of Federal Regulations (43 CFR 1610.7.2). The definitions for relevance and importance are as follows:

#### Relevance

An area is considered relevant if it contains one or more of the following:

1. A significant historic, cultural or scenic value (for example: rare or sensitive archaeological resources and religious or cultural resources important to Native American Indians).
2. A fish and wildlife resource (for example: habitat for endangered, sensitive, or threatened species, or habitat essential for maintaining species diversity).
3. A natural process or system (for example: endangered, sensitive, or threatened plant species; rare, endemic, or relict plants or plant communities; rare geologic features).
4. A natural hazard (for example: areas of avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or dangerous cliffs). A hazard caused by human

action may meet the relevance criteria if it is determined through the resource management planning process that it has become part of the natural process.

### **Importance**

The value, resource, system, process, or hazard described above must have substantial significance to satisfy the importance criteria. This generally means it is characterized by one or more of the following:

1. Has more than locally significant qualities which give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource.
2. Has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.
3. Has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of the Federal Land Policy and Management Act.
4. Has qualities that warrant highlighting in order to satisfy public or management concerns about safety and public welfare.
5. Poses a significant threat to human life and safety or to property.

### **Currently Designated ACECs**

Table 1 identifies the existing 13 ACECs in the Price Field Office, which total 308,059 acres.

**Table 1**

<b>ACEC</b>	<b>Acres</b>	<b>Values</b>
Big Flat Tops	285	Relict vegetation
Bowknot Bend	1,087	Relict vegetation
Copper Globe	128	Historic mining district
Dry Lake	22,258	Archaeological, geological
I-70 Scenic	45,594	Scenic
Muddy Creek	28,778	Scenic, historic mining, riparian
Pictographs	7	Archeological
San Rafael Canyon	54,102	Scenic
San Rafael Reef	84,018	Scenic, relict vegetation
Seger's Hole	7,918	Scenic
Sid's Mountain	61,380	Scenic
Swasey Cabin	60	Historic ranching
Temple Mountain	2,444	Historic mining

## **Potential ACECs Being Considered in the Price RMP**

External nominations were received as part of the RMP scoping process. BLM's interdisciplinary team completed the relevance and importance review of 23 nominated ACECs (44 sites). Many of these were determined to have relevance and importance and were included in the range of alternatives. In some cases the interdisciplinary team review resulted in additional resource concerns or modified boundary configurations for some potential and existing ACECs based on the information provided in the nominations.

In other cases, much of the same nominated areas were included within different potential boundaries or boundaries of existing ACECs, those delineated internally and those presented in the nominations. Determinations were then made by the interdisciplinary team to either include or exclude areas within the final boundary determination or analyze different boundary options in the range of alternatives.

On February 19, 2002 the Southern Utah Wilderness Alliance (SUWA) submitted ACEC nominations for Cedar Mountain (northern), Beckwith Plateau, Sid's Mountain, San Rafael River, Muddy Creek, Temple-Cottonwood-Dugout Wash, Price River, and the Lower Green River, which were evaluated for relevance and importance. SUWA submitted additional ACECs on April 24, 2003, which were also evaluated. These include Green River-Desolation Canyon, Range Creek, Molen Reef, Antelope Valley-Sweetwater Reef, Mussentuchit Badlands, Cedar Mountain (southern), and Nine Mile Canyon ACECs.

SUWA submitted a final list of potential ACECs on June 19, 2003, which include Dirty Devil Drainage, Lower Muddy Creek Drainage, Horseshoe Canyon Drainage, Quitcupah Creek, and Thousand Lakes Bench ACECs. With exception to Lower Muddy Creek Drainage ACEC, these nominations were deferred to the Richfield Field Office, also currently in the planning process, since these include areas predominantly within lands administered by that office.

The Utah State Wide Archeological Society worked with the BLM to identify, using various sources, 24 heritage, rockart, and historic uranium mining district sites to consider as 3 ACECs. They also identified for consideration Nine Mile Canyon, Range Creek, and Gordon Creek as ACECs.

In addition the BLM identified Cleveland-Lloyd Dinosaur Quarry as an area that should be considered as an ACEC.

## **New ACECs Considered with Alternatives in the Price RMP**

Of the ACECs nominated, 10 ACECs (31 sites) were determined to meet the relevance and importance criteria and are considered as ACECs with optional sizes in various

alternatives in the RMP/EIS. These ACECs, with their maximum potential sizes, are discussed below:

**Beckwith Plateau ACEC (56,980 acres)**

*Relevance:* The proposed ACEC contains significant features that meet the relevance criterion including 1) the isolation of the plateau as a topographic feature separated by two rivers and 1,000 foot vertical cliffs; 2) surface exposed formations which record the eastward crowding of the Mancos seaway; 3) visible coal seams; and 4) excellent expression of erosional features of the book cliffs, such as castellated and buttressed upper slopes with complex badlands below.

The proposed ACEC contains crucial and high value habitat for many sensitive species, including the bald eagle, long-billed curlew, blue grosbeak, burrowing owl, common yellowthroat, ferruginous hawk, osprey, sage grouse, short-eared owl, big free-tailed bat, black-footed ferret, western red bat, spotted bat, ringtail cat, dwarf shrew, Townsend's big-eared bat, and the Utah milk snake. Sensitive big game species crucial and high value habitats are also present, and include desert bighorn sheep, and elk.

Sensitive plants may include the yellow blanketflower, Bookcliff blazing star, horse canyon stickleaf, and a hole-in-the-rock prairie clover.

*Importance:* The proposed ACEC area possesses a national important characteristic as a primitive outdoor classroom displaying the processes leading to the formation of coal in a classic regressive coastal sequence.

The sensitive species habitat occurring within the proposed area is fragile, irreplaceable, and vulnerable to adverse change.

**Lower Green River ACEC (43,428 acres)**

*Relevance:* The proposed ACEC incorporates all or portions of the existing Bowknow Bend ACEC which contains a relic plant community and significant natural history values, as well as the Dry Lake Archaeological District ACEC containing Paleo-Indian sites which are the rarest site type in Utah. The proposed ACEC would also include several large and dominant side drainages of Three Canyon, Keg Spring Canyon and Horseshoe Canyon. Much of the proposed ACEC corridor is surrounded and overlapped by existing WSAs, lands the BLM has found to have wilderness characteristics, and proposed wilderness.

The Green river provides nourishment to nearby plants as well as to resident and migrating birds and other wildlife. The proposed ACEC includes crucial and high value yearlong habitat for pronghorn, desert bighorn sheep, rockloving milkvetch, Moab Woodyaster, Jones Indigo-bush, Jane's Globemallow, Dalea Flavescens Var Epica. The area also provides crucial habitat for several listed state sensitive species including the bald eagle, long-billed curlew, burrowing owl, ferruginous hawk, peregrine falcon, grasshopper sparrow, Big Free Tailed Bat, black-footed ferret (federal and state endangered), spotted bat, and the Townsend's big-eared bat.

Associated riparian systems are excellent examples of riparian systems, including Horseshoe, Keg Springs, and Three Canyon. The Green River provides nourishment to nearby plants as well as to resident and migrating birds and other wildlife.

*Importance:* The proposed area includes opportunities for many primitive recreation activities including canoeing, rafting, fishing, hiking, camping, picnicking and sightseeing. Some roadless areas for solitude and naturalness also exist within the proposed area.

The exemplary integrity of the river system should be protected; the riparian areas and wetlands provide an oasis of rare and lush vegetation as well as water in an otherwise arid environment. The corridors created along the river are not only essential the survival of the total species of the region, but also provide habitats for a large number of special status species.

### **Temple-Cottonwood-Dugout Wash ACEC (80,818 acres)**

*Relevance:* The proposed ACEC is designed to protect a unique, natural desert ecosystem with exemplary opportunities for primitive recreation and wildlife viewing in a landscape of huge skies, varied geologic forms, and unique riparian systems. Due to the vast ruggedness of the area and formations such as the Flat Tops, Spire Point, The Sand Dunes, Wildcat and Rattlesnake Buttes, and many others provides an overwhelming sense of solitude.

The prevailing winds of the area carry sands into the entrenched Cottonwood Wash forming a unique vegetated sand dune system there, as well as in other areas within the proposed boundary.

The washes and springs combine with the open desert landscape forming a complete natural system that includes a large block of crucial yearlong pronghorn habitat. In additions the proposed region also contains important habitat for ferruginous hawk and big free-tailed bat, both special status species.

Relic plant communities that evolved without the influence of grazing animals remain in the Big Flat Tops area that is within an existing ACEC included within this proposed ACEC.

*Importance:* Opportunities for primitive recreation exist due to the solitude and ruggedness of the area.

This area has early to middle archaic lithic scatters present.

The solitude of the area; crucial pronghorn habitat (fawning) and the rare water sources is believed to all be threatened by oil and gas exploration development activities, ORV activity, and heavy grazing of domestic livestock.

### **Range Creek ACEC (80,632 acres)**

*Relevance:* The proposed ACEC includes numerous pictograph and petroglyph panels, as well as habitation sites throughout Range Creek Canyon and its side canyons. These cultural resources are some of the most intact and well-preserved sites in the United States. An ACEC status will enhance their preservation.

Range Creek and its associated riparian areas as well as the surrounding canyons and ridges provide habitat for black bear, desert bighorn sheep, elk and mule deer. The area also provides high to crucial habitats for several state and federal special status species, including ferruginous hawk (BLM threatened species), short-eared owl, burrowing owl, long-billed curlew, Williamson's sapsucker, northern goshawk, bald eagle (federal threatened species), Virgin river montane vole, dwarf shrew, big free-tailed bat, Townsend's big-eared bat, ringtail cat, western red bat, and Utah milk snake. Because of its pristine qualities, the portion of Range Creek within the proposed ACEC is potential habitat for the reintroduction of the native Colorado Cutthroat Trout and is being considered as such the Utah Department of Wildlife Resources.

The proposed area features a unique desert riparian corridor that includes wetlands and riparian habitat supporting vegetation that includes sweetvetch, yellow blanketflower, Book Cliffs twinpod, gaillardia flava, and physaria acutifolia var purpurea epica.

*Importance:* The proposed Range Creek ACEC includes the unique and ecologically significant wetlands and creek system, numerous distinct geologic formations, and exceptional wildlife habitat.

Range Creek has nationally significant, outstanding cultural resources.

The crucial habitat that exists within the proposed ACEC provides for numerous wildlife species protection and is found unique to the area. For example the Utah milk snake was listed solely due to evidence of its declining population and is one of the few reptiles found at higher elevations in Utah. The dwarf shrew is extremely rare, with only three occurrences known in Utah. Other species that are unique to the proposed area include the Townsend's big-eared bat and the Virgin River montane vole.

The extraordinary Range Creek ACEC's riparian system- Range Creek and its undeveloped riparian areas crucial wildlife habitat, outstanding cultural resources, significant wildlife populations, and rugged canyon and ridges are of national importance as a model of functioning ecosystem and natural process.

The ecological, cultural, historic, and scenic values of this ACEC are at risk from various forms of human encroachments, including off-road travel, livestock grazing, water diversions, and energy development.

### **Nine Mile Canyon ACEC (62,885 acres)**

*Relevance:* The proposed ACEC area possesses a significant and high density of historic, cultural, and archaeological zones. It is documented to contain the country's highest concentration of rock art panels, remnants of the prehistoric Fremont Culture. It also contains many relics of the post-Civil War era when the canyon was the site of a major freight line. Because of the vast cultural and historical resources throughout the canyon, the BLM has found the area to be eligible for National Register of Historic Places.

The proposed area provides significant and high quality wildlife habitat for the mule deer, elk, black bear, mountain lion, desert bighorn sheep, pronghorn antelope, cottontail rabbit, snowshoe hare, coyote, fox, badger, yellow-billed marmot, beaver, raven, black-billed magpie, pinyon jay, and side-blotched lizard. Also abundant in the area is the Chukar partridge, Sage, blue and Ruffed grouse, Ringnecked pheasant. Raptors including the golden eagle, prairie falcon, Redtail hawk, American kestrel and Cooper's hawk. The region is also known for its large wild horse herd.

Nine Mile Creek supports red shiner and speckled dace, in addition to roundtail chub, razorback sucker, flannelmouth sucker, Colorado Squawfish, and bluehead sucker. All special-status fish species that currently occur in the Green River are now suspected of moving up into Nine Mile Canyon.

There is outstanding opportunity for dispersed primitive recreation in portions of the area due its naturalness and solitude.

This ACEC nomination also contains habitat for or known occurrences of several special status plant species, including the Barneby's columbine, Shrubby Reed-mustard, gate Canyon buckwheat, Caespitose Cat's-eye, Mt. Bartle's buckwheat, Penstemon Grahammi, and Sclerocactus glaucus. Graham's Beardtongue, a candidate plant species for the Endangered Species Act, is also suspected to occur within this area.

*Importance:* This area is international significance for prehistoric archaeologically resources, nationally significant for cultural/historic resources, regionally significant for its scenic value, and has been found eligible for the National Register of Historic Places.

The area is vulnerable to adverse change including oil and gas development, as well as off-road vehicle use that is expanding into the area.

### **Gordon Creek ACEC (4,099 acres)**

*Relevance:* Gordon Creek District is a very significant archeological resource. Two agricultural communities occupied it -a prehistoric Fremont cultural occupation about 1000 years ago and a historic pioneer occupation about 100 years ago. Although this situation existed elsewhere, the early abandonment of the historic occupation and a natural closure of the area have left sites relatively undisturbed and provide an opportunity to study the similarity and differences of the two cultural responses to the same area.

*Importance:* Although there are many other places where the Fremont and Historic peoples farmed the same area, Gordon Creek is unique. In most places the Historic activities turned into modern activities that has damaged or destroyed the Fremont and Historic sites. It now is the only known area where such study can take place.

The district has recently become more fragile and threatened, as oil and gas development increases on both sides and OHVs are developing trails up the middle of it. The area is being open up to the access of site vandals.

**Heritage Sites ACEC (7 sites – 2869 acres)**

*Relevance:* This ACEC includes several sites associated with the early historic uses on the public lands in Emery County including: Wilsonville, Shepherds End, Smith Cabin, Hunt Cabin, Copper Globe, Temple Mountain, and Swasey Cabin. A National Heritage Conservation Area has been proposed for the San Rafael area and these sites represent this heritage on public lands of that area.

*Importance:* As sites within a proposed National Heritage Conservation area, these represent historic uses of public land in the West.

These sites have recently become more fragile and threatened. Visitors not knowing the significance of these sites have been improperly using them (i.e. removing artifacts, removing wood from buildings for use of fire wood, ORV trails through sites, etc.).

**Uranium Mining Districts ACEC (4 sites - 4161 acres)**

These sites include Tidwell Draw, Hidden Splendor, Susan B, and Lucky Strike Mining Districts.

*Relevance:* ACEC includes several significant mining sites associated with the development of uranium as part of U.S. efforts during the escalation of the Cold War during the 1950s.

*Importance:* The sites are part of a National effort -the development of uranium as a deterrent in the Cold War. The history of these sites can only be retrieved by studies of the resources on the ground and oral histories.

These sites have recently become more fragile and threatened. Visitors not knowing the significance of these sites have been improperly using them (i.e. removing artifacts, removing wood from buildings for use of fire wood, ORV trails through sites, etc.). These sites are in danger of being destroyed before they can be studied.

**Rock Art ACEC (13 sites – 18,139 acres)**

This ACEC includes Black Dragon Canyon, Head of Sinbad, Lone Warrior, Rochester/Muddy Petroglyphs, Big Hole, Cottonwood Wash, Wild Horse, Sand Cove, Dry Wash, Short Canyon, North Salt Wash, Molen Seep, and Kings Crown.

*Relevance:* These sites are some of the best examples of prehistoric Rock Art on the Colorado Plateau. Many are world-famous. They are being visited more every year. Their popularity has grown following mention in several publications including National Geographic (Smith, 1980; Schaafsma, 1971; and Castleton, 1984) and being identified as part of the San Rafael National Heritage Area.

*Importance:* In addition to the discussion under Relevance, a big conflict that presently threatens these sites is between the public use of rock art and the destruction of the scientific potential of the associated archaeological sites. Also the surrounding lands are public lands used by OHVs, grazing, and mineral exploration.

### **Cleveland-Lloyd Dinosaur Quarry ACEC (765 acres)**

*Relevance:* The Cleveland-Lloyd bone deposit itself is the densest concentration of Jurassic dinosaur bones in the world. It is also the world's largest collection of a large meat-eating dinosaur (*Allosaurus fragilis*) yet found. Eighteen scientific papers published in the last 10 years have been written about the place and it still remains unsuccessfully explained. The 767 acres included in this proposed ACEC includes the Cleveland-Lloyd deposit and adjacent lands. The adjacent lands have a minimum of 15 dinosaur track sites containing at least 35 dinosaur tracks. Since 1992, when one was first discovered, new tracks have been located on almost an annual basis. These adjacent lands also have a minimum of 32 sites where dinosaur bone is visible at the surface. At least one-third of these are easily identifiable as fossilized bone by anyone walking by. The others are identifiable by persons with a bare minimum of training.

*Importance:* The Cleveland-Lloyd deposit itself is one of a kind, unique in the world. It is still not understood how it came to be and continues to receive attention from research paleontologists. Because of the deposit, the area around it also receives a lot of attention, both from scientists and the interested public drawn from across the nation and around the world. Cleveland-Lloyd deposit and adjacent lands represent an exceptional opportunity for scientific and educational use of fossils to educate the interested public in fossiliferous and geologic matters.

Special management attention is required to protect known and undiscovered paleontological resources in the proposed ACEC. Guided tours into the adjacent lands by the BLM Staff at Cleveland-Lloyd are commonly given to those interested in learning more about dinosaurs and geology. The tours must be staff-guided because many of the fossils are exposed at the surface and are fragile. Also, past experience at other public sites has demonstrated that publishing a map with vertebrate fossil locations allowing for self-guided tours results in an increase of unauthorized, illegal collection of fossils.

