

## 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 the passage, on the national, state, and local levels of legislation designed to promote and protect these examples of our nation's history and traditional legacy.

A listing of the laws, regulations, orders, policy etc. that pertain all or in part to historic properties and/or the review of cultural resources for the purposes of travel planning in this vicinity 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 36CFR60.4 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 (PA), 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.

Additionally, the rights reserved under treaties and cession agreements may possess an inherent measure of resource protection. These are addressed through Government to Government consultation as provided for under the Agency's Trust responsibility and E.O. 13175. A discussion and analysis of Treaties and reserved rights can be found in the "Socio-Economic – Blackfeet Reserved Rights" section of the FEIS.

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 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 preferred or selected alternative. Site-specific effects analysis and the resolution of effects, is ensured by following the regulatory review process at 36CFR800. For the Rocky Mountain Front 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 (1992), 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 the project design, the **FEIS/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** bibliography; this information is 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 preparation of a Forest Cultural Resources Overview. Forest Plan Amendment Number 10 (Lewis and Clark NF 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 nationwide, Forest Service, heritage infrastructure (INFRA) database is also used to track priority sites (**assets**) and their prescribed maintenance or management activities. This database is a tool for **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, ‘deferred maintenance’ is used to identify sites where there is a significant investment, or high risk, and to identify activities to maintain or manage these sites according to federal standards. It is most often through NEPA and/or NHPA **analysis** that ‘priority’ sites come to light and maintenance needs are recognized.

### ***Results of Background Data Review***

For the purposes of this analysis, the “*general* heritage analysis area” includes all non-Wilderness National Forest lands managed by the Rocky Mountain Ranger District. 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.

**For the purposes of FEIS analysis and individual RODs, cultural resource information has been divided into two units: the Badger-Two Medicine (BTM) and the Birch Creek South (BCS). Notes explaining this can be found at the end of each section.**

Surveys and monitoring to identify cultural resources and keep records current within the general area for the Rocky Mountain Travel Plan **FEIS** have been conducted for a variety of activities over a period of 30+ years. **Additional surveys, site monitoring, and site**

**evaluations targeting areas common to all alternatives identified in the travel planning DEIS were conducted during 2005 and 2006.** 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 **over** four percent (4%) of the overall heritage analysis area has been surveyed for cultural resources. These inventories have resulted in the discovery and recordation of **one hundred fifty seven (157)** cultural resources on National Forest lands within the *general* analysis area. **The percentage of inventory is heavier on the BCS unit; site numbers are reflective of amount and type of inventory and also other factors. Twenty six (26) cultural properties, including the TCD are located in the BTM unit. One hundred and thirty-one (131) sites are recorded in the BCS unit.**

The resources represent both the prehistoric and historic periods and traditional cultural use; some are multi-component, meaning that they are the remains of more than time period. In some cases, a resource is both documented at the individual level and linked to an historic district.

Heritage resources in the non-Wilderness portion of the Rocky Mountain Division of the Lewis and Clark National Forest represent a diversity of cultures and uses of the landscape. They represent such cultural contexts as prehistoric subsistence and art form, Native American traditional and religious use, early white settlement, trapping, agriculture, logging, transportation, forest administration, recreation, irrigation, and even human burial. Recognized historic districts and landscapes that overlap with the analysis area include the Badger-Two Medicine Blackfoot Traditional Cultural District (TCD), the Marias Pass Multiple-use District, the Sun Canyon Recreation, Irrigation, **and potential archaeological** District, the Region One Forest Service Administrative sites District, and the Forest Service Historic Trails System. The Old North Trail, Historic Great Northern Railroad, and Highway 2 are also complex linear sites (potential districts) located near the analysis area. These complexes may contain landscape elements in need of consideration and may provide a better understanding of the overall context of past use.

#### ***Documented Resources in the analysis area***

The largest geographic overlap between the travel management analysis area and known cultural resources is that of the Badger-Two Medicine Blackfoot Traditional Cultural District (89,376 acres) and that of the Forest Service Trails System (**201 miles**). The TCD is documented as a single cultural resource, with a large geographic area and an important landscape component. **It is entirely within the BTM Unit.** The trails system is comprised of numerous individually numbered trails that create a network of linear sites. Since trails and roads are the subject of travel management, it is not surprising that the documented historic trails entirely overlap with the heritage analysis area **in both units**.

The most numerous individual type of cultural site in the heritage analysis area is the privately-owned recreation cabin occupying National Forest land under Special Use Permit. **Fifty six (56)** of these have been recorded as historic sites; about twice as many exist as are formally inventoried. The cabins generally date from the 1920s through the 1950s; most are grouped into small neighborhoods or tracts. Almost all are linked to the Forest trail or road system by short, undesignated routes. These cabins are the subject of a **recently completed** contextual study which is part of the heritage assessment for upcoming (2007) 20-year permit reissuance (**HHM 2006**). **All recreation residences are located in the BCS unit.**

Sites representative of the prehistoric context, such as lithic scatters, animal kills and processing sites, domestic camps, travel routes, and pictographs (rock art) comprise the next-

highest number of individually recorded cultural resources. There are **thirty seven (37)** sites, roughly one fourth (1/4) of the total, that result from pre-contact Indian use. **Over** one third (1/3) of the prehistoric sites are overlain with another cultural site of later origin. These are termed ‘multicomponent.’ Archaeologists find this not uncommon, since the environmental preferences of human occupation and travel have changed little through time (Morris 2000: p 105). For the purposes of this analysis, when more than one component or context is documented for a cultural site, the attributes of each are considered (and counted). **Only four (4) prehistoric sites are documented in the BTM unit; the remainder are located in BCS.**

The Forest Service trail system comprises the next-highest number of individually recorded sites. **Thirty five (35)** of these routes have been documented as linear cultural 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. Like the recreation cabins, 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 and fire lookouts comprise roughly 6% of the recorded sites. Similar to the trails 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. **One recorded (1) Administrative site is located in the BTM unit (Badger Cabin); the rest are south of Birch Creek.**

Other documented cultural sites which occur with less-frequency within the **general heritage** analysis area include: eight (8) dams and related irrigation sites, six (6) sawmills and logging-related sites, six (6) log cabins or can-dumps of unknown historic association, five (5) guest ranches/resorts, with associated facilities, three (3) historic roads/routes, (including the railroad and highway), three (3) grazing-related structures (including a corral, spring development, and herder camp), three (3) trapping-related structures, (including a cabin and trapping lairs), two (2) Euro-American grave-sites, one (1) historic-period petroglyph, one (1) Native American cultural site, and one (1) commemorative monument. **Sites in the BTM include cabins and can-dumps, a sawmill, historic roads/routes, the Roosevelt Monument, grazing related structures, trapping structures, and Native American cultural properties. Historic sites in the BCS unit include all dams and irrigation facilities, guest ranches, grave-sites, the petroglyph, and some grazing and trapping evidence.**

The Sun Canyon and Marias Pass Historic Districts (French 2002, Stump 1977) are made up of concentrations of recreation, irrigation, and/or transportation-related historic sites. Both districts recognize a prehistoric component as well. Many of the resources individually identified above are found within these concentrations. Certain elements and time periods within these districts are better understood; neither district has been *fully* defined or evaluated for inclusion in the National Register of Historic Places. The Region One Forest Service Administrative sites were inventoried and evaluated as a discontinuous Historic District in 1991 (Caywood et al. 1991). Two sites within the current heritage analysis area contribute to this Districts’ NRHP qualification; they are Badger and Deep Creek cabins. **Cultural resources that are part of these historic districts are fairly well split between the BTM and the BCS units. Place names indicate which districts belong to which geographic area.**

A number of ethnographic studies and literature searches have targeted traditional use on the Lewis and Clark National Forest and adjacent areas (Biedel 1992, Deaver 1988, Deaver 1995, Foor and Campbell 2001, Greiser and Greiser 1993, Reeves and Peacock 2001, Zedeno **et. al. 2006**, Zedeno and Murray 2007). Ongoing tribal involvement has continued to refine and supplement data gathered in these studies. This research has variously described the analysis area and adjacent areas as traditional territory of the Blackfoot, and Kootenai and Salish, with brief protohistoric occupation by the Shoshone, and historic influence from the Métis and Chippewa-Cree (Deaver 1995: p 82).

Specifically, The Badger-Two Medicine Blackfoot Traditional Cultural District (TCD), on the north end of the analysis area, recognizes sacred sites, places, and resources, the practice of traditional ritual, and an ethnographic (cultural) landscape. This District is nearly 90,000 acres in size. Only a few of the sites within the district are individually identified in the site-count above; because of the nature of its use, the district in its entirety is treated as a cultural resource. This Historic District has been determined eligible for listing in the National Register of Historic Places (NRHP) by the Keeper of the National Register (2002). Ongoing ethnographic study (Zedeno **et. al., 2006**) is aimed at determining if additional National Forest lands, to the north should be included in the TCD. The Blackfeet have also **completed** a traditional use study targeted at lands to the south of the TCD, within the Forest Plan RM-1, **Badger-Two Medicine** geographic unit (Zedeno and Murray 2007).

No other traditional cultural properties have been identified within the analysis area. Pictograph sites are highlighted in the Forest's Ethnographic Overview (Deaver 1995) as a type of site that is 'sensitive' to Indian Tribes. These sites may or may not be indicative of traditional use. In the analysis area, the rock-art sites are concentrated in locations other than the TCD. **All are found in the BCS unit.**

Individual sites listed and discussed above do not reflect segments of the Old North Trail, Great Northern Railroad and US Highway 2, all of which are located not far from the **BTM** analysis area and have been documented as cultural resources. The Old North Trail was recently researched by the BLM as part of the Blackleaf Oil and Gas drilling analysis. Segments have been field-verified as representative of the legendary north-south, mountain-front route used by early peoples (ALL 2004).

Like the Old North Trail and the Forest Service Trail System, the Great Northern Railroad and Highway 2 are linear cultural resources that have been recorded in segments over a period of years. Federal cultural resource management (CRM) is largely responsible for this method of documentation, since undertakings usually occur on only a part of such a system. Cumulatively, as part of the NHPA Section 106 process, the system is eventually recorded; but, comprehensive research sometimes lags.

Of the **one hundred sixty (160)** recorded sites in and adjacent to the general analysis area, all but a handful are located within travel management corridors. This *very* high percentage is mainly the product of two factors: First, in mountainous topography, the good travel routes are near drainage bottoms and on ridge systems; travel is mostly funneled from one drainage to another through mountain passes. In order to reach habitation and occupation sites during any period (except possibly the most recent), overland travel is always required. Many of the same routes and corridors were used repeatedly throughout prehistory and/or history, thus laying the footprint for the trail system of today. Secondly, previous cultural resource surveys in the analysis area have largely been concentrated along travel corridors

Roughly half of the previously documented cultural resources in the heritage analysis area have undergone formal National Register evaluation. **Twenty two (22)** of the evaluated sites 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: the Badger-Two Medicine Blackfoot Traditional Cultural District, the Roosevelt Monument, Gibson and Diversion dams and associated construction camps, a small number of recreation residences, two Forest Service administrative cabins, **and one archaeology site. The significant (NRHP eligible) ethnographic and prehistoric sites are located in the BTM unit; the historic sites, with the exception of Badger Cabin are located in the BCS unit.**

No National Historic Landmarks or *nationally-designated historic* trail systems (such as the Lewis and Clark route) are associated with the analysis area. The Continental Divide National Scenic Trail (CDNST) has not yet been designated as a historic resource, but portions of it are associated with the Forest’s trail system. The CDNST corridor lies on the western edge of the analysis area. The Old North Trail, Great Northern Railroad and Highway 2 have not been formally evaluated as to this level of significance.

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 **(and was verified during 2005 survey)** 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. the historic trail system and historic districts) and the 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.

### ***Resource protection measures***

All significant (NRHP eligible), potentially eligible, and unevaluated sites or portions of sites within the travel management analysis area **were** carried forward for the consideration of effects **(n=121)**. The remainder, those determined ineligible by SHPO agreement, or those outside of the areas of potential effect **(n=43)** are referenced for context, but not additionally analyzed for adverse effects or included in additional NHPA Section 106 review.

Cultural resource review (Sec. 106) **was prepared**, for each part of the preferred or selected alternative meeting the definition of an undertaking in accordance with the 2005 USDA Forest Service Policy for NHPA Compliance in Travel Management and 36CFR800. Findings **were** 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 Rocky Mountain Front Travel Plan DEIS that **were** anticipated to require this site-specific Section 106 review, (which would likely entail field inventory) included: any trail locations where a new, motorized designation is accepted (not ‘over-the-snow’ areas), any currently “undesigned routes” that are added to the existing trail system, and any new ground-disturbance associated with the obliteration of routes. Section 106 review, which

**was not likely to** require intensive field inventory, but **could** require a large measure of research, consultation, documentation and perhaps mitigation included: the obliteration of significant historic routes, or potential adverse effects to archaeological sites, districts, cultural landscapes, or traditional cultural practices. Depending on the projected timeline for individual actions, the Section 106 review **was expected to** be staged or phased.

**Field inventory for locations of undertakings that were ‘common to all alternatives’ was initiated in 2005 (McCartney). Consultation with the Montana State Historic Preservation Office (SHPO) to confirm the phased, or stepped approach to the NHPA Section 106 review was completed in 2006 (Thompson and Wilmoth correspondence). Monitoring, site testing, and formal site evaluations for cultural properties which could be affected by travel planning in the Birch Creek South (BCS) unit were conducted in 2006 (French, McCartney). Consultation packages with findings of ‘no effect’ and “no adverse effect’ for cultural sites in the BCS unit as a result of travel management actions were provided to interested and consulting parties (Thompson 2006, French 2006) and the Montana SHPO (Thompson 2007, French 2007). The FEIS has been updated to include new contextual information compiled over the past two years (HHM 2006, Zedeno et. al. 2006, Zedeno and Murray 2007), as well as information resulting from NHPA Section 106 activities. FEIS changes in numbers of sites, eligibility status, and amount of inventory accumulated etc. is reflective of the most recent data.**

The completion of Section 106 review is the mitigation measure most often identified for cultural resources in NEPA documentation. To conclude the review, if individual mitigation measures are not specifically identified in the travel plan DEIS **or FEIS** 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.

Site-specific forms of mitigation which may be employed **under Section 106 review** were 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

**Monitoring of nine (9) sites was prescribed as a condition of the ‘no effect’/‘no adverse effect’ Section 106 finding for specific sites in the BCS unit (French 2006, 2007). Results are to be reported in the Forest’s Annual Programmatic Report to SHPO.**

***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 (and seasons) are listed below. They are individually included in the discussion of each alternative and summarized (**rounded to the nearest whole number**) 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 impacted by increased types 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 (e.g. Sec 106 review required).

1a. Measurements within the TCD, because of its size and unique characteristics, are displayed as the 'number of miles of motorized trail/road' or 'acres of motorized winter use' open to the public.

1b. 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.

1c. Measurements for 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.

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 historic character or preserving scientific value.

2a. Measurements within the TCD are displayed as 'number of miles of existing motorized trail/road that are reduced to non-motorized status'.

2b. Measurements for historic and archaeological properties are made in 'numbers of cultural sites' that meet Index 2. This would generally reflect the number of sites where types of use are lowered or where routes are relocated away from the potential impact zone.

## ***SIGNIFICANT HERITAGE RESOURCE ISSUES TO ADDRESS***

### **POTENTIAL EFFECTS TO THE BLACKFOOT TRADITIONAL CULTURAL DISTRICT.**

#### ***1. EXISTING CONDITION***

##### **a. Resource Characteristics**

Traditional cultural properties are defined in National Register Bulletin 38 (USDI NPS n.d.) 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. 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).

The northern portion of the analysis area, which which comprises of the southern **third** of the Blackfeet 1896 'ceded strip,' and is known locally as the "Badger-Two Medicine," has largely been included in a Traditional Cultural District (TCD). The "Badger-Two Medicine Blackfoot Traditional Cultural District" is an 89,376-acre Historic District significant for its religious use, association with creation beliefs, and location of spirits that play an important and traditional role in the Blackfeet culture (Flandrich and Deaver 1996, USDI NPS Keeper 2002). Adjacent areas in Glacier and Waterton National Parks **and the Sweet Grass Hills** contain similar significance (Reeves and Peacock 2001, Foor and Campbell 2001, **Jiusto and Schwab 1992**).

Communities linked to this traditional use area include those groups, societies and individuals of the Blackfeet Nation who practice the traditional ways. Their geographic distribution is predominately within the Blackfeet Indian Reservation, but, may also include individuals in Canada **and elsewhere**. The Blackfoot Confederacy is made up of four related groups (Talks About et al. 2004). The South Piegan, also known as Pikuni are the group most closely associated with the traditional use which occurs in the Badger-Two Medicine.

The Keeper of the National Register, in declaring the eligibility of the Badger-Two Medicine TCD (USDI NPS 2001), stated that "...the remote wilderness area is associated with the significant oral traditions and cultural practices of the Blackfoot people, who have used the lands for traditional purposes for generations and continue to value the area as important to maintaining their community's continuing cultural identity... the area is directly associated with culturally important spirits, heroes and historic figures... central to Blackfoot religion and traditional lifeways and practices."

**Subsequent** research has produced additional data on the traditional use of medicinal plant gathering, mineral collection, and the procurement of other items significant and critical to inclusion in medicine bundles and ceremonies. Certain subsistence activities may also play a part in the traditional cultural use (**Zedeno et al. 2006, Zedeno and Murray 2007**).

The TCD contains a cultural landscape component that is best defined as an ethnographic landscape (USDI NPS 2001). Technical Bulletin 36 (USDI NPS 2001) describes an ethnographic landscape as one which contains a "variety of natural and cultural resources that associated people define as heritage resources,...religious sacred sites...(and, culturally

used) plant communities, animals, subsistence and ceremonial grounds.” The Blackfeet Business Council and cultural leaders have reiterated their strong feelings about the significance of the ethnographic landscape in response to scoping for the Rocky Mountain Front Travel Plan and also in the language of the Blackfeet Historic Preservation Act (St. Goddard et. al. 2004, Travel Planning EIS administrative file).

### **b. Past Events and Conditions**

The TCD is primarily mountainous and timbered terrain, intersected with drainages and small waterways. Past natural events that have left a mark on the landscape and on resource values associated with the TCD include primarily wildfire and flooding. While these are seen as a part of the natural environment within which traditional use occurs, they do leave some concerns about water quality and landscape change. On the other hand, there are instances where fire enhances the production of certain plants related to traditional use (Morris 1992). In general, natural events are seen as most consistent with the historic and prehistoric lifeways and most accepted or accommodated by traditional use.

Other natural resource conditions, such as changes in wildlife numbers or range(s) and the introduction of non-native species and weeds are of great concern to Indian groups. These landscape-level changes are most-likely the indirect effects of human-related activities.

### **c. Human Influence**

Cultural resources are the ultimate product of human use, yet these resources are also vulnerable to the effects of human influence. Traditional cultural use and attributes associated with an ethnographic landscape are particularly sensitive to human-caused change. Development of any type and the introduction of any non-traditional, human-related activity, both have, and can affect traditional use. Types of development that have left a footprint on the land include road-building and structures associated with seismic and oil and gas exploration, logging, railroad and highway construction and use, Forest management, special uses (e.g. communication sites, pipelines), grazing, and some forms of recreation use (e.g. trails, campgrounds). Human caused change that either has or could alter patterns of traditional practice include changes in land ownership and/or management and the increasing trend of motorized use. There are numerous other human influences which are more ephemeral in their temporal and spatial distribution, and which may be further removed in distance, but which also have affected traditional use. Any attempt to inventory all of the human influences regarding traditional cultural use is beyond the scope of this analysis.

### **d. Future Trends**

Ongoing research, both on the Lewis and Clark Forest and across the nation is aimed at gaining a better understanding of traditional use and traditional activities. **Studies to determine if expansion of the Blackfoot Traditional Cultural District is warranted have recently been completed (Zedeno et. al. 2006, Zedeno and Murray 2007).** The Blackfeet have indicated their belief that the district should encompass the entire Badger-Two Medicine unit (Talks About et. al. 2004).

In general, the numbers and diversity of National Forest users continues to rise. Traditional cultural use likewise is seeing a resurgence of activity, as influences within the culture lead

toward revitalization. As a result, the potential for conflict is ever increasing. Motorized use and land development in particular are threatening to traditional cultural activities.

#### **e. Desired Condition**

The desired condition of the resource is to fully and formally define and evaluate the TCD and to understand it in such a way as to fully consider and integrate it into management activities. This would require continued consultation under the special government to government relationship, in which the Forest Service and the Tribe works closely to identify issues early and to develop alternative(s), mitigation or management plans that address traditional use.

Section 110 of the NHPA and the Lewis and Clark Forest Plan indicate that listing of NRHP-eligible resources is desirable, and that special management emphasis is possible. The Forest would carry out National Register listing of the TCD, only *with the concurrence of the Blackfeet*.

The Forest Plan recreation setting that most closely articulates the desired future condition of such a Traditional Cultural District is “semi-primitive” or ‘roadless.’

## **2. ENVIRONMENTAL CONSEQUENCES**

The significance of traditional cultural properties, that is: ‘areas of special religious or spiritual significance’ where traditional practices are performed, often depends on their context within the larger landscape in addition to their immediate physical features. Activities that occur beyond the physical boundary of a traditional use site can even have an effect on the resource if the larger landscape-level context is affected. By defining and managing the Badger-Two Medicine traditional use area as a Historic District, rather than a collection of individual sites, and including the cultural landscape component into its definition, the consideration of this landscape-level context has largely been factored in.

Likewise, due to the nature of the TCD, it is not ground-disturbing actions that hold the greatest potential for impact. Instead, it is the interruption of the necessary solitude and encounters of a non-traditional nature that most threaten the carrying out of traditional practices such as vision questing or other cultural ceremony. This interruption or disturbance could come simply with the sensory perception of a non-traditional activity, or with the encounter of others. The sight, sound, and smell of motorized equipment in the TCD is something that could occur, not occur, or be changed from the existing condition as a result of the decision made under travel management.

#### ***Technical assumptions:***

- *Area of potential effect (APE).* For the purposes of this analysis, the Area of Potential Effect (APE) regarding the TCD is the entire extent of the District where a travel management decision is applicable. Direct effects may occur closer to travel routes, but indirect effects may be far-reaching.
- *Cumulative APE.* The cumulative APE is drawn the same as that drawn for the direct and indirect effects, rationale for which is outlined above. Because of the nature of this cultural resource, cumulative effects could reach throughout the Blackfeet culture and be associated with unknown locations, primarily on the Reservation to the east.

- *Analysis methodology and intensity.* The documentary analysis was conducted by those methods described in the heritage resource overview. Individual issue analyses were made using a GIS map overlay of the TCD with various alternatives and by electronically querying the database to determine areas and distances of overlap (McCartney 2004).
- *Indices of Measure.* Two types of measurements are used to illustrate and compare the impacts to the TCD. Because of its size and unique characteristics, these units are different than those used for other heritage sites.
  - 1) The unit of measure used to illustrate potential adverse impacts is displayed as the number of ‘miles of motorized trail/road’ (non-winter) or ‘acres of motorized winter use’ open to the public.
  - 2) The measurement used for indicating potential benefits to the resource are displayed as the number of miles of current motorized use which are reduced.

#### **a. Alternative 1 - No Action Alternative**

##### ***1. Direct and Indirect Effects***

The effects to the Badger Two Medicine Traditional Cultural District that either are, or could occur from the stipulations of travel management include primarily those associated with motorized use, particularly summer use. Motorized travel, either by motorcycle, ATV or full-sized vehicle, produces audible, visible and atmospheric elements that have the potential to interrupt and disturb traditional practitioners. These sensory intrusions can void a religious experience or the practice of sacred ritual. Noise, lights, the presence of modern equipment, and exhaust are all viewed as adverse effects regarding traditional use.

The Tribe has indicated their position and perception of these effects through Government to Government consultation with the Business Council, and resource/specialist coordination through the Badger-Two Medicine committee (a council-appointed resource committee) and the Culture Director/Tribal Historic Preservation Officer. The Council has affirmed the Tribe’s position through formal resolution and written correspondence (Talks About 2004, St. Goddard 2004). The Tribe has identified no acceptable mitigation (other than avoidance) to anticipated adverse effects regarding the TCD. The adverse effects of allowing motorized use are perceived by the Tribe, regardless of season of use.

Thus far, ethnographic research has found that traditional use occurs primarily during the spring, summer and fall; instances of winter practice and a higher level of winter use during prehistoric times have also been documented (Flandrich and Deaver 1996, Reeves and Peacock 2001).

Currently 93.54 miles of National Forest System roads or trails within the TCD are open to motorized use at some time during the ATV season. Another 28.7 miles of undesignated routes exist within the TCD, and are likely experiencing motorized use. Motorized winter recreation (snowmobile use) is allowed on 20.8 miles of trail and 40,803.46 acres within the district. 46,213.10 acres within the District are currently closed to all winter-season motorized use. **These mileages have been rounded to the nearest whole number for consideration in the FEIS.**

The direct and indirect effects of allowing motorized use in the TCD are considered adverse. If the TCD boundary is altered (by ongoing study), a commensurate change in the area of potential effect is expected.

*Anticipated mitigation:* Under this alternative, completion of Section 106 review would be required in order to accept the existing management as an outcome of the EIS/ROD. Existing, *system* roads, trails and snowmobile areas would not require field, cultural resource inventory for the review; the acceptance of existing, non-system routes *would* require field survey. Consultation regarding effects to the TCD could be anticipated as a large part of the Section 106 review. Conclusion of this process would be required before a new decision could be accepted. Since this is the no-action alternative, the existing condition would remain until a new decision is accepted.

## **2. Cumulative Effects**

Cumulative effects of the existing management include those listed as common to all alternatives (below), plus the direct and indirect effects listed above and any increase in the magnitude of motorized use as a result of allowing it to continue within the TCD.

Cumulative effects are greatest under this alternative, because closure of existing non-system routes is not included and OHV travel would continue on these.

### **b. All Action Alternatives (Alts. 2-5)**

#### **1. Direct and Indirect Effects**

*Common to all Action Alternatives:* In addition to those analysis areas, effects and mitigation described in “common to *all* alternatives,” those common to Alts 2-5 include effects related to the decommissioning of roads and trails and those related to accepting alternate, undesignated routes into the trail system.

Route decommissioning would be similar among Alternatives 2 through 5. The action of decommissioning within the TCD, depending on the method chosen, could temporarily disrupt traditional practices, but would serve to restore the desired condition over the long term. A method of decommissioning which physically obliterates the routes (versus allowing them to recover on their own) would have a greater amount of ground disturbance and associated mechanical activity; but, the associated activity would be short-lived and overall landscape restoration more complete.

The Tribe has indicated that closing roads by gating is their preferred method, because access for Elders who can not walk or ride horseback could be accommodated by use of a wagon or similar non-motorized means on the existing road prism.

Route-specific historical evaluations need to be completed prior to implementation of road or trail closures in the selected alternative. The amount of system road or trail decommissioning proposed within the TCD under the each of the action alternatives differs slightly, but the overall difference is considered minimal: Alternative 2 = 6 miles, Alternative 3 = 8 miles, Alternatives 4 and 5 = 7 miles each. **(These have been rounded to nearest whole number for FEIS analysis).**

The effects of accepting undesignated routes in lieu of or in addition to system routes could affect the traditional use, but these effects are expected to be minor. The in-lieu routes are

primarily targeted for acceptance to alleviate natural resource damage (e.g. erosion etc.). In the long run, this natural resource restoration would also benefit the landscape elements of the TCD. Accepting short segments of undesignated trails will not significantly change patterns of use, foreclose traditional use, or increase the human activity at any known sacred sites or ritual use areas. The acceptance of undesignated routes does not include the management of that route, only its physical location. These alternate trail locations would be inventoried for cultural resources, including traditional use, prior to acceptance. The number of miles of newly accepted routes in the TCD under each of the action alternatives differs slightly; the overall difference is minimal: Alternative 2 = 3 miles, Alt 3 = 2 miles, Alternative 4 = 3 miles, Alt 5 = 3 miles. **(These have been rounded to the nearest whole number for FEIS analysis).**

*Alternatives 2 and 4:* Regarding traditional cultural use, Alternatives 1, 2, and 4 are most similar, because they all allow for some level of motorized use within the Historic District. The effects of the proposed action (Alternative 2) are similar in type and duration to those of the existing condition (Alternative 1), but they would occur over a system trail distance that is roughly 3 miles less. The effects of Alternative 4 are similar in type and duration to those described for Alternative 1 and 2, except that they would be reduced in system trail/road distance by over 40%. The number of miles of motorized trail/road use allowable in the TCD under alternative 2 is **98**; under Alternative 4 it is **44**. **(Again, figures are rounded to the nearest whole number for final analysis).**

Under alternative 4 winter play areas would be reduced by nearly 30% over the existing condition (Alternative 1) and reduced by over 50% relative to Alternative 2. Under Alternative 2, unrestricted winter-season motorized use would be allowed on 23,299 acres within the TCD; Under Alternative 4, the number of acres is roughly half of that at 11,697. **(Acreages, like miles, are rounded to the nearest whole number for final analysis).**

Alternative 4 is more favorable than Alternative 2 regarding the amount of motorized use in the TCD. Both are improvements over the existing condition, but would still likely result in an adverse effects to traditional values. Alternative 4 would considerably reduce, but not eliminate, the amount of potential interruption to traditional practitioners in the TCD. Under Alternative 4, motorized use would be confined to fewer corridors and smaller acreages.

*Alternatives 3 and 5:* These alternatives allows for little or no motorized use, which is the activity identified as having the greatest potential for effects regarding travel management and the TCD. Alternative 3 allows winter use on existing, main roads (e.g. Pike Creek). Alternative 5, calls for no motorized use, except that which is allowed under existing Special Use permit. If implemented, either alternative would benefit the TCD by restoring much of the characteristic perceived as ‘solitude,’ which is required for traditional use. Under each alternative, an estimated 116 miles of roads and trails within the ‘district’ would be reduced from the current ‘open to motorized’ status to a non-motorized designation. The reduction in motorized winter use would occur on **about** 41 acres.

Indirect effects of illegal motorized use and the resultant increased needs for law enforcement could be realized under Alternative 3 or 5, but any estimate would be speculative. The net result of Alternatives 3 or 5 is beneficial effects to the TCD.

*Anticipated mitigation:* Similar to Alt. 1, consultation regarding adverse effects to the TCD under Alternatives 2 and 4 could be anticipated as a large part of the Section 106 review. Under Alternatives 3 and 5, completion of Section 106 review regarding effects to the TCD would be streamlined and programmatic, likely resulting in a “no effect” finding.

## ***2. Cumulative Effects***

The type of cumulative effects that would result from Alternatives 2 and 4 are very similar in type and duration to those identified under Alternative 1, regarding the interruption of traditional practices and alteration of the landscape. By decommissioning certain existing roads and trails, the net cumulative effects of Alternatives 2 and 4 are viewed as an improvements over the existing condition (Alt 1). The potential cumulative effects under Alternatives 2 and 4 are commensurate to the amount of motorized use allowed. Alternative 4 is an improvement over Alternative 2; both are superior to Alternative 1, but inferior to Alternatives 3 and 5.

The cumulative effects of Alternative 3 and 5 are limited to those identified as common to all alternatives, plus the decommissioning activity described under “common to all action alternatives.” Any incremental activity resulting from illegal motorized use and necessary enforcement should be factored into overall cumulative effects as well. The net outcome expected from either alternative 3 or 5 is a condition where some of the past and ongoing cumulative impacts are mitigated, and the resource is moved closer to the desired future condition.

### **c. Effects Common To All Alternatives**

The APE outlined under ‘technical assumptions’ above is used throughout the analysis of this issue; it is common to all alternatives. Because this ‘heritage property’ is recorded as a ‘district’, and contains a landscape component, the measures of effect are applied equally within all areas of the District and over all seasons of use.

Alternatives for travel management are diverse. Effects common to all alternatives are only those past, present and reasonably foreseeable actions that have altered or could alter the landscape in ways that affect its potential use for traditional practices. In particular, roads constructed during the past, mostly for seismic exploration, oil and gas drilling or special use access, have added to the network of historic trails and routes that are available for motorized use within portions of the Traditional Cultural District. Roads constructed for the purpose of timber harvest and utility installation have left a similar footprint, but are confined to areas near Summit, upper Pike Creek and along Highway 2, and are not found within the TCD. Some special use roads, especially those which access electronic sites are located within the TCD. User-created routes and ATV trails and the adaptation of historic Forest Service trails by motorized use have created a two-track footprint in addition to the ‘constructed roads’ but without an engineered prism. The Blackfeet see the proliferation of motorized use on these routes as an increasing trend with commensurate cumulative effects to the cultural landscape and a threat to the continuance of traditional practices and associated cultural lifeways. The majority of currently undesignated (e.g. non-system) trails and roads, where motorized use is allowed under the three-State OHV rule, would no longer remain open under the Action alternatives.

The Blackfeet have identified oil and gas leasing any related development as potential actions that could directly, indirectly and cumulatively impact traditional use (Talks About et. al 2004). The associated network of roads, even if not open to the general public could cumulatively impact traditional values due to incompatible landscape alterations.

The implementation of the three-State OHV rule (USDI and USDA 2001) a past, but somewhat connected action, is seen as beneficial to cultural resources (p. 56), because areas

of potential ground disturbance and access to cultural sites is confined to the existing trail network. Traditional properties also benefited, but not to the same extent, because the rule did not reduce or eliminate the use of motorized vehicles on existing system or non-system routes.

Common to all alternatives under this analysis is the yearlong restriction of motorized use on at least 46,000 acres within the Badger-Two Medicine Traditional Cultural District. Configurations of the winter-season, motorized-use are different among alternatives; individual acreages and limits are included in the analyses of individual alternatives.

*Mitigation prescribed:* 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 FEIS. Ideally, the 106 review would be finalized for the preferred alternative between the Draft and Final EIS; **it must be complete prior to implementation.** Phased review is also an option, depending on certain factors, such as timeframes for implementation, **split decision** etc. The level of anticipated consultation, effect, and mitigation differ with each alternative. **Consultation with SHPO has confirmed that a stepped, or phased approach to Section 106 review is acceptable (Thompson/Wilmoth personal correspondence 2006).**



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

## **1. EXISTING CONDITION**

### **a. Resource Characteristics**

#### ***Prehistoric Period Sites***

In the culturally and geographically diverse lands of the Northern Rocky Mountain Region aboriginal subsistence relied on semi-nomadic hunter and gatherer lifeways. The choice of plants and animals used and methods to obtain and process them varied by cultural group and throughout time (Deaver and Deaver 1995: p 9). 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: p 2).

Evidence of prehistoric use (circa 10,000 B.C. to A.D. 1700) in the analysis area is manifest primarily as artifact scatters and pictographs. In the adjacent vicinity, that of the foothills and plains to the east, other types of prehistoric sites are more frequently found. These include segments of the Old North Trail, stone circles, alignments and cairns, and numerous pishkuns or bison jumps.

In the heritage analysis area for travel management **thirty eight (38)** prehistoric sites are recorded. While the pictographs are concentrated in the Sun River area, the lithic scatters or artifact scatters, which are believed to represent campsites, kill sites, and occupation areas, are more evenly dispersed. Generally the main domestic sites are located in drainage bottoms, and near water sources. The sites found on ridges and in mountain saddles are generally thought to be more transient camps. The kill sites appear to be more opportunistic and are not associated with the traditional pishkuns. The location of prehistoric sites often corresponds to access by natural travel corridors. The existing Forest Service road and trail system follows similar topography (Morris 2000). As a result, most archaeology sites in the analysis area owe their discovery to exposure in the tread of trails or two-track roads.

Very few of the prehistoric sites have been researched for NRHP qualification. **Three are being evaluated as part of travel planning or related activities and have elements or areas that are considered significant.** Most are assumed eligible for their scientific value, pending further consideration. Of the four analysis-area archaeology sites that have previously undergone evaluation, none have qualified for the NRHP. Among other factors, severe flood damage was primary in the loss of integrity for these sites. Most of the rock art sites have been included in professional studies (Greer and Greer 1992, Keyser 2001), and classified mainly as the “Foothills Abstract Tradition.” Like the artifact scatters, the pictographs have not been fully researched with dating techniques and laboratory analysis. Most are red ochre paint on limestone backdrops. All of the pictographs have been recommended as significant, but only one has had formal SHPO/Agency review with regard to inclusion in the NRHP. **Conservation measures (full, detailed recordation) and AMS carbon-dating were performed at one rock art site in 2006. A report is in progress (Lobser et. al).** An interpretive sign has been placed at one of the most visible pictographs sites in Sun Canyon (adjacent to a trail and historic road). This project was carried out in cooperation with the Blackfeet and USDI Bureau of Reclamation; prior to signing, this site was being smoke damaged from campfires associated with dispersed recreation. Since

signing (in 1992), annual monitoring has detected no additional smoke damage; **the site, however, is considered highly vulnerable to weathering and vandalism due to its location.**

### *Historic Period Sites*

During the late 1800s and early part of the 1900s resource utilization activities in the analysis area included logging, agriculture, hunting, and trapping. Timber harvest and milling are evidenced in most of the major drainages. Diversion Dam was completed at the mouth of Sun River canyon in 1911. Before Gibson Dam was completed upstream in that same drainage in 1929, several homesteads were located along the river bottom. These homesteads and several other cabins in the upper Sun River were accessed by traversing a road along the river which was constructed in 1886 by railroad tie-cutters working for the Great Northern Railroad. Aging, axe-cut stumps across the landscape are visible reminders of early logging pursuits. The sawmill sites recorded in the analysis area are mostly of mid-twentieth century origin, but others, from a previous era are rumored to have existed. The recorded sawmill sites are quite evenly dispersed, with all but one occupying a different drainage from the others.

Beginning in the late 1800s and continuing until the late 1900s, portions of the upland area on both the north and south ends of the Rocky Mountain Ranger District were used for sheep grazing (USDA FS Historic Grazing Files). Remnants of stock driveways can be found associated with or incorporated into the current trail system in both the Dearborn and Lubeck areas. Pens and a herder cabin from this period are also recorded. Sheep grazing no longer occurs on the Rocky Mountain District.

In 1896, the northernmost portion of the Rocky Mountain Ranger District, known as the Badger-Two Medicine, was ceded to the United States Government by the Blackfoot Tribe **as part of a larger cession along the western edge of the Reservation** (Kappler 1904). The ‘ceded strip’ eventually became part of both the Lewis and Clark National Forest and Glacier National Park. (see Social Effects – “Reserved rights” section for additional discussion). The remainder of the Rocky Mountain District came from various land transactions, beginning in 1897 with the creation of the Lewis and Clarke Forest Reserve (USDA 1968). By 1908, the area, which now comprises the Rocky Mountain District, was largely in place under the jurisdiction of the Lewis and Clark National Forest.

During the early 1900s and throughout the next 50 years, the Forest Service incorporated permanent and intermittent ranger stations and fire lookouts into the landscape; remnants of these are in use today at Benchmark, Willow Creek, Badger Creek, Hannan Gulch, Deep Creek, West Fork Teton and Ear Mountain. Remaining lookouts are located on the western boundary of the analysis area at Bear Top and Patrol Mountain. Ranger stations at Lubeck, Dupuyer Creek, and Blackleaf, as well as fire lookouts at Mount Wright, Steamboat, and Elk Calf Mountain have been removed. A series of trails and telephone lines were constructed to link these stations. **Most of the phone lines were later abandoned or removed, but their remnants, mainly in the form of ceramic insulators, can still be seen. Many of the trails are now part of the Forest Trail System.**

As a result of the devastating 1910 fires, many trails were constructed by the Forest Service for the purposes of fire detection and suppression. Previously existing routes, such as those used for sheep driveways were often incorporated into the Forest network. Later, trails were constructed specifically with the recreation experience in mind; some are the work of CCC crews, who were stationed at Augusta, Benchmark and Willow Creek.

The Forest road system similarly evolved. Some roads led from communities to the early Ranger Stations; some were created to access logging areas and facilitate timber removal. Many were wagon roads before the advent of motorized travel. Certain routes were specifically designed or substantially improved for the construction of Diversion and Gibson Dams and to access private in-holdings. Many short segments originated to allow access to Recreation Residences. These Special Use cabins, sometimes referred to as ‘summer homes’ were encouraged by the Forest Service during the 1920s to develop the National Forests’ recreation potential. Recreation residence access roads are one of the anomalies in the Travel Planning process, since they were never officially included in the Forest system and are counted as “undesignated” for the purposes of this analysis.

During the 1960s, a surge of road construction occurred for the purposes of seismic exploration and well drilling. A few of these roads were incorporated into the existing road or trail system. Most were abandoned and/or closed. Later, some of these were re-used by recreationists, primarily for jeep (4-wheel drive) and ATV travel.

Of the **thirty eight (38)** historic-period routes that have been identified as cultural resources **(including three (3) adjacent to the National Forest), thirty four (34)** are trails and **four (4)** are roads **(including one road/trail combination)**. Few have been evaluated for inclusion in the NRHP, in part because they are considered as ‘potentially eligible’ for the purposes of project review under the “Trails” appendix to the Region One Programmatic Agreement for Cultural Resources. The Gibson Lake Trail is one which has been formally assessed and determined eligible for NRHP listing. The old Beaver-Willow road and Sun River Tie-Hacker’s road were evaluated and found ‘not eligible.’

Homesteads and agricultural pursuits, including grazing, have altered certain areas or aspects of the landscape and no-doubt have contributed to the origination and use of the Forest’s road and trail systems. Evidence of land transfers from the public domain during the homestead era, for mineral claims, and under other authorities, such as the Valentine Script, are manifest in the irregular ownership patterns within portions of the analysis area. While not numerous, these activities all had a hand in shaping the cultural resources, transportation system, and ultimately the management activities of today.

Early hunting and trapping activities, while known, are not well documented in the analysis area **(with the exception of portions of the Badger-Two Medicine unit)**. Remaining physical evidence is minimal. Three trapping sites are formally recorded; all are in separate drainages. **Recent ethnographic study has documented many additional sites (Zedeno et. al 2006, Zedeno and Murray 2007).** More are known to exist **across the entire analysis area**; none have been **formally** evaluated for NRHP qualification.

The four historic dude ranches on National Forest lands include (outfitted) hunting use as well as horseback riding and other recreational activities that use the forest trail system for travel. Other guest ranches are located nearby and similarly use National Forest lands under Special Use Permit. Three of the National Forest-based guest ranches and two associated camps have been documented as historic sites. One lodge has been evaluated, and meets National Register qualification. **All of the guest ranch-related sites are located in the BCS unit.**

Currently, **over** seventy five percent (75%) of the recorded sites in the analysis area can be assigned to the Historic Period, with the majority of these being Recreation residences and portions of the Historic Forest Service Trail System.

## **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 and catastrophic flooding. 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 prehistoric sites that have been evaluated and found ineligible for the National Register all had serious flood damage. 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, **historic occupation**, 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. Changes in patterns of use and the introduction of modern developments into an area important for its historic character, are most evident in Sun Canyon.

## **d. Future Trends**

There are a number of current and future heritage research projects that will address management needs on the Rocky Mountain Division of the Lewis and Clark National Forest. Contextual studies aimed at gaining a better understanding of two of the most common types of historic buildings are underway. The historic and architectural significance of recreation residences and the traditional significance of Forest Service administrative facilities in Wilderness are both under consideration. **The recreation residence context study has been completed (HHM 2006). The Administrative buildings study is due in 2007 (Throop in progress).** These currently-used historic buildings are all linked to the Forest roads and trails system in some manner.

Prehistoric sites in the Sun River drainage and in the Scapegoat Wilderness are also the subject of current, large-scale research projects. The Forest has partnered with the Bureau of Reclamation and Museum of the Rockies to complete the research. These projects are aimed at gaining a better understanding of effects of inundation on cultural sites and of high-altitude, environmental use by early humans. While neither project is directly related to Forest system roads and trail use, both are in areas that draw recreationists and are accessible to the Forest user by way of the existing transportation system.

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. The 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 in different ways by travel management, because of the differences in their properties. Ground disturbing activities are particularly detrimental to archaeology sites, while character-altering activities, including those that affect the 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 that have the potential to adversely affect prehistoric and historic resources (**e.g. Section 106 ‘undertakings’**) are:

- increases in the type or duration of trail and road or land area use.
- road and trail 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 (**also Section 106 ‘undertakings’**) include:

- Decreases (but not necessarily closure or obliteration) in the type 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 snowmobile or 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 non-Wilderness portion of the Rocky Mountain Ranger District. 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 or District 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 2004). Individual site records and past correspondence were reviewed for each site to ascertain condition, resource conflicts, and management needs. **Cultural resource inventory, monitoring, and site testing (evaluation) targeted selected areas that were common to all DEIS alternatives. New data has been added to the FEIS as a result of this field review (McCartney 2005, French 2006, 2007). Data from other, new or ongoing studies, which have accumulated new information in the travel management analysis area have also been added to the FEIS (Zedeno et. al. 2006, Zedeno and Murray 2006, HHM 2006).**

- *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 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 **originally required for Section 106 review. (This number has been reduced substantially for the BCS unit between the DEIS and FEIS as a result of field surveys).**

#### **a. Alternative 1 - No Action Alternative**

##### *1. Direct and Indirect Effects*

Under the no action alternative, non-system routes that currently exist on the landscape will continue to be used. Effects to historic and prehistoric sites (and yet undiscovered sites) that either are occurring or could occur as a result this access would continue. The character of historic routes would continue to be eroded as changes in use continue. This alternative does not call for road obliteration, so potential effects from that activity (both adverse and beneficial) would not occur.

**Eight (8) unevaluated historic and prehistoric sites and one (1) significant prehistoric site are 'at risk' from ongoing motorized use and could require consideration under the no action alternative, if selected. The significant site has been mitigated with SHPO and Tribal participation (French and McCartney 2005, 2006), and is not further addressed in the travel plan analysis. Three of the unevaluated prehistoric sites have been tested and contain areas that are recommended as significant (French 2006, 2007 and French and McCartney in progress). Seven (7) of these sites are in the BCS unit; two (2) are in the BTM unit.**

**Two (2) prehistoric sites are located in non-motorized trails; both are in the BCS unit.**

*Anticipated mitigation:* Under this alternative, completion of Section 106 review would be required to accept the existing management as an outcome of the EIS/ROD. Existing, *system* roads, trails and snowmobile areas would not require field, cultural resource inventory for the review; but the acceptance of existing, non-system routes *would* require field survey. This amounts to **about 78** miles, which is much the same as required under other alternatives, since the undetermined routes will either be decommissioned or adopted. Section 106 review regarding prehistoric and historic sites would likely fall within the parameters of existing programmatic agreements and would be somewhat similar to the other alternatives. Conclusion of the process would be required before a new decision could be accepted. Since this is the no-action alternative, the existing condition would remain until a new decision is accepted.

## **2. Cumulative Effects**

Cumulative effects of the existing management include those listed as common to all alternatives, plus the direct and indirect effects listed above and any increase in the trend for motorized use as a result of allowing it to continue. Potential cumulative effects to historic and prehistoric sites are the greatest under this alternative, because it allows for the highest number of roads and trails and the most diverse methods of access.

### **b. All Action Alternatives (Alts. 2-5)**

#### **1. Direct and Indirect Effects**

*Common to all Action Alternatives:* The effect of decommissioning roads and trails would be similar among action Alternatives 2 through 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 in store. 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.

If research finds that the route to be closed is historic (over 50 years old), it must be evaluated for National Register qualification. If eligible, mitigation measures will be required. Since the method of decommissioning is not identified as part of travel management planning, the finalization of NHPA Section 106 review will be deferred until the undertaking is fully defined. The amount of road decommissioning between action alternatives differs slightly, but the overall difference is considered minimal. It ranges between 6.7 and 7.5 miles. The amount of trail decommissioning ranges from 28.9 to 33.1 miles, depending on the alternative. This difference is not significant relative to cultural resources

There are **three (3)** unevaluated prehistoric sites located in or proximate to trails that are currently open to motorized use, and the use would be reduced to a non-motorized status under all action alternatives. These sites, one in Ford Creek and the **two in Falls Creek (BCS unit)** will benefit from this new type of management.

Accepting undetermined routes in lieu of or in addition to system routes could cumulatively affect the historic trail system. The in lieu routes are primarily targeted for acceptance to

alleviate natural resource damage (e.g. erosion etc.). These alterations will not substantially change patterns of use, or trail character in most cases. These effects are expected to be minor, but cumulatively, they may alter the system in ways that will be recognizable over time. This type of effect is addressed under the Region One Programmatic Agreement for Cultural Resources - Trails Maintenance Appendix. Under Alternatives 2-5 the number of undetermined routes accepted into the trail system is substantially less than half of those which currently exist under Alternative 1. The alternate trail locations would be reviewed for cultural resources, prior to acceptance. The number of miles of routes accepted under each of the action alternatives differs slightly; the overall numbers range from 21 to 22 miles of road to be adopted as either road or trail use, and 24 to 28 miles of undetermined trail to be adopted as either Special Use or system trail.

There are small differences between the action alternatives with regards to direct and indirect effects to prehistoric and historic sites (see reasoning outlined above). Alternatives 2 and 4 have more potential for affecting sites (due to the amount of motorized use allowed) than do Alternatives 3 and 5. They have less potential than Alternative 1. Alternative 2 ranks second-highest (of 5) in the probability of affecting cultural resources.

*Alternatives 2 and 4:* **Five (4)** unevaluated prehistoric **and historic** sites are at risk from existing **types of motorized** use under Alternative 2. **Two (2) are located in the BTM and four (4) in BCS.** All have **similar** risk factors under Alternative 4, **except** one (1) of the sites is currently 'at risk' would **benefit from** decreased **types of allowable use**. Of the five sites **originally identified**, two are lithic scatters in the Badger-Two Medicine area and three are pictographs in Sun Canyon. **The three pictographs have been dropped from potential threat zones after monitoring and field inventory conducted in 2005 and 2006. One additional lithic scatter was added.** The individual site which is different under Alternative 4 is a lithic scatter. Under any Alternative 'at risk' sites may require **monitoring or other** mitigation.

*Alternative 3:* Prehistoric and historic sites would receive the greatest preservation benefit as a result of Alternative 3. The historic trail system would be used in a manner consistent with its design and character, which was largely prior to motorized use. Indirectly this would bring the system closer to the desired future condition.

**Eight (8)** unevaluated prehistoric sites are located within the 'at risk' zone where travel **types would** be decreased under alternative 3. These are the same **sites** mentioned in the discussion of Alternative 2 and 4 above. The **existing** threat to archaeology sites would **decrease**, because there would be the less potential for disturbance (see discussion above).

*Alternative 5:* The Direct and Indirect Effects from Alternative 5 are a combination of that described for Alternatives 3 and 4, since this Alternative has attributes of each. **Three (3) unevaluated historic and prehistoric sites in the BCS unit are located in existing motorized routes and would be considered for impacts under Alternative 5.**

Alternative 5 ranks second best for the retention of historic character within the trail system and second to the lowest in the probability of disturbing prehistoric sites.

Two (2) unevaluated prehistoric sites **are** located within **existing** 'at risk' zones and allowable motorized use will be decrease under Alternative 5. **All** are lithic scatter sites in the Badger-Two Medicine area. **The significant site was mitigated in 2006 and is no longer an issue.**

## 2. Cumulative Effects

*Alternatives 2 and 4:* The cumulative effects of Alternative 2 and 4 are identified in the analysis of ‘common to all’ and ‘common to the Action Alternatives’ above. Because these alternatives allows for a higher degree of motorized use, the potential for cumulative effects, especially relative to the historic character of the trail system, is commensurately higher. Alternative 4 is ranks in the middle (of 5), relative to potential for cumulative effects to cultural resources. Alternative 2 ranks second to the highest.

*Alternative 3:* Cumulative effects under Alternative 3 include those listed as common to all alternatives, plus the direct and indirect effects listed above. The net result would benefit cultural resources. The benefits identified as a result of the OHV rule would continue and increase under this alternative.

*Alternative 5:* The cumulative effects of Alternative 5 are most similar to Alternative 4, except that this alternative would actually benefit the restoration of the historic trail system on the north end (Badger-Two Medicine). It would do little in the way of cumulative change (either beneficial or adverse) for the rest of the system. Alt. 5 has merits over Alternatives 1, 2, and 4 due to the lesser amount of motorized use allowed.

### **c. 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.

Alternatives for travel management are diverse. Effects *common* to all are surprisingly numerous and are believed to have more to do with the location and type of cultural resources present and their existing condition, than the diversity of alternatives. Connected past, present, and reasonably foreseeable actions that have altered or could alter cultural resources in ways that adversely affect them likewise have many commonalities.

Past road-building, including that associated with timber harvest, ranching, utility easements, dam building, access to cabins, homesteads, mining, and administrative sites, wildfire suppression, seismic exploration and other special use activities have introduced a relatively modern system of roads into the landscape. Many of the historic wagon roads, stock driveways, and foot and horse trails have been incorporated within or upgraded as part of this system. User-created ATV routes and the adaptation of Forest Service trails by motorized use have likewise altered the character of the historic transportation system. Under **the various** alternatives **roughly 78** miles of undetermined roads and trails will either be adopted into the Forest trail system or decommissioned; both are activities which will require cultural resource survey. **Less than half of these are in the BTM unit.**

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. Many roads and trails were almost completely rebuilt as a result of the devastating floods in 1964 and 1975. A few, such as the trail through Willow Creek Gorge, contain intact features that may be architecturally significant (e.g. CCC-built, dry-laid stone retaining walls). 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. The Trails Appendix to the

Region One Programmatic Agreement was designed to address the 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.

Under all alternatives, the landscape elements of the adjacent, linear, historic resources will not be affected. Highway 2, the Great Northern Railroad and the Old North Trail are all travel routes in their own right. As currently recorded, they do not physically overlap with any of the roads and trails in the analysis area. The railroad and highway accommodate traffic larger than that allowed on any of the trails and most roads in the forest system, therefore the evaluation of landscape characteristics is moot. The physical remains of the Old North Trail are recognizable segments located adjacent to and in line with the mountain front, therefore, some of the (visual) landscape characteristics, even though a fair distance away, could be pertinent. Under the travel management decision, any mechanical action related to potential decommissioning would be temporary in nature **and not of concern relative to potential indirect/visual effects. (Ground disturbing effects would still need to be considered – further discussion below).** The view-shed of this **type of** resource will not be altered in any permanent manner as a result of the travel management decision.

Special Use Recreation Residences are the most abundant type of historic sites on the Rocky Mountain Ranger District. The roads and trails which access these 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.

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 **type** 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.

Three (3) unevaluated prehistoric sites are located within or proximate to motorized roads or trails where **little** change is proposed under any alternative. These sites, all within the Sun River to Ford Creek area (**BCS**), may be ‘at risk’. Monitoring and evaluation is recommended. Depending on the outcome, mitigation may also be warranted. **Two of these sites were evaluated as part of travel planning review in 2006; portions of the sites where road locations exist have lost integrity and are do not contribute to site significance. No mitigation (other than monitoring) is necessary.**

The implementation of the OHV rule (USDI and USDA 2001) was beneficial to cultural resources, because areas of potential ground disturbance across the landscape 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.

Six (6) unevaluated prehistoric sites are located within or proximate to trails where no significant change is proposed under any alternative and the current management designation is for “no motorized use.” With one exception, all of these sites occur in the Sun Canyon area (**BCS Unit**).

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.

Of particular interest are archaeology sites in and around Sun River Canyon; many of these are being considered for ‘district’ recognition. Site density in this area is high, relative to other areas of the Rocky Mountain Front. Some of these sites are very vulnerable to effects from all types of off-trail use, especially because of the narrow topographic confines of the canyon or their exposure in the draw-down zone of Gibson Reservoir. Artifact collection and disturbance of the fragile strata is an ongoing threat. A schedule of monitoring has been instituted for these sites. The potential for conflict with the acceptance of undesignated routes in this vicinity is elevated as well. If survey or monitoring identifies effects or potential conflicts with the location of archaeology sites, mitigation measures, such as trail realignment (site avoidance), armoring, or perhaps data recovery will be recommended. Mitigation requires review by the State and Tribal groups as part of the process.

Rock Art sites are generally not directly impacted by trail use, but instead, **were thought to be indirectly** affected by increased access and visibility, which in turn **might** increase chances of vandalism. These sites undergo periodic monitoring, and to date, **this type of damage has not been documented as a travel management issue (Loubser in progress).** **As a result, these sites, were moved from the ‘at risk’ category for travel management. Periodic monitoring will continue to occur for other reasons.**

Over the snow travel is generally not thought to affect prehistoric cultural sites, because when the ground is frozen, sub-surface disturbance is not a threat. Historic sites might experience a slightly higher risk of vandalism in the winter if associated with an over-the-snow play area, but with few exceptions, such as using the exposed roofs of cabins as ‘jumps’ (Bitterroot NF Archaeologist – Personal Communication) this has not been documented.

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. For some projects, such as proposed alterations to historic cabins or abandoned mine cleanup, cultural resource consideration can be more complicated, simply because the historic site is the target of the action.

*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 **FEIS/ROD**. 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 Forest Service has consulted with the Montana SHPO on the appropriateness of phased, or ‘stepped’ Section 106 review. SHPO has agreed to this strategy (Wilmoth 2006).** The level of anticipated consultation, effect, and mitigation differ somewhat with each alternative.

**Summary:** The concentrations of cultural sites on the Rocky Mountain Front range from sparse to moderate as compared to other national forests in the state. The heritage resource is 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 **and increased or existing use causes additional ground disturbance or artifact displacement,** or where rock art sites are subject to increased exposure. The variety of alternatives proposed adequately addresses historic resources. Prehistoric sites may require additional, site-specific mitigation measures. Alternative 3 is most beneficial to historic and prehistoric resources. Alternative 5 is closest to a balance of access and resource protection. Alternatives 1, 2, and 4 (in that order) have increased potential for impacting historic and prehistoric sites.

