

## CHAPTER 4 – CULTURAL RESOURCES

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### 4.1 RESOURCE OVERVIEW

Cultural resources are those non-renewable remains of past human activity. For BLM management purposes, these remains take the form of sites, artifacts, buildings, structures, ruins, features, and natural landscapes with particular cultural importance. With a few exceptions, these remains (or in the case of natural landscapes, the period of traditional use of that landscape) must be at least 50 years old. Cultural resources also include places identified by traditional groups (e.g., Native American tribes) as sacred or otherwise important to the maintenance of group identity even if no physical manifestation of past activities are present at that location. Such locations are frequently referred to as Traditional Cultural Properties (TCPs).

More than 25,000 cultural resource sites have been documented thus far in all of San Juan County. An estimated 60-65% of all of these sites are located on public lands, with the majority of these being under the jurisdiction of the BLM Monticello Field Office (FO). The BLM's management responsibility for the archaeological record of San Juan County grows significantly each year. During the 18 years since the completion of the existing RMP (1991), an average of 450 new cultural resource sites have been documented each year in San Juan County. Most of these sites were identified as a result of the Section 106 process of the National Historic Preservation Act of 1966 (see below for more discussion of this process) associated with applications for use of public lands. In order to make sound management decisions regarding land uses, cultural resource specialists and managers within the Monticello FO planning area must understand how cultural resources are distributed across the landscape, which types of cultural resources are present within the FO planning area, and which portions of the FO planning area have been subject to cultural resource inventories and which areas have not. At the present time, no comprehensive overview of known cultural resource sites and cultural resource survey projects conducted to-date within the Monticello FO planning area exists. The lack of this document hampers decision-making. The Monticello FO recognizes the need for such an overview and is currently pursuing its preparation in conjunction with the updating of the RMP (see Section 7.7.6 of this document for more information on cultural resource overviews).

Of the known sites within the Monticello FO planning area, several are listed on the National Register of Historic Places (National Register) as either individual entities or as part of a larger archaeological district or National Historic Landmark. Table 4.1 summarizes these sites.

While there have been many inventories for cultural resources in the Monticello FO planning area, there are significant gaps in the database that have increased the difficulty in management of these resources. These limitations include large unsurveyed areas where there is no current knowledge about cultural resources, gaps in the database of particular site types, and research-related data limitations. Despite the many cultural resource inventories within the FO planning area, the total percentage of the area covered has been relatively small. While a systematic audit of surveyed and as-yet unsurveyed lands within the Monticello FO planning area is beyond the scope of this document, a cursory review of previous project location mapping available at the Utah State Historic Preservation Office (SHPO) suggests that less than 10% of all BLM lands within the FO planning area have been subjected to intensive-level cultural resource inventories. As a consequence, there are still large areas for which there is no current information regarding the numbers, types, and distribution of cultural resources. This limitation can affect management decisions related to large areas. It can be difficult to develop efficient, large-area plans without at least a preliminary understanding of the potential cultural resources in a planning area.

**Table 4.1. National Register-listed Sites and Districts, National Historic Landmarks, and National Monuments within the Monticello FO Planning Area**

Site Number/Name	Year Designated	Acreage Included	Status
Alkali Ridge	1985	2,340 acres	National Historic Landmark
Big Westwater Ruin	1974	< 1 acre	National Register listed site
Hole-in-the-Rock Trail, Dance Hall Rock	1980	40,300 acres linear corridor	National Register listed site
Sand Island Petroglyph Panel	1980	< 1 acre	National Register listed site
Newspaper Rock Petroglyph Panel	1976	< 1 acre	National Register listed site
Butler Wash	1981	2,025 acres	National Register listed archaeological district
Grand Gulch	1982	4,240 acres	National Register listed archaeological district

Further, the majority of previous cultural resource inventories within the FO planning area have been driven by Section 106 compliance related to specific development or land use projects. These inventories have addressed discrete locations and have typically resulted in the "clearance" of small parcels of land and narrow linear corridors. As such, much of the current understanding of site types and their distributions, as well as of prehistoric and historical land use patterns, is based on piece-meal information gleaned from this patchwork of small, disparate surveys.

**4.2 CULTURE HISTORY OF THE MONTICELLO FO PLANNING AREA**

The following section contains a brief overview of past human activity on lands under the jurisdiction of the Monticello FO. This overview is divided into three sections: Prehistory, History, and Ethnography. It is intended to serve as a general summary documenting the basic chronology of human occupation and outlining broad cultural trends and is meant to provide a basic context within which to understand the basic types and affiliations of cultural resources that are present within the boundaries of Monticello FO planning area. This overview is not a thorough recitation of the existing body of knowledge regarding past human activity within the FO planning area and does not incorporate information from very recent and ongoing investigations (i.e., the condition assessment project at Moon House or excavations in Comb Wash) that are beginning to yield data that may change the existing understanding prehistoric land use patterns, cultural affiliations, and timing of events and trends.

An outline of the prehistory and history of the lands incorporated by the Monticello FO is useful in understanding the broad patterns of human occupation, land use, and habitation that have occurred within the region. Humans of multiple cultures have inhabited, traversed, mapped, and developed these lands for greater than 12,000 years. Our understanding of how prehistoric cultures utilized the resources of the region has developed as a result of archaeological investigations and ethnographic studies. Archaeological investigations, ethnographic studies, and written histories have developed our understanding of historic period use of the region following its rapid European-American settlement. This knowledge is useful in forming certain predictions and interpretations about site frequency in the region.

### 4.2.1 Prehistory

Regional models of prehistory, settlement patterns, and paleo-environments provide a basis for generating expectations regarding what types of archaeological resources might occur in a given area. Furthermore, this information provides a context within which the significance of a site can be understood and evaluated. Although it is important to possess an understanding of the social and environmental constraints through time, a general discussion of the Paleoindian, Archaic, Formative, and Proto-historic periods can be provided in order to discuss the distribution of sites within the region.

Although the precise timing and nature of human entry into North America is currently a matter of considerable debate (Dillehay 1997; Swedlund 1999), the first period of significant recognized human occupation of the continent occurs towards the end of the Pleistocene when the climate was cooler and moister than the present (Jennings 1989:60). The Great Basin was characterized by extensive marshlands and shallow lakes, as well as woodlands at lower elevations than present (Grayson 1993). The environmental conditions supported the presence of large game mammals such as giant bison, mammoth, camel, and ground sloth (Grayson 1993). Human populations over much of the continent appear to have concentrated, albeit to varying degrees, on the exploitation of these mammals during this period (Jennings 1989:59; Simms 1988). The characteristic artifacts associated with this period are the lanceolate and fluted lanceolate projectile points known as Clovis, Folsom, Lake Mojave, and other types (Cordell 1997:76). The Lime Ridge Clovis site, located 15 km southwest of Bluff, Utah, is the first known Clovis site on the northern Colorado Plateau (Davis 1989:66). The generalized nature of the toolkit analyzed from this site suggests it was used briefly as either a hunting stand or encampment (Davis 1989:76). Research conducted in Glen Canyon has also demonstrated a limited human presence during the Paleoindian period (Geib 1996:7).

In the Southwest, the Archaic Period is loosely used to define the period of time between the end of the Pleistocene and the widespread adoption of agriculture (Cordell 1997:102). The Archaic period is characterized by an adaptive radiance across the landscape, accompanied by an increasing reliance upon plant foods. Schroedl and Coulam (1994:13) have defined five phases for the Archaic period in San Juan County: Black Knoll (7,400–5,100 B.C.), Castle Valley (5,100–3,300 B.C.), Green River (3,300–1,500 B.C.), Dirty Devil (1,500–250 B.C.) and Escalante (250 B.C.–A.D. 100). Each phase is distinguished from the others by technology, subsistence strategies, and environmental change (Schroedl 1994:18-24).

Certain patterns have been noted in the distribution of Archaic sites. Good viewpoints, the presence or availability of raw material suitable for stone tool manufacture, and pinyon-juniper areas have all been positively correlated with Archaic site frequency (McVickar 2001:208, 209). The archaeological record for San Juan County indicates widespread occupation of the area between 6000 B.C. and A.D. 100 (Geib 1996:7-9; Nielson et al.1985). Cedar Mesa, Elk Ridge, and Montezuma Canyon are noted for numerous Archaic Period sites of varying size and complexity. Notable sites include Alkali Ridge, Cowboy Cave, Old Man Cave, and Dust Devil Cave (Brew 1946; Geib 1996:117; Schroedl 1994).

The Formative period is characterized by a village agricultural economy that operated from around A.D. 100 through A.D. 1300. Within southeastern Utah, the Formative Period has one distinct culture occupying San Juan County: the Anasazi (or *Hisatsinom*, as they are called by the Hopi). The boundaries for the culture are debated; it is generally accepted that the Anasazi occupied the Four Corners (Geib 1996:98, 99; Cordell, 1997 #105:196). Table 4.2 presents the chronology of the region during the Formative Period (Jennings 1989:306).

**Table 4.2. Formative Period Chronology**

Period	Date Range
Pueblo IV	A.D.1300–1700
Pueblo III	A.D.1100–1300
Pueblo II	A.D.900–1100
Pueblo I	A.D.750–900
Basketmaker III	A.D.450–700
Basketmaker II	A.D.1–500

Two traditions of Anasazi are believed to have occupied the southeastern portion of Utah: the Kayenta and the Mesa Verde (Geib 1996:99; McVickar 2001:233). Interactions with Anasazi groups to the east southeast (Chaco Canyon) and west (Virgin River Branch) also influenced people in the area. Clear delineation between these groups is difficult due to the nature of regional integration during the Formative period (Geib 1996:99; Varien 1996:111). What is now San Juan County formed the borderlands for these two groups. Sites in the area with mixed ceramic types generally reflect a high degree of interaction between the Kayenta and Mesa Verde groups during the Formative Period (McVickar, 2001 #533:232, 233). Several similarities exist between the two groups: pit houses, aggregated villages, rock art styles, black-on-white and red-on-black pottery, basketry, and chipped stone tools (Cordell 1997:192-197). Based on an analysis of ceramic types, archaeologists have suggested that the Kayenta Anasazi were derived from groups who migrated into the Cedar Mesa area and eastward from northern Arizona during the Pueblo II Phase (McVickar 2001:234). The Kayenta Anasazi evolved into a separate cultural tradition while maintaining close contacts with their other Anasazi neighbors. While there are cultural similarities between the Mesa Verde and Kayenta Anasazi, there are several distinguishable differences that separate the two traditions.

The Kayenta Anasazi occupied a broad geographical area, including much of southeast Utah, northern New Mexico, and northeast Arizona. The Kayenta moved much further into Utah than the Mesa Verde Anasazi, moving as far to the west as the Escalante drainage and north to Boulder Valley (Geib 1996:99). Jacal construction was common early on, with the development of multistoried room-blocks and ceremonial kivas occurring later (Cordell 1997:196). This later development of aggregate villages is the settlement characteristic that best distinguishes the Kayenta Anasazi from their neighbors to the west. Kayenta ceramics include Kayenta Black-on-white (A.D. 1250–1300), Tusayan Corrugated (A.D. 900–1150), Moenkopi Corrugated (A.D. 1150–1300), and Black Mesa Black-on-white (A.D. 1000–1100) (Cordell 1997:196; Geib 1996:186; McVickar 2001:101).

The Mesa Verde Anasazi occupied the southwestern portion of Colorado, and portions of southeastern Utah. In Colorado, the Mancos-Mesa Verde drainage served as the cultural core of the tradition, however, Mesa Verde Anasazi sites are found as far west as Natural Bridges National Park and Mesa Verde ceramics are found as far west as the Colorado River (Breternitz et al. 1974:17; McVickar 2001:38). Distinctive traits include extensive jacal-adobe and shallow pithouse habitation structures in the early Formative Period, with dispersed masonry-adobe habitations and ceremonial kivas developing later (Cordell 1997:193). Some Mesa Verde ceramic tradition types include Mancos Gray (A.D. 875–950), McElmo Black-on-white (A.D. 1075–1275), Mancos Corrugated (A.D. 1100–1300), and Tusayan Polychrome (A.D. 1125–1290) (Breternitz 1974; Cordell 1997:195; McVickar 2001:101).

Beginning around A.D. 1300 throughout the Colorado Plateau, small triangular arrow points (Desert Side-notched and Cottonwood Triangular) became more common, as did a distinctive brownware pottery ("Intermountain Brownware" or "Shoshonean Ware"). The appearance of these ceramics and projectile point types, the abandonment of horticulture, and other aspects of material culture indicate an expansion of Numic speaking peoples into the region from the Mojave Desert area to the west (Bettinger and Baumhoff 1982; Madsen 1975; Rhode and Madsen 1994). The model is premised on the fact that Numic-speaking groups were present in the area at the time of contact. Furthermore, glotto-chronological evidence suggests that the languages spoken by these groups (primarily Shoshone, Paiute, and Ute) shared a common origin and began to diverge approximately 1000 years ago (Rhode and Madsen 1994).

It is also hypothesized that during this time the peoples (Athabaskans) who would later identify themselves as the Navajo and Apache moved into the region (Maryboy and Begay 2000). This theory is supported by both linguistic and physical similarities among Northern and Southern Athabaskan groups (Maryboy and Begay 2000).

Whether the changes noted in the material culture (e.g., the appearance of new projectile point types and pottery) represents replacement of local populations, the absorption of local populations into new linguistic and cultural groups, or simply cultural change by indigenous populations remains an open debate (Aikens and Madsen 1986; Lyneis 1982).

#### **4.2.2 History**

Spanish territorial claims included what is now San Juan County as a part of New Mexico Province. The New Mexico Province, with Santa Fe designated as its capital in A.D. 1610, was located at the hinterlands of Spanish domination (McPherson 1995:74,75). Little documentary evidence of Spanish visitation of this largely unconquered corner of New Mexico Province, and little reference to this area is noted in the documents of the period. The primary impetus for traffic through the region was trade, and as the most lucrative markets included slaves, horses, firearms, and other wares illegal to trade with Native Americans few of the earliest expeditions were ever recorded. Orders from Governor Juan Ignacio Flores Mogollon forbade traders from entering "Ute lands" in 1712 that, according to his edict, prohibited travel through much of what are now Northern New Mexico, Colorado, and Utah (McPherson 1995:75).

In 1765, Governor Tomas Velez de Cachupin allowed Juan Maria Antonio Rivera to proceed northward into the hinterlands, in part to locate a crossing on the Colorado River, partly to gauge the attitudes of the native inhabitants toward the Spanish, and also to investigate claims of silver and other precious metals in the area. Rivera, traveling under the guise of a trader, would provide Governor Cachupin with Spain's first officially sanctioned reconnaissance of lands along the La Sal Mountains, the present site of Moab, and north to a fordable bend of the Colorado River. Rivera returned to Santa Fe with this information that would set the groundwork for the Dominguez-Escalante expedition of 1776 that would further open routes to Utah that would be utilized by traders and explorers.

By the early 1800s, trappers and traders from the United States began to operate within New Mexico Province (Pierson 1980:77). New partnerships formed, and the informal process of settlement began along the primary routes of travel that had been dictated by the challenging terrain of the area. Rivera's crossing of the Colorado became one of the earliest of such encampments. The establishment of the Republic of Mexico in 1821 encouraged cooperation between the traders who typically operated well beyond the range of support from their home companies. By the mid 1820s, Taos joined Santa Fe as a prominent city of the province, expanding the fur market. This market expansion encouraged exploration of the White River, the Green River, and the numerous tributaries of the Colorado River Drainage.

The intensification of trade and trapping through the region required the establishment of a trail network that would connect the hinterlands of New Mexico Province with population centers to the southeast. By the 1830s, informal routes were incorporated into the Old Spanish Trail. Founded in principal upon the route of the Dominguez and Escalante expedition, this trail connected Taos to settlements in California. The establishment of such crucial trail systems placed New Mexico Province at the center of a dynamic trade network. Renowned trapper and explorer Antoine Robidoux moved southward into the region, utilizing the Old Spanish Trail extensively in his investigations. In 1837, Robidoux established Fort Uintah on the Green (or Uintah) River to compliment Fort Uncompahgre, located at the confluence of the Gunnison and Uncompahgre. Robidoux's forts provided a southern trade point for the French, British, and United States' dominated northern fur trade establishment. Fort Uncompahgre and Fort Uintah, located off the Old Spanish Trail, connected the trade network of New Mexico Province with the northern fur markets via a trail network leading through the Book Cliffs of the southern Uinta Basin. A number of Anglo trappers utilized these forts for trade until 1844 when Fort Uintah was burned by a number of disgruntled Native American traders (Pierson 1980:79).

As the dominance of the fur trade waned, European traffic through the Four Corners Region took on a different tone. Although horse and mule trade remained important facets of the regional economy, an increasing number of explorers established routes for the impending westward expansion of Euroamerican settlement. The Old Spanish Trail routed an influx of New Mexicans from the southeast to California where new, lucrative markets were becoming more firmly established. With the settlement of the Salt Lake Valley by the Mormons in 1847, the Church of Jesus Christ of Latter-day Saints (LDS) became a prominent religious and political player in an area that was being more rapidly divided by boundaries and economic interests.

In 1854, the LDS church dispatched William Huntington and Jackson Stewart to explore the Four Corners region for possible expansion of Brigham Young's burgeoning religious state, Deseret. As a result of information obtained during the Huntington Expedition, the Elk Mountain Mission of 1855 was executed in the La Sal Mountains. This plan proposed to convert the local tribes to Christianity, and appreciated a moderate degree of initial success. As the Elk Mountain Mission began spreading south into the San Juan River drainage to establish relations with the Navajo Nation, the resources of the mission became spread thin. Many of the tribes grew disdainful of the LDS presence, and after a number of the mission party members were killed the project was generally abandoned.

The first scientific summary of the region was initiated in 1859. Led by Captain John M. Macomb, the Macomb Expedition followed the Old Spanish Trail from Santa Fe to the vicinity of modern-day Monticello. Collecting geological and botanical data along the way, Macomb documented the presence of pueblos in the vicinity of Harts Draw and Indian Creek before proceeding south to the San Juan River and east back to Santa Fe.

As these earliest expeditions were cross-country inventories, canyons and waterways were regarded primarily as obstacles to be crossed in the most expedient manner possible. John Wesley Powell's river expeditions down the Green River and the Colorado River in 1869 and 1871, respectively, provided the first real documentation of the two primary rivers in the region (Pierson 1980:81). Powell's works noted the rugged nature of the landscape, and mapped and named many of the side canyons and landforms that had yet to be explored.

In 1875, the United States made its first real indication of territorial interest in the region by sending United States Geological Survey teams lead by James L. Gardiner and Henry Gannet, under the direction of Ferdinand V. Hayden, to survey the LaSal Mountains. After two weeks, the Hayden Expedition of 1875 shifted attention to the Abajo Range whereupon they fell under attack by a band of Utes. They were forced to abandon their equipment in Peters Canyon, at a site that has since been identified. Much of their

equipment has since been recovered, and is archived at the University of Wyoming (Pierson 1980:82). The following year, W. H. Holmes led a second party to complete fieldwork in the Abajo Mountains in the company of Gannet, who was able to take a detachment into the Colorado River and San Juan River drainages for a more complete reconnaissance than had been attempted previously.

By the time of the Hayden Expedition, the LDS church had a firm hold on much of what would soon become known as Utah. Colorado was filling with miners, Nevada was dotted with settlements, and the New Mexico and Arizona remained at the interface between Mexican and American territorial governments. The green valleys of the San Juan River, Colorado River, and Green River drainages became attractive destinations for cattlemen seeking to graze herds destined for sale in the new markets of the west. The first cattle were grazed in the valleys of the region in 1874 (Pierson 1980:88-90). As the pressure of settlement increased in surrounding areas, tensions grew between the tribes and the farmers and ranchers who started spilling into the region.

By 1878, La Sal was a growing community with irrigation and a new petition for postal service. By 1879, the LDS church attempted a second conversion of the native inhabitants at the Hole-in-the-Rock Mission on the benches of the San Juan River (Pierson 1980). This community grew into the modern community of Bluff, which was one of the major population centers of the region. The other primary settlement, Moab, sprang up near the earlier LDS mission site near the Old Spanish Trail's ford across the Colorado River. LDS dominance in the region, while never as complete as in other neighboring areas, grew. By 1888, Mormon settlers had established the San Juan Colony which was subsequently renamed Bluff, and by 1903 the community of Grayson, later renamed Blanding, was off to a successful start. As settlements began to formalize, the routes between them became more firmly established. Many of these were based upon the routes that had been secured over the past two centuries, and were merely improved under the direction of county-level governments (Pierson 2001:3)

By the 1890s, placer mining in the Abajo Mountains began to draw prospectors (Pierson 1980:91). Within a few short years silver, copper, and other minerals drew almost equal attention. Even uranium and related deposits of vanadium and carnotite attracted some speculative interest, but would not be of much regional importance until after atomic weapons had been developed.

In 1894, with tensions running high between Indian groups and the European American intruders, rumor spread that southeastern Utah was to be consolidated into a single Indian reservation (Pierson 1980:88). In fact, a bill to that effect was under consideration by Congress. Seeking a way to quell conflicts in other parts of Utah, proponents of the bill saw the wholesale consolidation of tribes in such a far-flung corner of the region as a wise move toward a more peaceable occupation of traditional tribal lands. Bands from the southwest were already in hiding through many of the canyons of southeastern Utah, and as many hoped to one day return to their traditional lands the possibility of being institutionalized in such a multi-cultural reservation was unthinkable. Many fled their smaller reservations, feeling the best chance for avoiding intertribal consolidation was to avoid the reach of their agents. By 1895, negotiations with many of the bands were successful in returning them to their treaty reservations. By the end of that year the proposed bill was defeated.

Into the twentieth century, growth was slow and steady, limited by the nature and degree of industries to which the land was suited. Agriculture and ranching continued, but the growing LDS influence in this corner of Utah began to push outside cattlemen out as Mormon ranchers exercised more and more control over regional markets. Land ownership stabilized, more fences were constructed, and conflicts with local tribes had been suppressed through isolation, starvation, and poverty. By the 1920s, reservation boundaries had been shrunk to near their modern boundaries. The Navajo Indian Reservation, which comprises the southern fifth of San Juan County's area, was home to many of the more traditional Navajo

peoples. Even today, this peripheral margin of the Navajo Nation exists as a large percentage of Utah lands controlled by a sovereign government.

World War I had minor influence upon San Juan County's economy, as did the Great Depression, which may have had a positive effect upon the towns of the region. Southeastern Utah was sparsely populated and, lacking a well-developed economic foundation, there was little to be affected by a national economic downturn. The United States, looking toward industrial expansion, saw hydroelectric power as an answer to an impending energy crisis. The Bureau of Reclamation began studies in the 1920s, investigating proposed dam sites that would be gradually developed over the next 40 years. Civilian Conservation Corps, Works Progress Administration, and other make-work programs brought many people into the region that otherwise may have had no other reason to visit. To these laborers came modest stipends, some of which found its way into the local economy. In 1929, Arches was recognized as a National Monument, as Natural Bridges had been declared in 1908 (Pierson 1980). The federal make-work programs actively enhanced access to these sites, improved roads, constructed soil conservation features to limit erosion accelerated by overgrazing, and assisted local communities in making much needed improvements to streets and sidewalks (Pierson 2001). Outsiders were introduced to the region through other mechanisms, including religious interests. At the height of the depression, Marie Ogden of New Jersey started a communal religious settlement near Church Rock, between Moab and Monticello. This community that grew to just around 100 residents was located near Ogden's prophesied location of Christ's apocalyptic return to earth, and operated in a closed economic sphere with some ties to outside supply. As the nation climbed out of the depression, Ogden's experiment failed and left behind a small ghost town in Dry Valley (McPherson 1995:306-309).

As the United States pulled out of the Great Depression and resumed normal life, San Juan County started an economic transition. World War II had attracted the support of tribal members and European Americans alike, but aside from exposing the residents of southeastern Utah to new skills and various parts of the world the economy was affected very little. The detonation of two nuclear weapons on Japanese soil changed the regional economy in a way far greater than any other single factor had to this time.

Uranium, once a mineral of minimal economic importance, became a commodity in an international arms race. In 1952, Charles Steen discovered the Mi Vida mine in Big Indian Canyon (McPherson 1995:256). Subsequent discoveries resulted in the opening of a uranium mill outside Moab in 1956 (Pierson 1980:100). The population of southeastern Utah multiplied exponentially, and as more lands were consolidated under subsurface mineral rights and homes were constructed for the new arrivals farming and ranching industries began to decline. Despite the poorly understood, but formidable, health risks associated with uranium mining and milling, the economy of the region grew exponentially.

By this time, more Americans took to the highways than ever before. Interstate roadways developed since the 1920s were refined, automobiles were nearly perfected, fuel was inexpensive, and families enjoyed surplus incomes. Although the bottom fell out of the uranium industry after a surplus of the substance was stockpiled, agriculture never recovered as a result of overgrazing, and other aspects of the mining industry never regained prominence anywhere in the nation, southeastern Utah's tourism industry has only expanded. Arches National Monument was turned into a National Park, and was joined by Canyonlands (Pierson 1980:101). The completion of the Glen Canyon Dam in 1963 created a vast manmade reservoir that attracts fishermen, houseboat and water sport enthusiasts.

With tourism came a need for more federal employees to play host to visitors and, as a result, a new economy began to form. Support industries evolved in and around population centers and along highways. The trends following the 1950s have not changed dramatically, but continue to expand as southeastern Utah becomes an increasingly popular location for residents of Salt Lake City, Denver, and

surrounding areas who frequently visit the valley for mountain biking, climbing, off road vehicle recreation, and sight seeing. Expansion in the black market trade of antiquities has become an increasingly disturbing issue for federal agencies tasked with managing large tracts of remote lands possessing one of the highest archaeological site densities in North America and artifacts valued up to tens of thousands of dollars on the international market.

The economy of San Juan County, derived primarily from use of public lands, has become more than a regional issue. General concern from environmental interest groups, outdoor recreationalists, and community leaders seeking to enhance the interests of their residents has resulted in numerous attempts to sway national law in one direction or another. As these issues are refined through discussion, San Juan County's population follows seasonal fluctuations dictated by the peaks and valleys of the tourist industry. As Moab has developed into the primary hub supporting these activities, San Juan County is the destination for many visitors. The many resultant land and resource management issues comprise a large percentage of federal responsibility in San Juan County today.

### **4.2.3 Ethnographic Resources**

The history and concerns of individual tribes and tribal groups are detailed and complex and beyond the scope of summary in this document. A separate, comprehensive ethnographic overview is being prepared in conjunction with the current updating of the Monticello FO RMP and will provide field office cultural resource specialists and managers with in-depth descriptions of the claims to, concerns about, and importance ascribed to lands within the Monticello FO planning area (Molenaar and Easton n.d. [in progress]). This stand-alone document will be a companion to the new RMP and will be used in making decisions regarding land uses contained in or permitted by the RMP.

For the purpose of this AMS, ethnographic summaries and a discussion of potential site types to which tribes may ascribe religious or cultural values are provided in the following sections. These summaries outline what is currently known about concerns individual tribes have regarding management of lands within the Monticello FO planning area and note the types of resources that have been identified as sacred or of traditional importance to the individual tribes.

#### *4.2.3.1 Ute Mountain Ute and White Mesa Utes*

The aboriginal territory of the Ute once covered an extensive area that included what is now Colorado, Utah, and New Mexico. Of the three bands that make up the Southern Ute populations, (Muache, Capote, Weenuche) the Weenuche (Ute Mountain Utes, White Mesa Utes) inhabited the Monticello FO planning area, ranging from the Dolores River in the east to the Colorado River in the north and west to the San Juan River in the south. There are few diagnostic indicators, such as distinctive pottery or wickiup sites, that provide proof of Ute occupation in the San Juan region of Utah and Colorado. Utes tended to utilize existing structures and leave few cultural markers behind upon leaving an area. However, ethnographic data place the Utes in the San Juan region at least since the 1500s.

Utes place religious and traditional importance on many land features throughout southeastern Utah. Significant places of traditional use include Water Canyon or River-Flowing-From the Sunrise (San Juan River), Sagebrush Canyon or Crows Canyon (Montezuma Canyon), Slick Rock Mound (Comb Ridge), Two Rocks Canyon (Cow Canyon), Where-the-Sun-Sets-Last (Mount Tukuhtukivats in the La Sal Mountains). Bitter Root Mountain (Sleeping Ute Mountain) and the Colorado River are mythical places. Blue Mountain, Standing-Alone-Mountain (Navajo Mountain) are considered to be places of worship to the Utes. Mancos (Jim) Mesa and Spanish Mossback Mesas were used in historic times as Ute fortresses in times of conflict (McPherson and Yazzie 2000). Historically, the Bear Dance, a spring ceremony symbolic of nature's awakening, was performed in Bluff, Montezuma Canyon, and Allen Canyon. Today

the ceremony takes place in the fall in White Mesa; however, the Utes may ascribe cultural significance to these historic ceremony locations.

#### 4.2.3.2 Paiute Tribes

San Juan County is considered to be on the periphery of traditional Paiute territory that extended across southern Utah and Nevada, northern Arizona, and down along the western side of the Colorado River into California. The Monticello FO planning area is east and north of traditional Paiute territory although the San Juan Band Paiutes may have utilized resources along the San Juan River in what is now the boundary between San Juan County and the Navajo Reservation (Kelly and Fowler 1986; McPherson and Yazzie 2000). There are no known places of religious or traditional importance to the Paiute on lands managed by the Monticello FO. The Paiute Indian Tribe of Utah has requested to consult on cultural resource issues in the Monticello FO planning area and has indicated an interest in the ethnobotany of the San Juan region.

#### 4.2.3.3 The Hopi Tribe

The Hopi have rich oral traditions that tell of Hopi clan migrations throughout the Southwest, including southern Utah (Schroeder 1985). Archaeological evidence places the Hopi's ancestors originally within the San Juan region of the Southwest. Sometime during the end of the 1200s, a prolonged drought forced these people to move away from the area towards the north, west, south, and east. After several generations, the people continued their migrations, eventually settling on the southern escarpment of Black Mesa in northeastern Arizona. In present times, Hopi clans continue to inhabit and practice agriculture in Black Mesa country (Ferguson et al. 1993; Brew 1979; Courlander 1971).

Places of religious and traditional importance for the Hopi have not been identified in the Monticello FO planning area. However, the Hopi claim to be culturally affiliated with the occupants of prehistoric places such as habitation sites, pictograph sites, or petroglyph sites. These occupants are known in the scientific community as Paleoindian, Archaic, Fremont, and Anasazi but are known to the Hopi as *Motisinom* (First People) and *Hisatsinom* (Ancient Ancestors) (Ferguson 1997; Newton 1999). The Hopi Cultural Preservation Office has requested to consult with the Monticello FO concerning cultural resource issues and does claim cultural affiliation to archaeological sites within the Monticello FO planning area.

#### 4.2.3.4 Pueblo of Zuni

The Pueblo of Zuni is located in a part of western central New Mexico that has been inhabited by ancestors of the Zuni since A.D. 700 or 800 (Woodbury 1979). Like the Hopi, the Pueblo of Zuni claims traditional cultural use of areas far from their present-day reservation (Ferguson and Hart 1985). The Zuni claim stewardship over all lands upon which they hunted, collected materials such as plants and minerals, or traveled regularly to trade. Zuni forebears especially journeyed great distances for the purpose of collecting materials for ceremonial purposes. Traditional hunting and gathering areas extended as far south as the Mogollon and Gallo Mountains in southwestern New Mexico and westward into Arizona (Ferguson and Hart 1985). It should be noted that this area does not extend into present-day Utah; however, like the Hopi, the Zuni claim cultural affiliation to the Paleoindian, Archaic, Anasazi, and Fremont peoples (Pueblo of Zuni 1995). Therefore, all prehistoric or ancestral Puebloan sites within the Monticello FO planning area are considered by the Zuni as places of traditional importance (Panteah and Zuni Cultural Resources Advisory Team 1997).

#### 4.2.3.5 Navajo Nation

Navajos are believed to have entered the southwest during the mid-to-late 1500s and into southern Utah by the 1700s. Their traditional lands covered the area bounded by the four sacred mountains that are of primary religious and sacred significance to the Navajo: Blanca Peak, Mount Taylor, the San Francisco Peaks, and the La Plata Mountains (Maryboy and Begay 2000). Today, the Navajo presently occupy a reservation that is roughly 25,000 square miles and covers much of northeastern Arizona, northwestern New Mexico, and a small portion of southern Utah. The northern border of the Navajo Reservation borders the Monticello FO planning area.

The earliest known Navajo site in San Juan County is a hogan in White Canyon, west of Bear's Ears, dating to 1620. Early Navajo expansion into the Monticello FO planning area is also supported by a Navajo petroglyph at Bluff, Utah, which is in an eighteenth-century style. Navajos also attach cultural significance to three mountains in Utah that are mentioned in Navajo rite-myths: *Dzil Dilo* (Abajo Peaks), *Naatsisaan* (Navajo Mountain), and *Shash Jaa* (Bear's Ears) (Gilpin 2001b; Packak et al. 1992). Recently, the Navajo claimed the Colorado River watershed, including the Green River, as a place of religious and traditional importance based on creation stories (Molenaar 2003c).

In an initial consultation meeting held with the BLM, Monticello and Moab Field Offices, the Navajos requested to be involved in the RMP and cultural resource issues. They have also expressed an interest in the kind and quantity of archaeological records BLM is using in the RMP process.

#### 4.2.3.6 Pueblo of Jemez

The Towa-speaking Jemez people are thought to have migrated with the ancestors of the Zia into the Jemez Mountains around A.D. 1250, eventually settling into the valley along the Jemez River (Ford et al. 1972; Ellis 1956; Sando 1982). Jemez people believe that their ancestors came into this world at *Hoa-sjela*, or Stone Lake, a place located on the present-day Jicarilla Apache Reservation in northwestern New Mexico (NAU and SWCA 1996). Although no places of religious or traditional importance to the Pueblo of Jemez have been identified in the Monticello FO planning area, Jemez religious leaders are thought to have made treks to an emergence shrine at "Banana Mountain" which may be another name for Sleeping Ute Mountain (Ellis 1967:40).

#### 4.2.3.7 Pueblo of Zia

The Zia are thought to have migrated southward from southwestern Colorado into the Greater Mesa Verde and Chaco Canyon regions and claim both areas as ancestral homes. By the late 1300s, Zians had settled in a series of sites along the Jemez River, where they eventually settled (Ellis 1956, 1967). The Zia pueblo originally consisted of five villages in the 1500s, but their numbers were reduced following the Pueblo Revolt of 1689. Today, the Zia Pueblo consists of one village and two separate land parcels, is presently situated along the Jemez River, 30 miles north of Albuquerque. The Pueblo of Zia, like other Pueblos, claim cultural affiliation to prehistoric cultures of southeastern Utah based on ancestral migration and origin stories. The Pueblo of Zia has consulted with the Monticello FO on cultural resource issues but has not identified any places of religious or traditional importance.

#### 4.2.3.8 Pueblo of Acoma

Acoma is a Keresan-speaking pueblo located 20 miles southeast of Grants in north-central New Mexico. Prehistoric Acoma culture ranged from the plains of eastern New Mexico, to the Zuni Mountains in the west, to the Rio Puerco in the east, and to the north of Mount Taylor (Holmes 1989). Like other

Puebloans, Acoma oral traditions tell of their ancestors as having emerged from under the earth at *Shipap*, their place of origin in the north. Archaeological data such as pottery dating and oral traditions hold that Acoma has been occupied since prehistoric times, possibly as early as A.D. 700 (Ruppe 1990; Ruppe and Dittert 1952) with a later mix of migrants arriving from Mesa Verde, Chaco Canyon, and possibly the Gila and Cebolleta regions around A.D. 1300 (Horr 1974; Ellis 1974). Like other Puebloans, the Pueblo of Acoma claims cultural affiliation to prehistoric cultures of southeastern Utah based on their migration stories. The Pueblo of Acoma has consulted with the Monticello FO on cultural issues but has not identified any places of religious or traditional importance.

#### 4.4 POTENTIAL TRADITIONAL CULTURAL PROPERTIES (TCPS)

Consultation with Native Americans can result in the identification of TCPs. TCPs first came into use within the federal legal framework for historic preservation and cultural resource management in an attempt to categorize historic properties containing traditional cultural significance (Parker and King 1989:1). National Register Bulletin 38: Guidelines for Evaluating and Documenting Traditional Cultural Properties defines a Traditional Cultural Property as "one that is eligible for inclusion in the National Register (of Historic Places) because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community." To qualify for nomination to the National Register as a Historic Property, a TCP must be more than 50 years old, must be a place with definable boundaries, must retain integrity, and meet certain criteria as outlined in National Register Bulletin 15 (National Park Service 1995). Based on previous consultations with tribal organizations, the following TCP site types have the potential for being identified in the Monticello FO planning area.

##### 4.4.1 Archaeological Sites

Many Native American groups claim affiliation with prehistoric archaeological sites such as rock art, burials, and village sites. The Hopi Tribe, for example, claims that often the exact locations of some of these places, such as ancestral archaeological sites and burials, are unknown to tribes until these sites are identified by Hopi cultural experts during ethnographic or ethnohistoric investigations or by archaeologists during archaeological investigations of a given study area. Not only do the Hopi consider these sites to be TCPs, they also believe that they are historic properties eligible to the National Register under Criteria A, B, C, and D for the following reasons (Ferguson 1997; Hopi Cultural Preservation Office 1995):

- Criterion A because they are associated with the Hopi clan migrations, which have made a significant contribution to the broad patterns of Hopi history.
- Criterion B because they are "associated directly with Ma'saw and the Hopis' covenant to leave their footprints across the land."
- Criterion C because "ancestral archaeological sites, that may be individually anonymous, are identified as part of the great clan migration that are central to all that is Hopi."
- Criterion D because they have yielded or have the potential to yield information important to Hopi prehistory.

Other tribes also consider ancient Native American archaeological sites as places of traditional importance. For example, the Zuni have identified all "ancestral" archaeological sites as places of traditional importance, as well as being eligible to the National Register (Anyon 1995; Hart 1993:40). They say that these sites meet Criteria A and B (as outlined in National Register Bulletin 15) because of their association with the Zuni ancestors and their oral migration histories (Panteah and Zuni Cultural Resources Advisory Team 1997). The Utes also consider some of these sites to be culturally significant

and sacred and maintain that the spirit of their ancestors dwell at archaeological sites and will remain as long as the sites are not disturbed (Newton 1999; Perlman 1998). Recently, a spiritual leader of the Uintah and Ouray Ute Tribe has stated that the disturbance of significant archaeological sites is leading to the destruction of Ute religion and diminishing the power of the spirits that remain at these sites (Molenaar 2003a).

#### **4.4.2 Rock Art Sites**

Many tribes have strong spiritual convictions regarding petroglyphs and pictographs and usually request that these sites not be disturbed, especially if the site was created with the intention of connecting with a spiritual or natural power. Many Ute and Puebloan groups also believe that rock art created by their ancestors retains the spirits of their ancestors. The Hopi Cultural Preservation Office has ascribed cultural values to Fremont rock art panels as far north as Nine Mile Canyon in the Price Field Office area (Molenaar 2003b).

Rock art panels are also seen by tribes as physical evidence for Native American land use indicating territorial boundaries, hunting and camping sites, and trail or migration markers. It is generally accepted by Native Americans that some panels depict tribal stories and legends and that only those with special cultural knowledge can interpret them. In the past, Utes have derived spiritual powers and authority from special petroglyph panels for their Bear Dances (Spangler 1995:775). The Uintah and Ouray Ute Tribe often request one-half mile buffers around rock art panels, if possible, during Section 106 consultations (Molenaar 2003b).

#### **4.4.3 Rock Shelters**

Rock shelters and cave sites located within the Monticello FO planning area can potentially be identified as TCPs. These locations include overhangs, crevices and cave sites and are significant to Native Americans as ancestral dwellings. These site types are also potential ancestral grave sites for the Ute Tribe (Pettit 1990). These sites may also be identified as places where Native Americans communicated with the supernatural world by means of prayers, offerings, and vision quest sites (Molenaar 2003a).

#### **4.4.4 Non-Archaeological Site Types**

Non-archaeological site types are distinguished from archaeological site types in order to discuss places that are not necessarily associated with prehistoric or historic artifact assemblages and collections. These sites are typically identified by tribal representatives during the government-to-government consultation process that is required of federal agencies. Some common site types are lakes and springs, land features, and traditional gathering or collection areas.

#### **4.4.5 Lakes and Springs**

Native Americans often claim places of water as places of traditional importance and have traditional stories about mythical beings or water spirits that live in lakes, springs, and rivers. The Colorado River and its tributaries, have sacred significance to the Navajo. The Colorado, Green and Price Rivers have been identified as sacred to the Navajo because they come from natural spring water and also because the Colorado River flows from the north and can be associated with some of the Navajo creation stories. According to the Navajo, when the Green River is impacted, the cultural integrity of the spring water is affected, which in turn affects traditional procurement use values (Molenaar 2003c).

#### 4.4.6 Traditional Gathering or Collection Areas

Traditional plant or other resource gathering areas may be places of traditional importance to Native American groups. These areas are generally places where Native Americans go to collect resources such as medicinal plants used and minerals to be used in ceremonies and are often in current use when identified.

#### 4.4.7 Land Features

Large geographic regions, such as deserts, mountain ranges, and valleys are often identified as TCPs but none have been formally documented as such. Examples of such types of places in the vicinity of the Monticello FO planning area are Sleeping Ute and the Henry Mountains.

### 4.5 PLANNING CONSIDERATIONS AND ISSUES

Planning and implementing management practices related to cultural resources involves a multiple resources approach. While cultural resources have intrinsic values (e.g., scientific value, traditional value, or public interpretation value) that must be managed, the greatest proportion of impacts and potential impacts to these resources occur from non-cultural-resource-related activities such as recreational use, grazing, fire management, and oil and gas development. Impacts from these other activities can range from looting of sites, to minor physical disturbances that damage some of the important values of sites, to complete destruction of sites.

When identifying management practices for cultural resources, several factors are taken into consideration. These factors are related to characteristics of the resource and are largely driven by existing laws and mandates regarding treatment of cultural resources. Among those key factors considered in cultural resource management planning are:

**Data sufficiency.** Only those resources that have been identified or can be reasonably predicted to exist in a given location can be managed proactively. Comprehensive management planning cannot take place for areas where little or no knowledge of site types and frequencies is available.

**Location of resources.** The remoteness of the resource or its proximity to centers of population or high use influences the nature of and degree of management as this is directly related to the potential for the resources to be impacted and the ability of the BLM to provide appropriate monitoring and protection.

**National Register eligibility status of the resource.** National Register-listed sites, districts, landmarks, and buildings, and those sites, districts, and buildings determined to be eligible for listing are afforded special consideration under current law.

**Sensitivity of the resource.** Some types of cultural resources are more sensitive to impacts than others. The nature of the activity creating the impact is also considered (i.e., heat impacts from fire differ from physical impacts of recreational hiking).

**Intrinsic values of the resource.** Individual cultural resource sites as well as districts, landmarks, monuments, and natural landscapes all have an array of intrinsic values. At present, the BLM assigns cultural resources to one or more of the following use categories based on these values: scientific, conservation, experimental, public, and traditional (see Section 4.3.2 for more detail on these use categories).

#### 4.6 SPECIFIC MANDATES AND AUTHORITY

Several laws, regulations, and sets of formal guidance are in place that concern the management of cultural resources on federal lands and/or on lands administered by the BLM as well as on non-federal lands where federal involvement is present. Among those laws and executive orders related to cultural resources and to consultation with Native American tribes are the following (Table 4.3):

**Table 4.3. Applicable Cultural Resources Laws and Regulations**

Title	Applicable Regulation(s)	Year Enacted and/or Amended
Antiquities Act	43 CFR 3	1906
Historic Sites Act	N/A	1935
Reservoir Salvage Act	N/A	1960; as amended 1974
National Historic Preservation Act (NHPA)	36 CFR 65 36 CFR 800 36 CFR 801 36 CFR 63	1966; as amended 1980, 1992
Department of Transportation Act	N/A	1966; amended 1983 (relevant for easements through BLM land)
Executive Order 11593: Protection and Enhancement of the Cultural Environment	N/A	1971; codified as part of the 1980 amendments to the National Historic Preservation Act
Archaeological and Historic Preservation Act (Moss-Bennett Act)	N/A	1974
The American Indian Religious Freedom Act (AIRFA)	N/A	1978
Archaeological Resources Protection Act (ARPA)	43 CFR 7	1979; as amended
Native American Graves Protection and Repatriation Act (NAGPRA)	43 CFR 10	1990
Executive Order 13007: Indian Sacred Sites	N/A	1996
Executive Order 13175: Consultation and Coordination With Indian Tribal Governments	N/A	2000
Executive Order 13287: Preserve America	N/A	2003

These laws mandate the BLM to identify, preserve, and protect valuable cultural resource sites. The most recent of these regulations, Executive Order 13287 enacted in March 2003, also directs federal agencies, including the BLM, to develop heritage tourism programs utilizing the cultural resources under their jurisdiction.

In addition to those laws and regulations listed above, several sources of direct guidance on managing cultural resources have been developed for the Utah BLM in general and for the Monticello FO in

particular. These guidance documents provide an explication of the over-arching goals of the BLM as they relate to cultural resources and specific directives on how to manage such resources. The primary documents of this nature are:

- the Land Use Planning Handbook (BLM Handbook H-1601-1) (2000),
- the Bureau of Land Management Strategic Plan FY 2000-2005 (2000), and
- the existing RMPs for the San Juan Resource Area (1991) and the Grand Gulch Plateau Cultural and Recreational Area (1993).

Additional guidance comes from:

- the BLM Manual 8100-Cultural Resources Management;
- the BLM Manual H-8110 Identifying Cultural Resources;
- the BLM Manual H-8120 Protecting Cultural Resources;
- the National Cultural Programmatic Agreement between the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers; and
- the State Protocol Agreement between the Utah BLM and the Utah SHPO.

Procedural guidance for Native American Consultation is provided in the BLM Manual Handbook, section H-8160-1. Subsections include Consultation Issues, Consultation Guidance, and Procedures Unique to Specific Laws. Appendices include the Policy on Compensation to Native Americans for their Participation in the BLM's Administrative Process, Tribal Management of Non-Tribal Lands and Resources, Rights Secured to Tribes by Treaty, Competition Over Natural Resources-Traditions Versus Commerce, and Water Rights.

## 4.7 CURRENT MANAGEMENT PRACTICES

Current cultural resource management practices within the Monticello FO follow from the laws, regulations, and guidelines summarized above. The basic cultural resource management practices of the Monticello FO can be summarized in two basic categories: Specific Management Practices and General Management Practices. Specific Management Practices refers to the more detailed, daily activities through which the Monticello FO carries out its cultural resource management responsibilities. The Specific Management Practices category can be further divided into two functional subcategories: Section 106 and Section 110. While these two labels refer to specific sections of the National Historic Preservation Act, the policies, procedures, and intent of these sections captures the mandates of the other applicable resource appropriate laws. General Management Practices refers to the overarching plans, processes, and prescriptions influencing the approach of the Monticello FO toward the management of cultural resources.

### 4.7.1 Specific Management Practices

**Comment [j1]:** if ther is a 4.7.1.... there should also be a 4.7.2.....

#### 4.7.1.1 Section 106

Section 106 of the NHPA outlines the general process by which federal agencies are to follow the mandate of the NHPA and take into account the effects of their undertakings on historic properties (i.e., sites, buildings, structures, and landscapes either listed on or determined eligible for listing on the National Register) and afford the Advisory Council on Historic Preservation, or its designated representative, an opportunity to comment on those undertakings. This process is commonly referred to as the "Section 106 process." The Section 106 process calls for the identification of historic properties in the

area of potential effects for the undertaking, an assessment of the effects of the undertaking on any identified historic properties, the resolution of adverse effects, and consultation with relevant agencies, Native American tribal groups, and other interested parties. The Section 106 process is applicable to a wide variety of BLM actions such as agency-initiated projects, designating areas of federal lands for particular uses, and granting permits for oil and gas exploration or grazing. The majority of undertakings going through the Section 106 process within the Monticello FO are initiated by non-agency entities seeking to use BLM lands for recreational or commercial purposes. Since the implementation of the Federal Wildland Fire Management Policy in 2001, however, intra-agency undertakings related to fire management (e.g., chemically and mechanically-treated fuels reductions, prescribed burning, and allowing wildfires to burn) also comprise a significant portion of Section 106 cases managed by the Monticello FO. At present, it is estimated that 85–90% of all cultural resource management work carried out by the Monticello FO is through the Section 106 process.

As noted previously, the nature and level of management necessary for any given cultural resource depends on the nature of that resource. Individual artifacts, commonly referred to as isolated artifacts or isolated finds, are generally not subject to consideration under the various laws and regulations governing cultural resource management by federal agencies. As such, active management of this particular type of cultural resource is minimal. On the other hand, cultural resource sites, historical buildings, and TCPs are subject to consideration under existing cultural resource law and practice and necessitate far greater levels of active management and planning by federal land managers. For this reason and to ensure that limited agency financial and personnel resources are directed toward managing only those cultural resources mandated for consideration under existing law, the Utah BLM developed an operational definition of what constitutes a cultural resource site. BLM Handbook H-8110 (2002) defines sites as those manifestations of past human activity that are at least 50 years old and consist of one or more of the following:

- At least 10 artifacts of a single class (e.g., 10 sherds) within a 10-m-diameter area, except when all pieces appear to originate from a single source (e.g., one ceramic pot, one glass bottle).
- At least 15 artifacts that include at least 2 classes of artifact types (e.g., sherds, nails, glass) within a 10-m-diameter area.
- One or more archaeological features in temporal association with any number of artifacts.
- Two or more temporally associated archaeological features without artifacts.

#### *4.7.1.2 Native American Consultation*

The Bureau of Land Management is mandated to consult with Native American tribes concerning the identification of cultural values, religious beliefs and traditional practices of Native American people that may be affected by actions on federal lands. Places that may be of traditional cultural importance to Native American people include, but are not limited to, locations associated with the traditional beliefs concerning tribal origins, cultural history, or the nature of the world; locations where religious practitioners go, either in the past or the present, to perform ceremonial activities based on traditional cultural rules of practice; ancestral habitation sites; trails; burial sites; and places from which plants, animals, minerals, and waters possessing healing powers or used for other subsistence purposes, may be taken (Ferguson et al. 1993:30; Hopi Cultural Preservation Office 1995:2; Parker and King 1989:1). Additionally, some of these locations may be considered sacred (as opposed to traditional) to particular Native American individuals or tribes. Under the auspices of the National Historic Preservation Act of 1966 (NHPA), as amended; American Indian Religious Freedom Act of 1978 (AIRFA); Executive Order 13007–Indian Sacred Sites, dated May 24, 1996; and the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), as amended, the Bureau of Land Management must take into account the effects of federally linked projects or land uses on these types of locations.

Additionally, the BLM has developed several sets of guidelines for consultation with Native American groups and evaluation of cultural resources with an emphasis on traditional use values. BLM Manuals 8160, Native American Coordination and Consultation, and H-8160-1, General Procedural Guidance for Native American Consultation, provide consultation requirements and procedural guidance to ensure that the consultation record demonstrates, "that the responsible manager has made a reasonable and good faith effort to obtain and consider appropriate Native American input in decision making" (H8160-1, 2002:4). The BLM Handbook, H-8110 Evaluating Cultural Resources offers guidelines for management considerations when allocating cultural resources to use categories, including considerations for traditional use values.

In August of 2003, BLM Utah State Director, Sally Wisely, mailed initial consultation letters requesting input for land use planning documents from Native American organizations. Response letters were received from four organizations with specific requests to consult on cultural resource issues in the Monticello FO planning area: Pueblo of Santa Clara, Pueblo of Laguna, Hopi Cultural Preservation Office, and the Paiute Indian Tribe of Utah. Meetings were scheduled with these four organizations. The Monticello FO is also meeting with the Ute Tribes, Navajo Nation and Chapter Houses (Aneth, Blue Mountain, Mexican Water, Navajo Mountain, Oljato, Red Mesa, Teec Nos Pos), and Pueblos of Acoma, Zuni, Zia, and Jemez to discuss resource issues.

#### 4.7.1.3 Section 110

Section 110 of the NHPA outlines the broad responsibilities of federal agencies for historic preservation "and is intended to insure that historic preservation is fully integrated into the ongoing programs of all federal agencies" (National Park Service 2003). Section 110 carries several mandates, including the following:

- The head of each federal agency must assume responsibility for the preservation of historic properties under the jurisdiction of his or her agency.
- Each federal agency must establish a program in consultation with the Secretary of the Interior for the identification, evaluation, nomination to the National Register, and protection of historic properties.
- Each federal agency must, to the maximum extent possible, use historic properties available to it in carrying out its responsibilities.

In many BLM field offices, heavy Section 106 workloads virtually eliminate the ability of cultural resource specialist to carry out Section 110 work. While Section 106 work comprises the vast majority of work undertaken by the Monticello FO, the workload is such that it allows an estimated 10%-15% of the cultural resource specialists' time to be spent carrying out Section 110 projects.

The mandate to carry out Section 110 projects was recently bolstered by the issuance of Executive Order 13287 (EO 13287) in March 2003. As this order was only recently issued, it is not addressed in the current RMP (1991). Sections 3 and 4 of EO 13287, known as the Preserve America Order, both direct federal agencies to improve their planning, accountability for, and stewardship of the cultural resources under their jurisdiction. Although not specifically citing Section 110 of the NHPA, EO 13287 carries the same intent as the earlier legislation.

## 4.8 GENERAL MANAGEMENT PRACTICES

In order to assist its field office archaeologists and other decision makers in making informed land use allocations, the BLM developed a series of guidelines for evaluating cultural resource sites on public

lands under BLM jurisdiction. These guidelines are contained in the BLM Handbook H-8110, Guidelines for Identifying Cultural Resources (2002). As part of the guidelines, BLM field office personnel are directed to evaluate the cultural resource sites in a manner that includes both consideration of each site under the criteria of the National Register and an assessment of the site's use value. With regards to the latter element (use value), Handbook H-8110 directs BLM personnel to assign cultural resource sites to one or more of a series of use categories based upon a decision about what "values and qualities need to be protected, and when or how use should be authorized" (2002:9). The categories identified by the BLM include scientific use, conservation, experimental use, public use, traditional use, and discharged from management. It should be noted that cultural resource sites can belong to more than one of the following use categories.

**Scientific Use.** According to Handbook H-8110, the allocation of sites to the scientific use category is based upon ongoing or proposed future short- or long-term research and should be supported by a clear delineation of research objectives, data needs, and the degree to which a site or subset of sites can meet those data needs.

**Conservation.** Allocation of sites to the conservation category is to be based upon future goals and data needs identified through regional overviews, contexts, and previous studies. The decision to allocate a site to the conservation category should be supported by a justification of why the site is not currently eligible for investigation.

**Experimental Use.** Allocation of sites to this category is to be based upon the need to obtain information or conduct specific tests necessary for the development of effective cultural resource management plans or protection measures.

**Public Use.** Allocation of sites to the public use category is to be based upon the "potential use of cultural properties by the general public for education or recreation" (BLM Handbook H-8110 2002:10).

**Traditional Use.** Allocation of sites to the traditional use category is to be based upon socio-cultural value assigned to a site or site type by a specific group of people. Decisions to allocate sites to this category should be supported by thorough research and consultation with the relevant group to identify the nature of the use value as well as the importance of the site to maintaining cultural identity.

**Discharged from Management.** Allocation of a site as discharged from management reflects an evaluation that a site no longer retains value under any of the other use categories and that the site should no longer constrain other types of land uses.

Under the existing RMP (1991), approximately 362,920 acres were allocated as ACECs based upon combinations of the use categories described above (see Table 4.4). Additionally, clusters of sites comprising approximately 357,780 acres were identified as desirable for nomination to the National Register as archaeological districts, primarily for their scientific and conservation use values (Table 4.4). Four cultural resource sites comprising a total of 13 acres were identified as desirable for nomination to the National Register as individual listings owing primarily to their allocation to the scientific, conservation, and traditional use value categories (Table 4.5).

At present, the Monticello FO preservation specialist is actively identifying resources with high values under one or more of the use categories in order to allocate sites according to the overall BLM management strategy. This work is both retroactive and current in that previously documented sites are being re-assessed and allocated to a use category and newly documented sites are being assigned a use category at the time the site record is submitted to or prepared by the Monticello FO. Through this process, additional potential ACECs, archaeological districts, and National Register eligible sites are

being identified. As these areas and sites are allocated to a given use category or suite of use categories, the lands encompassing them are managed according to the procedures established in the current RMP (1991). Some of these areas and sites are managed under more specific planning documents.

**Table 4.4. Areas of Critical Environmental Concern (ACECs) with Cultural Resource Values Designated by the Monticello FO**

<b>ACEC Name</b>	<b>Year Designated</b>	<b>Acreage Included</b>	<b>Justification</b>
Alkali Ridge	1991	35,890 acres	Significant diversity of cultural sites; large Pueblo I sites (A.D. 700–900) in this area are part of the Alkali Ridge NHL. Large pueblos with complex architecture and connecting prehistoric roads are included in this diverse cultural landscape. This unique Historic Landmark is significant in the history of archaeology in the southwestern United States. This ACEC has high scientific and conservation use values.
Cedar Mesa	1991	323,760 acres	This ACEC contains a wide array of cultural resources reflecting most of the history of human use of southeastern Utah. Basket Maker -Pueblo I interface sites (pre- A.D. 1 to A.D. 700), terminal Pueblo III occupations (ca. A.D. 1300), plastered rooms in buildings associated with the Pueblo III occupations (A.D. 1100–1300), prehistoric roads, the historic Hole-In-The-Rock Trail, and pioneer era sites are all represented within this ACEC. The ACEC also has high Native American traditional uses and values as well as scientific, conservation, and public values.
Shay Canyon	1991	1,770 acres	This ACEC contains significant rock art associated with Archaic and Pueblo motifs as well as important paleontological resources including at least one dinosaur track way. The ACEC has high public and conservation use values.
Hovenweep	1991	1,500 acres	This ACEC contains large structural Pueblo II – Pueblo III sites (A.D. 850–1300), a terminal Pueblo III occupation (ca. A.D.1300) as well as evidence of interaction with the Mesa Verde Anasazi population. The ACEC has high scientific, public, and conservation use values.

**Table 4.5. Sites and Districts Identified in the 1991 RMP for National Register Listing**

<b>Name</b>	<b>Acreage Included</b>	<b>Site or District</b>
San Juan Prehistoric Roads	500 acres	District
Cedar Mesa	349,640 acres	District
Fable Valley	5,030 acres	District
Tin Cup Mesa	2,610 acres	District
Ruin Spring	10 acres	Site
Kachina Panel	1	Site
Monarch Cave	1	Site
Three Story Ruin	1	Site

Management of the Grand Gulch area and Cedar Mesa ACEC is currently governed by the Grand Gulch Plateau Cultural and Recreation Area Management Plan (1993). This plan provides for: 1) the formation of a planning area archaeological committee to identify important research questions relevant to the archaeological record of the area; 2) active consultation with the Navajo Tribe, Ute Tribe, Hopi Tribe, Zuni Tribe, All Pueblo Council, San Juan County Historical Society, and Four Corners Heritage Council; 3) archaeological survey based on the likelihood of impacts to National Register eligible sites; 4) stabilization of select ruins; 5) restrictions on and issuance of special area use permits for commercial and non-commercial use; 6) the development of an interpretive plan to educated visitors about the cultural resources of the area; 7) monitoring to assess impacts to archaeological resources; and 8) development of a public affairs plan related to the area. Specific management prescriptions are also outlined for individual units within the larger FO planning area.

**4.9 RESOURCE DEMAND AND FORECAST**

Cultural resources within the Monticello FO planning area are subject to a wide variety of demands. These demands range from the direct use of sites for scientific purposes by research institutions and for recreational purposes by visitors, to the indirect use of sites in areas of minerals exploration and development, high non-cultural-resource recreational activities, wood gathering, land exchanges, fire management, and livestock grazing.

**4.9.1 Direct Uses**

*4.9.1.1 Scientific Use*

The direct use of cultural resources for scientific purposes, such as through excavation, is currently low, with very few applications being made to the BLM in any given year. Such use of cultural resources is generally limited to academic institutions and non-profit organizations. Annual budgets for such entities are traditionally low and do not allow for extensive and frequent research excavations. In general, the trend at academic institutions across the United States has been toward decreasing budgets for anthropology and archaeology programs as well as toward the complete elimination of such programs from many institutions. Should this trend reverse itself, scientific use of cultural resources within the

Monticello FO planning area would be expected to increase. Given current conditions, however, such use is expected to either remain steady or slowly decline.

#### *4.9.1.2 Recreational Use*

The second major direct use of cultural resources is for recreational purposes. Recreational activity for the express purpose of visiting and enjoying cultural resource sites has increased dramatically throughout the West over the past decade. This increase is due in part to increased public awareness of the cultural resources present on public lands through public education programs and site interpretation, and through the general increase in specific recreational activities such as OHV use, remote hiking, and geo-caching. The role of cultural resource sites in these latter three activities has been enhanced by the availability of low-cost handheld Global Positioning System (GPS) units, which allow visitors to pinpoint the locations of previously unknown and unidentified, remote cultural resource sites and share that information with other via personal communications or, more recently, via the internet. A discussion of the impacts of such activities on cultural resources within the Monticello FO planning area is provided in Section 4.6.3 of this document.

Within the Monticello FO planning area, the Recreation Management Information System is used to document visitor days for various activities throughout the Monticello FO planning area. Data available for Fiscal Years 2001 and 2002 show an increase in visitor numbers for some activities and a decrease for others. Although slight, an increase (from 3,859 to 4,098) was seen between 2001 and 2002 in the numbers of registered visitors whose self-identified primary activity was viewing cultural resource sites. This increase is generally reflective of the overall trend toward increasing public interest in cultural sites throughout the West and is expected to continue at its current rate for at least several more years.

#### **4.9.2 Indirect Uses**

Demands are indirectly placed upon cultural resources by unrelated land uses in areas containing such resources. The demands generally include use of the land occupied by cultural resources for development and recreation and for the management of other resources, such as wildlife or domestic livestock forage, fire, or timber/woodlands (i.e., for wood gathering purposes). Affecting land exchanges between the BLM and other entities can also result in the indirect use of cultural resources.

##### *4.9.2.1 Minerals Exploration and Development*

Minerals exploration and development can result in the "use" of cultural resources via physical disturbance of the land on which the resource is located. In general, direct impacts to cultural resources located within the proposed footprints of seismic lines, well pads, pipelines, and associated access roads and ancillary facilities is avoided through adherence to the Section 106 process and avoidance of sites through relocating the proposed facility or activity. Owing to the relatively high cost of mitigating impacts to cultural resource sites, development companies tend to prefer to relocate their facilities. As a result, most individual cultural resource sites are left intact. The same cannot be said, however, for cultural resource districts, landscapes, and some TCPs. These types of resources often cover vast geographic areas within which multiple individual sites or traditional plant/animal communities are located. Minerals exploration and development within the broad geographic area may indeed be appropriately designed to avoid individual sites or resource communities but the physical and auditory disturbances created by the placement of roads, pipelines, well pads, buildings, and other related facilities may well detract from the overall cultural integrity of the district, landscape, or TCP. This is particularly critical in the case of TCPs, the primary component of which may be defined as the viewshed and/or soundscape of a particular area. Visual and auditory impacts within such TCPs can render the TCP non-

functional for the related Native American tribe or other cultural group. It should be noted, however, that in some cases, visual impacts may be considered short-term, as reclamation activities may restore the previous qualities of the viewshed.

Minerals development within the Monticello FO planning area occurs within four exploration and development areas defined by geologic composition, historic/current production activities, and potential for ongoing and future development. These four areas are: 1) the White Canyon Slope area; 2) the Monument Upwarp area; 3) the Blanding Basin area; and 4) the Paradox Fold and Fault Belt. At the present time, 538 producing oil wells, 18 producing gas wells, and 430 service wells are present within the exploration and development areas. An additional 1,600 wells are either temporarily or permanently abandoned. The development of the wells and their associated facilities (i.e., pipelines, access roads, compressor stations) has resulted in the disturbance of approximately 11,630 acres of surface land (see Section 12.0 for a more detailed discussion of minerals development within the FO planning area).

Projections are available for the anticipated oil and gas development within the four exploration and development areas over the next 15 years (see Section 12.0 of this document). These projections indicate that 1 to 10 oil and gas wells will be developed within the White Canyon Slope area. Along with their related transportation pipeline systems, these wells are projected to result in the physical disturbance of 4.3 to 42.7 acres of land. Another 3 to 25 wells are anticipated within the Monument Upwarp area and would result in a total of 13 to 107 acres of surface disturbance. Between 25 and 125 oil and gas wells are projected to be developed within the Blanding Basin area, resulting in an estimated 107 to 534 acres of surface disturbance. Within the Paradox Fold and Fault Belt, between 6 and 53 wells are anticipated and would result in surface disturbances of 26 to 226 acres. All totaled, between 35 and 213 new oil and gas wells, resulting in between 150.3 and 909.7 acres of surface disturbance, are anticipated within the four minerals exploration and development areas of the Monticello FO planning area. This is a projected increase of 6 to 38% over existing numbers of *producing* wells and an increase of 1 to 8% over existing *cumulative* (total to-date) ground disturbance.

By comparison to prior years, anticipated oil and gas development over the next 15 years within the Monticello FO planning area is expected to be relatively low. It is also expected that impacts to cultural resources within the development areas will, in general, be avoided through adherence to the Section 106 process at the project level. It is possible, however, that as incentives increase for minerals development companies under the current political climate, and as available lands within high-producing oil and gas zones decreases, developers may be more interested in funding mitigation of cultural sites rather than relocating their facilities. Such occurrences, although they would result in the science-based destruction of sites, are expected to be quite low and would represent a negligible increase in impacts to cultural resources within the Monticello FO planning area.

#### 4.9.2.2 Recreational Use

Recreational use creates the single largest indirect "demand" on cultural resources within the Monticello FO planning area. Indirect "use" or "demand" on cultural resources by recreational activity is defined, for this section, as impacts to cultural resources that detract from their traditional, scientific, public, experimental, and/or public use values. These uses or demands are, in most cases, inadvertent and result from visitors lack of awareness regarding the presence of the resource; or a lack of education as to the importance of avoiding damage to cultural resources, or the cumulative impacts of multiple visitors on such resources; or from increased erosion on cultural sites adjacent to heavily-used recreation areas. Other uses or demands are intentional and result from concerted efforts to collect artifacts from sites, remove rock art as souvenirs, or add one's name or other notation to a rock art panel. Specific conflicts between recreational land uses and cultural resources are discussed in greater detail in Section 4.6.3 of this document.

Staff of the Monticello FO have identified several trends in recreational use of FO planning area lands in recent years. These trends include marked increases in OHV use, rock climbing, and the dissemination of recreational information via the Internet by members of the public (including information on cultural resource site locations). Trends identified from the Recreation Management Information System for the 2001 and 2002 Fiscal years suggest there has been a slight decrease in registered visitors engaging in camping, backpacking, and non-motorized boating and substantial increases in hiking, OHV use, and general non-motorized events and activities (including rock climbing). Further recreational trend information related to OHV use comes from OHV registration data from the Utah Department of Motor Vehicles (see Chapter 11–Recreation of this document). Between 1998 and 2002, registration of Off Highway Vehicles within San Juan County increased by 167%. This trend in increasing popularity of OHV use is expected to continue for some time into the future, thereby increasing the uses of and demands upon cultural resources within the Monticello FO planning area.

#### *4.9.2.3 Wood Gathering*

At the present time, wood gathering is conducted throughout many areas of the Monticello FO planning area under a permit system. Predominant among permitted wood gatherers are members of the Navajo Nation, who use the gathered wood as the sole source of heat. Uses of cultural resource by wood gatherers are indirect in nature and consist primarily of unintended damage to cultural sites by driving vehicles off designated roads for the cutting and loading of wood and the subsequent use of the resultant "trail" (tire tracks) by OHV riders. Wood gathering is expected to remain at current levels, thus overall indirect impacts to cultural resources is not expected to increase in frequency, though previously undisturbed individual sites may be damaged each time a new area is accessed for wood gathering. Indirect impacts to cultural resources from wood gathering may be able to be reduced through increased enforcement of off-road (off-designated-trail) prohibitions, maintenance of the permit program, and implementation of a limited program to educate wood gatherers about their role in controlling damage to cultural resources.

#### *4.9.2.4 Land Exchanges*

Indirect use of cultural resources may result from exchanges of land between the BLM and other entities. This use occurs when lands containing cultural resources are exchanged. The BLM is beholden to federal law and internal policy to identify and evaluate cultural resources within the lands to be moved out of its possession in a land exchange. The BLM must then consider mitigation of impacts to those resources that are determined to be either listed on or eligible for listing on the National Register. This mitigation often takes the form of protective covenants placed on the legal exchange documents, data recovery, or exclusion of the area containing the site(s) from the exchange. In cases where cultural resources are present on lands obtained by the BLM in an exchange, the resources are often benefited in that they are brought under the protection of federal laws and agency policies governing the management of cultural resources by the BLM.

Land exchanges are expected to follow current and historical trends with exchanges being relatively infrequent and being focused on consolidation of BLM lands from scattered parcels to solid block units for more effective management. All land exchanges are subject to review for cultural resource issues prior to their approval, and eligible sites are to be either avoided or the impacts to them mitigated. Given this, the indirect demand on cultural resources within the Monticello FO planning area is anticipated to remain stable.

#### 4.9.2.5 Fire Management

Prior to the severe fire seasons of the past 8 years, the effects of wildland fire and prescribed burning on cultural resources were given little attention. Since that time, designed experiments and concerted post-fire assessments are being carried out by both land management agencies and private researchers alike to assess the effect of fire on these non-renewable resources. The critical conclusion of the ongoing research is that land managers need to understand the effects of fire on particular types of cultural materials in order to implement a fire management policy that avoids unnecessary loss of heritage resources. In general, the effects of fire on cultural resources is directly correlated with the nature of the resource and the intensity and duration of the fire. High temperature, slow burning fires cause far more damage to cultural materials than do cooler, faster burning fires. For this reason, prescribed fires, which typically do not exceed temperatures of 500° F and have a shorter "residence time" at any given location are likely to cause less damage to archaeological resources than uncontrolled, hotter burning wildfires that may burn and smolder on a site for longer periods of time.

Archaeological sites, regardless of type or age, consist of a collection of culturally modified materials. These materials react to exposure to fire in different ways; some sites and their artifact and feature assemblages are more susceptible to damage or destruction by fire than others. Certain cultural materials, particularly organic items such as bone or woven baskets, fur clothing, or wooden digging sticks, are far more susceptible to fire damage than are metal and some types of stone. Further, surface artifacts are more susceptible to damage than are subsurface artifacts, though the latter can also be affected if soil temperatures become too high.

While the destruction of artifacts eliminates the types of information that can be obtained from archaeological sites and may reduce or eliminate the cultural use values of sites, even mild heat-related changes in artifacts caused by exposure to fire can significantly alter the accuracy of certain scientific studies which are used to refine our understanding of past human behaviors and to help land managers assess the importance of sites under their jurisdiction. In particular, studies which are used to assign ages to sites and artifacts can be affected by changes that occur as a result of heat exposure. Dendrochronological studies (tree ring dating) are often used to assign ages to sites and structures that have wooden beams and timbers incorporated into their construction. Opportunities for such studies can be eliminated by the consumption of such wood materials during a fire. Of particular sensitivity to the effects of fire is radiocarbon dating. Material samples used in the dating test can become contaminated with charcoal and ash from modern fires, thus providing erroneous and often more recent dates. Other effects of fire on chronometric studies include altering the moisture content of samples used in obsidian hydration studies; realigning electrons in hearths subjected to temperatures over 975° F, which alters the results of archaeo-magnetic studies; and reducing the accuracy thermoluminescence studies related to pottery.

In addition to the impacts of fire, activities associated with fire suppression and prevention also affect cultural resources. These effects may be the result of direct physical disturbance related to activities such as the use of heavy equipment to create fire breaks or mechanical removal of vegetation either before or after a fire. Other types of destructive effects may occur from chemical treatments for both the suppression and prevention of fire. Chemical treatments may irreversibly damage artifacts and contaminate datable materials.

Knowledge of the various effects fire and fire prevention and treatment have on cultural materials guided the preparation of the BLM's Moab District Fire Management Plan (MDFMP) (1998) in determining an appropriate distribution of fire management activities relative to the types of resources that are either known to be or are likely to be present in a given area. Within the Monticello FO planning area, the MDFMP called for 43 projects treating a total of 57,000 acres with prescribed burning and mechanical

treatment. It was estimated that a reasonably achievable level of treatment under existing budget and personnel constraints would be between 5,000 and 6,000 acres per year.

While the overall fire management plan for the Moab District, which includes the Monticello FO, was not predicated upon protection of cultural resources, affording sites this protection is a major focus of the MDFMP. In addition to calling for archaeological inventories of areas to be treated for fire prevention and post-fire rehabilitation, the MDFMP identifies specific types of treatments (i.e., hand tools vs. heavy equipment) to be used in areas of high archaeological sensitivity. The plan also identifies desired/acceptable acreages allowed to burn from wildfire. In areas of important cultural resources or resources highly susceptible to fire, lower numbers, durations, and footprint acres of wildfire are tolerated.

#### *4.9.2.6 Grazing/Range Management*

The indirect use of cultural resources by grazing/range management activities is difficult to quantify. The issuance of grazing leases/permits/is considered an undertaking by the BLM and is subject to Section 106 review. Individual development projects within allotments, such as guzzlers or stock ponds, are also subject to Section 106 review. As such, inventories or allotments are not conducted, and as a result, the numbers and types of cultural resources within any given allotment are not known. Individual development projects within allotments, such as guzzlers or stock ponds, are subject to Section 106 review, however. Impacts to or uses of cultural resources resulting from grazing activities are believed to be minimal. In general, trampling of sites by livestock is considered to be the primary impact, and this tends only to be significant in areas where livestock congregate frequently and cause denuding and increased erosion of the landscape. Range management activities, such as forage restoration or enhancement have a greater potential form use of cultural resources if mechanical means (vs. aerial seeding without prior ground surface preparation) are used. Restoration or enhancement through mechanical means, however, would be considered an undertaking and would be subject to Section 106 review.

At the present time, just over 99% (2,261,174 acres) of lands within the Monticello FO planning area are contained within 75 grazing allotments. Of these, one allotment is not permitted for use by domestic livestock. Given the very high percentage of BLM land contained in grazing allotments, no increase in the overall acreage available for grazing is expected to occur over the life of the new RMP. In recent years, the numbers of animals placed on individual allotments has generally decreased owing to severe and prolonged drought conditions. Subsequently, range improvement projects have also decreased in frequency. This trend is expected to continue for the short term, but an increase to pre-drought levels is possible within the next 15 years as climate conditions improve.

## **4.10 CONSISTENCY WITH NON-BUREAU PLANS**

In order to be effective in its land management responsibilities, the Monticello FO must at least be aware of the management practices and goals of adjacent landowners, be they private or governmental. To the degree possible, the Monticello FO coordinates its planning efforts with the goals and practices of these non-Bureau entities. The following section outlines the areas of convergence and divergence between Bureau and non-Bureau plans with regards to issues of cultural resource management.

### **4.10.1 Old Spanish National Historic Trail (OST)**

The Monticello and Moab FO will cooperate with the NPS in development of a comprehensive management plan for the OST. This planning process is underway and decisions of the RMP will be

consistent with the National Historic Trail legislation and the plan that will be developed. The decisions of the OST management plan need to be consistent with the RMP.

#### **4.10.2 Manti-LaSal National Forest Plan**

The guiding management document for the Manti-LaSal National Forest is the Land and Resource Management Plan (1986). The Record of Decision (1986:4) for the forest plan states the "high archaeological values, especially [those] on the Monticello District [of the Manti-LaSal National Forest], will be protected from loss by theft, vandalism, and where possible, from natural destructive forces." The primarily goal of the cultural resources management component of the plan is to carry out the federal mandates requiring a taking into account the effects of federal undertakings on eligible cultural resources. Additionally, the forest plan promotes increased proactive identification of cultural resource sites rather than reactive identification when applications for specific, localized land uses are submitted. That is, under current practices, most identification of cultural sites is achieved through inventories carried out under Section 106 of the NHPA when a land developer submits an application to the BLM for a specific land use (e.g., oil and gas leasing, mining, etc.); few inventories are undertaken merely for the purpose of identifying resources in areas where no specific development is proposed. Management practices outlined in the current RMP for the Monticello FO (1991), and current practices not included in that RMP are consistent with the Manti-LaSal forest plan. Indeed, opportunities exist for the BLM and USFS to share resources that may assist both agencies in reaching their long-term cultural resource management goals.

#### **4.10.3 San Juan County**

The guiding management document for San Juan County is the county's Master Plan (1996). Cultural resources, as a management issue, are not specifically addressed in the plan. The plan does acknowledge the importance of cultural resources in drawing tourists to the county, thereby benefiting the local economy. The plan also identifies the role that historic trails, interpretive sites, and cultural resources play in providing recreational opportunities for residents and visitors, and includes such resources as a means of achieving their desired future condition of expanded recreational opportunities for these user groups.

In the Master Plan, San Juan County representatives express the belief that "lands of the BLM, unless withdrawn through Congressional Mandate, should be managed under the principles of multiple-use and sustained yield." This position is consistent with the general philosophy of the BLM. There are, however, several goals and objectives identified in the San Juan County Master Plan that are at least partially inconsistent with existing BLM management practices for cultural resources. Specifically, the San Juan County Master Plan states that San Juan County "strongly believes that enough lands within county boundaries have been designated for National Parks, Monuments, and wilderness. " The plan also states that it has specific concerns about "... the implementation [of] management strategies associated with Areas of Critical Environmental Concern" and that "the County opposes additional lands administered under single management schemes." The BLM's designation of the Alkali Ridge, Cedar Mesa, Shay Canyon, and Hovenweep ACECs, largely for cultural resource reasons and with restrictions placed on surface disturbance and recreation, conflicts with the general position of the County.

Current BLM management practices also conflict with the San Juan County Master Plan with regards to roads on public lands. The County claims all roads across public lands, thereby pre-empting BLM management decisions to close certain roads to reduce impacts on cultural resources.

#### **4.10.4 Canyon of the Ancients National Monument**

According to the Pre-Plan Analysis for the Canyons of the Ancients National Monument Management Plan (2001:1), the Canyon of the Ancients National Monument was designated in 2000 for its "complex landscape and remarkable cultural resources" which include an estimated 20,000 to 30,000 archaeological sites. A monument management plan is currently (April 2003) being prepared and will include management prescriptions for cultural resources. Prior to the completion of the management plan, a pre-plan analysis was conducted and limited interim guidance related to oil and gas leasing and development was issued. The pre-plan analysis outlined basic management precepts that are anticipated to be incorporated into the final monument management plan. These basic management precepts are designed to preserve those values supporting the monument's designation. Current BLM management practices are consistent with the precepts of monument management.

#### **4.10.5 Canyonlands National Park**

Management guidance for Canyonlands National Park is outlined in a series of documents including a general park management plan, a backcountry management plan, a river management plan, and superintendent directives. Practices of the Park in relation to the management of cultural resources are consistent with the NHPA and other federal legislation and include the protection of important cultural resource sites through use of "off-limits" archaeological sites, categorization of sites into vulnerability and accessibility categories and non-disclosure of location information for highly vulnerable and largely unknown/unvisited sites, visitor education, and prioritization of areas for cultural resource inventories. Management practices outlined in the current RMP for the Monticello FO (1991), and current practices not included in that RMP are consistent with the management practices of Canyonlands National Park. Opportunities exist for the BLM and NPS to share resources that may assist both agencies in reaching their long-term cultural resource management goals.

#### **4.10.6 Glen Canyon National Recreation Area**

Current management guidance for the Glen Canyon National Recreation Area (GCNRA) is outlined in the five-year Strategic Plan for Glen Canyon NRA and Rainbow Bridge NM, October 1, 2000 – September 30, 2005. Within the plan, cultural resources have been given primary consideration, along with certain natural and recreational resources. Among the Recreation Area's primary cultural goals to be accomplished by September 2005 are assessing, documenting, and, in necessary, rehabilitating 37 of the 77 historic and/or prehistoric structures within the GCNRA. Other goals include meeting 67% of the GCNRA's preservation and protection standards for its museum collection, assessing and "treating" up to 30% of the GCNRA's non-inundated cultural resource sites, increasing the number of archaeological sites inventoried within the GCNRA by prioritizing locations for inventory, completing two cultural landscape reports (Lees Ferry Historic District and Hole in the Rock), and cataloging museum objects. Management practices outlined in the current RMP for the Monticello FO (1991), and current practices not included in that RMP are consistent with the management practices of Glen Canyon National Recreation Area. Opportunities exist for the BLM and the GCNRA to share resources that may assist both agencies in reaching their long-term cultural resource management goals. In particular, the BLM and GCNRA could work together to identify priority inventory areas based upon specific research questions or to gather information about certain site types in order to better understand those resources or topics.

#### **4.10.7 Navajo Nation**

A management plan for the Navajo Nation could not be obtained for the preparation of this AMS.

#### **4.10.8 Hovenweep National Monument**

The Monticello FO has not yet prepared a separate management plan for the Hovenweep ACEC, which surrounds the Hovenweep National Monument. A management plan for the monument is currently in preparation by the National Park Service. Hovenweep National Monument was established with two primary purposes in mind: protect important cultural resources, and educate the public about the area's prehistory through the interpretation of cultural resources. Given these two primary purposes, it is safe to assume that management of the monument will incorporate elements for both the protection of vulnerable resources and the interpretation of others. It is also safe to assume that inventories for new sites and research into known sites will be given high priority. Management practices outlined in the current RMP for the Monticello FO (1991), and current practices not included in that RMP will not conflict with the management practices of Hovenweep National Monument. Given the proximity of the Monument to Monticello FO planning area-lands and to the Canyon of the Ancients National Monument, opportunities and responsibilities exist for the three management entities to coordinate their efforts through multi-jurisdictional planning, share resources and data, and define cultural resource research goal of regional import.

#### **4.11 ISSUES OR CONCERNS**

The current RMP is outdated with respect to current levels of land use, legislation regarding the protection of cultural resource sites, and current understandings of the scientific, conservation, public, and traditional use values of cultural resources. Discrepancies between the current management situation and the prescriptions of the current RMP fall into two categories: 1) legislation/policy that either did not exist at the time of the existing RMP or is conflicting with current management practice; and 2) outstanding or unfulfilled directives of the current RMP. In addition to these discrepancies, some current land uses, particularly recreational use, conflict with the intent of the cultural resource use allocations outlined in BLM Handbook H-8110 (2000).

##### **4.11.1 New and Conflicting Legislation/Policy**

Several changes in legislation governing the management of cultural resources on federal lands or associated with federal undertakings have been implemented since the preparation of the current RMP (1991) for the Monticello FO. As such, management prescriptions following from this legislation were not included in the existing RMP (1991) but must be included in the new RMP. Most notable among the legislative changes are the 1992 and 1999 revisions to Section 106 of the NHPA, the 1990 enactment of the Native American Graves Protection and Repatriation Act (NAGPRA), the 1996 enactment of Executive Order 13007: Indian Sacred Sites, the 2000 enactment of Executive Order 13175: Consultation and Coordination With Indian Tribal Governments, and the 2003 enactment of Executive Order 13287: Preserve America.

The implications of these legislative changes on management of lands within the Monticello FO planning area are several-fold. The revised Section 106 regulations, NAGPRA, and Executive Orders 13007 and 13175 all mandate increased levels of consultation with Native American tribal groups who may have concerns related to traditional religious or cultural sites located on lands managed by federal agencies or subject to disturbance by federal undertakings. These regulations and orders also afford additional consideration for protection of sites identified as culturally important or sacred by Native American tribes. The increased consultation mandated by this recent legislation constitutes a substantial portion of the existing workload for cultural resource managers in federal agencies. In particular, NAGPRA, which mandates that land managers assign cultural patrimony or affiliation to human remains found as part of a federal undertaking, has dramatically increased the workload of most agency cultural resource

representatives. NAGPRA cases are often complex, full of strong emotions and opinions, and not easily addressed. Even if cultural affiliation can be ascribed as mandated, NAGPRA stops short of identifying the appropriate subsequent management action on the part of the agency representative. That is, NAGPRA does not mandate what land managers are to do with human remains once affiliation has been assigned. In order to address this gap in the legislation, the BLM has established a limited policy with regards to human remains such that no remains discovered on BLM lands can be left in situ or reburied on BLM lands. This policy has met with great resistance from at least one tribal group, the Hopi, claiming cultural patrimony of the Monticello FO planning area. Hopi traditional belief that human remains must be left undisturbed in the location of their original interment is directly contrary to existing BLM policy and has resulted in strained consultation between the tribe and the BLM under Section 106 and the related Executive Orders.

Newly enacted Executive Order 13287: Preserve America places increased emphasis on federal land managers to fulfill their Section 110 responsibilities of proactive site identification and proactive resource management. It also stresses management of cultural sites for their public use values. As this legislation was so recently enacted, in March 2003, the full implications of it are yet to be understood. It is unclear whether additional funding will be provided to federal agencies under the Executive Order (EO) or whether existing funding (and staffing) will have to suffice. What is clear, however, is that EO 13287 does provide several immediate requirements that federal agencies will need to fulfill in the short term, and within the BLM, meeting many of these requirements is likely to fall to individual field offices. The following are the relevant field-office-level requirements set forth in Executive Order 13287:

By September 30, 2004, each federal agency with real property management responsibilities shall submit to the Chairman of the Advisory Council on Historic Preservation (the Council) and the Secretary of the Interior (the Secretary) "an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of the NHPA (16 U.S.C. 470h-2(a)(2)), the general condition and management needs of such properties, and the steps underway or planned to meet those management needs. The assessment shall also include an evaluation of the suitability of the agency's types of historic properties to contribute to community economic development initiatives, including heritage tourism, taking into account agency mission needs, public access consideration, and the long-term preservation of the historic properties."

By September 30, 2004, "each agency with real property management responsibilities shall review its regulations, management policies, and operating procedures for compliance with Sections 110 and 111 of the NHPA (16 U.S.C. 470h-2 & 470-3) and make the results of its review available to the Council and the Secretary. If the agency determines that its regulations, management policies, and operating procedures are not in compliance with those authorities, the agency shall make amendments or revisions to bring them into compliance."

By September 30, 2005, and every third year thereafter, "each agency with real property management responsibilities shall ... prepare a report on its progress in identifying, protecting, and using historic properties in its ownership and make the report available to the Council and the Secretary."

In addition to new and revised legislation specifically related to the management of cultural resources on federal lands or in areas of federal undertakings, other federal policy has been implemented which directly affects the management of cultural resources within the Monticello FO planning area. Of paramount consideration in this regard is current fire management policy. The current RMP (1991) was prepared prior to the establishment of the 1995 Federal Wildland Fire Management Policy. A fire management plan for the Monticello FO planning area was included in a larger 1998 fire management plan covering the Moab District. As noted previously, management prescriptions included in the Moab District plan do account for the identification and protection of cultural resources. Since the plan was developed, however, the Federal Wildland Fire Management Policy was revised (in 2001). These

revisions will necessitate the updating of the Moab [Fire] District plan, and the updates will need to reflect the current management situation related to cultural resources, including proposed cultural ACECs, historic/archaeological districts, and National Register-listed sites.

Conflicting policy creates another obstacle to the achievement of the Monticello FO's goals with regards to the management of cultural resources. In particular, the numerous existing policies applicable to cultural resource management with regards to the issuance of OHV permits are in direct conflict with each other. Under the revised federal NHPA regulations, issuance of OHV permits by the BLM is considered an undertaking and is subject to review under the Section 106 process, thus it is necessary for the BLM to formally take into account the effect issuing the permits has on cultural resources within the Monticello FO planning area. However, the statewide protocol established between the BLM and the Utah SHPO as well as existing Utah BLM handbooks indicate that issuance of permits is exempt from Section 106 review. This discrepancy provides unclear direction to field office resource specialists in the practical application of their management prescriptions.

#### **4.11.2 Outstanding Directives of the Existing RMP**

In addition to new legislation and policy that was not addressed in the existing RMP (1991), several key discrepancies exist between the directives of the existing RMP and actual management practice. In large part, these discrepancies stem from inadequate staffing and funding to fulfill the goals set forth in the RMP. The specific directives from the existing RMP (1991) that remain unfulfilled at the present time include the following:

The Alkali Ridge, Cedar Mesa, Shay Canyon, and Hovenweep ACECs will be designated and one ACEC-specific management plan will be prepared each year until all are completed.

Of the management plans to be prepared for these four ACECs, only the Cedar Mesa Plan has been completed since the final RMP was issued in 1991. Management prescriptions for the Grand Gulch Plateau Archaeological District were incorporated into the Cedar Mesa Management Plan. Management plans have not been prepared for any of the remaining archaeological districts, National Register listed sites, or national historic landmarks within the Monticello FO planning area. The schedule outlined in the RMP is not achievable given current budget and staffing levels.

Given current land use conditions and management goals, one of the designated ACECs (Shay Canyon) is no longer considered necessary or of high utility as a management tool. New areas, including Tank Bench and Comb Ridge, have been identified as worthy of ACEC designation and are not protected under the existing management plan.

The collective San Juan prehistoric roads sites, Cedar Mesa sites, Fable Valley sites, and Tin Cup Mesa sites will be nominated to the National Register as archaeological districts on a schedule of one nomination every two fiscal years.

To-date, none of these districts has been nominated by the BLM for the National Register. The schedule outlined in the RMP is not achievable given current budget and staffing levels.

The prehistoric road system within the Monticello FO planning area is only beginning to be understood but clearly represents a significant cultural manifestation in southeastern Utah. The presence of this road system appears to provide strong evidence of cultural connections between prehistoric populations in New Mexico and those occupying lands now under the jurisdiction of the Monticello FO. This is a significant scientific discovery that reinforces the importance of nominating the road network to the

National Register. The road network is being adversely impacted by land use, particularly OHV activity, in which the roads themselves are being used as riding trails.

The Ruin Springs site, Kachina Panel site, Monarch Cave site, and Three Story Ruin site will be nominated to the National Register as individual listed sites on a schedule of one nomination every two fiscal years.

To-date, nominations have not been completed for any of these sites. The schedule outlined in the RMP is not achievable given current budget and staffing levels.

Designate the following cultural resource use zones upon approval of (1991) RMP and manage for the assigned use values (Table 4.6):

**Table 4.6. Cultural Resource Use Zones Established in the 1991 RMP**

Area/Zone	Approximate Acres	Use Value
North Abajo	275,000	Information potential, public value
Monticello-Blanding	500,000	Information potential
Grand Gulch Plateau SRMA	400,000	
Grand Gulch Archaeological District	5,000	Information potential, public values
Remainder of G.G. Plateau SRMA	395,000	Conservation values
Southwest Abajo	440,000	Information potential
West Abajo	165,000	
Dark Canyon	102,500	Information potential
Fable Valley	2,500	Conservation
Beef Basin	60,000	Information potential, public values

NOTE: No maps showing the boundaries of these areas exist within BLM records.

The designations were implemented but only at a cursory level. No specific management actions are connected with the designations. Owing to the size of the areas designated, the vague nature of the designations, and the lack of specific management prescriptions for the zones, the allocation system as it stands has little utility for resource managers.

**4.11.3 Land Use Conflicts**

Public demand for access to BLM land within the Monticello FO planning area has grown significantly since the completion of the existing RMP (1991). This increased use has resulted in increased conflict between land users and the protection and preservation of National Register-eligible cultural resources. Of particular concern are the conflicts between recreational land users (i.e., OHV riders, rock climbers, hikers/campers, mountain bikers, and river runners) and cultural resource values.

The existing RMP (1991) includes prescriptions for management of OHV activity on lands within the Monticello FO planning area. These prescriptions include designation of various areas as either open to use, closed to use, or restricted in use (by season). The prescriptions restrict OHV travel to existing and designated roads. Owing largely to budgetary and staffing constraints and legal/political pressures, none of the designations outlined in the Plan have been implemented. As a result, lands within the Monticello

FO planning area generally remain open to OHV use, with two exceptions: emergency closures to OHV use have been implemented in the Indian Creek and Comb Wash areas. Furthermore, as none of the designations have been implemented, no area-specific management plans have been prepared. As such, there are no detailed management guidelines for controlling OHV use on the vast majority of lands within the FO planning area. Heavy, and largely uncontrolled, OHV use has resulted in the development of many new trails and roads, and is occurring in areas without the prior knowledge of land managers. Because the Monticello FO planning area contains the densest concentration of archaeological sites in the state of Utah, conflicts between preservation of cultural resource use allocation values and unrestricted OHV use are significant; open OHV use is occurring in areas designated as ACECs for cultural resource values.

The lack of a formal OHV management plan has resulted in the application of reactionary management prescriptions when conflicts between resources and OHV use become extreme. As a result, inconsistencies have arisen in the way different areas with similar resource constraints are managed. For example, the Comb Wash area is under an emergency closure for OHV use, largely because of the high rate of damage to cultural resources with high scientific, conservation, and traditional values from open OHV use. Butler Wash, however, which has a comparable, if not higher, number of such sites remains open for OHV use and is currently experiencing much higher rates of use, and therefore higher rates of damage to cultural sites, as a result of the closure of Comb Wash to OHV activity; OHV use has shifted from Comb Wash to Butler Wash because of the emergency closure.

Specific conflicts between OHV activity and the maintenance of cultural resource values within the Monticello FO planning area are also occurring within the Cedar Mesa ACEC, another high site density area. OHV activity on the Mesa is resulting in both primary and secondary impacts to cultural resource sites. Primary impacts are the result of OHV use on cultural resource sites. For example, OHV riders both create and follow trails that pass directly through cultural sites. Similarly, the central depression and walls of at least one partially buried prehistoric kiva have been repeatedly used for the loading and unloading of OHVs. Secondary impacts include increased scouring and erosion of cultural resource sites as a result of vegetation loss from OHV use and dispersed camping related to OHV use.

In order to ameliorate the conflicts between OHV activity and the maintenance of cultural resource values, the status of OHV activities in the FO planning area must be reviewed and the management plan updated to reflect known and potential cultural resource conflicts. The OHV management designations outlined in the existing RMP (1991) should be updated and the designations implemented. Areas of high cultural sensitivity should either be closed to OHV travel or have travel corridor restrictions placed upon them.

Additional conflicts, though on a lesser scale than with OHV use, between recreational land users and maintenance of cultural resource values are also occurring in areas of use for rock climbing, hiking/camping, and river running. Conflicts with rock climbers are most significant in the Indian Creek area, where petroglyph panels and other cultural features are being damaged by incidental contact related to climbing activities. Limited sign postings requesting that sensitivity to and avoidance of cultural resources have been placed near popular climbing locations and appear to be moderately successful. More direct physical measures may be necessary to further protect cultural sites from damage resulting from the high volume of users in climbing areas.

Dispersed camping is also a fairly substantial source of impact to the cultural resources of the Monticello FO planning area. No designated limits to camping are currently posted within the FO planning area. In areas such as Comb Wash, Butler Wash, the mouth of Arch Canyon, and Beef Basin, all popular camping locations, dispersed camping is rapidly expanding into previously undisturbed lands. All of the areas are notable for their high density of archaeological resources, and dispersed camping is having both direct impacts through the camping on archaeological sites and indirect impacts through a reduction in

vegetation cover which increases erosion on and scouring of cultural sites. Similar impacts are occurring in and around the Natural Bridges Overflow Campground where dispersed camping is steadily expanding the area of surface disturbance. Although site densities are lower in this area than in the Comb Wash and Butler Wash areas, large numbers of cultural resources sites are either currently being impacted or are in immediate danger of being impacted.

Other, and perhaps more severe, conflicts are occurring in areas of high river use and high backcountry use. Archaeological sites along the San Juan River corridor have been and continue to be vandalized. Access to some of the sites is via the river corridor only, and effective protection of the resources through physical patrolling of the area by BLM law enforcement is not possible. Although river permits do include language describing the importance of cultural sites along the river and requesting specific precautions to reduce impacts to these sites, it is up to the individual who picks up the permit to disseminate the information to other members of the group. Better group-level cultural sensitivity education is necessary for river users.

Similar concerns surround backcountry activities, where hikers often encounter cultural resource sites in remote locations. Many of these sites are unknown to BLM staff and have not been documented as to their contents, condition, and use allocation status. While the vast majority of backcountry users merely appreciate the opportunity to visit such sites, others are taking advantage of their remote locations to loot sites and are selling artifacts on the lucrative black market. Such illegal and destructive activities appear (anecdotally) to be increasing in frequency with the advent of affordable personal Global Positioning System (GPS) units. GPS locational information is being obtained for remote sites and posted on the internet, allowing others with similar equipment to easily navigate to them. Increased foot traffic through and exploration of these primarily undocumented sites, frequently accompanied by vandalism and looting, is resulting in the degradation of the use allocation values of the archaeological record in remote areas of the Monticello FO planning area. Because of the remoteness of many such sites, and given current staffing and funding constraints, law enforcement patrolling of backcountry activities is all but impossible. Alternative avenues of monitoring activities along river corridors and in backcountry areas, such as remote cameras, may be necessary in order to reduce the occurrence of vandalism and looting through more successful identification and prosecution of violators and publicizing of resulting penalties (e.g., jail time, fines, community service, etc.).

Although recreational activities are in the greatest conflict with the maintenance of cultural resource values in the Monticello FO planning area, other activities are contributing to the impacts on the region's cultural resources. Primary among these other activities is woodcutting, particularly within the Cedar Mesa ACEC. Impacts related to the woodcutting, which occurs by permit and is represented in large part by subsistence cutting by more traditional Navajo tribal members, are generally secondary in nature. While some limited primary impact occurs when woodcutters drive off of existing roadways to reach stands of trees, the majority of impact occurs after the woodcutting episode, when OHV users identify the tire tracks of the woodcutters' vehicles and adopt the path as a new OHV trail. This pattern of events is resulting in a proliferation of new OHV trails on Cedar Mesa and is significantly increasing the impacts to the cultural resources within the area. At present, woodcutting permits do not include language educating permittees in cultural resource sensitivity and requesting specific precautions to avoid unnecessary damage to cultural sites.

#### **4.12 OTHER ISSUES**

In addition to use-specific Issues or Concerns, at least two general cultural resource management considerations must be addressed. These general issues of concern are not limited to the Monticello FO but are pan-agency issues. Primary among these concerns is the impact of small budgets and staff sizes on

the ability of resource specialists to conduct effective monitoring programs to realistically gauge the levels of use and resulting impacts on cultural resources. Although the Monticello FO is conducting some limited monitoring of site impacts, the level of effort is insufficient for determining the extent of impact-related problems and the rate at which these impacts are irreversibly damaging the cultural resources of the region.

The second general management practice issue that should be reconsidered was raised in BLM Information Bulletin No. 2002-1610/8110 (240) P. The bulletin addresses a pan-agency tendency toward defaulting to data recovery on National Register-eligible cultural resource sites as a means of mitigating development impacts as a result of inadequate management plans that "defer decisions about cultural resources until a conflict with a proposed land use is identified." Following data recovery, the development activity is allowed to proceed, and the subject cultural resource site is physically impacted. While this practice ensures that important scientific data are recovered prior to the adverse impact, it has three significant consequences. First, it tends to ignore the other values a site may have. Impacts to traditional values, conservation values, and public values generally cannot be mitigated through data recovery. Second, although the data are obtained, the site is damaged or destroyed, resulting in a slow but steadily shrinking of the physical archaeological record in any given region. Third, "costly mitigation operations that are not warranted by the resource's research potential" are undertaken. The Monticello FO places high emphasis on avoidance of impacts to cultural resource sites, thus this issue of concern is less applicable to this office. However, the new RMP must include sufficiently specific proactive management prescriptions to allow the Monticello FO to continue to make informed and appropriate decisions regarding individual cultural resource sites in the face of growing land use pressures.

#### **4.12.1 Management Opportunities and Limitations**

Given the resource demand and Issues or Concerns described previously, several opportunities exist to refine cultural resource management practices within the Monticello FO. In some cases, however, data limitations or other factors may constrain the Monticello FO's ability to fully implement changes until such limitations can be resolved.

#### **4.12.2 Eliminate Ineffective or Unnecessary ACECs**

As noted, the Shay Canyon ACEC, along with several other ACECs, was designated through the 1991 RMP process. The Monticello FO is currently reconsidering this designation. The Shay Canyon ACEC, as designated, encompasses nearly 1,800 acres, but within the ACEC only two resource locations have been identified as significant and in need of specific protections. These sites include a petroglyph panel near the mouth of Shay Canyon along Indian Creek and a dinosaur trackway located in the bedrock of the wash extending out of the mouth of Shay Canyon along Indian Creek. The two sites are situated within the same area of Shay Canyon and in close proximity to each other. Designation of the entire Shay Canyon ACEC for the protection and management of these two sites is inconsistent with the magnitude of the management needs of these resources.

#### **4.12.3 Develop Joint Cultural Resource and Recreation Management Plans**

As noted in Section 4.6.3 of this chapter, significant land use conflicts exist between cultural resources and recreational users in many areas of the Monticello FO planning area. In particular, substantial conflicts exist in Comb Wash-Butler Wash (hereafter referred to jointly as Comb Ridge), Cottonwood Wash-Outlaw Canyon (hereafter referred to jointly as Tank Bench), and Moon House. In order to reduce these conflicts and balance the desired use of these areas by recreational users and preserve important cultural resource values, joint cultural resource and recreation management plans are necessary. In this

section, the important cultural resources components of these areas are described in relation to the land use conflicts.

Comb Ridge includes the ridge itself as well as portions of Butler Wash and Comb Wash. The ridge and washes have an extremely high cultural resource site density with sites possessing high scientific, conservation, public, and traditional use values. The areas contain sites associated with both the prehistoric and historic periods of the region's past. Evidence of early corn cultivation associated with Archaic occupation has been found at sites within the Comb Ridge area as have sites representing the Basketmaker – Pueblo I period interface. Pueblo II period sites associated with Chaco Canyon artifacts, Pueblo III terminal occupation sites, prehistoric stairways crossing Comb Ridge and their associated sites, and prehistoric roads and associated Chacoan cultural features are also prevalent in the area. Examples of Chacoan style architecture and protohistoric Navajo sites have also been found within the Comb Ridge area. Historic period sites, including the Hole-In-The-Rock Trail are also well-represented within these areas. The Comb Ridge area has high traditional values associated with individual archaeological sites, shrines, and other sacred sites identified by Native American groups.

An emergency closure to OHV use in Comb Wash is currently providing some protection to the resources in that area, but dispersed camping throughout the area and heavy OHV use in Butler Wash are adversely impacting these use values. Management prescriptions for the Comb Ridge might include nominating the area as a National Register District, establishing motorized vehicle travel only on designated roads and trails, placement of boundaries on dispersed camping, and consolidation of permissible camping areas.

Tank Bench is located in the mesa area immediately west and southwest of the community of Bluff and is composed of two separate areas, Cottonwood Wash and Outlaw Canyon. The area has a high cultural site density with sites possessing scientific, conservation, public, and traditional use values as well as high visual (VRM) values. The sites within the area have high traditional values related to the Cottonwood Wash caves for Native American groups. Tank Bench contains a large number of important cultural resource sites, many of which represent the Pueblo III period terminal occupation of the area as well as interactions with Kayenta and Mesa Verde Anasazi. The area also contains significant rock art with large panels in several locations and an early 1900s historical cattle industry trail. Encroachment on the area by residential subdivisions and substantial impacts to the cultural resources from open OHV use are threatening the maintenance of these use values. Management prescriptions for Tank Bench might include the limiting or eliminating motorized vehicle travel within the area and designation of approved primitive camping areas but would allow all pedestrian and pack animal use.

In addition to Tank Bench and Comb Ridge, the Moon House archaeological site has been identified by the Monticello FO cultural resource staff as worthy of site-specific management considerations. This site is located on Cedar Mesa, within the boundaries of the existing Cedar Mesa ACEC, and is included in the federal BLM Sites at Risk Program. The site is also included in the Monticello FO Sites at Risk Program that was implemented in August 2003. At the time this document was being prepared, a stabilization and investigation project was underway at the site. The preliminary results of the project indicate that this site is far more unique than was originally known and that the site contains data that will result in a refinement of existing scientific knowledge about the terminal Pueblo III period within the Monticello FO planning area. The ability of this site to yield such data is one of the most scientifically significant discoveries associated with prehistoric sites in southeastern Utah and warrants the designation of special management prescriptions for the site. Further, preliminary studies indicate that recreational use of the site by both individuals and large groups of visitors is damaging the architectural and artistic/ceremonial remains of the resource. Concentrated carbon dioxide from visitor exhalation within the confined "Moon Room" is resulting in deterioration of the prehistoric paint on the interior walls of the room. The deterioration is most pronounced when large groups occupy the room for extended periods of time. Deterioration is less pronounced, even acceptable from a preservation standpoint, when only one or two

individuals occupy the room for a short period of time. When an extended interval between individuals or small groups of visitors is implemented, allowing for dissipation of the carbon dioxide, the rate of deterioration appears to be even further reduced. Management considerations for this important and vulnerable site could be implemented through the creation of a site- or area-specific management plan. More appropriately given the impacts of tourist visitation on the site, management considerations for Moon House would be implemented through a joint cultural-recreation management plan.

#### **4.12.4 Refine the Use Value Allocation Zones Program**

As currently designed by the existing RMP (1991), the Cultural Resource Use [Allocation] Zones program is ineffectual. The expansive acreage contained within FO planning area jurisdiction lands, the extremely high number of known and as yet unknown cultural resource sites, the wide variation in site types, and the large number of interest groups associated with and assigning value to the sites precludes assignment of site use allocations on a broad geographic level. Conversely, the high number of sites within the Monticello FO planning area preclude the assignment of use value allocations on a site-by-site basis. Effective allocation of cultural resources to use value categories with attached management prescriptions must be done on a smaller scale, either through the identification of smaller geographic areas containing sites with common use values, such as the Beef Basin, or through a non-geographic approach such as assigning given site types, regardless of where they are found, a particular use value (or values). An approach combining site type use allocations with geographic allocations (i.e., certain site types tend to occur in certain areas) may also prove useful.

In order to redesign the use value allocation program, an analysis of existing Class I (overview) data to determine site type distributions will need to be undertaken. This information must be combined with the experiential knowledge of the cultural resource specialists of the Monticello FO in order to assign truly meaningful allocations either to site types or small geographic areas. A primary factor limiting the ability of the BLM to establish a regional use value allocation program for cultural resources with the FO planning area is the lack of a systematic study of various use values associated with cultural sites in general and specific site types. In essence, it is difficult to determine how to allocate use for a particular type of site without being able to compare that site to others and determine its relative value. Further, inconsistent sharing of regional data from other land management agencies with resources related to the prehistoric and historical cultures of southeastern Utah forces each agency to address only those sites located on its land, essentially forcing each agency's land manager to operate in a vacuum. Without a clear understanding of the range of values ascribed to cultural sites (general and specific) by the gamut of interested parties and use groups as well as the relative physical impacts imposed or the benefits derived by each group on the sites themselves, the BLM has difficulty assigning priorities or "weights" to the various uses when making decisions about how to manage use of the public lands.

Since most of the lands of the Monticello FO planning area have not yet been inventoried for cultural resources, allocations to a particular use category cannot reasonably be made for many areas. As information is obtained for an area, appropriate use values can be assigned. In the interim, areas for which little survey and site presence/type information is known can be assigned a priority ranking for future inventories. That is, areas for which little survey data are available should be identified as High, Medium, or Low in terms of where to focus Section 110 or volunteer inventory efforts. Areas assigned to a priority category would, by default, be managed according to the Section 106 process, and conservation value for the areas would be emphasized until such time as sufficient data are available to assign more representative use values.

#### **4.12.5 Site Stewardship Program**

Among the many challenges faced by the Monticello FO with regards to protecting significant cultural resources is limited staffing. At present (2004), one archaeologist and two law enforcement personnel are on staff in the Monticello FO. This staff is simply too small to provide adequate protection to the estimated 25,000+ cultural resource sites on the 1.7 million acres of land within the Monticello FO planning area. In order to help address this issue, development of a site stewardship program should be considered. An informal volunteer program has been used occasionally in the past with mixed success. A more formal program based upon creating a sense of ownership among local residents who take responsibility for visiting and monitoring select sites and educating the visiting public about site stewardship and protection may meet with greater success. Owing to the sensitive nature of the work in terms of access to information regarding site locations, site stewards must be selected and screened carefully and properly trained to interact with the public.

#### **4.12.6 Coordination of Management with Monticello Field Office Recreation Planners**

Most cultural resource management issues within the Monticello FO planning area are directly related to recreational uses of the public lands. As such, it is critical that recreational planners place protection of cultural resource values at the forefront of their management considerations; recreation plans developed within the Monticello FO planning area should be joint recreation and cultural resource plans.

#### **4.12.7 Prepare a Comprehensive Cultural Resources Overview**

Effective management of a given resource is based largely on understanding what is known about the resource as well as identifying data gaps. For cultural resources, which are non-mobile entities that can occur in almost any environmental and topographic setting, identifying where they are located generally requires intensive physical examination of the ground surface. Given the extreme acreage contained within the Monticello FO planning area, physical examination of all lands is not feasible. As such, and in order to better manage cultural resources, it is important to know where sites have been identified and what types of sites have been identified during those surveys that have taken place. Knowing this information allows managers to identify crucial data gaps, be they areas that have never be surveyed so no data regarding cultural resources is available for defining effective management guidelines or be they gaps in our understanding of a particular site/resource type.

Data on known sites and previously surveyed areas is available through a combination of digital (GIS) and paper records. This information is held in part in the Monticello FO and in part at the SHPO in Salt Lake City. In order to better understand what is known and not known about cultural resources within the Monticello FO planning area and to better prioritize areas for proactive survey under the BLM's Section 110 responsibilities, the available data should be gathered and summarized in a stand-alone Class I overview document. This document should also identify and summarize the important regional research questions and topics relevant to the Monticello FO planning area. Completion of this latter component would allow cultural resource managers in the Monticello FO planning area to better evaluate new cultural resource sites and re-evaluate known resource sites so as to more accurately assign individual sites to a resource use allocation category for more effective management.

#### **4.12.8 Effectively Utilize the New Monticello Field Office and Federal BLM Sites at Risk Programs**

Following an audit of the overall BLM management of cultural resources by the Office of Inspector General in the 1990s, the federal BLM established a "Cultural Resources at Risk" program to identify and

prioritize those cultural resources on BLM lands that were in the most danger of being adversely damaged or destroyed and were of the highest importance under any of the resource use allocation categories. This program was designed to channel available labor and funding to the protection/treatment of these most at risk sites. BLM field offices are to provide a list of sites within their jurisdictions for consideration for inclusion in this national program. A mirror program was established in August 2003 at the local level within the Monticello FO planning area. This field office at risk program sets priorities at the local level for allocation of available labor and funds to vulnerable sites that may or may not find acceptance in the national program. At the present time, the Monticello FO has one site, Moon House on Cedar Mesa, in both the local and national programs.

Use of the both "Cultural Resources at Risk" programs can be an effective management tool for the Monticello FO. Inclusion of a site in the federal program may provide for limited but additional funds for the treatment of the site. This additional funding, if obtained, would allow the Monticello FO to allocate its already thin cultural resources budget to management of other sites that may be equally vulnerable but are not included in the national program. Further, operation of the program requires that cultural resource managers and other field office managers assess the array of cultural resources under their jurisdiction and identify those that are most important for protection/treatment. Engaging in this assessment on at least an annual basis allows for constant re-evaluations of sites and more efficient allocation of limited funding to achieve the greatest gain.

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