

# CHAPTER 2

## ALTERNATIVES

### INTRODUCTION

Chapter 2 describes the proposed action and alternatives to the proposed action, including a no action alternative. The alternatives are compared, describing the differences among the alternatives and providing a clear basis for choice to the Responsible Official. This chapter also describes the measures necessary to mitigate environmental effects, displays monitoring, and shows a summary comparison of the alternatives relative to the issues and the purpose and need for action.

This chapter is divided into five sections:

- Alternative Development
- Alternatives Considered but Eliminated from Detailed Study
- Alternatives Considered in Detail
- Mitigation Measure
- Monitoring Plan
- Comparison of the Alternatives

### ALTERNATIVE DEVELOPMENT

The Forest Service used the Purpose and Need, described in Chapter 1, as a framework for alternative formulation, and the key issues that are identified in Chapter 1 to develop a range of reasonable alternatives. Several sideboards were applied during alternative development:

1. Previous NEPA decisions on the existing system roads and motorized trails or other decisions that predate NEPA do not need to be revisited.
2. All fully analyzed alternatives had to meet the purpose and need of the project.
3. All fully analyzed alternatives had to be consistent with the Forest Plans except where amendments are proposed.
4. The actions triggering NEPA in fully analyzed alternatives are to close the forest to cross-country motorized travel and designating corridors for motor vehicle access to dispersed camping, requiring forest plan amendments.

A “no action” alternative, Alternative A, provides a baseline for the environmental effects analysis. This alternative would not meet the purpose and need for complying with the Travel Management Rule, and therefore does not meet the Purpose and Need, but was fully analyzed to provide a baseline comparison for the action alternatives analysis.

In accordance with Forest Service NEPA regulations [36 CFR 220.7(b)], which allow for modifications to the proposal throughout the analysis process, the original Proposed Action (see Chapter 1) was modified, and the modified Proposed Action is analyzed as Alternative B. The incremental changes to the original proposed action as a result of issues generated during

public involvement are captured in the Alternatives Considered but Eliminated section below (#1).

Alternative C, an alternative to the proposed action, was developed to address issues raised during scoping concerning the proposed corridor designation, and the impacts to fish habitat from motorized access within the corridors. This alternative would meet the purpose and need to prohibit motor vehicle travel off of the existing designated system of open motorized roads, trails and designated areas. Alternative C would also provide motorized access to dispersed camping within designated corridors. The corridors in this alternative were developed by modifying the corridors Alternative B to avoid any overlap within 300 feet of designated critical fish habitat<sup>1</sup>.

Alternative D was developed to address concerns about losing motorized access to some established dispersed campsites, and concentrating campers into the corridors included in the Proposed Action. This alternative would meet the purpose and need to prohibit motor vehicle travel off of the existing designated system of open motorized roads, trails and designated areas. Alternative D would also provide camping corridors on all roads open to motorized access to ensure a majority of established motorized campsite access is retained.

Several alternatives were suggested during the public involvement and alternative formulation process that did not meet the Purpose and Need, or were outside the scope of the analysis. These alternatives are described in the following section.

## ALTERNATIVES CONSIDERED BUT ELIMINATED

Scoping comments suggested alternative methods for achieving the purpose and need. Federal agencies must explore and evaluate all reasonable alternatives, briefly discussing the reasons for eliminating any alternatives not developed in detail (40 CFR 1502.14).

**1. Eliminate all corridors, and only allow motorized access for dispersed camping directly adjacent to designated roads.**

This alternative was eliminated from consideration because it either does not meet Forest Plan direction to provide for a variety of recreation experiences in appropriate management allocations or it would require adding many new access routes to the designated open road system to allow for dispersed camping along those routes, which is outside the scope of the purpose and need for this project. In addition, the forest does not have a complete inventory of all access routes, and there is not adequate time to complete the survey and meet the Travel Management timeline.

**2. Do not allow motorized access for dispersed camping within 300 feet of perennial streams, 150 feet of lakes, and 100 feet of intermittent streams.**

This alternative was not considered further because it would be very difficult for the public to understand and comply with. It does not match the Forest Service definition

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<sup>1</sup> Critical habitat is defined in Section 3 of the Endangered Species Act (50 CFR Part 17 p.19). Refer to Hydrology and Aquatics section of Chapter 3 for more information.

of riparian allocations, as specified in the Northwest Forest Plan, PACFISH, or INFISH. However, Alternative C was developed to eliminate some impacts of motorized access to dispersed camping to waterways by eliminating camping corridors in critical fish habitat.

**3. Do not allow motorized access to any dispersed campsites beyond the 30-foot roadside parking allowance.**

This alternative was eliminated from further consideration because it would only allow motorized vehicle access to approximately 5% of the existing dispersed camping and would not meet Forest Plan direction to provide for a variety of recreation experiences in appropriate management allocations, or it would require adding many new access routes to the designated open road system to allow for dispersed camping along those routes, which is outside the scope of the purpose and need for this project.

**4. Close some areas to dispersed camping.**

This alternative was eliminated from consideration because the purpose and need does not include any alteration or restrictions on dispersed camping – it only addresses motorized access for the purposes of dispersed camping. Changing authorization or regulations pertaining to dispersed camping is outside the scope of the purpose and need. However, all three action alternatives limit motorized access for the purpose of dispersed camping. All action alternatives prohibit motorized access beyond 300 feet from a designated open road, and within 100 feet of waterways except at defined sites. Additionally Alternatives B and C only designate certain corridors, with Alternative C being the most restrictive because it prohibits motorized access to dispersed camping within 300 feet of critical fish habitat. No alternative adds routes as open system roads.

**5. Do not allow people to pull-off and park 30 feet off the side of roads.**

This alternative was eliminated from further consideration because use of designated roads and trails includes the ability to park a motor vehicle on the side of the road when it is safe to do without causing damage to National Forest System resources or facilities, unless prohibited by state law, a traffic sign or an order (36 CFR 261.54). The road designation must identify that vehicles can park within one vehicle length, or within a specified distance of up to 30 feet from the edge of the road surface (FSM 7716.1). Alternatives were considered that would designate the parking distance as one vehicle length, and for shorter distances than 30 feet. These were eliminated from consideration because there is considerable variation in vehicle length, including many types of vehicles that exceed 30 feet in length. Specifying a 30-foot distance would be easily understood when displayed on the MVUM, ensure adequate room for vehicles to safely pull off roadways, and limit the distance.

**6. Continue to allow motorized vehicles, specifically ATVs on maintenance level 1 roads.**

This alternative was eliminated because it does not meet the purpose and need to standardize the management of maintenance level 1 road across the forest in compliance with Forest Service Handbook policy to close all maintenance level 1 roads to motorized use. Although this alternative is not part of an action alternative, Alternative A would not change the current management of these roads, so the effects of not closing the roads are included in the analysis of Alternative A.

**7. Ban all motorized vehicles from the Okanogan-Wenatchee National Forest.**

This alternative was not considered further because it is outside the scope of the purpose and need to prohibit motorized vehicles off the existing open road system and motorized trail network.

**8. Allow motorized vehicles on paved surfaces only.**

This alternative was not considered further because it is inconsistent with Forest Plan direction to provide a variety of recreation experiences. This alternative would result in only 333 miles of road being open across over 4 million acres of land, severely limiting access for recreation by closing nearly 7,590 miles of road to all motorized use. It is also outside the scope of the purpose and need to prohibit motorized vehicles off the existing open road system and motorized trail network.

**9. Change the current system of open roads and motorized trails.**

A variety of alternatives were suggested to change the current system, including; add all unauthorized routes to the system; drop some routes; close some roads; change the motorized designation on some or all motorized trails; close some or all motorized trails; add motorized trails; and create loop routes by using maintenance level 1 and unauthorized routes. All these alternatives were eliminated from further consideration because they were outside the scope of the purpose and need for this project to prohibit motor vehicle travel off of the existing designated system of open motorized roads, trails and areas. These comments will be considered in future NEPA documents.

**10. Allow WATVs (ATVs that meet the requirements of Washington State House Bill 1632) on roads open to other licensed vehicles.**

A variety of different alternatives were suggested by ATV clubs and conservation groups pertaining to opening roads to WATVs. The ATV club alternatives were reviewed by conservation groups, and presented as modifications of the ATV club alternatives. All alternatives were screened by resources specialists on the ranger districts to determine if they were consistent with management direction, likely to create user conflicts, or could potentially cause unacceptable impacts to other resources. The routes (350 miles) that passed the screening and a safety review by the Forest Service were added to Alternatives B and D. All other routes and variations on the 350 miles were not considered further in this analysis.

**11. Authorize additional motor vehicle use for big game retrieval.**

The travel management rule allows for limited use of motor vehicles to retrieve downed big game that is in addition to the designated roads, trails, and areas. In Region 6, no additional motor vehicle access to retrieve big game will be authorized, except by the Regional Forester. Discussions with adjacent regions and Washington Department of Fish and Wildlife indicate support for not designating use of motor vehicles off designated roads, trails, and areas for the purpose of big game retrieval. Other discussions concerned needing consistency with adjacent Regions and Forests (USDA 2006). The Forest Supervisor does not have decision authority regarding motor vehicle access for big game retrieval and the Region is not supportive of providing such access; therefore, this alternative was eliminated from detailed study.

**12. Complete minimum road analysis as defined by travel analysis of all maintenance levels, and implement recommendations.**

The Forest completed Forest-wide Road Analysis in 2004 (USDA 2004) on maintenance level 3-5 roads. The Forest did not determine a minimum road system at that time nor did the Forest complete the travel analysis for maintenance level 1 and 2 roads.

Travel Analysis Relationship to Travel Management

Travel Analysis for minimum roads analysis is separate from Travel Management as FSM 7712 states:

*Travel analysis for purposes of identification of the minimum road system is separate from travel analysis for purposes of designation of roads, trails, and areas for motor vehicle use. Travel analysis for both purposes may be conducted concurrently or separately.*

Neither agency directives nor the rule mandate minimum roads analysis before conducting a travel management project, and travel analysis appropriate for this project was completed in 2004.

The responsible official has the discretion to determine the scale and detail of travel analysis to adequately inform a motorized travel management decision. Travel analysis is a tool for the responsible official to use when making decisions related to designation of roads, trails, and areas for motor vehicle use in motorized travel management. This is highlighted in FSM 7712:

*Travel analysis is not a decision-making process. Rather, travel analysis informs decisions relating to administration of the forest transportation system and helps to identify proposals for changes in motorized travel management direction.*

Scale

FSM 7715.2 states that:

*Travel management decisions do not need to be at the same scale as the travel analysis that informs those decisions. Responsible officials should establish the scale and scope of proposed travel management decisions based on local situations and availability of resources.*

Previous Administrative Decisions

Travel management rule 212.50 (b) states:

*The responsible official may incorporate previous administrative decisions regarding travel management made under other authorities, including designations and prohibitions of motor vehicle use, in designating National Forest System roads, National Forest System trails, and areas on National Forest System lands for motor vehicle use under this subpart.*

In the case of the Okanogan-Wenatchee National Forest, the Forest Supervisor determined the scale and detail of the travel analysis completed in 2004 was appropriate and sufficient to inform motorized travel management decisions, especially in light of incorporating previous administrative decisions regarding travel management

in developing the purpose and need to prohibit motor vehicle travel off of the designated system of motorized roads, trails and outside of designated areas.

Completing a new travel analysis for the purpose of determining a minimum road system is outside the scope of this project. Minimum roads analysis is currently underway across the Forest and is expected to be completed by the end of 2015. Implementing the recommendations from travel analysis will require subsequent site-specific NEPA documents. Those documents will analyze those recommendations from travel analysis at that time and any resultant decisions would be reflected on subsequent MVUMs. As a result, this alternative was eliminated from detailed study.

**13. Ban all off-road vehicles, and dirt bikes from trails.**

This alternative was eliminated from consideration because it was outside the scope of the purpose and need to prohibit motor vehicle travel off of the existing designated system of open motorized roads, trails and outside of designated areas, with no changes to vehicle class limitations.

**14. Establish play areas for motorized vehicles.**

All action alternatives continue the designation of Moon and Funny Rocks as motorized areas. Other “play” areas were eliminated from consideration because it is outside the scope of the purpose and need to prohibit motor vehicle travel off of the existing designated system of open motorized roads, trails and outside of designated areas.

**15. Manage all Inventoried Roadless Areas as non-motorized.**

Some commenters suggested all roadless areas be managed as non-motorized, while others were specific about Mad River, Lake Chelan-Sawtooth, Entiat/Chelan, Teanaway, West Manastash, Golden Horn, and Tiffany areas. This alternative was eliminated from further consideration because motorized status of roadless areas is outside the scope of the purpose and need to prohibit motor vehicle travel off of the existing designated system of open motorized roads, trails and outside of designated areas.

## ALTERNATIVES CONSIDERED IN DETAIL

The Forest Service fully developed four alternatives, including no action, in response to issues raised by the public and other government agencies. Maps of all alternatives are available at <http://www.fs.usda.gov/project/?project=46467>

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### ***Alternative A – No Action***

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Alternative A is the no-action alternative, which would not implement any changes to the current management direction for the Forest regarding motor vehicle access. Alternative A would allow motor vehicle use on the existing transportation system as well as current cross-country travel except where specifically designated closed to motor vehicle use (such as Wilderness and certain Roadless Areas, or by CFR). Current cross-country travel is a combination of non-routed travel, existing system roads managed as closed but without legal

closure (maintenance level 1), and unauthorized routes. Cross-country travel would only be limited by an existing prohibition on operation of motor vehicles in a manner that damages or unreasonably disturbs the land, wildlife, or vegetation (36 CFR 261.15(h)).

There would continue to be unlimited motorized access for dispersed camping, except in areas specifically designated as closed to motor vehicle use. Campers could drive vehicles off roads for any distance, on established routes or by creating new ones, and as close as they want to any lake, stream, river, or other water body, as long as they complied with 36 CFR 261.15(h).

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## ***Action Alternatives***

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As described above, three action alternatives are fully developed and analyzed in this EA. Alternative B is a modification of the Proposed Action described in Chapter 1, and distributed for public review and comment on December 22, 2014<sup>2</sup>. Alternatives C and D were developed to respond to comments raised by the public and other government agencies. The three alternatives have elements in common, but differ in how each addresses motorized access for dispersed camping. The common elements are described below, followed by detailed description of the differences.

### **Special Access**

Alternatives B, C, and D would comply with the Travel Management Rule's recognition of valid existing rights and not modify those rights, nor take away any statutory or treaty rights. The following would be exempt from designation:

- Aircraft
- Watercraft
- Over-snow vehicles<sup>3</sup>
- Limited administrative use by the Forest Service
- Emergency purposes
- National defense purposes
- Law enforcement response
- Motor vehicle use that is specifically authorized under a written authorization issued under Federal law or regulations.

Additional details for the most common exemptions are included below.

#### Tribal Access

The Yakama Nation and the Confederated Tribes of the Colville Reservation retain rights to portions of the Forest located within ceded lands. Members of the Yakama Nation retain rights to fishing, hunting, gathering, and pasturing of horses and cattle on the Wenatchee National Forest and portions of the Okanogan National Forest by virtue of Article 3 of the Yakima Treaty of 1855. Members of the Confederated Tribes of the Colville Reservation

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<sup>2</sup> Refer to Proposed Action section in Chapter 1 for a description of the modifications made to the original Proposed Action.

<sup>3</sup> Subpart C of the Travel Management Rule pertains to over-the-snow vehicles. The Okanogan-Wenatchee National Forest will complete this part at a later date.

retain the right to hunt and fish in common with all other persons in the former northern half of their reservation by virtue of Article 6 of the 1891 Agreement between the United States and the Tribes. This area includes all of the Tonasket Ranger District east of the Okanogan River. A special authorization process for motor vehicle access off designated routes to exercise these traditional trust activities on the Forest would be considered on a case-by-case basis.

#### Special Use Permittee, Forest Service Contractor, and Allotment Access

Permittee and contractor motor vehicle access needs would be identified on a site-specific basis for special use permits and easements, Forest Service contracts awarded, and grazing allotments managed. These proposals would continue to be administered in accordance with the terms and conditions of the Forest Service authorization and would be reviewed as needed.

The Forest Service would work with the permittee, easement holder, or contractor to address reasonable requests for motor vehicle use off designated routes (including cross-country) when the use is critical for the operation. Authorized or contractor motor vehicle access must be consistent with other pertinent rules, regulations and laws and would be at the discretion of the authorizing officer's evaluation of need.

#### Mining Access

Nothing in the final rule revokes any rights held by miners. Reasonable access for and reasonably incident to mining operation is authorized by U.S. Mining Laws. Motorized vehicle use inconsistent with the MVUM could be authorized under an approved Plan of Operations. The approved Plan of Operations would serve as written authorization and would exempt involved parties from specified MVUM regulations.

#### Special Forest Products, including Firewood

Motor vehicle access for firewood or other forest product gathering would be allowed, consistent with the rules and regulations of the permit that pertains to the area in question.

## **ELEMENTS COMMON TO ALTERNATIVES B, C, AND D**

Alternative B, C and D would close the Forest to cross-country motorized travel off the existing open National Forest system roads (maintenance levels 2-5), existing open system motorized trails (including any sections of maintenance level 1 roads part of a motorized system trail), and outside of the Moon and Funny Rocks rock crawl areas. WATVs would be allowed to operation on 350 miles of National Forest System roads. All system roads currently open for motorized use (maintenance levels 2-5) would remain open to highway legal vehicles during the existing seasons of use, with existing designations for vehicle types. In addition, all system roads currently open to motorized mixed use would remain open for that existing use. All motorized system trails would remain open to current vehicle designations (greater than 50 inches, less than 50 inches, or motorcycle) during the existing seasons of use.

The Travel Management Rule does not require reconsideration of past management decisions, and none of the alternatives would change existing road maintenance levels, the use designation of trails, or the use of the Moon and Funny Rocks rock crawl areas (23.27 and 9.93 acres, respectively). The alternatives would each make the following changes:



1. Prohibit cross-country motor vehicle use off the existing maintenance level 2-5 system roads, and existing motorized trails, and outside of the existing Moon and Funny Rocks rock crawl areas<sup>4</sup>.
2. All maintenance level 1 roads would be closed to motorized vehicles, unless currently part of a motorized system trail, in accordance with Forest Service Handbook policy (FSH 7709.58, 10, 12.3).
3. Motor vehicle parking would be allowed up to 30 feet from the edge of the road surface when it is safe to do so without causing damage to National Forest System resources or facilities, unless prohibited by state law, a traffic sign, or a closure order (36 CFR 261.54).
4. Amend the Okanogan and Wenatchee National Forest Plans to make them consistent with the Travel Management Rule as follows:  
 The Okanogan Forest Plan currently contains the following forest-wide standard and guideline:  
 17-3 Areas, roads, and trails shall be designated open, closed, or restricted to motorized use to conform to management goals. These designations shall be displayed in the Forest travel plan (USDA 1989 p. 4-50).

**This would be amended as follows:**

17-3 Except for over-snow vehicle use; areas, roads, and trails shall be closed to motor vehicles unless specifically designated as open on the motor vehicle use map. Motorized use on areas, roads, and trails shall conform to the goals of the management area. Project-specific NEPA decisions may be made on a case-by-case basis to open, close, or restrict roads, trails, and areas based on the goals of the management areas; these changes would be displayed on future motor vehicle use maps. Over-snow vehicle use areas, roads, and trails shall be open, closed, or restricted consistent with the goals of the management area and designated on a map depicting authorized over-snow use.

The Wenatchee Forest Plan currently contains the following forest-wide standards and guidelines:

**Road Operation**

1. Road closures – The decision to close any Forest Road will be made on a case by case basis. Unless there is a resource need documented in the project analysis, currently open roads will remain open and newly constructed roads will be closed to public access by vehicle (USDA 1990, p. IV-102).

**Trail System Maintenance and Operation**

1. The Forest trail system will provide for use by all specified modes of transportation as contained in the management prescriptions (USDA 1990, p. IV-69).

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<sup>4</sup> Except by authorization as described in the Travel Management Rule.

**These would be amended as follows:**

**Road Operation**

1. Except for over-snow vehicle use, roads shall be closed to motor vehicle use unless specifically designated as open on the motor vehicle use map. Motorized use on roads shall conform to the goals of the management area. Project-specific NEPA decisions may be made on a case-by-case basis to open, close, or restrict roads based on the goals of the management area with changes displayed on the subsequent motor vehicle use map. Over-snow vehicle use on National Forest System roads may be allowed, restricted, or prohibited consistent with the management area prescription.

**Trail System Maintenance and Operation**

1. The Forest trail system will provide for use by all specified modes of transportation as contained in the management prescriptions. Except for over-snow vehicle use, trails shall be closed to motor vehicle use unless specifically designated as open on the motor vehicle use map. Motorized use on trails shall conform to the goals of the management area. Project-specific NEPA decisions may be made to open, close, or restrict trails based on the goals of the management area with changes displayed on the subsequent motor vehicle use map. Over-snow vehicle use on National Forest System trails may be allowed, restricted, or prohibited consistent with the management area prescription.

**The Wenatchee Forest Plan would additionally be amended to add the following standard and guideline (IV-69):**

**Motorized Areas**

1. Except for over-snow vehicle use, areas shall be closed to motorized vehicles except where specifically designated open on the motor vehicle use map. Motorized use on areas shall conform to the goals of the management area. Project-specific NEPA decisions may be made to open, close, or restrict areas based on the goals of the management area with changes displayed on the subsequent motor vehicle use map. Over-snow vehicle use on National Forest System areas may be allowed, restricted, or prohibited consistent with the management area prescription.

## **ELEMENTS SPECIFIC TO INDIVIDUAL ALTERNATIVES**

### *Corridors for Motorized Access to Dispersed Camping*

Alternatives B, C, and D would all establish corridors for motorized vehicle access for dispersed camping. The corridors would be shown on the MVUM. Each alternative varies in the amount of designated corridors although the following items would be consistent among the alternatives:

- All corridors designated for the purpose of access to dispersed camping would be 300 feet wide from the road centerline, on both sides of open designated roads. Within corridors, motorized vehicles would be restricted to existing routes, and vehicles would not be permitted within 100 feet of water, except at defined sites (some routes within

these corridors have been improved to reduce environmental impacts with fences, boulders or other barricades, and/or signs define the acceptable travel routes. At these sites, vehicles would be allowed on the defined route, regardless of the proximity to water). The Motor Vehicle Use Map (MVUM) would include a listing of “Special Provisions” for motor vehicle access to dispersed camping. The “Special Provisions” would read:

*Motor vehicle access to dispersed camping is confined to existing routes leading to existing campsites. The following definitions apply:*

- **Existing route:** *a route with an established history of motor vehicle use, as indicated by a road-bed width of greater than 50 inches, the predominance of compacted soil, and minimal vegetation growing in the travel way. New resource impacts (indicated by single or double tracks over vegetation) are not considered existing routes.*
- **Existing campsite:** *an area obviously used by campers that usually contains a rock fire ring and minimal ground vegetation as the result of motor or foot traffic.*

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## **Alternative B**

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Alternative B would designate corridors along approximately 1,640 miles of currently open road (approximately 31%). The corridors would be 300 feet wide from the road centerline, on both sides of these roads. Within corridors, motorized vehicles would be restricted to existing routes. Motorized vehicle use within the corridors would be allowed as described in Elements Common #4 above.

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## **Alternative C**

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Alternative C would designate corridors along approximately 1,492 miles of currently open road (approximately 28%). The corridor pattern included in Alternative B (Modified Proposed Action) was modified for Alternative C to remove any corridors within 300 feet of Critical Fish Habitat. The corridors would be 300 feet wide from the road centerline, on both sides of these roads. Within corridors, motorized vehicles would be restricted to existing routes. Motorized vehicle use within the corridors would be allowed as described in Elements Common #4 above.

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## **Alternative D**

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Alternative D would designate corridors along all maintenance level 2 through 5 roads, approximately 5,366 miles, or 100% of the currently open roads<sup>5</sup>. The corridors would be 300 feet wide from the road centerline, on both sides of these roads. Within corridors, motorized

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<sup>5</sup> Some maintenance level 2-5 roads are gated, and open only for administrative use. No motorized access for dispersed camping would occur along these gated segments.

vehicles would be restricted to existing routes. Motorized vehicle use within the corridors would be allowed as described in Elements Common #4 above.

## *WATV Routes*

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### ***Alternatives B and D***

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Approximately 350 miles of maintenance level 2 through 5 National Forest System road would be open to WATVs. The specific routes are described below, and shown on the alternative maps available on the website.

- The Table Mountain Route would open approximately 41 miles of currently open road to WATVs, linking the Blewett SnoPark at the Blewett Summit along Highway 97 to the town of Liberty, and to the Reecer SnoPark near Ellensburg.
- The Thunder Mountain Route would open approximately 91 miles of road, linking the town of Conconully to the East Chewuch Road just north of Winthrop, the Toats Coulee Road west of Tonasket, the North Summit SnoPark along Highway 20 at the Loup Loup Summit, and the Beaver Creek Campground on Washington State Department of Fish and Wildlife land east of Winthrop.
- The Bald Mountain Route would open approximately 34 miles of road, linking the Hog Ranch, Dipping Vat, and Cow Canyon Roads, and connecting to the existing 4x4 trail number 4W644 west of Bald Mountain.
- The Clover Springs Route would open approximately 50 miles creating 3 interconnected loops by tying into trail number 4W696 at the Clover Springs Trailhead and Forest Road 1600.
- The Entiat Ridge Route would open approximately 72 miles and link the Lower Chiwawa Trailhead to Forest Road 5700 near Entiat and Forest Road 7401 to the Derby Canyon Road near Peshastin.
- The Grade-Oss Route would open approximately 62 miles and link the Black Canyon SnoPark near Pateros to the Echo Valley Ski Area, and create a loop along Forest Roads 8200 and 8020.

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### ***Alternative C***

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No roads would be opened to WATVs under Alternative C.

#### **MITIGATION MEASURE**

If motorized use on access routes within corridors for access to dispersed camping (corridors) is causing resource impacts beyond those predicted in this EA, the access route would be modified to minimize or eliminate the impact. Some of the possible actions could include, but are not limited to:

- using boulders, fences, or other barriers to keep vehicles to an acceptable location;
- hardening the access route surface to minimize erosion;

- improving the access routes with water bars or other drainage structures to protect water quality; or
- decommissioning and blocking the access route
- modifying or removing the corridor.

## **MONITORING PLAN**

The following monitoring plan would be used to determine if the environmental effects of motorized access for dispersed camping projected in the EA are accurate, and when mitigation is needed to modify access routes in corridors so impacts are within the disclosed range of effects. Monitoring and evaluation would determine whether the motorized travel management decision has been properly implemented and how effective the implementation has proven to be in accomplishing the desired outcomes.

### *Heritage Resources*

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?

#### *Aquatic Resources, Hydrology, and Soil*

Monitoring would be done to validate the effects projected in this document of motorized vehicle access in corridors, and to ensure compliance with the Aquatic Conservation Strategy (ACS) and Riparian Management Objectives (RMOs). ACS objectives and RMOs are designed to maintain or restore processes and functions necessary for healthy aquatic ecosystems at the watershed scale. Monitoring of motorized access within corridors would determine whether these objectives are being met, and when mitigation is needed to reduce effects to keep effects within those predicted in this document. This plan defines both implementation and effectiveness monitoring.

The monitoring would be prioritized as follows:

- Riparian allocations within corridors in or adjacent to (within 300 feet) of occupied ESA listed fish habitat, critical habitat, essential fish habitat, or in key watersheds under the NWFP and PACFISH, and priority watersheds under INFISH.
- All other riparian allocations within corridors.

## Evaluation Criteria

Implementation monitoring would focus on direct effects of motorized vehicle use in corridors. It would document if vehicles are staying on existing access routes, and remaining 100 feet away from waterways except at defined sites. Effectiveness monitoring would focus on a more thorough inventory of the impacts from any particular access route and offer a clearer picture of use patterns and impacts. The questions below are examples of the data that would be collected within corridors to determine whether motorized use is adversely affecting riparian dependent resources, hydrologic function, or soil, and if mitigation is needed to reduce impacts to acceptable levels.

- Have new access routes been created, or existing ones increased in size or developed degrading conditions?
- Is there evidence that the access route is becoming longer, moving towards the stream/river/lake?
- Is there an obvious rutting/erosion problem on the access route?
- Is there evidence of sediment delivery associated with the access route, to waterways or channels?
- Is vegetation along streams being impacted by motorized vehicles using the access route?
- Is there a reduction in stream shading from motorized vehicles using the access route?
- Is there evidence of recent motorized vehicle use within 100 feet of the edge of a stream, river, or lake?

## *Botanical Resources*

Monitoring would be done to validate the projected effects of corridors on botanical resources. Populations of threatened, endangered, or sensitive species and survey and manage species would be targeted, in addition to known or discovered populations of invasive species.

The monitoring would be prioritized as follows:

- Know populations of threatened, endangered, or sensitive plant species within corridors.
- Known populations of invasive species within corridors.
- Riparian allocations within corridors.

## Evaluation Criteria

Implementation monitoring would focus on direct effects of motorized vehicle use in corridors. It would document if vehicles are staying on existing access routes, and remaining 100 feet away from waterways except at defined sites. Effectiveness monitoring would focus on a more thorough inventory of the impacts from any particular access route and offer a clearer picture of use patterns and impacts. The questions below are examples of the data that would be collected within corridors to determine whether motorized use is adversely affecting vegetation or contributing to the introduction or spread of invasive species, and if mitigation is needed to reduce impact to acceptable levels.

- Have new access routes been created, or existing ones increased in size or developed degrading conditions?
- Are populations of threatened, endangered, sensitive, or survey and manage species being affected by new or expanding motorized access routes?

- Have invasive species populations increased or new species become established within corridors?

*Wildlife: Chelan Mountainsnail & Larch Mountain Salamander*

Monitoring would be done to determine if new motorized access routes within corridors have been developed, or existing ones expanded in habitat for Chelan Mountainsnail (CMS) or Larch Mountain Salamander (LMS).

The monitoring would occur in CMS and LMS habitat within corridors.

**Evaluation Criteria**

Implementation monitoring would focus on direct effects of motorized vehicle use in corridors on CMS and LMS habitat. Effectiveness monitoring would focus on the potential creation of new access routes, and any effects on the species habitat. The questions below are examples of the data that would be collected within corridors to determine whether motorized use is adversely affecting CMS or LMS habitat, and if mitigation is needed to reduce impacts to acceptable levels.

- Have new access routes been created, or existing ones increased in size or developed degrading conditions?
- Is the motorized access impacting CMS or LMS habitat?

## PREFERRED ALTERNATIVE

Alternative B is the preferred alternative.



# COMPARISON OF ALTERNATIVES

This section provides a summary of the ability to meet the purpose and need and the effects of implementing each alternative. The data in this table are supported in Chapter 3 and the Resource Specialist Reports.

**Table 2-1. Comparison of Alternatives**

	Alt. A	Alt. B	Alt. C	Alt. D
<b>Motorized Recreation Opportunities</b>				
Acres Open to Cross Country Motorized Travel	2.6 million	33	33	33
Miles of road open to motorized vehicles	7,923	5,366	5,366	5,366
Miles of road open to WATVs	0	350	0	350
<b>Motorized Access to Dispersed Camping</b>				
Miles of Designated Corridors	n/a	1,640	1,492	5,366
Approximate percent of existing drive-in dispersed campsites located along roads with corridors	n/a	81%	58%	100%
Approximate percent of existing drive-in dispersed campsites located along roads without corridors	n/a	19%	42%	0%
Approximate percent of existing drive-in dispersed campsites with complete motorized access <sup>6</sup> .	n/a	56%	42%	69%
Approximate percent of existing drive-in dispersed campsites with partial motorized access <sup>7</sup> .	n/a	25%	18%	31%
Approximate percent of existing drive-in dispersed campsites with no motorized access <sup>8</sup> .	n/a	19%	42%	0%

<sup>6</sup> These campsites are located within designated corridors, and are at least 100 feet from water, and closer than 300 feet from the road. Campers would be allowed to drive directly to the campsite.

<sup>7</sup> These campsites are located along roads with corridors, but are closer than 100 feet to water, or further than 300 feet from the road. Campers would be allowed to drive up to 300 feet from the road, but not closer than 100 feet to water. The campsite could then be reached on foot, or by some other non-motorized means.

<sup>8</sup> These campsites are located along roads without corridors. Campers would be allowed to park within 30 feet of the side of the road, and access the campsite by non-motorized means.

<b>Hydrology, Fish, and Soil</b>				
Overall Open Road Density	1.1 mi/mi <sup>2</sup>	0.7 mi/mi <sup>2</sup>	0.7 mi/mi <sup>2</sup>	0.7 mi/mi <sup>2</sup>
Number of 5 <sup>th</sup> Level HUs with open road density <1 mi/mi <sup>2</sup>	23 HUs	29 HUs	29 HUs	29 HUs
Number of 5 <sup>th</sup> Level HUs with open road density between 1 mi/mi <sup>2</sup> and 2.4 mi/mi <sup>2</sup>	23 HUs	22 HUs	22HUs	22 HUs
Number of 5 <sup>th</sup> Level HUs with open road density >2.4 mi/mi <sup>2</sup>	7 HUs	2 HUs	2HUs	2 HUs
Miles of Open FS Road in Riparian Reserves of RHCAs	1,072	828	828	828
Miles of Open FS Road within 300 feet of Critical Fish Habitat	275	260	260	260
Acres of Riparian Reserves or RHCAs within designated corridors	n/a	20,457	14,401	53,744
Approximate number of established routes to dispersed sites within Riparian Reserves or RHCAs	n/a	277	100	301
Acres of Corridors within 300 feet of Critical Fish Habitat	n/a	5,042,	0	15,175
Approximate number of established routes to dispersed sites within Critical Fish Habitat	n/a	107	0	141
<b>Wildlife</b>				
Determination of effects to threatened or endangered species	May affect, not likely to adversely affect			
Determination of effects to proposed and sensitive species	May impact individuals or habitat, but will not likely contribute to a trend towards federal listing	Beneficial impact, would not jeopardize continued existence		
Determination of effects to management indicator species	Not likely to have negative effects, would not contribute to a negative trend in viability			

<b>Botany</b>				
Acres open to motorized cross country travel	2.6 million	33	33	33
Acres of riparian habitat open to motorized cross country travel	79,261	0	0	0
Acres of late successional/old growth habitat open to cross country motorized travel	140,390	0	0	0
Miles of road open to motorized use	7,923	5,366	5,366	5,366
Acres of corridors in riparian habitat	n/a	20,457	14,401	53,744
Approximate number of established routes to dispersed sites within Riparian Reserves or RHCAs	n/a	277	100	301
Acres of corridors in late successional/old growth habitat	n/a	29,847	22,975	91,927
Number of threatened, endangered, sensitive, and survey and manage species within corridors	n/a	35	27	71
Number of known threatened, endangered, sensitive and survey and manage sites within corridors	n/a	229	193	468
Determination of effects to <i>S. oregano var. calva</i> (endangered species)	May affect, not likely to adversely affect			
<b>Determination of effects to sensitive species</b>	Would not result in a loss of species viability			
<b>Invasive Species</b>				
Acres infested with invasive species open to cross country motorized travel	16,281	0	0	0
Miles of road open to motorized vehicles, providing movement corridors for invasive species	7,923	5,366	5,366	5,366
Acres within corridors infested with invasive species	n/a	4,165	3,781	9,691

<b>Heritage Resources</b>				
Number of known heritage resources potentially impacted by motorized cross country travel	1,541	0	0	0
Miles of road open to motorized vehicles, potentially impacting unknown heritage sites	7,923	5,366	5,366	5,366
Number of known heritage resources in corridors	n/a	387	252	676
Acres of high probability areas with corridors	n/a	22,411	16,574	50,050
Acres of moderate probability areas within corridors	n/a	17,946	17,151	36,129
Acres of low probability areas within corridors	n/a	74,198	66,996	223,538
<b>Economics</b>				
Estimated employment and labor income from motorized recreation (no projected difference between alternatives)	6 jobs \$240,000 labor income			
Role of Forest Service recreation visitor spending to local economy (no projected difference between alternatives)	0.04% of employment (jobs) 0.03% of labor income			
<b>Air Quality</b>				
Qualitative discussion about air quality and the Clean Air Act	All alternatives would comply with the Clean Air Act.			