

3.24 Cultural, Historical, and Tribal Resources

3.24.1 Introduction

Cultural and historical resources

Cultural resources are defined by the National Historic Preservation Act and by FS Manual 2200, section 2360, as objects or definite locations of human activity, occupation, or use identifiable through field survey, historical documentation, or oral evidence. Cultural resources can be prehistoric, historic, or archaeological sites, structures, places, or objects and traditional cultural properties.

Areas of tribal importance

The FS has obligations under the American Indian Religious Freedom Act of 1978 to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian (Public Law 95-341). Executive Order 13007 of 1996 further directs federal agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners and to avoid adversely affecting such sites. Consultation with recognized tribal governments is further defined and required by the Native American Graves Protection and Repatriation Act of 1990 (Public Law 101-601), the 1992 amendments to the National Historic Preservation Act, and the 1999 revisions to the implementing regulations in 36 CFR Part 800; Protection of Historic Properties. These obligations are applicable to all management actions no matter where they occur on the forest.

Indicators

Key indicators used to measure the effects of alternatives are:

- Potential ground disturbance: management activities and natural disturbances can both pose a threat to sacred sites and other cultural and historical resources.
- Ease of access: the ability to access sacred sites is important to local Tribes. At the same time, greater access to some cultural and historical resources could lead to detrimental effects such as vandalism and looting.

These measurement indicators were identified and defined through consultation with Tribes. Consultation provides the opportunity for Tribes to identify potential effects to tribal interests, including to native knowledge, tribally affiliated cultural resources, sacred sites, treaty rights, and religious freedom. Ground disturbance is a key consideration for effects, as ground disturbance may negatively impact sacred sites and areas. These impacts can be further exacerbated by interactions with fire, weather events, human actions, and environmental change. Access to sacred areas to exercise religious ceremonies and freedoms is another key consideration for effects. Management actions that change access could either beneficially or negatively impact the exercise of treaty rights and expression of religious freedom.

3.24.2 Regulatory framework

Laws and executive orders

Historic Sites Act of 1935 (16 USC 461-467) declares that it is a national policy to preserve for public use historic sites, buildings, and objects of national significance for the benefit of the people of the U.S.

National Historic Preservation Act of 1966 (public laws 89-665, as amended, 91-243, 94-422, 94-458 and 96-515) establishes a program for the preservation of historic properties throughout the United States. It created the National Register of Historic Places, State Historic Preservation Offices and the Section 106 review process.

- **Section 106** requires each agency to take into account the effects of its actions on historic properties, prior to approving expenditure of federal funds on an undertaking or prior to issuing any license. Furthermore, an agency must afford the Advisory Council on Historic Preservation (an independent federal agency created by the National Historic Preservation Act) an opportunity to comment on any of the agency’s undertaking that could affect historic properties.
- **Section 101(a) (8)** gives the Secretary of Interior the responsibility and authority to assess “significant threats” to properties included in, or eligible for inclusion in, the National Register in order to: determine the kinds of properties that may be threatened, ascertain the causes of the threats, and develop and submit to the President and Congress recommendations for appropriate action.
- **Section 110 (a) (2) (A)** directs federal agencies to establish “a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places, and protection of historic properties” to “ensure that such properties under the jurisdiction or control of the agency are identified, evaluated, and nominated to the National Register.” This requires development of a schedule for the identification, evaluation, and nomination of unrecorded sites.
- **Section 111** encourages Federal Agencies to out-lease historic properties and retain the proceeds to fund preservation activities. If an agency determines the historic real property isn’t needed for current or projected agency purposes, under National Historic Preservation Act Section 111, they may lease (or exchange with comparable historic property) the property with any person or organization, if the agency determines that the lease or exchange will adequately ensure the preservation of the historic property.
- **Section 470ii (c)** states that “Each federal land manager shall establish a program to increase public awareness of the significance of the archaeological resources located on public lands and Indian lands and the need to protect such resources.” It further directs that an annual report of such progress will be submitted to Congress.
- **Section 470mm** directs federal agencies to:
 - Develop plans for surveying lands under their control to determine the nature and extent of archaeological resources on those lands;
 - Prepare a schedule for surveying lands that are likely to contain the most scientifically valuable archaeological resources; and
 - Develop documents for the report of suspected violations of this act and establish when and how those documents are to be completed by officers, employees, and agents of their respective agencies.
- **Subdivision 1, Chapter 3001** directs the federal government to assist in the establishment of preservation programs on Indian lands. This directive emphasizes the use of partnerships to expand and accelerate preservation programs.

Archaeological Resources Protection Act of 1979 (Public Law 96-95) and Regulations 43 CFR Part 7 establish a permit process for the management of cultural sites on federal lands which provides for consultation with affected tribal governments.

Archaeological and Historic Preservation Act of 1974 (16 USC 469) amends the 1960 Reservoir Salvage Act by providing for the preservation of significant scientific, prehistoric, historic and archaeological materials and data that might be lost or destroyed as a result of flooding, the construction of access roads, relocation of railroads and highways, or any other federally funded activity that is associated with the construction of a dam or reservoir.

Native American Graves Protection and Repatriation Act of 1990 (public law 101-601, 25 United States Code 3001-3013) and **Regulations 43 CFR Part 10** addresses the rights of lineal descendants and members of Indian tribes and Alaska Native and native Hawaiian organizations to certain human remains and precisely defined cultural items. It covers items currently in federal repositories as well as future

discoveries. The law requires federal agencies and museums to provide an inventory and summary of human remains and associative funerary objects. The law also provides for criminal penalties in the illegal trafficking in Native American human remains and cultural items.

Executive Order 12866 of 1993, Regulatory Planning and Review: Enhances planning and coordination with respect to both new and existing regulations. Makes process more accessible and open to the public. Agencies shall seek views of tribal officials before imposing regulatory requirements that might affect them.

Executive Order 13287 of 2003, Preserve America reinforces the federal government policy for “protection and enhancement of America’s historic treasures, and to recognize and treat cultural resources as assets. Federal agencies shall advance this policy through the protection of, continued use of, and reinvestment in, the federal government’s historic buildings and sites and by conforming to the highest standards of care for, and consideration of, the unique cultural heritage of communities, and of the Nation.” Each agency is directed to: (a) review its regulations, management policies, and general operating procedures for compliance with Section 110 of the National Historic Preservation Act, and (b) develop annual goals and measures as part of their compliance with the Government Performance and Results Act (P.L. 103-62) and report annually on the protection of historic and archeological properties within its care. The order also encourages the formation of partnerships with Indian tribes, state and local governments, and the private sector to promote public understanding of the preservation and use of historic properties.

Executive Order 13007 of 1996, Indian Sacred Sites directs federal agencies to, to the extent practicable, accommodate access to and ceremonial use of sacred sites by Indian religious practitioners while avoiding adversely affecting the sites and maintaining the confidentiality of the sites.

Executive Order 12898 of 1994: Environmental Justice in Minority Populations and Low- Income Populations directs federal agencies to focus on the human health and environmental conditions in minority and low-income communities, especially in instances where decisions may adversely impact these populations.

Executive Order 13175 of 2000, Consultation and Coordination with Indian Tribal Governments: Provides direction for consultation with tribal governments for formulating or implementing policies that have tribal implications. Also provides direction regarding consultation and coordination with Indian Tribes relative to fee waivers. Calls upon agencies to use a flexible policy with tribes in cases where proposed waivers are consistent with applicable federal policy objectives. It directs agencies to grant waivers in areas where the agency has the discretion to do so, when a tribal government makes a request. When a request is denied, the agency must respond to the tribe in writing with the rationale for denial.

Executive Order 11593 of 1971, Protection and Enhancement of the Cultural Environment, states that the federal government will provide leadership on preserving, restoring, and maintaining the historic and cultural environment of the Nation. It directs federal agencies through federal plans and programs to preserve cultural resources and contribute to the preservation and enhancement of non-federally owned sites, structures, and objects of historic, architectural, or archaeological significance. It orders federal agencies to locate, inventory, and nominate to the National Register all properties under their control or jurisdiction that meets the criteria for nomination. It also directs federal agencies to exercise caution during the interim period to ensure cultural resources under their control are not inadvertently damaged, destroyed, or transferred.

American Indian Religious Freedom Act of 1978 (Public Law 95-341 as amended and Public Law 103-344): The Act states that “...it shall be the policy of the United States to protect and preserve for American Indians their inherent right for freedom to believe, express, and exercise the traditional religions of the

American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to site, use and possession of sacred objects, and the freedom to worship through ceremonies and traditional rites.”

- Agencies must make a good faith effort to understand how Indian religious practices may come into conflict with other forest uses and consider any adverse impacts on these practices in their decision-making practices. The consideration of intangible, religious, ceremonial, or traditional cultural values and concerns which cannot be tied to specific cultural sites/properties could be considered under American Indian Religious Freedom Act.

Religious Freedom Restoration Act of 1993 (Public Law 103-141): Established a higher standard for justifying government actions that may impact religious liberties.

Other regulation, policy, and guidance

36 CFR 800 implements regulations for National Historic Preservation Act, Section 106. It provides explicit direction for the identification of sites, the determination of project effects on sites, requirements for consultation with state historic preservation offices, and the Advisory Council on Historic Preservation; and how to develop agreements.

36 CFR 60 sets forth basic procedures of evaluation and nomination of sites to the National Register of Historic Places, procedures for the operations of state historic preservation officers, and minimum qualification standards for cultural resource professionals.

36 CFR 79 establishes standards, procedures, and guidelines to be followed by federal agencies to preserve collections of prehistoric and historic material remains and associated records that are recovered in conjunction with federal projects and programs under certain federal statutes. This action should ensure that federally-owned and administered collections of prehistoric and historic materials remains and associated records are deposited in repositories that have the capability to provide adequate long-term curatorial services.

36 CFR 261 Prohibitions in Areas Designated by Order; Closure of National Forest System Lands to Protect Privacy of Tribal Activities (2011): “provides regulations regarding special closures to provide for closure of NFS lands to protect the privacy of tribal activities for traditional and cultural purposes to ensure access to NFS land, to the maximum extent practicable, by Indian and Indian tribes for traditional and cultural purposes”.

36 CFR 223.239 and .240 Sale and Disposal of National Forest System Timber, Special Forest Products, and Forest Botanical Products: Section 223.239 provides regulations for free-use without a permit for members of Tribes with treaty or other reserved rights related to special forest products. Also free-use without a permit upon the request of the governing body of a Tribe. Section 223.240 provides regulations regarding harvest of special forest products by Tribes with treaty or other reserved rights.

The following elements authorize and guide cultural resource management activities on the HLC NFs.

- Heritage Program Managed to Standard Performance Measures, 2011
- National Historic Preservation Act Programmatic Agreement regarding the Maintenance of Historic Buildings by the Region 1 Historic Preservation Team, 1992, as amended, and protocols
- National Historic Preservation Act Programmatic Agreement regarding the Management of Cultural Resource on National Forests in Montana, Programmatic, 2015, as amended, and protocols (Eastside Site Identification Strategy, travel management, bark beetle-hazard tree)
- Northern Region Historic Structure Assessment and Historic Preservation Plan
- Preserving Montana, The Montana Historic Preservation Plan, 2013-2017
- Historical Overview of the Helena and Deerlodge National Forest (Beck, 1989)
- Overview: Ecological and Cultural Prehistory of the Helena and Deerlodge NF (Knight 1989)

- Ethnographic Overview of Selected Portions of the LCNF and Adjacent BLM lands (Deaver 1995)
- Lewis & Clark Trail on the Helena NF Preservation Plan (Scott 2001)
- Charter Oak Mine and Mill Preservation Plan (Davis 2003)
- Mann Gulch Fire Historic Landscape Preservation Plan (Randall 2014)

3.24.3 Assumptions

- Only ~10% of the HLC NF has been inventoried for cultural resources. It is likely that additional cultural resources exist in areas that have not yet been inventoried.
- Increases in access can have a negative impact on cultural and historical resources due to unauthorized use, vandalism, and looting.

3.24.4 Best available scientific information used

Heritage specialists determine whether existing cultural resource data is adequate to complete the environmental analysis and disclose potential effects on cultural resources. If the information is insufficient, additional research and inventory is undertaken as needed. Where additional inventory is needed, heritage personnel design a survey strategy to locate all historic properties within the area of potential effect. This strategy is designed in accordance with the criteria defined in “Site Identification Strategy Prepared for the East Side Forest”. If a survey discovers previously unknown cultural resources, those resources are recorded and their National Register eligibility status determined in consultation with the Montana State Historic Preservation Office. Both background research and fieldwork are documented in a Section 106 report submitted to the State Historic Preservation Office. The Heritage Specialist consults with the State Historic Preservation Office to determine the nature of the project’s effects on significant properties. If needed, the Heritage Specialist and the State Historic Preservation Office work together to determine appropriate project redesign, restrictions, designation of sensitive areas, or mitigation measures. The heritage specialist coordinates recommendations, actions, and monitoring with the project leader, the State Historic Preservation Office, and interested Tribal preservation officials.

Tribal knowledge and perspectives on cultural resources also represent a valuable source of information that can complement formal resource surveys and research. Their different systems of knowledge and belief are increasingly being accommodated in agency cultural resource management practices. Traditional cultural knowledge, sacred sites, and other places of tribal importance are now part of agency government-to-government and National Historic Preservation Act dialogue and interaction with tribes, and the HLC NF’s heritage program will continue to consider traditional knowledge as an important source of information.

3.24.5 Affected environment

Central Montana was once a kaleidoscope of indigenous (American Indian) cultures. The plan area is the ancestral homeland and travel way of native bands now referred to as the Blackfeet, Chippewa Cree, Confederated Salish and Kootenai, Crow, Eastern Shoshone, Gros Ventre, Assiniboine, Sioux, Nez Perce, Northern Arapahoe, Northern Cheyenne, Shoshone-Bannock and the Little Shell Tribes (Aaberg et al 2007; Deaver 1995;(Knight, 1989). Most prominent among the groups found in the plan area were those historically known as the Blackfeet, Gros Ventre, Salish, Kootenai and Metis. Today, these groups retain an active culture with an unbroken tie to the greater plan area.

Aboriginal use of the plan area over the centuries is thus manifest in hundreds of archaeological sites in addition to sacred sites and other areas of traditional cultural importance. The arrival of the Lewis and Clark and the Corps of Discovery to the plan area in 1805 marks the beginning of the historic period for central Montana. Following the Corps of Discovery’s eastward departure from the plan area in 1806, a slow trickle and then a tide of trappers and explorers entered central Montana. The discovery of gold in

and around Helena ushered in a wave of settlement and land use that transformed the plan area’s natural and political landscape (Beck, 1989). The first farming of the plan area began in the fertile river valleys adjacent to the mining camps (ibid). The entry of the railroads into the area boosted the agricultural industry considerably. Not only did railroad access provide transport for produce, it sought out and attracted farmers to Montana. The late 1910s and early 1920s brought severe drought and depression. The cattle industry in the plan area began with the use of the Oregon Trail in the 1840s. Continued mining and small scale lumbering, ranching and homesteading typified the use of the plan area during the 1870s and 1880s. The first several decades of Forest administration saw each forest following similar trends as other NFs in the interior Northwest. Mapping of the forest occurred along with the establishment of initial communication lines, fire lookout locations and administrative sites.

The history of the plan area left behind hundreds of cultural and historic resources, and their condition varies by resource class, location, and age. Site monitoring and condition assessments of historic properties show a range of condition from “excellent” to “destroyed”. Taken as a whole, historic properties across the plan area exist in fair condition.

3.24.6 Environmental consequences

Effects common to all alternatives

Compliance with the National Historic Preservation Act Section 106, and all other applicable federal laws and regulations, are required for all FS undertakings, regardless of the chosen alternative. The identification, evaluation, nomination, protection, and interpretation of cultural and historic resources would occur under all alternatives. Coordination and consultation with interested parties would also continue in accordance with federal laws and regulations. Sites eligible for listing in the National Register of Historic Places would be evaluated and formally nominated to the Register. Protection protocols and mitigation measures would be used to preserve resources that are inadvertently discovered. All alternatives thus provide protection for cultural resources consistent with National Historic Preservation Act.

The effects to tribal interests are defined by tribes during consultation. Current management direction and requirements for consultation have been designed to ensure that areas on NFS lands that are important to Native Americans are not inadvertently impacted by the FS. Because management direction is required to follow all federal laws and regulations in respect to American Indian Rights and Interests, related effects are the same across all alternatives.

Effects common to all action alternatives

All action alternatives contain plan components that explicitly state the desired conditions for cultural, historical, and tribal resources and provide guidance for achieving these desired conditions (See Table 251). Collectively, these plan components serve to ensure that potential adverse effects from land management and visitor use are avoided or minimized. The action alternatives also contain plan components designed to ensure that tribal knowledge and values are considered in management decisions and to provide access to the forest for traditional and ceremonial uses.

Table 251. Summary of revised plan components for cultural, historic, and tribal resources

Plan component	Intent and Expected effects
FW-CR-DC-01, 03, 04	These DCs would help ensure that the public has the opportunity to visit and learn about cultural and historical sites as well as participate in conservation activities through volunteer programs.
FW-CR-DC-02; FW-RSUP-DC-04	These DCs are designed to ensure that historic buildings continue to provide for functional use while also reflecting local history and identity.

Plan component	Intent and Expected effects
FW-CR-GO	These goals outline a process for supporting cultural resource inventories, research, management, and preservation through the use of cooperative agreements and partnerships as well as consultation with Native American tribes and traditional cultural practitioners.
FW-CR-GDL	This GDL is designed to ensure that maintenance of significant sites is designed in a way that includes conservation and preservation measures.
FW-CONNECT-DC-02, 03; FW-CONNECT-DC-GO-08, 09; FW-CONNECT-OBJ-02, 03; FW-CONNECT-GDL-01	Collectively, these plan components help to ensure that cultural and historic resources are conserved and appreciated through the provision of high-quality interpretive and educational programming that promotes conservation and stewardship. The guideline stresses that education should emphasize stewardship principles such as “Leave no Trace” to help minimize potential visitor impacts to natural and cultural resources.
BB-MISCORR-DC-03,04, 05	These components apply to the historically and culturally significant Missouri River Corridor and are designed to protect its unique cultural values and enhance appreciation of its history through education. DC-05 ensures that the historical and cultural resources are not degraded by potential increases in visitor use.
RM-BTM-DC-01	These components apply to the Badger Two Medicine Area, which has significant traditional and cultural value to the Blackfeet people. Plan components are designed to protect the cultural values of this area and ensure access for tribal members for ceremonial and cultural activities.
FW-TRIBAL-DC	These desired conditions recognize the importance of accommodating traditional, cultural, and religious uses of the forest that are essential to sustaining the way of life and cultural integrity of local tribes. Together, they ensure that sustainable populations of culturally significant flora and fauna remain available for harvest and that access to the Forest for the exercise of treaty rights is accommodated.
FW-TRIBAL-GO	These goals are designed to ensure that consultation with tribal members and the development of collaborative relationships enhances both knowledge and conservation efforts.
FW-REC-DC-04, 07; FW-RSUP-DC-02	These DCs are designed to ensure that recreation facilities, infrastructure, and their use do not harm cultural sites and resources.

Effects from forest plan components associated with:

Infrastructure and access

All action alternatives include plan components designed to provide public access to key cultural and historical resources while also ensuring adequate protection for these resources. While the development and maintenance of infrastructure such as roads and trails has the potential to affect cultural and historical resources through ground disturbance, both plan components and legal direction ensure that any potential effects are considered and mitigated. Roads, trails, camping areas, and other infrastructure would be designed in such a way as to minimize any negative impacts associated with their construction and use.

Ease of access affects the degree of visitor use, and visitors have the potential to harm cultural and historical resources either inadvertently via trampling, which could expose sites and adversely affect their physical integrity, or through vandalism and looting, which result in the degradation or loss of cultural and historical artefacts. The proximity of sensitive cultural resources, such as rock art, rock shelters, historic structures, and Traditional Cultural Properties, to designated routes or areas is important when determining where resources could be susceptible to greater threats or risks. To minimize potential adverse effects, plan components associated with recreation infrastructure direct the construction of trails and barriers where needed to protect sensitive resources. Plan direction associated with visitor education can also help to minimize impacts from visitor use. Increased access may also have a positive impact on cultural and historical resources if it increases the rate of discovery of new cultural or historical sites.

Motorized vehicle use can be particularly harmful due to the potential for increases in both ground disturbance and ease of access. Unauthorized, user-created routes and areas can negatively affect historical and cultural resources. Direct effects of motorized use include physical damage resulting in or from erosion, down-cutting, rutting, or displacement of cultural features. Because adverse effects on cultural resources have been observed where motorized users have gone off road, the action alternatives provide direction to close and rehabilitate unauthorized recreation routes (FW-ACCESS-DC-01, GDL-01) in an effort to minimize future damage. Indirect effects associated with motorized vehicle uses include vandalism and looting, and can occur outside of designated routes and areas, such as at adjacent dispersed camping areas. Any adverse effects can be mitigated through compliance with plan direction and Section 106 of the National Historic Preservation Act.

The action alternatives also emphasize collaborating with tribal partners to ensure continued access to culturally significant areas. While tribes may traditionally have reached these places by foot or horseback, today, motorized vehicles are essential for reaching some locations, especially for elders who can no longer walk long distances. The Forest would consult with tribes when access and recreation management activities may impact treaty rights and/or cultural sites and cultural use. There is some potential risk to sacred sites where American Indians conduct ceremonies that require privacy. If a road were built to or near such a site, the associated increase in visitation could make it difficult to conduct ceremonies there, undermining the important cultural practice. A tribe could request the HLC NF to temporarily close the site to nontribal members for a short period under the 2008 Farm Bill Authority.

Sacred sites are likely to be located in these areas. There is still a potential that landscape integrity and sacred sites may be affected because of the activities that are permitted under the action alternatives. However, prior to implementing resource management activities impacts on Tribal government and Tribal practices would be assessed and consultation requirements fulfilled.

Recreation management

Recreation can potentially affect cultural, historical, and tribal resources through its effects on both ground disturbance and visitor use. Ground disturbance may occur either directly, through the construction and management of recreation sites, or indirectly, through the use of motor vehicles for recreation. All action alternative contain plan components designed to avoid or mitigate these effects. As described above, new roads, campsites, trails, and other recreation infrastructure would be designed in a way that minimizes any adverse effects from construction and protects cultural and historical resources from the effects of future visitor use.

Recreation plan components emphasize providing opportunities for visitors to connect with and learn about both the natural *and cultural* environment. These opportunities could help to instill a sense of stewardship in forest visitors, potentially minimizing impacts to cultural and historical sites through careless use or direct vandalism.

The HLC NF manages portions of both the Continental Divide National Scenic Trail and the Lewis and Clark National Historic Trail, both of which have significant cultural and historical value. Plan components associated with management of these trails ensure that they conserve important cultural and historical resources while allowing visitors an opportunity to learn about the local history. The action alternatives all emphasize the use of partnerships to help protect cultural resources along these trails and enhance visitor experiences through the development of interpretive materials and programs.

Eligible wild and scenic rivers

Several of the river segments that are identified as eligible to become WSRs are eligible at least in part due to their outstanding cultural value. Eligible WSRs must be managed to maintain the outstanding remarkable values for which they have been identified, which could result in greater protection for these river segments. Plan direction further specifies that any recreation facilities “must be located and designed

to harmonize with the natural and cultural settings” (FW-WSR-STD-01), which would ensure that any development would not detract from the cultural value.

Recreational use does have the potential to affect cultural and historic resources near eligible rivers, but the recreation plan components described above would also apply near eligible WSRs and would serve to avoid or mitigate any adverse effects associated with visitor use.

Vegetation management

The plan components for vegetation management, including timber harvest and planned or unplanned ignitions, have the potential for adverse effects to cultural resources. The adverse effects can be caused by machinery and vehicles, including tree felling, skidding, and burning of slash piles and construction or reconstruction of roads. Any adverse effects can be mitigated through compliance with Section 106 of the National Historic Preservation Act.

All action alternatives include plan components that would help to restore vegetation to its natural condition and maintain resilient forests, which may provide protection to cultural and historical resources that could be negatively impacted by severe wildfires or other disturbances. Maintaining the integrity of ecosystems and associated plants and wildlife may also enhance the ability of tribes to harvest native species with cultural value and ensure that vegetation at sacred sites resembles what it would have historically.

Minerals

Mineral activities such as mining and oil and gas exploration can have adverse effects on tribal resources and culturally important landscapes, but the action alternatives include plan components designed to avoid or mitigate these effects. The Forest would consult with tribes when mineral management activities may impact treaty rights, cultural sites, or traditional uses. The action alternatives place a greater emphasis on ongoing communication and collaboration with tribal stakeholders compared to alternative A.

Alternative A, no action

The existing forest plans are focused on Section 106 compliance and do not consider a balance between compliance, stewardship, and protection of cultural and historical resources. However, numerous federal laws and regulations exist for the protection and enhancement of these resources regardless of any forest plan direction. Compliance with federal laws and regulations would continue.

Alternative A does not include identified traditional/cultural special areas. Therefore, it does not provide the Forest with specific direction for the management of these areas. Alternative A does have a forestwide standard for cultural resources that requires the Forest to consult with Native American traditional religious leaders on any project having the potential to affect Native American cultural sites and practices.

Alternatives B - E

Protection of cultural and historic resources is expected to be higher under all action alternatives, compared to alternative A, due to more specific and actionable plan components and collaborative management approaches. For alternatives B - E the plan directions are the same and only the size and location of the land allocations change, resulting in differences in the potential for active management, motorized recreation, and public access.

Differences in the potential for ground disturbance

More management can mean more potential for harm related to ground disturbance. At the same time, an increase in projects may result in the discovery of new cultural resources and would provide the heritage program an opportunity to conduct National Historic Preservation Act Section 106 inventories, which in

turn creates a more complete picture of how people have used the landscape. More motorized recreation could also increase the possibility of disturbance to sensitive cultural and historical resources.

Alternative E would treat fewer acres due to its emphasis on timber harvest, so it has the lowest potential for ground disturbance to cultural and historical resources due to management activities. All other alternatives treat more acres than alternative E and the amount does not differ, so they would have a similar possibility of ground disturbance from management. Any impacts from land management would be small and could be avoided or mitigated by following plan direction and complying with applicable laws and regulations.

Alternative E has the greatest number of roads and trails open to motorized recreation, followed by A, C, B, and then D. Alternative E thus has the greatest potential for ground disturbance from motorized recreation while alternative D has the least due to its emphasis on RWAs. These impacts are also expected to be small, and would be further minimized by following the plan direction in the action alternatives.

Differences in public access and associated impacts

Greater public access can also mean more potential harm to cultural and historical resources due to trampling, vandalism, and looting. Different alternatives propose different amounts of RWAs or differences in motorized and mechanized access within them, which can affect ease of access and visitor use. Alternative D would provide the most RWAs, and therefore, the greatest protection to cultural, historical, and tribal resources through limited use. Alternative E does not recommend any RWAs, and so provides the least protection from visitor use and active land management. While alternatives B and C recommend the same amount of wilderness, alternative C allows existing motorized and mechanized recreation to continue, which would potentially result in greater access and greater impacts due to ground disturbance from motorized vehicles.

Differences in tribal access for traditional and ceremonial uses

While roads can increase access and consequently the potential for harm from visitor use, they also provide access for managing cultural sites and visiting areas of tribal importance. Those alternatives with the least motorized access (alternatives D and B) could have a negative effect on tribal access, even though lack of access may also help to preserve and protect tribal resources from use and vandalism by non-tribal members. All action alternatives would rely on forestwide elements specific to American Indian Rights and Interests to recognize impacts that may result from wilderness and primitive management.

Cumulative Effects

Cumulative effects, over time, can include loss and damage to cultural, historical, and tribal resources. The effects that past activities have had on cultural, historical, and tribal resources are reflected in the current condition of these resources as described in the affected environment section.

Cultural, historical, and tribal resources on many of the lands surrounding the HLC NF are also protected by law. All federal land management agencies must follow the same federal laws and regulations in regards to cultural resources. All state owned land must follow the Montana State Antiquities Act as amended 1995 or the administrative rules written by the State Historic Preservation Office in 1999. Private land is not required to follow any laws or regulations in regards to cultural resources, with the exception of human skeletal remains. If human skeletal remains are found on public or private land the Montana Human Skeletal Remains and Burial Site Protection Act (1999) applies, or applicable federal laws.

Conclusions

Management actions that result in ground or structural disturbance have the potential for effects to cultural resources and sacred sites, but all action alternatives include components designed to avoid or minimize any adverse effects. Furthermore, potential effects are identified, detailed, and disclosed during site-specific analysis, which gives the FS the opportunity to determine appropriate mitigation, avoidance, and protection measures. Thus, the consequences to cultural resources from actions associated with other programs such as fire and fuels management, access and recreation, vegetation management and non-native invasive plant management programs are estimated to be minimal or avoidable under all alternatives.

Visitor use also has the potential to harm cultural and historical resources, and so differences in access can affect the potential for harm and associated mitigation measures. All action alternatives contain components designed to minimize this risk using education and strategic placement of recreation infrastructure to protect sensitive resources. Access to sacred sites is also a key issue for local Tribes. While some alternatives do provide fewer restrictions on access, the Forest would collaborate with Tribes to accommodate access to and ceremonial use of sacred sites under all alternatives.

3.25 Lands

3.25.1 Introduction

This section addresses land ownership administration, adjustments, and special uses of NFS lands on the Forest. Management of NFS land includes surveying, marking, and posting of ownership boundaries, acquisition, conveyance and exchange of lands and interests in lands, disposition of title claims and encroachments, acquisition of rights-of-way, and authorization and management of land use authorizations to protect resource values and interest of the public managed by the FS.

Adjustments of land ownership can occur through congressionally mandated conveyances, exchanges, and acquisitions, or through discretionary FS administrative activities.

Land occupancy and use by private parties and other government entities is managed through the issuance of special use authorizations. Authorized special uses on the HLC NF include industrial or commercial uses, private uses, and a variety of recreational uses.

All occupancy, use, or improvements on NFS lands that are not directly related to timber harvest/forest products, grazing, mining activities, and recreation are referred to as ‘lands special uses.’ The most common lands special uses include: roads, utilities, storage facilities, communications sites, research, water transmission, and commercial filming. Recreation special uses include: resorts, ski areas, outfitter and guides, and a variety of uses that provide access and use of NFS lands by commercial ventures.

3.25.2 Regulatory framework

The following is a select set of statutory authorities that govern landownership adjustments and the issuance and administration of special use authorizations on the HLC NF. They are briefly identified/described below to provide context to the management and evaluation of these resources. There are multiple other laws, regulations and policies not described below that also guide the management of these programs; see FSM 2700, 5400, and 5500 for a comprehensive listing.

Law and executive orders

Occupancy Permits Act of March 4, 1915 (16 U.S.C. § 497 et seq.) as amended: This act authorizes use and occupancy on NFS land for recreational purposes including resorts and recreation residences.

General Exchange Act of March 20, 1922 (16 U.S.C. 485, 486): This act authorized the FS to consolidate its holdings in NFs where a large percentage of private lands were intermingled with NFS lands. It made possible the exchange of inholdings within NFs for private lands of equal value and within the same state.

Highway Act of August 27, 1958 (23 U.S.C. 317), supplemented by the Act of October 15, 1966 (49 U.S.C. 1651): This act authorizes the Federal Highway Administration to grant easements to States for highways that are part of the federal-aid system or that are constructed under the provision of chapter 2 of the Highway Act. The FS consents to the grant of these easements in a form agreed upon by the two agencies and upon the state highway agency's execution of stipulations. This is the only authority for granting rights-of-way for projects on the federal-aid system or projects constructed under the provisions of chapter 2 of the Highway Act (FSM 2731).

The Act of November 16, 1973 (30 U.S.C. 185): This act, amending Section 28 of the 1920 Mineral Leasing Act, authorizes the FS to issue authorizations for oil and gas pipelines and related facilities located wholly on NFS land. When the lands are under the jurisdiction of two or more federal agencies, authority for issuance is reserved to the USDI, BLM, subject to approval by the agencies involved.

Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3210): provides numerous authorities related to access that are specific to national forests in Alaska (except for sec. 1323(a), which applies to all NFS lands; see the following paragraph b). The provisions of section 1323(a) (16 U.S.C. 3210) apply to all NFS lands. This section provides that, subject to terms and conditions established by the Secretary of Agriculture, the owners of non-federal land within the NFS shall be provided adequate access to their land. Regulations implementing section 1323(a) are set forth at Title 36, Code of Federal Regulations, Part 251, and Subpart D -Access to Non-federal Lands. See FSM 2701.3, paragraph 3, for the summary of the provisions of 36 CFR 251, Subpart D.

Small Tracts Act of January 12, 1983 (16 U.S.C. 521c-521i): This act authorizes the sale, exchange, or interchange of certain parcels of minimal size.

Need to add organic act of 1956 authorizes acquisition of lands and interests in lands. This is the primary authority used by the FS to purchase lands.

Act of May 26, 2000 (16 U.S.C. 406l-6d): This act supplements the authority of the Secretary of Agriculture to regulate commercial filming and still photography on NFS lands. It also authorizes the Secretary to retain and spend land use fees collected for commercial filming and still photography without further appropriation, and provides for recovery of administrative and personnel costs in addition to the collection of the land use fee.

March 22, 2012, Executive Order 13604, Improving Performance of Federal Permitting and Review of Infrastructure Projects, states that “it is critical that executive departments and agencies take all steps within their authority, consistent with available resources, to execute Federal permitting and review processes with maximum efficiency and effectiveness...”

August 8, 2005, Energy Policy Act of 2005, Section 1211(c), Access Approvals by Federal Agencies (Public Law 109-58), states “Federal agencies responsible for approving access to transmission and distribution facilities located in the U.S. shall expedite any Federal agency approvals that are necessary to allow the owners or operators of such facilities to comply with reliability standards regarding vegetation management, electric service restoration, or resolution of situations that imminently endanger the reliability or safety of the facilities.”

May 18, 2001, Executive Order 13212, Actions to Expedite Energy-Related Projects, orders executive departments and agencies to take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy.

Code of Federal Regulations (CFR)

The following regulations provide direction for special uses management on NFS lands:

- **36 CFR 251** – Land Uses
- **36 CFR 254** – Landownership Adjustments

3.25.3 Assumptions

As population increases, expected trends include a greater use of NFS lands by the recreating public, particularly those areas close to population centers. There is also expected to be more development of private lands adjacent to forest and on private inholdings within the forest boundary. Private access needs will likely increase. This may also result in challenges from other land owners to existing and perceived access to NFS lands, as private landowners are becoming more reluctant to grant easements. Access in general across all NFS lands is becoming more difficult to obtain. This is expected to continue into the future.

3.25.4 Best available scientific information used

The Forest used the best available data and science relevant to inform the analysis for the draft plan components for lands and land uses. Data sources included information stored in the corporate data base and site-specific knowledge from forest personnel.

3.25.5 Affected environment

Lands

The total acres of NFS lands that are the administrative responsibility of the Forest are a result of the original Congressionally-designated lands and the conveyances (acquisitions, disposals, and exchanges) that have occurred to date. The HLC NF landownership pattern varies with location. The pattern can be characterized as:

- Large blocks of uninterrupted, contiguous NFS lands;
- NFS lands surrounding isolated tracts of private lands;
- NFS lands surrounded by isolated tracts of private lands;

Ownership

In 1986 when the current forest plans went into effect, the HLC NF included 2,825,580 acres of NFS lands. Since 1986, NFS ownership has increased by 20,906 acres on the Lewis and Clark NF portion and increased by 5,257 acres on the Helena NF portion of the forests.

There have been other land acquisitions across the Forest utilizing appropriated funds, typically through the Land and Water Conservation Fund. Additionally, the Forest periodically exchanges lands for the mutual benefit of each party and the public. While there are still some areas of the HLC NF that have intermingled ownerships of land, there are no significant acquisitions or exchanges of lands in process, partly due to decreased lands funding.

Special uses

Some uses of NFS lands are covered by special use authorizations, including permits, leases, and easements that allow occupancy, use, rights, or privileges on the HLC NF.

The HLC NF currently administers 295 Lands Special Use Authorizations that are issued within the plan area (Table 252). These include current authorizations and authorizations that have expired. In the instances of authorizations that have expired, the use is still occurring and annual fees are being collected.

Table 252. Special Use Authorizations

Type of Use	Number of Authorizations
Agriculture	82
Community and Public Information	11
Feasibility, Research, Training, Cultural Resources and Historical	12
Industry	2
Energy and Gas Transmission	22
Transportation	115
Communication Uses	41
Water	7
Military Training and Facilities	3
Total	295

Lands special uses range from permits for individuals to use NFS land for their driveways, to more extensive uses such as powerlines, fiber optic cable, telephone lines, and oil and gas pipelines that cover many miles of NFS lands. Other land uses include communications towers, research studies, fences, signs, and service buildings.

The majority of the land use authorizations are for transportation-related uses and the majority of recreation uses are for recreation residences. There are a large number of unauthorized transportation uses in the plan area. With recent travel plan decisions, roads accessing private land that were open to the public in the past have been closed to public use. Use of these roads by private landowners requires a special use authorization. At present, the FS lacks the resources it needs to manage the special uses program (Office of Inspector General Audit findings, 2011). For this reason, the HLC NF special use program has not had the resources to process the large number of special use road authorizations which would allow legal use of these roads by private landowners.

In the current forest plans, utility rights of way and communication sites are not identified. The Regional Office has recommended that each forest plan should include three basic elements to identify suitable utility corridors and communication sites: 1) text or reference in the plan itself, 2) maps, and 3) tables.

Access

In this section, access refers to the easements held by the U.S. government and administered by the FS across non-NFS land for the management of NFS lands. This generally and preferably includes access by the public across these lands. There will likely be more challenges to historic access that currently exists and a greater need to perfect access to NFS lands. The FS will continue to pursue reciprocal right of way opportunities in an effort to continue securing access.

There is a need to identify those areas where there are access issues and to continue pursuing access in these areas.

3.25.6 Environmental consequences

Effects common to all alternatives

None of the alternatives propose to make any site-specific changes to the existing landownership on the HLC NF. No conveyances (acquisitions, disposals, or exchanges) are proposed. Any of these actions would only be considered at the project level. Until an external entity presents a proposal there would be no changes to the existing landownership pattern.

Since no changes in landownership are proposed, the number of acres of NFS lands remains the same for all four alternatives. None of the alternatives propose to make any site-specific changes to existing special use authorizations or rights-of-way on the HLC NF.

Due to differences in RWAs and lands suitable for timber production between alternatives, there could be an effect on the number of new access proposals that would be submitted resulting in a larger workload for land uses staff. These effects are described below in each alternative.

Cumulative Effects

At this time the HLC NF is not actively pursuing any adjustments in landownership. But, in recent years, external entities have made land acquisitions and have transferred ownership to the NFs; and there is some likelihood that these types of actions may continue. Any change (increase or decrease in total NFS lands) is dependent on what actions might be approved. Outright purchase and transfer would most likely result in an increase in the acres of NFS lands. Land exchanges, on the other hand, may result in a decrease in the acres of NFS lands. There are some small community based conveyances occurring on the forest. There may be an increase in the number of these conveyances.

The Forest can expect requests for special use authorizations to continue. As more private land is subdivided there is usually an associated increase in requests for road special use permits and utility easements. Requests for modification of existing authorized communication sites and designation of new communication sites can reasonably be expected as technological advances (e.g., cell phones) are made. On the HLC NF these sites typically occupy small acreages (1 to 2 acres).

Boundary survey and marking would increase with vegetation management and fire programs. Along with this, more encroachments are likely to be discovered.

Activities on adjacent lands under private ownership and from other land management agencies such as state, city, county and private may have an effect on land management in the planning area. An example would be the Black Butte mine project in the Sheep Creek area of the Little Belts, which may potentially impact adjacent land and management of NFS lands in the area.

Effects common to all action alternatives

Effects from forest plan components associated with:

Vegetation management

Vegetation management would increase the need for easements to be acquired and reciprocal right-of-way opportunities. There would be an increased need for boundary management which likely would daylight encroachments that were not previously known.

Wildlife management

NFS lands that provide secure habitat or contribute as linkage areas are less likely to be considered for disposal or exchange. The impact is the same for the four alternatives since the lands where these conditions exist does not vary between the alternatives.

Recreation management

NFS lands with developed recreation sites (e.g., campgrounds) are less likely to be considered for conveyance or exchange.

Fire and fuels management

Unplanned and prescribed fires would continue to affect the long-term ecological processes across recreation settings and may impact the location and availability of recreation opportunities on the Forest. Fire could create a temporary loss of vegetation, reduction in water quality due to sedimentation, and air

pollution which could cause displacement of some forest visitors to other areas on the forest or to other forests in the region. There is a need to increase landownership consolidation of non-NFS and NFS lands for easier fire and fuels management.

Road access and infrastructure

For those areas with high development and use of FS roads by private landowners, the HLC NF would ask counties to enter into Forest Roads and Trails Act easements. Forest roads are maintained at a level suitable for FS administrative purposes not for access to private. They are not maintained for residential development, only for NF management.

Alternative A, no action

The existing plans include standards for elk security. These standards conflict with vegetation management along utility corridors.

This alternative proposes to seek land adjustments and acquire easements to support long term forest goals and objectives. The plan also provides for special uses that private land cannot support and uses that support forest goals and objectives.

Alternative B

Lands and land uses will not change under this alternative. This alternative could have an effect on new access proposals in RWAs. This alternative also includes plan components that would provide additional direction for approval of land uses in riparian areas.

Alternative C

This alternative could have an effect on new access proposals in RWAs. Alternative C also includes plan components that would provide additional direction for approval of land uses in riparian areas.

Alternative D

This alternative could potentially create a larger workload to special uses because it would not allow mechanized uses and would change to non-motorized use during the winter, which could increase the workload for authorizing access to private inholdings. This alternative also includes plan components that would provide additional direction for approval of land uses in riparian areas.

Alternative E

This alternative includes no RWAs and the highest amount of lands suitable for timber production. This could affect land values and would possibly increase the need for access to timber management areas. This alternative also includes plan components that would provide additional direction for approval of land uses in riparian areas.

Conclusions

Land adjustment activities would not vary in any of the alternatives, including alternative A. However, the action alternatives would include plan components that would provide additional direction for approval of land uses in riparian areas, and there could be differences in access needs by alternative.

By providing the plan components outlined in the action alternatives, the HLC NF meets the purpose and need of the revised forest plan because there are no significant impacts to land adjustments, access, ownership or special uses which provide for multiple uses.

3.26 Infrastructure

3.26.1 Introduction

Broadly, the infrastructure on the HLC NF includes roads, trails, bridges, facilities, and dams. The programmatic effects analysis focuses on the transportation system. The transportation system for the HLC NF is defined as the system of NFS roads, NFS trails, and airfields on NFS lands (36 CFR 212.1). Please see the recreation and access section for discussion on access and effects to NFS trails and motorized over-snow vehicle use, as well as airfields.

The HLC NF expects to maintain an appropriately sized and environmentally sustainable road system that is responsive to ecological, economic, and social concerns. The NF road system of the future would continue to provide access for recreation and resource management, as well as support watershed restoration and resource protection to sustain healthy ecosystems.

Effects to the NF road system are measured by the miles of open road within RWAs.

Analysis area

The geographic scope of the analysis includes NFS lands administered by the Forest. All lands within the Forest boundary form the geographic scope for cumulative effects. The temporal scope of the analysis is the life of the plan (15 years).

3.26.2 Regulatory Framework

Term Permit Act of March 4, 1915 (Pub. L. 63-293, Ch. 144, 38 Stat. 1101, as amended; 16 U.S.C. 497): This act provides direction to the NFS lands to authorize occupancy for a wide variety of uses through permits not exceeding 30 years.

Highway Safety Act of September 9, 1966 (Pub. L. 89-564, 80 Stat. 731, as amended): This act authorizes state and local governments and participating federal agencies to identify and survey accident locations; to design, construct, and maintain roads in accordance with safety standards; to apply sound traffic control principles and standards; and to promote pedestrian safety. The Highway Safety Improvement Program and the Safety Performance Management Measures Final Rules (effective April 14, 2016) addresses the requirements of the Moving Ahead for Progress in the 21st Century Act and the Fixing America's Surface Transportation Act. The Highway Safety Improvement Program Final Rule updates the existing Highway Safety Improvement Program requirements under 23 CFR 924 to be consistent with Moving Ahead for Progress in the 21st Century Act and the Fixing America's Surface Transportation Act, and to clarify existing program requirements. The Safety Performance Management Measures Final Rule adds part 490 to title 23 of the CFR to implement the performance management requirements under 23 U.S.C. 150, including the specific safety performance measure requirements for the purpose of carrying out the Highway Safety Improvement Program to assess serious injuries and fatalities on all public roads.

Federal Aid Highway Act of 1968, as amended (23 U.S.C. 109(a) and (h), 144, 151, 319, and 351): Establishes the National Bridge Inspection Standards (23 CFR Part 650, Subpart C) and the requirement that each state have a current inventory of bridges on all public roads, including NFS roads open to public travel (FSM 1535.11).

Surface Transportation Assistance Act of 1978 (Pub. L. 95-599, as amended). Supersedes the Forest Highway Act of 1958: Authorizes appropriations for forest highways and public lands highways. Establishes criteria for forest highways; defines forest roads, forest development roads, and forest development trails (referred to as "NFS roads" and "NFS trails" in FS regulations and directives); and

limits the size of projects performed by FS employees on forest roads. Establishes the Federal Lands Highway Program.

Moving Ahead for Progress in the 21st-Century Act of July 6, 2012 (Pub. L. 112-141): Replaces the Federal Lands Highway Program with the Federal Lands Transportation Program and Federal Lands Access Program. This act authorizes funding for federal lands transportation facilities and federal lands access transportation facilities under a unified program with policy similar to federal-aid highways and other public transportation facilities. It requires federal land management agencies to identify a comprehensive inventory of public federal lands transportation facilities that, at a minimum, includes the transportation facilities that provide access to high-use federal recreation sites or federal economic generators.

National Best Management Practices for Water Quality Management on National Forest System Lands, Volume 1: National Core BMP Technical Guide, April 2012: The first volume of guidance for the FS, U.S. Department of Agriculture, and National Best Management Practices Program. The National BMP Program was developed to improve agency performance and accountability in managing water quality consistent with the Federal Clean Water Act and state water quality programs. Current FS policy directs compliance with required Federal Clean Water Act permits and state regulations and requires the use of National BMP Program to control nonpoint source pollution to meet applicable water quality standards and other Federal Clean Water Act requirements. It includes road management activity National BMP Program for construction, operation, and maintenance for roads and motorized trails.

36 CFR 212—Travel Management This final rule requires designation of those roads, trails, and areas that are open to motor vehicle use. Designations are made by class of vehicle and, if appropriate, by time of year. This rule prohibits the use of motor vehicles off the designated system, as well as use of motor vehicles on routes and in areas that is not consistent with the designations. Subpart B provides for a system of NFS roads, NFS trails, and areas on NFS lands that are designated for motor vehicle use. After these roads, trails, and areas are designated, motor vehicle use, including the class of vehicle and time of year, not in accordance with these designations is prohibited by 36 CFR 261.13. Motor vehicle use off designated roads and trails and outside designated areas is prohibited by 36 CFR 261.13. Subpart C provides for a system of NFS roads, NFS trails, and areas on NFS lands that are designated for over-snow vehicle use. After these roads, trails, and areas are designated, over-snow vehicle use not in accordance with these designations is prohibited by 36 CFR 261.14. Over-snow vehicle use off designated roads and trails and outside designated areas is prohibited by 36 CFR 261.14.

The Road Management Rule 2001. This rule “removes the [prior rule’s] emphasis on transportation development and adds a requirement for science-based transportation analysis.” “The intended effect of this final rule is to help ensure that additions to the NFS network of roads are those deemed essential for resource management and use; that, construction, reconstruction, and maintenance of roads minimize adverse environmental impacts; and finally that unneeded roads are decommissioned and restoration of ecological processes are initiated” (Federal Register Vol. 66, No 9, pg. 3206).

Subpart A of the Rule pertains to Administration of the Forest Transportation System. In part, Subpart A requires each unit of the NFS to: 1) identify the minimum road system (MRS) needed for safe and efficient travel and for protection, management, and use of NFS lands (36 CFR (CFR) 212.5(b)(1)); and 2) identify roads that are no longer needed to meet forest resource management objectives (36 CFR 212.5(b)(2)). In determining the MRS, the responsible official must incorporate a science-based roads analysis at the appropriate scale.

3.26.3 Assumptions

Due to the extensive evaluation of RWAs and the effort to identify areas with the least amount of infrastructure, facilities and bridges would be minimally impacted across all alternatives and therefore only motorized access will be compared between alternatives.

3.26.4 Best available scientific information used

The FS uses the best available science when implementing construction and maintenance activities. Please see the regulatory framework section for more information.

3.26.5 Affected Environment

Forest system roads

NFS roads are under the jurisdiction of the FS. They are wholly or partly within or adjacent to NFS lands. The FS determines the necessity of these roads for the protection, administration, and utilization of NFS lands and the use and development of its resources. Roads managed by public agencies (such as states, counties, and municipalities) that provide access to NFS lands are also informally considered part of the overall regional transportation system, but do not fall under the jurisdiction or direction of the NFS. These roads are not included in this evaluation.

In 2015 the Forest completed a travel analysis report. This broad-scale analysis encompassed all existing NFS roads on the Forest. The report provides an assessment of the road infrastructure and a set of findings and opportunities for change to the forest transportation system. This report provides information to forest managers regarding the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands.

The travel analysis report is used by the Forest to prioritize maintenance needs and identify opportunities for decommissioning roads, or putting them in intermittent stored service as the Forest works to identify the minimum number of routes needed for an efficient transportation system as directed in 36 CFR 212 subpart A. The travel analysis report identified NFS roads as “not likely needed for future use”. These roads may be considered candidates for conversion to another use, storage for future use, or removal through decommissioning. Other roads that were rated as “high risk” were identified as candidates for storage for future use, reconstruction or relocation, or additional road maintenance. Roads considered as “low risk” are the first to be considered for reduced road maintenance (i.e., change to a lower maintenance level).

Neither the travel analysis report nor the draft plan makes travel management decisions. Site-specific, project level analysis is required to make travel management decisions, including road closure, storage, or decommissioning.

NFS roads are designated by design (vehicle classifications and use) and maintenance standards for each road. Roads are generally constructed and maintained wide enough (>12 feet) for typical cars and trucks. Since many of the roads were initially constructed for vegetation management objectives, the design vehicles were lowboys or logging trucks. Roads are constructed to grades usually less than 12 percent to allow grade-ability for most highway vehicles. The FS uses five maintenance levels to define the general design standards, use, and associated type of maintenance required. These five maintenance levels are:

- Maintenance level 1. These are roads that have been placed in storage between intermittent uses. The period of storage must exceed one year. Basic custodial maintenance is performed to prevent damage to adjacent resources and to perpetuate the road for future resource management needs. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur. Roads managed at this maintenance level are in basic custodial care.

- Maintenance level 2. These roads are open for use by high clearance vehicles. Passenger car traffic, user comfort, and user convenience are not considerations. Warning signs and traffic control devices are generally not provided. Motorists should have no expectations of being alerted to potential hazards while driving these roads. Traffic is normally minor, usually consisting of one or more of a combination of administrative, permitted, dispersed recreation, or other specialized uses. Roads managed at this maintenance level are described as high clearance vehicle roads.
- Maintenance level 3. These roads are open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not priorities. Roads in this maintenance level are typically low speed with single lanes and turnouts and are included in the term “passenger car” roads. These roads are maintained for travel by a prudent driver in a standard passenger car.
- Maintenance level 4. These roads provide a moderate degree of user comfort and convenience at slow to moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated. Maintenance level 4 roads are collectively maintained for travel by a prudent driver in a standard passenger car.
- Maintenance level 5. These roads provide a high level of user comfort and convenience at slow to moderate travel speeds. The roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated. Maintenance level 5 roads are collectively maintained for travel by a prudent driver in a standard passenger car.

These roads fall under the requirements of the National Highway Safety Act and the Manual of Uniform Traffic Control Devices. Warning signs and traffic control devices are provided to alert motorists of situations that may violate expectations.

Forestwide, there are approximately 2,569 miles of road that are open for public use either seasonally or year round. Roughly 1,593 miles of these roads are open for high clearance vehicles and 976 miles are open for passenger cars. Additionally, there are 1,082 miles of NFS roads within the plan area that are currently in custodial care (closed to public motorized use).

Table 253 provides information related to the distribution of roads by maintenance level and GAs within the plan area. Some roads under the jurisdiction of the FS fall outside of the GA boundaries. These roads are owned and/or maintained by the FS on private lands, have easements in place with private land owners, or are situations where necessary easements are being pursued by the FS.

Table 253. Overview of NFS roads by maintenance level

Geographic Area	ML 1 (Miles)	ML 2 (Miles)	ML 3 (Miles)	ML 4 (Miles)	ML 5 (Miles)	Total (Miles)
Outside GA ¹	21	33	69	37	3	163
Big Belts	333	205	142	26	0	706
Castles	3	50	21	3	0	77
Crazies	7	26	11	0	0	44
Divide	216	201	97	38	1	553
Elkhorns	114	123	35	15	0	287
Highwoods	1	9	2	0	0	12
Little Belts	166	562	235	58	0	1021
Rocky Mountain Range	14	53	33	26	8	134
Snowies	14	48	16	1	6	85
Upper Blackfoot	193	283	86	9	1	572
Total Miles	1,082	1,593	747	213	19	3,651

1. Areas where roads under NF jurisdiction are not located on NFS land.

The total number of miles of NFS roads within the plan area has steadily been declining over the past ten years. Miles of road decommissioning has become an assigned accomplishment target. The miles of roads decommissioned are shown in Table 254. The roads that have been decommissioned were routes that were no longer needed, routes that were decommissioned to eliminate resource damage, or roads that were acquired through land exchange and are not needed.

Road maintenance practices and policies

The maintenance level of roads, as well as the amount of attention the roads receive annually, varies widely. Some of the roads are in poor locations, which increases maintenance needs and the risk that sediment from the road surface could enter the adjacent streams. The FS works to prioritize road maintenance in annual maintenance plans. These plans are based on projected budgets, the amount of traffic individual roads receive, and damage created by environmental factors such as flooding and erosion.

Routine road and bridge maintenance work (brushing, blading, ditch, culvert cleaning, deck cleaning, etc.) is periodically performed on approximately 2,500 miles of maintenance level 2, 3, 4, and 5 roads as funding allows and in most cases they are kept in a drivable condition for their designed use. The approximately 1,100 miles in maintenance level 1 (which includes roads treated for intermittent stored service), however, do not receive routine maintenance work.

Table 254 provides a summary of the accomplishments from 2007 and 2014. There has been a steady increase in the emphasis on decommissioning of both system and non-system roads over the past several years. The emphasis on decommissioning roads for specific resource concerns is expected to continue.

Table 254. 2007-2014 road maintenance accomplishments (miles)

Accomplishment Item		FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Road Maintenance	High Clearance Roads	319	333	407	461	340	20	0	4
	Passenger Car Roads	394	335	417	625	390	217	162	143
Road Improvements	High Clearance Roads	5	0	0	8	1	14	2	0
	Passenger Car Roads	16	22	6	21	2	8	0	13
Road Reconstruction	Passenger Car Roads	0	0	0	0	0	0	2	0
Road Decommissioning	All Roads	25	57	59	79	59	138	69	180

Administrative facilities

The management of buildings and other structures is held under FSM 7310. Forests are mandated to develop a facilities master plan as a guide to facilities planning. These documents are continuously updated.

Administrative facilities are typically buildings and their appurtenances necessary to support the employees, equipment, and activities necessary for the management of the NFs. These are commonly called fire, administrative, and other. Administrative facilities are separate from recreation facilities. Administrative facilities include fire stations, offices, warehouses, and shops as well as living quarters such as barrack and individual residences. Living quarters are partially supported by rental receipts, while administrative and other facilities are financially supported through annual budget appropriations.

There are two supervisor offices which serve the HLC NF plan area; one is located in Helena, MT and the other one is located in Great Falls, MT. Both of these administrated offices are leased facilities. There are

eight ranger district offices dispersed throughout the forests as well as the Lewis and Clark Interpretive Center and the Augusta Information Station. The Helena Ranger District, which is co-located with the Helena NF Supervisor’s Office and the Townsend Ranger District Office and Warehouse, the Judith Ranger Station, the Musselshell Ranger District, the Rocky Mountain Ranger District and Augusta Information Station are leased facilities. The Lincoln Ranger District, Belt Creek Ranger District, White Sulfur Spring Ranger District, and the Lewis and Clark Interpretive Center are NFS facilities.

There are approximately 245 FS-owned fire administrative and operations buildings. The rehabilitation or replacement of existing forest facilities that do not meet current operational standards and the disposal of those facilities that are considered surplus to the forest operational needs is a focus for the Forest program. There are actions underway to remove these facilities from the forest and from the inventory. There are approximately 20 structures that have been identified as excess across the HLC NF.

Road bridges

There are approximately 138 road bridges under the jurisdiction of the FS within the HLC NF plan area. The majority of these structures meet or exceed the minimum criteria for bridge condition. Approximately 11 are at an intolerable or minimum tolerable limit for condition.

FS policy requires two-year inspections on every bridge under FS jurisdiction. Bridges must be repaired and replaced with road maintenance funding, with a small number of structures being replaced through the capital investment program.

Many bridges within the planning area were constructed to support the timber program and are over 30 years old. Older bridges were often built with the abutments at the very edge of streams and often encroach on the stream, and are no longer in compliance with BMPs. Table 255 describes the number of bridges within the planning area, the GA in which they are located, and information concerning the condition of these structures.

Table 255. Road bridge location and condition in the HLC NF plan area

GA	Intolerable: requires high priority replacement	Meets minimum tolerable limit	Somewhat better than minimum adequacy	Equal to minimum criteria	Better than minimum criteria	Equal to desirable criteria	Superior to desirable criteria	Totals
Big Belts			1	4	1	7		13
Castles			2		1			3
Crazies				3	1			4
Divide		1	1	4	3	4		13
Elkhorns				1	1	3		5
Highwoods		1	1	1	1	2		6
Little Belts	1	6	13	16	5	5		46
Rocky Mountain		2	5	2	11	2		22
Snowies			1	2				3
Upper Blackfoot			2	4	9	6	2	23
Totals	1	10	26	37	33	29	2	138

Facilities, Dams

There are six dams in the HLC NF planning area that have been identified by the infrastructure database. These dams are inspected by the FS or by private contractor. Table 256 shows the list of dams that are located within the HLC NF planning area. The records for these dams are held at the supervisor's office and in the infrastructure database. These dams are maintained and operated by the FS, the City of Helena, or private entities. The Teague dam is privately owned and located in the Big Belt GA. This dam has not been inspected recently because it falls below the FS capacity requirements of retaining greater than 13 acre-feet of water.

Table 256. Dams by GA

GA	Dam Name	Operation Condition	Owner/Operator	Hazard Classification
Big Belts	Gipsy Lake Dam	Limited Operations	FS	Low
Big Belts	Teague	Fully Operational	Private	Low (<12 acre feet)
Divide	Chessman Dam	Fully Operational	City of Helena	Medium
Divide	Park Lake Dam	Fully Operational	FS	High
Rocky Mountain	Wood Lake Dam	Fully Operational	FS	Low
Upper Blackfoot	Mike Horse Dam	Fully Operational	FS	Low

The following information about these dams shows the relative condition of each of them. More specific information is located in the infrastructure database and in files at district offices:

- Gipsy Lake Dam is in poor condition with an under designed spillway and substantial vegetation growing over 100% of the structure. There is substantial leakage around the outlet works.
- Teague Dam is a private dam that holds back less than 13 acre feet.
- Park Lake dam is in very good condition, having been recently rebuilt. There is an early warning system in place for this structure.
- Chessman Dam, located within the Divide GA, is operated by the City of Helena.
- Park Lake Dam has an early warning system in place which is inspected and monitored by a private engineering firm located in Helena.
- Wood Lake Dam is in good condition with maintenance required on the gate controls and brushing of the embankments needed.
- Mike Horse Dam holds back mine tailings and will be removed as soon as the tailings are removed from behind the dam.

3.26.6 Environmental Consequences

Effects common to all alternatives

Road, bridge, and facility maintenance (both recurrent and deferred) would continue to occur, as funding allows. Physical conditions would continue to be addressed through maintenance activities and be based on public health and safety, resource protection, and mission priorities. Annual operating budgets and supplemental funding would likely fluctuate, resulting in varying maintenance accomplishments from year to year.

The drivability of maintenance level 1 roads can be expected to continue to diminish as roads revegetate.

*Effects from forest plan components associated with:***Fire and fuels management**

Fuels management activities (e.g., prescribed burning) and fire suppression actions are likely to continue under all alternatives. Administrative use of gated roads that normally prohibit motor vehicle use yearlong is likely when these management activities occur.

Fire suppression actions are also likely to continue and could result in the use of gated roads. In some cases, roads in storage (maintenance level 1) that are impassible to motor vehicle use (due to re-vegetation or other restrictive condition) may be opened to facilitate suppression actions. These roads would probably be used for the duration of suppression efforts and post-fire work then returned to their previous status. Bridge load ratings are required for all road bridges and due to the age of many of the bridges, may limit the capacity of the bridge, requiring overload permits for the equipment used for fire suppression activities.

Wildlife management

Habitat security requirements and other mitigation measures for grizzly bear can be expected to affect motorized access under all alternatives. Where roads and the access they provide are necessary, limitations on road construction and operating seasons can be expected to affect public access. Areas most affected would be bear management units in the Northern Continental Divide Ecosystem primary conservation area. The standards and guidelines associated with the Grizzly Bear Conservation Strategy would be incorporated in all alternatives.

Minerals management

The FS does not initiate exploration or development of mineral or energy resources. Proposals for exploration and development are regulated by existing mining law. Access and road development (long-term or temporary) are often associated with mineral exploration and development, but a site-specific analysis would be required prior to any approval for exploration or development activities.

If any mine reclamation activities occur they would likely, but not always, use existing roads. These may be roads that are not currently designated for motor vehicle use. They would likely be used for the duration of the reclamation work and then returned to their previous status. New roads, trails or other types of access may be approved for a proposed mining operation as long as the proposal is incident to mining and within the scope of the next logical phase of mining development and subject to a site specific analysis.

Aquatic ecosystems management

Watershed improvement activities are likely to continue under all alternatives. The consequences to motor vehicle access to implement watershed improvements are expected to be minimal. Activity that would occur on roads that are generally not designated for motor vehicle use are treatments to reduce sediment production and transport sediment to surface waters or to provide for aquatic organism passage. Actions taken might include culvert removal, out-sloping of road prisms, or the removal of unstable fills.

Watershed treatments will continue to be completed on roads that are designated for motor vehicle use and may result in traffic delays or temporary road closure of open roads while construction occurs.

Effects common to all action alternatives

Table 257 describes the effects common to all action alternatives, based on draft plan components.

Table 257. Summary of plan components and their effects to infrastructure

Plan component	Expected effects
FW-WTR-GDL-02	Installation of drainage features would increase the stability of the road and reduce its deterioration for long term storage.
FW-CWN-OBJ-01	Repairing stream crossings would protect the road and avoid future road failure during high water event.
FW-CWN-GDL-02	Due to limited funding allocations for road maintenance, prioritizing road maintenance and obliteration to travel routes that directly affect streams verses roads that are ecologically disconnected from streams, may result in roads with higher public use not receiving road maintenance, reducing their drivability.
FW-RMZ-GDL-04 & FW-RMZ-STD-01	Avoiding construction of roads in RMZs may reduce access or increase cost of construction.
FW-VEGT-GDL-01	User safety and facility protection need to be considered when limiting vegetation removal.
FW-WL-GDL-10	Due to high deferred maintenance costs and national direction to reduce excess infrastructure, removal of buildings housing bats may be necessary and mitigation measures may be required.
FW-RECWILD-SUIT-08-09, FW-WSA-GDL-05-06	New administration facilities may be required for management activities due to travel time.
FW-CR-DC-02	Maintaining cultural and historic characteristics of existing buildings may result in increased costs for building materials and the use of less maintenance free products.
FW-RT-OBJ-01-03	The number of miles decommissioned, maintained, reconstructed or improved varies on available funding and the number vegetation management projects contributing to road management activities.
FW-RT-STD-02	Requiring all new, reconstructed and replaced crossings to meet the 100-year flow event would increase the cost and limit the number completed each year but provide increased road protection during high water events.
FW-RT-GDL-01	No effect.
FW-RT-GDL-02 & 04	Installation of drainage features would increase the stability of the road and reduce its deterioration for long term storage.
FW-RT-GDL-05 & 07	Not locating roads on lands with high mass wasting potential or wetlands and unsuitable areas would increase the stability and longevity of the road but may result in increased construction costs to avoid those areas.
FW-RT-GDL-10	Requiring annual operating plans on all new, reconstructed and replaced crossings in fish bearing streams would increase the cost and limit the number completed each year but provide increased road protection during high water events.
FW-BRDGE-DC-01, 02	These DCs would ensure that bridges and culverts are managed to provide safe access while protecting natural and cultural resources, and provide for aquatic organism passage.
FW-BRDG-GDL-01	No effect.
DI-FAH-STD-01	Requiring all new crossings to meet the 100-year flow event would increase the cost and limit the number completed each year but provide increased road protection during high water events.

*Effects of plan components associated with:***Aquatic ecosystems management**

Under all action alternatives, FW-RMZ-STD-01, delineating the size of riparian areas, would now limit road construction activities according to Categories 1-4, on both sides of the Continental Divide, which may result in reduced access and/or increased construction costs.

There are numerous plan components in infrastructure (FW-RT-STD-01 through 04; FW-RT-GDL-01 through 12) that are designed to minimize sediment from roads to waterbodies. Generally, these plan components would not affect the public use of roads except for decommissioned roads which would be more difficult to travel on but would improve road conditions through proper BMPs and maintenance.

Alternative A, no action

The no-action alternative is represented by the existing 1986 Forest Plans, as amended (See Table 258). There are three RWAs in this alternative, where mechanized means of transport and limited motorized uses are allowed. About 4.0 miles of open roads that are currently within the RWAs, within the Big Belts and Divide GA, would continue to be used as open motorized routes.

Under the no-action alternative, the current forest plan would continue to apply national BMPs and west of the continental divide directions from INFISH would be carried forward. The existing plan was developed to provide guidance and objectives to build the infrastructure that was needed to support land management activities for the future and those objectives have been achieved and continued growth in infrastructure is no longer needed at the rate laid out in the 1986 plans.

Table 258. Summary of existing plan components and their effects to infrastructure

Plan component	Expected effects
Facilities, Objective Lewis & Clark NF	Increasing the existing road system by an average 17 miles/year for the next 50 years is not sustainable or needed.
Facilities, Objective Helena NF	Increasing the existing road system by an average 22 miles/year over the next decade is not sustainable or needed.
Facilities, Road Standard 3	Not locating roads, trails and other linear features on lands with high mass wasting potential would increase the stability and longevity of the roads but may result in increased construction costs to avoid those areas.
INFISH RF-2d	No effect.
INFISH RF-2f	Requires minimizing side casting into or adjacent to waterbodies when blading roads and plowing snow. This only applies to INFISH priority watersheds. No effect.
INFISH RF-4	Requires installation of a 100-year crossing structure where “a substantial risk to riparian conditions” may exist. This is less stringent than the revised plan component which requires all new, reconstructed and replaced crossings to meet the 100-year flow event.

Effects that vary by alternative

Alternative B is the proposed action. There are nine RWAs in this alternative. Motorized and mechanized means of transport in RWAs would not be allowed. About 11.8 miles of open roads that are currently within the RWA, the Snowies GA may need to be removed from the system after site-specific analysis. In addition, about 57 miles of closed roads (maintenance level 1) that are currently within the RWAs may need to be removed from the system after site-specific analysis.

Under alternative C, the RWAs are the same as alternative B, but existing motorized and mechanized means of transport would be allowed. About 11.8 miles of open roads that are currently within the RWA, within the Snowies GA, would continue to be used as open motorized routes.

Alternative D represents more undeveloped recreation areas, and includes the greatest amount of RWAs and least amount of lands suitable for timber production. Motorized and mechanized means of transport in RWAs would not be allowed. About 23 miles of open roads that are currently within the RWAs, within the Big Belts, Castles, Little Belts, Snowies and Divide GA, may need to be removed from the system after site-specific analysis. In addition, about 130 miles of closed roads (maintenance level 1) that are currently within the RWAs may need to be removed from the system after site-specific analysis.

Alternative E represents the most motorized use on NFS lands and would require no removal of open roads as a result of not identifying RWAs.

Effects from forest plan components associated with:

Vegetation management

Commercial timber harvest activities would generally result in road maintenance, reconstruction and continued application of BMPs on existing NFS roads. New road construction is likely to be limited and temporary road construction used as a more common method for short-term access needs.

Administrative use of gated roads that normally prohibit motor vehicle use yearlong would be likely when management activities such as pre-commercial thinning, invasive weed treatments, or other non-commercial silvicultural treatments are planned.

Bridge load ratings are required for all road bridges and due to the age of many of the bridges and may limit the capacity of the bridge, requiring overload permits for the equipment used for commercial timber harvest activities.

Alternative E would generally be expected to result in the least amount of vegetation management activities and result in a lower amount of road use compared (respectively) to alternatives A, B, C and D. Consequently, reduced traffic (i.e., number of vehicles on roads), both commercial and administrative, can be expected for alternative E. Associated with reduced commercial use is the reduction of road reconstruction to standard and BMPs work. Road and bridge maintenance activities done in conjunction with commercial use would also occur less often since this work is only required commensurate with use.

Cumulative effects

The Forest is likely to be influenced by a variety of factors. Given the mixed land ownership (state lands, corporate timberlands) in and around the Forest, and the continuing management actions taken on these lands, there may be options for new access opportunities through cooperative and cost-share agreements.

Commercial traffic (timber hauling) can be expected to fluctuate to some degree, relative to vegetation management activities. Market conditions and other external factors can often influence activity levels. These traffic conditions are usually limited to relatively small GAs and short periods of time. Hauling occurs more often during the summer months, but is not uncommon during the winter months as well.

Change in ownership of private lands can result in continued requests for road access across NFS lands. Depending on the circumstances, these may be requests for forest or private road special use authorization. Depending on the terms and conditions written into any new authorizations, opportunities for access to NFS lands may be created.

State and local government agencies with road management authority can be expected to continue to maintain their existing road network across the Forest. Some changes such as widening, resurfacing, and bridge replacements are probable but are dependent on budgets and funding allocations. The likelihood of jurisdiction of NFS roads being passed to other public road agencies is low.

Some adjacent lands are subject to their own management plans. The cumulative effects of these plans in conjunction with the HLC NF revised forest plan are summarized in Table 259, for those plans applicable to roads and bridges.

Table 259. Summary of cumulative effects to infrastructure from other resource management plans

Resource plan	Summary of effects
Forest Plans of Adjacent National Forests	The Flathead, Lolo, Beaverhead-Deerlodge, and Custer-Gallatin NFs are adjacent to the HLC-NF, and share boundaries on specific GAs (Rocky Mountain Range, Upper Blackfoot, Divide, Elkhorns, and Crazies). The Flathead and Custer-Gallatin are currently in forest plan revision under the 2012 planning rule. The Beaverhead-Deerlodge is guided by a recent forest plan (2009) developed under the 1982 rule. The Lolo is guided by a 1986 forest plan and is expected to undergo revision relatively soon. Generally speaking, management of infrastructure is consistent across NFs due to consistency in law, regulation, and policy. The management of the specific areas that are adjacent would be complementary across boundaries.
BLM Resource Management Plans	The Butte, Missoula, and Lewistown field offices manage lands that are intermixed with the HLC-NF. The Missoula and Lewistown areas are currently in revision. The Butte area is guided by a recent plan (2009). At a broad scale, the themes of the plans are similar to the HLC NF; infrastructure would be generally be managed in a similar manner and with similar results.
County growth plans	Many of the county growth plans associated with the HLC NF plan area emphasize an interest in recreational uses and access, water quality and wildfire protection which are consistent with the infrastructure plan components.

Conclusions

Under the no-action alternative, the current forest plan would continue to apply national BMPs. West of the continental divide, directions from INFISH would be carried forward. In all action alternatives, plan components developed to support and improve watershed and aquatic management areas, including creation of RMZs, which would increase the GA where road construction limitations are applied. This change would likely result in a decrease in possible motorized access in those areas and an increase in construction costs to avoid RMZs.

RWAs would have a direct effect on motorized use across the GAs and would vary across all action alternatives as well as the no-action alternative. Alternative D proposes the most RWAs and contains the most open road within those areas followed by alternatives B, C, A and E where there are no RWAs and therefore no effect to open roads. In all alternatives, the total number of miles of open road that would be effected by RWAs would be minor compared to the total number of miles of open roads across the Forest.

Road, bridge and facility maintenance (both recurrent and deferred) would continue to occur, as funding allows. Physical conditions would continue to be addressed through maintenance activities and be based on public health and safety, resource protection, and mission priorities. Road and bridge maintenance would continue under all alternatives but maintenance activities would tend to be greater in the alternatives that allow for more commercial timber harvest activities, alternatives D, C, B A and E respectively.

Plan components in the draft plan that would require all new, reconstructed and replaced crossings to meet the 100-year flow event would increase the cost and limit the number completed each year but would provide increased road protection during high water events.

Under all alternatives, administration facilities would continue to be repaired or replaced to meet current operational standards. They would be disposed of if they are considered surplus to the forest operational needs. Action plan components that maintain cultural and historic characteristics of existing buildings may result in increased costs for building materials and the use of less maintenance free products.

Under all alternatives, the FS would continue to maintain dams in working condition and will continue to work with other agencies regarding their operations. The FS would continue to inspect these structures in compliance with the designated frequency.

3.27 Social and Economics

3.27.1 Introduction

The mission of the FS is to sustain the health, diversity, and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations. The HLC NF lands both influence, and are influenced by, local and national publics. Local communities, particularly those adjacent to NFS lands, benefit from a multitude of goods and services provided by the Forest and the FS. These societal benefits are often referred to as ecosystem services, which are defined “as goods and services provided wholly or in part by ecosystems and that are of value to people” (Olander et al. 2015). The Forest’s ecosystem services, alongside infrastructure and operations, are the main ways that public lands contribute to social and economic sustainability. Many local communities were formed based on availability of roads and ecosystem goods and services such as timber, minerals, grazing lands, and other natural resources. Historically, individuals in these communities have benefited from a host of services such as recreation, scenery, employment and opportunities to connect with nature. The general public across the U.S. also benefit from the HLC NF. The key benefits the Forest and the FS provide include: recreation, income, jobs, scenery, clean water, cultural, historic and tribal resources, designated areas (e.g. wilderness), fire suppression, fish and wildlife, grazing, infrastructure, timber, other forest products and wood for fuel, energy and minerals, public information, interpretation and education and carbon storage and sequestration.

The 2012 Planning Rule states that plans are to guide management so that forests and grasslands contribute to social and economic sustainability, providing communities with ecosystem services and multiple uses that deliver a range of social, economic, and ecological benefits in the present and into the future. Specifically, plan components must include standards or guidelines to guide the plan area’s contribution to social and economic sustainability, taking into account ecosystem services as well as multiple uses that contribute to local, regional, and national economies and communities in a sustainable manner. Furthermore, reasonably foreseeable risks to societal benefits shall be considered when developing the forest plan.

This section, therefore, (1) describes the social and economic conditions of the affected environment using key indicators of social and economic sustainability; (2) describes how key benefits of the Forest currently contribute to social and economic sustainability of beneficiaries, both locally and at a broader scale (3) evaluates the impacts of the proposed forest plan and alternatives on the benefits the Forest provides to local beneficiaries and the general public.

The Assessment identified an analysis area for the social analysis of 13 primary area counties and seven secondary areas counties. The factors for determining the social analysis area include recreational visitation, travel corridors, and social and cultural identity. The counties where the HLC NFs are located and that meet most of these factors are considered “primary analysis area counties”, or primary areas. The counties that do not meet most of these factors and do not contain HLC NFs land are considered “secondary analysis area counties”, or secondary areas.

The 13 primary counties are grouped into four areas:

- West: Broadwater, Jefferson, Lewis and Clark, Powell Counties
- North: Glacier, Pondera, Teton Counties
- Central: Cascade, Chouteau Counties
- East: Meagher, Judith Basin, Wheatland, Fergus Counties

Secondary area counties include:

- Missoula County