

HERITAGE

Heritage resources or cultural resources are broad and synonymous terms referring to cultural, historic, archaeological, and ethnographic properties and traditional lifeway values representing past, and in some cases, continuing human activities or uses. By their nature, historic resources are nonrenewable, easily damaged, and with few exceptions, considered irreplaceable. Interest in our heritage and concern over the destruction of archaeological sites has prompted passage of legislation on the national, state, and local levels designed to protect and promote these examples of our nation's history and traditional legacy.

A listing of laws, regulations, orders, policy etc. that pertain to historic properties and/or the review of cultural resources for the purposes of travel planning can be found in the project file. A short explanation of their applicability is provided below. Definitions of terms and abbreviations particular to heritage resources are included in the **FEIS** glossary and list of abbreviations/acronyms (Chapter 5).

The National Historic Preservation Act (NHPA) and its implementing regulations require that federal agencies consider the effects of their undertakings on historic properties. The term "historic" in this context refers to cultural properties that have been determined eligible for inclusion in the National Register of Historic Places (NRHP). Historic properties may be the result of aboriginal use (prior to Euro-American influence) or historic period use. They may represent a single event or a complex system. They may be an object, feature, site, or district. And, they must meet the criteria outlined in 36 CFR 60.4 to qualify for the National Register. The consideration of effects previewed in NEPA is formalized through the National Historic Preservation Act (NHPA) Section 106 review process. Section 106 review is the subject of Regional and National Programmatic Agreements (PAs), as well as federal policy and guidance.

Federal agencies must consider American Indian traditional use, belief systems, religious practices, and lifeway values as directed by the Archaeological Resources Protection Act (ARPA), the NHPA, the Native American Graves Protection and Repatriation Act (NAGPRA), the American Indian Religious Freedom Act (AIRFA), and the Sacred Sites Executive Order. Cultural resources in this category are the subject of technical guidance such as National Park Service (NPS) Bulletin 38.

Federal Agencies carry out their responsibilities under heritage laws and regulations by conducting documentary research, consulting with Indian Tribes, the State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), and others, and often by field-surveying to identify cultural properties. Disclosure of potential effects is initiated with the NEPA analysis, and finalized through compliance with NHPA Section 106 for the selected alternative. Site-specific effects analysis and the resolution of effects are ensured by following the regulatory review process at 36 CFR 800. For the Jefferson Division Travel Plan, this process is further guided by the Region One Forest Service Programmatic Agreement and certain Federal and Regional Forest Service policies. These documents include a recently published National Forest Service policy for addressing NHPA Compliance in Travel Management (USDA 2005), the Region One Policy for integrating NEPA and NHPA (1991), the Region One Programmatic Agreement for Cultural Resources (USDA Forest Service et al. 1995), and the Lewis and Clark National Forest Site Identification Strategy (1995). Through the Section 106 process, all undertakings are identified and addressed, and mitigation measures incorporated into either: the project design,

the **FEIS, the Record of Decision (ROD)**, or other appropriate heritage resource agreement. The goal is to avoid, minimize, or mitigate impacts to significant heritage properties.

Both NHPA and ARPA contain provisions for the confidentiality of certain cultural resource information. Site-specific locations and other sensitive site data are not disclosed to the public. Documents containing this information are filed separately in the project planning record and are marked with an asterisk (*) in the **FEIS** references; this information is exempt from public disclosure and not available under the Freedom of Information Act.

The Lewis and Clark National Forest Plan (FP) provides standards for Cultural Resource Management, reiterating compliance with the above-mentioned laws and regulations. The FP also stipulates that interpretation of cultural resources be carried out in appropriate areas, provides for heritage-related public education, and outlines the need for a Forest Cultural Resources Overview. Forest Plan Amendment Number 10 (Lewis and Clark National Forest 1993) provides for the monitoring of past project inventories and previously recorded cultural sites to see if prescribed mitigation measures are adequate and impacts accurately assessed.

In addition to Forest Plan monitoring, a national Forest Service heritage infrastructure database (INFRA) is also used to track priority sites and associated prescribed maintenance or management activities. This database is a tool for, among other things, **reporting heritage** activities known as ‘deferred maintenance,’ **‘sites managed to standard,’ (targets) and the ‘USDI/NPS Congressional report’**. For the purposes of heritage resource management, “priority sites” are those where there is a significant value investment or substantial risk to site integrity. ‘Deferred maintenance’ identifies and tracks activities necessary to maintain or manage these sites according to federal standards. It is most often through NEPA and/or NHPA **analysis** that “priority” sites are recognized, maintenance needs identified, and monitoring schedules established.

Defining the Research Area

For the purposes of Jefferson Travel Plan analysis, the “general heritage analysis area” includes all of the lands managed by the Kings Hill and Belt Creek Ranger Districts, and all the lands managed by the Musselshell and Judith Ranger Districts with the exception of the Big and Little Snowy Mountains and the Highwood Mountains. The “travel-planning-specific heritage analysis area,” sometimes referred to as the “area of potential effect” (APE) is a 1000-foot corridor, 500 feet on either side of any road or trail studied in the analysis, *and* any area open to snowmobile use. The 1000-foot figure was chosen to address any potential variances in map and resource data, to consider any adjacent cultural sites that may be associated with a travel corridor (e.g., recreation residences), and to consider all potential activities that may be associated with various methods of allowable travel. The APE is further expanded to include the entire **geographic area of the** cultural resource, where overlaps occur *and* **where** the site extends beyond the initial outlined (APE) corridor.

Past Surveys

Surveys and monitoring to identify cultural resources and keep records current within the general area for the Jefferson Division Travel Plan **FEIS** have been conducted for a variety of activities over a period of 30+ years. About **six** percent of the analysis area has been intensively covered. The cumulative results of these inventories characterize the type and distribution of prehistoric, historic, and other cultural resources across the landscape. A review of the Forest’s cultural resource inventory database indicates that previous inventories have resulted in the discovery and recordation of **413** cultural resources on National Forest

lands within the general analysis area. The resources represent both the prehistoric and historic periods; some are multi-component, meaning that they are the remains of more than time period.

Heritage resources in the study area represent a diversity of cultures and uses of the landscape. They represent such cultural contexts as prehistoric subsistence, travel, and art form, early white trapping, mining, logging, transportation, settlement, agriculture, forest administration, recreation, and even human burial.

Documented Resources in the analysis area

The number of recorded prehistoric and historic sites is about equally divided in the study area. Considering prehistoric site types, lithic scatters - stone tool manufacturing or refining sites - are the most numerous. There are 109 recorded. Pictographs and petroglyphs (rock art) in rock shelters and caves are the second most numerous with 57. There are 13 tipi ring sites (many with lithics), 4 chert quarries, 4 prehistoric rock features, 1 possible vision quest site, 1 wickiup, and 1 travois trail. Portions of the travois trail have evolved into segments of Forest system trails and roads.

There are many types of historic sites. **70** recorded sites are associated with mining. These include not only mines and prospects, but also miner camps, cabins, and sluice ditches. There are 43 general occupation sites including formally filed homesteads, undocumented cabins, foundations, and household dumps. Roads and bridges total 19. Grazing and farming sites, including; stock driveways, irrigation ditches, and herder cairns total 17. Most of these historic sites are associated with access routes although not all the historic access routes are part of the current road and trail system.

Nineteen Forest Service system trails have been recorded as linear historic resources. They are part of the existing agency trail system. The construction, maintenance and/or use of this historic network is linked to Forest Service administration, public recreation, and a variety of other uses. Only a portion of the existing historic trail system has been inventoried. The Forest Service continues to research and document historic Forest Service trails as outlined in the "Trails Appendix" to the Region One Programmatic Agreement for Cultural Resources (USDA et al 1995).

Historic Forest Service Administrative structures such as ranger stations, guard stations, work centers, and fire lookouts total 12. Similar to the trail system, this class of sites is the subject of a programmatic agreement for maintenance and upkeep (USDA et al 1992). The Forest roads and trails used to access these structures are an important element of the administrative sites.

Privately-owned recreation cabins occupy National Forest land under Special Use Permits. **Twelve** of these have been recorded as historic sites; many more exist. The cabins generally date from the 1920s through the 1950s. On the Jefferson Division these cabins tend to be relatively dispersed, with concentrations along Highway 89 and along Logging Creek. Almost all are linked to the Forest trail or road system by short, undesignated routes. These cabins are currently the subject of a contextual study which is part of the heritage assessment for upcoming (2007) 20-year permit reissuance.

Other documented historic sites which occur with less-frequency in the analysis area include **historic** routes (stage road, railroad, etc.: 6), trapping (6), logging (6), resorts (3), historic burial (3), one lime kiln complex, one rail line (related to transportation and mining), one

Prohibition-era still, one historic bar, and a historic timber feature thought to be for a cavalry signal fire, never lit.

Traditional Cultural Sites, Tribal Relations, and Treaty Rights

Traditional cultural properties (TCPs) are a type of historic site reviewed under the NHPA, as well as other tribal legislation and policy. TCPs are defined as cultural resource sites that are significant for the role they play in a living culture or community's historically rooted beliefs, customs, religion or cultural practices (National Register Bulletin 38). Traditional cultural properties represent a linkage of lifeway values that connect the landscape to a group by continued and 'traditional' use. Under the Northern Region Programmatic Agreement for Cultural Resources (USDA et al. 1995), traditional cultural properties are further interpreted "to mean properties of religious and cultural significance to Tribal groups" (Klima 2000).

American Indians and Alaska Natives are recognized as people with distinct cultures and traditional values. They have a special and unique legal and political relationship with the Government of the United States as defined by history, treaties, statutes, executive orders, court decisions, and the U.S. Constitution. It is the policy of the U.S. Government to implement programs in ways that are knowledgeable and respectful of, and sensitive to Tribal sovereignty (Clinton 1994). There is an emphasis on government-to-government relationships with *federally-recognized* tribes, including consultation in order to identify rights and concerns during the development of plans, projects, programs and activities (USDA Forest Service 1997).

The Forest Service also consults with non-federally recognized tribes, organizations, and individuals. These groups may have many of the same concerns or issues as federally recognized groups, but do not enjoy the same legal status or required agency protocol.

Tribal governments have considerable powers that are usually separate from State and local governments. Individual treaties, statutes--such as the American Indian Religious Freedom Act (AIRFA), and executive orders--such as those addressing sacred sites or tribal consultation--often reserve specific rights and/or address traditional interests relative to the use of federal lands. Reserved resource rights and privileges associated with treaties and other Indian agreements generally include activities such as hunting, fishing, grazing, subsistence, access to and the gathering of forest resources. In addition, land and resources hold a special and unique meaning in the spiritual and everyday lifeways of many Indians. National Forest lands and resources represent cultural and sometimes economic values to Indian people. Federally recognized Tribes and other Indian groups often look to the National Forests for traditional resource, religious, and contemporary uses, and as part of their ancestral homeland.

In a recent Ethnographic study produced for the Lewis and Clark National Forest, the Northwestern Plains culture area (including the Little Belt, Castle, and Crazy Mountains) is described as traditional territory of the Blackfoot, Gros Ventre, Atsina, White Clay People, Kootenai, Salish, protohistoric Shoshone and historic Chippewa-Cree peoples (Deaver 1995). The ethnographic study identified no Traditional Cultural Properties in the analysis area (ibid); however, since that research, a possible vision quest site has been found in the **Little Belt Mountains**. Also, pictograph sites are highlighted in the Forest's Ethnographic Overview (ibid) as a type of site that is "sensitive" to Indian Tribes. These sites may or may not be indicative of traditional use, **and are abundant in certain drainages of the analysis area. The pictograph sites are addressed as archaeological sites (above).**

Indian Treaties and portions of the Indian Claims Commission map covering Montana indicate no **existing** “reserved resource rights” (e.g., treaty rights) for the Little Belts or Castles. Nor do they show treaty rights for the Lewis and Clark National Forest portion of the Crazy Mountains.

Eleven native groups identified in the Ethnographic Overview as within the ‘sphere of influence’ for the Travel Plan analysis were contacted during the initial stages of study. Tribal members were informed of the different public scoping meetings through various public announcements. The tribes received hard copies of the DEIS when it was released and they received an update letter on November 6, 2006. No written comments or responses were received from the tribes.

Based on information supplied during the study by the Gallatin National Forest and special interest groups, the Crow Tribe was highlighted as potentially having an interest in either Travel Planning, its effects on the landscape and/or locations for their traditional practices. Forest Service representatives (Line Officer and Heritage Staff) personally contacted the appropriate tribal cultural resource delegate, both by phone and through personal visitation at the Tribal Offices. No concerns were brought forward by the Crow.

Significant Sites

Two sites in the study area are formally recognized, **through a special designation**, for their historic significance. The Judith Guard Station is listed on the National Register of Historic Places (NRHP) and Monument Peak Lookout is on the National Register of Historic Lookouts (NRHL). About 20 percent of the previously documented cultural resources in the heritage analysis area have undergone formal National Register evaluation. About a third of these (26) have been determined “eligible” by consensus determination (CD) between the Forest Service and the Montana SHPO or the Keeper of the National Register. These significant cultural resources include **a variety of** the site types listed above, selecting for those that retain physical integrity and are important representations of history or have potential to yield vital information. The Forest Service continues to evaluate sites as needs arise or time and funding become available.

Site Probability and Site leads

In addition to existing site records, inventories, and ethnographic studies, information contained in area overviews, historic documents and other archival matter in the Lewis and Clark National Forest files was reviewed (USDA 1976-2005). Based on this review and a site probability ranking system outlined in the Forest’s Site Identification Strategy (SIS) (LCNF 1995), it can be predicted that additional sites, representing a range of human activities similar to the previously documented resources, are likely to be found in the analysis area. The expected probability for the occurrence of cultural sites (on a high, medium, low ranking-system) is generally moderate to high. Factors contributing to this include proximity to site clusters (e.g., areas with prehistoric quarries, lithic scatters, and occupations, historic mineral districts, or areas along the historic trail system). Other factors include a range of environmental attributes common to both human occupation sites and natural travel corridors (SIS 1995). The current heritage database is believed to represent site types, clusters, and relative density that can be expected with additional inventory in similar, analysis-area environments.

Through the NEPA process, concerns were brought forward about impacts of illegal ATV traffic through the Neihart Miner's Union Cemetery. The cemetery has since been recorded as a historic site, and resource damage documented. This route is not on the Forest System and under all of the proposed alternatives it would be closed. A special 'area closure' to curb further damage is also being pursued.

Resource protection measures

All 354 significant (NRHP/NRHL eligible), potentially eligible and unevaluated sites or portions of sites within the travel management heritage analysis area will be carried forward for the consideration of effects. The remainder, those determined ineligible by SHPO agreement, or those outside the areas of potential effect, are referenced for context, but not additionally analyzed for effects or included in additional NHPA Section 106 review.

Cultural resource review (Sec. 106) will be finalized, as needed, for each part of the preferred or selected alternative that meets the definition of an undertaking in accordance with the 2005 USDA Forest Service Policy for NHPA Compliance in Travel Management and 36 CFR 800. Findings will be reviewed under the Montana Programmatic Agreement for Cultural Resources (PA) (USDA Forest Service et. al. 1995) as applicable. Actions (e.g., undertakings) analyzed in the Jefferson Division Travel Plan **FEIS** that **will** require this site-specific Section 106 review, and which are likely to entail field inventory include: any trail locations where a new, motorized designation is accepted (not "over-the-snow" areas), any currently "undetermined routes" added to the existing trail system, and any new ground-disturbance associated with the obliteration of routes. Section 106 review, which may not require intensive field inventory, but may require a large measure of research, consultation, documentation and perhaps mitigation may include: potentially affected sites needing a consensus determination on significance, significant historic routes to be obliterated, and any potential adverse effects identified relative to archaeological sites. Depending on the projected timeline for individual actions, the Section 106 review may be staged or phased. No ground disturbances will occur until Section 106 compliance is finalized (see the mitigation table in Chapter 2).

The completion of Section 106 review is the mitigation measure most often identified for cultural resources in NEPA documents. To conclude the review, if individual mitigation measures are not specifically identified in the travel plan **FEIS** or **Record of Decision** or cannot be addressed through existing programmatic agreements, a more detailed form of consultation will be required. This includes the gathering of consulting parties and negotiation targeted at achieving agreement in the best interest of the project and the resource. The outcome of such consultation is generally formalized in a Memorandum of Agreement (MOA). NHPA Section 106 review must be concluded prior to project implementation. In this manner, adverse effects are avoided, minimized, or mitigated.

In a consultation letter to the SHPO dated March 27, 2007, the Forest Service outlined foreseeable impacts of the alternatives and proposed an approach to Sec. 106 compliance. A phased or stepped approach to inventory, evaluation, and monitoring, which adheres to existing PAs and Policy was agreed upon. The Forest Service recognized the need to identify and mitigate potential impacts to sites in routes 'adopted' into the Forest system, monitor sites in routes where no changes are proposed to determine possible mitigation needs, and to assess and mitigate impacts to historic routes that will be closed under the selected alternative. All heritage compliance would precede proposed ground disturbances. A monitoring schedule would be developed for

significant sites. The SHPO concurred with the Agency’s proposal in a letter dated April 9, 2007. They commented that from a heritage perspective, Alternate 4 appears the most advantageous. Site forms and inventories are to be submitted to SHPO according to the existing PA. In this manner the Forest Service will continue to survey, identify sites and develop avoidance or mitigation measures. Consultation will continue until all sites are addressed and issues resolved.

Site-specific forms of mitigation which may be employed are discussed under each resource issue in the analysis of alternatives. Common treatments include:

- Incorporating avoidance measures or site-armoring techniques into road or trail reconstruction plans when prehistoric sites are present.
- Monitoring sites for impacts
- Detailed resource documentation
- Contextual study

Indices of Measure = Criteria for significance of impact determination

Indices which are important for the purposes of comparing the effects to cultural resources between alternatives are listed below. They were individually considered in the discussion of each alternative and summarized in the Alternative Comparison Table for Cultural Resources in Chapter 2.

1. CULTURAL PROPERTIES POTENTIALLY AFFECTED: A cultural property is present, which is eligible or potentially eligible (unevaluated) for the National Register of Historic Places AND the property contains characteristics or aspects of integrity which could be adversely impacted by increased levels of use or other activities proposed under travel management AND the potential impacts will not be mitigated through standard measures outlined in Programmatic or Policy Agreements.

1a. Measurements for historic or archaeological properties are made in “numbers of cultural sites that meet the index.” For each issue and alternative, this is shown as the number of sites requiring mitigation.

1b. Measurements to indicate any “yet-undiscovered” cultural properties that could potentially meet the index are displayed as “linear miles of field survey needed” to address NHPA Section 106 review. Distances include estimates for proposed route construction, reconstruction, or reroutes.

1c. Measurements to indicate the possibility that routes proposed for closure may meet the ‘historic’ (50-year) thresh-hold requiring consideration of them as cultural sites are made in ‘number of routes closed’ and total ‘miles closed’. Closure methods may include reversible features such as gates or berms, or permanent reclamation for the length of the route, and will be determined on a case by case (with the input of heritage resource managers). Section 106 review will be needed for these routes. Field survey and SHPO consultation will be needed in some cases.

2. POTENTIAL BENEFITS TO CULTURAL RESOURCES: A cultural property is present, which is eligible or potentially eligible (unevaluated) for the National Register of Historic Places AND potential direct, indirect and/or cumulative impacts resulting from the proposal may bring the resource closer to the desired future condition of retaining its historic character or preserving scientific value.

2a. Measurements for historic and prehistoric properties (non-linear) are made in 'numbers of cultural sites' that meet Index 2. This would generally reflect the number or extent of sites in the Area of Potential Effect where levels of use are lowered or where types of access will be reduced.

2b. Measurements for linear sites, mainly historic travel routes, are made in miles of recorded sites that meet the index and where projected use under the Travel Plan is consistent with maintaining important historic character and integrity.



POTENTIAL FOR EFFECTS ON OTHER IDENTIFIED AND UNIDENTIFIED ARCHAEOLOGICAL AND HISTORICAL SITES.

1. EXISTING CONDITION

a. Resource Characteristics

Prehistoric Period Sites

The Judith Travel Plan analysis area is on the western fringe of the Northwestern Plains cultural area and adjacent to the more culturally and geographically diverse lands of the Northern Rocky Mountain Region (Deaver and Deaver 1986, Frison and Mainfort 1996). Aboriginal subsistence relied on a semi-nomadic hunter-and-gatherer strategy. Though bison hunting was a primary focus that drew aboriginal groups to this area, no single prehistoric ecological or cultural model suffices for the entire area (Frison 1991). The choice of plants and animals used, and methods to obtain and process them varied by cultural group and throughout time. Evidence of use and occupation in the analysis area is manifest in such sites as lithic scatters, rock shelters with art, and the wickiup and possible vision quest site.

A number of chronological frameworks for the Northwestern Plains have been written and researched by professional archaeologists. Sally Greiser (1984) and George Frison (1991) defined the chronology based primarily on projectile point styles and their association with dateable materials, the stratification within sites, and a comparison with similar sites. The framework is divided into Early, Middle and Late Prehistoric Periods (Greiser 1984), and similarly referred to as Paleo, Archaic and Late Prehistoric (Frison 1991). The divisions respectively date to 12,500 - 4550 years ago, 4550 - 1500 years ago and 1500 years ago to 200 years ago.

Paleo-Indian Period (ca. 10000 B.C.– 6000 B.C.)

The Paleo-Indian period is generally felt to have had its origins in the very late Pleistocene and beginning of the Holocene geologic periods. Humans hunted large, ice-age mammals such as mammoth and giant bison. Hunting technology involved spears and large lanceolate shaped projectiles. The climate began with that of the late ice age and progressed to the warmer patterns of the Atlantic climatic period during this time. Cultural subsistence changed with the climate, from an intensive dependence on large game animals, to a more varied diet and extensive use of the foothills and mountains (Frison 1991). Clovis, a term for the earliest sites, are found distributed widely within the Northwestern Great Plains (Frison 1991). Paleo-Indian period artifacts have been found in the study area and in the west part of the Big Snowy Mountains, east of the study area. They include an Agate Basin point, style dated ca. 8000 B.C and, at a multi-component site, a Hell Gap style also dated ca. 8000 B.C. Paleo points have also been found near Vaughn (Fredlund 1988) and Wilsall, Montana (Frison 1991), both relatively close to the analysis area. Folsom and Cody-Complex sites (subsequent to Clovis) are found in the nearby Big Belt Mountains and other localities in SW Montana (Morris 2000). Evidence of the later portion of the Paleo-Indian Period has been found on the Jefferson Division and on nearby public and private lands.

Archaic Period (ca. 6000 B.C. – A.D. 700)

The middle period of Northwest Plains cultural prehistory appears to have coincided with a climatic shift known as the Altithermal. It was a time of increasing temperatures and drier conditions. The trend was for animals (and hunters) to use the higher (cooler) country and intermontane basins. Human inhabitants apparently used more plants and their diets became more diverse. Populations increased slightly and frequent movements of camp locations were required to acquire seasonally available resources (Morris 1994). Projectile point styles changed from spear points to dart points, which are generally smaller in size with more pronounced corner and side notching. This is a result of the technological change from the spear to the atlatl. These more sophisticated hunting methods and the exploitation of a broad range of plant and animal resources are the hallmark of the Archaic Period.

Several sites in the analysis area bear evidence of Archaic Period use. One of these is a multi-component lithic scatter where a Duncan point, style dated 1000-2000 B.C. was exposed in an eroded road. Another site, partially excavated, yielded Archaic points and evidence inhabitants processed mountain sheep, bison, camas, and cactus, and made stone tools from locally available lithic sources (Newton 1999). Many lithic scatters in the analysis area include Pelican Lake dart points dated ca. 1200 B.C. - A.D. 500.

Late Prehistoric Period (ca. A.D. 500 – A.D. 1750)

The late Prehistoric period begins at approximately A.D. 500 and changes to the Protohistoric period when European goods (including the horse) were introduced into the region. The technological change distinguishing this period in the projectile point chronology is evidenced in the wide-spread shift from atlatl or dart points to smaller and more-often side-notched bow and arrow points. According to Fredlund (1988), production of these small side-notched arrow points required different manufacturing techniques, but resulted in more expedient tool-making. Other artifacts (e.g., knives, scrapers, etc.) changed little in morphological appearance relative to earlier periods. In addition to the adoption of the bow and arrow, pottery became common.

Sites representing the Late Prehistoric period in the analysis area include many of the lithic scatters and perhaps rockshelters and/or pictographs. As with most prehistoric sites, stone artifacts and lithic debris are the primary evidence of prehistoric occupation.

Protohistoric (ca. A.D. 1750 - Historic)

The introduction of the horse to the Plains Indian brought about significant cultural changes. The absolute date of this event is unknown, but estimates place it as early as the late 1600s, and depending on location, the early to middle part of the 1700s. Artifacts and trade goods, such as cold hammered metal projectile points, European beads, and metal knives made an appearance at about the same time.

The Protohistoric Period was very short, and artifactual remains other than trade-goods do not readily distinguish it from the earlier periods. As a result, Proto-historic sites are relatively rare. A rockshelter with art depicting a horse and another including a gun are the only documented protohistoric sites in the analysis area. A travelway, thought to evidence both prehistoric and protohistoric period travois use, is recorded in study area.

Historic Period

During the late 1800s and early part of the 1900s resource utilization activities in the analysis area included agricultural grazing and haying, mining, logging, hunting and trapping, and the manufacturing of bootleg alcohol. The analysis area includes a network of trails and roads that

facilitated the movement of resources and provided access to various land areas; a system that continues in part to this day. Currently, about half of the recorded sites in the analysis area can be assigned to the Historic Period (from roughly 1800 to the present). The majority are associated with mining.

Prospecting and placer and lode mining left their mark on the land in the form of mineral districts around Neihart and Barker/Hughesville in the Little Belts, and Castle Town in the Castles. Evidence of smaller or more dispersed operations can be seen in the Little Belts near Yogo Town, Wolf Creek drainages, west of Mount Pilgrim, and other locations. Many of the historic routes in the study area are related to mining. **Seventy** sites related to mining are recorded in the analysis area. Yogo Town, an ephemeral gold camp on the creek, had 1200-1500 residents between 1879-1881 but nothing stands today. Neihart, Barker /Hughesville, and Castle Town were larger districts, mainly offering silver and lead. Neihart's population reached 4000 and all three settlements had schools. Claims in those districts were actively worked from 1881 until the silver panic of 1893, and intermittently until 1948 at Hughesville, 1953 at Neihart, and into the 1970s in the Castles (Fulbright 1996,). Most mineral district sites were linked by a user-developed system of roads and trails. Over time, these route systems have evolved. Some routes have been abandoned, some have been adopted as county or Forest System roads.

World-famous Yogo sapphires are mined from a dike formation crossing lower Yogo Creek and surrounding foothills. Patented and unpatented sapphire claims are inside the east-central part of the analysis area. Discovered in the late 1800s by Jake Hoover, a prospector and mountain man, and Jim Ettien, a shepherd, much of the dike was developed by the English Mining Syndicate in the early 1900s (Fulbright 1996).

Beginning in the late 1800s and continuing until the late 1900s, portions of the Jefferson Division were used for sheep grazing (USDA FS Historic Grazing Files). A network of sheep driveways with counting gates, corrals, and herder camps are recorded in the Little Belts, and range developments are recorded in the Castles and Crazies also. Usually it was local ranchers who held the National Forest grazing permits. Many of the former sheep (and goat) grazing permits have been converted to cattle and horse use. Homesteads and agricultural pursuits including grazing and haying have altered certain areas or aspects of the landscape as evidenced by houses and cabins, barns, corrals, fences, dams, and irrigation ditches, and altered vegetation patterns. Homestead claims were patented and became private land in many parts of the Little Belts and Castles. Other claims were initiated and abandoned or became part of the Judith Game Range. Most historic range features were reached via roads or trails although some routes have been abandoned over time.

Portions of the general analysis area are in a checkerboard pattern of public/private ownership. To spur development of the west, as part of the Railroad Grant Act of 1850, the federal government gave land to railroad companies. The companies could use or sell the land as needed to generate capital. These land grants included alternate sections along proposed rail lines, extending out 20 – 80 miles, depending on details of the grant (Campbell, no date, p. 11). In the north Crazies and west Castles and Little Belts, much of this checkerboard land was sold to ranchers. Recent land exchanges between the Forest Service and individual ranchers have consolidated ownership in some areas.

Historic timber harvest and milling are evidenced throughout much of the study area in the form of old harvest areas, haul routes and woodcutter roads, sawmills, and logger camps. These activities are noted with multiple "Sawmill" and "Mill" gulches and creeks, "Logging" Creek, and "Woodchopper" Ridge. An early, water-based transportation system built to move

timber from upper Sheep Creek, down the Smith and Missouri, to Great Falls is well documented. The large cribbed-log “splash dams,” some abandoned log decks, and old axe-cut stumps are visible today in places on Sheep Creek.

During the early 1900s, Forest Service management incorporated permanent and intermittent ranger stations and fire lookouts into the landscape. Over time, ranger stations or administrative cabins were located all across the Little Belts, on Fourmile Creek in the Castles, and near Forest Lake in the north Crazies. Many peaks had elevated fire lookouts or less developed lookout points with portable ‘fire finder’ maps. These ‘lookout points’ were associated with occupations on lower elevations. Roads or trails and Forest fire phone lines linked these sites.

The Judith Station on the lower Middle Fork Judith River has been restored to depict a ranger’s work and family life in the 1920s. Another restoration project is wrapping up at Monument Peak Lookout. The Judith Station is part of the recreation rental program and ultimately the Lookout will be also.

Early trapping, especially by one Scotty Allen, is well known in the Smith River and Tenderfoot area though physical evidence is minimal. Sites recognized to represent trapping activities in the general area include three cabins and several log trap sets. Fur trapping sites are arranged along a trap line, often with a remote low-ceiling cabin associated with the line. Predation trap sites, often for bears, are found near roads bordering ranch pastures. In 1938, the Judith River Wildlife Management Area (WMA), managed by the Montana Department of Fish, Wildlife, and Parks, was created in the east Little Belt foothills. It provides winter range for elk which were successfully reintroduced to the Little Belts in 1928. In 1957, the Haymaker WMA was created in the south Little Belt foothills. Many of the recorded cabins, camps, and trails in the analysis area are related to hunting.

Western artist Charlie Russell came to the Judith Basin just northeast of the study area as a kid in the 1860s. Failing as a shepherd, he was taken in by Jake Hoover, a local prospector, hunter, and general mountain man. Russell spent part of his life along the South Fork and Yogo Creek, illustrating the activities of Indians, trappers, hunters, prospectors, cowboys, and other characters, with local landmarks as backdrops. He operated out of Hoover’s cabin which became part of a homestead on the South Fork of the Judith River.

During Prohibition in the 1920s, distillers of bootleg alcohol set up stills and cabins in discrete riparian settings in foothills, to take advantage of the water and the privacy. A still is recorded in the Castles and cabins in the eastern Little Belts had stills (Nichols, personal communication, 2001). Illegal stills also operated at Barker and Hughesville, Little Belt mine towns northwest of the study area (Wahlberg 1989). Roads, Forest Service trails, and more subtle routes were used to bring supplies in and liquor out.

b. Past Events and Conditions

Past natural events that have left a mark on the landscape and on resource values associated with prehistoric and historic sites include primarily wildfire, catastrophic flooding, and erosion. Fire has undoubtedly burned many historic period sites, and may also have removed combustible prehistoric structures. Flooding is a primary threat to low-lying archaeology sites and those on creek margins. The natural weathering process, while much slower, is also responsible for the deteriorated condition of many sites. Historic structures are particularly vulnerable to weakening from snowload, rain, and wind damage. Pictographs are susceptible to UV and wind scour as well as calcareous patination from a mixture of rain water and

minerals in the bed-rock. Undoubtedly the cultural resources remaining today have been reduced in numbers, condition, and quality by natural events.

c. Human Influence

Cultural resources are the ultimate product of human use, yet these resources are also subject to the effects of human activities. As noted in the overview, many of the sites in the analysis area are termed “multicomponent,” a result of use during more than one time period (e.g., prehistoric and historic). Cultural (human) –influenced changes and site alterations are varied; in the analysis area they include such things as prehistoric site disturbance from the damming of rivers, construction activities, and recreational use. At historic sites, use and maintenance as well as neglect, removal and even vandalism have all influenced the sites we find today.

d. Future Trends

There are a number of current and future heritage research projects that will address management needs on the Jefferson Division of the Lewis and Clark National Forest. Contextual studies aimed at gaining a better understanding of two common types of historic buildings are underway. The historic and architectural significance of recreation residences and the traditional significance of Forest Service administrative facilities are both under consideration. These currently-used historic buildings are all linked to the Forest roads and trails system in some manner.

In general, as the numbers and diversity of National Forest users continues to rise, the challenge of managing cultural resources and interpreting or otherwise making historic sites available for public enjoyment also increases.

e. Desired Condition

The Lewis and Clark National Forest Plan articulates the desired future condition of cultural resources as: inventoried and evaluated for the National Register of Historic Places, nominated to the Register (if eligible), and managed (including monitoring) in such a way as to prevent adverse effects to historic character or potential to yield scientific value. The Forest Plan calls for providing for interpretation and public enjoyment of the historic resource in appropriate places; it also calls for the production of Forest wide overviews for prehistoric and historic resources.

2. ENVIRONMENTAL CONSEQUENCES

The significance of prehistoric and historic sites can be affected by travel management in different ways, because of differences in site properties. Ground disturbing activities are particularly detrimental to archaeology sites, while character-altering activities including those that affect the setting, design, materials, workmanship, use, or the association of historic structures and districts are most often related to historic period sites.

Actions associated with travel management which have the potential to adversely affect prehistoric and historic resources are:

- increases in the type, intensity, or duration of trail and road or land area use.

- road and trail closure or decommissioning (with different impacts depending on the method chosen).
- new construction or acceptance of previously uninventoried routes.

Actions that have the potential to benefit prehistoric and historic sites include:

- Decreases (but not necessarily closure or obliteration) in the type, intensity, or duration of trail and road use where archaeology sites are present, where areas have not been inventoried for archaeological resources, or where character of the historic route can be restored through this method.

Technical Assumptions

- *Area of Potential Effect (APE)*. For the purposes of this analysis, the Area of Potential Effect (APE) for prehistoric and historic period sites is determined to be any area open to motorized use, and a 1000-foot corridor, 500 feet on either side, of any road or trail identified in the analysis. The 500-foot figure was used to both compensate for variances in mapping data and to include cultural sites that may be associated with or accessed from a travel corridor. The APE is further increased to include the entire cultural site where one partly overlaps with the analysis corridor.
- *Cumulative APE*. The cumulative APE is drawn to include the entire Jefferson Division. This is the same as the general heritage analysis area outlined in the introduction to Heritage issues above. Because some of the sites may contain landscape level associations, the entire management area was chosen as the cumulative APE.
- *Analysis methodology and intensity*. The analysis was conducted by using those methods outlined in the general introduction above, as well as a GIS map overlay of historic and prehistoric resources and the various alternatives. The electronic database was queried to determine which sites would be included in the APE and mapped to display where potential conflicts existed (McCartney 2005). Newly recorded sites not yet entered into the database were also included. Individual site records and past correspondence were reviewed to ascertain condition, resource conflicts, and management needs.
- *Indices of Measure*. Three types of measurements are used to illustrate and compare potential impacts to cultural resources and to illustrate follow-up requirements which must be met for project implementation.
 - 1) The unit of measure for potential adverse effects to historic or prehistoric properties is displayed as the actual number of NRHP-eligible or unevaluated sites that may require mitigation.
 - 2) The unit of measure for potential beneficial effects to historic or prehistoric resources is listed as the number of miles of road or trail where reduced levels of use are proposed; and the number of recorded sites in areas where type of use will be reduced.
 - 3) The unit of measure for addressing potentially undiscovered cultural properties is displayed as linear miles of field trail/road inventory required for Section 106 review.
 - 4) **The unit of measure for proposed closures of possible historic routes is displayed as both the number of routes and the total miles involved.**

a. Alternative 1 – No Action Alternative

1. Direct and Indirect Effects

This is the ‘no action’ alternative. Proposed ground disturbances are limited to those required to close routes not officially part of the network of Forest system roads and trails. Where barriers would be installed or ground contours restored, direct effects would be limited to the previously disturbed route prism. Indirect effects would include reduced runoff and traffic-related erosion and reduced exposure of any sites along the routes. Section 106 compliance would be done prior to ground disturbance.

2. Cumulative Effects:

Cumulative effects might include increased traffic along other routes in the area that remain open, or development of new unauthorized routes. It is anticipated that arrangements could be made to keep closure activities, direct, and indirect impacts within the scope of current Programmatic Agreements on heritage resource management. No special consultation, mitigation, or direct benefits to resources would result.

b. Action Alternatives 3-5 (summer)

1. Direct and Indirect Effects

Alternatives 3 and 4 propose limiting access to Monument Lookout, listed on the National Register of Historic Lookouts (NRHL). The Lookout was built by the Belt Creek CCC in 1936. Historically, the route to the lookout was open to motorized travel. Construction material, crews, and lookout provisions were delivered by trucks. Lookout personnel and visitors drove in and out. Alternative 3 proposes to limit use of the .2 mile lookout spur road to motorbikes. This change to the historic pattern of use, at a site listed on the NRHL, would be considered an indirect but adverse effect requiring consultation with the State Historic Preservation Office (SHPO). Alternative 4 proposes closing the road to all motorized traffic a mile below the lookout. Direct effects to the site would be minimal. Indirect effects would be numerous and complex. On one hand, road closure would have an adverse effect on historic pattern of use/access. SHPO consultation would be required. On the other hand, complete road closure would serve to minimize the increasing pattern of traffic from cell-phone callers driving to the site for its good reception/ transmission qualities, a phenomenon noticed during hunting season. A restoration crew staying at the lookout reported that evening and late-night callers finding reception just a few feet from the lookout were a frequent disturbance to the historic setting of the otherwise remote site. There are plans to make the lookout available as a recreational rental and presumably, renters would find this traffic intrusive also. A mitigation response could be to lock the road to general traffic but allow motorized administrative use including access for future recreational renters.

One component of Alternative 5 involves constructing a .5 mile ATV route just west of the Judith Guard Station pasture. The Judith Station is historically significant, listed on the NRHP. There is a Forest system road past the front yard leading to the Station driveway, a small campground in front of the Station, and beyond. The campground is popular with a diverse crowd, including ATV riders who frequently drive past the Station yard to access area routes. The intent of the new ATV trail is to reroute them away from the main Station building. Trail construction could be designed so that the traffic would not be visible from most locations on site. It is likely trail traffic would be heard on site, but it would be more

distant than traffic on the existing road. The presence of other sites in the general area, including rock art, complicate the situation. Consultation and mitigation would be required. Direct effects would be limited to trail construction impacts. Indirect effects would include traffic along the new route, and possibly, increased exposure to sites.

A possible vision quest site is recorded in the general area of ATV trail construction proposed in Alternatives 3, 4, and 5. This construction would create a new loop route in an area of existing loop routes. Direct effects would be limited to trail construction. Indirect effects would include traffic on the new trail. Consultation would be needed to assess effects to the site and possibly develop a mitigation plan.

Alternative 3 proposes construction of four airstrips and three ATV youth loops. Developing three of these would result in impacts to nine potentially significant sites. Alternative 5 proposes construction of two airstrips and two ATV youth loops. Developing two of these would result in impacts to seven potentially significant sites. For either alternative, direct effects would include construction-related disturbances. Indirect effects would include introduced or increased traffic through and near sites and increased exposure of sites including rock art. Relocating some of these developments, installing filter cloth, and monitoring site conditions are possible mitigation measures.

Trailhead upgrades are proposed for many locations in Alternatives 3-5. See the Alternative maps. Direct, indirect, and cumulative effects of upgrades to existing trailheads are expected to be minimal to heritage resources. At Pierce Park, construction of a new trailhead is proposed in those three alternatives. Direct effects would include surface and subsurface disturbances related to construction of a parking area and installation of a toilet, signs, and possibly feedbunks. Indirect effects might include increased use of the park and area trails and increased exposure of area sites.

Travel options proposed in all three summer action alternatives involve numerous route closures, construction or reconstruction, altered categories of use, and trailhead developments. For many of these proposals, sites are nearby and effects to them are possible. See the 'Effects Common to All Alternatives' section, below. In most cases, following provisions of Section 106 of the NHPA and Programmatic Agreements (PAs) would result in acceptable conditions of site preservation. For Alternatives 3, 4, and 5, these cases are estimated to be similar and numerous. They have been considered case by case but details are not presented here, in order to focus emphasis on proposals and sites where impacts exceed the routine application of Section 106 and the PAs. These are the proposals and impacts that may require consultation with the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Office (THPO) and development of special mitigation measures. Collective information about these situations is presented in the Chapter 2 Comparison of Alternatives Table.

2. Cumulative Effects:

Alternatives 3 and 4 propose reduced access to Monument Lookout, listed on the National Register of Historic Lookouts. Cumulative effects to the lookout might include reduced visitation including fewer occasions of opportunistic site condition monitoring. Also cumulative effects might include increased traffic to other area high points as cell phone users try to find reception while in the area camping or hunting.

In Alternative 5, ATV trail construction is proposed near the Judith Station, a National Register site. Cumulative effects of this might include increased traffic on many area routes

and increased exposure of area sites. Consultation done to address direct and indirect effects described above would cover this situation also.

Alternatives 3, 4, and 5 include ATV trail construction in the general area of a possible vision quest site. Cumulative effects are likely to include increased ATV and motorbike traffic on area loop routes, including an existing road near the site. Cumulative effects of the ATV youth loops proposed in Alternatives 3 and 5 and a new trailhead at Pierce Park (Alts. 3, 4, and 5) would include similar increases in traffic on routes in the general area, past sites. Consultation would be needed to assess effects to sites and possibly develop mitigation plans.

The Trails Appendix to the Region One Programmatic Agreement was designed to address cumulative effects of trail maintenance. This agreement, which requires a detailed record of the historic resource, can be used to address short realignments or similar actions proposed under travel management. Where road or trail decommissioning is called for or changes to historic features or character (e.g., non-motorized to motorized use) are foreseen, the route must be considered for National Register eligibility; and, if eligible, potential adverse effects of the action must be addressed through the NHPA Section 106 process.

Appendix F includes diverse factors that may compound effects of Jefferson Travel Plan proposals. The Rocky Mountain Division of the Lewis and Clark National Forest and other Montana National Forests are conducting generally concurrent Travel Plan revisions. Also, recent national OHV policies are expected to become more consistently enforced. These developments could result in increased motorized traffic where it is allowed on the Jefferson Division, with other possible consequences such as increased visitation in general and increased exposure of sites. Also land and rights-of-way exchanges listed in Appendix F could attract visitation through those areas. Conversely, widespread fuel reduction projects could shift visitation away from those areas, temporarily.

c. Winter Alternatives 1-3 (Winter)

The DEIS stated: “The Winter Alternatives were not given detailed consideration in this heritage resource analysis. Snow cover and frozen ground generally protect sites from travel-related impacts. Proposed Winter Alternative ground disturbances that might affect cultural resources are minimal. Section 106 compliance will be done, prior to any disturbances, if needed”. For the FEIS, winter alternatives have been given detailed consideration even though they propose more restricted snowmobile travel. Consistent with the DEIS comments above, winter use was determined to have low potential for impacting sites. The SHPO concurred with this assessment in a letter dated April 9, 2007.

d. Effects Common to All Alternatives:

The travel management area of potential effect outlined under “technical assumptions” above is used throughout the analysis of this issue; it is common to all alternatives.

Effects Related to Site Characteristics:

Historic and prehistoric heritage properties are non-renewable. They represent a finite resource base that cannot be replenished. In this sense, all effects are cumulative and work to reduce the archaeological/historic database. Road and trail construction and use, mining activities, historic timber harvest, fire suppression, and other developments have directly

affected cultural resources by reducing the quality and/or quantity of sites due to disturbance or obliteration.

In addition to the direct effects from past actions, indirect and cumulative effects may include increased site access and exposure to the elements, resulting in a greater chance of looting and artifact displacement from erosion. Soil compaction and artifact displacement can result from foot, horse, and vehicle traffic and camping in areas of prehistoric sites. During site assessments and archaeological excavations at four lithic scatters it was apparent that cattle trampling and congregating at water developments and vehicle traffic along a two track had disturbed subsurface cultural deposits by churning and compacting the soils. Erosion and artifact collecting, both associated with lack of vegetation due to traffic and stock use, were also factors in site degradation (Newton 1999).

Rock Art sites are generally not directly affected by trail use, but instead, may be indirectly affected by increased access and visibility, which in turn increases chances of vandalism. These sites undergo periodic monitoring, and to date, no resulting damage has been identified. Any increase in kinds of use, where roads or trails come within view of pictograph sites, is seen as increasing the potential for adverse effects and would require NHPA Section 106 review for travel planning.

Historic sites have sometimes been scavenged for materials and equipment to use in mining and other pursuits. Also, they have been disturbed by antique and craft collectors and those thinking they are cleaning up an area. Increased amounts and types of traffic past a site increase risks of these disturbances. Change through time can also affect the integrity of cultural sites; for example, some prehistoric Indian trails became historic wagon roads, and later, gravel roads, as in the case of the Sage Creek/Bear Gulch/ Yogo Creek Road (Rd.265 / Rd. 3309 / Rd 266). Stock driveways have evolved into recreational ATV or snowmobile routes. Locations of prehistoric activities have become locations of historic activities, and later, modern activities. Also, abandoned historic claims with cabins have been reclaimed for (unsanctioned) recreational occupation, and then reclaimed again as operating claims. Patented mineral claims have become modern homesites.

Travel System History:

Past road-building, including that associated with general transportation, timber harvest, ranching, access to cabins, homesteads, mining, and administrative sites, has introduced a relatively modern system of roads onto the landscape. Many of the historic wagon roads, stock driveways, and foot and horse trails have been incorporated, and often upgraded as part of this system. Creation of undetermined ATV routes and the adaptation of Forest Service trails by motorized use have likewise altered the character of the historic transportation system. Under all alternatives, many miles of undetermined roads and trails will either be adopted into the Forest trail system, closed with barriers, or decommissioned - activities which will require cultural resource surveys.

Many of the existing routes were built before cultural resource regulations required inventory. Others, which evolved with use, were likewise not inventoried for cultural resources. Most of the main roads bear no resemblance to the historic system. Under all alternatives, the resulting roads and trail system will generally remain in the same location and will continue to be maintained and upgraded as government standards and local environmental conditions require and funding is available.

Roads and trails which access Special Use recreation residence sites were not historically included in the Forest System. Acceptance of these routes into the system or onto each permit, without changing the existing level and type of use, will not affect either the historic route or the associated cabin site. This continued use is consistent with historic use and desirable from the standpoint of the historic resource. Surveys for underlying archaeology sites would be required as part of the process to accept these routes into the Forest System or place them on the Special Use Permit.

Commonly Proposed Effects:

Jefferson Division Travel Plan alternatives propose varying combinations of road and trail construction, reconstruction, closures, allowed vehicle category changes, trailhead improvements, and airstrips. In general, road construction and reconstruction cause direct effects to a site in the form of surface and subsurface disturbances for the full width of the roadway, associated barrow ditches, and excavated run-off trenches. Construction equipment turn-arounds cause shallow subsurface disturbances. Gravel extraction can obliterate sites. Gravel surfacing can obscure sites and protect them from unauthorized collecting. Effects of trail work are similar, on a smaller scale. Where road or trail reconstruction is proposed, some impacts are limited to previously disturbed areas. Indirect effects of road and trail work might include increased traffic to and through sites and changes in vegetation and erosion patterns. Where routes are closed with barriers such as gates, excavations, and/or logs, direct effects are limited to the immediate areas of the barriers. Where routes are closed and reclaimed for their entire length, direct effects can be more extensive. They typically involve removal of all culverts, restoration of some ground contours, placement of biodegradable anti-erosion features such as filter cloth or staked hay bales, and reseeded. Often, road reclamation activities are done within the previously disturbed road prism. For either type of closure, indirect effects include reductions in type and amount of traffic. If the route is historically significant itself or it was part of a significant site, closing it or restricting a historic pattern of use may be an adverse effect. Conversely, if it cut through or led to an archeological site, closing it without causing additional site disturbances may be a beneficial effect. Both situations could apply to the same road proposal.

It has already been noted that many prehistoric sites owe their discovery to the recognition of artifacts and features exposed in trail tread. Adverse effects from such road and trail use may be ongoing, and could be accelerated by adding another level of use (motorized). Artifact displacement, breakage or disturbance of intact strata are effects that could occur from trail use and could increase with commensurate increases in the intensity, type, or duration of use and with potential trail widening to accommodate larger vehicles. Conversely, if prehistoric sites exist within the area of potential effect and use levels are reduced, the potential for future effects is also reduced.

The effect of decommissioning roads and trails would be similar for Alternatives 1 and 3-5. Decommissioning, depending on the method chosen, could affect both historic and prehistoric resources. Any decommissioning that includes ground-disturbing activities would require field survey as part of the NHPA Section 106 review. If the route is found to contain a prehistoric site, evaluation and project re-design or potential mitigation measures may be needed. It is possible that decommissioning could be beneficial to a prehistoric site, especially when ongoing damage is occurring or suspected, and the method of closure does not further damage the site.

For alternatives where the level of trail use is increased (e.g., non-motorized to motorized), NHPA Section 106 review will address these potential effects, and site-specific mitigation can be designed. Where the level of use does not change and a prehistoric site is present, the site will be scheduled for monitoring and trail managers made aware of the concern.

Existing trailheads are shown on maps for Alternatives 3-5. If one of these alternatives is chosen, traffic could increase at some trailheads. Indirect and cumulative effects of increased traffic could lead to future proposals for expanded parking or other improvements. Routine compliance with Section 106 and the heritage PAs would protect area sites, if present.

The implementation of the OHV rule (USDI and USDA 2001) was beneficial to cultural resources because areas of potential ground disturbance across landscapes were reduced and access to the more remote, and often more intact cultural sites (where looting might occur) was diminished. Where an existing road or trail prism crosses an archaeology site, the site-area crossed by the route has most likely been comprised. Portions of the site that extend outside of the trail tread and those sites that are located immediately adjacent to trails have a greater potential for looting, due in part to increased visibility; they also have a greater chance of inadvertent damage from recreational camping and associated fire pits/latrines, and trail maintenance or trail widening.

For most foreseeable management actions (see list in Chapter 2), effects (and cumulative effects) can be reduced through project design or re-design, provided that cultural resource specialists are involved early and consultation is productive.

Prescribed Mitigation:

Completion of the NHPA Sec 106 review prior to implementation is an action required for any alternative (or combinations of alternatives) which are selected as an outcome of the travel management DEIS. Ideally, the 106 review would be finalized for the preferred alternative between the Draft and Final EIS. Phased review is also an option, depending on certain factors, such as timeframes for implementation, etc. The level of anticipated consultation, effect, and mitigation differ somewhat with each alternative. They are described above.

For each action alternative, it will be necessary to access various sites to comply with provisions of Section 106 of the NHPA. Miles to be traveled or surveyed to access compliance survey areas would vary according to logistics and opportunities. For these reasons, this situation is not reflected in the Chapter 2 Comparison of Alternatives Table.

Summary:

The concentrations of cultural sites on the Jefferson Division study area range from sparse to moderate as compared to other national forests in the state. Most heritage resources are concentrated in the general vicinity of travel corridors. Increased types of use, especially from two-track wide, motorized use, and the maintenance of trails to meet OHV standard, could adversely affect the character of the historic trail system. Prehistoric sites could be affected by travel management where routes overlap with lithic scatters or where rock art sites

are subject to increased exposure. The variety of alternatives proposed adequately addresses historic resources. All three summer action alternatives will affect sites and some actions would require consultation and site-specific mitigation measures beyond the scope of current Programmatic Agreements for cultural resources. In general, of the three “action” alternatives considered in detail, Alternative 4 is most beneficial to historic and prehistoric resources. Alternative 5 is closest to a balance of access and resource protection. Alternative 3 has increased potential for impacting historic and prehistoric resources.

