Final Wilderness, Inventoried Roadless Areas, Potential Wilderness Areas, and Undeveloped Lands Report

Ten Cent Community Wildfire Protection Project

Umatilla National Forest, North Fork John Day Ranger District
Wallowa Whitman National Forest, Whitman Ranger District
Grant County, Oregon

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South Zone Recreation Manager
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INTRODUCTION

The USDA Forest Service, Pacific Northwest Region (Region 6) covers approximately 27.2 million acres within the states of Oregon and Washington. This represents approximately 27% of the total acreage of both states combined. These 27.2 million acres are allocated and managed based on the land allocations designated within the respective National Forest Land and Resource Management Plan. However, two types of land designations are overriding and common among all units within the region (and the nation), these are the management of Wilderness areas and the management of Inventoried Roadless Areas. In Region 6, there are approximately 4 million acres of Inventoried Roadless Areas (15%) and approximately 5 million acres of Wilderness (18%).

The Umatilla National Forest (NF) and Wallowa-Whitman NF are two of 16 administrative units that manage National Forest System Lands within the Pacific Northwest Region. The Umatilla NF covers approximately 1.4 million acres and the Wallowa-Whitman NF covers approximately 2.3 million acres. Both are situated in the northeastern corner of Oregon and southeastern corner of Washington. The Umatilla National Forest contains 303,000 acres of wilderness and 282,000 acres of Inventoried Roadless Areas. The Forest consists of four Ranger Districts, one of which is the North Fork John Day Ranger District. The Wallowa-Whitman NF contains 593,365 acres of wilderness and 167,541 acres of Inventoried Roadless Areas. This Forest also consists of four Ranger Districts, one of which is the Whitman Ranger District.

The North Fork John Day Ranger District is about 465,000 acres in size and contains the North Fork John Day Wilderness (23% of the Ranger District) and 11,184 acres of the Greenhorn Inventoried Roadless Area (2% of District). The Whitman Ranger District is approximately 638,000 acres in size and contains 58,533 acres of the Twin Mountain Inventoried Roadless Area (9% of District).

The Ten Cent project planning area occurs in the southeastern portion of the North Fork John Day District and northwestern portion of the Whitman District.

Table 1: Contextual Display of Wilderness, Inventoried Roadless Areas, Potential Wilderness Areas and Undeveloped Lands in PNW Region, Umatilla NF, North Fork John Day RD and Ten Cent analysis area

<table>
<thead>
<tr>
<th>Unit</th>
<th>Acres</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Northwest Region</td>
<td>27.2 million</td>
<td>27%1</td>
</tr>
<tr>
<td>Wilderness</td>
<td>5 million</td>
<td>18%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>4 million</td>
<td>15%</td>
</tr>
<tr>
<td>Umatilla National Forest</td>
<td>1.4 million</td>
<td>5%2</td>
</tr>
<tr>
<td>Wilderness</td>
<td>303,000</td>
<td>21%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>282,000</td>
<td>20%</td>
</tr>
<tr>
<td>North Fork John Day Ranger District</td>
<td>465,000</td>
<td>33%3</td>
</tr>
<tr>
<td>Wilderness</td>
<td>107,396</td>
<td>23%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>38,311</td>
<td>8%</td>
</tr>
<tr>
<td>Ten Cent Analysis Area—North Fork John Day R.D. portion</td>
<td>49,531</td>
<td>11%4</td>
</tr>
<tr>
<td>Wilderness</td>
<td>25,211</td>
<td>51%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>2,310</td>
<td>5%</td>
</tr>
<tr>
<td>Potential Wilderness Area</td>
<td>5,139</td>
<td>10%</td>
</tr>
<tr>
<td>Undeveloped Lands</td>
<td>8,708</td>
<td>18%</td>
</tr>
<tr>
<td>Wallowa-Whitman National Forest</td>
<td>2.3 million</td>
<td>8%2</td>
</tr>
</tbody>
</table>
Wilderness, Inventoried Roadless Areas, Land with Wilderness Characteristics, and Other Undeveloped Lands

<table>
<thead>
<tr>
<th>Unit</th>
<th>Acres</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilderness</td>
<td>593,365</td>
<td>26%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>167,541</td>
<td>7%</td>
</tr>
<tr>
<td>Whitman Ranger District</td>
<td>638,000</td>
<td>28%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>116,769</td>
<td>18%</td>
</tr>
<tr>
<td>Ten Cent Analysis Area—Whitman R.D. portion</td>
<td>40,636</td>
<td>6%</td>
</tr>
<tr>
<td>Wilderness</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Inventoried Roadless Area</td>
<td>2,310</td>
<td>6%</td>
</tr>
<tr>
<td>Potential Wilderness Area</td>
<td>2,550</td>
<td>6%</td>
</tr>
<tr>
<td>Undeveloped Lands</td>
<td>11,597</td>
<td>29%</td>
</tr>
</tbody>
</table>

1 Portion (acres) of both Oregon and Washington that are National Forest System lands.
2 Portion (acres) of US Forest Service Pacific Northwest Region that is managed by each National Forest.
3 Portion (acres) of Umatilla National Forest that is managed by the North Fork John Day Ranger District
4 Portion (acres) of the North Fork John Day Ranger District that occurs within the 10 Cent analysis area.
5 Portion (acres) of Wallowa-Whitman National Forest that is managed by the Whitman Ranger District
6 Portion (acres) of the Whitman District that occurs within the 10 Cent analysis area.

WILDERNESS, WILD & SCENIC RIVERS, & INVENTORIED ROADLESS AREAS

All of the Greenhorn Unit and the southern portion of the North Fork John Day Unit of the North Fork John Day Wilderness on the Umatilla National Forest are within the Ten Cent planning area (25,203 acres). In addition, 2,489 acres of the Greenhorn Inventoried Roadless Area (IRA) on the Umatilla and Wallowa-Whitman national forests and 2,930 acres of the Twin Mountain IRA on the Wallowa-Whitman National Forest are also within the Ten Cent planning area. About 51 acres of the North Fork John Day Wild & Scenic River are also within the planning area.

The North Fork John Day Wilderness contains several notable features of value: high water quality, anadromous fish spawning habitat, big game habitat, and historic features associated with mining. The North Fork John Day Wilderness Action Plan (Action Plan) identifies that vegetative changes resulting from prescribed fire would not be considered unacceptable changes in forest cover or visual/scenic qualities. The mosaic of vegetation created by fires over time is a natural ecological condition and provides vegetative and scenic diversity (Action Plan pages 24-25). Past fire suppression within the Wilderness has affected wilderness character by causing trammeling and disrupting natural burning cycles, thus allowing a buildup of fuels that would have otherwise burned during those cycles. Current fire regimes for the portion of the Wilderness planned for treatment are identified in Table 2. This information indicates that 96 percent of this portion of the Wilderness (Fire Regimes III and IV) should have burned one to three times in the last hundred years and the remainder (Fire Regime I) should have burned three or more times if fire had been allowed to play its natural role. There have been numerous fire starts, but constant fire suppression has led to excessive fuel build-up increasing the probability that when fire finally does occur it will be of high severity consuming most vegetation and soil cover.

Table 2: Fire Regimes within the Ten Cent portion of the North Fork John Day Wilderness

<table>
<thead>
<tr>
<th>Fire Regime</th>
<th>Acres</th>
<th>Regime Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>376</td>
<td>0-35 year frequency and low to mixed severity (less than 75% of the dominant overstory vegetation replaced)</td>
</tr>
<tr>
<td>III</td>
<td>6,819</td>
<td>35-100+ year frequency and mixed severity (25% to 75% of the dominant overstory vegetation replaced)</td>
</tr>
</tbody>
</table>
Wilderness, inventoried roadless areas, land with wilderness characteristics, and other undeveloped lands

<table>
<thead>
<tr>
<th>Fire Regime</th>
<th>Acres</th>
<th>Regime Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>2,316</td>
<td>35-100+ year frequency and high severity (greater than 75% of the dominant overstory vegetation replaced)</td>
</tr>
<tr>
<td>V</td>
<td>9</td>
<td>200+ year frequency and high severity (greater than 75% of the dominant overstory vegetation replaced)</td>
</tr>
<tr>
<td>Non-vegetated</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,560</strong></td>
<td></td>
</tr>
</tbody>
</table>

A portion of the Greenhorn IRA (9% of the total IRA) lies within the southwestern part of the Ten Cent planning area. This is 6% of all inventoried roadless areas within the North Fork John Day Ranger District of the Umatilla National Forest and less than 1% of IRAs on the adjoining Wallowa-Whitman National Forest districts (172 acres). This portion of the IRA is associated with Umatilla Forest Plan management area A8 (Scenic Area). About 5% of the Twin Mountain IRA lies within the northeastern part of the Ten Cent planning area. This is 4% of all inventoried roadless areas within the Whitman Ranger District of the Wallowa-Whitman National Forest. This portion of the IRA is associated with Wallowa-Whitman Forest Plan management areas 6 (Backcountry), 15 (Old Growth), and 18 (Anadromous Fish). Inventoried Roadless Areas provide primitive recreation opportunities, quality wildlife and fish habitat, cold, clean water and clean air.

The portion of the North Fork John Day Wild & Scenic River that lies within the Ten Cent planning area is a wild segment (51 acres) completely contained within the North Fork John Day Wilderness. The Wild & Scenic Rivers Act requires that a river be free flowing and possess one or more “outstandingly remarkable values”. This river was designated in 1988 based on its scenic, fisheries, wildlife, and historic outstandingly remarkable values. According to the North Fork John Day Wild & Scenic River Management Plan (Management Plan), the viewing area of wild river sections will have an essentially natural appearance. (Management Plan page 5). River sections located within the Wilderness will be managed under Wilderness or Wild and Scenic River principles and standards and guidelines, whichever is most restrictive. (Management Plan page 7). Manage visual resources to meet standards as follows: in wild segments, preservation (ecological changes only) is the norm. (Management Plan page 10). Prescribed burning will be permitted. Low intensity prescribed fires, producing minimal scorch and rapid recovery will be the most desirable. Use fire as a tool to meet vegetation management needs. Fire has a natural role in the management of the river corridor. (Management Plan page 18)

EFFECTS OF NO ACTION ALTERNATIVE

**Direct and Indirect Effects:** Natural fire cycles in the North Fork John Day Wilderness, Greenhorn and Twin Mountain IRAs, and North Fork John Day Wild & Scenic River would continue to be interrupted by fire suppression and existing fuels would continue to accumulate (Ten Cent Fire & Fuels Report). The type of high intensity wildfire indicated by existing fuel loads would remove vegetation from thousands of acres (as occurred in other portions of the Wilderness in the last 30 years with the Bull, Summit, Tower, Trout Meadows, North Fork Complex, Ryder Creek, Trout Creek and Vinegar wildfires). This would remove cover for big game, produce an influx of sediment into anadromous fish spawning habitat, and increase water temperatures due to loss of shade. The quality of the recreation experience would also decline for a period of time after such a wildfire and affected trails could become impassible with fallen trees. Many historic features would become more visible due to the loss of vegetation.

EFFECTS COMMON TO ALL ACTION ALTERNATIVES (2-4)

**Direct and Indirect Effects:** The only activities proposed within the IRAs would be prescribed fire, which would have effects similar to those discussed for wilderness. Fire could creep down to the Wild &
Scenic River corridor, but the effects of such would appear natural, meeting the “preservation” visuals standard. Views of the fire would appear as a mosaic from the river corridor, again meeting standards specified in the Wild & Scenic River Management Plan.

EFFECTS UNIQUE TO ALTERNATIVE 2

Direct and Indirect Effects: A Minimum Requirements Decision Guide was completed to determine the appropriate management and tools for applying fire in the North Fork John Day Wilderness (Appendix B). As a result, prescribed fire would be applied both outside the wilderness and allowed to back into the wilderness, and ignition would also occur along existing trails and ridgelines within the wilderness. No tree cutting or fireline construction would occur within the wilderness. Prescribed fire in the wilderness would begin to reduce fuel loadings and configurations to that which would be experienced under uninterrupted natural fire cycles. This would begin to restore naturalness in both fuel loads and vegetation type and density. Since the fire would only be controlled once it reaches the wilderness boundary, control features such as fire line trenches or tree stumps would not occur in the wilderness. Removal of fuels under prescribed fire conditions would protect other wilderness features of value such as big game and anadromous fish habitat, high water quality, and historic features.

CUMULATIVE EFFECTS OF ALL ACTION ALTERNATIVES

The effects of the proposed prescribed fire would combine with effects from past wildfires within the Wilderness and Inventoried Roadless Areas (and if it creeps into the Wild & Scenic River corridor) to create a mosaic of low fuel loads. This would allow for future wildfire to burn instead of being suppressed. Cumulatively, this would benefit the natural character of the Wilderness and reduce future trammeling associated with fire suppression. Combined effects of the proposed prescribed fire with effects of past fires within the Inventoried Roadless Area and Wild and Scenic River corridor would also create conditions that would allow future natural fire to occur. These effects would appear natural and visually blend with surrounding areas that have burned, creating a mosaic of vegetation types and sizes. There would be no cumulative effect on future wilderness decisions associated with a forest plan revision in these areas.

MODIFICATION OF POTENTIAL WILDERNESS AREA AND UNDEVELOPED LANDS ANALYSIS SINCE THE DRAFT EIS

Litigation and case law, NEPA regulations, Forest Service Handbook (FSH) direction, Forest Plan revision, and continued public comments regarding Potential Wilderness Areas (PWAs), and/or unroaded/undeveloped areas has resulted in some Region 6 forests conducting project level analysis of potential impacts to these areas.

When the 10 Cent draft EIS was published, the EIS followed Region 6 policy and case law concerning disclosing impacts of site-specific projects on Lands with Wilderness Characteristics using inventory criteria found in FSH 1909.12 Chapter 70. Since then Washington Office and Region 6 sent direction to the forests prohibiting use of FSH 1909.12 CH 70 inventory criteria in project NEPA analysis. Using and applying Chapter 70 inventory criteria at the project level is not consistent with the 2012 Planning Rule because “none of this subpart apply to projects or activities” (36CFR219.2(c)).

The Umatilla National Forest conducted a Potential Wilderness Area (PWA) inventory for forest plan revision and updated the inventory in 2010 (2010 PWAs) consistent with agency policy at that time. Only acres of land inventoried as PWA were carried forward into the forest plan.
revision evaluation and wilderness recommendation process. The forest plan draft EIS was released in 2014 and the 2010 PWA inventory was used to evaluate, analyze, and recommend wilderness in the alternatives.

The PWAs from the 2010 inventory and 2014 Forest Plan DEIS are considered and site-specific effects to them analyzed in this 10 Cent site-specific project FEIS analysis replacing the DEIS Lands with Wilderness Characteristics polygons and analysis (including determining potential impacts to future wilderness recommendations in forest planning).

During the comment period for the 10 Cent DEIS, some commenters raised concerns about effects on lands that do not contain development and exist outside of identified Wilderness, Inventoried Roadless Areas, and Potential Wilderness Areas. Because Lands with Wilderness Characteristics are no longer inventoried at the project level, those areas identified in the DEIS as Lands with Wilderness Characteristics that do not occur within (overlap with) a PWA need to be considered. This FEIS considers these acres of land within the undeveloped lands analysis. Therefore, identification of undeveloped lands within the 10 Cent project area was recalculated to incorporate lands outside of PWAs as described in the following methodology section and this addendum includes an updated existing condition for undeveloped lands and any changes to the predicted effects of the proposed activities.

In this final report for the FEIS, the Lands with Wilderness Characteristics section has been replaced with a section on Potential Wilderness Areas and portions of the Undeveloped Lands section were updated to reflect changes that resulted from eliminating lands with wilderness characteristics from project-level analysis.

POTENTIAL WILDERNESS AREAS

SCALE OF ANALYSIS
The scale of this analysis includes all acres contained within the Ten Cent project planning area and adjacent USFS and other federal lands, as appropriate, sufficient to consider effects to the Potential Wilderness Areas (PWA) identified in the 2010 inventory.

METHODOLOGY AND ASSUMPTIONS
For the PWA analysis, the PWAs identified in 2010 inventory\(^1\) were displayed on a map together with Wilderness, Inventoried Roadless Areas, and proposed treatments under the alternatives. Analysis was then conducted where proposed treatments and PWA overlapped.

Note that in some places the Wilderness boundary and PWA boundary overlap and in other areas these boundaries have small gaps. This is because adjustments were made to the Wilderness boundary after the

\(^{1}\) The Forest Plan Revision 2010 PWA inventory can be viewed at [https://www.fs.usda.gov/detail/wallowa-whitman/landmanagement/planning/?cid=stelprd3798047](https://www.fs.usda.gov/detail/wallowa-whitman/landmanagement/planning/?cid=stelprd3798047)
2010 PWA inventory was completed. Analysis was conducted under the assumption that where PWA abuts Wilderness, the boundaries should align, regardless of what appears on the map.

**INDICATORS FOR COMPARISON**

The measures used to compare between alternatives lands that may have wilderness characteristics are:

- Intrinsic biophysical values (soils, water, fisheries, plants, wildlife)
- Intrinsic social values (recreation, apparent naturalness, remoteness, scenic quality, cultural resources)
- Other locally identified unique characteristics
- Change in acres of lands with wilderness characteristics
- Effect on availability for future wilderness evaluation in Forest Plan revision

**AFFECTED ENVIRONMENT**

There are seven Potential Wilderness Areas from the 2010 inventory that occur within the 10 Cent planning area (see Map A-1). The one on the Wallowa-Whitman N.F. overlies the Twin Mountain Inventoried Roadless Area. On the Umatilla N.F. (and a small portion of the Malheur N.F.), two on the southwest side of the planning area overlie the Greenhorn Mountain Inventoried Roadless area and the remainder are extensions of the North Fork John Day Wilderness.

When the 10 Cent treatment units were originally overlaid with the 2010 inventoried PWAs, there were 58 acres of units within the PWAs. This was the result of PWA boundaries being located 300 feet from open roads, whereas the affected units extended 500 feet from an open road. As a result, those units have been modified to remove any harvest treatment areas that overlap with the PWAs.

**ENVIRONMENTAL CONSEQUENCES**

**Alternative 1 (No Action)**

**Direct and Indirect Effects:** All 7,846 acres of Potential Wilderness Areas (acres include PWA on Malheur National Forest in addition to PWA acres shown in Table 1) would remain undisturbed by the proposed project. The area would continue to appear predominantly natural. Scenic integrity within much of the area would remain very high, with only brief glimpses of closed roads on the landscape. There would be no changes to Late Old Structure wildlife habitat or pileated woodpecker source habitat. There would also be no changes to fisheries habitat and streams would remain unaffected by forest treatments within the polygon. Therefore, selecting this alternative would not affect any future wilderness decision associated with a forest plan revision.

**Effects Common to All Action Alternatives**

**Direct and Indirect Effects:** No roads and harvest are proposed within the PWAs in any action alternative, therefore there would be no direct or indirect impacts to PWAs. All PWA acres may be considered in future wilderness evaluation and recommendation processes.

Proposed prescribed fire would not affect a wilderness decision because the effects would appear similar enough to natural fire that management would not be obvious to the common observer because prescribed burning does not build new forest roads and there is no harvest that creates stumps. Fire and fire effects do not reduce the acres of land that meet the PWA inventory criteria. Therefore, selecting any of the action alternatives would not affect any future wilderness decision associated with a forest plan revision.
Cumulative Effects

There would not be any direct, indirect, or cumulative effects to any PWA. Therefore a future wilderness evaluation and wilderness recommendation decision associated with a forest plan revision using these PWAs would not be affected by any of the alternatives.

UNDEVELOPED LANDS

INTRODUCTION

The public has expressed concerns regarding effects to lands that have not yet been developed regardless of whether they are officially recognized as a Wilderness, Inventoried Roadless Area, or Potential Wilderness Area. As a result, effects to undeveloped lands are considered and described in this section. For this analysis, undeveloped lands do not contain substantially noticeable management activities (defined under Methodology) and do not contain development within 300 feet of maintenance level 1, 2, 3, 4, or 5 Forest Service roads or open County roads. Detailed information regarding the methodology used for the Ten Cent project analysis, along with maps and tables is located in Appendix A of this document. Note that the resulting undeveloped lands analysis is not related in any way to forest planning wilderness inventory and evaluations. Undeveloped lands analysis does not reference the planning handbook (FSH 1901.12) or the Wilderness Act as they are not relevant to this analysis.

There are no forest-wide or management area standards specific to undeveloped lands in either the Umatilla or Wallowa-Whitman forest plans. All lands, including undeveloped lands, are managed consistent with forest-wide standards and guidelines and by designated Forest Plan management area allocations.

SCALE OF ANALYSIS

The scale of this analysis includes all acres contained within the Ten Cent project planning area and adjacent USFS and other federal lands, as appropriate, sufficient to consider effects to the undeveloped lands.

Where areas that lacked development abutted the project boundary, lands outside the boundary were also analyzed to the extent that the next area with development was encountered. The scale of analysis is appropriate because it considers all lands within and adjacent to the Ten Cent project that are bounded by development such as roads, past harvest activity and private land (Appendix A, Maps A-1 through A-5).

METHODOLOGY AND ASSUMPTIONS

The identification of undeveloped lands was conducted through a sequence of GIS and database analyses, field verification, and application of professional judgment. The judgment applied was situational and instance by instance.

Lands 300 feet on either side of the centerline of all maintenance level 1, 2, 3, 4, and 5 Forest Service roads and open County Roads are considered developed due to evidence of stumps from firewood cutting and hazard tree removal, dispersed campsites, and other activities allowed under the current Forest Plan.

Lands with development were identified by creating a map that depicts past harvest and thinning from the FACTS and Legacy Harvest databases together with an orthophoto of the project area. This information was viewed both in terms of type of management and year of implementation. Where the orthophoto did not clearly indicate noticeable development (i.e. a uniform change in tree crown size and height, consistently open tree spacing, skid trails, etc.) stand conditions were verified on the ground.

Administrative sites, developed recreation sites, and developed mines were also included as lands with development.
Wilderness, Inventoried Roadless Areas, Land with Wilderness Characteristics,
and Other Undeveloped Lands

Wilderness, Inventoried Roadless Areas, Potential Wilderness Areas, development associated with roads,
and managed lands were then subtracted from the 10 Cent planning area acres and the remaining acres are
considered undeveloped lands. All polygons less than one acre were dropped from detailed study because
individual polygons this small could easily result from mapping error and they are too small to be
meaningful. Where an undeveloped land polygon intersected the 10 Cent planning area boundary, the
polygon extends outside the project boundary to show the full extent of that piece of undeveloped land.

INDICATORS FOR COMPARISON

The following values are used as indicators of comparison to display effects among alternatives on other
undeveloped lands:

- Intrinsic biophysical values (soil, water, fisheries, plants, wildlife)
- Intrinsic social values (recreation, apparent naturalness, remoteness, scenic quality)
- Other locally identified unique characteristics
- Change in acres of other undeveloped lands

AFFECTED ENVIRONMENT

In the 96,767 acre analysis area, approximately 20,295 acres (about 21 percent of the analysis area) have
been identified as polygons of other undeveloped lands that are at least one acre in size (see Appendix A
for individual polygon acres). For perspective, one acre is slightly less than a football field without end
zones and one square mile is about 640 acres. Individual polygons of other undeveloped lands less than an
acre were eliminated from further study because they are too small to be meaningful. The residual shape
of each undeveloped polygon is the result of boundaries created by noticeable past management activities
and development along roads.

Table 3: Undeveloped Lands Summary

<table>
<thead>
<tr>
<th>Description</th>
<th>Approximate Acres Ten Cent Analysis Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total acres considered within analysis area*. (Map A-1)</td>
<td>96,767</td>
</tr>
<tr>
<td>Lands that are not National Forest within the analysis area (i.e. private lands)</td>
<td>4,145</td>
</tr>
<tr>
<td>Existing Wilderness</td>
<td>25,203</td>
</tr>
<tr>
<td>Existing Inventoried Roadless Areas</td>
<td>5,419</td>
</tr>
<tr>
<td>Existing Potential Wilderness Areas</td>
<td>7,846</td>
</tr>
<tr>
<td>Excluded acres of development associated with ‘road improvements’ (roads maintained to level 1, 2, 3, 4, or 5). (Map A-2)</td>
<td>28,922**</td>
</tr>
<tr>
<td>Excluded acres of development associated with ‘other improvements’ (e.g. acres of substantially noticeable timber harvest, developed campgrounds, mining, etc.) (Map A-3)</td>
<td>26,480</td>
</tr>
<tr>
<td>Acres of Undeveloped Land (Map A-4)</td>
<td>20,295***</td>
</tr>
</tbody>
</table>

* This includes all acres contained within the Ten Cent planning area and other adjacent USFS and federal lands.

** Some of these acres may overlap with acres of substantially noticeable other improvements.

*** This number does not include polygons less than one acre in size. This also includes acres that are outside the Ten Cent project boundary.
Wilderness, Inventoried Roadless Areas, Land with Wilderness Characteristics, and Other Undeveloped Lands

Table 4: Undeveloped Lands Polygon Size Distribution for the 10 Cent Project

<table>
<thead>
<tr>
<th></th>
<th>1-10 acres</th>
<th>11-100 acres</th>
<th>101-640 acres</th>
<th>&gt;640 acres</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of polygons</td>
<td>193</td>
<td>127</td>
<td>29</td>
<td>9</td>
<td>358</td>
</tr>
<tr>
<td>acres</td>
<td>751</td>
<td>4,178</td>
<td>6898</td>
<td>8469</td>
<td>20,2968</td>
</tr>
</tbody>
</table>

Human influences have had limited impact to long-term ecological processes within the undeveloped lands. Disturbance by insects and fire has been and most likely will continue to be the factors with the most potential to impact the area.

Soils on undeveloped lands may still experience the effects of compaction and displacement from management activities that are no longer noticeable on the surface. Compaction and displacement within the prism of the management impacts (equipment trails) may still have the capacity to diminish vegetative growth and ground cover (Froehlich & McNabb1983, Amaranthus et al, 1996, Bulmer et al, 2010 and Miller 2004). Vegetation outside of the impact area often offers a source of ground cover from falling dead organic matter. While these management impacts may not be visible within feet of the impact; they can be viewed in aerial photography where not obscured by canopy closure. The existence of canopy closure does not mean the impacts are no longer present. Maintenance level 1 roads may also still be experiencing residual soil effects (such as potential instability) because on the whole, these roads were not returned to their original contour. These roads have had drainage structures removed and their surfaces may be largely re-vegetated, but there may be areas of localized erosion and much of their length would still be compacted. Where no roads or past management have occurred, soils would be unimpaired by humans.

Water resources on undeveloped lands would be largely unimpaired by humans. Exceptions would include maintenance level 1 roads and spring developments, both of which intercept ground water and potentially alter over-surface flows. There are perennial springs within the undeveloped lands, most of which have been developed for livestock and wildlife. These water systems and fences are maintained annually as needed. The water developments are necessary for operation of the grazing permits. A few have been inventoried, and a sub-set support groundwater dependent ecosystems (Fritz and Hernandez, 2014). Where no water developments, roads or past management have occurred, water flows and quality would be unimpaired by humans.

Plant communities, particularly habitat for threatened, endangered, and sensitive species, would be mostly unimpaired by human activities. Areas impacted by past management activities and maintenance level 1 roads have altered plant communities progressing through various stages of succession. Noxious weeds have fewer transport venues in undeveloped areas and less opportunity to become established. However noxious weeds have many vectors, such as wind and wildlife, and infestations in remote areas not often visited likely go undetected and untreated.

Wildlife habitat on undeveloped lands varies widely in structure, composition, and density. These stands provide habitat for a wide range of wildlife species dependent on open canopy forest, closed canopy forest, grasslands, shrublands, early successional stages, dead wood, and other features. This variation in structure, composition, density, and other habitat features (including snags and downed wood) are the result of multiple factors including historic disturbance regimes, topographical features (aspect, slope position, moisture gradients, etc.), past management (harvest, fire suppression, etc), and other factors. In some areas, past management is no longer noticeable in terms of evidence of harvest or maintenance level
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1 roads, but changes in species composition and density (due to fire suppression or removal of certain species and size classes) and dead wood availability still exist. Areas where there have been no timber management activities often provide snag densities that exceed those expected based on data from reference stands. Where no road building, past timber management, or natural disturbance events have occurred, snag and downed wood dynamics and stand structure, composition, and density (which contribute to habitat quality for a wide suite of wildlife species) are similar to what would have been expected historically and show no impairment by humans. Larger blocks of undeveloped lands (areas 1,000 acres or more) would serve as movement corridors for many wildlife species. Where moisture and other factors allow, undeveloped lands and those areas where management activities are no longer noticeable (in terms of stand structure) provide higher quality and better distributed cover habitat for elk and dense dry upland forest stands for species like the pileated woodpecker.

Recreation in undeveloped lands would consist of cross-country hiking, horseback riding, hunting, bird and wildlife viewing, and gathering of natural foods and medicines. Undeveloped lands in the northwest half of the Ten Cent analysis area are very dissected and dispersed. Opportunities for a feeling of remoteness are limited by the size and shape of polygons. Distance and topographic screening are also factors in creating such opportunities. Nearby, sights and sounds of roads and timber harvest can be heard and often seen from within the undeveloped lands. In larger polygons of undeveloped lands, there are numerous management-created openings scattered throughout the polygons. A sense of remoteness may be experienced in the portions of such polygons where past management is not visible. Visual integrity within many undeveloped lands would be pristine in the foreground, but views of managed landscapes could intrude, depending on the amount of screening provided by topography and tree cover. Cultural resources within undeveloped lands would be undisturbed by management and the historic integrity and character of these sites would be intact.

No additional special or unique values in undeveloped lands associated with the Ten Cent analysis area have been identified by project resource specialists.

The existing condition of all remaining land within and affected by the Ten Cent analysis area that are not undeveloped lands present a landscape that has been managed and is generally developed in nature; these lands contain evidence of past harvest and forest roads. Past management actions and current conditions reflect the multiple-use intent and decisions made in the Forest Plan (1990 as amended), and reflects consistency with Forest Plan management area allocations.

ENVIRONMENTAL CONSEQUENCES

Effects of No Action Alternative

Direct and Indirect Effects: There would be no direct effects to undeveloped lands because no activities would occur in these areas. The affected environment would remain unchanged, except by natural processes and ongoing management activities (see description of affected environment in Chapter 3 for a full list of resources considered). Biological and ecosystem functions would continue. The landscape would likely continue developing complex fuel loads. A wildfire would have potential to result in extensive mortality within denser forest stands which would result in larger acreages of blackened landscapes compared to prescribed fires. Some forest visitors would avoid blackened landscapes, at least until green vegetation predominantly returns (3 to 5 years). However, fire is a natural occurrence and expected disturbance process in this landscape. All polygons of undeveloped lands would continue to not be an inventoried roadless area, potential wilderness area, or a designated wilderness area.

For the No Action alternative, the Ten Cent project would not be authorizing any actions; therefore it would not be adding anything to the effects of past, present, and reasonably foreseeable future actions.
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Based on the definition provided in the CEQ regulations there would be no cumulative effects for the No Action Alternative.

**Table 5: Undeveloped Lands (UL) in 10 Cent Planning Area by Alternative**

<table>
<thead>
<tr>
<th>Alternative</th>
<th>UL Acres Prior to Activity</th>
<th>UL Acres Remaining After Implementation</th>
<th>Amount of UL in Analysis Area Affected by Treatments*</th>
<th>Percent Loss of UL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20,304</td>
<td>20,304</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>20,304</td>
<td>17,034</td>
<td>3.4%</td>
<td>16.1%</td>
</tr>
<tr>
<td>3</td>
<td>20,304</td>
<td>17,034</td>
<td>3.4%</td>
<td>16.1%</td>
</tr>
<tr>
<td>4</td>
<td>20,304</td>
<td>17,623</td>
<td>2.8%</td>
<td>13.2%</td>
</tr>
</tbody>
</table>

* Does not include prescribed fire treatments as these would have effects similar to natural wildfire.

**Effects Common to All Action Alternatives (2-4)**

**Direct and Indirect Effects:** Table 6 displays the management activities that would occur within undeveloped lands under each alternative. In many cases, harvest would completely develop smaller undeveloped land polygons (see Map A-5). Harvest treatments within larger undeveloped lands polygons mostly occur along the edges and would leave the majority of the polygon intact. However, there are five larger undeveloped lands polygons that would be almost entirely affected by development, or the development would split the polygon into several small pieces:

- Polygon 443 is 752 acres, over half of it would be developed after implementation and the remainder would be in three small and separated polygons.
- Polygon 481 is 441 acres and about half of it would be developed after implementation
- Polygon 524 is 693 acres and about half of it would be developed after implementation
- Polygon 540 is 317 acres and would be almost entirely developed after implementation
- Polygon 570 is 776 acres and over half of it would be developed after implementation

Effects to the intrinsic physical and biological resources of undeveloped lands within the Ten Cent planning area (soils, water, wildlife, recreation, fisheries, etc.) are disclosed in the applicable resource sections of the EIS and only briefly summarized here.

Where management would occur within undeveloped lands, soils would be exposed to compaction and displacement from heavy equipment and erosion due to soil surface exposure during skidding or road construction/reconstruction. However, given the design criteria, a minimum of 80 percent of an activity area would remain in a condition of acceptable productivity potential consistent with Forest Plan standards.

Bull Run Creek, a class I stream, occurs within or adjacent to polygons 443, 481, and 570. It contains steelhead and its critical designated habitat. Rabbit Creek occurs adjacent to polygon 524, and contains steelhead and its critical designated habitat. Polygon 524 also contains 3 mapped springs/seeps. Boulder, Granite, East Ten Cent, and Ten Cent creeks, all class I streams, occur within or adjacent to polygon 570 and contain steelhead and its critical habitat. The action alternatives have the potential to impact surface water quality and groundwater. However, the project contains site-specific Best Management Practices.
Wilderness, Inventoried Roadless Areas, Land with Wilderness Characteristics, and Other Undeveloped Lands

which are designed to prevent further impairment to water quality and to protect groundwater. These Best Management Practices would also prevent impacts on fish. In addition, the potential for high intensity wildfire in the riparian areas would be reduced.

Design criteria would protect threatened, endangered, or sensitive plants. Areas of disturbed soil would be open to colonization by noxious weeds.

Vegetation treatments would move treated forests to early seral species and tend to promote more open stands composed of larger, older ponderosa pine. These changes would benefit some wildlife species associated with open conditions, while reducing habitat for species associated with closed canopies and greater proportions of fir. Where cover is reduced, elk could disperse to other areas with cover and low levels of motorized disturbance. It is likely that vegetation treatment and road use in undeveloped lands would reduce existing snag densities to a small degree and impact the context of habitat (conversion of more dense stands to more open stands). Vegetative treatments would also impact future snag recruitment over a large portion of the forested acres in the analysis area. While snag densities in treatment units would likely be reduced in the short and mid-term (and in some cases the long-term) it is not expected that the snag density distribution at the analysis area scale would be affected appreciably.

Recreation would change slightly, adding dispersed camping, motorized sports, and firewood collection to the potential uses within undeveloped lands. The quality of the hunting experience would be reduced if elk are displaced. Where treatment occurs within undeveloped lands, there would be a loss of apparent naturalness. Recreationists seeking a primitive experience or a sense of remoteness would have less area available due to harvest in the large polygons of undeveloped lands (polygons 443, 481, 524, 540, and 570), whereas the small polygons have already been infringed upon by adjacent sights and sounds of management and human presence prior to implementation. On acres treated by commercial or noncommercial thinning, management activities would be noticeable for up to 50 years, depending on the rate of stump decay and recovery of disturbed soils. Prescribed fire would have little effect on undeveloped lands characteristics in that the majority of the treated area would still appear natural, with some non-conforming fire control lines and periodic stumps related to removal of hazardous snags. Pile burning would appear less natural, as blackened circles spaced somewhat regularly on the ground, but vegetation regrowth would begin to disguise this in one year, and by three years only burn scars on trees should be noticeable. Visual quality within undeveloped lands where management occurs would still meet Forest Plan standards, although views would no longer be pristine.

There are several cultural resource sites within these undeveloped lands, however no impacts are expected on known cultural resources since all would be avoided by project activities. All of the proposed activities will not affect the historic integrity or historic character of these sites.

Environmental effects to resources in undeveloped lands due to the implementation of proposed project activities would be consistent with applicable laws, regulations, and Forest Plan management area standards and guidelines (see applicable sections of the EIS for Findings of Consistency for each resource).

All action alternatives propose some level of activity within undeveloped lands, varying only by the number of acres or miles treated (see Table 6). Refer to the Appendix and associated maps to see the location of activity units and undeveloped lands and the EIS Chapter 2 for a listing of harvest activity units and logging method.
Wilderness, Inventoried Roadless Areas, Land with Wilderness Characteristics, and Other Undeveloped Lands

Table 6: Activities proposed in Undeveloped Lands in Ten Cent planning area

<table>
<thead>
<tr>
<th>Activities proposed in Undeveloped Lands</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Thinning, Non-commercial Thinning, Firewood, and Mechanical Fuels Treatment</td>
<td>2,691 acres</td>
<td>2,691 acres</td>
<td>2,103 acres</td>
</tr>
<tr>
<td>Riparian Non-commercial Thinning</td>
<td>581 acres</td>
<td>581 acres</td>
<td>580 acres</td>
</tr>
<tr>
<td>Temporary Road Constructed</td>
<td>2.4 miles</td>
<td>2.4 miles</td>
<td>2.3 miles</td>
</tr>
<tr>
<td>Closed Road Re-opened for Hauling</td>
<td>0 miles</td>
<td>0 miles</td>
<td>0 miles</td>
</tr>
<tr>
<td>Prescribed Fire-Landscape</td>
<td>7,928 acres</td>
<td>2,450 acres</td>
<td>7,848 acres</td>
</tr>
<tr>
<td>Prescribed Fire-Slash and Pile Burn</td>
<td>1,127 acres</td>
<td>1,588 acres</td>
<td>1,127 acres</td>
</tr>
</tbody>
</table>

Undeveloped lands with no proposed treatments would remain the same as described in the affected environment. All 20,304 acres of other undeveloped lands within the analysis area would still not be considered a designated wilderness area, potential wilderness area, or inventoried roadless area.

**Cumulative Effects Common to All Action Alternatives (2-4)**

The cumulative effects geographic boundary is the 96,767 acre Ten Cent analysis area. This boundary is appropriate because a larger scale would dilute the effects on undeveloped lands and their intrinsic biophysical and social values. The temporal boundary for this cumulative effects analysis is 50 years. This timeframe is appropriate because that is how long it would take harvest and temporary road construction to no longer be noticeable (based on field observations of other past management in the Ten Cent analysis area).

In the project area the increased numbers of stumps, the open nature of the forest stand, and soils disturbed by skid trails, temporary roads, and landings would likely be the most apparent change resulting from implementation. In the long term (about 50+ years), the proposed activities would result in the development of historic open, park-like conditions, characterized by larger diameter trees. Prescribed burning and future wildfires would cumulatively change composition and structure of vegetation (EIS, Chapter 4 Vegetation section). Burned areas would display a prominent blackened color for about one year, becoming subordinate on the landscape as grass and other vegetation grows. Outside the treated areas, the conditions described in the affected environment would remain unchanged except by natural processes and ongoing activities such as grazing and hunting.

The intrinsic biophysical values of undeveloped lands would be cumulatively impacted by implementation of the Ten Cent project, grazing, past harvest and road construction. For undeveloped lands in which project activities would occur, the cumulative effects to soil; water quality; plant and animal communities; habitat for threatened, endangered, and sensitive species; recreation; and cultural resources are disclosed in the applicable resource sections of the EIS and are not reiterated here. Apparent naturalness and a sense of remoteness would be cumulatively impacted by grazing, dispersed camping, and motorized ATV and vehicle use on roads. Effects associated with recreational use, including noxious weed spread, erosion, litter, and evidence of fire rings, are expected to remain cumulatively minor.
**FINDING OF CONSISTENCY**

All 20,304 acres of other undeveloped lands identified within the analysis area would not qualify as a potential wilderness area, inventoried roadless area, or a designated wilderness area. This outcome is consistent with the intent of the land allocation decisions made in the Forest Plan.

/s/ Janel Lacey  

JANEL LACEY  
South Zone Recreation Manager  

DATE: 6/4/17

**ATTACHMENTS:**

Appendix A: Inventory of Potential Wilderness Areas and Identification of Other Undeveloped Lands.

**BIBLIOGRAPHY**