

Middle Fork Weiser River Landscape Restoration Project Council Ranger District, Payette National Forest December 19, 2014

Proposed Action

Introduction

The Middle Fork Weiser River Landscape Restoration Project (Project) is located approximately six miles southeast of Council, Idaho, primarily in the Middle Fork Weiser River watershed. Proposed treatments include timber harvest, biomass removal, prescribed fire, road treatments including road reconstruction and decommissioning, recreation improvements and increasing public firewood gathering opportunities. The Project area is approximately 50,000 acres, including the Middle Fork Weiser River watershed and a small portion of the East Fork Weiser River subwatershed. Project proposals in the East Fork Weiser River are limited in scope to a non-motorized trail. The Project is located in Section 1 T14N R1E, Sec. 6 T14N R2E, Sec. 1-5, 9-16, 21-27, 35, and 36 T15N R1E, Sec. 1-12, 14-22, and 28-32 T15N R2E, Sec. 1, 12, 13, 24-27, and 32-36 T16N R1E, Sec. 2-11, and 14-35 T16N R2E, and Sec. 27-34 T17N R2E, Boise Meridian.

This proposal is based in part on recommendations provided by the Payette Forest Coalition (PFC) to the Payette National Forest Supervisor on August 20, 2014. The Payette Forest Coalition is a collaborative group whose recommendations are structured to meet the intent of the 2009 Collaborative Forest Landscape Restoration Act (CFLRA). The PFC members represent stakeholders from a broad range of interests, including the environmental community, timber industry, recreational groups, and state and county government. The purpose of the Collaborative Forest Landscape Program is to encourage collaborative, science-based ecosystem restoration of priority forest landscapes.

The Project area current conditions were evaluated in the Middle Fork Weiser River Landscape Assessment (USDA 2014) and the Middle Fork Weiser River Transportation Analysis Process (TAP [USDA 2014b]) by the Council and Weiser Ranger Districts Interdisciplinary Team (IDT). The Landscape Assessment evaluated the current conditions in the Project Area and provides a basis for comparing current conditions to desired conditions as described in the Payette Forest Land and Resource Management Plan (Forest Plan [USDA 2003]). The TAP provides a recommendation to a Decision Maker for a Minimum Road System (MRS) as directed by the Travel Rule (36 CFR Parts 212, 251, 261, and 295 2005).

Purpose and Need

Purpose

The **purpose** of the Project is to:

- 1) Move vegetation toward the desired conditions (e.g., canopy closure in large tree class, species composition, and size class distribution) defined in the Forest Plan and consistent with the current science for restoration of ponderosa pine, Douglas-fir, grand fir, subalpine fir and lodgepole habitat types, with an emphasis on:
 - a) Improving habitat for specific wildlife species of concern, such as the species dependent on dry coniferous forests, while maintaining habitat for federally-listed and sensitive species;
 - b) Maintain and promote large tree forest structure, early seral species composition (for example aspen, western larch, ponderosa pine, and Douglas-fir) and forest resiliency to fire, insect/disease and climate change;
 - c) Reducing the risk of uncharacteristic wildland fire, with an emphasis on restoring and maintaining desirable plant community attributes including fuel levels, fire regimes, and other ecological processes; and
 - d) Maintaining and promoting large trees where retention is consistent with the above objectives.
- 2) Maintain and promote legacy¹ ponderosa pine and western larch and legacy-like Douglas fir;
- 3) Restore heterogeneous fine and landscape scale mosaic patterns by establishing varying patch sizes consistent with spatial patterns that promote forest resilience to disturbance;
- 4) Within dry non-forested habitats, maintain and promote native grasses and restore desired conditions for age and canopy class structure of sagebrush and bitterbrush;
- 5) Decrease the conifer encroachment into aspen and non-forested habitats;
- 6) In order of priority, move the Granite Creek subwatershed from a Watershed Condition Framework (WCF) rating of Class 3 (Impaired) to a Class 2 (Functioning at Risk), and move Mica Creek, Jungle Creek, and Little Fall Creek subwatersheds within the Project area toward the desired condition for soil, water, riparian, and aquatic resources;
- 7) Manage recreation use in the Project with an emphasis on hardening primary dispersed recreation areas, improving existing trails and providing new trail opportunities including an

¹ Legacy trees are ponderosa pine and western larch that survived the previous stand initiating fire in lethal fire regimes, or survived numerous low to moderate intensity fires in other fire regimes. Old live and dead ponderosa pine and western larch trees are an important legacy of the historical condition in many areas. They are generally resistant to nonlethal/mixed fire; provide food and habitat for wildlife, and genetic material reflective of the local site conditions (Huckaby et al. 2003), particularly when present in plantations.

OHV loop and a non-motorized trail;

- 8) Contribute to the economic vitality of the communities adjacent to the Payette National Forest; and
- 9) Improve firefighter and public safety by establishing strategically placed defensible fuel breaks within the Project area.

Need

The **need** for the Project is based on the difference between the existing and desired conditions. These differences include:

- 1) Loss of habitat for Family 1 wildlife species, such as the white-headed woodpecker, compared to historical conditions;
- 2) Fewer large tree size classes than desired in the drier forest types (PVGs 2 and 5), and higher canopy cover;
- 3) Fewer early seral tree species (i.e. aspen, ponderosa pine and western larch) than desired;
- 4) Increased stand and landscape homogeneity of size classes, species diversity, tree distributions (e.g., currently in some vegetation types the tree spacing is uniform in nature) and canopy closure;
- 5) Increased high canopy closer in the large size classes in some vegetation types;
- 6) Increased conifer encroachment into aspen and non-forested habitats;
- 7) Fewer fire resistant tree species (i.e., ponderosa pine and western larch) and higher densities of non-fire resistant tree species;
- 8) Higher surface fuel loading in those areas that have missed one or more fire return intervals;
- 9) Less than desired watershed function and integrity, including increased sedimentation, hydrologic risk from flooding, disturbance (mainly road-related) in Riparian Conservation Areas (RCAs), habitat fragmentation, lack of large woody debris in some streams, and lack of coarse woody debris in areas of past timber harvest; and
- 10) Trail and recreation facilities that do not meet current design and accessibility standards.

The desired conditions for this project are based upon the Forest Plan, the Watershed Condition Framework (USDA Forest Service 2011) and the most recent science concerning management of wildlife habitats including the Draft Payette National Forest Wildlife Conservation Strategy Report (Egnew, 2011).

Project Objectives

Project objectives are elements of the purpose and need that the project is designed to address.

Vegetation (Forested and non-Forested)

Objective 1: Move vegetation toward the desired conditions defined in the Forest Plan, with an

emphasis on promoting large tree forest structure, early seral species composition and forest resiliency.

Objective 2: Move vegetation toward desired conditions as defined in the Forest Plan, with emphasis on reducing the frequency, extent, severity of uncharacteristic or undesirable disturbances such as fire, insects, and pathogens.

Objective 3: Move vegetative spatial patterns, such as amount, proportion, size, inter-patch distance, variation in patch size, and landscape connectivity important to the achievement of vegetation or other resource goals and objectives.

Fire and Fuels

Objective 4: Restore and maintain desirable fuel levels, fire regimes, and ecological processes.

Objective 5: Establish and maintain approximately 12 miles of strategically-placed shaded fuel breaks to improve firefighter and public safety, improve the defensible space adjacent to private lands and provide protection to infrastructure to the east of the Project.

Wildlife

Objective 6: Improve habitat for Family 1 wildlife species, as represented by the white-headed woodpecker, a Region 4 Sensitive Species (USDA Forest Service 2011) and Forest Management Indicator Species (MIS), by restoring forest conditions that contribute to source habitat for these species. Forested stands providing these source habitats should be restored to conditions within or near to the Historical Range of Variability (HRV).

Soil, Water, Riparian, and Aquatic (SWRA) Resources

Objective 7: In order of priority, move the Granite Creek subwatershed from a Watershed Condition Framework (WCF) rating of Class 3 (Impaired) to a Class 2 (Functioning at Risk), and move Mica Creek, Jungle Creek, and Little Fall Creek subwatersheds within the Project area toward the desired condition for soil, water, riparian, and aquatic resources, with an emphasis on actions to: reduce road- and trail-related impacts; reduce impacts from existing dispersed recreation sites along the Middle Fork Weiser River near its confluence with Cabin Creek and with Jungle Creek; restore habitat connectivity for fish in Big Creek and the upper Middle Fork Weiser River and promote coarse woody debris retention and recruitment in areas, such as past timber harvest units, where conditions are not meeting Forest Plan Appendix A desired conditions.

Recreation

Objective 8: Manage recreation use in the Project with an emphasis on identifying and hardening primary dispersed recreation areas, improving existing trails, closing and rehabilitating unwanted user created motorized routes and developing new trail opportunities.

Economics

Objective 9: Contribute to the economic vitality of local communities.

Proposed Action

The Project proposals are in the Middle Fork Weiser River (MFWR) watershed and a small portion of the East Fork Weiser River subwatershed. Project proposals in the East Fork Weiser River are limited in scope to a non-motorized trail and a bridge to facilitate livestock movement. Except for these two actions, vegetation treatments, road treatments, and all other actions are proposed only in the Middle Fork Weiser River watershed and analysis acres or miles are only included for MFWR.

Vegetation Background—Potential Vegetation Groups (PVGs)

At the level of the Forest Plan, forested habitat types have been further grouped into potential vegetation groups (PVGs) that share similar environmental characteristics, site productivity, and disturbance regimes. The purpose of these groupings is to simplify the description of vegetative conditions for use at the broad scale (USDA 2003, A-17). This classification allows for a more efficient and operational way to understand the ecological complexity of the landscape by grouping approximately sixty to seventy habitat types into eleven PVGs. Table 1 identifies the acreage and percentage of area of the PVGs in the Project area on National Forest System (NFS) lands.

Table 1. Potential Vegetation Groups by acres and percentage of MFWR Project Area

Potential Vegetation Group	Acres within Project Area (NFS Lands)	Percent of Project Area
PVG 1—Dry Ponderosa Pine/Xeric Douglas-fir	246	1%
PVG 2—Warm Dry Douglas-fir/Moist Ponderosa Pine	3,300	9%
PVG 3—Cool Moist Douglas-fir	0	0%
PVG 4—Cool Dry Douglas-fir	122	<1%
PVG 5—Dry Grand Fir	4,262	12%
PVG 6—Cool Moist Grand Fir	11,607	31%
PVG 7—Warm Dry Subalpine Fir	5,367	15%
PVG 8—Warm Moist Subalpine Fir	44	<1%
PVG 9—Hydric Subalpine Fir	693	2%
PVG 10—Persistent Lodgepole Pine	952	3%
PVG 11—High Elevation Subalpine Fir	419	1%
Total Forested Vegetation	27,012	73%
PVG 99 Grassland/Shrubland	10,061	27%
Project Area Total (NFS Lands)	37,073	100%

Potential Vegetation Group 1— Dry Ponderosa Pine/Xeric Douglas-fir

This is widespread group represents the warm, dry extreme of the forest environments wherever ponderosa pine is found. Historically, frequent nonlethal fire maintained large, park-like stands of ponderosa pine.

Potential Vegetation Group 2—Warm, Dry Douglas-fir/Moist Ponderosa Pine

This group represents warm, mild environments at low-to-middle elevations. Ponderosa pine mixed with Douglas-fir is the dominant cover type in this group. Historically, frequent nonlethal fire maintained large, park-like stands of ponderosa pine.

Potential Vegetation Group 4—Cool Dry Douglas-fir

This group is found at elevations above 6,000 feet. Douglas-fir is the predominant cover type on these sites and may form open or dense stands. The dense stands often display poor tree growth and heavy infestations of dwarf mistletoe. In some areas, quaking aspen or lodgepole pine may dominate seral stands. Historically, fires burned infrequently through stands.

Potential Vegetation Group 5—Dry Grand Fir

This group is found at elevations ranging from 4,300 to 6,400 feet. Ponderosa pine and Douglas-fir are common cover types that appear to have been maintained by fire regimes that were historically nonlethal to mixed1. In many areas, this group may have resembled PVG 2, with open, park-like stands of large ponderosa pine. Mixed tree species stands were likely restricted to small micro sites that burned less frequently.

Potential Vegetation Group 6—Cool, Moist Grand Fir

This group is found at elevations ranging from 3,400 to 6,500 feet and represents moister environments in the grand fir zone. Ponderosa pine is common at the drier extremes of the group and lodgepole pine occurs in colder areas. Western larch may also be present as an early-seral species. Historical fire regimes were mixed, ranging from mixed1 to mixed2. Where ponderosa pine was maintained as a common seral species, it appears that fires were more often mixed1. In other areas, where western larch, Douglas-fir, or lodgepole pine were maintained as seral species, the mixed2 fire regime may have been more common. This difference within PVG 6 reflects a split, described by Crane and Fischer (1986), of the Grand Fir Habitat Types into warm, dry and cool, and moist subgroups.

Potential Vegetation Group 7—Warm, Dry Subalpine Fir

This group represents warmer, drier environments in the subalpine fir zone. Elevations range from 4,800 feet to 7,500 feet. At lower elevations, this group is found on steep, north-to-east aspects, but shifts to south-to-west aspects, as elevation increases. Adjacent sites at lower elevations are Douglas-fir or grand fir, and these commonly intermix where topography controls cold air flow. Douglas-fir is the most common cover type throughout this PVG. Ponderosa pine may be found at the warmest extremes, particularly where this group grades into the Douglas-fir or grand fir zone. Lodgepole pine or Engelmann spruce may occur at cool, moist extremes, but these cover types rarely dominate. Understories are commonly shrubby and include mountain maple (*Acer glabrum*), mountain ash (*Sorbus scopulina* or *sitchensis*), serviceberry (*Amelanchier alnifolia*), and scouler willow (*Salix scouleriana*). Historical fire regimes were generally mixed2, though mixed1 fires may have occurred where ponderosa pine was maintained.

Potential Vegetation Group 8—Warm, Moist Subalpine Fir

This is a relatively minor group of habitat types in central Idaho. In central Idaho, this group ranges in elevation from about 5,000 to 7,200 feet but may follow cold air drainages as low as 4,500 feet. These sites are found in moist, protected areas such as stream terraces, toeslopes, and steep, northerly aspects. There are various mixtures of species lodgepole pine, western larch, Douglas-fir and Engelmann spruce comprise the seral tree layers. Historically, these sites experience infrequent high-intensity fires sometimes mixed with underburns.

Potential Vegetation Group 9—Hydric Subalpine Fir

Seasonally high water tables control this group, and the extent may be small in some areas, depending on the presence of these conditions. Elevations range from 9,000 feet, to as low as 4,500 feet in frost pockets and along cold air drainages. This group most commonly occurs on wet toe slopes, stream terraces, seep areas, and old bogs. Cover types are lodgepole pine, followed by Engelmann spruce and subalpine fir. Early seral conditions usually support lodgepole pine, because this species can tolerate intermittent high water tables and cold air that often accumulates. In severe frost-prone areas, lodgepole pine can persist for long periods. In other areas with better cold air drainage, Engelmann spruce and subalpine fir rapidly establish under the lodgepole pine. Understories in this group are primarily dominated by herbs and grasses that require the seasonal influence of a high water table. Shrubs are sparse, though Labrador tea (*Ledum glandulosum*) can dominate some sites. Historically, fire was lethal in this group. Ignitions more likely occurred on adjacent drier slopes, and burning in this group likely depended on weather conditions before and at the time of the ignition.

Potential Vegetation Group 10—Persistent Lodgepole Pine

This group is common throughout the subalpine fir zone. It represents cold, dry subalpine fir sites that range in elevation from over 9,200 feet down to 5,200 feet in frost-pockets. Lodgepole pine is the dominant cover type, though small amounts of other species may occasionally occur. Understories can be sparse. Generally, grasses and scattered forbs are the most common understory components. Shrubs are sparse and consist mainly of low-growing huckleberries including dwarf huckleberry (*Vaccinium caespitosum*) and grouse whortleberry (*V. scoparium*). Historically, this group experienced lethal fire, though nonlethal fires may have occurred during stand development. Lodgepole pine is more often non-serotinous in western portions of the Forest and appears to become more serotinous moving easterly. Within the Forest, lodgepole pine may reproduce in areas that experience nonlethal fires. The result is more vertical stand diversity in some areas than is often found where lodgepole pine is mostly serotinous. Over time, the combinations of these low-intensity events, subsequent reproduction, and mountain pine beetle (*Dendroctonus ponderosae*) mortality would have created fuel conditions that allowed lethal fires to occur under the right weather conditions.

Potential Vegetation Group 11—High Elevation Subalpine Fir (with whitebark pine)

This group occurs at the highest elevations of the subalpine fir zone and generally represents the upper timberline conditions. It often grades into krummholz or alpine communities. Whitebark pine (*Pinus albicaulis*) is a major seral species in this group. Engelmann spruce and subalpine fir are the climax co-dominates. In some areas, whitebark pine serves as a cover for Engelmann

spruce-subalpine fir establishment. Understories are primarily forbs and grasses tolerant of freezing temperatures, which can occur any time during the growing season. Shrubs are sparse, due to the cold, harsh conditions. Historically, the fire regime in this group is characterized as mixed2, though the effects of fires were highly variable. Ignitions are common, due to the high elevation; however, fuel conditions were historically sparse, due to the cold growing conditions and shallow soils. Therefore, fire effects were patchy. Fire regimes are mixed2, with whitebark pine being a major seral component.

Potential Vegetation Group 99—Non-forested vegetation type

This vegetation groups consist of grasslands, sagebrush, high brush, scablands, dry and wet meadows or rocky areas; all areas are incapable of supporting more that 10% stocking of conifer trees.

Fire regime descriptions in relation to PVGs

Historically, PVGs 2 and 5 in the Project area consisted of a diverse understory of grasses, forbs, and low shrubs, with a large-diameter, fire-resilient overstory. This condition was maintained over time by frequent, low-intensity fires. The mixed-severity fire regimes found in PVGs 6, 7, and 11 occurred in the Douglas-fir, grand fir, subalpine fir, and whitebark pine communities. PVG 9 falls into a lethal fire regime. See Table 2 for a description of Fire Regimes and relationship to PVG.

Table 2. Fire regime descriptions

Fire Regime	Fire Interval	Fire Intensity	PVG	Vegetation Patterns (Agee 1998)
Nonlethal	5–25 years	Low—10% mortality or less	1, 2 and 5	Relatively homogenous with small patches generally <1.0 acre of different seral stages, densities, and compositions created from mortality
Mixed1	5–70 years	Low to moderate—10–50% mortality	3, 4, 5, and 6	Relatively homogenous with patches created from mortality ranging in size from <1.0 to 600 acres of different seral stages, densities, and compositions
Mixed2	70–300 years	Moderate to high—50–90% mortality	3, 4, 6, 7, 11	Relatively diverse with patches created by mixes of mortality and unburned or underburned areas ranging in size from <1 to 25,000 acres of different seral stages, densities, and compositions
Lethal	100–400 years	High—over 90% mortality	8, 9 and 10	Relatively homogenous with patches sometimes >25,000 acres of similar seral stages, densities, and compositions. Small inclusions of different seral stages, densities, and compositions often result from unburned or underburned areas.

Design of Treatment Areas

Vegetation Treatments

Vegetative treatments include: Commercial and Non-commercial Vegetative Treatments, Meadow Restoration, Prescribed Fire, and Associated Actions.

Vegetation Treatments are needed to promote early seral species, creation of a mosaic pattern at the fine and large scales (i.e., structural diversity, density, and canopy cover), maintain large tree structure (including legacy and legacy-like trees), and reduce fuel loading. Currently in some areas of the Project, the vegetation conditions are outside of desired conditions (Forest Plan Appendix A) with regard to age structure, density and canopy cover (Middle Fork Weiser River Landscape Assessment 2014).

The Forest Service proposes to treat *up to* 13,002 acres with commercial harvests (a combination of Free Thin, Free Thin–Patch Cut–Selection Harvest, Aspen Restoration, and Mature Plantation Harvest). Combined commercial and non-commercial vegetation treatments include up to 5,280 acres of Meadow Restoration and 1,267 acres of Restoration of Low Density Timber Stands. Non-commercial treatments include thinning up to 4,309 acres. These acreages include treatments designed for and within RCAs and total approximately 3,428 acres (as described below).

Riparian Conservation Area Delineation

The Forest Plan (Appendix B) outlines criteria to aid IDTs in delineating RCAs for perennial and intermittent streams, ponds, lakes, reservoirs, and wetlands (USDA Forest Service 2003). The RCAs within the project area have been identified by the IDT using the Appendix B Option 2 delineation method for forested streams. Option 2 provides a more site-based delineation of an RCA boundary using site potential tree heights. While there are PVGs within the project area that, under Option 2, would have RCA widths narrower than 120 and 240 feet, these PVGs are intermixed with PVGs where the 120 and 240-foot RCAs are appropriate. For consistency and reduction in the margin of error during project layout, using a simpler RCA distance for all PVGs would be most efficient. Table 3 lists the RCA delineation distance by water source.

Table 3. Riparian Conservation Area (RCA) delineation distance by water source

Water Body	RCA Width*
Perennial Stream	240-foot slope distance (two site-potential tree heights)
Intermittent Stream Providing Seasonal Rearing and Spawning Habitat	240-foot slope distance (two site-potential tree heights)
Intermittent Stream	120-foot slope distance (one site-potential tree height)
Ponds, Lakes, Reservoirs and Wetlands	120-foot slope distance (one site-potential tree height)

Note: RCA distance is measured slope distance from the ordinary high water mark (either side of the stream).

In RCAs where there is a specific vegetation treatment objective (i.e., aspen restoration, targeted fuels reduction, or upland vegetation restoration), portions of the RCA could be treated following a site-specific assessment, as long as soil and water requirements can be met. The treatment objectives within RCAs are based on Desired Future Conditions (DFC) as defined in Appendix A of the Forest Plan (USDA Forest Service 2003) by PVG, and on Management Area-specific objectives in the Forest Plan. Input on treatment design would be given by the district hydrologist or fish biologist in order to ensure that all riparian functions were maintained or improved, as required by Forest Plan standard SWST01 (USDA Forest Service 2003). Further description of treatments proposed within RCAs is below, within subsections of the Vegetation Treatments section.

Large Tree and Legacy Tree Retention

The Proposed Action is designed to retain and promote legacy trees and large tree size class appropriate for the forest type and has been designed to incorporate the retention of these attributes while moving toward the desired vegetative conditions specified in the Forest Plan. Legacy tree guidelines are included in Appendix A of the Proposed Action. Legacy tree and large tree retention would be accomplished through the use of marking guides, see Draft Marking Guides, Appendix B.

Other Considerations

It is expected that there would be a reduction in treatments acres based on locations of northern goshawk Post Fledgling Areas (PFAs) and nest stands, elk wallows, Canada lynx habitat, archeological sites and additional streams and other water sources that would be identified during implementation. Specific guidelines that would be followed include:

- There are nine identified goshawk PFAs and within the PFAs, goshawk nest replacement nest stands would not receive mechanical treatment. Stands within goshawk post fledgling areas would be identified prior to marking operations and would be designed to meet *Management recommendations for the northern goshawk in the southwestern United States* (Reynolds et al. 1992).
- There is approximately 8,300 acres of lynx habitat in the Project area. No more than 30%

of the lynx habitat would be moved to an unsuitable condition for lynx.

Non-commercial Treatments

PVGs	Sum of Potential Non-Commercial Thinning Acres
1	72
2	1684
4	30
5	419
6	1702
7	210
9	36
10	139
99	17
Total Acres	4309

** 99 indicated non-forested PVG

Non-Commercial Thinning – up to 2,974 acres. Non-commercial thinning would be completed in plantations that currently have density-related stress occurring. These plantations are generally less than 30 years old and have an average DBH of less than eight inches. Non-commercial thinning would generally cut trees less than eight inches DBH and prune residual trees, when practical, up to six feet in height. In areas targeted for prescribed fire treatments non-commercial thinning/ladder fuel thinning would be completed where necessary. Additionally, ladder fuel thinning would be permitted within the outer half of RCAs where active ignition has been approved by the District hydrologist and/or fisheries biologist. All ladder fuel treatments in RCAs would be completed by hand and would not cut trees larger than eight inches DBH. Slash produced from ladder fuel treatments would be lopped and scattered or hand piled as directed by the District hydrologist and/or fisheries biologist or soil scientist. Piling of slash would not occur within RCAs.

Treatment Intent:

- Reduce non-commercial tree densities, increase growth rates, improve wildlife habitat, and tree vigor.
- Improve stand resiliency to natural disturbance by reducing density-related competition;
- Maintain and promote early seral species with variable densities depending upon site-specific objectives;
- Promote spatial heterogeneity in species diversity (i.e., retention of naturally regenerating aspen or other desired species when present), canopy cover, and density;
- Expand the opportunity for application of prescribed fire by changing the fuel profile;
- Reduce the potential for undesired fire effects (i.e., mortality of legacy trees);
- Aid in the retention of desired leave trees;

Commercial Treatments

PVGs	Sum of Potential Commercial Treatment Acres
1	15
2	532
4	11
5	2217
6	7168
7	2139
8	50
9	105
10	463
11	256
99	47
Total Acres	13,002

** 99 indicated non-forested PVGs related to Aspen treatments

Stands would be thinned through commercial logging. Potential harvest systems may include ground based, skyline, and/or helicopter. Harvested trees would generally be removed with the limbs and tops attached. The limbs and tops would be utilized as biomass, or other products, where practical. Where appropriate and needed, sapling sized trees would be cut to reduce ladder fuels and promote desired advanced regeneration. Following harvest, these stands could be underburned as described in the prescribed fire section below. Commercial vegetative treatments have been divided into the following categories:

Commercial Thin-Free Thin (CT-FT) – up to 3,294 acres. Free thinning would allow flexibility to use different thinning methods for varying stand conditions and objectives. Free thinning would be accomplished primarily by low thinning (removing trees from the lower crown classes) with some crown thinning (removing trees from the dominant and co-dominant crown classes) and occasionally sanitation cutting (removing trees to improve stand health by reducing the anticipated spread of insects or disease, especially mistletoe infections).

These treatments would generally be completed in forested areas dominated by mature, vigorous ponderosa pine, Douglas-fir and / or western larch with canopy cover greater than 35 percent.

Treatment Intent:

- Reduce stand density and increase mean diameter;
- Maintain and promote large tree forest structure and old forest characteristics while restoring the desired species composition, and stand densities;
- Promote regeneration of desired early seral tree species in areas that are conducive to uneven-aged silviculture systems. Uneven-aged management would be considered in the drier forest types where successful regeneration of desired species is anticipated (i.e., ponderosa pine, western larch, and Douglas-fir forest types);

- Legacy ponderosa pine and western larch and legacy-like Douglas fir would be released by removing younger trees for approximately twice the canopy drip line of the legacy tree(s). As discussed earlier, overlap of other legacy tree crowns is acceptable and these other legacies would be retained. Release of replacement/future legacy trees/clumps would also be considered. In addition, retention of replacement trees would be considered if a desirable legacy tree replacement is within this area;
- Promote resiliency, reduce competition and improve growth rates for remaining trees;
- Improve habitat for wildlife species that require large tree and old forest characteristics with low to moderate canopy cover;
- Reduce potential for crown fire spread should a wildland fire occur;
- Restore a heterogeneous fine scale mosaic pattern.

Following treatment, these stands would be a mosaic of thinned areas, clumps of trees, and small openings. The average canopy cover in these stands after harvest and underburn operations would be between 25 and 45 percent. In mature stands, this equates to an average crown spacing of approximately 6 to 20 feet. Lower canopy cover (25 to 30 percent post treatment canopy cover) would generally be targeted in PVG 1 and 2. This equates to 10 to 20 foot crown spacing. Higher canopy cover (30 to 45 percent) would generally be the desired post treatment desired condition in PVGs 5 and 6. This equates to 6 to 15 foot crown spacing. Portions of stands with natural openings and heavily thinned areas would have less canopy cover, perhaps as low as 10 percent. These openings would eventually develop more canopy cover where seedlings establish and grow. In mature stands, this equates to an average crown spacing of 12 to 30 feet.

Free Thin–Patch Cut-Modified Shelterwood-Selection Harvest (Group or Individual Tree) (FT-PC-MSw-SH) – up to 7,523 acres. This treatment would be implemented primarily in relatively cool, moist grand fir, subalpine fir and lodgepole forest types that have evidence (*i.e.*, - relic early seral trees, stumps, snags, etc.) of previously having had an aspen, ponderosa pine, western larch and/or Douglas-fir component. In some cases PVG 1, 2, and 5 may be treated with FT-PC-MSw-SH.

Treatment Intent:

- Restore a heterogeneous fine and landscape level scale mosaic pattern by establishing varying patch sizes consistent with spatial patterns that improve forest resilience to disturbance. Retaining portions of stands that historically would not have been dominated by early seral species as skips;
- Maintain early seral species in microsites;
- Reduce stand density and increase mean diameter;
- Maintain and promote large tree forest structure and old forest characteristics while restoring the desired species composition, and stand densities;
- Legacy ponderosa pine and western larch and legacy-like Douglas fir would be released by removing younger trees for approximately twice the canopy drip line of the legacy tree(s). As discussed earlier, overlap of other legacy tree crowns is acceptable and these

other legacies would be retained. Release of replacement/future legacy trees/clumps would also be considered. In addition, retention of replacement trees would be considered if a desirable legacy tree replacement is within this area;

- Promote resiliency, reduce competition and improve growth rates for remaining trees;
- Improve habitat for wildlife species that require large tree and old forest characteristics with low to moderate canopy cover; and
- Reduce potential for crown fire spread should a wildland fire occur.

Implementation of these treatments would allow for regeneration (e.g., patch cut with reserves or selection harvest) in patches ranging from three to ten acres in size, generally on less than 50 percent of a stand. In regenerated areas (patches) approximately four to twelve trees per acre would be retained as reserve trees. The stand would be either naturally or artificially regenerated after treatment; unless, the stand is predominately lodgepole pine and the intent is lodgepole regeneration these stands would only be naturally regenerated.

Reserve tree preference would be legacy trees, replacement legacy trees, high value wildlife trees (i.e. cavities, broken tops with structure for nesting), dominant non-serals and vigorous serals in any crown class. Artificial regeneration (planting trees) would be utilized in areas (excluding lodgepole pine areas intended for lodgepole regeneration) where the desired species composition would not be expected to be met with natural regeneration.

In portions of stands with an early seral component still remaining, free thinning or modified shelterwood would be implemented. Portions of each stand not meeting the criteria for patch cuts, modified shelterwood, selection or free thinning would not receive commercial treatment during this entry.

Commercial Thin / Mature Plantations (CT-MP) – up to 1,067 acres. This treatment would be applied to stands that were previously artificially regenerated (plantations). These stands are typically greater than 30 years in age and were planted predominately with ponderosa pine, Douglas-fir, and/or western larch. These mature plantations contain commercial trees with an average diameter at breast height (DBH) greater than eight inches and would average approximately 70 to 80 trees per acre (this would generally result in crown spacing of 10-15 feet) after thinning. Thinning would generally favor the retention of larger, early seral trees and be completed to create stands with variable densities while promoting a mix of desired species. Merchantable material would be removed from the site and utilized as markets allow. Non-commercial material (slash) would be lopped and scattered, mechanically harvested, removed, hand piled, machine piled, and/or broadcast burned to reduce fuel loading. The cost of slash treatment, coarse woody debris, and fuel loading would be considerations in determining the method of non-commercial material treatment.

Treatment Intent:

- Promote large tree forest structure while restoring the desired species composition, and stand densities;
- Promote spatial heterogeneity in species diversity (i.e., retention of naturally regenerating aspen or other desired species when present), canopy cover, and density;

- Reduce stand density and increase mean diameter;
- Promote resiliency, reduce competition, improve growth for remaining trees; and
- Reduce potential for crown fire spread should a wildland fire occur.

Commercial Thin within RCAs. Both thinning and prescribed fire treatments are proposed in RCAs in the Middle Fork Weiser River watershed. Up to 2,237 acres of CT-FT, FT-PC-MSW-SH, Aspen Treatments, and CT-MP treatments in RCAs have been proposed in areas dominated by drier forest types (PVGs 1, 2, 4, 5, and drier 6) historically maintained by frequent, low intensity fire regimes to maintain upland vegetation within the historic range of variability. These acres are not additional acres of proposed treatment and are accounted for in the CT-FT and CT-MP sections above. Only areas in the outer half of RCAs (e.g., 120 ft. and 60 ft.) have been proposed for this treatment and the CT-FT and CT-MP treatment descriptions would be modified in these areas to retain adequate stocking to achieve shade and large woody debris recruitment objectives within RCAs.

RCA treatments would apply to upland vegetation that occurs within the outer portion of an RCA. These treatments would move more vegetation toward desired conditions as described in the Forest Plan (Forest Plan, pp. III-30, A-15 and III-131 Objectives 0325 and 0326). Treatments would only occur if all soil and water resource requirements and Forest Plan standards and guidelines could be met.

Conifer Removal in Aspen Stands – up to 1,120 acres. This treatment would be implemented in relatively cool, moist grand fir, subalpine fir and lodgepole forest types that have evidence (*i.e.*, - relic early seral trees, stumps, snags, etc.) of previously having a dominant aspen overstory. The treatment would occur in stands that still have a dominant component of aspen present.

Treatment Intent:

- Re-establish aspen where they have departed from desired conditions. Aspen restoration conifer overstory removal would remove all conifers except legacy ponderosa pine/western larch and legacy like Douglas-fir. Conifers within 100 feet of the south and west edges of the aspen stands and within 50 feet on the north and east edges of the aspen stands would be removed. Whole tree yarding would be used to limit slash concentrations within the aspen stands. Excessive slash would be hand piled and burned. To initiate suckering of the root system, units would be burned; additionally, aspen may, in limited cases, be girdled or felled when other treatment options have failed.
- In areas adjacent to aspen clones, establish varying patch sizes and densities (using FT-PC-SH treatments) consistent with spatial patterns created by historic fire regimes. Retaining portions of stands that historically would not have been dominated by early seral species as skips.
- To ensure that aspen are restored in riparian areas, both commercial harvesting and hand treatments (including girdling, non-commercial thinning, and felling conifer trees) may occur within the in the outer half of RCAs, and adjacent to seeps and springs. No equipment would be permitted within perennial or intermittent RCAs or within 30 feet of seeps and 120 feet of springs. Location and treatment type within RCAs, seeps, and springs would be determined on a site by site basis. In some locations near seeps and

springs, fencing may be needed and would be determined on a site specific basis.

- To initiate suckering prescribed burning would be used following mechanical or hand treatments. Active ignition for the prescribed burn would occur within the RCA where SWRA conditions would be maintained or improved.

Combined Commercial and Non-Commercial Treatments

Restoration treatments in stands with Low Densities – up to 1,267 acres. These stands typically have stocking rates not conducive to commercial harvest; however, in many cases there are restoration needs in overstocked forested pockets. In many of these stands there is in an early seral species component that is being affected by increased ladder fuels and insect/disease issues. Both thinning (commercial and non-commercial treatments) and prescribed fire treatments are proposed in timber stands with lower densities.

PVGs	Potential Restoration of Low Density Acres
1	53
2	206
4	9
5	228
6	198
7	350
9	37
10	80
11	106
Total Acres	1,267

Treatment Intent:

- Maintain legacy and legacy-like trees while reducing stand densities and ladder fuels;
- Restore natural fire disturbance regime to improve understory plant diversity and vigor, and provide habitat for native species;
- Move the project area toward a pre-fire suppression vegetative condition related to stand density, tree size class, and species composition to enable the reintroduction of fire into a fire adapted ecosystem and;
- Promote resiliency and reduce competition for remaining trees.

Commercial and Non Commercial Thinning within Non-Forested (dry and wet) – up to 5,280 acres. Non-forested stratum include grasslands, sagebrush, scablands, dry meadows and wet meadows that are typically incapable of supporting more than 10 percent stocking rates of conifers. Both thinning (commercial and non-commercial treatments) and prescribed fire treatments are proposed in non-forested. This treatment addresses Objective 0325 in the Weiser River Management Area section of the Forest Plan, which provides direction to, “Maintain and promote native grasses and aspen where they occur...”. Approximately, 4,985 acres are considered non-commercial treatments and 295 acres considered commercial/non-commercial treatment.

PVGs	Potential Non-Forested Thinning (Commercial/Non-Commercial) Acres
1	16
2	20
4	68
5	29
6	66
7	73
8	0
9	4
10	13
11	6
99	4985
Total Acres	5,280

Dry Non-Forested Vegetation Treatment (up to 5,138 acres)– The dry non-forested treatment areas include grasslands, sagebrush, scablands and dry meadows. Fire exclusion has led to expansion of young conifers along the edges as well as a decadency of upland shrubs, grasses and forbs. Treatment of encroaching conifers include a combination of hand felling, lop and scatter or hand piling followed by burning; while the remaining meadow complexes may be treated with prescribed fire.

Treatment Intent:

- Restore natural fire disturbance regime in dry meadows to enhance upland meadow species, increase meadow acreage, improve plant diversity and vigor, and provide habitat for native species; and
- Move the project area toward a pre-fire suppression vegetative condition related to stand density, tree size class, and species composition to enable the reintroduction of fire into a fire adapted ecosystem.

Wet Meadow Treatment (up to 142 acres) – Due to fire suppression, many wet meadows within the project area have higher tree densities and reduced riparian vegetation. The preferred approach is to treat wet meadows in one entry using a combination of mechanical treatment or hand treatment followed by prescribed fire. Equipment would not be allowed within 30 feet for seeps and 120 feet for springs. In some locations near seeps and springs, fencing may be needed and would be determined on a site by site basis.

Treatment Intent:

- Restore physical and biological (terrestrial and aquatic diversity and abundance), and ecological meadow processes (evapotranspiration) and functions (flow dispersal, ground water recharge, and sediment retention) that are appropriate for the current climate regime and comparable to reference conditions.
- Restore fire in wet meadows to enhance riparian habitat for native riparian-dependent species, increase meadow acreage, improve plant diversity and vigor, provide habitat for

native species, increase water availability for wetland species, and provide wetter conditions for a longer duration each year.

- Provide diverse wildlife habitat for native riparian-dependent species, which is currently limited within the Middle Fork Weiser River project area due to past land management activities.

Associated Actions

A number of activities associated with implementing these vegetative treatments are necessary. These include:

Road Maintenance and Use – Road reconstruction associated with this project may include, but is not limited to, blading, installation of drainage features (i.e. – rolling dips), hardening soft spots (i.e. - utilizing pit run), surfacing, installing or improving water passage (i.e. – culverts), realignment of small segments of roads to minimize impacts to resources, and brushing roads to improve visibility and safety. System roads currently in long-term closure may also be reconstructed and used for implementation of the project. Use of these roads may involve the installation of stream crossings that were removed as part of the long-term closure treatment. These roads would be returned to long-term storage following use.

Temporary roads - Temporary roads are defined as roads authorized by contract, permit, lease, other written authorization, or emergency operation; that are not intended to be part of the forest transportation system; that are not necessary for long-term resource managements; that are not forest roads or forest trails; and that are not included in a forest transportation atlas. Both planned and incidental temporary roads would be utilized and decommissioned (fully re-contoured) after project implementation. Planned temporary roads are defined as routes identified during the planning process and depicted on project maps. Some of the planned temporary roads would be newly constructed; however, most of the planned temporary roads have existing roadbeds (unauthorized routes) in place. Up to 23 miles of existing unauthorized routes would be used as temporary roads and fully recontoured after use. Incidental temporary roads are roads that are needed to complete vegetative treatments but cannot yet be identified due to the level of site-specificity necessary. These incidental temporary roads would be preferentially located on existing roadbeds (unauthorized routes) where applicable and receive full obliteration and recontouring when logging is completed. Incidental temporary roads would require approval by resource specialists prior to construction and would be limited to 7 miles or less of temporary road (not on an existing roadbed) throughout the Project area.

Gravel and Rock Sources – Existing gravel pits and identified undeveloped sources would be utilized within the project area, and in nearby areas if necessary, to provide materials such as gravel for resurfacing roads, rock for stabilization, and fill material. These sites may also be used for additional activities, such as stockpiling, disposal of excess material, and equipment staging. Sites for potential material sources have been identified on NFS lands and on private land. These sources have suitable material for present and foreseeable future expansion needs. Activities in these areas would be coordinated with the Wildlife Biologist for any restrictions or constraints for the protection of wildlife.

Brush Disposal- After thinning, slash reduction would include machine piling and burning, hand piling and burning, lop and scatter, broadcast/underburning, or removal. This applies within and

outside of areas designated for prescribed fire treatments. Opportunities would be sought for removing and utilizing the biomass for energy production or other uses where practicable.

Site Preparation – After the harvest activities are completed and prior to planting in proposed areas, site preparation may be completed either by prescribed burning or hand scalping. This would be completed to reduce competition to seedlings from brush and grass. All site preparation activities would be consistent with SWRA requirements, specifically detrimental disturbance and coarse woody debris.

Planting – Planting of ponderosa pine, western larch, Douglas-fir and/or Engelmann spruce seedlings on all proposed regeneration treatments would be completed as necessary to meet desired stocking levels. The species mix would depend on elevation and site conditions.

Firewood Availability – Roads currently closed roads used for timber harvest and would be evaluated for firewood retrieval, including firewood decks made available for public use.

Prescribed Fire Treatments

Up to 37,000 acres of the project area would be targeted (see description below) for prescribed burning over the next 15-20 years. Commercial activities would generally be completed prior to the application of fire. Reintroducing 500 to 10,000 acres of fire annually for the next 15-20 years would move forested and non-forested vegetation towards conditions that more closely represent historic distribution, structure, and function.

Primary target areas (up to 8,000 acres) for treatment consist of stands with historically high fire frequencies and lower severities (grasslands and stands dominated by seral species such as ponderosa pine, Douglas-fir, and western larch). Secondary target areas (up to 29,000 acres) include stands with historically moderate fire frequency and mixed severities stands comprised of both seral and non-seral species (i.e., grand fir).

A mosaic-like application of fire would re-introduce fire to approximately 75 percent of treated primary targeted acres, and 50 percent of treated secondary targeted acres. All acres targeted for the application of fire would be available for noncommercial thinning in order to minimize mortality from prescribed fire and aid in moving towards restored conditions.

- Fire would not be directly applied to non-target areas. These stands comprise young plantations, stands of historically low frequency and high severities, and stands set aside for other resource concerns or objectives (e.g., wildlife cover). Approximately 20 percent of non-target acres within the project area can be expected to receive fire, through backing (low intensity fire spread, without additional lighting). This minimal fire spread would not alter overall stand conditions within the non-target areas.
- Prescribed fire would be used to reduce fuel loads and rejuvenate vegetation. Aspen stands in the Project area are in particular need of rejuvenation and regeneration. Coniferous trees have encroached on aspen stands due to the lack of frequent low-intensity fire. In the past, frequent fire killed encroaching conifers and induced aspen root sprouting. After treatment, these areas would appear more open.

Existing barriers to fire spread (barren ridgelines, roads and trails) would be used where possible

to contain prescribed burns within specified boundaries. In areas where existing barriers are insufficient to control fire spread, handline would be constructed. Hand-constructed fireline would be limited to use only where necessary. The integrity of existing trails and roads would be considered in the application of fire and damage caused by these actions would be repaired. Constructed fireline would be rehabilitated after use.

Ignitions would be by hand or aurally. Prescribed burning operations may occur from early spring to late fall. Fire may be applied to tree wells in winter or early spring to reduce fuel accumulation and to reduce the potential for tree mortality during regular broadcast burning. Maintenance burning (burning after initial application of fire) would occur every 5-10 years to maintain desired conditions in high frequency fire regimes. Prescription parameters (wind speed, fuel moisture, smoke dispersion, and other resource area objectives) influence burn opportunities. Active ignition for the prescribed burn would occur within the RCA where SWRA conditions would be maintained or improved and approved of in advance by the District hydrologist and/or fisheries biologist.

Up to 8,500 acres of burning would be conducted in the Council Mountain and Poison Creek Inventoried Roadless Areas to rejuvenate grass/shrub communities. There would be no road building or timber harvest. Fireline construction would be limited to handline construction where needed.

All burning would follow Forest Plan Standards and Guidelines, and adhere to national and state air quality regulations. Specific conditions under which burning would occur would be developed through a prescribed fire plan, prior to ignition.

Shaded Fuelbreaks

A shaded fuelbreak would be created using existing roads and terrain features on approximately 370 acres to provide areas to control large or emerging fires in a safe manner for firefighters and to provide protection to the values to the east of the project (Tamarack Ski Area and structures in this area). This treatment would involve reducing crown closure, piling and burning ladder fuels (excavator or hand piles) or using a masticator to reduce fuel loading. The width of the fuelbreak would range from no fuelbreak needed to up to 500 feet wide, depending on fuel type, site slope, and the risk level associated with protecting improvements and increasing fire fighter safety.

Where the Shaded Fuel breaks and RCAs intersect, prescribed fire would, with the approval of the District hydrologist or fisheries biologist be directly applied to portions of the RCAs and allowed to back in other portions of the RCAs. Active ignition for the prescribed burn would occur within the RCA only where soil and water resource conditions would be maintained or improved.

Fuel Reduction within an RCA

This is approximately ½ mile of stream corridor, or about 15 acres. Due to fire suppression some RCAs within the project area have high conifer densities and fuel loadings. Location of the riparian treatment area was based on location of a fuel break, proximity to the county road, and the presence of riparian vegetation. Within this defined location, RCA treatments would occur up to the stream channel; treatments would include understory/overstory thinning and prescribed burning. Treatments would remove less than 40 percent of the canopy cover and would be

developed in consultation with the district fish biologist and/or hydrologist to ensure streambank stability, large woody debris recruitment, stream shade, and ground cover are addressed and riparian functions are maintained or improved as required by Forest Plan SWST10 (USDA 2003).

Treatment Intent:

- Reduce hazardous fuel loading within the RCA boundaries;
- Improve fire fighter safety (ingress and egress via the adjacent Forest System Roads) by reducing fine and ladder fuel loading;
- Reduce canopy cover, allowing more light for riparian species in the understory to grow; and
- Create a gradual transition between the treated upland and the stream channel, which would accomplish two things: move treated stands toward Appendix A desired conditions, and increase the likelihood of achieving desired effects from prescribed fire operations.

Within RCAs where surveys indicate that WCIs are not meeting Forest Plan Appendix B requirements, and where treatment would not move those WCIs toward desired conditions, treatment would not occur within the RCA.

Watershed Improvement and Restoration Treatments

Watershed improvements proposed would improve watershed function and resiliency through minimizing the impact of the road and trail network throughout the subwatersheds, and restoring vegetation and soil productivity in riparian areas. Treatments include road and trail decommissioning, improvements and reroutes, improvement to dispersed recreation sites within the Middle Fork Weiser River RCA, and vegetation treatments designed to restore or enhance native riparian vegetation through mechanical or hand treatment, prescribed fire, and planting and seeding.

Prioritization of restoration in the project area subwatersheds is based on the amount of Forest Service land within each one. Since impediments to watershed function such as road density and disturbance in RCAs are present in relatively equal proportions within each subwatershed, the higher the percentage of land ownership the greater the opportunity to restore the subwatershed to desired conditions, as stated in the Purpose and Need section of this document. Table 4 displays restoration priority order and landownership by subwatershed:

Table 4. Land ownership by subwatershed

Watershed	FS Ownership	Forest Plan Restoration Objective	WCF Condition Class
Granite Creek	93%	Move Toward Appropriate Function	Impaired; Move to “At Risk” with this Project
Mica Creek	73%	Move Toward Appropriate Function	Impaired
Jungle Creek	65%	Move Toward Appropriate Function	At Risk
Little Fall Creek	34%	Move Toward Appropriate Function	At Risk

Road treatments proposed for this project were developed using the Travel Analysis Process (TAP) conducted in 2013 and 2014 (USDA Forest service 2014b). Changes to the Forest System Road network are proposed to reduce road-related impacts to water quality and fish habitat, as well as reduce overall road density and comply with the Travel Rule (36 CFR Parts 212, 251, 261, and 295 2005) requirement of establishing a Minimum Road System (MRS).

Roads that are recommended to remain on the landscape as part of the MRS would be maintained and improved to reduce sediment production (guided by recommendations from site-specific sediment modeling). Aquatic Organism Passage (AOP) would be improved at two crossings described below. Fish habitat connectivity would also be achieved by replacement of fish passage barriers on open and closed maintenance level two System Roads where rusting or failing culverts are necessarily replaced, and by removal on closed maintenance level one System Roads. Forest Service System Roads not needed for future management or access and unauthorized routes are identified for decommissioning.

System road treatments proposed throughout the project area include maintenance and/or improvement of Forest Service System Roads. This could include graveling, reshaping, upgrading and replacing culverts, and stabilizing cut and fill slopes. Approximately 16.6 miles of system road would be placed in long-term closure status. Long-term closure treatments include stabilizing road surface and cut and fill slopes, removing or bypassing culverts, and blocking the entrance.

Approximately 16.1 miles of system roads and 62.1 miles of unauthorized routes would be decommissioned. Decommissioning treatments proposed range from full recontour to spot treating isolated areas such as stream crossings on roads that have little to no defined prism and have recovered, based on the professional judgment of the hydrologist or soil scientist, to a point where features blend with the surrounding terrain and hydrologic and soil functions are largely restored. This is not a common occurrence, and usually these “recovered roads” are legacy non-engineered skid trails or temporary roads that were never recontoured following past management activities. Roads that were engineered (prism and drainage structures) largely require treatment to restore natural physical and biological processes (Lloyd et al, 2014).

Currently, 72.7 miles of road are open year round and 27.3 miles are open seasonally to

motorized use within the Project area. Table 5 lists the road treatments by subwatershed and Table 6 displays the road density by subwatershed.

Table 5. Road Treatments (Miles) by Subwatershed. All Subwatersheds are within the Middle Fork Weiser River Watershed.

Treatment	Granite Creek	Jungle Creek	Mica Creek	Little Fall Creek
Decommission- System Road, full recontour	2.8	1.5	2.3	2.3
Decommission, System Road, outslope 20%	0.5	0	0.7	0
Decommission, System Road, permittee coordination (includes option of range of treatments, from full recontour to outslope 20%)	2.8	0	0	1.3
Decommission, System Road, spot treat	1.1	0.7	0.1	0
Total System Road Decommission (16.1)	7.2	2.2	3.1	3.6
Decommission- unauthorized road, full recontour	15.7	9.7	15.3	9.8
Decommission, unauthorized road, outslope 20%	0.2	0	0.8	0
Decommission, unauthorized road, permittee coordination (includes option of range of treatments, from full recontour to outslope 20%)	0	0	0.8 *same miles as above	0
Decommission, unauthorized road, spot treat	4.6	0.7	1.2	4.1
Total Unauthorized Road Decommission (62.1)	20.5	10.4	17.3	13.9
System Road, long term closure (level I maintenance)	7.3	2.8	5.0	1.5
Block Entrance (Level II closed roads that currently have ineffective closures; treatments could include gate, earthen berm, or boulders.	0	1.8	0.7	0

Table 6. Road Densities- Existing and with Proposed Action

**includes both Forest System and unauthorized routes*

Subwatershed	Project Area- Existing (mi/mi sq)	Project Area- Proposed Action (mi/mi sq)
Granite Creek-Weiser River	4.2	2.6
Jungle Creek-Weiser River	3.1	2.1
Little Fall Creek-Weiser River	3.9	1.8
Mica Creek-Weiser River	2.6	1.6

Aquatic Organism Passage/Habitat Connectivity

Culverts that restrict proper hydrologic function and passage of fish and other aquatic organisms would be replaced. These are:

1. FS System Road 50186 at the Middle Fork Weiser River near the junction with FS System Road 50245
2. FS System Road 50186 at Big Creek

Temporary culverts or bridges would be installed where access crosses intermittent or perennial streams in planned temporary roads or closed system roads where culverts have been removed. Where fish passage is needed, fish passage would be provided.

Recreation Improvements

Recreational use within the Project area is moderate during the summer months and higher in the fall, during hunting season. One developed campground, Cabin Creek, is located in the area with the rest of the camping occurring in dispersed sites adjacent to open roads. There are both motorized and non-motorized trails within the area. Trail use is low to moderate. Trail maintenance and minor trail relocations are proposed to improve watershed conditions by repairing erosion problems and re-routing around wet areas along some trails, focusing on trails on the east side of Council Mountain that are located in headwaters of main tributaries to the Middle Fork Weiser River. Trailhead development is also proposed to better accommodate recreational use of these trails.

Proposed improvements include:

Developed and Dispersed Recreation

1. Cabin Creek Campground:

- Install and relocate one single vault toilet to replace the old existing one. Relocate it to meet all required health and safety codes, including setbacks from live water.
- Add new site markers to individual campsites, replace an existing fee tube and information kiosk, install accessible tables, and build an accessible pathway to the water

system.

- Gravel the main campground loop road, and widen the road and turn at the campground access to accommodate full size recreational vehicles.
2. Make improvements to the Horse Cabin Flat dispersed site including installation of up to four hitch rails, designation of camping sites using boulders, graveling and site signs to mark the allowed camping locations, add a single vault toilet.
 3. Harden the crossing of the Middle Fork Weiser River at the dispersed camping area for stock use and to minimize resource damage and focus motorized access to the existing bridge approximately 300 feet from this crossing. Make improvements to the site in general (hardening, providing physical barriers to direct use) in order to minimize impacts to the adjacent Middle Fork Weiser River.
 4. Roads identified for decommissioning that are located at the intersection with FS System open or seasonally open roads would be evaluated for site-specific dispersed recreation opportunities within 300 feet of the system road junction if no resource concerns are identified. If necessary for resource protection, sites would be improved by surfacing, or other hardening and evaluate for barriers, where stream impacts are found.

Trails

1. Establish trailheads with parking and hitch rails for the #205 (northeast) and the #198 (southwest) trails. Both trailheads would require securing easements from Potlatch Corporation, the private landowner.
2. Motorized use is currently present and allowed within the Council Mountain IRA. To accommodate continued two-wheel motorized access on the entire #198 trail, change the designation of a short section (two miles) of the trail from non-motorized to two-wheel motorized use.
3. Perform trail maintenance (including proper signing) on 24 miles of existing open designed trail within the Project area (this includes the 518 trail to Indian Mountain).
4. Construct and formally designate for seasonal use, a new motorized OHV loop Trail (Trail open to vehicles 70 inches and less in width) using closed road 50166 and closed road 50485, to provide a motorized trail approximately 3 miles in length. This would require ½ mile of new trail construction to complete and close the loop.
5. Sign and formally designate the former #202 trail as open for non-motorized use. Complete needed switchback construction to mediate the steep sections.
6. Relocate the trailhead for the #209 ATV trail onto National Forest Lands. Correct the map to coincide with actual trail location. Change the designation of the trail from “open year round” to “seasonal”, to coincide with other seasonal trail and road designations in the immediate area.
7. Re-route portions of the #198 trail near the base of Council Mountain to reduce resource impacts and improve sustainability. Work to reduce congestion of multiple trail junctions in this sensitive upper elevation trail network.
8. Close and rehabilitate approximately 4 miles of unauthorized OHV trails throughout the

project area, as identified on numerous field trips.

Council Mountain and Poison Creek Inventoried Roadless Areas

Proposed actions in the IRAs include:

- Preparation for prescribed burning including associated handline and prescribed burning
- Trail improvement and designation changes.

Council Mountain Research Natural Areas

There is no treatment proposed in the Council Mountain Research Natural Area.

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