

MOTORIZED TRAVEL MANAGEMENT PROJECT

DRAFT HERITAGE RESOURCES REPORT

Prepared

by

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Introduction

On the Okanogan-Wenatchee National Forest, heritage resources are archaeological and historic sites defined by artifacts and/or the remains of buildings and structures; places and landscapes of religious, sacred and traditional importance to contemporary culture; and single artifacts or objects that represent past human activities/culture.

Heritage resources are important because they provide insight into human adaptation to the environment over time. Individually and cumulatively they reflect the challenges faced by humans and through their study, they explain and define success, failure and ultimately, the origin of cultural diversity today. For many Americans heritage resources are windows to the past; of importance in terms of explaining and understanding their cultural origin. Heritage resources with the greatest potential to provide insight into human nature, and/or that are associated with culturally important individuals, events, and objects are listed on or eligible for nomination to the National Register of Historic Places (NRHP) and as such, are given consideration in planning for federally licensed, approved or funded activities. The protection and preservation of these resources is the goal of heritage resource management on the Okanogan-Wenatchee National Forest.

Regulatory Framework

Regulatory direction relevant to travel management and its effects to heritage resources includes:

The National Historic Preservation Act (NHPA) of 1966, as amended

This Act and its implementing regulations (36 CFR 800) provide comprehensive direction to federal agencies about their historic preservation responsibilities. The Act established the federal government's policy and programs on historic preservation, including the establishment of the National Register of Historic Places (NRHP). Section 106 of the Act requires federal agencies having direct or indirect jurisdiction over a proposed federal or federally assisted or permitted undertaking to take into account the effect an undertaking may have on historic properties listed on or eligible for the National Register, and it affords

the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on such undertakings. It allows federal agencies to develop programmatic agreements for complying with Section 106 of the Act. On the Okanogan-Wenatchee National Forest, Section 106 is implemented in accordance with a 1997 programmatic agreement entitled, "Cultural Resources Management on National Forests in the State of Washington".

Executive Order 11593: Protection and Enhancement of the Cultural Environment.

Issued May 13, 1971, this E.O. directs federal agencies to inventory heritage resources under their jurisdiction; to nominate heritage resources to the National Register of Historic Places; to use due caution until inventory and nomination processes are completed, and to assure that federal plans and programs contribute to preservation and enhancement of non-federally-owned properties.

USDA Forest Service Policy for Section 106 Compliance in Travel Management: Designated Routes for Motor Vehicle Use.

This policy was developed in 2005 in consultation with the Advisory Council on Historic Preservation. It outlines minimal requirements for considering possible effects to historic properties that may be associated with designating routes and areas as part of a national forest's transportation system. While it clearly recognizes that establishment of policy is a planning effort with no potential to affect historic properties, the following actions/activities are considered "undertakings" with the potential to affect heritage resources and as such, trigger consideration under Section 106 of the NHPA:

- construction of a new road or trail;
- authorization of motor vehicle use on a route currently closed to vehicles; and
- formal recognition of an unauthorized (usually user-developed) route as a designated route open to motor vehicles.

It further states that existing, formally established system (classified) roads and trails, already open to motor vehicle travel, generally need not be re-evaluated for purposes of this rule. Designation of the existing system on a motor vehicle use map (MVUM) will not

generally be considered an undertaking for the purposes of NHPA and not subject to Section 106 review because it is actively being managed.

The proposed action and alternatives considered in this Travel Management project do not include any construction of new roads or trails, authorization of motor vehicles use on a route currently closed to vehicles, or formally designating unauthorized routes open to motor vehicles. They do include designating corridors for motorized access to dispersed camping, where motorized vehicles would be allowed on existing user-created routes only. These user created routes would not be individually designated.

The Area of Potential Effect (APE) for the road, trail, or area shall include corridors or zones adjacent to the road, trail, or area that the Forest determines to be subject to direct or indirect effects due to local environmental factors or the proximity of particularly sensitive resources. This will include the road, trail, or area surfaces, passing or parking areas, and campsites or other features established as part of the road or trail. It shall also include additional affected areas or properties if the designation would facilitate increased access to those historic properties. When a Forest proposes an unclassified, user-created road, trail, or area for addition to the designated route system, or when opening an existing route to a new use, the agency official must make a determination as to the potential for that designation to have an effect on historic properties. If there is no effect to any historic properties because there are no historic properties present or because the designation will not affect any historic properties, then the process may conclude with this determination provided that the Forest issues a determination of no effect.

Designations of new or unclassified routes must be based on appropriate inventory of historic properties within the APE, considering local conditions and inventory protocols, the degree to which designation of a route will change existing use patterns, and the probability of finding historic properties. Monitoring of impacts to historic properties as the result of motor vehicle activity is a critical component of forest plan monitoring and OHV designation.

Okanogan and Wenatchee National Forest Plans

The Forest Plans provide guidance for heritage resource management. Management direction in both plans requires compliance with federal laws and regulations governing heritage resource management and emphasizes protection, and evaluation and nomination of heritage resources to the National Register of Historic Places (USDA Forest Service 1989, 1990).

Best Available Science for Analyzing and Determining Effects

Information for the effects analysis was gathered from Okanogan-Wenatchee Heritage Program GIS data, heritage resource reports and records; archaeological, historic, and ethnographic overviews; the Washington State Department of Archaeology and Historic Preservation; by field inventory conducted by cultural resource specialists (CRS) and para-professionals working under the direct supervision of a CRS, and from consultation with Tribal Historic Preservation Officers (THPO) for the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation respectively.

Methodology

Alternative A is the no action alternative which per ***USDA Forest Service Policy for Section 106 Compliance in Travel Management: Designated Routes for Motor Vehicle Use***, requires no re-evaluation for purposes of this rule “*Designation of the existing system on a motor vehicle use map (MVUM) will not generally be considered an undertaking for the purposes of NHPA and not subject to Section 106 review because it is actively being managed.*” Alternatives B, C and D adopt the existing system of designated roads, motorized trails and the two motorized use areas of Funny Rocks and Moon Rocks but add corridors to some ML 2-5 roads.

To analyze effects to heritage resources through the adoption of corridors, the Forest’s GIS heritage resource layer was applied to each alternative. Each corridor was defined as a maximum of 300 feet either side of a system road for the total distance or length of

the corridor. The 100 foot set back from streams within corridors was not applied so that indirect effects on heritage resources from dispersed camping in corridors could be considered. The APE for the Moon Rocks and Funny Rocks motorized use area was defined as the boundary of each area.

The type of heritage resource (e.g., cabin, prehistoric fishing village, lookout) was irrelevant because the Forest's management of heritage resources is based on their National Register status as listed, eligible, ineligible or unevaluated. The National Register of Historic Places (the Register) is the official list of heritage resources recognized as having national, state, or local significance in history, architecture, archaeology, engineering and/or culture, and considered worthy of preservation. The Park Service maintains the Register on behalf of the Secretary of the Interior. In order to guide the selection of properties included on the Register, the Park Service has developed standards by which every property nominated to the Register is judged. These criteria state that quality of significance in American history is present in districts, sites, buildings, structures, and objects that are at least fifty years old and possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

- a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- b) that are associated with the lives of persons significant in our past; or
- c) that embody the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master; or
- d) that have yielded, or may be likely to yield, information important in history or prehistory (36 CFR 60.4).

Heritage resources that meet one or more of the above criteria are considered "historic properties", and are eligible for nomination to, and listing on, the Register. All heritage resources are considered eligible for the National Register pending formal evaluation.

The GIS data was translated into Excel spreadsheets listing the number of National Register listed, eligible, and unevaluated (potentially eligible) heritage resources by alternative as follows:

- heritage resources located across 2.6 million acres which are currently open to motorized use and include existing system ML 1-5 roads, and motorized system trails (Alternative A)
- heritage resources within a road corridor (ML 2-5 roads), system motorized trails, and two motorized use areas (Alternates B, C and D)

Heritage resources determined ineligible for the National Register were not considered.

Through this process the number of heritage resources under alternatives A, B, C, and D was determined. Okanogan-Wenatchee National Forest heritage resource reports and records and the Washington State Department of Archaeology and Historic Preservation's GIS database were consulted and it was determined that under alternatives B, C and D portions of some corridors had not been inventoried while other corridors had been inventoried but no heritage resources or eligible heritage resources are present. The Moon Rocks and Funny Rocks motorized use areas (Alternatives B, C and D) had been recently inventoried for cultural resources. A single isolate was documented in the Moon Rocks motorized use area but it was determined ineligible for the National Register.

Per ***USDA Forest Service Policy for Section 106 Compliance in Travel Management: Designated Routes for Motor Vehicle Use***, the expectation is that all corridors associated with the selected alternative will be inventoried for heritage resources. Surveys would be conducted by Cultural Resource Specialists (CRS) or para-professionals working under the direction of a CRS. Field work would tier to the Forest's heritage resource probability model which would be used to prioritize the order in which corridors are inventoried.

Okanogan-Wenatchee National Forest Archaeological Sensitivity Model

High Probability – 100 Percent Surveys Required. Based on the type of undertaking (i.e. potential to affect heritage resources) consider shovel probes or surface scraps where visibility is poor.

- terrain with 15% or less slope within 500 feet (150 meters) of perennial water sources
- locations of known or suspected heritage resources
- major ridgelines (including continuous and feeder ridge tops, saddles, divides and gaps)
- wet and dry meadows with 15% or less slope
- floodplains of 15% or less slope of main branches of drainages and major confluences
- rhyolite domes (obsidian sources)
- margins of springs, ponds, lakes, and marshes
- rock outcrops and talus slopes
- other terrain of 15% or less slope along edges of major ridge systems/travel ways

Moderate Probability – Complete Survey of 35% of Acres Classified as Medium

- isolated, discontinuous ridges
- floodplains and benches of intermittent streams
- terrain with 15% or less slope farther than 500 feet (150 meters) from perennial water sources

Low Probability – Complete Survey of 5% of Acres Classified as Low

- terrain with slopes greater than 15% excluding cliffs, talus slopes, rock shelter areas
- lodge pole pine stands with ash or pumice mantles
- steep forested and non-forested slopes
- heavily forested areas with no water source

Corridors located in high probability areas would be inventoried first followed by corridors in moderate and low probability areas. The goal will be to identify as many eligible, listed or unevaluated heritage resources as possible and to assess effects to them before impacts from motorized use result in determinations of adverse effect.

Pending completion of those inventories, the State Historic Preservation Officer (SHPO), the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation have concurred with the Forest's monitoring plan which focuses on areas where documented heritage resources and motorized use overlap within corridors. Monitoring can only be conducted by a CRS because it involves assessment of effect.

Analysis Area & Boundary Rationale

The area of analysis for determining direct and indirect effects to heritage resources is the Forest outside of designated wilderness areas; more specifically, heritage resources located within a corridor. The Moon Rocks and Funny rocks motorized use areas have been inventoried for heritage resources and no heritage resources are present within these areas. While it is possible for a heritage resource located on an inholding or on private and public lands adjacent to the Forest boundary to be affected because it's visible (e.g. cabin, rock shelter), the effort to identify heritage resources within a corridor is designed to capture those resources as well.

Assumptions Specific to Heritage Resources

General assumptions are outlined in Chapter 3 of this document but the following are specific to heritage resources:

- Under the existing open-travel management system, heritage resources are and will continue to be affected by unauthorized motorized use.
- Allowing WATVs on ML 2-5 roads will not change the effects of the existing licensed vehicle traffic.
- Restricting motorized use to ML 2-5 roads, system motorized trails, to existing routes within corridors, but no closer than 100 feet of water, will be effective in substantially reducing if not eliminating impacts to heritage resources located in areas that would otherwise be open to motorized use.
- High numbers of heritage resources are expected in corridors adjacent to rivers and streams due to terrain and abundant natural resources past and present.

- Over time all corridors under the selected alternative will be inventoried for heritage resources.
- Adverse effects to heritage resources will be mitigated.
- Monitoring of heritage resources located within a corridor in combination with an adaptive management strategy will be effective in preventing adverse effect.
- Motorized restrictions provide adequate protection to heritage resources in corridors.
- Travel Management Planning will benefit the management of heritage resources on the Forest by focusing management where needed.
- Restricting motorized use to existing system, corridors and two motorized use areas, will limit opportunities for motorized use across the Forest but may concentrate use in some areas which may impact heritage resources more intensively if present.

Existing Condition

Heritage resources are nonrenewable resources that can be affected by motorized vehicles. Soil erosion, crushing of artifacts, relocation of artifacts, and destruction of a feature such a hearth or foundation, are examples of direct effects attributed to vehicles.

More than 2,500 heritage resources have been documented on the Okanogan-Wenatchee National Forest since passage of the National Historic Preservation Act in 1966. Seasonal hunting, gathering and fishing camps, and large permanent villages associated with American Indians are scattered throughout the Forest. Discoveries of stone tools, pictographs and radiocarbon dating of a few heritage resources indicates use of the Forest as far back as 9,000 years ago and that large permanent villages were firmly established 2,000-3,000 years ago along major rivers that flow into the Columbia River. Many of these heritage resources are of cultural, religious and traditional importance to local tribes residing on the reservations of the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation.

Euro-American settlement across the Forest began in the 1800s and is represented in the archaeological record by homesteads, mines, seasonal camps, town sites, agricultural and ranching sites, by vast transportation systems (railroads, roads, trails, ditches, communication lines) and by isolated artifacts. Active and abandoned Forest Service administrative sites (e.g. ranger stations, guard stations, fire lookouts) dot the landscape along with more than 600 recreation residences and numerous organizational camps associated with use of the national forest since its inception in the early 1900s.

A total of 15 heritage resources are listed on the National Register of Historic Places, Standouts due to public interest include the Stevens Pass Historic District, Bonaparte Lookout, the Leavenworth Ranger Station, and the Salmon La Sac Guard Station.

The majority of the heritage resources documented to date were located during field inventories in support of Forest Service activities such as timber sales, prescribed burns, forest ecosystem restoration and even small scale projects like toilet replacements in existing campgrounds. For some ranger districts, coverage is in excess of 80 percent. The Naches and Cle Elum Ranger Districts have the highest number of heritage resources due to terrain and the high number of projects requiring heritage resource inventories on those districts.

Cross Country Motorized Travel

There are 1,541 documented heritage resources scattered across the 2.4 million acres currently open to cross country motorized travel. Fifteen of them are listed, 487 are eligible, and 1,039 are unevaluated.

Cross country motorized use on the Forest can and has caused damage to heritage resources. Artifact scatters are most prone to direct effects from vehicles while structural sites like cabins are more likely to be avoided due to visibility yet more prone to indirect effects such as vandalism and looting. This unmanaged motorized travel currently threatens the integrity of some National Register eligible, listed or unevaluated heritage resources

Maintenance Level 1 Roads

There are 7,923 miles of system Forest Service roads, including 2,577 miles of maintenance level 1 roads. The maintenance level 1 roads are closed by definition, but are considered part of the cross country landscape, and therefore most are still open to motorized vehicles. Motorized vehicles on these roads have the potential to damage any heritage resource in or directly adjacent to the road. The risk of this occurring is proportional to the miles of road open to motorized vehicles. As with cross country motorized travel, artifact scatters are most prone to direct effects from vehicles while structural sites like cabins are more likely to be avoided due to visibility yet more prone to indirect effects such as vandalism and looting.

Motorized Access for Dispersed Camping

The Forest's heritage resource probability model was developed to identify high, moderate, and low probability areas where there is a risk of damage to unidentified heritage resources. All these probability areas include terrain with 15% slope or less, with the proximity to perennial water sources being one of the determining factors separating out the high, moderate, and low probability. The existing dispersed campsites and access routes leading to the sites are located in areas with slopes less than 20%, with most of the sites concentrated along rivers, lakes, and streams. This puts nearly all of the dispersed camping and access routes within the high or moderate probability areas.

Motorized access for dispersed camping is occurring in a mostly unregulated pattern, with people driving vehicles on existing access routes, or pioneering new routes to new or existing campsites. This unmanaged motorized vehicle use within these high and moderate probability areas has the potential to damage heritage resources through soil erosion, crushing of artifacts, relocation of artifacts, and destruction of a feature such as a hearth or foundation.

Environmental Consequences

Direct and Indirect Effects

Alternative A covers 2.6 million acres which are currently open to motorized use and includes existing system ML 1-5 roads, and the motorized system trails. Alternative A need not to be analyzed per ***USDA Forest Service Policy for Section 106 Compliance in Travel Management: Designated Routes for Motor Vehicle Use***. Therefore the focus of this analysis is on alternatives B, C, and D which adopt the existing system of ML 2-5 roads, system motorized trails, corridors, and two motorized use areas, with the effects of Alternative A provided as a baseline.

Alternative A

Cross Country Motorized Travel and Maintenance Level 1 Roads

The potential for motorized vehicle damage to documented and undocumented heritage sites across the 2.4 million acres of Forest that would remain open to cross country motorized travel would continue, and likely increase over time as new unauthorized trails are developed. This unmanaged motorized travel would continue to threaten the integrity of some National Register eligible, listed or unevaluated heritage resources.

Maintenance Level 1 Roads

Motorized vehicles would continue to be allowed on the 2,577 miles of maintenance level 1 roads. There would be a continued risk of damage from the motorized vehicles to any heritage resources in or directly adjacent to the roads. Artifact scatters would be the most prone to direct effects from vehicles while structural sites may be vandalized or looted.

Motorized Access for Dispersed Camping

Motorized access for dispersed camping would continue in a largely unregulated pattern in much of the high and moderate probability areas of the forest. Current impacts to heritage resources would continue, and likely increase in the future as new access routes are developed.

Effects Common to Alternatives B, C, and D

Alternatives B, C, and D would reduce or eliminate impacts to heritage resources through inventory, monitoring and mitigation of adverse impacts and restriction of motorized vehicles to designated routes, corridors and the motorized use areas of Moon Rocks and Funny Rocks. Management of motorized travel will reduce or eliminate inappropriate motorized use that currently threatens the integrity of some National Register eligible, listed or unevaluated heritage resources. Designation of ML 2-5 roads, system motorized trails, corridors with route restrictions, and two motorized use areas, will be easier to monitor and mitigate and will reduce the potential for damage to heritage resources that are currently being impacted by unauthorized motorized use across the Forest.

Cross Country Motorized Travel and Maintenance Level 1 Roads

Eliminating unrestricted cross-country motor vehicle use would ultimately protect heritage resources across a broad landscape. The potential for damage from motorized vehicles to the 1,541 known sites, and all unknown heritage resources would be eliminated or substantially reduced.

Maintenance Level 1 Roads

Motorized vehicles would no longer be allowed on the 2,557 miles of maintenance level 1 roads, reducing the miles of road open to motorized vehicles by 32%. Any heritage resources in or directly adjacent to maintenance level 1 roads, such as scatters or structures, would no longer be at risk of damage from motorized vehicles.

Effects of Designating Corridors for Motorized Access to Dispersed Camping in Alternatives B, C, and D

Corridors for motorized access to dispersed camping would be designated in Alternatives B, C, and D. Vehicles would be limited to existing access routes only, not farther than

300 feet from the open road, and not closer than 100 feet to water¹ This would reduce impacts to sites within corridors because people would be prohibited from driving off existing routes, so the risk of damage to currently un-impacted sites would be substantially reduced compared to Alternative A or the existing condition. There would be variation in the risk between Alternatives B, C, and D however because of the number of known sites that would be in the designated corridors, and the difference in the acres of high, moderate, and low probability within corridors.

Based on the Forest’s heritage resource GIS data, the number of documented National Register listed, eligible or unevaluated heritage resources varies from a low of 252 under Alternative C to 676 under alternatives A and D. The tables that follow illustrate that as the number of corridors increase so too do the number of heritage resources potentially affected.

Table 1: Number of Heritage Resources in Corridors By Alternative

Alternative	Listed HR	Eligible HR	Unevaluated HR	Total
B	3	117	267	387
C	2	72	178	252
D	11	249	416	676

The probability of damage occurring to heritage resources from motorized vehicles within corridors varies by the amount of high, moderate, and low probability acres. The following table lists the number of acres in each category by alternatives.

Table 2: Heritage Resource Probability Acres Within Corridors by Alternative

Alternative	High Probability	Moderate Probability	Low Probability	Total Acres
B	22,411	17,946	74,198	114,555

¹ Except at Improved Sites where vehicles would be allowed within the defined route, regardless of the distance from roads or to water.

C	16,574	17,151	66,996	100,721
D	50,050	36,129	223,538	309,717

Where National Register listed, eligible, or unevaluated heritage resources and motorized routes overlap, heritage resources could be affected. Comparing Tables 1 and 2, Alternative D has the highest number of heritage resources and as such, the highest potential for impacts. In terms of site probability Alternative D has a higher risk of impacts since it would include at least twice as much high probability area within corridors as Alternatives B or C. Alternative C would have the smallest number of listed, eligible and unevaluated heritage resources and the smallest acreages of high, moderate and low site probability. Of all the alternatives, Alternative C has the least potential to affect heritage resources and would require less inspection, monitoring and survey.

The risk of damage to heritage resources would be reduced and mitigated because of the mitigation and monitoring that would be included in Alternatives B, C, and D.

<p>Effects of Allowing WATVs on Some Open Roads in Alternatives B, C, and D</p>
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Allowing WATVs on the 350 miles of currently open road would have no additional effects, or increase in the probability to damage to heritage resources. All the roads are currently open to, and receiving use from highway legal vehicles. Adding the new class of motorized vehicles onto these roads would not add additional effect because the WATVs would be traveling in the same road way as the current vehicles.

Monitoring Plan

The objective of monitoring is to determine how motorized use within a corridor is affecting heritage resources and how effective, using evaluation criteria, implementation of the Forest’s Travel Management Plan is in accomplishing desired outcomes. For heritage resources the desired outcome is the protection, preservation, and management of the

Forest's National Register listed and eligible heritage resources. More specifically, monitoring will be used to:

- determine whether a heritage resource located within a corridor is being adversely affected by motorized use;
- implement appropriate mitigation to prevent damage to National Register listed or eligible heritage resources in corridors; and
- identify and manage new heritage resources located as a result of field inventory and monitoring

Monitoring Procedures and Priorities

During the first year of monitoring a CRS will compile a list of heritage resources located in the corridors of the selected alternative. Para-professionals working under the direction of a CRS will begin inspecting heritage resources on the list and assemble a list of heritage resources overlapped by a motorized route within a corridor. A CRS will then inspect up to 30 heritage resources on that list annually to establish baseline data for each heritage resource. Establishment of baseline data will continue until all heritage resources listed have baseline data. After that, heritage resources on the list will be monitored every five (5) years unless the corridor is removed from the MVUM by adaptive management. Acquisition of baseline data and subsequent monitoring will be prioritized as follows:

- Unevaluated heritage resources located in high probability areas
- Unevaluated heritage resources located in moderate probability areas
- Unevaluated heritage resources located in low probability areas
- National Register listed or eligible heritage resources located in high probability areas
- National Register listed or eligible heritage resources located in moderate probability areas

- National Register listed or eligible heritage resources located in low probability areas

The Forest is responsible for the management of heritage resources listed or eligible for listing on the National Register of Historic Places (NRHP) so the intent of monitoring unevaluated heritage resources first is to evaluate and remove those determined ineligible from the monitoring list.

For each heritage resource located within a corridor, baseline data will consist of an updated or new heritage resource record, photographs of the heritage resource from established datum points, artifact counts with attention paid to artifact distribution in areas of ground disturbance potentially associated with motorized use, and detailed heritage resource maps that also document areas of motorized use and erosion. Heritage resource vandalism will be documented, mapped and photographed. Shovel testing will be done to determine the presence or absence of artifacts and/or features where motorized routes overlap the heritage resource. Baseline data will be captured on an evaluation form specific to heritage resource monitoring. Monitoring results will be documented in an annual report to the State Historic Preservation Officer, the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation.

Evaluation Criteria

The questions below will be used to determine whether a heritage resource is being affected by motorized use within a corridor.

- Does a motorized route inside a corridor overlap a heritage resource?
- Is the area of overlap expanding in length, width or depth and if so, by how much?
- Are heritage resource features or artifacts present in the area of overlap?
- Are heritage resource features or artifacts in the area of overlap being affected (e.g., artifact breakage, artifact or feature exposure, relocation of artifacts or features) due to motorized-use?
- Are heritage resource features and artifacts being removed as evidenced by loss of features over time, reduction in the number and types of artifacts, or by the presence of a collector's pile or looters pit?

- Are heritage resources along motorized routes shrinking in size due to motorized-related damage?
- Are heritage resources within line of site of a motorized route being vandalized?
- Are new heritage resources being exposed by use of a motorized route, by expansion of a route in a corridor, by dispersed camping?

Monitoring of heritage resources overlapped by motorized routes is expected to result in a determination of no adverse effect or adverse effect.

A no adverse effect determination is defined as follows:

- The heritage resource and the motorized route overlap but there are no heritage resource features or artifacts within the motorized route
- The motorized route itself is a National Register eligible or listed heritage resource (i.e. historic road or trail) and use stays within the existing tread
- The heritage resource and the motorized route overlap but the motorized route is separated from the heritage resource by several inches of artificial fill and/or no artifacts or features are exposed

A determination of adverse effect is defined as follows:

- Overlap between the heritage resource and the motorized route has resulted in exposure of features and/or artifacts
- Overlap occurs between a heritage resource and a motorized route and vandalism is evident (i.e. collector's pile of artifacts, dismantled features, broken artifacts, graffiti)
- Heritage resources within line of sight from the motorized route exhibit vandalism (i.e. collector's pile of artifacts, dismantled features, broken artifacts, graffiti)

Mitigation for adverse effect would be developed on a case-by-case basis in consultation with the State Historic Preservation Officer, the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation. Mitigation

measures would be driven by traditional use values and by the science-based research potential of the heritage resource. Mitigation measures may include limited excavation to salvage portions of the heritage resource that overlap the motorized route; removal of the heritage resource from the motorized route through excavation; protection of the heritage resource through capping within the motorized route; and relocation or closure of the motorized route.

Cumulative Effects

The cumulative effects analysis for heritage resources considers the incremental contribution of effects of the alternatives with all other actions. The geographic scope of the cumulative effects analysis is 2.6 million acres open to motorized travel. The scope of cumulative effects to heritage resources located outside the Forest boundary is limited to points of Forest ingress and egress, the distance of which is defined by physical mobility. The temporal boundary extends from the early to mid-1900s when road and trail construction began on National Forest System land until approximately 10 years into the future when Forest Plan Revision may change management direction.

Past actions (e.g. timber sales, road construction, fire management) across the Forest have resulted in the discovery of heritage resources but for actions conducted prior to passage of the 1966 National Historic Preservation Act (NHPA) which requires federal agencies to consider effects of their actions on National Register listed or eligible heritage resources, there was likely little or no consideration of effects to heritage resources. Unless the Forest choose avoidance, heritage resources may have been both knowingly or inadvertently damaged or destroyed during ground disturbing activities such as road construction, logging, fire prevention, trail and campground construction.

Even with passage of the NHPA, avoidance of heritage resources pending formal evaluation, has had and continues to have unintended consequences. Avoidance during prescribed burning projects for example, has contributed to unnatural and heavy fuel loading within heritage resources which puts them at even higher risk during a wildfire when protection may not be possible. The Forest's emphasis on avoidance pending

evaluation has resulted in the protection of hundreds of heritage resources that may not warrant management yet remain subject to the cumulative effects of past, present and foreseeable future actions as well as to unrestricted human activities (looting and vandalism) and natural environmental processes such as erosion, wildfire, and exposure to the elements.

Alternative A

The cumulative effect of all past, present, and reasonably foreseeable future actions and Alternative A would be the continued risk of damage to heritage sites across the forest. All present or reasonably foreseeable future actions included in Appendix A of the EA (e.g., timber sales, watershed restoration, prescribed burning, road construction, winter motorized use, campground maintenance) would be subject to review in accordance with Section 106 of the National Historic Preservation Act. This would partially offset the continued and likely increasing potential for damage from the cross country motorized travel and unregulated motorized access for dispersed camping from Alternative A.

Alternatives B, C, D

The cumulative effects the past, present, and reasonably foreseeable future actions and Alternatives B, C, or D would be an overall reduction in the potential for damage to heritage resources. The incremental contribution of Alternatives B, C, and D to the effects of the other present and reasonably foreseeable future actions would be substantial protection or heritage resources by eliminating cross country motorized travel, and restricting motorized access for dispersed camping. Heritage resources listed or eligible for the National Register would be protected through avoidance or appropriate mitigation, and all present and reasonably foreseeable future actions (e.g., restoration, prescribed burning, road construction, campground maintenance, etc.) would be subject to review in accordance with Section 106 of the National Historic Preservation Act.

Consistency Finding

Travel Management planning is consistent with Section 106 of the National Historic Preservation Act (36 CFR 800) which requires federal agencies having direct or indirect

jurisdiction over a proposed federal or federally assisted or permitted activity to take into account the effect that undertaking may have on historic properties listed on or eligible for the National Register. This includes planning documents involving a decision. Through its past, present and continued consultation with the Confederated Tribes of the Colville Reservation and the Confederated Tribes and Bands of the Yakama Nation, this plan is consistent with the American Indian Religious Freedom Act (AIRFA) which directs federal agencies to consider how their actions might affect tribal practitioners. This planning effort is consistent with the standards and guidelines for heritage resource management outlined in the Wenatchee National Forest Plan and the Okanogan National Forest Plan. Both plans require compliance with all federal laws and regulations pertaining to heritage resources. The methodology used to consider effects to heritage resources is consistent with the 2005 USDA Forest Service Policy for ***“Section 106 Compliance in Travel Management: Designated Routes for Motor Vehicle Use”***.