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EA 12-03  
Carpenter Bypass

May 20, 2013

Dear Citizen,

The Siuslaw Resource Area of the Eugene District Bureau of Land Management has completed a new Environmental Assessment (EA) for the proposed management of the Carpenter Bypass Mountain Bike Trail System located in T. 20 S., R. 5 W., Sec. 23, 27 and 35.

As a result of comments received on the Carpenter Bypass Mountain Bike Trail EA available for review from August 15, 2012, to October 4, 2012, we have made changes to this EA to provide clarification to the purpose and need, project design, and effects of issues considered. I have also directed the IDT to review the substantive comments received and address them through the revision of this EA.

This EA considers in detail two alternatives, the No Action Alternative (Alternative 1) and the Proposed Action (Alternative 2). The Proposed Action was developed to meet the purpose and need to refine the mountain bike trail system known as Carpenter Bypass to eliminate unsustainable trail segments, reduce user conflicts, improve user safety, and eliminate resource impacts occurring from concentrated public mountain bike recreational use. Project actions are derived from the assessments made by applying the sustainability factors identified in an International Mountain Bike Association assessment. The assessment identified sustainability ratings, assigning recommendations for maintenance.

You have expressed an interest in receiving copies of EAs for district projects. This EA has been provided for your review and any comments. Public notice of this proposed action will be published in the Eugene Register Guard on May 22, 2013. The EA is also available on the internet at <http://www.blm.gov/or/districts/eugene/plans/index.php>. **The public comment period will end on June 20, 2013.** Please submit comments to Jan Robbins at the Eugene District Office by mail at 3106 Pierce Parkway, Suite E. Springfield, OR, 97477; or by e-mail at [BLM\\_OR\\_EU\\_Mail@blm.gov](mailto:BLM_OR_EU_Mail@blm.gov) by close of business (4:30 PM) on or prior to June 20, 2013. If you have any questions concerning this proposal, please call Jan Robbins at 541-683-6465.

Comments, including names and street addresses of respondents, will be available for public review at the Eugene District Office, 3106 Pierce Parkway, Springfield, Oregon, during regular business hours (8:00 AM to 4:30 PM), Monday through Friday, except holidays, and may be published as part of the EA or other related documents. Individual respondents may request confidentiality. If you wish to withhold your name or street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses and from individuals identifying themselves as representatives or officials of organizations or businesses will be made available for public inspection in their entirety.

Sincerely,

Alan Corbin  
Field Manager  
Siuslaw Resource Area

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
EUGENE DISTRICT OFFICE

**ENVIRONMENTAL ASSESSMENT**  
DOI-BLM-OR-050-2012-0003-EA

## **1.0 INTRODUCTION**

This Environmental Assessment (EA) analyzes mountain bike trail utilization of a BLM-managed parcel of land located in T. 20 S., R. 5 W., Sec. 23, 27 and 35, commonly referred to as Carpenter Bypass (Appendix B, Map 1). The project area includes 18.8 miles of existing trail, 25 feet on both sides of the existing trails, and an approximately 0.5 acre existing logging landing proposed for a parking lot and its access.

### **1.1 BACKGROUND**

In 2010, the BLM-OR, Eugene District became aware of an 18.8 mile mountain bike trail network in the Carpenter Bypass area that was developed by local mountain biking users without the authorization of the BLM. Upon further investigation it was discovered that the trail system began in the late 1990s and has become a well-known recreation opportunity utilized by a variety of non-motorized user groups from the local and regional area. Most notably, the mountain bike community utilizes the trail system regularly and hosts an annual gathering in the area. Other users include trail runners, hikers, and local equestrians.

On May 6, 2010, representatives from a collection of community-based, mountain biking organizations met with representatives of the BLM to discuss the future management of the trail system. During this and subsequent interaction, the BLM expressed a desire to develop a partnership based on mutually agreed upon goals and objectives for the management of the trail system. The BLM and the most active group, the Disciples of Dirt (DoD), a 501(c)3 non-profit organization, signed a Memorandum of Understanding (MOU), outlining a long-term maintenance agreement for the trail system through a volunteer workforce of DoD members. The MOU enabled the BLM and DoD to develop a strategy to ensure a safe and sustainable mountain biking experience.

In summer 2011 the BLM worked with the International Mountain Biking Association's (IMBA) trail solutions team to complete a sustainability analysis of the mountain bike trail network<sup>1</sup>. The assessment included both social sustainability (e.g., patterns of user behavior, potential conflict, and skill ratings) and environmental sustainability (the ability of the trail to handle current and expected mountain bike use without intensive maintenance).

The analysis conducted by IMBA for sustainability was directly correlated to standards for mountain biking trails; however, these factors are relevant to measure other known uses of the trail which, unlike design or maintenance standards, would assess the same principles under all uses. Evaluating environmental sustainability of the trails was based on several factors including those listed below:

- Prevailing slope to trail grade alignment ratio
- Absolute trail grade
- Canopy cover and adjacent vegetation
- Soil type and rock content
- Current tread condition (widening, muddiness, etc.)
- Level of anticipated use

### **1.2 PUBLIC INVOLVEMENT**

In early April of 2012, outreach informing the public of the EA planning effort and upcoming public meeting was sent out through a formal press release to weekly papers, including *The Creswell Chronicle*, *Cottage Grove Sentinel* and *Eugene Weekly*. This outreach was also sent to radio stations *KLCC*, *KUGN*, and *KPNW*. Further outreach with the same information was published on the BLM public website and at informational kiosks located at BLM Siuslaw Resource Area Recreation areas, including Hult Reservoir Equestrian Trailhead and Hult Reservoir Parking Lot. Informational flyers were provided to local businesses and the University of Oregon.

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<sup>1</sup> The full Carpenter's Bypass Trail System Assessment is included as Appendix C of this EA. The assessment contains a table which provides information on the sustainability of the trail system by trail segment. Trail segment numbers in this table correspond to Map 1, Appendix B.

A public scoping meeting was held on April 26, 2012, at the Lorane Grange in the town of Lorane, Oregon. The meeting was advertised via press release, the BLM public website and the reader board at the Lorane Grange. Approximately 55 members of the public attended the meeting, in addition to five BLM staff. Comment forms were provided at the meeting and 17 forms were filled out and submitted. In addition to public meeting comment forms the BLM received 54 comments via postal or e-mail correspondence.

A draft EA/FONSI was posted for a 30-day public comment period on August 15, 2012. In response to the number of comments that were received, the comment period was extended for another 15 days until October 4, 2012. A total of 271 comments were received ranging from support from the mountain bike community to concerns from equestrian users regarding language in the EA implying exclusion from trail access. Other comments included concerns from the timber community surrounding unauthorized use of timberlands, concerns from trail users about potential user group conflict on the trail network, and concerns from environmental groups regarding effects to fish and wildlife and stream crossings.

The Decision Maker for the project directed the IDT to review the substantive comments received and re-issue an EA for another 30-day public comment period. All substantive comments have been addressed through the revision of this EA and are reflected within this document.

Several comments from equestrians expressed concerns with analysis that implied that horses would be excluded from trail riding on this trail system. In response to comments from local equestrians, several subsequent meetings were held from December 5, 2012, to February 14, 2013, with members of the Backcountry Horsemen of America (BCHA), at their request, to clarify analysis done and to acquire substantive information to consider incorporating into the EA's revision. The BCHA was requested to provide a proposal with a map showing desired trail use, and proposals for trail segment re-design to meet equestrian trail use standards. On February 14, 2013, the organization provided the BLM with a map identifying areas within the Carpenter Bypass project area that would provide them with an optimal recreation experience, but did not propose renovating those trail segments to align with federal equestrian trail standards at this time. In March 2013, The Emerald Empire chapter of the Backcountry Horsemen of Oregon expressed their desire to enter into a MOU, similar to the DoD, with the BLM, to partner in future trail maintenance. This agreement is currently being developed but has not been completed at this time. Should the MOU identify any proposals for trail renovations to meet equestrian trail use design and maintenance standards, a subsequent analysis of those proposals would be conducted.

### **1.3 PURPOSE AND NEED**

The purpose for action is to enhance mountain biking opportunities by refining the mountain bike trail system known as Carpenter Bypass to eliminate unsustainable trail segments, reduce user conflicts, improve user safety, eliminate resource impacts occurring from concentrated public mountain bike recreational use, and continue to allow incidental use by other recreational users. These improvements would be intended to provide mountain biking recreation opportunities that are sustainable, safe, and prevent resource damage and environmental impacts.

This need was identified through the Carpenter's Bypass Trail System Assessment of the sustainability of the mountain bike trails. This assessment indicated that sections of the current mountain bike trail network need to be improved or re-routed in order to reduce erosion and minimize the need for trail maintenance. The assessment also identified conflicts between bicyclists due to differing skill levels, lack of trail marking, and lack of advanced trail riding opportunities. The BLM has also identified soil compaction and sanitation concerns resulting from a lack of adequate parking areas and lack of public restroom facilities.

For any action alternative to be given serious consideration as a reasonable alternative, it must meet the purpose and need identified above and meet the objectives provided in the Eugene District ROD/RMP (1995) for implementing projects within the planning area. The ROD/RMP and applicable statutes specify the following objectives in managing lands within the project area:

“Provide amenities (recreation, facilities, protected special areas, and high quality fisheries) that enhance communities as places to live and work (p. 80).”

“Provide a wide range of developed and dispersed recreation opportunities that contribute to meeting projected recreation demand within the planning area (p. 80).”

“Continue to provide non-motorized recreation opportunities and create additional opportunities where consistent with other management objectives (p. 81).”

## 1.4 CONFORMANCE

On May 16, 2012, the U.S. District Court, District of Oregon (*Pacific Rivers Council et al v. Shepard*) vacated the 2008 Records of Decision/Resource Management Plans for western Oregon BLM districts and reinstated BLM's 1995 RODs/RMPs. As of May 16, 2012, the Eugene District has reverted back to its 1995 ROD/RMP as the official land use plan of record. Due to previous ongoing litigation, the Eugene District initiated planning and design for this project to conform to the 2008 ROD/RMP and the 1995 ROD/RMP. Consequently, this project is consistent with the goals and objectives of the 1995 ROD/RMP.

## 1.5 ISSUES ANALYZED IN DETAIL

The IDT brought forward additional concerns (issues) related to resources that would be affected by the proposed actions. The resource concerns related to these issues are analyzed in Chapter 3.

Issues identified:

- Issue 1. What are the effects of the proposed action on mountain biking opportunities in the area?
- Issue 2. What are the effects of the proposed actions on recreational user safety and sanitation?
- Issue 3. What are the effects of the proposed action on soil erosion and water quality?
- Issue 4. What are the effects of the proposed action on botanical and wildlife species and their habitats?

Resources relevant to the identified issues that are analyzed for direct, indirect, and cumulative effects of implementing the alternatives include recreation resources, soils/hydrology, botany, fisheries, and wildlife resources.

## 1.6 ISSUES CONSIDERED, BUT NOT ANALYZED IN DETAIL

Comments brought forward by the IDT and through public participation raised the following additional concerns related to resources that had potential of being affected by the proposed actions. For reasons described below, these issues were not carried forward to be analyzed in detail.

### **What are the effects of unauthorized motorized use on the mountain bike trail system?**

Typical of a rural-urban interface area, unauthorized motorized recreation use on both public and private property in the area has been observed. The majority of this use is concentrated along the roads in the area. Some signs of motorcycle use, including rutting, were observed by BLM staff on the user created trails in the project area. It is estimated that this activity represents a small percentage (less than 1%) of overall usage at this time on the trails. As the activity for motorized use in the area is low, and impacts found were concentrated on roads in the area that the trail system accesses to provide connectivity, this issue was dropped from further consideration in this analysis. Furthermore, to address unauthorized motorized recreational use would be outside the scope of this project and does not meet the purpose and need identified.

Some efforts to address this activity, including signing trailheads to identify it as a non-motorized trail system, have been made. Additionally, BLM law enforcement was notified and has been monitoring the area for illegal use. These actions have been taken independent of this analysis.

### **What are the effects of the proposed action on noxious weeds and non-native invasive plants?**

During 2012 botanical surveys, the project area's trails and proposed parking lot were surveyed for noxious weeds and non-native invasive plants. Sparse scatterings, small thickets, or single sites were found of bull thistle (*Cirsium vulgare*), Canada thistle (*Cirsium arvense*), common St. Johnswort (*Hypericum perforatum*), cut-leaf blackberry (*Rubus laciniatus*), false brome (*Brachypodium sylvaticum*), herb Robert (*Geranium robertianum*), Himalayan blackberry (*Rubus armeniacus*), shining geranium (*Geranium lucidum*), and tansy ragwort (*Senecio jacobaea*). Scotch broom (*Cytisus scoparius*) was very common in the project area, mostly as small plants scattered along roadsides.

Most weed infestations appear related to roads and forestry treatments, rather than the singletrack trails through intact forest. Most of the weeds that occur along trails are at the recently thinned progeny site, and along the road-to-trails sections (closed roads used as trails). The single site of Herb Robert was the only occurrence that appeared due to trail users. Evidently, seeds had been deposited at this point, and have spread to an approximately 20 by 30 foot long area along the trail. Because there has been relatively little weed infestation occurring due to single-track trails, this issue was not analyzed in detail in the EA. There remains a risk that increasing weed infestations will occur, due to trail users acting as seed vectors, and due to increasing amounts of disturbance from unmaintained trails and unmanaged trail use. Shade tolerant weeds are of particular concern. Under the proposed action, there is less risk of noxious weed spread. Disturbance would be lessened by

managing and maintaining the trail system, weed introductions can be more easily located on a designated trail system, and mitigation measures can be put in place.

Manual management of weeds in the area has been found to be effective and has occurred on various species along the main roads since 2005. Management of weeds would continue to occur in accordance with District noxious and invasive species management procedures. Shade-tolerant weeds, particularly the false brome and herb Robert sites, would be a priority for management along the trails.

Trail signing and kiosks would contain information about noxious and invasive weeds, including information to prevent new contaminations or spreading, such as pictures for identification and the importance of washing mud from footwear and bicycles. Monitoring by BLM personnel of noxious and invasive weeds on the re-routed and existing trails would occur every 2-5 years to identify new species or expanded occupations needing management.

**What are the effects of the proposed action on available timber lands and forested vegetation?**

Vegetation in the project area consists of primarily Douglas-fir forest stands on the general forest management area (GFMA) Eugene Resource Management Plan land use allocation (LUA). Stands are comprised of relatively dense, dark young forests and some older stands including remnant legacy trees. The majority of Carpenter Bypass trails are about 2-3 feet in width, single-track trails through the timbered stands. Most of the trail system was constructed between existing overstory trees. Comments from timber industry also expressed concerns regarding the removal of lands the mountain bike trail encompasses from the timber base and impacts of project actions on the future timber stand.

Establishment of the mountain bike trail in the GFMA LUA would not remove the land base from timber management. Forested stands within the Carpenter Bypass trail network would be available for timber management and future projects would be based on scheduling considerations for supporting a sustainable supply of timber in the Eugene District. Recreational resource impacts from any proposed harvest would be analyzed whenever the timber was considered for analysis in harvest and would be mitigated to reduce impacts to continue to provide for the opportunity. Any restoration or re-routing of trails as a result of impacts from harvest would be analyzed at that time. Impacts to the forested overstory would not occur from project actions, as no tree above 11" in diameter would be allowed to be felled.

Adjacent landownerships consist of private timber lands, and comments received expressed concerns over unauthorized use on these private lands from trail users. Actions taken under this project are expected to reduce unintentional unauthorized use of adjacent lands from better signing, mapping, and information at kiosks to stay on designated routes.

**What are the effects of the proposed action on soil compaction?**

Currently, the compaction footprint in the 3 sections of BLM land within the project area is less than 1% of the areal extent. Compaction of the forested area has occurred primarily from legacy logging roads (roads built for previous logging use) within the project area and surrounding vicinity. Parts of the trail system have been built on these old logging roads that are compacted. Small changes to compaction levels have occurred on the existing trails as a result of cleared vegetation and trail use. Extra parallel trails and short-cut trails, sometimes braiding around trees, are causing additional compaction. However, compaction from the mountain bike trails is less than one-half of one percent of the acreage of the sections in which the trails are located. No actions proposed or expected uses under either alternative would meaningfully increase this level of calculated compaction. The parking area proposed under Alternative 2 is proposed on an existing logging landing, which already has already been compacted from past operations. As there would be no measureable difference in analysis for compaction, this issue was not considered in detail.

**What are the effects of the proposed action on Aquatic Conservation Strategy (ACS) Objectives?**

Aquatic Conservation Strategy (ACS) objectives established with the Northwest Forest Plan include nine specific objectives that establish criteria for management within Riparian Reserves. These nine objectives direct the maintenance and restoration of aquatic habitat characteristics through management actions. A point-by-point review of the nine ACS objectives and how they are maintained under each alternative was conducted for this analysis and is captured in the Hydrology Report, which is hereby incorporated by reference. The proposed actions do not include modifications to riparian areas (i.e., overstory vegetation removal) and include improvements to the few existing stream crossings (i.e., hardening, re-routing, or realignment). The improvements of stream crossings and low miles (about 2.4 miles) within Riparian Reserves (one site-potential

tree, or 210 feet) were not found to be impacting connectivity or the physical integrity of aquatic systems. The analysis's evaluation of this potential issue determined that all ACS objectives would be maintained (no change expected) under both alternatives at the watershed and sub-watershed scale.

**What are the effects of the proposed action on Threatened & Endangered or Bureau Sensitive botanical species?**

Surveys were conducted in the project area for Threatened or Endangered, Bureau Sensitive, and Survey and Manage vascular plants, lichens, or bryophytes. No plants were found excepting two vascular plants, one Bureau Sensitive and one District Review species. These plants are discussed in detail in Chapter 3.4.

Special Status fungi may occur in the project area, however surveys were not conducted. The Eugene District has three documented and 19 suspected Bureau Sensitive fungi species and nine documented and 67 suspected Bureau Strategic species. According to USDI (2004), pre-disturbance surveys in proposed project areas for these fungi are not practical to conduct and should not be attempted. Instead, large scale strategic surveys are conducted, and sites are protected where known. No known sites of Special Status fungi are found in the project area.

As these botanical species were not found in the project area, this issue was not considered in detail.

**What are the effects of the proposed action on threatened and endangered fish species?**

The proposed action is located in the Upper Siuslaw River 5th Field HUC. The action would occur within the Douglas/Letz 6th Field HUC (T. 20 S., R. 5 W., Section 27) and in the South Fork Siuslaw River 6th Field HUC (T. 20 S., R. 5 W., Sections 23, 27, 35). Although critical habitat for Oregon coast Coho salmon (*Oncorhynchus kisutch*) exists within the Upper Siuslaw 5th Field HUC, no critical habitat is present within the project area. Non-Coho-bearing headwater streams within the project area drain into critical habitat in Letz, Gardner, Sandy, and Lick Creeks (tributaries of the Siuslaw River). No Coho salmon have been observed within the project area. As there is no critical habitat or occupation of Coho salmon within the project area, this issue was not considered in detail as proposed actions would have **no effect** on Coho salmon or their designated critical habitat due to the absence of both.

**What are the effects of the proposed action on the Survey and Manage Mitigation Measure, special status, and migratory bird wildlife species?**

The project area is located in coniferous and mixed deciduous/conifer forests ranging from about 25 to over 200 years old. This range in seral stages represents habitat for a variety of wildlife species, including one survey and manage species (red tree vole), several special status, and migratory bird species. Habitat for these species occurs throughout the project area and Siuslaw Resource Area.

Land management actions that can impact these species have been analyzed in several analyses on the Siuslaw Resource Area and are well understood (Long Tom Landscape Plan EA; DOI-BLM-OR-E050-2009-0006-EA, pp. 29-34). The proposed actions do not modify habitat or disturb ground vegetation or forested structure at levels that could impact any of these species; no timber harvest or large removal of understory vegetation is proposed. Noise disturbance to wildlife from public use would occur, but such use has been occurring for over 15 years in the project area with local wildlife likely acclimated to these activities.

The proposed parking lot is located on existing cleared ground within an old landing which does not provide habitat to any of these wildlife species. Incidental felling of mid-seral trees (11 inches diameter or less) may be required to facilitate trail re-routes; however, trees would be left on-site as coarse woody debris to contribute to wildlife habitat. Previous analyses conducted in the Siuslaw Resource Area have demonstrated that more intensive habitat modification than would occur here (i.e., timber sales) would be required to have more than a limited impacts on these species. As such, this issue was not considered in detail under this analysis.

**2.0 ALTERNATIVES**

One action alternative and a no action alternative have been analyzed in detail in this EA. Four alternatives were considered but not analyzed in detail.

**2.1 ALTERNATIVE 1: NO ACTION**

The No Action alternative is a continuation of the existing user-created mountain bike trail system in the Carpenter Bypass area. Under this alternative, the BLM would not allow re-route and improve existing trails, or construct a parking lot and restroom in the project area. Trail segments identified as unsustainable would not be realigned or closed. Trail interpretive and informative signing would not be installed.

Ongoing trail maintenance would continue in accordance with mountain bike trail standards via the MOU with the DoD. Although the trail would be maintained to mountain bike trail design standards, no non-motorized recreation activities would be excluded from using the trail system in the area. This typically includes hiking, trail running, and horse-back riding.

## **2.2 ALTERNATIVE 2: PROPOSED ACTION**

Alternative 2 was developed to meet the project purpose to enhance mountain biking opportunities by refining the mountain bike trail system known as Carpenter Bypass to eliminate unsustainable trail segments, reduce user conflicts, improve user safety, eliminate resource impacts occurring from concentrated public recreational use, and continue to allow incidental use by other recreational users.

Proposed actions are derived from the assessments made by applying the sustainability factors identified in the IMBA assessment. The assessment identified sustainability ratings, assigning recommendations for maintenance including surface hardening/armoring, trail re-routing, trail closure, and road-to-trail conversions. All actions described below include application of project design features (PDFs) presented in Appendix A.

Approximately 3 miles of trail segments were found to be environmentally unsustainable due to, primarily, poor alignment and lack of proper drainage conditions. These routes would be closed and rehabilitated, or re-routed to eliminate use on these segments (Map 1, Appendix B).

Re-routing and realignment of unsustainable trails or portions of trails identified as maintainable (up to 12.5 miles) would occur to enhance the trail system and make it more sustainable. Trail work would occur over the next ten years in accordance with IMBA mountain biking design and maintenance standards under agreements with the DoD.

Maintenance, including trail hardening and brush clearing, would occur on existing trails. Hardening would include placement of rock in areas to reduce erosion and rutting. Brush clearing would be done using hand tools and chainsaws and would occur along the entire 18.8 mile trail system where needed.

Road-to-trail conversions would occur on the approximately 2.8 miles of existing trails that utilize legacy logging (decommissioned) roads, which have been identified as not being needed for foreseeable future logging use. Road-to-trail conversions on these roads would include placement of slash, brush, stumps, or boulders. Contours of rolling humps and dips would also be introduced to provide a more desirable trail riding experience and to help divert water off the trail.

Surveys were conducted along existing trail segments and within a 25 foot buffer on either side of the trail tread to identify resources needing consideration that could be directly impacted by any of these recommendations.

All of the 11 existing stream crossings have potential for sediment delivery. Improvements, including hardening of crossing ingresses and egresses with crushed rock and re-routing of trail segments, are proposed at these crossings to reduce sediment delivery from trail use. Adjustments of approach alignments within the 25 foot survey zone would occur where sediment inputs could be reduced. Trail re-routing would only occur on non-road trail segments (i.e., 82, 119, 120, 122, and 33). Hardening would occur on all stream crossings, including those on roads serving as portions of the trail (i.e., trail segments 141, 155, and 162).

Informational signage at trail heads and at trail intersections to identify trail difficulty levels would be installed to provide users information about the overall trail system and help orient users to remain on trails of desired challenge level. Signage would provide maps of the overall trail network, include information about responsible recreational use of the mountain bike trails, and explain trail routes to follow. Additionally, trails where user conflicts or safety concerns are identified would be designated as one-way routes to further reduce user conflicts and resource damages.

Safety information regarding trail segments that utilize roads open to motorized traffic would also be provided via informational signage at trailheads and at trail intersections. A gravel parking area (approximately 0.5 acre) with vault toilets would be developed off of Carpenter Bypass Road (Map 2, Appendix B). The parking lot would be constructed to accommodate known and anticipated uses of the mountain bike trail, including an overflow parking area to accommodate group and event use, including trailers. Informational kiosks and signage would be installed at the parking lot to further educate, inform, and orient users of the mountain bike trail system. Construction of the parking lot and restrooms would be anticipated for completion in 2013.

Ongoing trail maintenance would be implemented in accordance with mountain bike trail standards via an updated MOU with the DoD. Although the trail would be maintained to mountain bike trail design standards, no non-motorized recreation would be excluded from using the trail system in the area. This typically includes hiking, trail running, and horse-back riding.

### **2.3 ALTERNATIVES CONSIDERED, BUT NOT ANALYZED IN DETAIL**

The following alternatives were considered but not analyzed in detail for varying reasons explained below.

#### **Managed Equestrian Use**

Extensive public involvement with the BCHA was done during the development of this project (see 1.2 Public Involvement). No proposals or requests for specific trail segments to be converted to meet equestrian trail design standards were identified through this process. An alternative which would modify the trail system to better accommodate equestrian use (i.e., reduce winding routes to provide a line of site of about 50 feet or more to allow reaction time for the horse and rider to adjust to trail conditions or oncoming rider; reduce trail gradients and ensure routes provided adequate water sourcing opportunities) was considered but eliminated from detailed analysis at this time. Equestrian use on the existing trails is estimated at about 1% of the total use for the trails. An important consideration given to developing and managing a shared-use trail system is to mitigate potentially unsafe conditions that can occur when dealing with multiple users. The IMBA assessment concluded that due to existing use patterns, levels of direct user conflict between mountain biker and equestrian user groups on the Carpenter Bypass trail system is low, mostly because equestrian use is infrequent. Because of this, and because no specific proposals for trail segments to be modified to better accommodate equestrian use, an alternative that incorporated the conversion of these trails was not analyzed in detail. The development of the entire trail system to be an equestrian trail system does not meet the purpose and need. As such, this alternative was not analyzed in detail. Should an MOU with the Backcountry Horsemen of Oregon identify any proposals for trail renovations to better accommodate equestrian use, an analysis of those proposals would be conducted at that time under a new EA.

#### **Trail Obliteration**

An alternative which considered obliterating the existing trail network was considered but eliminated from detailed analysis because the proximity of this trail system to the Eugene/Springfield area lends itself as an outstanding recreation resource and provides the public with an all-season mountain bike trail experience, filling a critical need in the area. The commitment of the DoD to maintaining the trails through the use of a MOU requires little financial or labor commitment from the BLM. This alternative would not meet the purpose and need to enhance mountain biking opportunities and was, therefore, not considered in detail.

#### **Exclude Alternate Non-Motorized Trail Uses**

An alternative which considered designating the trail network for mountain bike use only, prohibiting hiking, trail running, equestrian use, and dog walking, was considered but eliminated from detailed analysis because the proximity of the trail system to the Eugene/Springfield area lends a unique opportunity for a wide range of non-motorized recreational uses. Based on visitor utilization surveys conducted by the BLM and DoD, the amount of use by non-motorized recreationists other than mountain bikers was found to be low (totaling 4% of all non-mountain bike users) and conflicts from mixed use were deemed low and infrequent. As no conflicts were identified from mixed user groups and the use of these trails, exclusion of these multiple recreational use opportunities would not meet the purpose and need of allowing continued incidental use by other recreation users and was not considered in detail.

#### **Construct New & Advanced User Routes**

The unauthorized trail construction that occurred in the late 1990s attempted to provide for a mix of beginner, intermediate, and advanced sections of trail that offer different degrees of technical challenge; however, the system does not currently offer many trail riding opportunities for advanced technical challenges. The IMBA assessment identified approximately 7% of the 18.8 mile trail network as "advanced". An alternative which considered designating additional miles of trail network classifiable as "advanced" was considered but eliminated from detailed analysis because no site-specific proposal was submitted by DoD or other mountain bike user groups to identify a new desired trail network. Siuslaw Resource Area staffs do not currently have the capacity to instigate this action and, as such, the alternative was eliminated from detailed consideration because it is not feasible at this time. Conflicts from mixed experience levels within the mountain biking user group were identified in the IMBA assessment. The proposed action identifies actions to address these conflicts to provide for user

safety without the construction of new, advanced trails. Should a proposal for additional trails or modifications to create advanced route opportunities be submitted, those proposals would be analyzed under a new EA.

### **3.0 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES**

#### **3.1 ISSUE 1: WHAT ARE THE EFFECTS OF THE PROPOSED ACTION ON MOUNTAIN BIKING OPPORTUNITIES IN THE AREA?**

##### **3.1.1 AFFECTED ENVIRONMENT**

Currently there are no trail systems designed and maintained for the mountain biking community within the BLM's Siuslaw Resource Area. Mountain bike trails at Carpenter Bypass were built by multiple members of the local mountain bike community to provide an opportunity for year-round mountain bike trail riding access in the Eugene/Springfield area. Construction attempted to provide for a mix of beginner, intermediate, and advanced sections of trail that offer different degrees of technical challenge.

Mountain bikers from both the local and regional area have utilized the trail system on a year-round basis. In terms of overall trail system use, mountain bikers make up the predominant user group ranging from individual riders to large groups in excess of 200 riders. Based on BLM and DoD visitor utilization surveys, this user group represents the highest percentage of usage on the system (approximately 96%). The remaining 4% is composed of hikers/trail runners (3%) and equestrians (1%).

The Carpenter Bypass mountain bike trails were built to feature significant trail twisting, with narrow turns, steep downhill stretches, jumps and berms; however, without a management plan, trail development has been haphazard and producing trail experiences and challenge opportunities that are similar on multiple routes.

The majority of trails at Carpenter Bypass are "single track" and therefore they require visitors to travel single file. Single track trails average about two feet in width. Trees and shrubs create a "tunnel effect" in areas and the trail tends to wind around obstacles such as trees, large rocks and bushes. Most of the trails are less than 2 feet in width with widths on many portions of the trail utilizing old logging roads being up to approximately 13 feet, or the width of the road. Legacy logging roads exist throughout the assessment area and are likely used occasionally due to poor signing to clearly identify the designed mountain bike trail segments. This use has led to trespass on neighboring non-BLM lands.

Most (approximately 15 miles) of the user-created mountain bike trails are in relatively good shape, and many see routine maintenance from volunteers and members of DoD as per agreements outlined in the MOU. However, there are many (approximately 3 miles) trail sections that have been identified as unsustainable and, as a result, are degrading the trail conditions. Trail degradation identified includes rutting, braiding, and extra parallel trails. Trail segment maintenance needs are shown on Map 1 (Appendix B).

##### **3.1.2 ENVIRONMENTAL CONSEQUENCES**

Environmental consequences to mountain biking opportunities and experiences of mountain bike users on the trail are considered in terms of direct and indirect effects from the different alternatives, as well as cumulative effects of the project.

##### **Alternative 1**

There would be no change to the current recreation management levels within the project area, which would be limited to management authorized through the MOU with DoD and would be limited to trail hand-clearing and maintenance. No trail management plan to provide for a well-managed network would be developed, no signing or clarification of routes would be provided, and unsustainable trail segments would not be closed or re-routed.

Given the proximity of the Carpenter Bypass Area to Eugene/Springfield, the demand for local developed and undeveloped recreational opportunities is expected to increase. The creation of user-created trails would continue to be a management issue, with trail construction continuing to be opportunistic and not developed according to a management plan.

Continued unregulated recreational use would contribute a negative impact on the quality of a visitor's experience. Current management dictates that any use would be essentially uncontrolled. Incidents of recreation-related trespass would be expected to continue. Limited agency presence and monitoring would also result in a slight to moderate degradation (low levels of public contacts, uneducated/uninformed users) of the recreational experience due to lack of visitor contacts for information, safety, and other interpretative purposes.

Inability to improve and rehabilitate trail system using sustainable practices would likely see a continual degrading of the quality of the trail system and overall recreation experience. Physical impacts would likely continue to be ground disturbance, bank erosion, and unauthorized trails and parking areas.

### **Alternative 2**

The recreation experience would be enhanced by the phased development of sustainable re-routed trails and signed trails, parking areas, and visitor facilities. Recreation opportunities would be enhanced creating diverse and sustainable visitor experiences in the long term. Given that the system would be formally managed and improved to a higher level and quality of user experience, visitors from local and regional population centers would likely increase over time. This alternative would provide a much needed recreation opportunity for mountain bikers and other users in the Eugene/Springfield area and surrounding communities.

Beneficial effects would result from land use restrictions and management actions that address damaging unauthorized and unregulated activities and recreational uses. Restrictions would provide higher levels of protection for enhanced recreation opportunities within the area. Provision of managed, low elevation single track trail opportunities in the geographic region defined as within an hour's drive of the Eugene/Springfield metropolitan area would be beneficial to recreational opportunities. These benefits would mostly be directly on mountain bike users, but would also be beneficial to other users including trail runners and equestrians using the trail.

### **Cumulative Effects**

Potential future BLM uses in the project area include timber management projects. There are currently no specific proposals for timber management projects so there are no specific impacts from reasonably foreseeable projects to which effects of the proposed action would be added. There are no reasonably foreseeable future projects from adjacent landowners that would affect the Carpenter Bypass project area.

## **3.2 ISSUE 2: WHAT ARE THE EFFECTS OF THE PROPOSED ACTIONS ON RECREATIONAL USER SAFETY AND SANITATION?**

### **3.2.1 AFFECTED ENVIRONMENT**

Safety concerns existing within the project area have been identified under two main categories of user conflict and trail access/parking. Sanitation concerns have been identified in the area and are a result of concentrated recreation use in an unmanaged location with no sanitation infrastructure.

An important consideration given to shared-use trail systems is the potentially unsafe conditions that can occur when dealing with multiple users (either users of same groups or differing groups). The IMBA assessment concluded that, due to existing use patterns, conflicts on the Carpenter Bypass trail system result primarily within the mountain bike user group due to differing skill levels, unclear routes, and unmarked trails.

The trail system is currently accessible from several informal parking area trailheads along Carpenter Bypass Road (gravel surfaced). Currently, the main staging area for visitors is at an active gravel stockpile site proximal to the north end of the trail system. The gravel pit is still actively utilized by road maintenance crews, and has varying levels of gravel, sometimes taking up most of the informal parking area. During group rides and other events where large numbers of mountain bikers convene, the gravel stockpile site does not provide enough space for parking and vehicles are often parked on the shoulder of Carpenter Bypass Road.

Approximately 4.7 miles of gravel roads (legacy and currently managed) exist in the planning area and multiple and mixed use (mountain biking, motorized recreation, highway-legal vehicle travel) occurs on these roads.

Overall, there is little to no trash evident, but some evidence of human waste is visible on some trails. No trash cans or restroom facilities are in the vicinity of the project area.

### **3.2.2 ENVIRONMENTAL CONSEQUENCES**

#### **Alternative 1**

Safety and sanitation concerns would be expected to continue at levels currently identified. Safety risks from off-shoulder parking on Carpenter Bypass Road or along dirt roads and from user conflicts and mixed use along motorized routes would continue. Potential for conflicts with road maintenance crews using the gravel pit would persist. Trails would not be marked, so continued conflicts resulting from users being unclear about which trail they are on or the difficulty rating of the trail would continue. Sanitation issues of some presence of trash and evidence of human waste along trails and at parking areas would continue. These safety and sanitation risks are

not considered high risk, however undesirable. As such, there would be continuing negative impacts to user safety and sanitation under Alternative 1, but these impacts are not expected to be at risk levels outside of what users could expect to encounter in other unmanaged recreation areas.

### **Alternative 2**

Alternative 2 would implement actions to improve user safety and mitigate sanitation concerns to levels that would be expected at a typical managed recreation area on BLM lands. Construction of a designated parking area (Map 2, Appendix B), installation of sanitation facilities (toilet and trash cans), signing of trailheads, and trail changes would all provide benefits to providing for user safety and reducing sanitation concerns.

Construction of the parking lot would create a designated parking area for trail users, reducing conflicts with road maintenance vehicles accessing the gravel pit and with conflicts caused by shoulder parking along Carpenter Bypass Road or on dirt roads. The parking lot was designed to accommodate known and anticipated uses, including additional parking and/or trailer parking for high user days or group events.

The parking area would also include a restroom facility and trash cans (Map 2, Appendix B). Trash cans and bathrooms would provide locations for trash and waste to be deposited, decreasing the potential trash and waste along the trail.

Informational kiosks at the parking area would provide trail maps and other trail use and safety information such as trail etiquette and trail difficulty ratings. Signing at the parking area lets users know before they begin using the trail about what to expect, what the expectations are as responsible users, and plan a route matching their skill level.

Changes to the trail system include signing at intersections and conversion of segments with conflicts or safety concerns to a one-way trail system. Trail signing at intersections would reduce user conflicts created by riders unknowingly using trails outside their skill or comfort level and interfacing with higher skilled riders. It would also assist riders to stay on the route they identified at the beginning as their route. One-way travel would reduce conflicts from trail riders on the same route but in opposite direction. Restricting travel direction is often used in trail management to provide for safety.

Alternative 2 would have beneficial effects to user safety and sanitation conditions within the Carpenter Bypass trail system. These beneficial impacts would be expected to improve safety and sanitation conditions to levels expected and BLM managed recreation sites.

### **Cumulative Effects**

Potential future BLM uses in the project area include timber management projects. There are currently no specific proposals for timber management projects so there are no specific impacts from reasonably foreseeable projects to which effects of the proposed action would be added. There are no reasonably foreseeable future projects from adjacent landowners that would affect the Carpenter Bypass project area.

## **3.3 ISSUE 3: WHAT ARE THE EFFECTS OF THE PROPOSED ACTION ON SOIL EROSION AND WATER QUALITY?**

### **3.3.1 AFFECTED ENVIRONMENT**

The project area is located entirely within the Upper Siuslaw River (5<sup>th</sup> field) Watershed (H.U.C. 1710020603) and within the Letz Creek-Siuslaw River (H.U.C. 171002060303) and South Fork Siuslaw River (H.U.C. 171002060301) sub-watersheds (6<sup>th</sup> field). The primary drainages in the vicinity of the project include tributaries of Gardner Creek (east of the trails in sections 23 and 27 and north of the trails in section 35), tributaries of the South Fork of the Siuslaw River (east and northeast of the trails in section 23), tributaries of Letz Creek (south of the trails in section 27 and west of the trails in section 35), tributaries of Sandy Creek (south and east of the trails in section 35), and unnamed tributaries of the Siuslaw River (located west of the trails in section 23 and north and west of the trails in section 27). Annual precipitation in the project areas averages about 52 inches per year. The project area is characterized as relatively low in elevation (800 to 1350 feet above sea level).

Geologically, the area is mapped as *Tt*, Tye Fm., with micaceous massive-bedded sandstone and subordinate siltstone. There is also graded bedding *Tss*, Spencer Fm, tuffaceous siltstone and sandstone mapped in the near area which most likely fingers into this unit (Walker and MacLeod, 1991). The landforms on this hillslope are composed of large earthflows and seeps that can be found in concavities of headwalls. The current trail network is built through many of these ancient slumping landforms. The trails in this area have been constructed in soils that are highly erosive, consisting of clay, silt and sand. The surface soils are of the Bellpine Series which have

high silt and clay content (Patching, 1987). The soil temperatures remain warm and moist through late spring and early summer. There are some short length and several long length steep sloping trails (up to 30%) with erosion from the tread. Gulleys, rills, and sediment wedges at the base of the slopes are evident. Steep approaches to streams occur on trail segment numbers 120 and 122. Overall, there has been good use of contouring the trails to slope, with retaining walls being used to route users and direct drainage.

The IMBA assessment for the project area analyzed trail sustainability on about 18.8 miles of trail on federal land. This report was used as a starting point in the hydrologic review of the project. The identification numbers used to identify individual segments in this EA correspond to IMBA assessment numbers for consistency of referencing.

A field review of many of the segments by the area soil scientist and area hydrologist indicated that the existing trails are generally narrow (less than two feet), except in areas of braiding and where the trail system utilizes old road beds. The trails identified in the IMBA assessment as being unsustainable (approximately 3 miles) exceed recommended gradients and are subject to rutting and erosion.

Eleven stream crossings were identified on the existing constructed trails and include metal culverts, log culverts, in-stream crossings and man-made wooden bridges (Table 1). All crossings show some level of sediment inputs into the streams resulting from crossing conditions. Stream crossings on roads are culverts that were installed with the road’s construction.

**Table 1:** Stream Crossing Type, Location, and Drainage.

Segment #	Type of crossing	Section	Road or Trail	Drainage
141	Log culvert w/fill	T20S-R5W-23	Road	Tributary of Gardner Creek
141	Log culvert w/fill	T20S-R5W-23	Road	Tributary of Gardner Creek
141	Log culvert w/fill	T20S-R5W-23	Road	Tributary of Gardner Creek
82	Existing Bike bridge	T20S-R5W-27	Trail	Unnamed Tributary
119	At headwater- no structure	T20S-R5W-27	Trail	Tributary of Letz Creek
120	Existing Bike bridge	T20S-R5W-27	Trail	Tributary of Letz Creek
122	Existing Bike bridge	T20S-R5W-27	Trail	Tributary of Letz Creek
155	Stream culvert	T20S-R5W-35	Road	Tributary of Sandy Creek
162	Stream culvert	T20S-R5W-35	Road	Tributary of Sandy Creek
162	Log culvert w/fill	T20S-R5W-35	Road	Tributary of Sandy Creek
33	Ford- no culvert or bridge	T20S-R5W-35	Trail	Tributary of Sandy Creek

Of the existing 18.8 miles of trail system, about 2.4 miles of trail are within one site tree (210 feet) of a stream channel. It also includes approximately 0.7 miles of trail within 100 feet of a channel. These areas are located near the stream crossings and the segments listed above. In addition, short lengths of segments 126 and 154 and all of segment 128 are within 100 feet of a stream channel (without stream crossings). Mountain bike use on these segments of trail is not believed to be contributing measurably to the sediment inputs. Sedimentation is only evident in the vicinity of stream crossings. These sediment inputs from mountain bike trail use on non-road trail segments are present, but not at measureable levels. The existing trail system poses no threat in terms of turbidity/sedimentation as less than 4% of the existing trail segments are within 100’ of the stream system. Studies show that roads or trails further than 100’ from a stream pose little likelihood of sediment delivery.

The proposed gravel parking area and concrete vault restroom area would be located on flat to gently sloping topography a short distance below road 20-5-14.1, which was an old timber sale landing. There is no erosion present.

**3.3.2 ENVIRONMENTAL CONSEQUENCES**

**Alternative 1**

Unsustainable trails would continue to erode, with concentrated runoff particularly on steeper trails causing gullies to form in the treads. Deterioration of the trail system results in further trail development as users would find detours around any muddy spots. This would likely increase opportunities for erosion potential.

No work would be done to harden the existing eleven stream crossings. Current sediment contributions from mountain bike use on the trails would continue. While occurring, levels are not measurable or considered to be impacting stream quality.

### **Alternative 2**

Although mountain bike use is not providing measurable levels of sediment delivery to the stream, a minor amount of sediment delivery is occurring. The hardening and re-alignment of stream crossings would provide beneficial measures in reducing erosion/sedimentation and improving the sustainability of the crossings. Trails would be maintained through an MOU with DoD to prevent the concentration of runoff, particularly on steeper trails.

Impact to flows would be negligible which is similar to Alternative 1. This action includes design features to facilitate proper drainage off of existing trails, re-routed trails and new trails so that movement of flow from the compacted trail surfaces to the adjacent undisturbed areas are improved. Closed trails would be closed and re-claimed, to the extent possible, to mitigate routing of flow on the unsustainable segments that are currently routing water along the trail.

There would be no risk of increased sedimentation from the construction and use of the parking and restroom facilities. These facilities would be located on flat to gently sloping topography and would be at least 500' away from any stream channels so there would be no possibility for sediment to reach streams. The access (20-5-14.1) road would have a low risk of sediment delivery from increased road use as it is a paved road with water-runoff features (ditchlines) to capture sediment prior to stream entry. The vault toilet facilities would be beneficial in reducing human waste additions to the area and reduce the potential of pathogenic organisms being added to the stream channels by recreationists. This would also reduce the potential increase in nitrogen and phosphorous to the stream system from human waste.

Traffic is the driving force behind erosion and sedimentation from forest roads (Bilby et al, 1989) and trails (Root, 1972; Summer, 1985). Trails would be maintained to mountain bike sustainability standards established by IMBA. Trails would be monitored and maintained to prevent the concentration of runoff, particularly on steeper trails. Deterioration of the trail system through erosion would be expected to be very limited, as trails would be re-routed to be sustainable in areas where the problem currently exists and all trails would receive maintenance through the MOU with DoD.

Alternative 2 would be expected to provide beneficial impacts to water quality and reduce potential for soil erosion from mountain bike trail riding.

### **Cumulative Effects**

Potential future BLM uses in the project area include timber management projects. There are currently no specific proposals for timber management projects so there are no specific impacts from reasonably foreseeable projects to which effects of the proposed action would be added. There are no reasonably foreseeable future projects from adjacent landowners that would affect the Carpenter Bypass project area.

## **3.4 ISSUE 4: WHAT ARE THE EFFECTS OF THE PROPOSED ACTION ON BOTANICAL AND WILDLIFE SPECIES AND THEIR HABITATS?**

### **3.4.1 AFFECTED ENVIRONMENT**

Botanical and wildlife species considered in detail in this analysis were identified either by documented species presence or potential for impacts from proposed actions. Other species are discussed briefly as issues considered but not analyzed in detail (Chapter 1.6).

#### **Botanical Species**

Tall bugbane (*Cimicifuga elata*) was located at one site, with nine plants along and near trail segment 67. This vascular plant was recently removed from the Bureau Sensitive list late in 2011. It remains on Oregon Biodiversity Information Center List 4 (the watch list), hence monitoring to assess population trends is still appropriate, but active management is not currently considered necessary (ORBIC 2010). Tall bugbane often occurs in small isolated populations that can be vulnerable during succession, but are more secure where occurring in late-successional forest stands. The site is in a relatively moist area at the bottom of a north facing escarpment, in 70 year-old forest. Trail segment 67 descends an old, steep, wide, rutted road bed cut into the escarpment.

Howell's violet (*Viola howellii*) was located at thirteen sites. This plant is on the Eugene District Review List; its status is under review. It occurs in shaded environments along roads and trails and in some forest understory habitats. It is found mostly in shaded disturbance areas, and the species may be under increasing threat from shade tolerant non-native invasive weeds.

### **Threatened & Endangered Wildlife Species**

Large remnant trees within the project area provide suitable nesting structure for the marbled murrelet, a seabird that nests in older forests up to 50 miles inland. Most of the trail system passes within 100 yards of this suitable nesting structure. The project area is approximately 44 miles from the coast, putting it at the outer edge of that species' range. The project area does not fall within CH for this species.

The mountain bike trail system is located within the South Willamette/North Umpqua Area of Concern (AOC) and is within 2012 designated critical habitat (CH) for Northern spotted owls (NSO) (Section 35). This AOC is an area where forested portions of the Coast and Cascade Mountains closely converge, creating a "habitat bridge" across the Willamette Valley. This allows for spotted owl dispersal over the valley, facilitating genetic variability of populations within the two mountain ranges. Habitat around the trail system includes suitable nesting/roosting/foraging habitat for this species. Surveys of known NSO sites in the vicinity were not conducted in 2012, so current occupancy status is unknown.

## **3.4.2 ENVIRONMENTAL CONSEQUENCES**

### ***Botanical Species***

#### **Alternative 1**

Trail migration, braiding, erosion, and the proliferation of additional user-created trails would be expected to continue. Understory vegetation would be impacted directly by trampling and removal as these trails would continue to drift over time. Both the tall bugbane and Howell's violet sites would be vulnerable to these impacts, although since locations and amount of trail drift and migration is not exactly known, it is impossible to know for certain that plants would be impacted. Under Alternative 1, no protection measures for these species would be provided.

#### **Alternative 2**

Vegetation impacts under the proposed action would be similar to those under the no action alternative, resulting from direct impacts from trampling and removal of vegetation from users and from proposed trail re-routes. These impacts should be short-term (during the 10-years re-routes are authorized for construction), and would reduce trail impacts from erosion by building better-sustained trails so would benefit botanical species in the long term. Mitigations provided against trail migration, braiding, erosion, and the proliferation of user-created trails include trail signing, printing of trail maps, and information at kiosks to stay on designated routes.

Specifically, trail segment 67 would be re-routed to avoid direct impact risks to the tall bugbane site. This re-route would reduce the amount of traffic flow adjacent to the site and remove the risk from trampling or trail drifting into the site. As such, no impact is expected under Alternative 2. Mitigation measures for *Viola howellii* are not considered appropriate at this time due to the species' uncertain status.

### **Cumulative Effects**

Potential future BLM uses in the project area include timber management projects. There are currently no specific proposals for timber management projects so there are no specific impacts from reasonably foreseeable projects to which effects of the proposed action would be added. There are no reasonably foreseeable future projects from adjacent landowners that would affect the Carpenter Bypass project area.

### ***Threatened & Endangered Wildlife Species***

#### **Alternative 1**

Over story canopy structure would be unaffected by continued the unregulated use under Alternative 1. As such, nesting structure for marbled murrelets would remain untouched. No direct or indirect effects to marbled murrelet or their habitat is anticipated under Alternative 1.

Trail braiding and trail migration have directly impacted NSOs foraging habitat by damaging understory vegetation, ground litter and coarse woody debris that prey species depend on for habitat and refugia. It would be expected that these impacts would continue to occur under this alternative. Disruption from trail users from noise and human presence would also continue to occur under this alternative. While the project area contains portions

within AOC and CH for the NSO, there is no known occupation. With no known occupation, and impacts only to prey habitat anticipated, Alternative 1 would have no direct impact on the NSO or its CH.

**Alternative 2**

This proposed action has undergone consultation with the U.S. Fish and Wildlife Service (FWS) for spotted owls and marbled murrelets. The analysis conducted for this consultation is hereby incorporated by reference. A response in the form of a Letter of Concurrence was received on November 29, 2012 and effects to those species are as follows:

Trail work would have **no effect** on the habitat of the marbled murrelet because the diameter limit (11 inches or greater) on tree felling would preclude damage to nesting forest habitat (large branches or other suitable nesting substrates) of these species. There would be **no effect** to marbled murrelet critical habitat because the project is not located in marbled murrelet critical habitat.

No marbled murrelet nesting sites are known within the project area; however, surveys were not conducted as no habitat modification would occur from proposed actions. Should any marbled murrelets nest within the project area, there is potential that disturbance from trail construction or recreational activities. However, since the project area's vicinity is at the outer edge of the murrelets' range and it is unlikely these birds would occur in the vicinity, the proposed action **may effect, but is not likely to adversely affect** the marbled murrelet due to disturbance.

The proposed action **may affect, but is not likely to adversely affect** the NSO as a result of understory habitat modification. Re-routing of identified trail segments would be located adjacent to or within 25 feet of the problem segment and would not expand the footprint of the trail system. Although some brush and herbaceous vegetation would be removed during the re-routes, trees are not proposed for felling. If tree removal cannot be avoided, felling would be limited to trees less than 11 inches dbh. Any trees felled would be left on site as coarse woody debris. As a result, some minor mid-story alteration may occur; however, the rest of the habitat types would not be affected. The proposed action **may affect, but is not likely to adversely affect** proposed NSO critical habitat for the same reasons. Critical habitat would continue to function as is. The proposed action **may affect and is not likely to adversely affect** the spotted owl as a result of disturbance due to construction and recreational activities.

**Cumulative Effects**

Reasonably foreseeable future uses in the project area include trail use and timber management. There is no anticipated impact of either of these actions cumulatively on threatened or endangered wildlife species, as these future management actions would require analysis and propose mitigations as appropriate to reduce impacts.

**5.0 LIST OF PREPARERS**

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Luis Palacios	Engineer	Engineering
Wade Judy	Outdoor Recreation Planner	Recreation/Safety

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## **APPENDIX A: PROJECT DESIGN FEATURES**

A sustainable trail is designed to provide enjoyable and challenging experiences for visitors by managing their expectations and their use effectively. Under Alternative 2, all existing and re-routed mountain bike trails would be designed, constructed, and maintained according to the specifications described below.

These specifications are based on IMBA trail standards, the amount of use, and the physical characteristics of the land. Sustainable trail principles incorporated in any improvement or new construction on the trail system include sustainable trail alignment, sustainable grade, grade reversals, out slope, minimizing user-caused soil displacement and regular maintenance. Useable trail width for mountain bikes is approximately two to three feet.

The following Project Design Features (PDFs) are included in the design of the mountain bike trail system and would be implemented in the proposed action unless otherwise specified.

### **Trail Construction/Realignment**

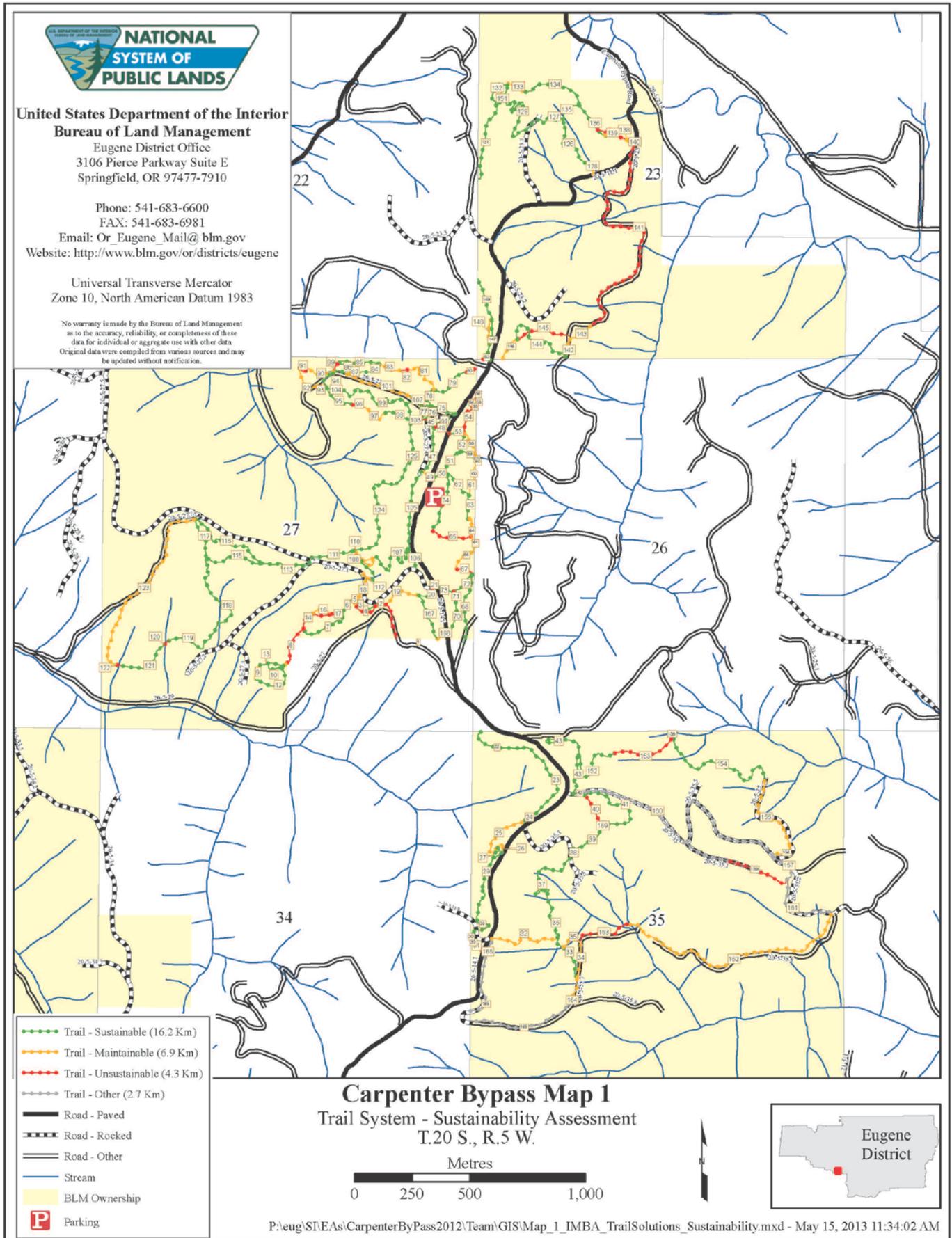
1. Trail work would be anticipated to begin in the late summer or fall of 2013 and continue for the next several years.
2. All trail realignments and re-routes would be built within 25 feet on either side of existing trail route footprints.
3. Trail re-routes and improvement would only be conducted during dry periods to minimize run-off of loose soils.
4. Construction would be performed using a hand tools including but not limited to pulaskis, Mcleods, digging bars, shovels, hack saws, pruners, etc. Smaller, hand-held motorized equipment, such as chainsaws, may also be used if necessary in compliance with any wildlife and/or fire restrictions. To help prevent the spread of noxious or invasive weeds, all tools would be cleaned before entering projector area for construction and maintenance activities.
5. Trail improvements would occur within the current trail network in accordance with IMBA standards and as approved by the BLM.
6. Trail out slope of 10% or greater would be implemented to facilitate proper drainage.
7. Trail grade or steepness would not exceed half the grade or steepness of the hillside.
8. Trail design would minimize vegetation removal through route designation. No trees over 11 inches in diameter would be removed or felled as part of the trail construction process. Any trees felled would be left on-site as coarse woody debris.
9. Trail closures would be done by placing woody slash along trail route and barricades (e.g., rocks/logs) at trail heads. Closures would be clearly posted at trail heads and listed on informational signs at the parking area and through a variety of channels including brochures, web-based outreach and partnerships.
10. Stream crossings would be well armored with rock to allow crossing without silting the water or obstructing water flow.
11. Approaches to stream crossings (side hills within each drainage) would be designed to reduce grade and potential for erosion (by roughly maintaining contour where possible), routing approaches at more durable locations where possible and building crib walls where necessary to stabilize the downhill side of the trail and prevent trail sloughing. In areas where re-routing to avoid a stream crossing is feasible and within 25 feet of existing trail route footprints, re-route trail.
12. Reroute trail segment 67 to include avoidance of the tall bugbane site.
13. Sow native grass seed on bare ground areas where weed infestations are deemed highly likely or where erosion potential is present, after parking lot construction and trail maintenance operations have been completed.
14. If any cultural resources are discovered during project activities, all operations in the immediate area shall be suspended immediately. District archaeological staff would be contacted immediately to assess and evaluate protection measures needed.

### **Signing**

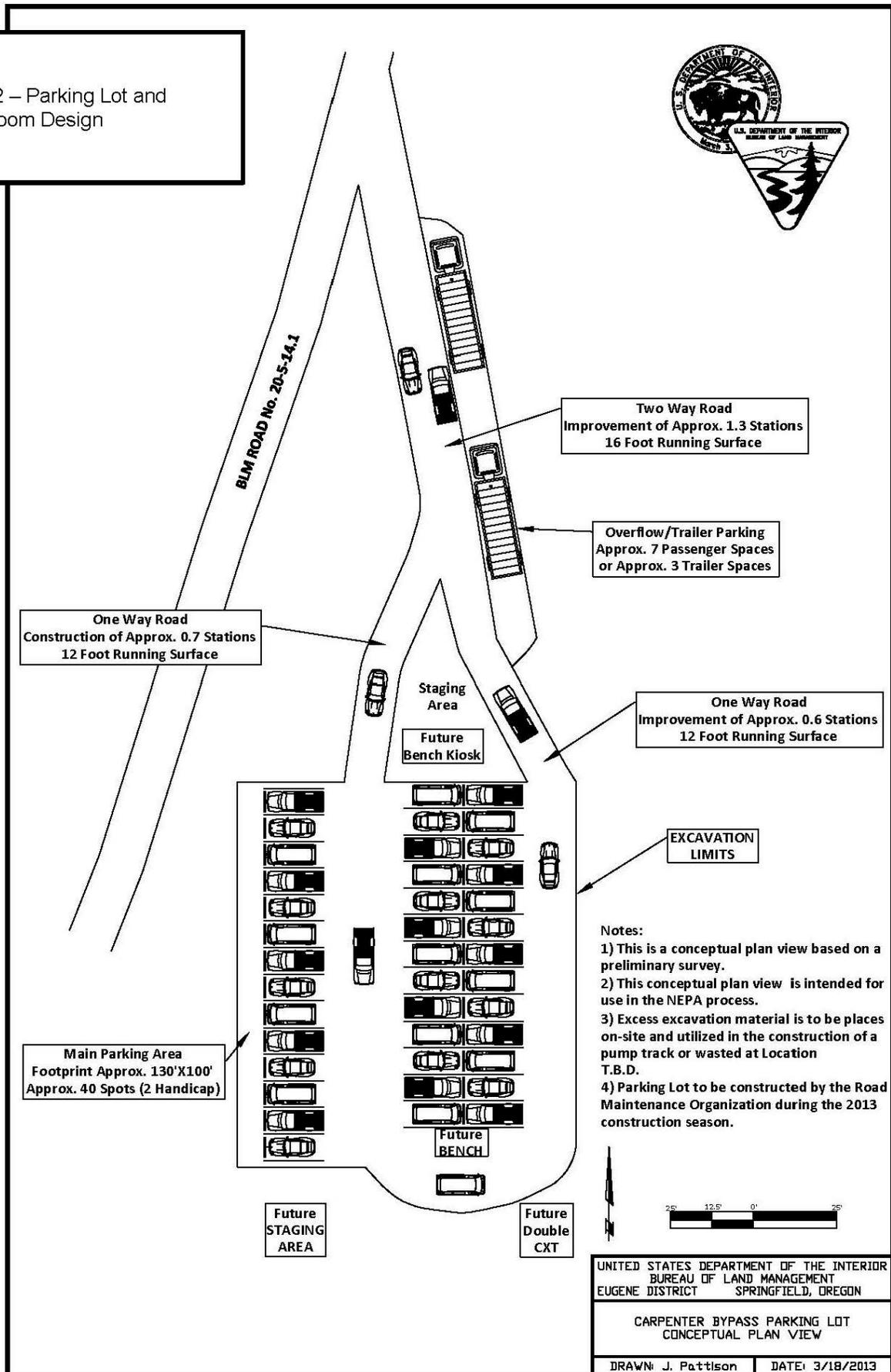
15. Trail brochures would be developed for all planned routes, stressing trail etiquette and Tread Lightly principles.
16. Trail signing and kiosks would contain information about noxious and invasive weeds, including information to prevent new contaminations or spreading, such as pictures for identification and the importance of washing mud from footwear and bicycles.
17. Trail signage would include informational kiosks in the parking area, signing indicating trail difficulties, and safety signing at trail intersections/right-of-ways with motorized traffic. Additional signing would be developed as needed to provide for user safety and reduce resource damage.

**Maintenance**

18. On-going trail maintenance would occur by volunteers with Disciples of Dirt as outlined in the MOU.
19. Maintenance of trails would minimize vegetation removal. No trees over 11 inches in diameter would be removed or felled as part of trail maintenance processes. Any trees felled would be left on-site as coarse woody debris.
20. Monitoring by BLM personnel of noxious and invasive weeds on the re-routed and existing trails would occur every 2-5 years to identify new species or expanded occupations needing management. Management of weeds would occur in accordance with District noxious and invasive species management procedures. Shade-tolerant weeds, particularly the false brome and herb Robert sites, would be a priority for management along the trails.



Map 2 – Parking Lot and Restroom Design





# Carpenter’s Bypass Trail System Assessment

Summer 2011

**PREPARED FOR:** Bureau of Land Management, Eugene District

**PREPARED BY:** The International Mountain Bicycling Association - Trail Solutions program  
PO Box 7578  
Boulder, CO 80306





## Carpenter's Bypass Trail System Assessment

In an effort to establish a management plan for the Carpenter's Bypass area, the existing trail system at Carpenter's Bypass was assessed for sustainability. In addition to sustainability ratings, broad recommendations for maintenance or realignment were given for each trail segment.

This assessment was made possible by the Bureau of Land Management (BLM) and IMBA's Trailbuilding Fund; facilitated through IMBA's Assistance Agreement with the BLM. Trail Solutions would like to acknowledge the assistance of the Disciples of Dirt in providing route guidance and context for evolution of trails at this site.

### Corridor Assessment

We desire trails to be both environmentally and socially sustainable. In many ways, social and environmental sustainability are linked - users on the trail appropriate and enjoyable for them are less likely to exhibit environmentally damaging behaviors (e.g. skidding, trail widening, off trail travel).

Social Sustainability: Reduce user conflict and enhance user experience.

Environmental Sustainability: Reduce water- and user-based erosion, displacement, and muddiness, and require minimal maintenance.

There are many broad guidelines that apply to most situations, such as fall-line alignments as unsustainable, but many that are situation and setting specific. For the Carpenters Bypass Trails, there are several setting-specific social and environmental factors that were considered in the assessment:

#### Social

This site has very little user conflict, and because of its location and existing use patterns, it is expected to continue to have little user conflict concerns. The primary users are cyclists, but with runners, hikers, and occasional equestrian users as well; user patterns have established organically as the trail system has grown and changed. The largest potential conflict here is within the cycling user group: as riders seek more technical challenge and create new trails and/ technical features within existing trails that may be socially and/or environmentally unsustainable.

Social sustainability here is more defined by user experience goals for challenge, both skill and fitness. The system currently does not adequately offer appropriate advanced experiences. There are limited natural terrain



Conscientious DoD volunteers try to help manage the informal trail system and foster partnerships with land management.



### Sustainability Map Key

**Green:** Trail corridors in a sustainable alignment and generally in good condition. Some trail segments may require significant maintenance to improve tread condition, but the corridor is sustainable.

**Yellow:** Trail corridors where tread can be made maintainable after restoration within the existing corridor. May involve significant armoring or other tread hardening and regular maintenance, but can be made sustainable. Many yellow sections of trail are overdue for regular maintenance and require rolling grade dips, knicks, meanders, and/or hardening.

**Red:** Trail corridors that cannot be made sustainable or maintainable. Due to the costs associated with reconstructing an unsustainable trail, the continued maintenance required, and the possibility of failure during catastrophic rain events and/or heavy use, it is likely that most of these trails will need to be relocated. Relocation within the existing corridor (e.g. adding undulations and meander, corralling), the use of concrete pavers, major armoring, and other techniques can be used to create a more stable, maintainable tread.



This trail segment is in a sustainable alignment, but needs tread improvements: as roots are exposed, the tread becomes more off-camber and slippery, users go around the roots, causing trail widening and further impact to roots. A small retaining wall with fill should be added to protect the roots; or roots can be armored with rock and chokes added to prevent user widening.



This heavily trenched section of road is part of the trail system. Old roads have much greater surface areas for erosion and typically make less desirable trail experiences. Road to trail conversions or reroutes are recommended.

Carpenters Bypass Trail Assessment								
Segment ID	Sustainability Rating	Average Grade	Maintenance Prescription	Relative Skill Rating	Comments	Photo #	Route Type	Reroute or Closure
1	3	0-10	close; or reroute (RR) at clearcut (CC) & maint: RGD every 75', harden	Int	old rd bed, ends in CC & pvt ppty, very muddy/wet	4182	DT	RR/close
2	2	0-10	harden, rolling grade dip (RGD) 50lf	Int	old rd bed, muddy, some rubble added	4182	DT	
3	1	0-10	RGDs & harden occ. wet spots	Int	upper line: ST, nice, twisty	4184	ST	
4	3	0-10	close	RR	muddy, rutted rd bed; use upper line	4185	DT	close
5	3	30-40	armor 40lf or RR	RR	very short steep section (40lf), reroute to intersection	4188	ST	
6	1	0-10	nice, continue exist maint.	Int	nice, existing tread maint	4189	ST	
7	1	0-10	nice, continue exist maint	Int	outer line, along edge of CC, nice, twisty		ST	
8	3	10-20	RR into woods (N), close	RR	on pvt ppty, steep, loose, eroding, brushy	4186	ST	RR
9	2	0-10	RGDs 50', harden	Int	rd bed, ok, minor cupping		DT	
10	1	0-10	enhance opt lines- challenge	Adv	side route w/opt features		ST	
11	2	5-15	ok, harden; confusing area- guide & sign	Int	ok, close to CC, little steep		ST	
12	1	0-10	good now, watch approaches @ upper turns	Int	nice, good UM, upper turns a little steep		ST	
13	1	5-10	good; confusing area- guide & sign	Int	nice, undulation and meander (UM)		ST	
14	3	10-20	RR or harden, armored RGDs for adv line	Adv	steep, cupping, fall-line		ST	RR/armor
15	3	25-30	RR, or major armoring for adv line	Adv	very steep, cupping, straight, fall-line	4187	ST	RR
16	2	10-20	harden, armored RGDs for adv line; or RR	Int	reroute to steeper line; better, top steep		ST	
17	3	15-25	RR or harden, armored RGDs for adv line	Adv	steep, fall-line		ST	RR/armor
18	2	0-10	RGDs 75', harden	Int	rd bed, muddy, exist maint/harden		DT	
19	2	10-15	RGDs to fall-line sections, armor dips & >15%	Int	ok, but some fall-line/steeper		ST	
20	1	5-15		Int	ok		ST	
21	3	30-40	RR 50lf to intersection	Int	50lf very steep/fall-line to rd intersection		ST	RR
22	1	0-10	knick, harden dips;	Beg	nice, rolling, few wet low/outside berms	4190	ST	
23	1	5-15	Minor bench improvements (MB): camber & debern; ret wall over roots	Int	mostly good; partial bench, roots exp; wet spots	4191-92	ST	
24	1	0-10	MIB: knick & harden low spots	Int	sust; few low muddy spots		ST	
25	2	5-15	MIB: bench, +turn platforms; close braiding/armor	Adv	partial bench, roots exp, camber		ST	
26	2	5-15	Improve bench (IB), bench tread or close	Adv	very low/no use, road connector	4193	ST	RR/close
27	1	5-15	MIB: bench, camber	Adv	good, few roots exp, partial bench		ST	
28	1	0-10	clean up garbage dumping	Adv	good, road connector, garbage dumped		ST	
29	1	0-10	close braiding, choke; harden low spots	Int	ok; braiding, occ low muddy spots	4194	ST	
30	1	0-10	close to CC, harden low spots	Int	mostly good, UM, occ loose & muddy near CC		ST	
31	3	10-20	RR to align w/Y88; or RGDs@30', harden, choke.	Int	steep, fall-line runoff to road; RR to align w/Y88	4195	ST	RR
32	2	10-20	elev/berm turns & harden; RGDs@75'	Int	fun, low-angle fall-line, UM, need maint w/use inc		ST	
33	1	5-10	armor draw xing & add reversals	Int	nice, UM, moto tracks, drainage xing	4196	ST	
34	2	0-10	RGDs@75', harden	Int	rd bed, open canopy		DT	
35	2	10-20	low priority: RGDs@50'	Int	short, sl fall-line connector; good now		ST	
36	1	0-10		Beg	nice, UM		ST	
37	1	0-10	close & choke braiding & shortcuts; harden low	Beg	nice, UM, occ braid & wet spots, shortcuts		ST	
38	1	0-10	sign connector/ rd xing	Beg	short road connector		DT	
39	1	0-10		Beg	good	4198	ST	
40	3	15-30	close, use existing RR		steep, fall-line - use existing RR	4197	ST	close
41	1	5-15	berm turns, harden low spots & steep pitches	Int	pretty good, UM		ST	
42	1	0-10	sign & guide along road	Beg	short road connector		DT	
43	1	0-10	IB: bench, armor dips (low P); close soc trls @Y97	Int	low use, good align, partial bench; soc trails @97	4199	ST	
43	1	0-10	imp turns near road: berm/build up	Int	good, except few turns @ beginning		ST	
44	1	5-15	RGDs/knicks w/topo, harden dips	Beg	ok, minor cupping	4200	ST	
45	1	0-5		Beg	nice		ST	
46	3	15-20	RR or armor 40lf	Int	steep, fallline from Y21		ST	RR/armor
47	1	5-10	RGDs/knicks w/terrain, harden dips	Beg	minor braiding & cupping; mostly good, UM	4201-02	ST	
48	3	10-25	RR & close: too many routes here!	Int	redundant & fall line, too many parallel trails	4203	ST	RR
49	2	10-20	RR or armor/RGD: RR from TreeJail TH?	Int	shortcut to Road, ok, steep but contour		ST	
50	1	0-5		Beg	From TH, brushy, ok, limited canopy		ST	
51	1	0-8	close braiding (lower/wet line), choke	Beg	good, UM, occ braiding, mud @ XY18		ST	
52	1	0-8	close & choke braiding	Beg	UM, occ braiding		ST	
53	1	0-8		Beg	short connector to road, UM		ST	
54	3	5-15	RR; or major maint- RR much easier	Int	fall-line, cupping, widening, exist maint	4204	ST	RR
55	2	5-15	elev/berm turns, +reversals, +harden/fill	Int	UM, ok, some good armoring	4205	ST	
56	3	10-30	close	Int	steep, fall-line, cupping		ST	close
57	2	5-10	RR, or RGDs@50', armor dips, add UM	Int	low angle fall-line, cupping, widening, braiding	4206	ST	RR/armor
58	2	10-20	bench & RR thru drainage; or close	Int	very low/no use; fall-line thru draw		ST	RR/close
59	1	0-10		Int	lower use, nice		ST	
60	2	0-10	corridor, harden, knicks	Beg	low use, along CC edge, very brushy!	4207	ST	
61	2	0-10	corridor	Beg	low use, ok		ST	
62	1	0-8	harden turns & dips, knicks	Beg	UM, thinned: limited canopy & brush		ST	
63	1	0-8		Beg	nice, UM, good beg route		ST	

Carpenters Bypass Trail Assessment							
Segment ID	Sustainability Rating	Average Grade	Maintenance Prescription	Relative Skill Rating	Comments	Photo #	Route Type / Reroute or Closure
64	2	0-5	+rollers, harden, elev/berm turn @Y29	Beg	along ppty edge/CC, straight, flat, minor cupping		ST
65	3	15-20	close, RR through thinned area	Int	straight, fall-line, cupped, skidding	4213	ST RR
66	2	10-20	RGDs@50', armor steep pitches (>20%)	Int	UM, cupping & widening		ST
67	3	25-35	RR & close	Int	steep, wide, rutted, road bed, motos	4208	DT RR
68	1	0-10	replace asphalt w/rock, fill low spots, harden,	Int	nice, exist armoring, dead end @ clearcut!	4209-10	ST
69	2		RR! trail is gone	Int	trail abolished in clearcut! need to reroute!		DT RR
70	1	0-10	close/choke braiding & widening @ roots	Int	braiding, roots exposed	4211-12	ST
71	3	25-30	RR, close	Int	steep, wide, rutted, fall-line		ST RR
72	1	5-15	armor (or RR) short steep pitches (>20%)	Int	mostly nice, few short steep pitches (25-35%)		ST
73	1	0-5	knicks, harden (low P)	Int	nice, gravel added, road connector		ST
74	1	0-8	+rollers, harden low spots	Beg	ok, mostly flat, open. good to add more UM		ST
75	1	0-5	harden, knicks	Beg	old skid, ok		DT
76	2	10-20	armor or RR	Int	low-angle fall-line, low use, rd connector		ST
77	1	0-10	define route, harden @ start; close all routes	Int	Gift Area: very confusing, X's & parallel trls		ST
78	1	5-15	+reversals & berm turns, harden (low P)	Int	nice		ST
79	1	0-10		Int	nice, UM contour	4214	ST
80	3	20-35	major armoring or RR - armor for challenge line?	Int	steep climb from draw, on sidehill	4214	ST RR/armor
81	2	5-15	reversals & berm turns, harden	Int	UM, nice flow, breaking bumps, widening @turns	4215-16	ST
82	3	10-15	RR further up draw, or armor & replace bridge	Int	fall-line into draw, cupping, muddy	4217	DT RR/armor
83	2	0-10	close braid, keep upper line; RGDs@50', harden	Int	rd bed, braiding, cupping, upper tumpke line	4218	DT
84	1	0-5		Beg	nice, sidehill		ST
85	1	0-10	RGD@75', harden; distinguish from parallel route!	Beg	lower rte, nice, brushy -near clearcut; redundant		ST
86	1	0-10	corridor, harden spots	Beg	ok, brushy, nice		ST
87	2	10-20	rebuild or close	Int	poor const, pitches >20%, horse damage; align ok	4219	ST close
88	3	10-20	RR or armored RGDs@30', harden	Int	steep/fall-line, but short section		ST RR/armor
89	1	0-10		Beg	rd bed		DT
90	2	5-15	rollers/RGDs@50' (low P)	Beg	low angle fall on knob, ok, UM		ST
91	3	15-25	RR; or berm & armor turns, RGD@50', harden	Int	long steep turns, fall-line. rebuild or RR		ST RR/armor
92	2	5-15	RGDs@75', harden dips, add UM	Int	rd bed, straight; maint or RR		DT
93	1	0-10		Beg	short connector; nice		ST
94	1	0-10	remove log jump- replace w/optl feature	Int	nice, UM	4220	ST
95	1	5-15		Beg	nice to drainage		ST
96	3	25-35	RR or armor & choke	Int	steep up from drainage 200', skidding, cupping		ST RR/armor
97	2	15-25	reversals & elev, armor/pavers, chokes; or RR	Int	berms steep & long, +ret wall&fill		ST RR/armor
98	1	5-15	reversals & elev, armor/pavers, chokes; or RR	Int	nice above turns		ST
99	1	5-10		Int	nice, good UM		ST
99	1	0-10	good; close side trails, jumps; add sust TTFs	Int	nice, good UM, lots of side trails, jumps	4224	ST
100	1	0-10		Beg	connector		ST
101	2	5-15	RGDs@50', +UM	Beg	ok, old rd bed, sust/maint	4223	DT
102	1	0-10	RGDs@50', +UM	Beg	ok, old rd bed; sust/maint	4223	DT
103	3	25-35	RR; close; add sust TTF/challenge zone	Int	steep, fall-line, Gift Zone, create real TTF area		ST RR
104	1	0-10	remove log jump/double, add sust TTFs	Int	short connector; rotting log jumps, sust grade.		ST
105	1	0-10	close & choke braiding; harden dips	Beg	nice, UM, occ braiding, exist maint	4225	ST
106	1	0-10	continue existing maint	Beg	nice, existing maint.		ST
107	1	5-15	build up berm lower legs; +reversals	Int	nice, fun, UM		ST
108	2	5-15	move berm ~40' S; close turn; or use pavers	Int	turn too steep, erosion & widening, loose		ST RR/armor
109	2	5-15	close & fix outer line/turn; or RGDs@50', harden	Int	ok, low use shortcut to steep, loose turn		ST
110	2	5-15	harden dips & steep pitches (~15%, low P)	Int	short connector; low-angle fall-line		ST
111	1	0-10	+UM, close/choke braiding, harden/elev berms	Int	old rd bed? wider, low-angle fall, cupping	4230	DT
112	1	0-10		Int	nice, contour, UM		ST
113	1	0-10	close/choke braiding; add optl features	Int	nice, tight & twisty, rooty, fun		ST
114	2	15-25	RR short section	Int	too steep, skidding to road		ST RR
115	1	0-10	harden small berms (low P)	Int	nice, rolling, rooty, twisty	4226	ST
116	1	0-10	add optl lines & TTFs?	Int	nice, flat/open, twisty, rooty		ST
117	1	0-10	harden low spots	Int	good, rolling, twisty		ST
118	1	0-10	choke roots, harden/fill low; improve all lines	Int	T&T, nice. few alt lines, widening @roots, logs		ST
119	1	0-10	RGDs@75', harden	Int	straighter, ok		ST

Carpenters Bypass Trail Assessment								
Segment ID	Sustainability Rating	Average Grade	Maintenance Prescription	Relative Skill Rating	Comments	Photo #	Route Type	Reroute or Closure
120	3	25-35	RR or armor &choke (~200'), replace bridge-BMPs	Int	steep into bridge, erosion	4227-28	ST	RR/armor
121	1	0-10	RGDs@75', harden low spots	Beg	wider, smooth, but nice, minor cupping		ST	
122	3	20-30	RR or armor &choke (~200'), replace bridge-BMPs	Int	steep into bridge, erosion		ST	RR/armor
123	2	0-10	add UM, R2TC, harden- use machine! jumps? or RR	Beg	cupping, low/angle fall; convert to jump line?	4229	DT	R2TC/RR
124	1	0-10	elev & berm turns.	Beg	nice, contour, short pitches @15%		ST	
125	1	0-10	MIB- full bench, camber	Int	align good; tread breaks, camber, pitches @15%		ST	
126	1	0-10	knicks, harden dips & cupped areas	Int	good UM, short pitches @15%	4231	ST	
127	1	0-10	elev/harden lower leg of turns; harden low spots	Int	S-curves, winding, nice UM		ST	
128	2	0-10	harden approach to road, close/choke braiding	Int	low angle fall-line, some braiding; good UM	4231	ST	
129	1	0-10	continue maint- harden low spots	Int	gentle climb, curves, nice maintenance	4232	ST	
130	1	0-5		Beg	nice, open ridge connector		ST	
131	1	0-10	continue exist maint.	Beg	good maint, nice, ridgeline, views		ST	
132	1	0-10	choke & close braiding, cont existing maint.	Beg	minor braiding; good maint.		ST	
133	2	5-15	harden existing rollers, dips, choke widening	Int	low-angle fall-line, cupping & widening	4233	ST	
134	1	0-10	harden low spots	Beg	sust.		ST	
135	1	0-5		Beg	low use connector, rolling		ST	
136	1	5-15	harden & elev berm, harden tread, choke	Int	pitches @15%, braiding, steep berm		ST	
137	1	0-5		Beg	nice, open, ridge connector		ST	
138	2	5-15	elev & armor berm, harden dips, choke	Int	mostly good, outside line@ berm, armored	4234	ST	
139	3	20-30	close or major armoring & chokes	Adv	fall-line, steep, rutted	4234	ST	close
140	3	20-40	RR, or major armor & DH only	Adv	very steep, fall-line to road	4234	ST	RR/close
141	3	0-15	R2TC: RGDs/swales@75', UM, harden- ST RR is better	Int	trenching, mud, erosion, wide; 0-10, pitches@15	4235	DT	R2TC/RR
142	2	0-10	R2TC: RGD/swale@75', UM, harden, or close	Int	fall-line, wide, muddiness		DT	R2TC/RR
143	2	5-10	harden, choke	Int	nice side trail, slight fall-line		ST	
144	1	0-15	berm & harden turns	Int	twisty, low use, nice, few pitches@15%, fall-line		ST	
145	3	15-35	close	Int	fall-line, straight, low use; upper 1/2 is steep	4237	ST	close
146	2	5-15	RGDs@50', harden dips & tums	Int	ok, some cupping		ST	
147	1	0-10	use instead of lower line?	Beg	nice, good maint, sust; lower use upper line	4237	ST	
148	2	0-10	harden dips, RGDs w/terrain, choke; redundant	Int	more use, good maint, low-angle fall-line sections	4238	ST	RR/close
149	1	0-10	harden/fill low spots, knick, choke, cont maint.	Beg	good maint, wider, some cupping; into CC/pvt ppty	4237	ST	
150	1	0-10	good existing maint.	Beg	minor cupping, good UM		ST	
151	2	0-10	replace/remove log ride; add TTF w/BMPs	Adv	log ride- good idea, poor construction, fall zone	4239	ST	close
152	1	0-10	harden & elev berms, harden dips & fall-lines	Int	nice, mostly contour, short pitches @15%		ST	
153	3	15-25	RR fall-lines or armor, RGDs@30', harden, add UM	Int	fall-line pitches, too straight, not too bad yet nice, UM, pitches @15%, lower use, minor braiding		ST	RR/armor
154	1	0-10	choke braiding	Int			ST	
155	2	0-10	R2TC or RR, culvert Xing needs major imp	Beg	old rd bed, grade ok, could be nice		DT	R2TC/RR
156	2	10-20	R2TC or RR & decomm road	Int	rd bed, fall-line, wide, rutting, moto use		DT	R2TC/RR
157	0				gravel road		Road	
158	3	20-30	RR, close; unsust, trail goes to pvt ppty.	Int	fun but unsust, braiding, alt routes, rutting	4240	ST	RR/close
159	3	5-15	RR, close/reclaim	Int	rutted, steep, fall-line, moto use		DT	RR/close
160	0		RR to avoid road		gravel road		Road	RR
161	0		RR to avoid road		gravel road		Road	RR
162	2	0-10	RR or R2TC, RGDs@75', UM, corridor	Beg	grown in, low use, mid section- good canopy		DT	R2TC/RR
163	3	10-20	RR, or R2TC, RGDs@75', UM, corridor	Int	steeper, fall-line;		DT	R2TC/RR
164	2	0-10	RR or R2TC	Int	very low use, limited canopy- harder for maint		DT	R2TC/RR
165	0		RR to avoid road section		road, overgrown		Road	RR
166	0		RR to avoid road section		Carpenters Pass Rd		Road	RR
167	1	0-10	harden low spots	Int	good UM, existing maint, goes to CC edge		ST	
168	2	5-15	RGD/rollers, harden, choke to rd intersection	Int	ok, exist maint, follow CC edge		ST	

### Glossary for IMBA Assessment

Segment ID - distinct ID # for each trail segment

Average Grade - % grade ranges for the given trail segment

Maintenance Prescription – recommendation for what should be done to fix each segment

Relative Skill Rating for Mountain Bike User Group - beginner, intermediate, or advanced

Route Type - existing route type, e.g. road, Doubletrack (DT) or Singletrack (ST)

Reroute or Closure – different prescriptions as detailed below in abbreviation section. If no comment here, it's slated for maintenance (as described in the Prescription field)

#### **Abbreviations:**

CC= clearcut

RR= reroute

RGD= rolling grade dip

RGDs= RGDs spaced at designated frequency ## (e.g. every 75')

UM= add undulation and meander, typically this is on a section of old road bed and is too straight, needs road to trail conversion and/or added chokes and rollers to give it a better/more compelling flow

R2TC= road to trail conversion

X= intersection

lf = linear feet

maint= maintenance

Int= intermediate

Beg= beginner

Adv= advanced

Appchs= approaches (to stream/drainage crossings)

MIB/IB = (minor) improve bench, bring bench up to IMBA specs, described specifics follow (e.g. reduce camber, establish full bench, etc.)

x-ing= crossing

TH= trailhead

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
EUGENE DISTRICT OFFICE

**Preliminary FINDING OF NO SIGNIFICANT IMPACT**

DOI-BLM-OR-E060-2012-0003-EA  
Carpenter Bypass Mountain Bike Trail EA

The Bureau of Land Management (BLM) prepared an Environmental Assessment (EA) (DOI-BLM-OR-E060-2012-0003-EA) which analyzed the effects of the proposed action and alternatives. On the basis of the information contained in the EA, and all other information available to me, it is my determination that the implementation of the proposed action would not have significant environmental effects. Therefore, an environmental impact statement is not necessary and will not be prepared. This finding is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), both with regard to the context and to the intensity of the impacts described in the EA.

**CONTEXT**

The Bureau of Land Management (BLM) has prepared an Environmental Assessment (EA) (DOI-BLM-OR-E050-2012-0003-EA) for the proposed management of the Carpenter Bypass Mountain Bike Trail System located in T 20 S., R. 5 W., Sec. 23, 27, and 35. A no action alternative and the proposed action alternative to assess the impacts from mountain bike use and trail improvements have been analyzed.

**INTENSITY**

I have considered the potential intensity of the impacts that would result from the proposed action relative to each of the ten areas suggested for consideration by the Council on Environmental Quality (CEQ), as detailed below:

- 1. Impacts that may be both beneficial and adverse.** No potential adverse impacts are anticipated from the proposed actions analyzed in the project. Predicted beneficial effects include resource protection and stabilization, retention of the scenic values, and enhanced recreational opportunities.
- 2. The degree to which the proposed action affects public health and safety.** No aspect of the Proposed Action would have an effect on public health and safety. The proposed action is expected to provide safer conditions for non-motorized trail users.
- 3. Unique characteristics of the geographic area such as proximity of historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** The proposed action will not adversely affect the resource values of the area.
- 4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.** No anticipated effects have been identified that are scientifically controversial. A disclosure of the predicted effects of the proposed action is contained in the environmental assessment.
- 5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.** The proposed action is not unique or unusual and does not show that the action would involve any unique or unknown risks. The BLM has experience implementing similar actions in similar areas and have found effects to be reasonably predictable.
- 6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.** The proposed action does not set a precedent for future actions that may have significant effects, nor does it represent a decision in principle about a future consideration. The proposed action will stabilize and prevent unacceptable degradation of natural resources; minimize threats to life or

property; and repair, replace, or construct physical improvements necessary to prevent degradation of land and resources.

7. **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** The interdisciplinary team evaluated the proposed action in context of past, present and reasonably foreseeable actions. Significant cumulative effects are not predicted. A complete disclosure of the effects of the selected alternative is contained in the environmental assessment.
8. **The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.** The proposed action activities will not adversely affect cultural or historical resources.
9. **The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.** The proposed action has been reviewed by BLM specialists and the analysis has determined that the proposed action would have no adverse effects on any endangered or threatened species or its critical habitat.
10. **Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.** The proposed action does not violate any known Federal, State, or local law requirement imposed for the protection of the environment.

Signature of the Responsible Official:

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Alan Corbin  
Field Manager, Siuslaw Resource Area  
Eugene District Office

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Date: