Preliminary Information (Pre-Scoping)
PROPOSED ACTIONS FOR THE UPPER MORES PROJECT

PROJECT OVERVIEW

The Boise National Forest is developing a proposal to implement a variety of vegetation management activities, including timber harvest, non-commercial thinning, prescribed fire, mastication, and reforestation to address hazardous fuels within the wildland-urban interface, promote forest resiliency, and respond to insect and disease outbreaks. The forest is also proposing transportation and recreation management activities focused on reducing impacts to watersheds and providing sustainable recreation opportunities.

Where is the Upper Mores Project?

The Upper Mores Project is located on the Idaho City Ranger District near Idaho City in Boise County. The project area is approximately 40,933 acres and contains 37,171 acres of National Forest System lands. Through the Wyden Amendment (P.L. 109-54, Section 434) proposed treatment activities may occur on State and private lands within the project area boundary provided there are agreements between the BNF, the Idaho Department of Lands, and/or willing private landowners.

The legal description for the project area is portions of: Township 7N, Range 6E, Range 7E; Township 6N, Range 5E, Range 6E, Range 7E; and Township 5N Range 6E. See the map at the end of this document for further location information.

Management Direction

The 2010 Boise National Forest Land and Resource Management Plan provides management direction for resources on the forest. The Plan assigns different components, such as desired conditions, standards, and guidelines, for Management Areas (MAs) and Management Prescription Categories (MPCs) to help meet forest-wide goals and objectives. The project is entirely within MA 8 (Mores Creek). MPCs that fall within the project area boundary include MPC 5.1 (Restoration and Maintenance Emphasis within Forested Landscapes), MPC 3.2 (Active Restoration and Maintenance of Aquatic, Terrestrial, and Watershed Resources), and MPC 4.1c (Undeveloped Recreation: Maintain Unroaded Character with Allowance for Restoration Activities).

Why is this Project Being Proposed? (Purpose and Need)

Much of the project area lies within the Southwest Idaho Landscape, a high fire-risk landscape, designated for priority funding and treatments under the 2022 Bipartisan Infrastructure Law. Projects in this landscape should decrease wildfire risk to communities, improve watershed health, sustain industry, protect recreation opportunities, and improve forest resilience to climate change and other stressors. Due to the proximity of wildland urban interface and infrastructure, in addition to many years of fire exclusion, fuel accumulations, and natural and human-caused disturbances; there are now conditions that could substantially interrupt natural processes important for the health of the ecosystem. ***The Upper Mores Project*** is being proposed to meet the underlying ***need for action***: to reduce risk of uncharacteristic wildfire in the project area and improve watershed health to achieve desired vegetation conditions. Landscape diversity allows for historical disturbance processes to occur at moderate levels with lower risk for uncharacteristic wildfire and insect and disease-related disturbances.

There are several ***purposes*** that meet the need for action. These purposes will be refined through further field review by resource specialists, collaboration, and public outreach.

Purpose 1

Reduce hazardous fuels in the Wildland Urban Interface (WUI)

Need

Most of the Project Area is within the Warm Dry Douglas-fir/Moist Ponderosa Pine and the Warm, Dry Subalpine Fir forested vegetation groups. Stands in these vegetation group pose a high fire risk for several reasons:

- These stands have relatively high stand densities and fuel loadings that have departed from Forest Plan desired vegetative conditions creating a risk for uncharacteristic wildfires; and
- Insect and disease activity have increased due to a lack of disturbance and/or management, which has decreased diversity of forested stands. Other factors driving this increase also include climate change, drought, and other natural environmental stressors.

Large scale fires have become more common across the Boise National Forest. Examples include the 8th Street Fire (1996), Trinity Ridge (2012), Aveline Fire (2012), Elk Fire (2013), Pine Creek Fire (2013), Pony Fire (2013), Mack Fire (2014), Walker Fire (2015), Mile Marker 14 Fire (2016), Table Rock Fire (2016), and Pioneer Fire (2016). The Pioneer Fire scar borders the watershed boundary to the north/northeast. The Upper Mores Project surrounds several communities and subdivisions in the Idaho City area and the Forest has determined this community and nearby infrastructure is in the wildland urban interface (WUI). Some private property owners have treated their acres to reduce hazardous fuels, and earlier projects on Forest Service lands (Bogus Basin Forest Health Project, 2016; Sinker Creek-Boise Ridge, 2019; and Clear Creek Forest Health Project, 2022) were designed to create a more fire resilient landscape, but those projects occur to the southwest of the Upper Mores watershed. Communities in the Idaho City area need more localized treatment; a fire originating on public lands and spreading to private lands (and vice-versa) poses a high risk to public safety.

There is a need to conduct strategically placed fuels treatments to protect nearby communities. Such treatments would reduce crown fire potential, fuel loadings, and reduce risk to the public and suppression resources in the event of a wildfire.

Purpose 2

Manage species composition and forest structure using forest management tools such as commercial and non-commercial treatments to promote early seral species and reduce the risk or extent of, or increase resilience to, insect or disease infestation.

Need

The project area exhibits stand densities in some places that may be contributing to declines in stand health, including tree mortality caused by insect and disease. There is a need for targeted treatments to increase landscape diversity, which lowers the risk for uncharacteristic disturbances from balsam wooly adelgid and potentially other forest insects and disease.

Figure 1. High stand densities in the project area may be contributing to declines in stand health, including tree mortality caused by insect and disease.

Balsam Woolly Adelgid

Subalpine fir is susceptible to damage and mortality from this introduced insect. Balsam wooly adelgid causes “grouting,” a stunting of the terminal growth with distinct swellings around the buds and branch nodes. The dead/dying upper stem of the fir is often then invaded by wood-destroying fungi, while the main bole is subject to mass infestation, causing quick decline and turning the tree yellow then deep red or brown.

Other insects and disease exist on the landscape, including Douglas-fir beetle, dwarf mistletoe, *Ips* pine engraver, and mountain pine beetle; the extent of how they are affecting the forest is being assessed. Treatments may be proposed to address these vectors and increase resilience to them. Field verification is ongoing.

Figure 2. Stand conditions typical in the project area, showing dead/dying subalpine fir caused by balsam wooly adelgid. Affected trees are especially prominent in the project area adjacent to Highway 21 at the higher elevations near Mores Summit.

Purpose 3 – Aquatic and Terrestrial Habitat and Biodiversity

Improve watershed conditions and reduce road and/or trail-related impacts to water resources and aquatic habitat, soil, and wildlife and associated habitats. Increase ecosystem resilience and function at the landscape scale in order to maintain and improve habitat conditions for native plants and animals.

Need

The five subwatersheds within the project area are either functioning at risk or exhibit impaired function; this includes water quality, aquatic habitat condition, and riparian and wetland vegetation conditions. These impaired conditions have been caused by several past and current human activities. The headwaters of Mores Creek subwatershed is a high priority Aquatic Conservation Subwatershed, so active restoration opportunities should be pursued when possible. There is a need to maintain or improve important aquatic habitat features so they can be sustainable over time. There is also a need to minimize road-related impacts on water quality and quantity, and aquatic habitat.

To improve terrestrial habitat and biodiversity, there is a need to restore landscapes to more resilient conditions by favoring early seral species in a diverse mosaic of seral stages that supports federally listed and regionally sensitive wildlife and plants.

Past use and development have altered landscape and watershed connectivity for several wildlife species. Strategies for managing toward larger, well-connected patches include reducing road and trail density to decrease fragmentation, disturbance and risk of mortality, retaining and improving the structural elements of forage and cover along corridors such as ridges, riparian areas and dry meadows.

To maintain breeding and foraging habitat for many Threatened, Endangered, Proposed, Candidate and Sensitive (TEPCS) wildlife species, there is a need to retain stands exhibiting important legacy characteristics such as older trees and snags. These trees provide diversity and are often selected as nest sites. In more frequent fire regimes (which makes up most of the project area), this structural stage does not occur at the same scale across the project area as what would historically be expected. Retaining the large tree component and developing mid-size stands toward larger size classes would contribute to the maintenance and restoration of old forest habitat.

There is a need to retain and improve important habitat components for the threatened whitebark pine. The species is under threat from non-native white pine blister rust, native mountain pine beetle epidemics, a changing climate, and altered fire regimes.

Purpose 4 – Road Management and Sustainable Recreation

Provide for a safe and efficient transportation network for all users and address road and recreation-related negative effects to resources.

Need

There is a need to reduce road-related degrading effects to resources. Roads may be needed and/or not needed for land and resource management; appropriate roads should be evaluated for decommissioning.

There is a need to reduce impacts to resources through trail re-routes and to provide safe trailhead locations to proposed trails and the pre-existing trail system.

Additionally, there is a need to minimize illegal activities in the project area through decommissioning of unauthorized routes in areas causing user conflict and resource damage.

Figure 3. Unauthorized motorized use adjacent to NFS Road 327. This use is causing erosion and exposing tree roots, eventually killing the trees and creating hazards to recreators. This degradation is also adding excess sedimentation into nearby Granite Creek.

Sacajawea's bitterroot (LESA) exists along prominent ridgetops and shoulder slopes in the project area. These geographic features coincide with existing unauthorized off-road vehicular use. There is a need to reduce impacts to this plant by decommissioning unauthorized routes where feasible.

Figure 4. On the left is a photo of Sacajawea's bitterroot, most visible during the two-week blooming period in June. On the right, tire tracks from illegal offroad use have damaged rare LESA habitat in the Upper Mores project area.

Preliminary Proposed Actions: What are we proposing to do?

The proposed actions are preliminary and will be refined based on comments received during scoping, Tribal consultation, conversations with interested groups and individuals, and additional field work and analysis conducted by Forest Service resource specialists. Some aspects of the proposed actions could change prior to a decision being signed. The Forest Service is not currently seeking comments on the proposed actions.

The Forest proposes to address the purpose and need by conducting a combination of vegetation treatments, prescribed fire, active habitat restoration, and transportation management. Specifically, the Forest is proposing intermediate and regeneration thinning activities, aspen and whitebark pine restoration, fuels reduction, meadow restoration, reforestation, road and trail realignments, improvements, and closures. Road management activities associated with vegetation treatments are also needed.

Vegetation Management

Vegetation management activities, consisting of commercial and non-commercial treatments, are proposed to address the purpose and needs. Proposed treatments are described below.

Commercial Harvest

Intermediate Treatment – Commercial Thin

Commercial Thin includes thinning trees from below to accelerate the development of large trees by reducing competition and favoring retention of healthier, more vigorous trees. Trees heavily infected with balsam wooly adelgid (Subalpine fir) and dwarf mistletoe (Douglas-fir) would be targeted for removal.

Regeneration Harvest – Group Selection with Reserves

For units proposed for this treatment, up to 1/3 of the stand acres would include removal of most trees, aside from a few reserves. Reserve trees would likely be the largest diameter lodgepole pine, ponderosa pine, and Douglas-fir on the site and would include several of the large pine as well as any legacy trees. The remainder of the stand would be treated by thinning trees through all diameter classes in a similar way to the commercial thinning treatment, described above.

Regeneration Harvest – Shelterwood with Reserves

This treatment is prescribed where much of the overstory has already been killed or is experiencing high levels of balsam wooly adelgid and dwarf mistletoe activity. This treatment would retain at least 10% canopy cover and the residual trees should be composed primarily of ponderosa pine, lodgepole pine, or Douglas-fir. Retained trees would typically be in the larger size classes and relatively free of insects and disease. Retained trees are intended to limit post-fire brush response and aid in establishing regeneration.

Non-Commercial Treatments

Intermediate Treatment- Non-Commercial Thin

Non-commercial thinning consists of thinning of small diameter trees to reduce the density of the understory in overstocked stands where pines are diminishing in abundance and vigor due to overcrowded, dense conditions. Merchantable material may be removed if economically feasible.

Whitebark Pine - Competition Removal and Pruning

Thinning competing vegetation would be implemented for the restoration of whitebark pine (*Pinus albicaulis*), a western North American tree listed as threatened under the Endangered Species Act. Thinning consists of removal of competing conifer trees that are encroaching on whitebark pine to reduce

competition for resources and retain whitebark pine. Pruning activities may occur to raise the crown base height of individual trees or to remove cankers at the site of infection.

Aspen Management – Aspen Clone Release

Aspen Clone Release consists of thinning conifers within and around aspen stands where aspen is diminishing in abundance and vigor due to overcrowded and dense conditions. Merchantable material may be removed if economically feasible.

Meadow Encroachment Treatments

Meadow Encroachment Treatments would be considered in all areas where conifers are encroaching on historically open meadows. Actions include mechanical (in dry meadows) and non-mechanical thinning of conifers that are establishing and infringing on the edges of historically open meadows. This treatment may be considered in riparian conservation areas.

Planting

Planting activities, typically after regeneration harvest, would consist of planting early seral species where species composition and/or stocking levels are not expected to meet desired conditions. Site preparation would consist of mastication, salmon blading (use of a tractor equipped with a toothed blade that mixes the first couple inches of topsoil in preparation for natural regeneration), and/or prescribed fire.

Planting of whitebark pine could occur anywhere in whitebark pine habitat where species composition and/or stocking levels don't meet desired conditions. When available, disease-resistant stock would be planted to encourage blister rust resistance.

Harvest Systems

Commercial timber removal would be accomplished with ground-based logging systems that include rubber-tired skidders, feller bunchers, off-road jammers, as well as tethered systems. On slopes less than approximately 35%, feller bunchers would harvest the trees while rubber-tired skidders would be used to yard material to landings adjacent to the transportation network. On slopes steeper than approximately 35%, off-road jammers would be used to yard material to landings via skid/jammer trails or the transportation network. Tethered systems include the use of harvesters and forwarders that can be used on all slopes. On slopes between 35% and 70% a cable system would be attached on the uphill side of the machine to a tree stump, then used to lower the machine down the slope to harvest and retrieve material. In portions of the project area, skid trails exist from past commercial timber removal activities and would be used, where feasible, to limit the creation of new trails. For most harvest systems, trees would be whole-tree yarded when possible, allowing the creation of piles near the landing for later burning instead of contributing to additional surface fuels. Tethered logging systems would use cut-to-length harvest methods within the cutting units. This provides slash material in a lop and scatter manner that the machines use as matting to reduce overall ground impacts and lessen the height of fuels remaining on the ground post-harvest. Fuels are typically then addressed with broadcast burning. In most cases, no landings are created when using tethered harvest methods. Logs are decked in the interior of units and a forwarder follows behind the harvester picking up the logs and transporting them to loading areas via skid trails or the transportation network.

Fuels Treatments / Prescribed Fire

The Proposed Action was designed to reduce fuel loads through prescribed fire/fuels treatments that would consume or remove the material from the site, and/or rearrange across the treatment unit. Fuel treatments would follow commercial and non-commercial treatments but may also take place in other portions of the project area outside thinning treatments.

Concentrations of slash would be piled and burned. Pile burning would likely take place in late fall or during winter months, but could occur when conditions warrant. Prescribed understory fires (broadcast burn) would reduce fine fuels across the stands and could be used following commercial and non-commercial treatments or as a stand-alone treatment. Broadcast burns would occur where continuous surface fuels exist and would attempt to emulate a low intensity surface fire where shrubs, needle cast, and the upper duff layer is primarily consumed. Some mortality would be expected, particularly in smaller diameter trees. Additional factors that may increase the likelihood of mortality include tree stress caused by insects, disease, or competition. Depending on fuel loads, burning may need to occur in multiple entries due to the lack of historical fire frequency within the project area. Underburning helps reduce ladder fuels and raise canopy base heights throughout the stand. Burning would likely occur in either spring or fall, as prescription parameters, burn windows, and fuel conditions permit.

Figure 5. The Bear Face Project area near McCall on the Payette National Forest. Previous commercial and non-commercial treatments (timber harvest, thinning, prescribed fire) have helped turn this wildland-urban interface area into a healthy, adaptable landscape, resilient to wildfire.

Jackpot burning would occur where surface fuels are concentrated in discrete locations, typically on drier slopes and aspects. Jackpot burning creates a patchy burn mosaic; reducing fuel concentrations where they are the heaviest and leaving areas where fuel concentrations are minimal, largely unburned. Jackpot burning reduces the likelihood of individual tree torching.

Mechanical methods to reduce fuels include pruning and/or machine cutting with a mulching or mastication head on slopes less than approximately 40%. Surface fuels would be either removed for biomass, mulched, chipped, masticated on site, or piled and burned on site. Piling would be accomplished either by hand or machine, on suitable slopes.

Whole tree harvesting with disposal of the tops at the landings is an effective method of preventing surface fuel increases within the residual stand. At the landings, fuels would be piled and burned, while surface fuels within the units would be treated by underburning, jackpot burning, or rearranged by mechanical means.

Riparian Conservation Area Treatments

Riparian conservation areas (RCAs) will be delineated as part of the Proposed Action to protect and maintain the integrity of riparian communities and their adjacent aquatic ecosystems. Appropriate buffer widths surrounding the riparian communities would ensure riparian function and ecological processes are maintained or restored to fully support beneficial uses, including native fish species and their habitats.

The Interdisciplinary Team hydrologist will use on-the-ground mapping to validate perennial, intermittent, and ephemeral stream types along with sediment, large woody debris, and stream shade data – providing project scale information to use Option 3 in the Forest Plan to define RCAs (USDA USFS 2010a, Appendix B, p. B-34).

Watershed Restoration

Specific actions under this category include meadow restoration and installation and repair of aquatic organism passages, and culvert removal. Activities related to watershed restoration, but not stated specifically under this category includes decommissioning of unauthorized roads and trails causing resource degradation, aspects of prescribed fire activities, and removal/remediation of abandoned mines.

Meadow Restoration

Aquatic/riparian habitat improvements are proposed on an unnamed meadow east of Freeman Peak in the Headwaters Mores Creek Subwatershed. NFS Road 314 currently travels through portions of this meadow. The road itself has widened due to excessive use and rerouting which has shifted the width of the road to two to three times the normal width. Vehicles are causing rutting, soil displacement, and accelerated erosion of the banks and meadow habitat, causing the eventual dewatering of the meadow's existing footprint, which will lead to continual shrinking and eventual disappearance from the landscape. Meadow restoration actions include soil decompaction, soil bulking in rutted areas, and planting of native vegetation. Activities would occur parallel to meadow encroachment activities described above. Additional meadow areas found to be in degraded condition during field assessment could be treated in a similar fashion.

Figure 6. View of meadow damage on Road 314 looking south.

Aquatic Organism Passage Installation and Repair

Where needed, culvert or other obstructions would be replaced, removed, or improved to restore connectivity to aquatic organisms. Activities would coincide with other transportation system – related activities described below.

Transportation / Road Management

On Forest Service lands, an inventory and analysis of the transportation system was conducted in 2011 for the Boise NF to identify problem areas and opportunities for decommissioning, closure, or upgrade (i.e., surfacing, hydrological disconnect, change maintenance levels). The planning effort for the Upper Mores Project is reviewing recommendations from the Forest-wide analysis and taking a more detailed examination.

Road Management Actions to Support Vegetation Management and Prescribed Burning

Proposed road activities designed to support vegetation and prescribed burning treatments may include road maintenance, construction, and decommissioning activities. Road maintenance may include road prism blading and shaping, roadway vegetation clearing, roadway ditch and culvert cleaning, drainage culvert replacement and installation, water bar removal and installation, road aggregate resurfacing, dust abatement, and surface repair including aggregate placement.

Additionally, temporary roads on NFS lands may be constructed, mostly on existing template. These roads would be decommissioned and would not be added to the Forest Transportation System. Permanent roads may be considered for construction and added to the National Forest transportation system. Existing roads on private lands used for haul would not be decommissioned after completion of project activities.

Road Restoration Actions

Road restoration actions may be proposed to improve drainage structures on existing roads and trails to reduce the potential for future road and trail-related failures and reduce impacts to water quality and aquatic habitat by decreasing the amount of sediment delivered to streams. The Forest is in the process of identifying such road and trail segments.

Decommissioning Unauthorized Routes and Rehabilitating Dispersed Recreation Use Areas

Unauthorized route and dispersed recreation site restoration may be proposed to restore resource conditions and reduce degradation for a number of native plants and animals, including the sensitive Sacajawea's Bitterroot and threatened White Bark Pine. Decommissioning unauthorized routes would restore areas by blocking vehicle access. Unauthorized route decommission activities would be determined on a case-by-case basis but could include installing waterbars in the trail tread to limit further erosion and discourage future use, covering the trail with locally available brush and rocks, installing signs, constructing rock or log barriers, installing gates, and/or planting and seeding with appropriate vegetation. Restoration of dispersed recreation use areas would be achieved by closing locations to vehicles by installing boulder barriers and signs and/or planting and seeding.

Figure 7. This unauthorized route adjacent to an authorized trail could be proposed for decommissioning. Such work may include ripping he surface, placing logs and other natural debris over the trailhead, reseeding it with native weed-free seed mixtures, and installing barriers and signage. Closing this route would encourage recreators to use the nearby authorized trail system.

Trailhead Improvements

Improving signage at authorized trailheads and trail crossings may be proposed to funnel recreation users to such areas, discouraging them from using unauthorized routes. Improvements at trailheads could include installation or replacements of informational kiosks with trail information and maps, while improvements at crossings would include installation or replacement of carsonite trail markers to clearly identify authorized trials.

Trailhead locations may be reconstructed or improved to meet current standards. Such actions could include installing barrier rock around the trailhead parking area and placing of material and compaction of surfaces throughout the trailhead parking area. Survey work and identification of such trailheads and crossings is ongoing.

Designation of Authorized Trails

New authorized motorized and non-motorized trails may be designated/constructed where needed to create connectivity between trail systems. Such designations would encourage users to stay on the designated trail system, reducing unauthorized use overall, and enhancing the recreational experience.

Figure 8. Preliminary Map of the Upper Mores Project. Treatments are still being refined through field surveys and on-the-ground mapping.