

United States Department of Agriculture

Forest Service



June 2017

Record of Decision

Ochoco Summit Trail System Project and Forest Plan Amendments

Ochoco National Forest Crook and Wheeler Counties

RECORD OF DECISION

Ochoco Summit Trail System

USDA Forest Service Ochoco National Forest

Crook and Wheeler Counties, Oregon

West Trail Implementation Area: T12S, R19E, Sections 25 and 36; T12S, R20E, Sections 30 and 31; T13S, R19E, Sections 1, 10, 11, 12, 13, 14, 15, 16, 20, 21, and 22; T13S, R20E, Sections 7, 8, 9, 10, 11, 12, 14, 15, 16, 22, 23, 24, 25, 26 and 36; T13S, R21E, Sections 19, 20, 29 and 30; Willamette Meridian

East Trail Implementation Area: T13S, R22E, Sections 13, 14, 15, 21, 22, 23, 24, 26, 27, 28, 29, 32, 33, 34 and 35;T13S, R23E, Sections 7, 8, 16, 17, 18, 19, 20, 21, 22, 26, 27, 28, 29, 31, 32, 33, 34, 35 and 36; T14S, R22E, Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 24, 25 and 36; T14S, R23E, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 16, 17, 18, 19, 20, 21, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35 and 36; T14S, R24E, Sections 5, 6, 7, 8, 9, 15, 16, 17, 18, 20, 21, 22, 27, 28, 29, 30, 31, 32 and 33; T15S, R23E, Section 1; and T15S, R24E, Sections 5 and 6; Willamette Meridian

OHV Management Area (for closure and rehabilitation of routes not authorized for motor vehicles) includes all of above townships and sections as well as the following: T13S, R19E, Sections 2, 17, 19 and 23; T13S, R20E, Sections 1, 13, 18 and 35; T13S, R21E, Sections 6, 7, 8, 9, 10, 11, 13, 14, 17, 18, and 24; T13S, R22E, Sections 9,

10, 16, 19, 20, 25 and 36; T13S, R23E, Section 30; T14S, R23E, Sections 10, 13, 14, 15, 22, 23, 24 and 34; T14S,R24E, Section 19; Willamette Meridian

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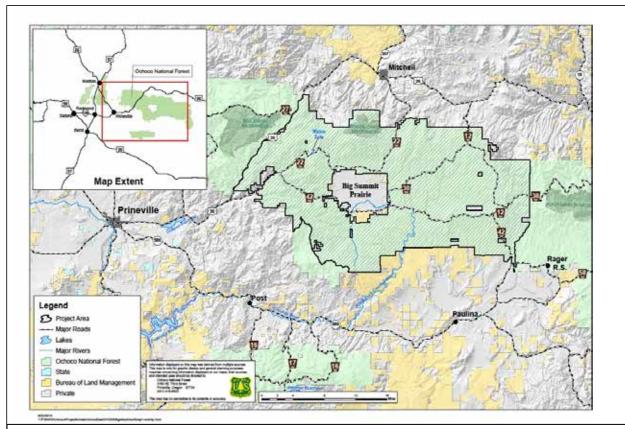


Figure 1. Ochoco Summit Trail System Project location.

Changes between Draft and Final Record of Decision

A number of changes were made prior to finalizing this Record of Decision (ROD); many of the changes are related to the directions and clarifications specified by the Regional Forester following the administrative review of the Objections. Full documentation of how the Ochoco National Forest responded to the Regional Forester's directions is in the project record.

- Four appendices were added to the Record of Decision to provide clarity related to potential
 effects to water quality, effects of the Forest Plan amendments, restoration work that has
 been completed on the Ochoco National Forest in the years since the Travel Management
 Project ROD was signed, and the preliminary implementation plan for this project.
- Information related to the objection period was added to the ROD.
- More information was added to the discussion of the environmentally preferable alternative.
- More information was added to the discussion of alternatives considered but eliminated from detailed study.
- More information was added to the discussion of Forest Plan amendments.
- · Maps were updated and clarified and new maps were added.
- · Minor corrections and clarifications were added throughout the document.

Introduction and Background

Based on my review of the Supplemental Final Environmental Impact Statement (SFEIS), I have decided to implement **Alternative 5**, with one modification; please see Maps 1 and 2 (the modification is clearly displayed on Map 2). Alternative 5 is summarized in this Record of Decision (ROD) and described in detail in the Supplemental Final Environmental Impact Statement (SFEIS) titled *Ochoco Summit Trail System Project*. My decision is to select Alternative 5 with one additional route described under Alternative 2, including the associated project design criteria, resource protection measures, monitoring, and Forest Plan amendments as described starting on page 29 of the SFEIS. Alternative 5, plus the one additional route, provides a designated trail system for motorized off-road vehicles while caring for natural resources and providing for non-motorized recreation.

Prior to the Record of Decision for the Deschutes and Ochoco National Forest Travel Management Project (2011), motorized recreationists on the Ochoco National Forest were able to travel cross-country anywhere on the Forest, except where this use was specifically prohibited. During the planning process for the Travel Management project, when it became clear that the Record of Decision would change the nature of motorized recreation and access on the Ochoco National Forest, the decision was made to initiate a planning process to designate a system of trails intended specifically for motorized recreation and OHV access. This proposal was intended to offset the loss of opportunity that would be experienced by the motorized recreation community once the Travel Management Project ROD was signed.

The Ochoco National Forest engaged in an extensive pre-scoping process to identify a project area in which a designated motorized trail system might be proposed. The Forest worked with the Federal Advisory Committee Act chartered Deschutes Basin Provincial Advisory Committee (PAC) Travel Management Working Group to identify a Community Support Area, which was an area where the diverse group of stakeholders, the Travel Management Working Group, could agree a motorized trail system could be proposed. Initially, the area identified by the Forest for development of a designated OHV trail system was in the McKay Creek Subwatershed near Prineville, Oregon. Communication with stakeholder groups, however, determined that there was a distinct lack of common support for such an undertaking in the McKay Creek area. Further stakeholder meetings indicated that there was common support for development of a proposed motorized trail system within the Ochoco Summit Trail System Project area (please see Figure 1). Additional public involvement during the development of the final EIS resulted in refining the project area into two implementation areas with an overlying OHV Management Area, as described in the "Decision" and "Rationale for the Decision" sections of this ROD and illustrated on Maps 1, 2 and 3.

Considering the reduction of authorized OHV recreation and access opportunities following the 2011 Travel Management decision and recognizing that it is Forest Service policy to provide a diversity of road and trail opportunities for experiencing a variety of environments and modes of travel, the following Needs for Change were identified, which led to the development of the statement of Purpose and Need:

1. There is a need to designate a sustainable system of roads and trails open to motorized recreational vehicles, including OHVs, to provide legal public access, protect natural

resources, and minimize conflicts between motorized and non-motorized recreational use on the Ochoco National Forest.

- 2. There is a need to change the existing system of NFS motorized-use trails on the Ochoco National Forest to provide a sufficient number and length of trails to disperse recreational users and make a sustainable network of trails.
- 3. There is a need to provide a diversity of off-highway motorized recreation opportunities, for a range of OHV classes, to offset the loss of opportunities following the 2011 Travel Management decision.

The Ochoco National Forest released the draft EIS for the Ochoco Summit Trail System project in January of 2012 and the final EIS and draft Record of Decision in March of 2014. The Responsible Official withdrew the final EIS and draft Record of Decision in 2014 due in part to a desire to have further dialogue with public stakeholders and other agencies prior to making a decision. The decision to withdraw was also partly associated with the Bailey Butte Fire of 2014, which burned into the project area and created a condition that was potentially sufficiently different from the condition initially analyzed that additional analysis and some different design criteria were warranted. The Ochoco National Forest then initiated the supplemental draft EIS.

The Decision

I have reviewed the SFEIS for the Ochoco Summit Trail System project and the information contained in the project file. I have reviewed and considered all public comments submitted on this project, including the objections that were filed. I have determined that there is adequate information to make a reasoned choice among alternatives. It is my decision to select Alternative 5 plus one route from the Proposed Action (Alternative 2). My decision includes connected actions, forest plan amendments, resource protection measures and monitoring, as described in the SFEIS (pages 24-44).

Specifics of Decision

My decision includes adoption of some appropriately and sustainably located user-created trails, establishment of trails on existing road beds and new trail construction for a total of 107 miles of designated trails, plus 30 miles of connecting high-clearance roads for a total of about 137 route miles within the designated trail system and OHV Management Areas (see Table 1). These designated routes are located within two distinct implementation areas (see Maps 1 and 2).

The West Implementation Area (Map 1) will include a total of about 53 miles of designated routes that will be available to motorcycles and ATVs. Of these, about six miles will also be available for side-by-side vehicles. This system will include 37.7 miles of trails designed for Class I vehicles (OHVs up to 50" in width) and 9.3 miles of connecting road in the Class I system. In addition, there will be 4.9 miles of trail for side-by-side vehicles (OHVs up to 65" in width) and 1.2 miles of connecting road in the Class IV loop.

The East Implementation Area (Map 2) will include a total of approximately 84 miles of designated routes open from June 1 to September 30. This system will include 14 miles of trail intended for Class II vehicles (Jeeps and other 4-wheel drive vehicles up to 80" in width) plus 8.3 miles of connecting road, for a total of 22.3 miles of routes designated for Class II vehicles; all smaller motorized vehicles (including ATVs, side-by-sides, and motorcycles) may use these trails as well.

The East Implementation Area also includes 50.2 miles of trails intended for vehicles up to 24" in width (Class III vehicles) plus 11.6 miles of connecting road, totaling 61.8 miles of trail designated for use by motorcycles only.

Trails (except for learner loops) will be designated for 2-way traffic; that is, trails will be single trail width with turnouts (SFEIS p. 30). Generally speaking, trails designated for a particular class of vehicle will be available for use by that vehicle type and smaller vehicles, but will be designed for the designated vehicle type. For example, the Class II (Jeep and 4x4) trail system will be designed to the extent possible to support the recreational interests of Class II users, but all smaller vehicles will be permitted to use Class II trails. All vehicle types are permitted to use open, mixed use roads as identified in the Motor Vehicle Use Map (MVUM). Non-motorized recreation will be permitted on any trail segment at any time of the year.

Of the 137 miles of trail system, about 84 miles (61%) are on existing roads and are therefore mapped with a high level of accuracy. Of the 53 miles of "new" routes, some were mapped using Global Positioning Systems (GPS) and some were mapped using visual estimates. Although identified as "new" routes because they are not located on existing roads, these routes were located on existing disturbance as much as possible.

The route miles described above are estimates made with Geographical Information System (GIS). The final mileage may vary due to on-the-ground alignment adjustments associated with trail features such as switch-backs, meanders, road or stream approaches, road grades, curves, obstacles, and topography. As described in the "Project Design Criteria" section in SFEIS Chapter 2, minor trail location adjustments may be made to meet project objectives associated with resource protection. It is my intent that actual trail placement will occur within approximately 100 feet of the center line displayed on the map for the selected alternative.

Table 1. Summary of OHV routes authorized in this decision.

Total miles in Designated System Routes (including mixed-use roads)	137
Total miles of OHV trail	107
Miles of Class I Trail (trail for vehicles 50" wide and smaller)	38
 Miles of Class II Trail (trail for vehicles 80" wide and smaller) 	14
Miles of Class III Trail (24" single track trail for use by motorcycles	50
Miles of Class IV Trail (trail for vehicles 65" wide and smaller)	5
Miles of trail not on GIS roads ("new construction")	53

There are four strategically-placed staging areas in my selected alternative (see Maps 1 and 2). All but one of these utilize existing developed facilities. All staging areas will be designed for target user groups based on trail width and vehicle classes allowed on the trail network. As described above, vehicles of narrower width and nonmotorized recreationists would not be prohibited from utilizing staging areas designed for larger vehicles. For example, motorcycle riders, mountain bikers and hikers could choose to use staging areas and trails in Class I and

Class II trail systems. Likewise, ATV riders could choose to use staging areas and trails in Class II trail systems. Operators of Class II vehicles will be limited to traveling on open mixed use roads and areas designated as open to cross country travel according to the MVUM or on a designated Class II trail system.

- The West Trail Implementation Area includes staging at the Ochoco Divide and Walton Sno-Parks. These staging areas will utilize existing vault toilets and parking areas and will include a kiosk with visitor maps and information and Walton Sno-Park will include picnic tables. These staging areas will be available for Class I and III riders and will provide access to the designated trail system in the West Implementation Area. Directional signage will be provided throughout the Class I/III trail system.
- The East Trail Implementation Area includes staging for Class III vehicles at Cottonwood Pit and will utilize the existing vault toilet; the staging area will include picnic tables and a kiosk. A trailhead for Class III vehicles will be established at the trail crossing of the road to Six Corners Rock Pit. Minimal development will occur at that site, including picnic tables and a kiosk with visitor maps and information. No vault toilet will be installed at the Six Corners trailhead. Directional signage will be provided throughout the Class III trail system.
- The East Trail Implementation Area includes one staging area for Class II vehicles at Peterson Lava for riders that enter the system from FS Road 2630. A vault toilet, picnic tables and a kiosk with visitor maps and information will be installed there. The Class II system has multiple connections with open mixed use roads. These connections will not include developed facilities and will be managed as dispersed recreation sites in accordance with the Motor Vehicle Use Map (MVUM). A kiosk will be installed near the south end of the system at Jones Lava to provide information and maps to rider entering the system from FS Road 30. Directional signage will be provided throughout the Class II trail system.

Authorized season of use for motorized vehicles on the designated trail system will be from June 1 to September 30, except within the Rager Travel Management Area (TMA) where the routes not on green dot roads close at an earlier date of September 30 or the beginning of the closure period specified for the Rager TMA. The actual date of this closure changes annually, but generally begins two days prior to the opening of deer rifle hunting season. Trails and roads closed for the Rager TMA would remain closed to motorized use through the winter and would reopen on June 1 of the following year. Non-motorized use of the proposed trail system would be allowed year-round, including use by hikers and equestrians during the motorized closure period.

Actions Associated with the Selected Alternative

Implementation of Alternative 5, plus one route from Alternative 2, includes the following activities:

About 12 miles of administratively closed¹ Maintenance Level 1 roads will be opened, designated and maintained for Class I vehicles (50" in width or less), and open to Class I and III.

¹ Motorized use on administratively closed roads is limited to what is required for administration and protection of NFS

- About 4.6 miles of administratively closed Maintenance Level 1 roads will be opened, designated and maintained for Class II vehicles (80" in width or less) and open to Class I, II. and III.
- About 19.7 miles of administratively closed Maintenance Level 1 roads will be opened, designated and maintained for Class III vehicle use (24" in width or less).
- About 4.8 miles of administratively closed Maintenance Level 1 roads will be opened, designated and maintained for Class IV vehicles (80" in width or less) and open to Class I, II, III, and IV.
- About 1.5 miles of roads previously planned to be decommissioned will be opened, designated and maintained to a width of 50" and used as OHV routes for Class I vehicles and open to Class III vehicles.
- About 1.3 miles of roads previously planned to be decommissioned will be opened, designated and maintained to a width of 80" and used as OHV routes for Class II vehicles and open to Class I, III, and IV vehicles.
- About 4.6 miles of roads previously planned to be decommissioned will be opened, to a width of 24" designated and maintained for Class III vehicles.
- About 8.6 miles of currently open Maintenance Level 2 roads will be primarily utilized as OHV routes for Class I vehicles. This will be shared use Class III OHVs with standard (non-OHV) motor vehicles and will have directional and safety signing installed.
- About 8.3 miles of currently open Maintenance Level 2 roads will be primarily utilized as OHV routes for Class II vehicles. This will be shared use all OHVs with standard (non-OHV) motor vehicles and will have directional and safety signing installed.
- About 11.4 miles of currently open Maintenance Level 2 roads will be utilized as OHV routes for Class III vehicles. This will be shared use with standard (non-OHV) motor vehicles and will have directional and safety signing installed.
- About 1.2 miles of currently open Maintenance Level 2 roads will be utilized as OHV routes for Class I, II and IV vehicles. This will be shared use with standard (non-OHV) motor vehicles and will have directional and safety signing installed.
- Two existing Sno-Parks (Ochoco Divide and Walton) will be utilized as staging areas for OHV during the season of operation of the OHV trail system (June 1 to Sept 30).

lands by Forest Service personnel performing official duties. Other authorized uses of administratively closed roads include:

Use of administratively closed roads for OHV trail system will not preclude the use of the road at a later date. Trail segments on administratively closed roads will incorporate design features that will restrict trail use to the designated footprint but allow for conversion back to administrative road use if such use becomes necessary; trail design would be restored following any administrative use.

Use of any fire, military or emergency vehicle for emergency purposes or law enforcement vehicles for emergencies of law violations, including pursuit.

Motor vehicle use specifically authorized under a written authorization issued under Federal law or regulation such as contracts, easements, permits and mining claims. These can include, but are not limited to, timber sale contracts, road use permits, special use permits, grazing permits, and mining plans of operation.

- One existing developed recreation site (Cottonwood Pit) will be utilized as a staging area for Class III vehicles during the season of operation (June 1 until the beginning of the Rager TMA closure period each year).
- User-created trails and other unauthorized routes located in inappropriate areas or that
 would cause confusion and attract use due to intersection with the proposed designated
 route will be closed and rehabilitated or concealed, and directional signing installed as
 needed.
- Motorized and non-motorized uses will be separated as much as possible except where
 proposed motorized routes and non-system, traditional use equestrian trails share open
 mixed use road segments. Signing will be used to encourage respectful behavior by all
 users and to ensure designated motorized routes are consistently mapped and clearly
 marked on the ground with directional signage.
- An open rocky area near the top of Peterson Lava will be utilized as a staging area for Class II vehicles. This site will be set back off of the 2630 road in order to maintain the current historic integrity of the Historic Summit Trail which is a primitive native aggregate surface Maintenance Level 2 road in this area. An informational sign would be developed and installed in the vicinity of this site to share the historical background of the Historic Summit Trail and the surrounding area.
- Six Corners Material Source (gravel pit) is an active mineral material source. The
 trailhead and parking area for the Class III system will be located so as to not interfere
 with safe operation of the mineral material source and the access and haul road associated
 with it.
- The Walton Sno-Park is situated in the Walton Material Source (gravel pit) which is an
 active mineral material source. The staging area and associated amenities for the Class I
 and III OHV trail system will be located so as to not interfere with safe operation of the
 mineral material source and the access and haul road associated with it.

My selected alternative will provide trail systems for all four Classes of OHVs and as described above will be specifically opened, designed, and maintained for a range of OHV opportunities. They are classified into four standard categories:

- Class I: vehicles (ATVs, three-wheelers and quads) are 50 inches wide or less and have a dry weight of 800 pounds or less, have a saddle or seat, and travel on three or four tires.
- Class II: vehicles (Jeeps or other 4-wheel drive vehicles) are more than 50 inches wide and have a dry weight of more than 800 pounds, but less than 8,000 pounds.
- Class III: vehicles (motorcycles) ride on two tires and have a dry weight of less than 600 pounds.
- Class IV: vehicles (side-by-sides) are 65 inches wide or less and have a dry weight of 1800 pounds or less, have non-straddle seating and a steering wheel, and travel on four or more pneumatic tires.

The implementation strategy for this project includes two levels of focus. First, an "OHV Management Area" boundary will be established to guide the area of focus for managing OHV

recreation within the Ochoco Summit project area (see Map 3). Within the "OHV Management Area" a priority will be placed on education, increased compliance, and enforcement of the OHV use regulations including restricting OHV use to designated routes. It should be noted that the term "OHV Management Area" is intended to identify an area within which certain management activities will occur; no new Forest Plan Management Area is established with this decision.

Within the "OHV Management Area" there will also be a focus on closure and rehabilitation of unauthorized routes being used by OHV vehicles and street-legal vehicles or that intersect with the designated system, but are not part of it. Closure may include activities such as installation of barriers, concealment and/or revegetation. Rehabilitation may include activities such as restoration of cross drainage, storm proofing, stabilization, placement of woody debris and or/revegetation. The "OHV Management Area" will be the boundary for funding proposals (such as grants and partnerships) to support monitoring, maintenance, operations, education, visitor compliance, and enforcement of the OHV trail system.

The term "Trail Implementation Area" is generally applied to the area within ½-mile of the designated trail system routes shown on Maps 1 and 2. The "Trail Implementation Areas" will serve as areas of focus for efforts on trail development, signing, monitoring and maintenance, as well as for management of unwanted routes that are not included in the designated trail network. These boundaries will also be utilized to focus efforts of volunteer groups and partners involved in trail development, monitoring and maintenance, as well as those involved in monitoring of non-motorized routes and closure of unauthorized routes. Route closure may include physical closure, rehabilitation and/or concealment of routes not authorized for motorized use (closed, decommissioned or user-created routes not included within the designated system of motorized routes).

Forest Plan Amendments

This decision includes non-significant and site-specific forest plan amendments as described in the SFEIS on pages 28 and 438-444. These amendments will exempt the Ochoco Summit Trail System project from standards and guidelines associated with three Old Growth Management Areas (MA-F6) and scabland habitat in order to create logical connections between existing open roads within the designated trail system. All four amendments affect a very small portion of the landscape in general and the specific resource in particular, as described in the SFEIS and in Appendix B of this ROD, and are therefore very limited in both context and intensity. The function of the affected Old Growth Management Areas would not be changed by the creation, designation, presence and use of motorized trails. The creation, designation and use of motorized trails on scabland will result in a permanent effect to scabland, but will affect less than 1% of the scabland in the project area. I do not anticipate that this decision will result in setting a precedent for similar Forest Plan amendments in Old Growth Management Areas or scabland. I believe that the analysis described in the SFEIS SFEIS (pages 438-444) and in Appendix B of this ROD indicates that there will be no adverse cumulative effects to Old Growth Management Areas and scabland, when all management activities including past Forest Plan amendments are considered.

Resource Protection Measures

This decision includes all resource protection measures described for the action alternatives in Chapter 2 of the SFEIS.

Rationale for the Decision

My decision to select Alternative 5, plus the additional route from Alternative 2, was made by considering how well the alternative meets the purpose and need and how the alternative responds to the issues raised during project development. This decision is based on my review of the analysis presented in the Environmental Impact Statement and the comments received from the public, from other agencies and internally. In selecting Alternative 5, plus the additional route from Alternative 2, I carefully reviewed disclosures in Chapter 3 SFEIS. The analysis discloses predicted environmental consequences of the actions, including effects to Transportation; Recreation; Geology and Soils; Hydrology and Aquatic Species; Wildlife and Plants; Cultural Resources; Range Resources; Wilderness, Inventoried Roadless and Unroaded Areas; Visual and Air Quality; Social and Economic elements; Civil Rights and Environmental Justice. My conclusions are based on a review of the entire project record, which includes a thorough review of relevant scientific information, and a consideration of responsible opposing views as described in SFEIS Appendix A-Response to Comments. The following narrative explains details of my reasoning for the decision.

Response of Selected Alternative to the Purpose and Need

There are many good reasons to proactively establish a motorized trail system in a suitable and sustainable location on a forest where the public wants to participate in motorized recreation and where interest in recreational opportunities is increasing. It is also important to provide motorized recreation opportunities on the forest and near the community of Prineville, Oregon, given the implementation of the Travel Management Rule and the resulting changes to the opportunity for motorized recreation. The 2011 ROD for the Travel Management Project prohibits off-road motorized travel on the vast majority of the Deschutes and Ochoco National Forests, resulting in a demand for designated OHV trail opportunities. Refer to the Purpose and Need statements on page 2 to 3 of the SFEIS. The purpose of the Ochoco Summit Trail System project is to designate motorized trails in order to provide a suitable experience for users while minimizing resource damage. Alternative 5, as modified with this decision, responds to the Purpose and Need of this project by implementing a logical and sustainable trail system that meets the demand for trail opportunities for a variety of OHV vehicle classes while limiting impacts to soil, water, wildlife and botanical resources in the area. The selected alternative also minimizes effects to existing nonmotorized recreational experiences by avoiding equestrian staging areas and non-system horse trails, favored wildflower and bird watching areas, developed campgrounds, unroaded areas and other designated recreation areas and hiking/mountain biking trails, as well as by limiting the season of use by motorized off-road vehicles so that there is very little overlap with the big game hunting seasons.

Modified Alternative 5 responds to the Purpose and Need by designating trail routes in locations that minimize impacts to sensitive resources (see SFEIS pages 451-456 and Maps 4 and 5 with this ROD). Modified Alternative 5 addresses concerns raised by the public associated with motorized vehicle interaction with water features, especially fish bearing and 303(d) listed streams; the selected alternative also responds to public concerns by avoiding Corral Flats and Crystal Springs and by reducing proximity to private lands and to the Ochoco Divide Research Natural Area (RNA) compared to the other action alternatives. The additional route added to Alternative 5 by this decision does not require new stream crossings over perennial streams and utilizes existing road beds. The selected alternative will designate routes within existing road corridors and in proximity

to existing open roads to the extent possible in order to reduce potential disturbance to wildlife, and stays out of the Big Summit Wild Horse Territory. This alternative addresses unauthorized routes and motor vehicle access off of designated routes in the "OHV Management Area" to further protect soil, water, wildlife, botanical resources, and the experience of the non-motorized recreationists.

Response of Selected Alternative to the Key Issues

Issue 1: The proposed action trail system is too small and lacks quality (complexity, range of difficulty levels, dispersion of users, etc.).

The proposed action (Alternative 2) reflected the interdisciplinary team's initial collaborative effort in trail system location and design. Public comments on the proposed action indicated a range of interests from all OHV Class riders; requested changes to the proposed action included more trail miles, interconnected loops, access to prominent viewpoints and interesting features, creation of trails (rather than existing open road), amenities like staging areas, and separation of some vehicle classes, particularly Class III, for increased safety.

Alternative 5 identifies approximately 135 miles of designated trail system across two separate implementation areas, each focused on providing opportunities for specific vehicle Classes. Alternative 5 provides staging areas and trails for Class I and III vehicles and a trail loop for Class IV in the West Implementation Area and staging areas and trails for Class II and III vehicles in the East Implementation Area. As noted previously, Class I, III and IV vehicles can utilize trail systems designated for Class II if they choose to do so. The added trail segment from Alternative 2 provides approximately 2.2 miles of additional trail for Class II vehicles while utilizing existing disturbance on old road beds. Each trail system provides decision points and interconnected loops within the system for each vehicle class, and/or connects to a variety of mixed-use roads for further riding opportunity, trail connectivity and dispersed camping opportunities beyond the designated trail network (as allowed under the Travel Management Plan and current Motor Vehicle Use Map). Modified Alternative 5 includes a trail system offering varying degrees of difficulty for a variety of vehicle classes and access to scenic vistas.

Modified Alternative 5 incorporates most of the design features that OHV users requested (interconnected loops, decision points, access to scenic vistas). The added trail from Alternative 2 adds another loop option within the Class II trail network. Modified Alternative 5 is one of the best alternatives for access to scenic viewpoints with the proposed change in highway legal designation on one segment of FS Road 2630, which will allow mixed-use road access from the designated trail systems to Mt. Pisgah and Peterson Point.

Issue 2: The trail system could impact big game habitat.

Oregon Department of Fish and Wildlife personnel and others raised concerns about designation of a motorized trail system potentially altering effectiveness of mule deer and elk summer range, fawning and calving areas, and winter range. Mule deer use the project area year round, fawning in the spring, summering at higher elevations and wintering at lower elevations. Elk also use the project area for summer range and calving, particularly north of Big Summit Prairie, near Round Mountain and north of the 2630 road from Peterson Point to Buck Point. Elk calving period distribution also includes concentrations of activity south of Road 42 near Roba Butte and in South Boundary Travel Management Area (TMA). Elk use the project area as winter range with the

greatest winter use south of the 42 road from Six Corners to Deep Creek Campground, within the South Boundary TMA and the lower elevations of Ochoco Creek. While small bands of elk can be found in most of the project area, the greatest use occurs to the north and to the south of the East Implementation Area, to the south of the West Implementation Area and within the South Boundary TMA. During planning of this project, areas with the highest concentration of elk telemetry points and all areas within winter range allocations were avoided when locating potential OHV trail networks. In addition, the project analysis included a disturbance banding exercise which estimated the extent of elk security habitat based on research from Starkey Experimental Station (greater than ½ mile from motorized routes).

Currently, considerable motorized and unregulated use is occurring across the project area. The designation of a well-designed, managed and monitored trail system is expected to concentrate motorized use within the Implementation Areas and lessen the impact of motorized use outside of the Implementation Areas. Within Implementation Areas there is potential for increased disturbance and a disruption in daily activity patterns for both mule deer and elk; however, disturbance is expected to decrease outside of the Implementation Areas where telemetry has demonstrated that elk use is highest.

An important indicator regarding big game habitat is open road/motorized trail density. Forest Plan Standards and Guidelines for road density are based on Forest Plan Management Area. No action alternative would increase open road density above Forest Plan standards and guidelines; no trail system will be established within Winter Range or General Forest Winter Range Forest Plan allocations (Table 2).

Table 2. Open road/motorized trail densities by alternative, compared with Forest Plan Standards by Management Area.

Forest Plan Management Area	Forest Plan Standard	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
MA-F22, General Forest	3.0 mi/mi ²	1.91 mi/mi ²	2.23 mi/mi ²	2.13 mi/mi ²	2.31 mi/mi ²	2.13 mi/mi ²
MA-F20, Winter Range and MA-F21, General Forest Winter Range (during season of use)	3.0 mi/mi ² (5/2 to 11/30 annually)	1.41 mi/mi ²				
Winter Range and General Forest Winter Range (during seasonal closures)	1.0 mi/mi ² (12/1-5/1 annually)	0.9 mi/mi ²				

The OHV Management Area and Implementation Areas for the selected alternative are within moderate to low value forage areas as predicted by the Draft Blue Mountain Elk Nutrition Model. The largest blocks of highest value forage areas predicted by the model are avoided under the selected alternative. The amount of secure elk habitat (based on a distance of ½ mile or more from open motorized routes) is reduced within some small to moderate sized blocks of existing elk security habitat, within small to moderate sized blocks of low to moderate value summer forage habitat. The largest blocks of highest value elk security areas remain unchanged. The changes in elk security areas within high predicted use areas is generally within relatively small-sized patches of elk security areas (Marks Creek, Peterson Lava, and between Jackson Creek and Little Summit Creek). The remainder of the changes in elk security area under the action alternatives occurs within small to moderate sized patches of elk security and within moderate to low value forage areas (between Big Summit Prairie and Little Summit Prairie). Thus the best elk security areas

based on (large patch size and high forage value) are not affected by the selected alternative (see Appendix B of the Wildlife Report).

The season of use for the selected alternative is one month less on each end of the operating season compared to Alternatives 2 and 4; the trail system will open to motorized use on June 1 and close on September 30, except in the Rager TMA where it closes with the Rager restriction start date and remains closed until the following June. Thus this alternative provides a higher level of security for big game in the fall, winter and spring than the other action alternatives. Unauthorized routes will be rehabilitated within the OHV Management Area, and user compliance (motorized use only within the finite system of designated routes) is expected to be maintained through monitoring and education, as well as enforcement as necessary, which will reduce the impacts of motorized use to big game in these areas.

Issue 3: The trail system could impact water quality or cause degradation of fish habitat.

Some commenters, including Oregon Department of Fish and Wildlife personnel and public entities, raised concerns that designation of a motorized trail system could affect water quality and habitat for aquatic species. In developing a proposed action, the project interdisciplinary team and I avoided Riparian Habitat Conservation Areas (RHCAs) and stream crossings to the greatest extent possible while identifying a sustainable trail network within the Community Support Area that was identified by the Deschutes Provincial Advisory Committee (PAC) Travel Management Subcommittee. Potential trail routes paralleling stream courses and potential routes near sensitive areas, such as seeps, springs, wet meadows and wetlands, were largely avoided when locating the proposed OHV trail network. Alternative 3 was developed to go further in avoiding opportunity for unwanted resource effects. Alternative 5 was developed using Alternative 3 as a starting point, but included a number of route realignments to remove trail segments from riparian locations that were determined to be especially sensitive during the initial analysis of alternatives. Although Alternative 5 has more total stream crossings than Alternative 3, its avoidance of sensitive riparian areas makes it the preferable alternative. See Table 3 for a comparison of stream crossings; the trail system and its location relative to RHCAs are displayed on Maps 6 and 7 with this ROD.

Table 3. Comparison of trail and intermittent and perennial stream crossings among the action alternatives.

pa	Alternative 2		Alternative 3		Alternative 4			Alternative 5				
Sub- Watershed	Existing Xing	New Xing	Total Xings	Existing Xing	New Xing	Total Xings	Existing Xing	New Xing	Total Xings	Existing Crossing	New Xing	Total Xings
Elliott Creek	15	9	24	1	4	5	10	14	24	0	5	5
Howard Creek	1	7	8	4	3	7	2	7	9	3	4	7
Jackson Creek	12	10	22	4	7	11	16	8	24	3	5	8
Little Summit Prairie Creek	2	1	3	2	1	3	2	2	4	0	2	2
Lower Deep Creek	5	4	9	5	4	9	8	4	12	1	4	5
North Wolf Creek	3	0	3	3	0	3	3	0	3	0	5	5
Peterson Creek	24	16	40	0	0	0	21	17	38	0	3	3

Table 3. Comparison of trail and intermittent and perennial stream crossings among the action alternatives.

pa	Alternative 2		Alternative 3		Alternative 4			Alternative 5				
Sub- Watershed	Existing Xing	New Xing	Total Xings	Existing Xing	New Xing	Total Xings	Existing Xing	New Xing	Total Xings	Existing Crossing	New Xing	Total Xings
Porter Creek	25	9	34	3	6	9	22	8	30	12	10	22
Upper Marks Creek	4	0	4	5	9	14	15	9	24	21	1	22
Total	91	56	147	27	34	61	99	69	168	40	39	79

My selected alternative includes the fewest number of miles of new trail within wetland areas. Table 4 displays the mileage of new trails within wetlands by alternative, compared to existing unauthorized routes (identified by LIDAR) through wetlands, in each affected subwatershed. OHV use on existing roads through wetlands does not cause additional effect to wetland habitat because the road surface has already been built. Existing unauthorized routes through wetlands within the OHV Management Area will be camouflaged/restored/rehabilitated as described in the SFEIS under my selected alternative.

Table 4. Miles of new motorized trail through wetlands by subwatershed and alternative, as compared to the existing condition (Alternative 1).

Subwatershed	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Crazy-Deep	0.0	0.2	0.1	0.2	0.0
Headwaters Elliott Creek	0.1	0.1	0.1	0.1	0.1
Howard Creek	0.3	0.3	0.2	0.3	0.2
Jackson Creek	0.2	0.1	0.1	0.1	0.0
Little Summit Creek	0.1	0.1	0.1	0.1	0.1
North Wolf Creek	0.0	0.0	0.0	0.0	0.0
Peterson Creek	0.2	0.0	0.0	0.0	0.0
Porter Creek	0.4	0.0	0.0	0.0	0.0
Upper Marks Creek	1.2	0.4	0.5	0.5	0.2
TOTAL	2.5	1.2	1.1	1.3	0.6

For the 0.6 miles of new trail in wetland areas, my selected alternative will utilize "puncheon stringers" to elevate the trail above the wetland. Puncheons are wooden walkways that consist of a deck or flooring made of sawed, treated lumber or native logs placed on stringers; they are used to cross bogs, wetlands or small streams. Puncheons will be constructed in locations where the ground is so wet that the trail can't be graded and the trail surface is not easily drained. Elevating motorized vehicles above the wet areas will ensure that there is no damage or destruction to the wet areas; between use of puncheons and restoration of unauthorized routes in wetlands, my selected alternative will result in no net loss or degradation of wetland habitats within the OHV Management Area.

The season of use for Alternative 5 is two months shorter (one month shorter on each end of the operating season) compared to Alternatives 2 and 4; under Alternative 5 the trail system will open for motorized recreation on June 1 and close to motorized recreation on September 30, except in the Rager TMA where it closes with the Rager restriction start date and remains closed until the following June. Thus Alternative 5 provides a better assurance of dry soil conditions during the open season of use than Alternatives 2 and 4. My selected alternative includes Project Design Criteria (PDC) that will ensure that drainage is functional and that measures are in place and

effective in preventing erosion and sediment delivery (refer to PDCs in the SFEIS, Chapter 2). Unauthorized routes will be rehabilitated within the OHV Management Area (see Appendix D). With the implementation of a well-designed trail system (including monitoring, education and enforcement), it is expected that most motorized recreationists will opt to use the designated system within the open season of use, which will contribute to protection of project area waterways through reduced opportunity for erosion and sediment delivery.

Issue 4: The trail system could create or exacerbate conflict between motorized and non-motorized recreationists.

Comments from organized equestrian groups and other public entities have indicated a belief that designation of an OHV trail would bring additional motorized riders as the designated trail system becomes known; consequently the potential for conflict would be greater. Motorized uses that encounter horse riders on the trail have the potential to surprise and frighten animals. For this reason alternatives to the Proposed Action were located so as to minimize sharing of trail routes between the non-system endurance trails (High Horse and Mustang Loops). Designated motorized routes and non-motorized equestrian routes would be separated as much as possible except where each trail system shares use on existing open roads. There are intersections between the proposed OHV routes and the non-system horse trails, and the intent is to have the crossings well marked with directional signing to prevent OHV use of the equestrian routes. If any width controlling devices are installed at any OHV route intersection with an endurance trail route, it will be designed to be passable by horses.

There were also concerns expressed by non-motorized recreationists other than equestrians. As disclosed in the SFEIS, there is no overlap or crossing of proposed motorized routes with system non-motorized trails in the project area, with the exception of Nordic ski trails. The season of use for the OHV trail network under Alternative 5 is from June 1 to September 30, except in the Rager TMA where it follows the dates of the Rager restriction period, then remains closed for the winter. This effectively separates the OHV use from the Nordic ski trail use even though they may share some routes.

Currently, as a result of an Oregon Statue, Class I, II, and III vehicles must be muffled to produce no more than 99 decibels (dB) of sound pressure. A noise analysis was done for this project using 45 dB or greater as a level at which the sound from OHV traffic would be audible to the casual observer (refer to the Recreation section in Chapter 3, Environmental Effects to Non-motorized Recreation Experience). Of the action alternatives analyzed in detail in the SFEIS, Alternative 5 had the least impact on existing recreation sites and areas (refer to Table 44 in the SFEIS). Alternative 5 removes the routes in proximity to Crystal Springs Organization Camp, but increases the number of dispersed camp sites within the >45 dB noise band compared to the other alternatives; this is due to inclusion of existing open mixed use roads that are in proximity to such sites and areas into the designated trail network.

Equestrians, hikers and mountain bikers will not be prohibited from using the motorized trails, so some sharing of portions of the proposed trail is expected. When non-motorized recreationists choose to use designated motorized routes, they may encounter motor vehicles on the trail and may be able to hear the sound from them while traveling within or in proximity to the designated system of routes. Education and signing to encourage respectful behavior by all users is key and part of the education and monitoring strategy incorporated into the selected alternative. Unauthorized routes

will be rehabilitated within the OHV Management Area, and user compliance is expected to increase, and off-season use will be monitored and enforced, further assuring protection of waterways through reduced opportunity for erosion and sediment delivery.

Consideration of Public Comment and other Resource Issues

The following describes how Modified Alternative 5 responds to public comment and other resource concerns.

- Abandoning specific routes in proximity to private land and the Crystal Springs
 Organization Camp (operated under Special Use Permit) reduces potential impacts to
 residents and to quality of experience of guests at the camp facilities.
- Abandoning specific routes in proximity to Corral Flat (events operated under Special Use Permits) reduces potential conflicts with traditional equestrian camps and staging for the annual endurance ride and other informal rides and camp events that occur at this site and on the non-system horse trails originating from this site: Mustang Loop and High Horse Loop.
- Addition of selected routes from Alternative 4 replaces the mileage of trail system, and quality features such as interconnected loops and decision points within the Class I OHV trail system.
- Addition of a trail route proposed in Alternatives 2 and 4 to connect between the staging area at Walton Sno-Park and the existing mixed use road system FS 2630-400 in combination with a change in status from "Roads Open to Highway Legal Vehicles" to "Roads Open to All Vehicles" (mixed use allowed) on one segment of FS 2630 between its junctions with FS 2630-400 and 2630-450 would provide an opportunity for authorized OHV travel between the West Implementation Area and the East Implementation Area. This would provide opportunities for riders coming from Mitchell to access the west end from FS 2630 coming from either FS 12 or FS 22, and for riders from Paulina to access the west end from FS 2630 coming from either FS 42 or FS 30. For riders from Bend, Prineville, Madras and Redmond west end staging areas could be used to access trails to points of interest such as Mount Pisgah or Scott's Camp, or the east end trail networks.
- The realignments of routes from Alternative 3 to avoid specific areas of hydrologic concern provide an opportunity to maintain or increase the length of trail system within the Class III OHV trail system while responding to comments regarding the need to reduce potential impacts to streams and riparian habitat, particularly in the Deep Creek Watershed. Two Class 2, and two Class 4 stream crossings that were eliminated with the alignment modifications (as compared to Alternative 3) are within the Deep Creek Watershed. The reroute of the 24" wide trail around the Crazy Creek exclosure (avoiding recently authorized or implemented road decommissioning and stream restoration work) is also within the Deep Creek Watershed.
- The inclusion of selected routes for Class II OHV from Alternatives 2 and 4 into
 Alternative 5 fills an important niche by providing trails designed for motorized Class II
 users. With the implementation of travel management rules, opportunities for off road use
 of these vehicles is more limited; Alternative 5 provides up to 7.8 miles of new trail in a

combination of desirable terrain and tight turns among trees in a loop configuration. The proposed trail has multiple access points off of existing open roads. In addition, there are 4 miles on closed or decommissioned roads that would not be maintained for standard vehicles and which would have obstacles or roughness added for technical challenge. There is also approximately 0.5 mile in one segment of an existing open road that is currently gullied, which would receive a layer of boulder armoring, which would provide an opportunity to drive on a boulder surface while also controlling erosion on this section of open road. This section of road would be posted as suitable for high clearance vehicles only. Of Alternatives 2 and 4 Class II routes available for consideration, the routes chosen to be included in Alternative 5 have the lowest level of environmental impacts because the trail system is primarily on ridges or on existing road beds and avoids new stream crossings.

This decision includes an additional route from Alternatives 2 and 4 to provide another 2.2 miles of trail on old road beds. This route utilizes an existing culvert on the lower end and a dry ford on the upper end that will be armored with boulders, providing additional opportunity for Class II riders as well as materials for stabilization and rehabilitation on a nearby closed road stream crossing.

Other Alternatives Analyzed

In addition to the Selected Alternative (Modified Alternative 5), I considered and analyzed three other action alternatives along with the No Action Alternative. Several alternatives were considered in the SFEIS and "eliminated from detailed consideration" (SFEIS, page 46). The four action alternatives considered in the SFEIS were developed to address the key issues and examine different combinations of activities. For additional details on these alternatives, see the SFEIS (Chapter 2, Alternatives 2, 3 and 4). As discussed under "Decision Rationale" I found Alternative 5 better responds to the public issues that arose during planning and sufficiently meets the purpose and need.

Alternative 1 – No Action

Under the No Action Alternative, current management plans would continue to guide administration of the project area. No new designated trails would be constructed. OHV use in the project area would be limited to open mixed use roads and areas open to cross-country travel under MVUM (selected rock pits). OHV Management Areas would not be identified, and grant funding to rehabilitate unauthorized routes and areas, to increase visitor compliance through education, information and enforcement would not be available.

The No Action Alternative is included as a baseline comparison of continuing the existing conditions without implementing the proposed actions as required by the CEQ Regulations (40 CFR 1502.14). Motorized access would remain in its current condition. Enforcement of existing restrictions found in the Ochoco National Forest Land and Resource Management Plan, the Travel Management Plan and site-specific decisions would continue. This includes past and reasonably foreseeable decisions to open, close, or decommission National Forest system roads on a project by project basis as supported by a roads analysis. At this time, there will be no change to existing designated routes or class of vehicle that could use the routes within the project area unless authorized under another project, such as those listed in the Cumulative Effects section (SFEIS

Table 7). There would be no Forest Plan Amendments to establish legal motorized crossings in allocated old-growth (MA-F6) or across scablands, and there would be no focused effort to close, restore, rehabilitate or conceal unauthorized routes unless authorized under another project such as those listed in SFEIS Table 7 (SFEIS page 47).

Alternative 1 would maintain the status quo within the project area. Although user-created trails typically take advantage of existing areas of disturbance, herbaceous cover would continue to be removed as trail systems and parking areas expand. It is believed that the user-created trail system within the project area has expanded on a yearly basis since the early 2000s when OHVs became popular in the project area.

I did not select this alternative because it does not meet the Purpose and Need for designation of an OHV trail system in a suitable and sustainable location, where there is some community support on Ochoco National Forest, while considering other forest uses.

Under this alternative there would be no opportunities to ride motorized vehicles other than on open mixed-use roads and within rock pits that are designated as open to cross-country travel on the MVUM maps.

Consequences of the No Action Alternative would include a continued absence of legal trail opportunities for Class I, II, III and IV vehicles within the project area, complete absence of legal trail opportunities for Class II and IV vehicles on the Ochoco National Forest, and very few legal trail opportunities for Class I and III vehicles on the Ochoco National Forest.

Alternative 2

Alternative 2, the original Proposed Action, would designate a total of 124 miles of OHV trail routes including 55 miles for Class I (ATV), 20 miles for Class II (Jeeps and other four-wheel drives) and 49 miles for Class III (motorcycles) within the Ochoco Summit Trail Project area (SFEIS, 12-16) and includes a number of specific features (SFEIS, Tables 38-40).

Designated trail routes would be located on existing skid trails and Maintenance Level 1 and 2 roads where available and would require new construction where old road beds are not available. This Alternative would include connecting roads within the designated system of routes to total 170 trail system miles as well as ten staging areas and six trailheads. This alternative would require four non-significant Forest Plan Amendments to designate specific trail routes to cross through allocated Old-growth (MA-F6) and one to cross scabland.

Alternative 2 was not selected because it does not sufficiently address the key issues that arose during the planning process, specifically the resource values associated with Key Issues 2, 3, and 4 (big game, aquatic resources and conflicts with non-motorized recreation). Alternative 2 would designate more motorized trail routes within areas more than ½ mile from existing motorized routes (elk security habitat); would establish more miles of trails in riparian areas and would involve more stream crossings; would designate staging areas and play areas in the vicinity of Happy Camp Creek and Ahalt Pit; proposes more trail mileage in proximity to Jackson Creek and in proximity to Buck Hollow Creek; would establish a trail in closer proximity to Corral Flat (equestrian endurance race staging area) and Allen Creek Horse Camp. This would most likely result in greater disturbance to wildlife, higher potential for impacts to water quality, non-motorized recreation, and social values when compared to Alternative 3 (SFEIS pages 8-11, Issues 2, 3, and 4). This Alternative would also create a greater amount of new disturbance dedicated to trail routes (69 miles). This alternative

was not selected because of concern about user conflict and safety of shared motorized and non-motorized uses on non-system trails and roads being used by equestrian groups and other non-motorized recreationists specifically in proximity to Corral Flats, the Sheep Corrals and Allen Creek Horse Camp.

This alternative was also not selected because it does not have the proper design to provide the recreational experience riders want. I heard from riders and they indicated they wanted a trail system better designed and engineered to provide more variety and a higher quality of trail experience (interconnected loop options and decision points) with less development of staging areas and trailheads and a lower cost of development. They also wanted a more diverse system that offered better opportunities for Class II vehicles not on open roads.

Alternative 3

Alternative 3 is fully described on SFEIS pages 16-19 and in SFEIS Tables 2, 38, 39 and 41. Alternative 3 offers many of the features described for Alternative 2 with the following exceptions:

- Motorized trails would be open for use by specified vehicle type, seasonally between June 1 and September 30 of each year, except in the Rager TMA where it would close with the Rager restriction start date and remain closed until the following June.
- The motorcycle (Class III) loop trail does not include the side loop in the Derr and upper Jackson Creek area that was in the Proposed Action. It also does not include the staging area or associated trails at Forest Road 4200-600, or the staging and play areas and associated trails at and around Aspen Pit compared to Alternative 2. It also does not include the staging area at Peterson Lava or any of the trailheads from Alternative 2.
- Compared to the Alternative 2, the Class I staging and parking areas at Ahalt Pit are not included; the singular (there-and-back) ATV (Class II) route between Indian Butte (at Forest Road 2200-350) and Scott's camp is not included; and none of the trailheads are included in this alternative.
- Alternative 3 does not include designated trails or staging areas for Class II vehicles (jeeps and buggies).

Alternative 3 was not selected because it does not address concerns related to private land as well as Alternative 5. Alternative 3 does not provide a system of trails for Class IV vehicles; Alternative 5 does offer a Class IV trail loop. Alternative 3 does not address water quality as well as Alternative 5, because the number of proposed new stream crossings is greater in Alternative 3 than in Alternative 5.

Alternative 4

Alternative 4 would designate a total of 158 miles of OHV trail routes including 95 miles for Class I (ATV), 18 miles for Class II (Jeeps and other four-wheel drives) and 45 miles for Class III (motorcycles) within the Ochoco Summit Trail Project area (SFEIS 19-24) and includes a number of specific features (SFEIS Tables 38, 39 and 42). Designated trail routes would be located on existing skid trails and Maintenance Level 1 and 2 roads where available and would require new construction where old road beds are not available. This Alternative would include connecting roads within the designated system of routes to total 212 trail system miles and ten staging areas.

This alternative would require four non-significant Forest Plan Amendments to designate specific trail routes to cross through allocated old-growth (MA-F6) and one to cross scabland.

Alternative 4 was not selected because it does not sufficiently address the key issues that arose during the planning process, specifically the resource values associated with Key Issues 2, 3, and 4 (big game, aquatic resources, and conflicts with non-motorized recreation). Alternative 4 would designate motorized trail routes within the areas described above for Alternative 2, plus additional routes in proximity to Howard Creek, Scott's Camp, Peterson Creek, and in the Deep Creek Watershed. This would most likely result in greater disturbance to wildlife, higher potential for impacts to water quality, non-motorized recreation, and social values when compared to Alternative 3 (SFEIS pages 8-11, Issues 2, 3 and 4). This Alternative would also create a greater amount of new disturbance dedicated to trail routes (84 miles). This alternative was also not selected because of concern about user conflict and safety of shared motorized and non-motorized uses on non-system trails and roads being used by equestrian groups and other non-motorized recreationists in proximity to Corral Flats, the Sheep Corrals and Allen Creek Horse Camp.

Although this alternative best addressed Key Issue 1, the level of potential for impacts to wildlife and aquatic resources and to non-motorized recreation values was sufficient to warrant not selecting this alternative.

Alternatives Considered but Eliminated from Detailed Study

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Public comments received in response to the Proposed Action provided suggestions for alternative methods for achieving the purpose and need. Some of these alternatives may have been outside the scope of the purpose and need (to designate a sustainable system of roads, trails and areas open to motor vehicles that will provide legal public access, enhance regulation of unmanaged wheeled motor vehicle travel, protect resources, and decrease conflicts between motorized and non-motorized use on the Ochoco National Forest), duplicative of the alternatives considered in detail, or determined to be components that would cause unnecessary environmental harm. Therefore, a number of alternatives were considered, but dismissed from detailed consideration for reasons summarized below.

A concept utilizing one long all-user trail system (80" wide) with short side loops for individual user groups (50" and 24"wide) was explored early in this planning effort. When presented to the Provincial Advisory Committee (PAC) the planning team was told that a long all-user trail would not satisfy the needs or desires of the OHV trail using community. It was suggested that the all-user concept be dropped and separate trail systems developed which would emphasize opportunities and quality for individual user groups. Based on that feedback the all-user central network concept was abandoned and the Proposed Action was developed.

Numerous potential routes were provided by Central Oregon Motorcycle and ATV Club (COMAC). To the extent these routes fit within the sideboards established for this project (refer to Purpose and Need, Chapter 1) the COMAC routes were incorporated into project alternatives. However many of the suggested routes were not included in a fully developed alternative due to conflicts with sensitive resources (sensitive plant habitat, weed populations, fish bearing streams, etc.), established uses or recreation emphasis (horse camp, semi-primitive recreation, etc.), riparian management objectives or other established land management objectives. For example: a motorized route from

the staging area at Ahalt Pit into the Walton Lake Basin and connecting with highway legal roads at Ochoco Creek was found to be inconsistent with objectives for recreational uses at Walton Lake and did not connect with any other trail or mixed use road.

Establishing a loop trail between mixed use roads at Walton Sno-Park and Round Mountain was found to be inconsistent with objectives for Round Mountain National Recreational Trail. For these reasons the suggested routes northwest of Walton Lake and south of Walton Sno-Park were not included in a fully developed alternative.

Several options were considered for changing the designation of highway-legal roads under the Forest-level Travel Management Plan, in order to provide mixed use opportunities potentially connecting with trail systems that were being evaluated. The road segments considered included: FS 2630 between the junction with 2200-150 and 2630-400 to connect between the mixed use portions of 2630; FS 2200-150 to connect the staging area at Walton Sno-Park with mixed use portions of the 2630; FS 2200 to connect between trails at Howard Creek and the staging area at Walton Lake; FS 4250 south of the junction with 4256 to a COMAC route coming in from the west; FS 3810 or 4200 to connect between Wolf Creek Campground and the proposed trail network via mixed use roads; a short segment of FS 30 to connect mixed use roads 3000-800 and 4256 and a short segment of FS30 to connect mixed use roads 3000-500 and 4200-450. Due to declining road maintenance budgets and concern for public safety on these high use, high speed roads it was believed that generally the cost of making the changes necessary to make them safe for shared use by traditional and OHV traffic would not be a priority for road and OHV trail maintenance funds. Therefore conversion of highway legal roads to mixed use roads was an alternative that was not fully developed. In some areas parallel trails are included in action alternatives that provide the connections on a constructed trail rather than by putting the OHV onto high traffic roadways. Examples of this are parallel trail on segments along FS 12, 42 and 38 near the Six Corners and Cottonwood Pit Staging Areas, and also along the FS 30 between 3000-500 and 4200-450. In other cases an alternate connection was provided requiring only direct crossing of highway legal roads. Examples of this are connecting loops just east of the FS 30 connection between 4256 and 3000-800 under Alternatives 2 and 4.

Some suggested alternatives were outside of the project area and were considered to be outside of the scope of this analysis. One of these areas, the McKay Creek watershed, could connect to the existing Green Mountain Trail, but it is outside of this project area and therefore outside of the scope of this project. Another area that was suggested was FS 5810, which starts in the project area but travels outside of the project area prior to reaching Spanish Peak. This option was considered by the team, but it is outside of this project area; therefore, converting this highway legal road to a mixed use road in this area would be outside the scope of this project.

Following my consideration of the objections that were submitted on the 2016 draft Record of Decision and discussions with objectors, I considered two additional alternative actions:

Some objectors suggested opening the trail system to OHV use earlier than my decision describes; specifically, these objectors suggested opening the trail system for motorized recreation before Memorial Weekend every year because camping and OHV use on the Forest are very popular with local residents at that time. I did not incorporate this suggestion into my decision because the analysis documented in the SFEIS indicates that opening the trail system on June 1 every year would reduce the potential for disturbance to

- fish and wildlife during the breeding season and would reduce the potential for motorized use on wet and muddy trails.
- Some objectors suggested that the Class IV loop that is authorized in this decision is too
 short, and suggested that some of the authorized Class I trail be converted to Class IV. I did
 not incorporate this suggestion into my decision because it is outside the scope of effects
 that were analyzed and disclosed in the SFEIS and would have required additional analysis,
 possibly including additional public comment.

I agree with the commenters that incorporation of either or both of these suggestions may contribute to a successful motorized trail system. I want to make it clear that, if resource, use and compliance monitoring indicate that either suggestion would be appropriate to consider in the future, the Responsible Official would have the discretion to initiate new NEPA analysis to determine the effects of these modifications to the existing trail system and season of use.

Public Involvement

A notice of intent to prepare an EIS was published in the Federal Register on November 20, 2009 (74 FR 60235). In addition, the proposed action was listed in the Ochoco National Forest Schedule of Proposed Actions and updated periodically during the environmental analysis. The Forest Service received scoping responses from 70 individuals, agencies and organizations.

The following issues were identified from scoping comments and were used to determine the scope of the analysis. Significant issues were as follows:

- 1. The proposed action trail system is too small and lacks quality (complexity, range of difficulty levels, dispersion of users, etc.).
- 2. The trail system could impact big game habitat.
- 3. The trail system could impact water quality or cause degradation of fish habitat.
- 4. The trail system could create or exacerbate conflict between motorized and non-motorized recreationists.

A full description of issues significant to the proposed action appears in the SFEIS on pages 8-11.

The supplemental draft EIS was released to the public for review and comment on February 19, 2016, with the publication of a Notice of Availability in the Federal Register (81 FR 8490). The Ochoco National Forest also notified the public of the availability of the supplemental draft EIS via legal notices published in the Bend Bulletin and the Central Oregonian. The Forest Service received 1090 separate comment communications (letters and emails) from individuals, agencies and organizations. All comments were considered; responses to substantive comments are included in Appendix A of the supplemental final EIS.

In 2014, the Forest Service conducted 19 presentations, field trips, and project updates with individuals, groups and organizations interested in the Ochoco Summit project. The goal of these meetings was to build understanding for the proposals in the Ochoco Summit project, and for managing motorized access; including the importance of staying on trails.

Objection Period

The objection period was announced by a legal notice posted in the newspaper of record on September 22, 2016. Twenty-eight individuals or groups submitted objections to the Draft Record of Decision; all objection letters, as well as the objection response from the Regional Forester, are available through the Ochoco Summit Trail System Project's website.

On December 13, 2016, I, along with members of the project interdisciplinary team (IDT) and the Deputy Regional Forester, met with objectors. I had subsequent conversations with several of the objectors. While no objections were officially withdrawn as a result of this process, this decision was informed by the input from all objectors during the resolution process.

The Environmentally Preferable Alternative

Under the National Environmental Policy Act, the agency is required to identify the environmentally preferable alternative (40 CFR 1505.2(b)). This is interpreted to mean the alternative that will cause the least damage to the biological and physical components of the environment, and that best protects, preserves, and enhances, historic, cultural, and natural resources (Council on Environmental Quality, Forty Most Asked Question Concerning CEQ's National Environmental Policy Act Regulations, 46 Federal Register 18026). Factors considered in identifying this alternative include: (1) fulfilling the responsibility of this generation as trustee of the environment for future generations, (2) providing for a productive and aesthetically pleasing environment, (3) attaining the widest range of beneficial uses of the environment without degradation, (4) preserving important natural components of the environment, including biodiversity, (5) balancing population needs and resource use, and (6) enhancing the quality of renewable resources. An agency may discuss preferences among alternatives based on relevant factors, including economic and technical considerations and statutory missions {40 CFR 1505.2(b)}.

I have determined that the environmentally preferable alternative is Alternative 5 for the short- and long-term. A description of the effects of Alternative 5 can be found in Chapter 3 of the SFEIS. By providing a logically and sustainably located motorized trail system, Alternative 5 best meets the Purpose and Need for the project while preserving desired resource conditions and addressing the need to restore and/or rehabilitate unauthorized routes in the project area. As with all the action alternatives, Alternative 5 was mindfully located to stay within identified "community support areas" and avoid sensitive habitats, best available big game forage, the wild horse territory, and identified and/or designated nonmotorized recreation routes. All the action alternatives include design features to protect natural resources and include rehabilitation of unauthorized routes to offset the effects of route creation. However, Alternative 5 rises above all other alternatives including the No Action in terms of protection of the environment because it goes the farthest in providing effective protection of water quality and aquatic resources.

Although Alternative 5 includes more total stream crossings that Alternative 3, Alternative 5 includes the removal of several Alternative 3 trail segments from sensitive riparian areas, which ultimately results in the less riparian effect at those sites and overall. Alternative 5 includes fewer stream crossings than either Alternative 2 or 4. Table 3 displays a summary of stream crossings.

When fully implemented, Alternative 5 will deliver less sediment to project area streams than any other alternative, including the No Action alternative. The analysis documented in the SFEIS

indicates that implementation of Alternative 1 would perpetuate unauthorized routes within the project area; modeling summarized in Appendix A of this Record of Decision indicates that these unauthorized routes would continue to deliver a large amount of sediment to project area streams if they are not blocked or restored. The modeling indicated that between the restoration of unauthorized routes and the thoughtful placement of designated trail segments, Alternative 5 would result in the least amount of sediment delivered to project area streams of all alternatives. See Appendix D of this Record of Decision for information related to the Ochoco National Forest's program for implementing restoration of unauthorized routes; the Forest has already secured funding for implementing restoration activities that are authorized with this Record of Decision.

Consultation with Government Agencies and Tribes

The following tribal governments were notified of the project proposal: Confederated Tribes of the Warm Springs, Burns Paiute, and the Klamath Tribes (SFEIS page 8). These tribal governments did not express any concerns about the Ochoco Summit Trail System project.

The Supplemental Draft EIS was filed with the Environmental Protection Agency (EPA) for review, pursuant to 40 CFR 1506.9. The EPA's reviewing official submitted comments on April 4, 2016; they provided an Environmental Concerns - Adequate (EC-1) rating (see SFEIS Appendix B).

Findings Required by Other Laws and Regulations

In reviewing the SFEIS and actions associated with Alternative 5, I have concluded that my decision is consistent with the Ochoco National Forest Land Management Plan, as amended, and with the following laws and requirements:

The National Environmental Policy Act (NEPA)

NEPA establishes the format and content requirements of environmental analysis and documentation as well as requirements for public involvement and disclosure. The entire process of preparing this environmental impact statement was undertaken to comply with NEPA (SFEIS page 449).

The National Forest Management Act (NFMA)

I find this decision to be consistent with the long-term management objectives as discussed in the Ochoco National Forest Plan as amended. All Forest Plan direction has been adhered to and incorporated into the project's design, except as described under Site Specific Forest Plan Amendments, below. The selected alternative is consistent with direction contained in the Inland Native Fish Strategy (INFISH); see the "Hydrology and Aquatic Species" section in Chapter 3 of the SFEIS, as well as design criteria described in Chapter 2.

Site-Specific Forest Plan Amendments: The four amendments included in this decision will not have an impact on the goals and objectives of the Forest Plan and they provide for activities that contribute to meeting Recreation objectives identified in the Plan. I find the amendments described in the SFEIS (page 28) to be non-significant based on the analysis in the SFEIS (pages 438-44).

The Preservation of American Antiquities Act of June 1906 and the National Historic Preservation Act: The Oregon State Historic Preservation Officer (SHPO)

A cultural resource inventory was conducted in the project area. The Ochoco National Forest completed the "Project Review for Heritage Resources under the Terms of the 2004 Programmatic Agreement" with the Oregon State Historic Preservation Office (SHPO). The activities in the selected alternative have been designed to have no effect to cultural resource sites through both protection and avoidance (SFEIS page 456). The original Preferred Alternative (Alternative 3) was surveyed between 2009 and 2012. A finding of "No Historic Properties Adversely Affected" has been made for this project and the SHPO concurred with this finding on January 24, 2013. Following development of Alternative 5 routes not covered in the Alternative 3 survey were evaluated. Based on that assessment additional surveys were conducted. Updated SHPO compliance was documented in a letter dated October 19, 2016.

Endangered Species Act

Effects to Threatened, Endangered species are evaluated in the Aquatic Species, Botanical Resources, and Wildlife sections of Chapter 3 of the FEIS. The Endangered Species Act of 1973 requires that actions of federal agencies do not jeopardize or adversely modify critical habitat of federally-listed species. The purposes of this Act are to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered and threatened species, and to take such steps as may be appropriate to achieve the purpose of the treaties and conventions set forth in subsection (a) of this section." The Act also states "It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of the purposes of this Act."

There are no federally listed Threatened or Endangered native plant species on the Ochoco National Forest. Bull trout and Mid-Columbia River steelhead trout are federally listed as threatened and found on Ochoco National Forest and Crooked River National Grassland. This project area does not include bull trout watersheds and would have no effect on bull trout or their designated or proposed critical habitats. Watersheds containing Mid-Columbia River steelhead trout do occur within the project area. However, construction of the proposed trail system would not affect steelhead trout or their habitat and the trail would not contribute sediment into the watersheds in which this species occurs. For these reasons there would be no effect to Mid-Columbia steelhead trout or their designated or proposed critical habitats (SFEIS Table 58). There are two terrestrial wildlife species that are either federally listed or proposed for listing and have potential habitat on the Ochoco National Forest and within the project area; these are gray wolf (Endangered) and California wolverine (proposed for listing as Threatened). These species are addressed in the Wildlife section; the ESA determination for all alternatives for gray wolf is "No Effect" and for wolverine is "Not Likely to Jeopardize the Continued Existence of the Species or Result in Destruction or Adverse Modification of Proposed Critical Habitat" (SFEIS Table 135).

The Clean Water Act, 1982, and 303(d)

The selected alternative will comply with the Clean Water Act. This Act establishes a non-degradation policy for all federally proposed projects. Effects to water quality were analyzed for the myriad of streams present in the project area. Section 303(d) of the Clean Water Act requires that a list be developed of all impaired or threatened waters within each state. The ODEQ is responsible

for compiling the 303(d) list, assessing data, and submitting the 303(d) list to the Environmental Protection Agency (EPA) for federal approval. Project area streams identified on the 303(d) list include Double Corral Creek, Fox Creek, Happy Camp Creek, Howard Creek, Indian Creek, Jackson Creek, Little Summit Creek, Marks Creek, North Wolf Creek, Ochoco Creek, Peterson Creek, Porter Creek, and Toggle Creek. The selected alternative would not change the 303(d) parameters for which these streams were listed. Best Management Practices to protect water quality are incorporated in the Project Design Criteria described in Chapter 2 of the SFEIS.

The Clean Air Act

The selected alternative will comply with the Clean Air Act, as described on SFEIS page 457.

Travel Management Rule, Subparts A and B

My selected alternative complies with Subparts A and B of the Travel Management Rule (36 CFR 212). The SFEIS documents that the Ochoco Summit Trail System project complies with Subpart A because there would be no changes to the existing road system as displayed on the Motor Vehicle Use Map, except a change in Road Maintenance Level at one location (see SFEIS page 25). The SFEIS documents compliance with Subpart B by describing the steps taken by the Forest Service to minimize unwanted effects to resources (see SFEIS pages 452-456).

Civil Rights and Environmental Justice

Executive Order 12898 on environmental justice requires federal agencies to identify and address any disproportionately high and adverse human health or environmental effects on minority and low income populations. The analysis focuses on potential effects from the project to minority populations, disabled persons, and low-income groups.

After evaluating the discussion in the SFEIS, page 445, I have determined that there would be no discernable impacts from the selected alternative on Native Americans, women, or other minorities, or the Civil Rights of any American citizen.

Other Laws, Regulations and Executive Orders

No permits or certifications are required to implement my selected alternative.

The SFEIS for the Ochoco Summit project describes compliance with Part 212-Travel Management (Subparts A and B) and a variety of applicable Executive Orders (SFEIS pages 449-62). After evaluating these disclosures in the SFEIS, I have determined that the selected alternative is in full compliance with all applicable laws.

Consistency with Past Forest Decisions

My decision includes conversion of some roads that were closed or decommissioned under past Forest NEPA decisions to OHV trail. Where this information is available, I have examined the reasons for closure; where the information is not available I am making the assumption that the closure or decommissioning decision was made for the protection of resources such as water quality or wildlife habitat. Based on the analysis documented in Chapter 3 of the SFEIS, I have determined that all proposed closed/decommissioned road conversions to OHV in my selected alternative would result in effects that are consistent with the intent of the original decisions because proper design of the trails, project design criteria, limited season of use, and ongoing monitoring and

management of the trail system will prevent the unwanted effects that led to the closures or decommissionings. Please see Tables 5 and 6 for identification of the road segments in question.

Table 5. Decommissioned roads converted to OHV trail under Alternative 5.

Road No.	Miles	Decision Document	Reason
1250022	0.49	TM 2010	Not available
2610023	0.19	TM 2010	Not available
3000805	0.32	TM 2010	Not available
3000864	0.48	TM 2010	Not available
4200437	0.46	TM 2010	Not available
4200744	0.40	TM 2010	Not available
4200745	0.13	TM 2010	Not available
4200785	0.20	TM 2010	Not available
4250520	0.36	TM 2010	Not available
4258070	0.33	TM 2010	Not available
4272632	0.35	TM 2010	Not available
1200130	0.10	TM 2010	Not available
1200150	0.08	TM 2010	Not available
2200356	0.20	TM 2010	Not available
2200358	0.71	TM 2010	Not available
2620023	0.40	TM 2010	Not available
3800014	0.76	TM 2010	Not available
4200458	0.28	TM 2010	Not available
4200462	0.56	TM 2010	Not available
4250608	0.34	TM 2010	Not available
4270405	0.16	TM 2010	Not available
4272630	0.11	TM 2010	Not available

Table 6. Administratively closed roads converted to OHV trail under Alternative 5.

Road No.	Miles	Decision Document	Reason ¹
2200212	0.37	TM 2010	Not available
2600640	0.28	TM 2010	Not available
2610025	0.86	Spears	WQ/WL
2610029	0.31	Bandit	WQ
2610159	1.32	Spears	WQ/WL
2610306	0.28	Marks/Harpo	WQ
2630016	0.74	TM 2010	Not available
2630366	0.34	TM 2010	Not available
3000501	0.86	TM 2010	Not available

 $\label{lem:converted} \textbf{Table 6. Administratively closed roads converted to OHV trail under Alternative 5.}$

Road No.	Miles	Decision Document	Reason ¹
3000860	0.70	TM 2010	Not available
4200425	0.47	TM 2010	Not available
4270252	0.40	TM 2010	Not available
1200130	0.20	TM 2010	Not available
2200151	0.17	TM 2010	Not available
2200153	0.11	TM 2010	Not available
2200210	0.17	TM 2010	Not available
2200255	0.78	TM 2010	Not available
2600630	0.43	Marks/Harpo	WQ
2610012	3.55	Bandit & Spears	WQ/WL
2610015	0.33	Marks/Harpo	WQ
2610021	1.01	Bandit	WQ
2610022	0.32	Bandit	WQ
2610024	0.57	Bandit & Spears	WQ/WL
2620010	0.95	Marks/Harpo	WQ
2620015	1.61	Marks/Harpo	WQ
2620018	0.24	Marks/Harpo	WQ
2620020	0.09	Marks/Harpo	WQ
2620025	0.76	Marks/Harpo	WQ
2630013	0.44	TM 2010	Not available
2630152	0.22	Bandit & Marks/Harpo	WQ
2630301	0.55	TM 2010	Not available
3000500	0.93	Yellow Jacket TS	WQ
3000858	0.17	TM 2010	Not available
3000930	1.98	TM 2010	Not available
3000935	0.80	TM 2010	Not available
4200420	0.47	TM 2010	Not available
4200436	0.62	TM 2010	Not available
4200440	0.26	TM 2010	Not available
4200454	0.19	TM 2010	Not available
4200600	0.20	Deep Creek	WQ
4200602	0.23	TM 2010	Not available
4200604	0.74	TM 2010	Not available
4200616	2.16	TM 2010	Not available
4200742	0.50	TM 2010	Not available
4250200	2.35	TM 2010	Not available
4250420	0.77	Deep Creek	WQ
4250421	0.16	Deep Creek	WQ

Table 6. Administratively closed roads converted to OHV trail under Alternative 5.

Road No.	Miles	Decision Document	Reason ¹			
4250500	0.16	TM 2010	Not available			
4250530	0.16	TM 2010	Not available			
4250531	0.65	TM 2010	Not available			
4254211	0.16	TM 2010	Not available			
4258011	0.72	TM 2010	Not available			
4260720	1.81	TM 2010	Not available			
4260725	0.03	TM 2010	Not available			
4260735	1.70	TM 2010	Not available			
4270101	0.04	TM 2010	Not available			
4270250	0.26	TM 2010	Not available			
4270502	1.01	TM 2010	Not available			
4272400	0.28	Deep Creek	Not available			
4272401	0.20	Deep Creek	Not available			
¹ WQ = Water Quality; WL = Wildlife						

Administrative Review

The Ochoco Summit Trail System Project SFEIS and a draft Record of Decision were distributed according to 36 CFR 218.7 and a 45-day administrative review (objection) period ended with the Regional Forester's Objection Response and letters to objectors dated January 23, 2017 (pursuant to 36 CFR 218.11(b)(2)). Information about public involvement and the objection period are detailed above and in the project record. All concerns and instructions identified by the reviewing officer in the objection response have been addressed, as follows.

Related to Objector Statement #4: In order to address the objectors concerns regarding
potential calving sites, I instruct the Responsible Official to modify this monitoring item to
include a provision that if monitoring indicates that potential habitat is actually being used
as calving habitat, a seasonal restriction would be placed on the affected trail segments (this
would not apply to the open, mixed use roads within the system, but would apply to OHV
trails).

The following was included in an errata to the SFEIS (included with the ROD and published on the website):

- Page 36. Replace the first and second bullets under the subheading "Big Game" with the following bullet statements, to clarify the intent of the project design criteria (new/changed language is in bold font).
 - Timing restrictions will be placed on project construction, re-construction, decommissioning, and maintenance activities from May 15 through June 30 within known elk calving areas, as established based on telemetry data from collared elk in the Ochoco Mountains, district records and other sources.

 Should new calving areas be identified along the trail system where the

- character of the site may be affected due to disturbance, this seasonal restriction would be implemented for these areas in accordance with standards and guidelines outlined in the Forest Plan.
- Timing restrictions will be placed on project construction, re-construction, decommissioning and maintenance activities from September 1 through October 15 within 0.25 mile of known elk wallows. Should new elk wallows be identified along the trail system where the character of the site may be affected due to disturbance, this seasonal restriction would be implemented for these areas in accordance with standards and guidelines outlined in the Forest Plan.
- During the objection resolution meeting, discussions occurred with ODFW regarding updating telemetry data. The SFEIS used the best available data that ODFW provided for the analysis and also mapped potential calving habitat. I encourage the Responsible Official to continue to work with ODFW to update telemetry data in the project area.
 - Stacey Forson (Forest Supervisor) met with interested stakeholders on May 16, 2017, for a discussion related to the preliminary implementation plan. One topic included collecting baseline data on elk use in the project area with radio collars paired with traffic counters; the group acknowledged that such research would require funding to accomplish. Notes from this meeting are in the project record.
- Related to Objector Statements on Water Quality: I instruct the Responsible Official to summarize watershed impacts across all alternatives, including the no action alternative, in lieu of comparing one alternative to another alternative, which would make the existing information in the SFEIS easier to understand. In particular, I instruct the Responsible Official to compare the estimated sediment loading between all alternatives in a single table for improved comparison of impacts between alternatives and to include this in the final ROD or an appendix to the final ROD.

This has been accomplished in Appendix A to the final ROD.

Related to Objector Statements #68 and #70: The SFEIS at 387 shows tables 166 and 167 that identify acres of trails within invasive plant infestations and 2 staging areas. The proposal of trails and staging areas within known infestations contradicts the project design criteria listed in the SFEIS at 33. In order to ensure that invasive plants do not spread, I instruct the Responsible Official to clarify the project design criteria in the SFEIS at 33-34 for invasive plants to state "Avoid ground disturbing activities in areas with known invasive plant infestation when feasible. In areas where avoidance is not possible, pretreat existing infestations prior to commencement of ground disturbance activities."

The following was included in an errata to the SFEIS (included with the ROD and published on the website):

Page 33. Replace the first bullet under the subheading "Invasive Plants" with the following bullet statement, to clarify the intent of the project design criteria.

Avoid ground disturbing activities in areas with known invasive plant infestation when feasible; in areas where avoidance is not possible, pre-treat existing infestations prior to commencement of ground disturbing activities.

Related to Objector Statement #73: I agree with the objectors that it is difficult to compare road densities between alternatives and how each alternative complies with the Forest Plan standards and guidelines. As such, I instruct the Responsible Official to include a table in the final ROD or in an appendix to the final ROD that compares the road densities by alternative and includes the Forest Plan standards and guidelines.

This has been accomplished in Table 2 in the final ROD.

Related to Objector Statement #80: There is an error in the SFEIS at 96. Cottonwood Pit is included as a staging area, but Table 44 did not include an "X" under Alternative 5 for Cottonwood Pit. The discussion of effects under Alternative 5 does include discussion of Cottonwood Pit, and therefore, the effects were disclosed. As such, I instruct the Forest to correct this error in an errata to the SFEIS.

The following was included in an errata to the SFEIS (included with the ROD and published on the website):

 Page 96. Table 44 should have included an "X" under Alternative 5 for Cottonwood Pit; this information was accidentally omitted. The following table replaces Table 44 in the SFEIS.

Table 1. Sites/Areas from which sounds of OHVs might be audible at > 45 db.

Site/Area	Alt 2	Alt 3	Alt 4	Alt 5
Dispersed Camping Sites	35	18	37	38
Dispersed camping roads within noise band (miles)	65	26	73	66
Equestrian Endurance Event Route (miles)	1.89	1.46	2.12	4.76
Keeton Trail (miles)	0.03	0.02	0.02	.11
Scotts Camp	X		X	
Ochoco Divide Sno-Park	X	X	X	X
Keeton Trailhead	X	X	X	X
Walton Sno-Park	X	X	X	X
Cottonwood Pit	X	X	X	X
Crystal Springs Organizational Camp		X	X	
ROS acres within noiseband by ROS Classification				
Roaded Modified	10,837	5,818	12,771	12,541
Roaded Natural	1,668	1,059	2,220	2,476
Semiprimitive Non-Motorized	276	117	292	359

• Related to Objector Statement #98: During the objection resolution meeting, the implementation plan and how the project would be phased in was discussed. Although no resolution was reached, this is one area where the Responsible Official would like to work with the objectors to ensure that project objectives are being met. As such, I instruct the

Responsible Official to work with interested and willing objectors to develop a preliminary implementation plan and to include it in the final ROD.

Stacey Forson (Forest Supervisor) met with interested stakeholders on May 16, 2017, for a discussion related to the preliminary implementation strategy. Two stakeholder groups have since sent a letter to the Forest Supervisor in support of collaboratively developing monitoring protocol related to wildlife disturbance. Notes from the meeting and the followup letter are in the project record.

Related to Objector Statement #128: I instruct the Responsible Official to include a single table in the final ROD or an appendix to the ROD that compares all alternatives with regard to sediment.

See Table A2 in Appendix A to the final ROD.

Related to Objector Statement #130: I instruct the Responsible Official to add a paragraph to the section of Irreversible and Irretrievable Commitments of Resources that reiterates the findings in the SFEIS regarding impacts to shrub scablands and attach it to the SFEIS as an errata.

The following was included in an errata to the SFEIS (included with the ROD and published on the website):

Page 449. Add the following sentences to the end of the 2nd paragraph under the heading "Irreversible and Irretrievable Commitments of Resources" to add information that was unintentionally omitted from the SFEIS.

Effects to shrub-scabland, including biological soil crust, are expected to be irreversible because they would be long-term to permanent, but would be small in magnitude, as described in Chapter 3 of this EIS. Acreage-wise there would be little scabland area affected, 21 acres, 8 acres, 26 acres and 16 acres for Alternatives 2, 3, 4 and 5 respectively, out of 41,296 acres present within the project area.

Related to Objector Statement #165: I concur that the final decision should provide a map of and clearly articulate the exact route added from Alternative 2 and instruct the Responsible Official to include this in the final ROD.

Map 2 in the final ROD clearly displays the added route.

Related to Objector Statement #172: While the SFEIS contains the requisite information required by the Regional Forester, in order to provide more clarity, I instruct the Responsible Official to further elaborate in the final ROD why the proposed amendments are not significant in terms of context and intensity, including why there would be no adverse cumulative effects.

Language has been added to the "Forest Plan Amendments" section of this final ROD (page 13). Appendix B in the final ROD includes additional discussion related to the Forest Plan amendments. The discussion is consistent with what was analyzed and disclosed in the SFEIS, but provides additional rationale related to context and intensity, and discusses cumulative effects related to other Forest Plan amendments.

 Overall SFEIS: During the review of the project, there were small errors in the SFEIS noted by both the review team and the objectors that I recommend be corrected in the SFEIS or in an errata prior to signing the final decision.

Errata #2 and #3 are included with the ROD.

Implementation

Implementation will likely begin in the summer of 2017, as described in Appendix C of this ROD.

Minor changes to trail alignment may be needed during implementation to better meet on-site resource management and protection objectives. Generally, such minor changes will be within 100' of the alignment that was mapped, as described previously in this document, and will not present sufficient potential impacts to require any specific documentation or action to comply with applicable laws. In determining whether further NEPA action is required, and if so, what type of documentation is necessary, we will consider the criteria to supplement an existing Environmental Impact Statement in 40 CFR 1502.9(c) and FSH 1909.15, sec. 18, and in particular, whether the proposed change is a substantial change to the intent of the Selected Alternative as planned and already approved, and whether the change is relevant to environmental concerns. Connected or interrelated proposed changes regarding particular areas or specific activities will be considered together in making this determination. The cumulative effects of these changes will also be considered.

Contact Persons / Further Information

Project records are on file at the Ochoco National Forest, Prineville, Oregon. The supplemental final EIS, errata and other project documents are available on the internet at http://data.ecosystem-management.org/nepaweb/nepa_project_exp.php?project=26807.

For additional information concerning the specific activities authorized with this decision, you may contact:

Marcy Anderson, Environmental Coordinator Ochoco National Forest 3160 NE 3rd Street Prineville, OR 97754 (541) 416-6463 marcelleanderson@fs.fed.us

Responsible Official

The Supervisor of the Ochoco National Forest is the official responsible for deciding the type and extent of management activities in the Ochoco Summit Trail System project area.

I reviewed the SFEIS, its appendices, and the appendices to this Record of Decision and believe there is adequate information within these documents to provide a reasoned choice of action. I am fully aware of adverse impacts that cannot be avoided and believe the risks are outweighed by the benefits. Implementing the selected alternative will cause no unacceptable cumulative impact to any resource.

Stacev L. Forson

Ochoco National Forest Supervisor

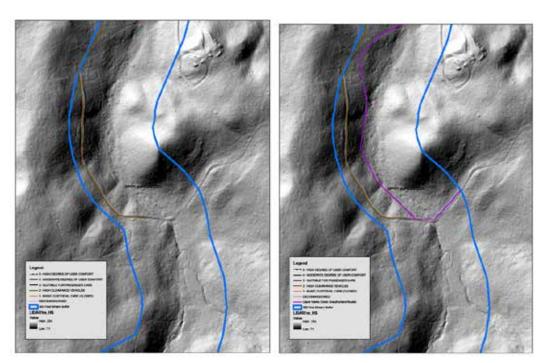
06/27/2017

Date

Appendix A – Additional Discussion related to Sediment Loading

Modeling of Sediment Loading for All Alternatives

In order to clarify the differences between the alternatives in terms of effects of sedimentation to water quality and fish habitat, the project fisheries biologist used bare earth LIDAR (Light Detection and Ranging) imagery and aerial photos for the project area to identify roads and trails on the landscape that are not part of the Forest Service system of roads. These unauthorized roads were digitized for each project subwatershed within 300 feet of National Hydrography Dataset (NHD) streams to estimate sediment delivery for Alternative 1. Several sideboards were used when identifying unauthorized roads in the project area. First, unauthorized roads were only digitized off of existing open roads, not off of closed and decommissioned roads in the project area. Only those unauthorized roads off of open roads are used in this analysis. Secondly, only unauthorized roads within 300 feet of streams were used in this analysis, since it is very specific to sediment delivery. This 300 foot buffer was established based on a review by Belt et al. (1992)² of studies in Idaho that concluded non-channelized sediment flow rarely travels more than 300 feet and that 200-300 foot riparian "filter strips" are generally effective at protecting streams from sediment from non-channelized flow. Figures A1 and A2 show a group of unauthorized trails that were identified using LIDAR in the Upper Marks Creek subwatershed.



Figures A1 and A2. LIDAR image of unauthorized road/trails in the Upper Marks Creek subwatershed. Figure A2 (right) includes the digitized routes (shown in purple).

² Belt, G., J. O'Laughlin and T. Merrill. 1992. Design of Forest Riparian Buffer Strips for the Protection of Water Quality: Analysis of Scientific Literature, Idaho Forest, Wildlife and Range Policy Analysis Group, Report No. 8.

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After routes in all nine of the project subwatersheds were digitized, the route segments and associated crossings were intersected with the Ochoco National Forest Soil Resource Inventory layer to determine the soil type and rock content for the associated unauthorized route or crossing.

Before determining sediment loading using the WEPP:Road model³, assumptions were established for unauthorized routes and crossings. Assumptions for unauthorized routes included: road design of "outsloped, rutted," 4% road gradient, 800 foot road length between drainage features, fill gradient of 5%, fill length of 1 foot, buffer gradient of 15% and buffer length of 150 feet. There is a difference in assumptions between Alternative 1 and the modeling done for all four action alternatives. A 4% road gradient was used for unauthorized routes instead of the 8% used for the action alternatives because it is easier for unauthorized roads to be established on flatter slopes, so the road gradient was reduced by ½. An 800 foot road length between drainage features was used as opposed to 400 feet because these routes are more than likely user-created and don't have proper drainage, so the drainage length was doubled because of lack of design and maintenance. The action alternatives are designed with proper drainage features, so a shorter distance between drainage features was used. Fill gradient of 5% and fill length of 1 foot were used because these are user-created routes that wouldn't have constructed fills as a regular road does, so a very short length and flat gradient were used. Road design, buffer gradient and buffer length were consistent between all alternatives. Road width for unauthorized routes was assumed to be 10 feet. Traffic level was determined to be the average between low and high. High traffic is generally associated with roads that receive considerable traffic during much of the year and low traffic is associated with roads with administrative or light recreational use during dry weather. It is assumed that these unauthorized routes fall somewhere in the middle, since they likely receive a lot of use in the dry season and a moderate amount of use during the wet season when they are free of snow.

Assumptions were also established for unauthorized route crossings. These assumptions include: road design of "outsloped, rutted," 4% road gradient and 800 foot road length between drainage features. Because these are unauthorized routes, it was assumed that all crossings were fords. Therefore, a fill gradient of 5%, fill length of 1 foot, buffer gradient of 5% and buffer length of 1 foot were used for all crossings. Again, a flatter road gradient was used because it is easier for unauthorized routes to be established on flat ground and a longer distance was used between drainage features because these are unmaintained routes.

With the assumptions established, WEPP:Road was used to model sediment delivery for all unauthorized road segments in the nine project-area subwatersheds. Table A1 displays sediment loading for Alternative 1 for unauthorized routes and crossings.

³ https://forest.moscowfsl.wsu.edu/fswepp/

Table A1. Sediment delivery for unauthorized routes and crossings in the Ochoco Summit Project Area for Alternative 1.

Subwatershed	Alternative 1 Route Segment Sediment Delivery (tons)	Alternative 1 Route Crossing Sediment Delivery (tons)	Alternative 1 Total Sediment Delivery (tons)
Crazy Deep	3.4	4.6	8.0
Headwaters Elliott Creek	6.8	10.2	17.0
Howard Creek	2.3	1.1	3.4
Jackson Creek	14.6	9.1	23.7
Little Summit Prairie Creek	0.9	0.8	1.7
North Wolf Creek	0.2	0.5	0.7
Peterson Creek	3.0	4.4	7.4
Porter Creek	4.7	2.8	7.5
Upper Marks Creek	5.4	5.7	11.1

Once sediment delivery was estimated for unauthorized routes and crossings in the project area, the previous model runs for action alternatives were rerun to make sure the numbers were still correct, since model runs were made over three years ago, and with a web-based model, updates are continually occurring. It was discovered after comparing the old and new model runs that sediment delivery estimates were different. The project fisheries biologist contacted Bill Elliot with the Rocky Mountain Research Station regarding the changes to the runs. Bill Elliot indicated via email, on January 27, 2017, that the initial runs were done when there was the interface using a WEPP version published in 2000. The newer version changed predicted sediment delivery, due mainly to significant changes in WEPP's evapotranspiration and winter routines. The research station also added lateral flow which tends to reduce surface runoff and sediment delivery from the buffer, but has less effect on the road surface. Therefore, in order to compare Alternative 1 to the action alternatives, all action alternatives were rerun in the WEPP:Road model. Although changes were relatively small, it was important for comparison purposes to be able to put everything on the same level. The largest changes in the model were less sediment delivery in general at crossing locations and more sediment delivery in general from trails routes within 300 feet of streams. Table A2 displays total sediment delivery for all alternatives by project subwatershed based on new model runs.

Table A2. Comparison of total sediment delivery for trail routes and crossings by alternative (in tons).

Subwatershed	Alternative	Alternative	Alternative	Alternative	Alternative	
Subwatersneu	1	2	3	4	5	
Crazy Deep	8.0	1.9	1.9	3.2	1.7	
Headwaters Elliott Creek	17.0	10.7	9.2	10.7	2.6	
Howard Creek	3.4	2.0	1.9	2.9	1.8	
Jackson Creek	23.7	13.1	8.8	15.1	3.9	
Little Summit Creek	1.7	1.4	0.7	1.6	0.4	
North Wolf Creek	0.7	0.1	0.1	0.1	0.1	
Peterson Creek	7.4	14.9	0.0	15.5	4.0	
Porter Creek	7.5	17.8	2.4	16.2	4.7	
Upper Marks Creek	11.1	0.9	4.8	1.5	5.3	
TOTAL	80.5	62.8	29.8	66.8	24.5	

Assuming that unauthorized routes would be blocked and/or rehabilitated under any action alternative, Alternative 1 predicts more sediment delivery from unauthorized road segments when compared to the Ochoco Summit action alternatives. In the Crazy-Deep, Elliott, Howard, Jackson, Little Summit, North Wolf and Upper Marks Creek subwatersheds, all action alternatives are

predicted to deliver less sediment that Alternative 1's unauthorized routes. In the Peterson and Porter Creek subwatersheds, Alternatives 2 and 4 are predicted to deliver more sediment than the No Action alternative, but Alternatives 3 and 5 are predicted to deliver less sediment than Alternative 1.

Based on this new information, Alternatives 3 and 5 are preferable to Alternatives 1, 2 and 4 in terms of effects to aquatic resources. However, Alternative 5 is most preferable because it removes sections of trail from highly sensitive riparian areas that were identified in the analysis (and by some commenters). Therefore, based on these new modeling runs, Alternative 5 is the least impactful to aquatic resources of all the alternatives, including the No Action.

Magnitude of Change of Road/Trail Stream Crossings and Road/Trail Densities in the Action Alternatives and Effects to Riparian/Water Quality Conditions

Table A-3 illustrates the magnitude of density increases or maintenance of current road/trail or stream crossing densities that would result from Alternatives 2, 3, 4 and 5 and compares it to the current condition (including unauthorized routes) identified for Alternative 1. The largest increases in both road/trail and stream crossing densities across analyzed Subwatersheds would exist as a result of Alternative 4, followed by Alternative 2, then Alternative 3 and Alternative 5. However, Alternative 1 (unauthorized routes) has the largest increases in stream crossing density compared to all the other action alternatives. Similar increases in the magnitude of both road/trail densities and stream crossing densities would result from both Alternatives 2 and 4 in all of the Upper North Fork Crooked River Watershed Subwatersheds. The Howard Creek Subwatershed has similar increases in densities for all alternatives except for Alternative 5. The largest increases in both road/trail densities and stream crossing densities would occur as a result of Alternatives 2, 4, and 5 in the Porter Creek Subwatershed, and as a result of Alternative 3 and 4 in the Upper Marks Creek Subwatershed. Both of these Subwatersheds have poor existing conditions relative to flow/sediment regimes.

Table A-4 illustrates the magnitude of density increases or maintenance of current road/trail densities resulting from Alternatives 2, 3, 4 and 5 and compares it to the current condition (including unauthorized routes) identified for Alternative 1. The largest increases in road/trail densities within stream sediment delivery zones and wetland RHCAs exist as a result of Alternative 1. For the action alternatives, Alternative 2 has the largest increases in road/trail densities with stream sediment delivery zones and wetland RHCAs.

For Tables A-3 and A-4, the following applies: Arrow direction indicates magnitude of increase in density values: \rightarrow indicates less than 0.2 mile per square mile increase in density; \nearrow indicates an increase of 0.2 to 0.3; and \uparrow indicates an increase of greater than 0.3; SDZ = Sediment Delivery Zone; GDE = Groundwater Dependent Ecosystem.

Table A-3. Summary of effects to flow and sediment regime by alternative.

Table 11	-3. Summa	iry or circo	15 10 1101	v and sec	AIIIICIIC I			Direct/Indire	ect Effects			
	Existing				Altern	Alternative 2 Altern		ative 3 Alterna		ative 4 Alternativ		ative 5
Water- shed	Condition Flow/ Sediment Regime Rating	Sub- Watershed	Road/ Trail Density	Stream Xing Density								
Lower Beaver Creek	Fair	North Wolf	\rightarrow									
		Elliot	↑	↑	↑	1	1	1	↑	↑	1	1
Upper North		Howard	1	↑	↑	1	1	1	↑	↑	↑	1
Fork Crooked River	Poor/Fair	Peterson	7	↑	↑	1	\rightarrow	\rightarrow	↑	↑	\rightarrow	\rightarrow
		Porter	↑	↑	↑	1	1	1	↑	↑	↑	↑
		Jackson	↑	1	↑	1	1	\rightarrow	↑	1	\rightarrow	\rightarrow
Deep Creek	Good	Little Summit Prairie	\rightarrow	↑	↑	\rightarrow	1	\rightarrow	↑	\rightarrow	↑	\rightarrow
		Lower Deep	1	↑	↑	1	1	1	↑	1	1	\rightarrow
Upper Ochoco Creek	Poor	Upper Marks	↑	↑	1	\rightarrow	1	1	↑	1	↑	\rightarrow

Table A-4. Summary of effects to sediment and turbidity alternative.

Tuble 11-4.		of effects to sec		una tui	bidity di		Summit D	irect/Indir	ect Effects			
	Existing Condition		Altern		Altern	ative 2	Altern	ative 3	Alteri	native 4		ative 5
Watershed	Sediment/ Turbidity Rating	Sub-Watershed	SDZ Road/ Trail Density	GDE Road/ Trail Density								
Lower Beaver Creek	Fair	North Wolf	↑	\rightarrow								
		Elliot	\uparrow	1	↑	\rightarrow	\rightarrow	\rightarrow	\rightarrow	\rightarrow	7	1
Upper North Fork		Howard	\uparrow	↑	\uparrow	1	\rightarrow	\rightarrow	†	\rightarrow	\uparrow	\rightarrow
Crooked River	Fair	Peterson	↑	↑	\rightarrow	\rightarrow	\rightarrow	\rightarrow	\rightarrow	1	\rightarrow	\rightarrow
		Porter	↑	1	1	\rightarrow	\rightarrow	\rightarrow	1	\rightarrow	↑	\rightarrow
		Jackson	↑	1	\rightarrow	1	\rightarrow	\rightarrow	\rightarrow	\rightarrow	\rightarrow	\rightarrow
Deep Creek	Fair/Good	Little Summit Prairie	↑	\rightarrow	\rightarrow	7	\rightarrow	1	\rightarrow	1	\rightarrow	1
		Lower Deep	↑	\rightarrow	\rightarrow	↑	\rightarrow	↑	\rightarrow	↑	\rightarrow	\rightarrow
Upper Ochoco Creek	Fair	Upper Marks	↑	↑	\rightarrow	\rightarrow	\rightarrow	↑	\rightarrow	↑	\rightarrow	↑



Appendix B – Further Discussion of Forest Plan Amendments

The effects of the Forest Plan amendments are disclosed in the SFEIS, pages 438-444, and the analysis related to determination of significance is disclosed in the SFEIS at 450-51. The discussion in this appendix is intended to enhance those disclosures and is consistent with the information that has already been provided.

Amendments that Affect Old Growth Management Areas

This Record of Decision amends the Ochoco Forest Plan to exempt the Ochoco Summit Trail System project from standards and guidelines regarding motorized travel within three Old Growth Management Areas (Forest Plan MA-F6), as described in the SFEIS at 438. The management emphasis within Old Growth Management Areas is to "provide habitat for wildlife species dependent on old growth stands" (Forest Plan 4-58); the Forest Plan specifically identifies pileated woodpeckers and white-headed woodpeckers (primary cavity excavators) and flying squirrels as species that are dependent upon old growth habitat.

The affected Old Growth Management Areas (OGMA) are as follows:

- OGMA OG-D2-02 (Deep Creek): See Figure B1. One 24"-wide segment of trail route will cross through the OGMA; this route will connect adjacent sections of open, mixed-use road. The segment of trail route includes approximately:
 - o .31 miles of new trail construction;
 - o .22 miles of converted decommissioned road (narrowed to 24" trail);
 - o .39 miles of converted closed road (narrowed to 24" trail).
- OGMA OG-D1-08 (Indian Butte): See Figure B2. One 50"-wide segment of new route will cross through the OGMA to connect adjacent sections of open, mixed-use road. The segment of new trail construction is about .32 miles.
- OGMA OG-D1-12 (East Porter): See Figure B3. One 24"-wide segment of new route will
 cross through the OGMA to connect adjacent sections of open, mixed-use road; another
 segment of open-mixed use road will be incorporated into the designated Class II trail
 system. The trail segments include approximately:
 - o .10 miles of new 24" trail construction;
 - o .03 miles of converted closed road (narrowed to 24" trail);
 - o .06 miles of open, mixed-use road incorporated into the Class II trail network.

The area within OGMA that would be occupied by motorized trail totals less than 1.5 miles and 0.84 acres.

To provide context for the analysis of effects of the Forest Plan amendments, the affected area was compared against the project area, the trail miles in the selected alternative, and the Forest Plan area.

• At 1.5 miles, the amount of trail system that will be within mapped OGMA represents about **1.1%** of the total trail system in the selected alternative.

- At 0.84 acres, the amount of trail system within mapped OGMA represents about .01% of the mapped OGMA within the project area (about 7,693 acres total).
- At 0.84 acres, the amount of trail system within mapped OGMA represents about .004% of the mapped OGMA within the Ochoco National Forest, as described in the Forest Plan.

Under the selected alternative, motorized use of the trail segments in OGMA would be permitted for a maximum of 4 months each year (between the dates of June 1 to September 30).

The analysis documented in the Ochoco Summit Trail System Project SFEIS indicated that adverse impacts of motorized trail use within the three OGMAs are unlikely for the following reasons:

- 1. Research indicates that trail-based recreation disturbance does not affect the guild of primary cavity excavators, which are dependent upon old growth habitats (SFEIS at 279).
- 2. No habitat would be removed from the affected OGMAs for the trail construction that would be associated with the motorized trail use; the seasonal trail use would not remove habitat (SFEIS at 280).
- 3. Motorized trail use within the OGMAs would not take place through intact interior old growth habitat (SFEIS at 439).
- 4. While motorized trail use would be limited to the open season (between June 1 and September 30 annually), motorized use of the adjacent open roads may take place year-round, as weather conditions permit.

The amendments would affect limited locations within three OGMAs, as described above (see Figures B1, B2, and B3 and Maps 3 and 4 in this Record of Decision). This decision does not apply to any other OGMA on the Forest, does not change Forest Plan standards and guidelines in any other location. It is unlikely that the ONG will undertake another motorized trail project in the foreseeable future; therefore it is unlikely that a precedent of allowing motorized trail use within OGMAs on the Forest will be set by this decision.

Due to the small area affected by these Forest Plan amendments, and due to the lack of measurable effects to Old Growth Management Areas and the habitat that they provide, these amendments are of very limited scope and very low intensity.

Cumulative Effects to OGMA

Cumulative effects of the Forest Plan amendments in OGMA were described in the SFEIS at 440. That analysis considered projects listed in SFEIS Table 7, but did not specifically consider the cumulative effects of ONF Forest Plan amendments on habitat in Old Growth Management Areas.

According to the regulation at 40 CFR 1508.7, "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

As has been described in this document, and in the SFEIS, the function of the OGMAs would not be affected by the construction and use of motorized recreation trails in the locations described. If the selected alternative does not have a measurable effect, it can't contribute cumulative effects to the OGMAs. However, to fully disclose potential for cumulative effects, a review of past Forest Plan

amendments that affected OGMAs was done for this Record of Decision.

There have been three projects in the past 10+ years that included Forest Plan amendments to allow vegetation treatments within OGMAs. The approved acreage and reason for the Forest Plan amendments are summarized in Table B1.

Table B1. Summary of past Forest Plan Amendments that affected Old Growth Management Areas on the Ochoco National Forest.

Project Name	Decision Year	Treatment(s) Authorized	Acres Authorized	Reason
West Maurys Fuels and Vegetation Management Project	2005	Prescribed fire	521 (in 2 OGMAs)	Preservation of large ponderosa pine.
Spears Vegetation Management Project	2007	Precommercial thinning, piling, underburning	70	Preservation of large ponderosa pine on south and west facing slopes.
Upper Beaver Creek Vegetation Management Project	2010	Harvest (66 ac), noncommercial vegetation treatments	557	Preservation of large ponderosa pine on south and west facing slopes.

Each of the amendments identified in Table B1 were authorized in order to maintain and enhance the large-diameter ponderosa pine on dry sites, which is a benefit to the old growth dependent species that select for open ponderosa pine forest. When considered cumulatively with the unmeasurable effects of the Ochoco Summit Trail System project on OGMA, there is no cumulative effect to the amount or quality of old growth on the Ochoco National Forest.

Forest Plan Amendment, Old Growth Management Area OG-D2-02 Deep Creek - Alternative 5

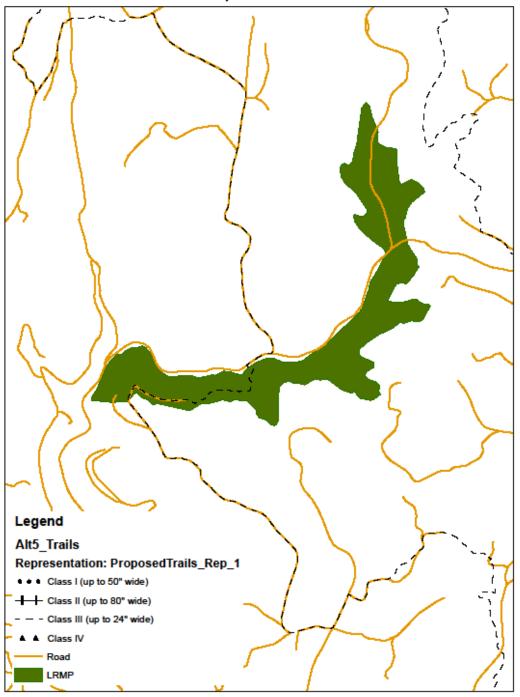


Figure B1. Old Growth Management Area OG-D2-02 and selected alternative.

Forest Plan Amendment, Old Growth Management Area OG-D1-08 Indian Butte - Alternative 5

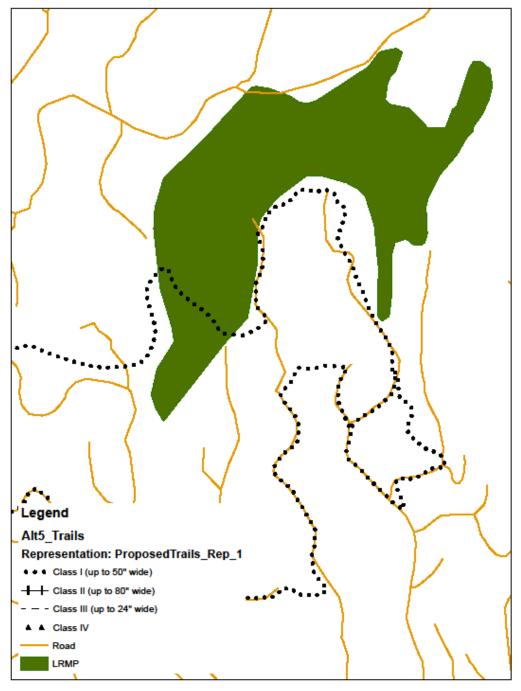


Figure B2. Old Growth Management Area OG-D1-08 and selected alternative.

Forest Plan Amendment, Old Growth Management Area OG-D1-12 East Porter - Alternative 5

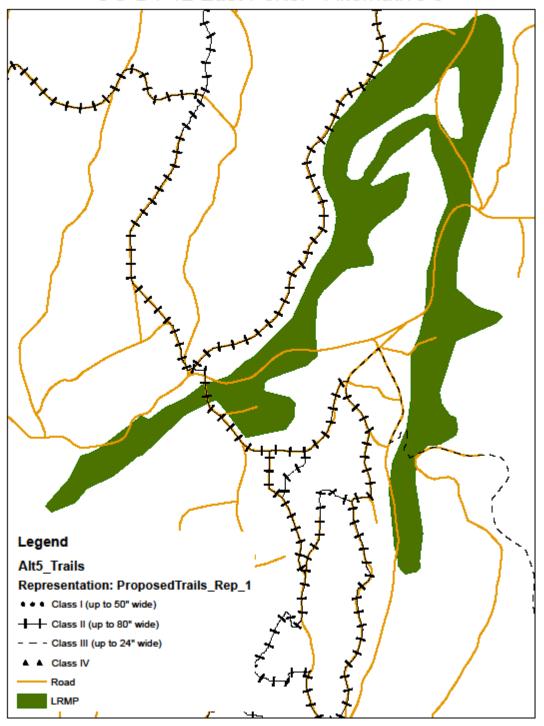


Figure B3. Old Growth Management Area OG-D1-12 and selected alternative.

Amendments that Affect Scablands

This Record of Decision amends the Ochoco Forest Plan to exempt the Ochoco Summit Trail System project from standards and guidelines regarding motorized travel on scablands, as described in the SFEIS at 440. The Ochoco Forest Plan recognizes that scablands are fragile ecosystems (Forest Plan at 4-197). Forest-wide standards and guidelines include the standard that ORV use on scablands will be limited to snowmobiles operating on an adequate snow base (Forest Plan at 4-177).

The 2011 Record of Decision for the Travel Management Project amended the Ochoco Forest Plan to limit motorized vehicles (except for over snow vehicles) to designated routes only. This amendment was consistent with the existing Forest Plan direction that prohibited ORV use on scablands.

Maps 4 and 5 display the selected alternative in relation to scabland in the project area. As described in the SFEIS, there are about 41,296 acres of scabland habitat in the project area; of these, the selected alternative would affect about 16 acres or about 0.04% of the scabland habitat within the project area. As displayed on Maps 4 and 5 of this Record of Decision, the trail system in the selected alternative avoids the majority of the scabland habitat in the project area and utilized existing disturbance on scabland as much as possible. Segments of new trail will be constructed as identified on the map, as necessary to connect existing open road and trails on existing disturbance to create a logical trail system.

As discussed in the SFEIS, the predicted effects of motorized trail construction and use on scablands are expected to be long-term to permanent (SFEIS at 398; see also Errata 2, attached to this ROD). However, the trail segments that are not on existing disturbance amount to only 0.04% of the scabland in the project area. While this is a measurable effect, it is extremely small, limited in space, and of very low intensity.

Cumulative Effects to Scablands

Cumulative effects of the Forest Plan amendments on scablands were described in the SFEIS at 440. That analysis considered projects listed in SFEIS Table 7, but did not specifically consider the cumulative effects of ONF Forest Plan amendments on scablands.

The only Forest Plan amendments that would affect scabland were authorized by the Record of Decision for the Travel Management Project. As described above, that decision limited motorized vehicle use to designated routes only. While ORV use was already prohibited on scablands, the Forest Plan was not clear about the use of other motor vehicles over scabland habitat; the amendment in the Travel Management Project ROD made it clear that motor vehicles could cross scabland on designated routes only. By designating routes for OHV use, the Ochoco Summit Trail System Project is consistent with the intent of the Travel Management Project ROD. Cumulatively, the Travel Management Project amendments and the designation of logical, managed and maintained routes with this ROD, will contribute to appropriate vehicle use on scablands in the Ochoco National Forest.



Appendix C – Preliminary Implementation Strategy

Introduction

The Ochoco Summit OHV Trail System Preliminary Implementation Strategy provides a framework to identify how the Ochoco National Forest plans to implement the selected alternative for the project. An Implementation Plan will be developed as a separate document.

The Implementation Strategy will serve as a framework for identifying key steps needed to position the Ochoco National Forest for the successful implementation of the Ochoco Summit OHV Trail System. This framework will be implemented in phases and broken out as "Areas." The East and West Areas will be looked at by segment of trail, which will be referred to as "Nodes." Each Node has been assigned a number as a unique identifier; the numbers are not intended to imply priority or implementation sequence. Please see "Node maps" (Maps 8 and 9 in this ROD).

As more site specific information is known, and prior to implementation, each Node within the East and West Areas will have detailed design criteria documented. Consideration is being given by the Supervisor of the Ochoco National Forest as to where implementation will begin in the project area.

Key resources include Planning, Engineering, Recreation, Aquatics, Wildlife, and Archaeology,

The objectives of this document are to:

- · Provide an implementation framework.
- Describe the considerations related to implementation for West and East Areas.
- Provide a list of action items.
- Identify a plan of work through 2018.

Descriptions of West Trail Area and East Trail Area

West Trail Area

The western portion of the Ochoco Summit OHV Trail System includes 47 miles of Class I-ATV trails (<50" wide) and 6 miles of Class IV-Side-by-Side trails (<65" width), utilizing a mix of open roads, decommissioned and/or closed roads, and new construction. The Class I system ties into the already existing staging areas at Ochoco Divide and Walton Lake Sno-Parks.

Ochoco Divide has amenities in place except for a warm-up/learner loop adjacent to the Staging Area. The existing Walton Lake Sno-Park will be developed to accommodate an OHV staging area for use from June 1 through September 30. Walton Lake Staging Area will be improved to support ATV and motorcycle staging including an additional vault toilet, picnic tables, sign boards, and directional signing.

The Class IV system will have an access point near the north end of the loop from Forest Road 2600-090.

The implementation team will coordinate with specialists, stakeholders and partners prior to work occurring in any Node.

The West Trail Area includes the following segments of trails (Nodes):

Node	Class	Name	Miles	Important Considerations
01	Class IV/Class I	Shamrock Creek Zone	8	Side by side access, Local
				Residents
02	Class I	Rush Creek Zone	9	Local Residents
03	Class I	Coyle Butte Zone	10	2 New Crossing Structures
04	Class I	Ochoco Divide Zone	4.7	Staging Area, Bailey Butte Fire,
				Hazard Trees
05	Class I	Walton Lake Zone	7.8	Historic Trail
06	Class I	Big Summit Zone	13.5	Staging Area, 2 New Crossing
				Structures,
				& 5 New Crossings

WEST TRAIL AREA CONSIDERATIONS

- · Accommodates Class I, III and IV. Designed for Class I and IV.
- Some infrastructure is in place at Walton and Ochoco Divide Sno-Parks.
- Based on observations, there is a higher proportion of unauthorized motorized use in the
 West Area than the East Area, resulting in resource damage including riparian impacts.
 Starting in the West Area would align with the purpose and need of the project related to
 managing unauthorized use. This will demonstrate that the trail system can be successful in
 reducing unauthorized OHV use and keeping most people within the designated system.
- The West Area is accessible to Prineville and work is visible to the public.

Providing Class IV loop access in the West Trail Area

- The EIS states there will be no developed staging area but will have an access area at each end of the loop.
- Prior to implementation, the space for parking, unloading and turning around trailers needs to be evaluated to ensure access is addressed.
- There is a good access route from the south using a closed road prism of Forest Road 2600-012. At the junction of Forest Road 2600-012 and 2610 parking and access is available. The road status will need to be evaluated for allowing legal access to the trail system.
- Building the Class IV loop early in the process may illustrate the demand for side by sides.

East Trail Area

The eastern portion of the Ochoco Summit OHV System includes 62 miles of Class III – Motorcycle trails (<24" wide) and 20 miles of Class II – 4x4 Vehicle trails (<80" wide), utilizing a matrix of open roads, decommissioned and/or closed roads, and new construction. Two staging areas and a trailhead will be developed.

Peterson Lava Staging Area will serve the Class II system (<80" wide) and the Class III system (<24" wide). Improvements at Peterson Lava will include installation of a vault toilet, defining

camp sites, and adding amenities including picnic tables, fencing, sign boards and directional signage.

Cottonwood Pit Staging Area will also serve the Class III trail system. Cottonwood pit will retain the existing level of facilities but will serve as a motorcycle staging area. This staging area will include an adjacent warm-up/learner loop and a supervised youth riding area. Additional amenities will include a hardened parking area, picnic tables, sign boards and directional signage.

Six Corners Trailhead will also provide trail access and an informational kiosk will be installed.

The East Trail Area includes the following segments of trails (Nodes):

Node	Class	Name	Miles	Important considerations
80	Class II	Peterson Lava Zone	13	Staging Area, 1 New Crossing Structure,
				3 New Crossings
09	Class II	Porter Creek Zone	13.2	3 New Crossings
10	Class III	Broadway Lava Zone	8.4	1 New Crossing Structure & 1 New Crossing,
				Rager TMA
11	Class III	Crazy Creek Zone	7.5	2 New Crossing Structures, Rager TMA
12	Class III	Deep Creek Zone	8.5	1 New Crossing Structure & 3 New
				Crossings,
				Rager TMA, New Bridge
13	Class III	Little Summit Zone	14.5	Rager TMA, New Bridge
14	Class III	Cottonwood Pit Zone	13.5	Staging Area, 2 New Crossing Structures,
				Rager TMA
15	Class III	Six Corners Zone	6.4	Rager TMA, Trailhead

EAST TRAIL AREA CONSIDERATIONS

- Accommodates Class I, II, III, IV. Designed for Class II and III.
- There is a higher investment to plan and build bridges/river crossings.
- There is more mileage of new routes planned than the West Area.
- Funding has been received to inventory unauthorized routes or intersecting existing, closed roads and evaluate the need for closures and restoration.
- The Rager Cooperative Travel Management Area (TMA) geographically overlaps nodes 11

 15. This TMA's seasonal restrictions may overlap and close these nodes earlier than September 30th.
- The proposed trails in Nodes 08 and 09 are part of the Black Mountain Fuels and Vegetation Restoration project. Haul routes could be located on proposed trails. These are full size vehicle routes.
- Ochoco Trail Riders have offered to help with implementation of Class III (single track) trail system and are ready to begin.

Connecting the West Area and East Area Trail Systems

The 2630 road serves as the connecting route between the East and West implementation Areas. This road skirts the southern boundary of the Bridge Creek Wilderness and portions of this road are

on the Historic Summit Trail. A section west of Bridge Creek Wilderness will need to be converted from allowing highway legal vehicles only to allow for mixed use by all vehicles.

Node	Class	Name	Miles	Important Considerations
07	Mixed Use	Bridge Creek Connector	16.4	Historic Trail

To determine the ability to convert this section of road from "Roads Open to Highway Legal Vehicles" to "Roads Open to All Vehicles" allowing for mixed use with non-highway legal vehicles, this road will require an engineering evaluation to determine what is needed to bring the road to standard for mixed use.

Implementation Strategy Action Items

- Determine which Area to begin work in and prioritize by node.
- Develop Implementation Plan Following all resource protection measures described in Chapter 2 of the SFEIS.
- Order signs (Travel Management and OHV System Signs) & create an installation plan.
- Develop detailed road and trail sign plans.
- Install portal signs, OHV area boundary signs and replace road and trail signs as needed for users to comply with regulations.
- Complete installation of route markers on all roads open and closed to public motorized vehicle use.
- Determine thresholds for adaptive management framework.
- Identify areas for monitoring (user created trail/roaded areas and riparian crossings).
- Initiate monitoring and develop additional monitoring guidelines as needed.
- Identify areas where additional planning is needed to implement (e.g. 2630 connector road).
- Develop communication/education tools (brochures, press releases, PSAs, etc.).
- Make maps available to the public.
- Continue to engage partners during implementation.
- Continue to decommission roads and trails as determined in NEPA decisions and obliterate user created routes to address resource issues.
- Continue to inventory and identify unauthorized use and resource concerns.

2017 Field Season – Planned Work

- Identify where work will be begin.
- Decision on Forest Road 2630 connection from West Area to the East Area.
- Order signs with 2016 funding set aside at the Government Printing Office.
- Determine what additional signage is needed not currently funded.
- Identify ongoing signing needs:
 - o Complete installation and repositioning of route markers on closed roads.

- o Install boundary signs as needed (staging areas, pits, play areas).
- o Replace trail signs that do not comply with the OHV trail sign strategy.
- Complete installation of regulatory Portal signs or Travel Management information signs.
- Develop a strategy for on-going inventory, condition surveys and replacement of route markers.
- Conduct wildlife surveys pre-implementation to determine baseline.
- Work with partners to determine a wildlife effects monitoring plan.
- Recreation and Aquatics will be verifying the identification of unauthorized routes and access utilizing regional funds received for the East Area. Funding was received for planning in 2017 and Recreation and Aquatics will assess these routes.
- Technical evaluation of proposed constructed features and new infrastructure will be completed in 2017 using Capital Improvement (CIP) funds.
- Collect visual observations of motorized use and violations through the Recreation Crew database and other employee observations. Additionally, the Black Mountain Vegetation and Fuels EIS planning efforts will be validating motorized use within portions of the planning area.

2018 Field Season - Planned Work

- Inventory unauthorized use and identify need for closures/restoration/costs.
- Apply for grant funding for wildlife monitoring.
- Once implementation begins monitoring for compliance will be developed.
- Continue identifying unauthorized routes for rehabilitation.
- Engineering and Aquatics will be analyzing the unauthorized routes in the East Area identified in the 2017 field season and will work on preconstruction and contracting to prepare for deconstruction of unauthorized routes in 2019.



Appendix D – Restoration Work on the Ochoco National Forest

Summary of Restoration Work Accomplished since the 2011 Travel Management Project Record of Decision

The Forest Service Watershed Improvement Tracking (WIT) database was used to help quantify the amount of money spent on restoring areas impacted from authorized and illegal OHV use. The WIT database was queried on all projects implemented since 2011; local knowledge contributed to the understanding of projects that may not have been accurately depicted in the database. If project cost was not entered in the database, an estimate of \$2000 per mile was used for road closures. For some projects, the actual cost was much higher than the value that was used because these projects included more than just closures associated with authorized or illegal OHV use. For example, the Dick Creek meadow restoration project, completed in 2014, included a large meadow restoration, as well as closure of an unauthorized road down to the project site. The cost for just the road closure portion was estimated.

Based on data generated from the WIT database and local knowledge of many areas where unauthorized roads have been closed, the Ochoco National Forest since 2011 has invested approximately \$214,000 in road closures and decommissioning, as well as unauthorized trail closures. Most of the work has been completed in the McKay and Deep Creek subwatersheds, but various other closures have taken place across the forest. This cost also includes rehabilitation of sites, such as dispersed campsites, that have been severely impacted by off-road use.

In terms of time investment, it is estimated that the Ochoco National Forest, on average, spends approximately 30 person-days per year on identifying in the field, planning and implementing closure of unauthorized routes on the Forest. Using a GS-7 rate (the daily cost of a Forest Service employee who is paid at the GS-7 level), this equates to an additional \$7,500 each year spent on planning and implementing closures on the forest.

Planned Restoration Work

The Ochoco National Forest continually seeks funding to implement unauthorized closures. For example, the Forest recently secured approximately \$110,000 over three years to implement unauthorized road closures and closure of existing closed roads in the Ochoco Summit Trail System project area, as authorized by the Ochoco Summit Trail System Record of Decision. This funding covers work on the east side of the project area in the Peterson, Porter, Crazy-Deep, Jackson, Little Summit and North Wolf Creek Subwatersheds. This proposal includes two types of treatments, one on unauthorized trails and another for reinforcement of existing closures on Maintenance Level 1 roads. On unauthorized trails, the road/trail will be hydrologically stabilized through deep ripping, recontouring if necessary, installation of water bars or other water drainage features, rehabilitation of stream crossings if necessary, and effective closures through the use of a combination of berms, large boulders, or recontouring of the entrance. On reinforcement of existing closures on Maintenance Level 1 roads, appropriate drainage in terms of water bars or other drainage structures will be installed to hydrologically stabilize the road bed, and an effective closure will be installed using a combination of large boulders, berms, or gates as needed.

The \$110,000 will be used as follows: in 2017, \$10,000 will be used to begin identifying routes in the field; in 2018, \$20,000 will go towards layout in the field and prep for implementation; in 2019, the remaining \$80,000 is secured for implementation of closures and rehabilitation.



List of Maps

- Map 1 The selected alternative, west side.
- Map 2 The selected alternative, east side.
- Map 3 The "OHV Management Area."
- Map 4 Special Habitats and Old Growth Management Areas in relation to the selected alternative, west side.
- Map 5 Special Habitats and Old Growth Management Areas in relation to the selected alternative, east side.
- Map 6 Riparian Habitat Conservation Areas in relation to the selected alternative, west side.
- Map 7 Riparian Habitat Conservation Areas in relation to the selected alternative, east side.
- Map 8 Preliminary Implementation Strategy Nodes, west side.
- Map 9 Preliminary Implementation Strategy Nodes, east side.