



United States Department of Agriculture  
Forest Service

# **Grasshopper Restoration Project**

## **Recreation Report**

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for:  
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## 1.0 Introduction

This report examines the potential impacts of the Grasshopper Restoration Project to recreation opportunities and experiences within and adjacent to the planning area.

The four primary Forest Plan land use allocations in the planning area are Wood Product Emphasis (C1), Unroaded Recreation (A5), Semi-primitive roaded recreation (A6), and Pine-Oak Habitat (B4). Land in A9-Key Site Riparian Area is located within the planning area, but does not have any actions proposed within it. The majority of the acres proposed for treatment (approximately 92% of acres proposed for treatment) is within the C1 Wood Product Emphasis land use allocation, as described by the Forest Plan. The recreation analysis will focus on activities within C1, A5, A6 and B4. This analysis will indicate that actions proposed by both alternatives are consistent with forest plan standards and measures for recreation within these land use allocations.

Treatments are proposed for approximately 272 acres of Inventoried Roadless Areas (IRA). Approval to treat these areas was received by the Deputy Regional Forester in 2019. Treatments would not impinge upon opportunities for dispersed recreation within the IRA.

The report focuses on the pertinent resource indicators that could affect recreation including the Recreation Opportunity Spectrum (ROS), developed recreation facilities, dispersed recreation, trails, the Mount Hood National Recreation Area (NRA) and Wilderness. Implementation of Alternative 1 or Alternative 2 would comply with Forest Plan standards for recreation.

For both action alternatives, short term effects to the examined recreation resources would include loss of access to trails and some dispersed recreation such as campsites. Loss of access would occur as a result of the need to protect the safety of forest visitors during harvest related activities. Effects would be minimal because of plentiful opportunities to access trails and dispersed recreation elsewhere. Project design criteria would minimize these effects to the extent possible by not allowing harvest activities during weekends and holidays. Project design criteria would also ensure that visitors were informed of closures as early as possible prior to the beginning of harvest. Another short term effect would be impact on trail tread from equipment crossings of trails. PDC would minimize this impact.

For both action alternatives, long term effects include the change in the condition or aesthetics of recreation resources including trails and dispersed recreation sites. Project design criteria would ensure that these changes did not conflict with the Forest Plan. However, changes could be noticeable for years after the completion of project-related activities within the planning area. Effects would include changes to the scenery around trails where treatments decrease canopy cover within view of trails, and reduction of canopy cover at some dispersed campsites. Long term effects to dispersed campsites and non-motorized trails would be minimal because of plentiful opportunities elsewhere. Long term effects to motorized trails could be more substantial as there are limited opportunities for off highway vehicle recreation on the Mt.

Hood National Forest. Access and aesthetics could be impacted by several other projects within off highway vehicle areas.

For both action alternatives, recreation values within the Mt. Hood National Recreation Area (NRA) would be enhanced in the long term because proposed activities would improve forest health within these stands. The Badger Creek Wilderness is located adjacent to the planning area. No activities are proposed within the Wilderness, but activities are proposed adjacent to the Wilderness boundary. Unintended consequences of Alternatives 1 and 2 could include inadvertent introduction of invasive species which would negatively impact the natural character of the Wilderness or unintended motorized or mechanized intrusions (**Error! Reference source not found.**). Project design criteria have been developed to minimize the introduction or spread of invasive plant species.

Cumulative effects would include short term loss of access to some recreational activities that could potentially occur within the project area and in locations across the Forest at the same time leading to displacement of forest visitors (**Error! Reference source not found.**).

There would be a difference in magnitude of effects to motorized trails between Alternatives 1 and 2. Shelterwood treatments proposed in Alternative 2 would have a long term impact to the aesthetic and tread of trails 910 and 475 as result of greater reduction of vegetation adjacent to the trails. This would impact views from the trail system and potentially decrease the moisture content of the trail tread itself as shading would decrease and brush would increase adjacent to the tread. Under Alternative 1 more vegetative cover would be retained adjacent to the trails reducing the visual impact to trail users as well as the impact of loss of moisture along the trails and the amount of brush encroachment.

Project design criteria were designed for this project to reduce the magnitude, scope and duration of the impacts associated with either action alternative and would ensure consistency with law, regulation and policy.

## 2.0 – Analysis Framework

### 2.1 - Resource Indicators and Measures

The table below lists the resource elements and their corresponding indicators and measures that this report will analyze in order to identify effects Alternative 1 or Alternative 2 would have on the recreation resource.

**Table 1. Resource indicators and measures for assessing effects**

<b>Resource Element</b>	<b>Resource Indicator</b>	<b>Measure</b>	<b>Used to address: Purpose/Need or key issue?</b>	<b>Source</b>
Recreation Opportunity Spectrum(ROS)	Types of recreation opportunities available	Compatibility of recreation opportunities within the planning area	No	Forest Plan
Developed Recreation Facilities	Access to facility	Number and duration of facility closures	No	Forest Plan
Dispersed Recreation	Access to dispersed recreation	Duration of closures	No	Forest Plan
Dispersed Recreation	Desired dispersed activity	Change to environment or availability of activity	No	Forest Plan
Trails	Trail Tread	Impacts to moisture levels in trail tread, damage to trail surface	Public Concern	Forest Plan
Trails	Aesthetic – condition of trail environment	Change to overall trail experience	No	Forest Plan
Trails	Access and availability	Change to accessibility and availability of system trails	No	Forest Plan
National Recreation Area	Impairment of recreational values within NRA	Negative impact to recreational access and experience	Public Concern	2009 Omnibus Public Law 111-11
Wilderness	Presence of invasive species	Identification and documentation of populations of invasive species	No	Forest Plan, Wilderness Act

## 2.2 - Methodology

Information regarding the existing condition of these resources and their associated recreation use was gathered from various information sources, including: maps, management plans, databases, and local managers. Some field surveys were completed during the summer of 2019. In some cases, knowledge of recreation resources within the project area is incomplete. For example, dispersed camping locations within the project area have not been completely surveyed. In these cases, estimates were made based on conditions found in comparable areas and local manager experience.

Alternatives 1 and 2 were analyzed for possible effects to recreation resources or experiences. Impacts to recreation have been reviewed on a case-by-case basis and are described in more detail in the Direct and Indirect Effects section of this report. The spatial boundary for the effects analysis focuses on areas within the Grasshopper planning area, but also considers areas outside of the planning area when appropriate. Examples include some portions of the Mount Hood NRA, Badger Creek Wilderness, developed recreation facilities just outside of the planning area, and comparable recreation experiences available across the Forest. The temporal boundaries used for analyzing the direct and indirect effects were 1 year (short-term) and 10 – 50 years (long-term). The cumulative effects analysis considered activities listed in 3.2.3 including the Rocky Restoration project, the White River Fire of 2020, and White River Fire recovery projects.

## 3.0 – Analysis of the Alternatives

### 3.1 – Existing Condition

Recreational use within the planning area as a whole is moderate with the majority of recreational activities occurring in the spring, fall and summer months. The majority of recreational use occurs along trails and in the general forest area as dispersed recreation. There are motorized and non-motorized trails within the planning area. One developed campground, Bonney Crossing, borders the east side of the planning area. For the people who frequent the project area to recreate, it is a reprieve from the busier parts of the Mt. Hood National Forest. Recreationists are unlikely to see crowds in these areas; however, Boulder Lake and Little Boulder Lake, which are both just west of the project area can become crowded on warm days during the summer. The recreational opportunities within the Grasshopper Planning Area are semi-primitive and desirable to individuals who prefer to get away from the congestion that can be found along the main recreation corridors of the forest along Highways 26 and 35 as well as Forest Road 44.

#### 3.1.1 – Recreation Opportunity Spectrum

The desired condition for this area is one where “opportunities for dispersed recreation in a roaded setting are plentiful” (Forest Plan 1990). The planning area falls within two ROS settings: Roaded Natural, and Roaded Modified with the majority of the planning area located within the Roaded Modified ROS setting. These ROS settings provide for the following recreation experiences:

**Roaded Natural:** The Roaded Natural ROS is applied along the eastern border of the Mount Hood NRA with some of that setting falling within the NRA and some of it falling to the east of the NRA. To the west and the east of the Roaded Natural ROS within the planning area the ROS is Roaded Modified. This ROS is characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of people. These evidences usually harmonize with the natural environment. Interaction between users may be low to moderate but with evidence of other users prevalent. Resource modification practices are

evident but harmonize with the natural environment. Construction standards and design of facilities (i.e. placement of campsites, bathrooms, and trails) take into account visitors arriving by car/truck instead of other means of travel (foot or horse) (USDA 1982).

The desired condition for the Roaded Natural ROS is being met within the planning area. The evidence of human activity on the landscape is moderate as denoted by roads, vegetative treatments and some developed recreation facilities. User interaction is generally moderate to low.

Roaded Modified: This ROS covers the majority of the planning area. These areas are meant to provide for a range of recreation experiences that are consistent with substantially modified, motorized settings in which the sights and sounds of humans are readily evident and the interaction between users can be from low to high. Recreation experiences and opportunities in these areas often depend on vehicular access off the primary routes via secondary roads. Camping experiences are relatively primitive, with few on-site facilities provided, requiring some self-reliance and use of primitive outdoor skills.

The existing condition on the ground meets the Roaded Modified ROS. There are opportunities for primitive camping throughout the planning area and vehicular access is abundant for individuals wishing to drive to camp, hike or collect berries or firewood. Motorized trails also exist within the planning area. For the majority of the year throughout the planning area user interactions are low to moderate.

The Unroaded Recreation (A5) land use allocation falls within the Roaded Natural and Roaded Modified ROS classes. The A5 land use allocation is located on the east and west side of the Mt. Hood National Recreation Area. The desired condition for this land use allocation is predominantly natural or natural-appearing environment which may show evidence of past human activity and low interaction between recreational users. According to the Forest Plan, all management actions within A5, Unroaded recreation, shall meet the Semi-Primitive Non-Motorized (SPNM) ROS class. Areas within the SPNM ROS setting are characterized by a predominantly natural or natural appearing environment with few interactions of moderate to large size occurring. There is often evidence of other users, but interactions are low.

While the ROS settings occurring for the A5 land use allocations are Roaded Natural and Roaded Modified, which are higher ROS settings where one may expect more interactions and more evidence of use and management, the A5 Unroaded Recreation within the planning area meets the Semi-Primitive Non-Motorized ROS class due to the lower levels of use in the area and minimal infrastructure.

The A6 Semi-Primitive Roaded Recreation Land Use Allocation is found on the west side of the Mt Hood National Recreation Area. This land use allocation falls under the Roaded Modified ROS class. According to the Forest Plan, all activities within A6 Semi-Primitive Roaded Recreation shall meet the ROS class of Semi-Primitive Motorized Recreation (SPM). SPM is characterized by predominantly natural or natural appearing environment of moderate to large size with a low concentration of users. There is often evidence of other users.

Land falling under the A6 land use allocation meets the Forest Plan Standard of the SPM ROS class as use levels and infrastructure are low and evidence of management is low to moderate.

C1 Timber Emphasis lands fall within a range of ROS classes. Within the planning area they fall under Roded Natural and Roded Modified ROS classes. All C1 lands within the planning area meet forest plan standards for ROS classes due to the low to moderate levels of use and evidence of human presence.

B4 Pine Oak Habitat falls within the Roded Modified ROS within the planning area. Proposed activities would not affect the Roded Modified ROS.

### 3.1.2 – Developed Recreation Facilities

There are no developed recreation facilities within the planning area, although Bonney Crossing Campground is adjacent to the planning area on the east side of Forest Road 2710. Bonney Crossing Campground is a small, concessionaire operated campground with several corrals for campers with horses. It is not a very busy campground, but it is well liked by horseback riders as well as other users who often visit from nearby communities.

### 3.1.3 – Dispersed Recreation

Opportunities for dispersed recreation including camping, hunting and special forest products collection (e.g. huckleberry picking) occur throughout the project area. Dispersed camping is allowed in many locations, however the Forest Service does not actively manage or promote these campsites. Visitors occupy dispersed campsites on a first-come, first-served basis and across the Forest there are large numbers of existing or potential dispersed campsites. The Forest Service has inventoried a number of dispersed campsites within and adjacent to the planning area. The highest concentration of sites occurs near Boulder and Little Boulder Lakes, which are located just west of the planning area. Numerous dispersed sites at a lower concentration and receiving less frequent use are scattered throughout the planning area. It is clear that some of these sites have been utilized for many years, likely by individuals and groups who return annually to camp, hunt, and enjoy the trail system. Access to dispersed recreation activities is determined by access to the area. Most recreationists access the area when it is clear of snow and the roads are no longer too wet to drive.

Within the A5 Unroded Recreation land use allocation and the A6 Semi-Primitive Roded Recreation land use allocation the Forest Plan indicates that dispersed campsites should be located to take advantage of topographic screening and located out of the foreground from lakes, trails, and key interest points. Dispersed camping and recreation currently meets these Standards and Guidelines as described in the Forest Plan. Dispersed sites and recreation falling within lands designated as C1 Timber Emphasis and B4 Pine Oak habitat have less stringent standards. Opportunities within C1 lands may be altered to facilitate timber management. Dispersed recreation opportunities are encouraged within C1 and B4 lands.

### 3.1.4 – Trails



There are several system trails within the planning area, as shown in Table 2. Some of these trails are maintained by District trail crews. Other trails are maintained by partner groups including 44 Trails and Northern Oregon Motorcycle and ATV Club.

**Table 2. Trails and associated mileage and uses within the planning area**

<b>Trail Name and Number</b>	<b>Permitted Uses</b>	<b>Approximate Mileage in Planning Area</b>
Crane Creek 478	Hike, Bike, Horse	3.5
Boulder Lake 463	Hike, Bike, Horse	0.5
Forest Creek 473	Hike, Bike, Horse	0.1
South Fork Three Mile 466.1	Hike, Horse	1
Three Mile 466	Hike, Bike, Horse	1.1
Rocky Butte 475	Hike, Bike, Horse, Motorcycle	0.6
Rock Creek 910	Hike, Bike, Horse Motorcycle, ATV	0.25
		<b>7.05 Total Trail Miles</b>

Approximately 7 miles of National Forest System trail intersect with the planning area. Table 2 lists the names of these trails, the permitted uses on the trails and the number of miles within the planning area. Two trails, Rocky Butte 475 and Rock Creek 910, are motorized trails. These trails are located on the east side of Rock Creek OHV area. Portions of Rocky Butte 475 exist on the ground and other portions of the trail need to be constructed. Rock Creek 910 exists as a road on the ground, but is open to ATVs and motorcycles and not open to full sized vehicles.

The remainder of the trails are non-motorized. Crane Creek 478 and Forest Creek 473 are popular with mountain bikers as portions of the trails offer tall, mature trees and shade that is not often found on the Mt. Hood outside of Wilderness. Three Mile 466, South Fork Three Mile 466.1 and Mud Spring 466A are popular with horseback riders and provide access into the Badger Creek Wilderness. All of the trails within the planning area receive moderate use with the exception of Boulder Lake 463, which receives high use on weekends as it accesses popular dispersed camping at Boulder and Little Boulder Lakes. With the exception of Boulder Lake 463 on the weekends, the trails within the planning area provide an opportunity for recreationists to enjoy trails with lower user interaction than many other areas on the Mt. Hood National Forest. Access to these trails is mainly limited by snow. Rocky Butte 475 and Rock Creek 910 are seasonally closed December 1-April 1 to protect wildlife.

The Forest Plan indicates that within the A5 Unroaded Recreation and A6 Semi-Primitive Roaded Recreation land use allocations trail systems should be developed and designed to disperse use and provide a range of difficulty levels. Trail systems should also be constructed,

reconstructed, and maintained to meet the prescribed ROS class. Trail construction may occur within the A6 Semi-Primitive Roded Recreation land use allocation. Less stringent designs are required for C1 Timber emphasis lands. On B4 Pine Oak land use allocations use is discouraged between December 1 and April 1. Rock Creek OHV area is closed during this time. Forest Plan Standards and Guides are being met for all trails within the planning area as there are a variety of difficulty levels and use is well dispersed both within the non-motorized and motorized trail systems.

It is likely that there are some non-system trails within the planning area, however there has not been a complete survey of the planning area for these types of trails. Some of these trails may have been created by forest visitors without the knowledge or consent of the Forest Service. The Forest Service does not maintain these user-created or unauthorized trails, and therefore these will not be evaluated or discussed further in this report.

### 3.1.5 – Mount Hood National Recreation Area

The Mount Hood National Recreation Area was designated under the 2009 Omnibus Public Law 111-11 to provide for the protection, preservation, and enhancement of recreational, ecological, scenic, cultural, watershed, and fish and wildlife values of the area. National Recreation Areas (NRAs) are defined as areas containing outstanding combinations of outdoor recreation opportunities, aesthetic attractions, and proximity to potential users. NRAs may also have cultural, historical, archaeological, pastoral, Wilderness, scientific, wildlife and other values contributing to public enjoyment (FSM 2370 90).

According to Forest Service Manual 2370 for special recreation designations, NRAs must be incorporated into forest plans or comprehensive management plans if directed by law. The Omnibus Act of 2009 did not direct the Forest to create a comprehensive management plan, but the Forest did incorporate the Mount Hood NRA into the Mt. Hood National Forest Land and Resources Management Plan (USDA 2016). According to the Forest Plan, all management actions within the NRA will follow the standards and guidelines for the underlying land use allocation. Stringent standards and guidelines provide the direction for management actions within the NRA. No new or temporary roads may be constructed within the Mount Hood NRA except as necessary to protect the health and safety of individuals or prevent irreparable resource damage. In addition, the cutting, sale and removal of timber may occur within the NRA as long as it maximizes the retention of large trees, improves the habitats of threatened, endangered or sensitive species, or maintains or restores the composition and structure of the ecosystem by reducing the risk of uncharacteristic wildfire (Pub. L. 111-11 2009).

There are a variety of conditions on the ground within this NRA. Portions of the area are characterized by large trees with limited undergrowth and primitive recreation, while other portions of the area contain thick stands of small diameter trees, evidence of motorized use, and heavy dispersed recreation. Generally, recreation use within the NRA is low to moderate with evidence of use throughout the NRA, but interactions with other users are low. Boulder and Little Boulder Lakes are the exceptions with higher use occurring on warm summer weekends; however, the lakes themselves are west of the planning area.

### 3.1.6 – Wilderness

A section of the congressionally designated Badger Creek Wilderness adjoins the project area to the north. The Badger Creek Wilderness generally receives low to moderate use along system trails. The general forest area within the Wilderness receives low use. The intent of the Wilderness designation is to preserve and protect the Wilderness area in its undeveloped and natural condition; to allow natural processes to operate freely; and to provide opportunities for solitude and primitive recreation. The Wilderness Act prohibits motorized and mechanized entry into congressionally designated Wilderness. The Forest attempts to track and document unauthorized mechanized and motorized entries into the Wilderness. In addition the Forest Service is required to protect the natural quality of wilderness character. Invasive plant species are a common threat to the natural quality of wilderness character. The Forest tracks and documents the type and location of invasive plant species within Wilderness. Neither action alternative for the Grasshopper Project proposes activities within Wilderness.

## 3.2 - Environmental Consequences

### 3.2.1 – Effects of No Action

No Action within the planning area would not impact on recreation as it occurs today. Existing facilities and opportunities would remain unchanged. In addition, there would not be any short term interruption to recreation access.

### 3.2.2 - Direct and Indirect Effects of Alternative 1

#### Recreation Opportunity Spectrum (ROS)

Alternative 1 would have no direct or indirect effects on the ROS applied to the planning area. The desired condition and experience identified for the roaded natural and roaded modified ROS would remain because the proposed treatments would not have an effect on the interactions between users and would not substantially change the environment within which visitors recreate. Similarly, Alternative 1 would have no direct or indirect effects on the Semi-Primitive Non-Motorized ROS within the A5 Unroaded Recreation land use allocation or the Semi-Primitive Motorized ROS within the A6 Semi-Primitive Roaded Recreation ROS.

Within the roaded natural area in the planning area the proposed treatments include variable density thinning from below and intermediate thinning which would reduce the canopy cover, but continue to provide a predominantly natural appearing environment in the long run.

The roaded modified ROS makes up the majority of the planning area. By definition, there is an expectation that this ROS setting will be substantially modified. As such, the proposed treatments would not alter the ROS so that it would fall outside of its desired condition.

A5 Unroaded Recreation has a Semi-Primitive Non-Motorized ROS standard and A6 Semi-Primitive Roaded Recreation has a Semi-Primitive Motorized ROS standard in the Forest Plan.

The proposed treatments for these land use allocations include a combination of sapling thinning and commercial plantation thinning. These treatments would reduce canopy cover in the commercial plantations and make room for more growth within the sapling plantations. In both cases, a predominantly natural appearing environment with enhanced forest health would result. There would be no impact to interaction between users in these areas in the long run and these land use allocations would continue to meet Forest Plan Standards for desired condition.

Fuels reduction treatments would occur within the footprint of silvicultural treatments and would not modify the existing ROS settings. In general, proposed treatments would not have an impact on the intensity of human interaction within the planning area.

If parts of the planning area were closed during implementation, recreationists could choose to go to other parts of the forest. Due to the low to moderate intensity of use within the planning area, this displacement would not have an impact on the ROS settings.

#### Developed Recreation Facilities

Alternative 1 would have no effects on access to existing developed recreation sites. No sites are found within the planning area. Bonney Crossing Campground is just outside the eastern end of the planning area, but the campground would remain accessible during implementation, and the project would not have an impact on any other developed recreation facilities across the forest. Notification of harvest activities would be posted at Bonney Crossing Campground, so that recreationists would be aware of activity nearby such as burning and hauling.

#### Dispersed Recreation

Direct effects to dispersed recreation would occur within the planning area because access to some dispersed activities and campsites would be unavailable during project implementation. Thinning and other proposed activities would generally occur during the week and not on weekends, which would mitigate this impact to an extent. The effect of this loss of access would be short term.

A long term direct effect on activities would occur because of the removal of trees. Thinning in particular areas could alter the condition of some sites on the ground. For example, overhead shading at dispersed campsites could be removed. However, the overall magnitude of the effect would be minimal. There are a large number of dispersed campsites on the forest and many opportunities would continue to be available for recreationists seeking this type of opportunity both inside and outside the project area. Implementation of the proposed treatments may also create new locations which would be desirable for use as dispersed campsites or for dispersed activities. Effects of implementation would be similar across all land use allocations within the planning area and would fall within Forest Plan Standards and Guidelines.

#### Trails

Alternative 1 could have several direct and indirect effects on system trails within the project area. Details are below. Potential impacts would be minimized by project design criteria.

### *Trail tread*

PDC were created to ensure operational impact to trail tread would be avoided to the extent possible. Skidding and heavy equipment would not be permitted along trails except along Rock Creek 906. Rock Creek 906 is a motorized trail that has the characteristics of a road on the ground. This trail is not inside the planning area, but borders it on the south end and connects with Rock Creek 475 which does intersect harvest units within the planning area. Skidding and heavy equipment would not be permitted on Rock Creek 475. A 100-foot no cut buffer would be retained on either side of the non-motorized trails within the planning area including Forest Creek 473 where it crosses unit 264, and Threemile 466 where it crosses unit 76. The buffer would be utilized to retain moisture in the trail tread and reduce future maintenance needs resulting from opening the canopy and allowing for the encroachment of brush. Other non-motorized trails are located within the planning area but are not adjacent to units; therefore tread on these trails would not be impacted.

The motorized trails Rock Creek 475 and 910 are adjacent to units and treatments would occur adjacent to trail tread. This could potentially impact trail tread and maintenance more immediately after harvest and years later as a result of the opening of the canopy and encroachment of brush. These impacts could occur on up to approximately 0.75 miles of motorized trail. There would be some perpendicular crossings along the motorized trails, but these crossings would be rehabilitated once operations were complete and effects would be short term.

### *Trail aesthetics*

Harvest activities would have a long term impact to the aesthetic of the trail environment. The level of impact would depend on the type of harvest adjacent to the trail. This impact would be greatest along the motorized trails within the planning area, Rock Creek 910 and 475. Since there would be no buffer adjacent to these trails, the change in the surrounding units would be more visible. Along the non-motorized trails adjacent to units, Forest Creek 473, and Threemile 466, a buffer would decrease the visibility of nearby treatments. Perception of the aesthetic changes in canopy cover would vary by individual.

### *Trail access*

Trails would be closed to visitor use when harvest activities occur in adjacent units. The purpose of a closure is to protect the safety of trail users and is short term. Every effort would be made to notify visitors ahead of time and to minimize the length of such closures. Individuals wanting to utilize closed trails may decide to utilize other trails on the Mt. Hood National Forest or trails on other jurisdictions such as Hood River County. Since trail use within the planning area is light to moderate, these effects would be minimal.

Effects of the implementation of Alternative 1 would be similar across all land use allocations within the planning area and would fall within Forest Plan Standards and Guidelines.

#### Mount Hood National Recreation Area

By improving forest health within these stands recreation values within the NRA would be enhanced rather than impaired for the long term. Thinning to move the stand towards historic species composition would improve the overall condition of the stand and aesthetics near trails. This thinning could also improve aesthetics throughout proposed treatment units within the NRA, and could be visible to a variety of dispersed recreationists.

#### Wilderness

##### *Invasive Plants*

Treatments in units 141, 151, 76, 81, 4, 3, 5, 44, 45, 46, 21, 22, 24, 1, 251 and 228 which are immediately adjacent to the Badger Creek Wilderness could create a vector which would allow additional invasive plants to become established in the Wilderness area. Establishment of non-native and invasive species would reduce the natural Wilderness character of the area. While subsequent invasive weed treatments might improve the natural character of Wilderness, these would result in an impact to its untrammelled character. Preventing the establishment of non-native and invasive species is the most desirable method of preserving Wilderness character. A mitigation to treat equipment prior to operation is included in the project design criteria, and would reduce the risk of introducing invasive weeds. Another PDC specifies that treatment would occur for any invasive species in stands nearby Wilderness prior to, and after, implementing proposed activities.

### 3.2.3 - Direct and Indirect Effects of Alternative 2

#### Recreation Opportunity Spectrum (ROS)

Alternative 2 would have the same effects for ROS settings as Alternative 1.

#### Developed Recreation Facilities

Alternative 2 would have the same effects for developed recreation as Alternative 1.

#### Dispersed Recreation

Alternative 2 would have the same impact to dispersed recreation as Alternative 1. Summer 2019 surveys indicated no dispersed campsites were located within the units proposed for shelterwood treatment; however, that does not mean these areas have not been used for dispersed camping or other dispersed activities in the past. At the same time, impacts would be minimal due to the limited area where treatment is proposed.

#### Trails

### *Trail tread*

Alternative 2 would increase the impact to the trail tread and aesthetic along Rock Creek 910 and 475. These trails are near units proposed for shelterwood treatment and there is no buffer along these trails.

### *Trail aesthetics*

Perception of the aesthetic changes in canopy cover would vary by individual. The change in canopy cover would be visible to trail users in the short term and in the long term, especially in areas where shelterwood treatments are proposed. Non-motorized trails within the planning area are not within viewing range of proposed shelterwood treatments.

### *Trail access*

Alternative 2 would have the same effects for trail access as Alternative 1.

### Mount Hood National Recreation Area

Alternative 2 proposes the same treatments within the NRA that are proposed by Alternative 1 and therefore effects would be the same within the NRA. Proposed shelterwood units are located just east and outside of the NRA's boundary, on the east side of Forest Road 4860. The proposed treatments would not have an impact on recreation values within the NRA, and the combination of thinning and fuels treatments could have a beneficial impact as it could decrease potential for stand replacing fire within the NRA in the short and long term.

### Wilderness

Alternative 2 would have the same effects for Wilderness as Alternative 1.

### 3.2.3 - Cumulative Effects

Cumulative effects are impacts on the environment that result from the incremental impact of an action when it is added to other past, ongoing, and reasonably foreseeable future actions. A cumulative effects analysis for each resource considers activities relevant to the resource which overlap in time and space. If proposed activities would have little or no effect on a given resource element, a more detailed cumulative effects analysis is not necessary because there are no effects to cumulate.

The interdisciplinary team listed projects and activities that should be considered in the cumulative effects analysis. This information is included in the project record. The items documented in Table 3 were considered when analyzing cumulative effects for recreation. These items were analyzed as a result of their proximity to the planning area and their potential to have an effect on recreation within the planning area. The spatial boundary for the effects analysis focuses on areas within the Grasshopper planning area, but also considers areas

outside of the planning area when appropriate. Examples include some portions of the Mount Hood NRA, Badger Creek Wilderness, developed recreation facilities just outside of the planning area, and comparable recreation experiences available across the Forest. The temporal boundary includes activities within the recent past (approximately 0-5 years), present and near future (approximately 0-10 years) and long term (approximately 10+ years).

PDC such as restricting project operations to weekdays and non-holidays would mitigate impacts to recreation. Changes to recreational opportunities would be minimal in regards to the recreational opportunities offered across the forest, especially when taking into consideration the limited timeframe in which campsite and trail closures resulting from these activities would occur. As such cumulative effects would not be substantial.

**Table 3 Cumulative Effects**

Project/Activity	Resource element potentially affected	Overlap in		Measurable Cumulative Effect?	Extent, Detectable?
		Time	Space		
Ongoing trail maintenance	ROS	Yes	Yes	No	Effects to ROS would overlap in time and space for trail maintenance, however cumulative effects would be nominal as the proposed activities would not have an effect on levels of use, levels of development, or user interaction within the project area.
	Developed Recreation Facilities	No	No	No	
	Dispersed Recreation	No	Yes	No	
	Trails	No	Yes	No	
	NRA	Yes	No	No	
	Wilderness	Yes	No	No	
Trail Closures	ROS	No	No	No	Trail closures would have no cumulative impacts due to the availability of trails across the forest at any given time.
	Developed Recreation Facilities	No	No	No	
	Dispersed Recreation	No	No	No	
	Trails	Yes	Yes	No	
	NRA	Yes	Yes	No	
	Wilderness	No	No	No	
Road Closures	ROS	No	No	No	



Project/Activity	Resource element potentially affected	Overlap in		Measurable Cumulative Effect?	Extent, Detectable?
		Time	Space		
	Developed Recreation Facilities	No	No	No	Road closures necessary to safely implement harvest activities could impact access to visitors seeking access to dispersed recreation, trails and access; however, opportunities for these activities are abundant across the Forest and project design criteria would mitigate this impact by notifying the public as early as possible of closures and limiting project activities and haul to weekdays.
	Dispersed Recreation	Yes	No	No	
	Trails	Yes	No	No	
	NRA	Yes	No	No	
	Wilderness	No	No	No	
Ongoing vegetation/fuels management projects including but not limited to Rocky Restoration	ROS	No	No	No	It is possible that implementation of these projects could occur during the same time resulting in loss of access to some roads, trails and dispersed campsites. Loss of access to dispersed recreation would be nominal due to the availability across the forest. Loss in motorized trail access could be more impactful due to the limited availability of motorized trails on the forest. Project design criteria addresses this impact by ensuring closures are posted as early as possible and notifying the public as early as possible.
	Developed Recreation Facilities	No	No	No	
	Dispersed Recreation	Yes	No	No	
	Trails	Yes	Yes	Yes	
	NRA	No	No	No	
	Wilderness	No	No	No	
2020 White River Fire	ROS	No	No	No	There would be no cumulative effects as a result of the 2020 White River Fire.
	Developed Recreation Facilities	No	No	No	
	Dispersed Recreation	Yes	No	No	
	Trails	Yes	No	No	

Project/Activity	Resource element potentially affected	Overlap in		Measurable Cumulative Effect?	Extent, Detectable?
		Time	Space		
	NRA	No	No	No	
	Wilderness	No	No	No	
White River Fire Projects: Roadside CE, Salvage CE, Reforestation CE	ROS	No	No	No	There would be no cumulative effects as a result of White River Fire Projects.
	Developed Recreation Facilities	No	No	No	
	Dispersed Recreation	Yes	No	No	
	Trails	Yes	No	No	
	NRA	No	No	No	
	Wilderness	No	No	No	

3.3 - Consistency with Management Direction

Forest Plan

Five Forest Plan land allocations can be found within the planning area: Wood Product Emphasis (C1), Pine-Oak Habitat Area (B4), Semi-Primitive Roaded-Recreation (A5), Unroaded Recreation (A6) and Key Site Riparian (A9). See the Grasshopper Restoration Environmental Analysis (Section 2.0) for approximate acres of treatment within each land allocation.

Alternative 1 and Alternative 2 would both be consistent with Forest Plan direction and standards and guidelines.

The most stringent Forest Plan standards and guidelines applicable to recreation within the proposed project area occur within the A5 Unroaded Recreation and A6 Semi-Primitive Roaded Recreation LUAs:

A5-018 Regulated Timber harvest shall be prohibited.

A5-019 Nonregulated timber harvest activities necessary to achieve recreation objectives may be allowed, provided no permanent roads are constructed, and the semi-primitive non-motorized ROS class is maintained.

A6-020 Regulated timber harvest shall be prohibited.

A6-022 Nonregulated timber harvest operations necessary to achieve recreation objectives may be allowed.

Alternative 1 and Alternative 2 would be consistent with the standards above for nonregulated timber harvest. Regulated timber harvest is defined as harvest that contributes chargeable timber volume to the Allowable Sale Quantity (ASQ). ASQ is the quantity of timber that may be sold from the area of land covered by the Forest Plan for a time period specified by the plan. This quantity is usually expressed on an annual basis as the average annual allowable sale quantity. "A" land allocations are not considered suitable for timber production and would not contribute to ASQ.

Proposed activities within A5 and A6 land use allocations would improve forest health within the stands. This would enhance recreation by improving aesthetics for both trail users and visitors enjoying dispersed recreation.

#### Recreation Opportunity Spectrum (ROS)

Both alternatives would be consistent with the goals and objectives for Rooded Natural and Rooded Modified classifications. Furthermore, they would be consistent with the goals and objectives for the Semi-Primitive Non-Motorized ROS and Semi-Primitive Motorized ROS prescribed for A5 and A6 lands. Neither alternative would have more than a minimal effect to the types, settings, quantities or quality of recreation experiences available within the planning area.

#### 2009 Omnibus Public Law 111-11

Both alternatives are consistent with direction provided under the 2009 Omnibus Public Law 111-11. Per the Omnibus Law, management actions within the Mt. Hood NRA would not degrade the protection, preservation, and enhancement of recreational, ecological, scenic, cultural, watershed, and fish and wildlife values of the area. Both alternatives include thinning activities within the NRA that would focus on moving existing stands of timber towards more historic species composition and structural conditions by opening the stands and reducing stocking levels. This activity would create healthy growing conditions for current residual trees while providing growing space for shade intolerant species. No new roads including temporary roads would be constructed within the NRA. Timber removal to restore the composition and structure of the ecosystem is permitted within the NRA. The Mt Hood LRMP indicates that all management actions within the NRA will follow the most stringent standard and guidelines for the underlying land use allocation. Within the planning area, the most stringent guidelines are

specified in the 2009 Omnibus Law. As mentioned above, Alternative 1 and Alternative 2 follow this direction.

### Inventoried Roadless Areas

All proposed treatments within Inventoried Roadless Areas (IRA) would be consistent with the Roadless Area Conservation Rule (RACR) exception §294.13(b)1(ii). Approval for this exception was received from the Deputy Regional Forester in 2019. Treatments would take place on approximately 272 acres of IRA to improve ecosystem composition. These activities would not impinge upon opportunities for dispersed recreation within the IRA inside the planning area. While access could be blocked by harvest activities in the short term, improvement to the ecosystem could improve access for dispersed recreation in the long term. No areas within IRA proposed for treatment contain developed recreation infrastructure or trails.

### 3.4 – Summary of Effects

Alternative 1 and Alternative 2 would have the following effects:

- **Recreation Opportunity Spectrum.** Neither action alternative would impact the ROS classes within the planning area as the proposed treatments would not have an effect on the interactions between users and would not substantially change the environment within which visitors recreate.
- **Developed Recreation Facilities.** Neither action alternative would impact access to developed recreation sites within or near the planning area.
- **Dispersed Recreation.** The use of some dispersed areas and campsites could be unsafe or infeasible during implementation of the proposed alternatives. In the longer term the proposed treatments would be unlikely to affect the overall availability of dispersed activities. Implementation of the proposed treatments may also create new locations which would be desirable for use as dispersed campsites or for dispersed activities. There may be a short-term displacement effect to forest visitors seeking dispersed recreation activities, however the overall effect would be minimal as there are many opportunities for these types of activities across the Forest. Long term effects at some dispersed campsites would occur when canopy cover is reduced.
- **Trails.** There would be effects to recreational trail use during implementation of either action alternative due to closures. There is also the potential for impacts to trail tread and aesthetics, although project design criteria have been identified to lessen this impact. Impacts to the tread and aesthetics of motorized trails would be greater under Alternative 2 as these trails have no buffers and less vegetation would remain along trail corridors.
- **National Recreation Area.** Proposed thinning activities within the NRA would utilize the existing road system and focus on moving existing stands of timber towards more

historic species composition and structural conditions. These management actions are within the scope of activities allowed within the Mount Hood NRA. By improving forest health within these stands recreation values within the NRA would be enhanced.

- **Wilderness.** There is the potential for the introduction of noxious weeds into Wilderness which would impact the natural character the Wilderness is managed for. Activities are not proposed within Wilderness. Project design criteria have been identified to mitigate potential spread or introduction of invasive weeds.

## 4.0 - References Cited

Omnibus Public Land Management Act of 2009. Pub. L. 111-11, H. R. 146. March 2009.

Special Areas; Roadless Area Conservation; Final Rule. Fed. Reg. Vol 66, No. 9 (January 12, 2001) (to be codified at 36 C. F. R. pts. 294).

USDA Forest Service. 1982. ROS User Guide.

USDA Forest Service. 1990. Land and Resource Management Plan. Mount Hood National Forest.

USDA Forest Service. 1990b. Chapter 2370 Special Recreation Designations. FSM 2300 Recreation Wilderness and Related Resource Management.

USDA Forest Service. 2016. *Final Omnibus Land Use Allocations Letter*. Retrieved November 1, 2021 from <https://www.fs.usda.gov/main/mthood/landmanagement/planning>

Wilderness Act of September 3, 1964 (P.L. 88-577, 78 Stat. 890 as amended; 16 U.S.C 1131-1136). Sec. 1.