

Appendix D – Stonewall Roadless Area Characteristics Worksheet

<p>Roadless Characteristics As described in 36 CFR 294 – Roadless Area Conservation Final Rule, 2001</p>	<p>Is there an effect? Yes or No</p>	<p>Is the effect improving, stable or degrading?</p>	<p>Describe the actual effect. Use descriptive terms that discuss the effect, not the activity. Explain if the proposal would alter or modify the landscape.</p>
<p>Maintaining these areas in a relatively undisturbed condition saves downstream communities millions of dollars in water filtration costs. Careful management of these watersheds is crucial in maintaining the flow and affordability of clean water to a growing population.</p> <p>Identify any public drinking water systems or sources within the project area or that would be affected by the project. Describe how the project would affect water quality and quantity of the public drinking water source.</p>			
<p>Diversity of plant and animal communities Roadless areas are more likely than roaded areas to support greater ecosystem health, including the diversity of native and desired nonnative plant and animal communities due to the absence of disturbances caused by roads and accompanying activities. Inventoried roadless areas also conserve native biodiversity by serving as a bulwark against the spread of nonnative invasive species.</p> <p>Discuss the diversity of plant and animal communities. Identify any unique plant and animal communities within the area. Describe effects to the diversity of communities and impacts to populations in the areas.</p>	Yes	Stable/Improving	<p>Project IRA’s provide habitat for large number of wildlife species that depend on their remote forested character including nine threatened, endangered and sensitive species (discussed below). These areas provide critical lynx habitat, grizzly bear core and den habitat and wolverine den habitat. While activities proposed under alternatives 2 and 3 would result in short-term disturbance, because no new roads are proposed, all alternatives would maintain the remote character of the area and long-term human access would be unchanged under all alternatives. Approximately 23,000 acres have recently burned and due to elevated fuel conditions, the likelihood of stand replacing wildfire and a long-term loss of suitable wildlife habitat is greatest under alternative 1, whereas alternatives 2 and 3 both reduce the risk of catastrophic wildfire. Vegetative diversity would be relatively unchanged under alternative 1, although a continued reduction in whitebark pine and aspen is likely to occur. Treatments proposed under alternatives 2 and 3 would enhance stand and landscape level vegetative and habitat diversity, including maintenance or improvement of white-bark pine and aspen.</p>
<p>Habitat for TES and species dependent on large undisturbed areas of land Roadless areas function as biological strongholds and refuges for many species. Of the nation’s species currently listed as threatened, endangered, or proposed for listing under the Endangered Species Act, approximately 25% of animal species and 13% of plant species are likely to have habitat within inventoried roadless areas on National Forest System lands. Roadless areas support a diversity of aquatic habitats and communities, providing or affecting habitat for more than 280 threatened, endangered, proposed, and sensitive species. More than 65% of all Forest Service sensitive species are directly or indirectly affected by inventoried roadless areas. This percentage is</p>	Yes	Stable/Improving	<p>Plants: Under both alternatives, all treatments in the roadless areas would be prescribed burning with hand preparation. More area would be treated under alternative 2. TES plants: <i>Pinus albicaulis</i> (whitebark pine) is the only sensitive species found in the project area. Sensitive plant habitat has not been mapped in the project area, but there is likely to be potential habitat for eight additional herbaceous sensitive plant species. None of the herbaceous sensitive plants would be directly affected unless there are undiscovered occurrences in the roadless area. Treatment in the roadless area would be prescribed burns, generally of mixed severity that would create openings less than 75 acres in size. Low severity burns would be expected to have minimal impacts since these herbaceous species have adaptations to fire and all typically grow in moist to wet areas that would be less likely to burn. Large openings in the canopy could reduce the shade that is needed by several of these species. These species and their habitat would be expected to be similarly affected by wildfire. Occurrences of whitebark pine would be protected by the project design</p>

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<p>composed of birds (82%), amphibians (84%), mammals (81%), plants (72%), fish (56%), reptiles (49%), and invertebrates (36%).</p> <p>Identify any TES or sensitive species within the Roadless area. Describe how the project would affect the habitats or populations and whether this effect is significant across the normal range and distribution of these habitats and populations.</p>			<p>feature SILV-2 which is designed to protect individuals and enhance habitat for the species. Thus, while there is the potential for individuals to be charred or physically damaged during the treatment, beneficial effects for whitebark pine (in the form of habitat enhancement due to the removal of shade-tolerant species and creation of caching sites for Clark’s nutcrackers) are expected in the long-term.</p> <p>Invasive plants: Small areas of spotted knapweed overlap roadless area units 80, 82, and 84. Effects of fire on spotted knapweed are variable but available studies have shown that fire may kill above ground plant parts but the sturdy perennial taproot is likely to survive all but the most severe fires. For the most part, spotted knapweed may be expected to establish, persist, or spread following fire. In some cases hot fires have shown the greatest increase in spotted knapweed cover after several years (Zouhar 2001). Project design features and the ongoing weed management program on the Helena National Forest (which treats 1/3 of infested acres each year) would reduce the potential for new establishment and spread of spotted knapweed in the roadless areas as a result of proposed actions.</p> <p>Animals: Project IRA’s provide habitat for two federally listed species including the grizzly bear and Canada lynx and seven Regionally Sensitive Species including the gray wolf, wolverine, fisher, Townsend’s big-eared bat, black-backed woodpecker, flammulated owl and western toad. The following is a brief discussion of anticipated effects to these species.</p> <p>Grizzly Bear – All but approximately 2,700 acres of Project level IRA’s are considered occupied grizzly habitat and these areas contain 39,000 acres of grizzly bear core habitat and over 8,000 acres of den habitat. Because there are no roads proposed in the IRA, core habitat and Total Motorized and Open Motorized Road Densities would be unaffected under all alternatives. Under alternative 1, den habitat would be unaffected. Also while suitable habitat would be largely unchanged, over the long-term due to the absence of fire, whitebark pine would continue to decline under alternative 1. Under alternatives 2 and 3, localized short-term increases in human disturbance would occur during burning. Due to proposed low and mixed severity burning there would also be a reduction in cover on 4,845 acres and 3,564 acres under alternatives 2 and 3 respectively, although cover would be maintained within and adjacent to all units. Of this, potential short-term impacts to 979 acres of den habitat would occur under alternative2 and 920 acres of den habitat would be affected under alternative3. Unaffected den habitat would be widely available under both alternatives. Both alternatives 2 and 3 would maintain or promote development of white bark pine.</p>

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			<p>Canada Lynx – Project level IRA’s contain 32,587 acres of Lynx critical habitat. Because there is no hare habitat proposed for treatment within the IRA, lynx foraging habitat would remain relatively unchanged under all alternatives. Also due to the absence of treatment, lynx cover would be unchanged under alternative 1. Under alternatives 2 and 3, low and mixed severity fire would occur on 3,349 acres and 2,410 acres of suitable den habitat respectively and cover would be reduced on most of this acreage. However considering that up to 25 percent of the treatment sites would have unburned lands, suitable cover would continue to occur on all treatment sites. Also due to establishment of understory vegetation, proposed actions would increase long-term foraging habitat on the acreage treated. Large blocks of unaffected suitable habitat would be available in all watersheds and connectivity and landscape level habitat would be maintained under all alternatives. All alternatives are consistent with NRMLD standards and guidelines.</p> <p>Gray Wolf – Due to its remote nature, virtually all of the project IRA’s provide suitable gray wolf habitat, although no known den or rendezvous sites would be affected under any alternative. Also because there are no new roads proposed, long-term human access would be unchanged under all alternatives, although alternative 2 and 3 would increase short-term human access 4,845 and 3,565 acres respectively. Gray wolf foraging habitat would likely continue to decline in some areas but would generally be maintained under alternative 1, whereas under alternatives 2 and 3, wolf foraging would be maintained in the short-term and increased in the long-term.</p> <p>Wolverine – Project level IRA contain approximately 16,500 acres of wolverine den habitat. Prey availability and landscape connectivity would be largely unchanged under all alternatives. Den habitat under alternative 1 would be unaffected, whereas mixed severity burning would affect 1,648 acres or 10 percent of the suitable IRA den habitat under alternatives 2 and 3. Also there would be a short-term increase in human activity on this acreage, as well as a long-term reduction in cover. However 90 percent of the suitable habitat would be unaffected and suitable den and foraging habitat would continue to be available in all affected watersheds under all alternatives.</p> <p>Fisher – Project IRAs contain 478 acres of fisher summer habitat and 21,800 acres of winter habitat. Under alternative 1 suitable habitat and prey availability would be largely unchanged. Also because there would be no new roads, long-term human access would be unchanged under all alternatives. Due to proposed low and mixed severity burning, short-term disturbance to foraging individuals and a reduction in cover would occur on 39/1,189 acres of summer/winter habitat under alternatives 2 and 49/718 acres of summer/winter IRA habitat under alternative 3. Also due to the canopy openings associated with mixed severity burning, suitable summer/winter</p>

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			<p>habitat would be reduced 4/207 acres and 1/66 acres under alternatives 2 and 3 respectively. Preferred riparian habitat and travel corridors would be maintained under all alternatives.</p> <p>Townsend’s big-eared Bat – Most of the project IRA’s provide suitable foraging habitat for this species and under alternative 1 foraging habitat would be unaffected. Proposed burning would create more open understory conditions and improved foraging habitat on 3,564 and 4,845 acres under alternatives 2 and 3 respectively. While habitat would be reduced on sites where canopy openings would be created through mixed severity burning under alternatives 2 and 3 (up to 900 acres), suitable foraging habitat would continue to be widespread under all alternatives.</p> <p>Black-backed Woodpecker – Project IRAs contain approximately 23,000 acres of recently burned high quality black-backed woodpecker habitat. In the absence of future wildfires, habitat may decline under alternative 1. Under alternatives 2 and 3, high intensity burning would create high quality habitat on approximately 1,500 acres and 1,000 acres respectively.</p> <p>Flammulated Owl – Suitable flammulated owl habitat occurs on approximately 4,300 acres of project IRAs. Under alternative 1, preferred open canopy habitat would continue to decline. Proposed burning under alternatives 2 and 3 would increase open canopy habitat on 3,900 acres and 2,900 acres respectively.</p> <p>Western Boreal Toad – Suitable breeding habitat would be largely unchanged under all alternatives. While proposed burning would affect upland habitat on approximately 4,600 acres under alternatives 2 and 3, suitable habitat would continue to occur on all sites and foraging habitat would be improved on the acreage affected. Unaffected suitable upland habitat predominates across all watersheds under all alternatives.</p>
<p>Primitive and semi-primitive classes of recreation Roadless areas often provide outstanding dispersed recreation opportunities such as hiking, camping, picnicking, wildlife viewing, hunting, fishing, cross country skiing, and canoeing. While they may have many Wilderness-like attributes, unlike Wilderness the use of mountain bikes, and other mechanized means of travel is often allowed. These areas can also take pressure off heavily used wilderness areas by providing solitude and quiet, and dispersed recreation opportunities.</p>	<p>Yes</p>	<p>Stable</p>	<p>The ROS classification in the Bear-Marshall-Scapegoat-Swan and Lincoln Gulch IRAs is primarily Semi Primitive Motorized with areas of Roaded Modified and Roaded Natural. The primary recreation activities occurring within the roadless areas include hunting, hiking, dispersed camping, use of motorized trails in the summer and snowmobiling and cross-country skiing in the winter. In the short term, visitors may be temporarily displaced during implementation of the proposed activities (prescribed burning, hand slashing of small diameter trees and construction of hand fireline). Noise associated with hand slashing of small diameter trees and hand fireline construction would affect the expected experience associated with the areas’ roadless character, however this would only impact visitors traveling through the area during project implementation. The proposed low severity and mixed severity prescribed fire would create openings ranging from 5 to 75 acres in size, the more</p>

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<p>Describe current recreation opportunities within the Roadless area. Identify the effects of your project on the area and these activities. Describe the effect in terms of availability for similar experiences in surrounding areas or within the region of use. Consider link to ROS mapping.</p>			<p>open forest canopy is not expected to affect the recreation activities or experience within or adjacent to the project area in the long term. However, the prescribed fire activities would be noticeable by the area users, affecting the on-site management component of the expected setting. No road construction, reconstruction or maintenance is proposed within the IRA acreage; therefore the current IRA roadless characteristic would not change. There would be no long term impacts to recreation opportunities within the project area. Ecosystem restoration and a reduction in the risk of negative impacts from severe wildfire would help to maintain the recreation settings and opportunities.</p> <p>Alternative 2 would treat 4,846 acres out of the total combined 71,256 acres of both IRAs (managed by the Lincoln Ranger District); the prescribed fire would be implemented on 6.8 percent of the total Lincoln RD IRA acreage. Alternative 3 would treat 3,564 acres out of the total combined 71,256 acres of both IRAs (managed by the Lincoln Ranger District); the prescribed fire would be implemented on 5 percent of the total Lincoln RD IRA acreage. Opportunities to continue the popular dispersed recreation activities would exist over the vast majority of the IRA acreage during project implementation and would continue to exist on all of the IRA acres after project completion.</p>
<p>Reference landscapes for research study or interpretation The body of knowledge about the effects of management activities over long periods of time and on large landscapes is very limited. Reference landscapes of relatively undisturbed areas serve as a barometer to measure the effects of development on other parts of the landscape.</p> <p>Describe the landscape that is present. Describe any unique reference landscapes that exist within the Roadless area. Describe how the project activities might affect the reference landscape values of the Roadless area. Consider how the landscapes within the Inventoried Roadless area fits within the broader landscape and if the project creates any overall change. Consider landscape character descriptions in SMS.</p>	No	Stable	<p>No documentation regarding reference landscapes within the project area were found. The current landscape is comprised of dense forests susceptible to insect and wildfire mortality (Douglas-fir and lodgepole pine). In addition, a large-scale mountain pine beetle epidemic has killed most of the mature lodgepole pine and ponderosa pine. The proposed action would result in a landscape setting that resembles a wildfire event which naturally follows a pine beetle event. Forest regeneration and “greenup” would occur shortly thereafter and improve upon the visual appearance of this landscape cycle by resembling an increasingly healthy forest.</p>
<p>Natural appearing landscapes with high scenic quality. High quality scenery, especially scenery with natural-appearing landscapes, is a primary reason that people choose to recreate. In addition, quality scenery contributes directly to real estate values in nearby</p>	Yes	Stable	<p>The current scenic quality of the unroaded areas resembles that of landscapes with high scenic integrity. Although visually unappealing to many, the scenes created by large scale beetle kill and wild fires (within their natural regime) do not change a landscapes scenic integrity or visual quality per the visual or scenery management systems. However, events that occur outside of a natural regime due to management decision (i.e., fire suppression) can. The proposed prescribed fire would help ensure</p>

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<p>communities and residential areas.</p> <p>Describe the current scenic quality and character of the area. Describe project effects to the scenic integrity of the area and changes to the character of the area. Consider existing scenic integrity.</p> <p>Scenic Quality- essential attributes of the landscape. (Glossary 5, Landscape Aesthetics Handbook)</p> <p>Landscape Character – Particular attributes, qualities, and traits of a landscape that give it an image and make it identifiable or unique. (Glossary 3, Landscape Aesthetics Handbook)</p>			<p>the forest maintains a visual appearance characteristic of a wildfire within its natural regime as opposed to an unnaturally intense wildfire.</p> <p>The scenic integrity within the IRAs may decrease from the viewpoint of a user traveling through the proposed prescribe fire treatment units. The fire handlines would create a linear disturbance within the roadless area and stumps from the hand slashing of small diameter trees may remain visible for several seasons following the prescribed fire, which would be an unexpected characteristic for the IRA landscape. The creation of openings in the forest from low and mixed severity prescribed fire ranging from 5 to 75 acres in size would create a more natural and visually appealing mosaic in the landscape, enhancing the overall existing landscape character. Less than 4,846 acres out of the combined 71,256 acres of both IRAs (managed by the Lincoln Ranger District) would be affected and only the users who travel through these areas would notice these changes.</p>
<p>Traditional cultural properties and sacred sites Traditional cultural properties are places, sites, structures, art, or objects that have played an important role in the cultural history of a group. Sacred sites are places that have special religious significance to a group. Traditional cultural properties and sacred sites may be eligible for protection under the National Historic Preservation Act. However, many of them have not yet been inventoried, especially those that occur in inventoried roadless areas.</p> <p>Identify generically any significant cultural resources within the Roadless area and describe the effect of the project on these resources. Typically mitigation will be designed to prevent significant effects to these resources.</p>	<p>Yes</p>	<p>Degrading</p>	<p>Hand slash pile burning within sites could affect historic structures and could alter prehistoric site artifacts. Hand lines within sites could alter historic and prehistoric sites.</p>
<p>Other locally unique characteristics Inventoried roadless areas may offer other locally identified unique characteristics and values. Examples include uncommon geological formations, which are valued for their scientific and scenic qualities, or unique wetland complexes. Unique social, cultural, or historical characteristics may also depend on the roadless character of the landscape. Examples include ceremonial sites, places for local events, areas prized for collection of non-timber forest products, or</p>	<p>No</p>	<p>N/A</p>	<p>The proposed action would not impact the special features or values of the Bear-Marshall-Scapegoat-Swan IRA because they do not fall within the Stonewall project area. In the long-term, the proposed action would potentially enhance the productive and primitive Elk hunting opportunities within the Lincoln Gulch IRA.</p>

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<p>exceptional hunting and fishing opportunities. Identify any locally unique characteristics and describe how the project would affect these values.</p>			