



United States Department of Agriculture  
Forest Service

# **Zigzag Integrated Resource Project**

## **Unroaded Report**

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for:  
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Mt. Hood National Forest

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## 1.0 Introduction

During public scoping, comments were received about unroaded and undeveloped areas. These terms have different meanings for different people: the absence of certain types of roads and certain types of logging activities may be considerations and sometimes a minimum size is considered. The project area contains much designated wilderness and some adjacent non-wilderness area with no roads or other development. Many wilderness areas were expanded with the 2009 Omnibus Public Land Management Act.

In this document, the terms “unroaded” and “undeveloped” are used to denote any areas that are not already Wildernesses or Inventoried Roadless Areas. Unroaded and undeveloped areas are portions of the landscape that do not contain forest roads (36 CFR 212.1). Forest roads have been called system roads, classified roads or forest development roads: they are a part of the Forest’s network of roads necessary to protect, administer, and use the national forest system and its resources. Other roads may or may not be present such as temporary roads, user created roads, or old decommissioned roads. Unroaded and undeveloped areas generally do not contain developments such as rock quarries, power lines, campgrounds or logged areas that have changed the character of the area. The following sections focus on what is special about the unroaded and undeveloped parts of the project area. No minimum acreage size will be used to exclude areas from this discussion.

The project lies in two distinctly separate areas: Horseshoe and Mud Creek.

## 2.0 Existing Condition

The Mt. Hood Wilderness (65,000 acres) borders the Horseshoe area. Recent additions to the wilderness included most but not all of the Inventoried Roadless areas that were identified in the Forest Plan. The Salmon-Huckleberry Wilderness (62,000 acres) borders the Mud Creek area. Recent additions to the wilderness included some but not all of the Inventoried Roadless areas that were identified in the Forest Plan. There are no proposed actions in wilderness or in Inventoried Roadless areas.

### 2.1 Unroaded and Undeveloped Character

Figure 1 shows an unroaded and undeveloped block of 2,261 acres in the Horseshoe area. Approximately 3 acres of Unit 7 overlaps this block. There are no trails or other recreational features in this area. This area was not added to the wilderness system in the 2009 Omnibus Public Land Management Act.

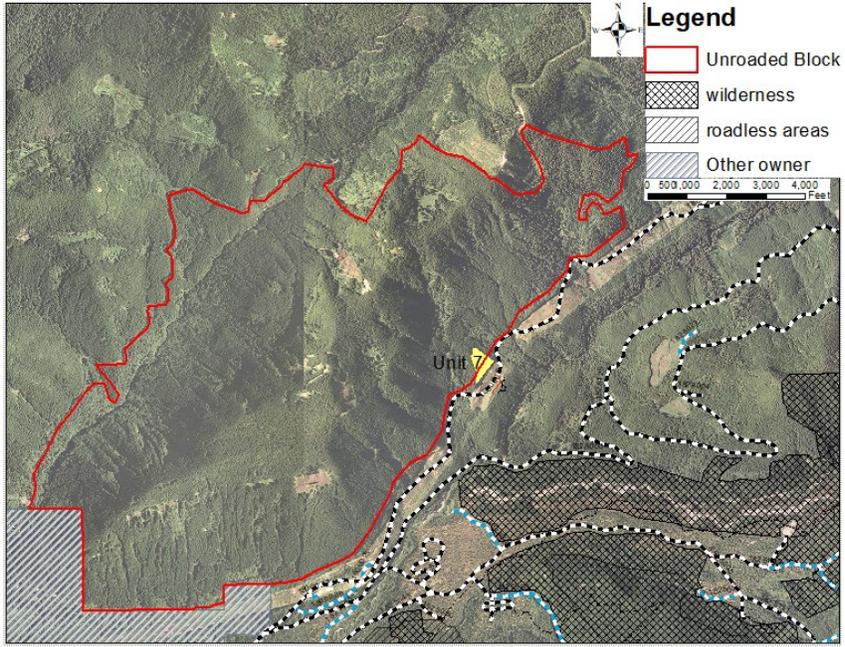


Figure 1

Figure 2 shows an unroaded and undeveloped block in the vicinity of Unit 180 in the Mud Creek area. This area is adjacent to the Salmon-Huckleberry Wilderness to the south and an Inventoried Roadless Area to the west. Trail 492 crosses this area. While the wilderness to the south was added to the wilderness system in 2009, neither the Inventoried Roadless Area, nor the area at Unit 180 were added. Units 180 through 186 have been logged before and are transected by temporary roads and skid trails.

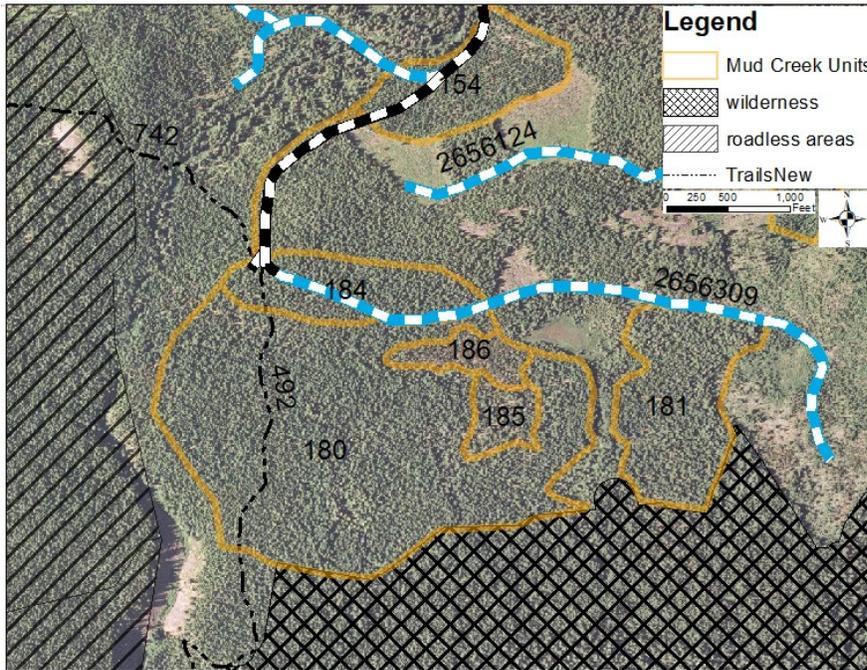
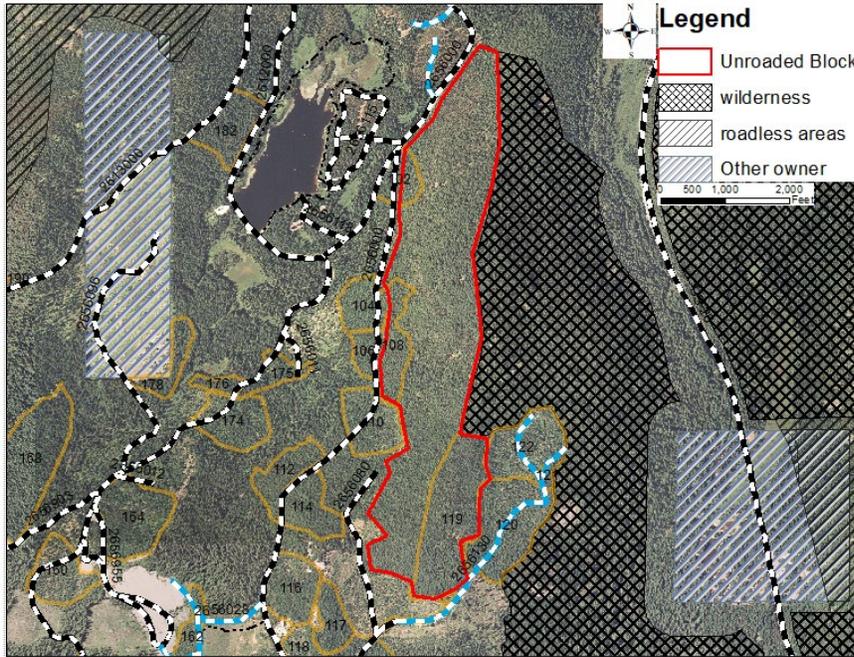


Figure 2

Figure 3 shows an unroaded and undeveloped block in the vicinity of Unit 119 in the Mud Creek area. This area is 247 acres and is adjacent to the Salmon-Huckleberry Wilderness to the east. There are no trails in this area. While the wilderness to the east was added to the wilderness system in 2009, the area in this block was not added. Units 102, 108 and 119 are in this block. Portions of this area have been logged before and are transected by skid trails.



**Figure 3**

Figure 4 and Figure 5 show an unroaded and undeveloped block in the vicinity of Units 190 through 198 in the Mud Creek area. This area is adjacent to the Salmon-Huckleberry Wilderness to the south and an Inventoried Roadless Area to the south and north. Road 2613 bisects this area in an east west direction with the units all to the north. The Salmon-Huckleberry Wilderness and the south Inventoried Roadless Area are separated from the units by Road 2613. The Inventoried Roadless Area to the north was not added to the wilderness system in 2009. Units 190 through 198 are huckleberry enhancement treatments in a narrow strip along the road.

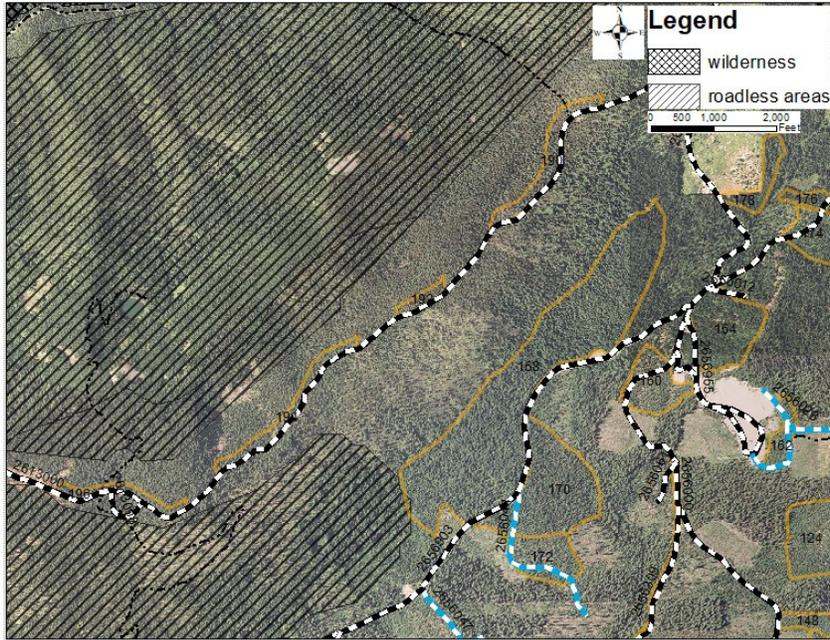


Figure 4



Figure 5

All of the blocks discussed above have been affected by wildfire in the past and have little or no old growth. There are no streams in the proposed units.

## 4.0 Direct and Indirect Effects

### 4.1 No Action

With no action, the unroaded and undeveloped character of the areas described above would remain unchanged.

### 4.2 Proposed Action

The proposed action would alter some of the unroaded and undeveloped character of the project area. Cutting trees, disturbance from logging equipment, fuels treatment, landings and road construction would affect unroaded and undeveloped values.

- The block in Figure 1 would be reduced by 3 acres or 0.1%. The proposed action is thinning to increase health and diversity of the second-growth stand. While the area would be slightly diminished in size, the remaining 2,258 acres would continue to provide some unroaded and undeveloped benefits.
- The area described in Figure 2 is marginal in terms of its unroaded/undeveloped value due to past logging. However, the additional thinning would alter approximately 190 acres. The adjacent Inventoried Roadless Area is approximately 2,014 acres and the undeveloped block near unit 180 would add an additional 353 acres. The thinning of units 180 to 186 to enhance health and diversity of second-growth stands would alter the unroaded and undeveloped block by 8%. The remaining 2,177 acres would continue to provide some unroaded and undeveloped benefits.
- The area described in Figure 3 is marginal in terms of its unroaded/undeveloped value due to past logging. The thinning of units 102, 108, and 119 to enhance health and diversity of second-growth stands would alter the unroaded and undeveloped block by 27%. The remaining 181 acres would continue to provide some unroaded and undeveloped benefits.
- The area described in Figure 4 and Figure 5 involve roadside thinning treatments to enhance huckleberry production. The adjacent Inventoried Roadless Area is approximately 3,902 acres and the additional adjacent undeveloped area would add an additional 444 acres. The huckleberry treatments of units 190 to 198 would alter the unroaded and undeveloped block by 1%. The remaining acres would continue to provide some unroaded and undeveloped benefits.

The following discussion focuses on several key resources that are often considered well provided for in unroaded and undeveloped blocks and lacking in other parts of the developed landscape. Some of these topics relate to standards and guidelines that are documented in other reports.

- High quality or undisturbed soil

Soils are addressed in s. 3.6. The soils were affected by intense fire. Landings, roads and skid trails would result in some soil impact. Soil impacts would be within the limits set by Forest Plan standards and guidelines for long-term productivity.

- High quality water and sources of public drinking water

Water quality is addressed in s. 3.3. There are no streams in the proposed harvest units; protection buffers have been developed to provide sufficient protection to water quality and aquatic resources. No streams would be crossed by proposed new temporary roads. Project design criteria minimize the risk that sediment would reach any stream. The project is not in any municipal watersheds.

- High quality air

Air quality is addressed in s. 3.15.5. The unroaded and undeveloped blocks are too small to have an airshed that would be unaffected by surrounding air pollution sources. The area is transected by a busy highway, and there are many adjacent residences that burn firewood as a heat source. Small quantities of debris would be piled and burned at landings resulting in some smoke during the late-fall burning season.

- Diversity of plant and animal communities

Diversity is addressed in s. 3.1. The unroaded and undeveloped blocks have relatively uniform stands of second-growth. The proposed action would leave some snags and down wood and would introduce some variability through skips and gaps. No special plant or animal communities have been identified.

- Habitat for threatened, endangered, proposed, candidate, and sensitive species

Fish are addressed in s. 3.4. There are listed fish in the Horseshoe area, but the alteration of 3 acres by thinning with sufficient protection buffers would not likely have a measurable on threatened fish species. There are no listed fish in the Mud Creek area, the nearest listed fish are over a mile away and there is no hydrologic connection.

Owls are addressed in s. 3.7. The proposed action would not remove suitable habitat for the threatened northern spotted owl. The thinning would also not likely affect the owl's ability to disperse across the landscape. The block is not in critical habitat for owls.

Botanical species are addressed in s. 3.11.

No sensitive botanical species were found during project surveys.

- Habitat for those species dependent on large, undisturbed areas of land

Wildlife is addressed in s. 3.7. The edge effect of surrounding forest roads and old clearcuts, and the noise generated by vehicles on adjacent forest roads reduce the habitat effectiveness of the unroaded and undeveloped blocks for species that need unfragmented habitat and solitude. The proposed action would reduce the size of the unroaded and

undeveloped blocks. Since the proposed treatments are on the edge of larger blocks they would reduce the size but would retain some interior habitats. Species that require large undisturbed areas of land would likely persist and they would find similar forest types in adjacent Wildernesses, Inventoried Roadless Areas, and other undisturbed blocks elsewhere on the Forest. Approximately 127,000 acres of Wilderness and 6,000 of Inventoried Roadless Areas in and adjacent to the project area would remain unaltered. As trees grow, they would eventually contribute mature interior habitats for species such as spotted owls that benefit from large intact blocks of suitable habitat.

- Primitive, Semi-Primitive Non-Motorized, and Semi-Primitive Motorized classes of dispersed recreation

Recreation is addressed in s. 3.9. The land management areas and Recreation Opportunity Spectrum (ROS) goals are different for each block. The blocks are described by the figure where they are shown.

- Figure 1 – The area where harvest is proposed is with a ROS designation of Roded Modified.
- Figure 2 - The area where harvest is proposed is with a ROS designation of Roded Modified.
- Figure 3 - The area where harvest is proposed is with a ROS designation of Roded Modified.
- Figure 4 and Figure 5 - The area where harvest is proposed is with a ROS designation of Roded Natural.

Roded Modified involves areas that are characterized by predominantly natural-appearing environments with high evidence of the sights and sounds of humans. Resource modification and utilization practices are evident and may not harmonize with the natural environment. Conventional motorized use is allowed.

Roded Natural involves areas that are characterized by predominantly natural-appearing environments with high evidence of the sights and sounds of humans. Such evidence usually harmonizes with the natural environment. Resource modification and utilization practices are evident but harmonize with the natural environment. Conventional motorized use is allowed.

The unroded and undeveloped blocks are not prescribed for Primitive, Semi-Primitive Non-Motorized, or Semi-Primitive Motorized classes of dispersed recreation. Low levels of non-motorized use occurs in the blocks, primarily on trails.

The temporary roads would be rehabilitated after use; therefore there would be no long-lasting change to vehicular access, or the number or type of social encounters. The project would have little impact on recreation.

The thinning that is proposed in these areas would meet the Recreation Opportunity Spectrum.

- Reference landscapes

Similar unroaded and undeveloped landscapes are present in abundance on the Forest in wildernesses and Inventoried Roadless Areas. These areas provide opportunities for researching and experiencing these landscapes and some of them are much larger than the unroaded and undeveloped blocks in the project area.

- Natural appearing landscapes with high scenic quality

Scenery is addressed in s. 3.8. The visual quality objectives (VQOs) are different for each block. The blocks are described by the figure where they are shown.

- Figure 1 – The area where harvest is proposed is in the B2 Scenic Viewshed management area and the VQO is Partial Retention. The area could be potentially seen from Road 1825 and from Trail #776C. The presence of large high-voltage power lines directly adjacent to the unroaded block and Unit 7 alter the scenery and dominate the landscape in this area.
- Figure 2 - The area where harvest is proposed is in the B2 Scenic Viewshed management area and the VQO is Retention and Partial Retention as seen from trail #492.
- Figure 3 - The area where harvest is proposed is in the B2 Scenic Viewshed management area and the VQO is Retention as seen from Trillium Lake.
- Figure 4 and Figure 5 - The area where harvest is proposed is in the B3 Roded Recreation and B2 Scenic Viewshed management areas the VQO is Partial Retention as seen from Highway 26, Trillium Lake and Timberline Lodge.

For all of these areas, the VQOs would be met. The thinning prescription combined with project design criteria would result in a landscape with naturally appearing landscapes.

- Traditional cultural properties and sacred sites

Heritage Resources are addressed in s. 3.15.1. No known sites are present within proposed treatment areas.

- Other locally identified unique characteristics

No other unique characteristics have been identified.

Public comments have been received requesting deletion of all project elements in the unroaded and undeveloped blocks. Some suggested that blocks over 1,000 acres in size should be protected. This report has been developed in response to these comments.

## 5.0 Cumulative Effects

Past actions including road construction, power line construction, and logging have created the boundaries of the unroaded and undeveloped blocks. The analysis areas for cumulative effects are the unroaded and undeveloped blocks and the Wildernesses and Inventoried Roadless Areas that are adjacent to them. The time frame for this analysis is very long because the effects of logging, skidtrails and temporary roads are long lasting. There are no known ongoing actions within the described analysis areas. Within the Mt. Hood Wilderness, a foreseeable action includes the construction of monitoring sites high on the mountain to detect volcanic activity. These would not likely have an additive or synergistic interaction with the thinning proposed in the unroaded and undeveloped blocks due to the great distance between them.

At the landscape scale, the Forest has approximately 315,000 acres of unroaded and undeveloped areas in Wilderness and another 35,000 acres in Inventoried Roadless Areas. This represents approximately 1/3 of the Forest. The values provided by unroaded and undeveloped landscapes are well represented on the Forest.

The proposed action would reduce the unroaded and undeveloped opportunities in the analysis area by less than 0.1%. For these reasons, and because no extraordinary features were identified in the areas of proposed treatment, the cumulative effect would not be substantial.

## 6.0 Forest Plan Goals, Standards and Guidelines

There are no specific standards and guidelines for unroaded and undeveloped blocks.