Bear Palmer Forest Health Project Preliminary Effects Document

Introduction

The Gardiner Ranger District is proposing to treat approximately 4,401 acres of National Forest System lands on the Gardiner Ranger District of the Custer Gallatin National Forest, using a variety of vegetation treatments to reduce the risk, and extent of insect and disease outbreaks, enhance landscape resilience, and to reduce hazardous fuels surrounding the community of Jardine in Park County, Montana.

The project is located in Park County, Montana, on the Gardiner Ranger District of the Custer Gallatin National Forest. The project area is adjacent to the community of Gardiner, surrounding the community of Jardine, and north of Yellowstone National Park. The project area encompasses Eagle Creek, Bear Creek, Palmer Creek, and Crevice Creek.

As with most of the western United States, over 100-years of wildfire suppression has led to an increased density and homogenization of forest stands on National Forest System lands. In addition, environmental change contributing to increasingly large swings in seasonal conditions has further stressed western forests. These conditions have resulted in forested stands that are at substantial risk to tree mortality from outbreaks of insects and disease, and high-severity wildfires. In response to these crisis conditions, the Secretary of the Department of Agriculture has made an emergency action determination under section 40807 of the Infrastructure Investment and Jobs Act (IIJA) that includes a majority of those lands in the project area.

Consistent with the Infrastructure Investment and Jobs Act and the Secretary's determination, we will carry out an authorized emergency environmental assessment in order to address the threats to public

health and safety, critical infrastructure, and to mitigate threats to natural resources on National Forest System lands.

We are preparing an environmental assessment to determine whether effects of the proposed activities may be significant enough to prepare an environmental impact statement. By preparing this environmental assessment, we are fulfilling agency policy and direction to comply with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. For more details of the proposed action, see the Proposed Action section of this document.

Need for Action

The project area includes lands identified under the Emergency Situation Determination which the Secretary of Agriculture made under section 40807 of the Infrastructure Investment and Jobs Act. The lands included in the Secretary's determination were those lands identified as experiencing, or at risk of experiencing, insect and disease infestations as a part of Section 602 of the Healthy Forests Restoration Act, and lands under very high or high fire risk as identified in the 2023 Wildfire Hazard Potential for the United States report. The project area also includes the wildland urban interface around the community of Jardine, MT.

The purpose of this project is to address current wildfire risks and insect infestations, to increase resiliency to future wildfires and disturbances from insect and disease, and to increase ecosystem health across the project area. This would be accomplished by managing fuels, restoring degraded habitat types, and increasing landscape diversity in the project area.

From an overall wildfire mitigation and protection perspective, effective fuel reduction treatments are needed in the wildland urban interface across broad areas surrounding communities to protect homes, life, and property. These treatments will also increase firefighter safety and can provide multiple fire management options when wildfires occur. Treatments are also designed to promote ecosystem health and resilience to the environmental stressors described in the introduction.

Jardine is a small community accessed by a single gravel road (one way in and one way out) and is situated in a fire prone ecosystem as evidenced by the Yellowstone fires of 1988. In addition to the fires of 1988, many large-scale wildfire incidents have periodically occurred in the surrounding area since that time. Implementing this proposed action will increase the probability of successfully mitigating many of the devastating effects suffered by other surrounding communities.

The project area currently has a high level of spruce budworm infestation and 67 percent of the lodgepole and whitebark pine dominated stands possess characteristics of high hazard rated stands to mountain pine beetle, followed by an estimated 33 percent of stands with moderate hazard class designations. Climate forecasts predict conditions will increase forest susceptibility to insect and disease outbreaks in the project area. Creating new age classes and diversifying species composition within the project area will help address spruce budworm levels and reduce the stand hazard ratings for mountain pine beetle and other potential pests.

In addition, conifers have expanded into historically wet meadows and streamside riparian areas, and whitebark pine stands within the project area. Increased shade and competition from conifers in wet meadows can displace sedges and willows and the higher transpiration rate of conifers can decrease soil moisture and surface water in wet meadows and wetlands. This is of particular concern in the Gardiner Basin's semi-arid landscape where many wetlands and ponds are already ephemeral.

Proposed Action

The proposed action is designed to meet the purpose and need for the project and consists of the following activities: commercial timber harvest (clearcut, commercial thinning, and group selection) and non-commercial treatment (mechanical fuels treatments, non-mechanical fuels treatments, and prescribed fire). In addition, the non-commercial treatment units may include: riparian benefit treatments, aspen enhancement, and whitebark pine treatments. The acres, miles and locations of actions described in this document are approximate and will be refined based on the field conditions and additional analysis. Temporary road locations are approximate and road maintenance descriptions are based on current knowledge and may change with layout and during sale implementation. Changes will be within the range of effects analyzed and disclosed in the environmental assessment.

Primary Treatment Acres	
Commercial Treatments	
Clearcut	824
Commercial Thinning	802
Group Selection	500
Non-Commercial Treatments	
Mechanical Fuels (including riparian and aspen treatments)	565
Non-Mechanical Fuels (including whitebark pine treatments)	1,447
Prescribed Fire (Broadcast Burning)	263 primary (992 secondary)*
Total treatment acres	**4,401**
Temporary Roads	
Use of Existing Templates	9.2 miles
New Construction	7.7 miles
Total Miles	**16.9 miles**

*Where prescribed fire units overlap with other units, broadcast burning will be implemented as a secondary treatment

Commercial Treatments

All treatments under this category will be implemented through the completion of commercial harvesting activities. Commercial timber harvesting activities will be planned where site conditions allow for mechanical equipment operations and tree size classes meet merchantability requirements. These

treatments will remove trees larger than seven inches diameter at breast height to maintain and restore the desired characteristics of ecosystem composition and structure, while favoring the retention of trees of the highest vigor, largest diameter and longest-lived species that are most resistant to disturbance. The removal of these trees during harvesting operations will meet overall forest health objectives while minimizing residual fuels and downed woody material that could foster localized insect outbreaks.

Clearcut

The Forest proposes to implement stand clearcutting on about 824 acres of the project area. This is the maximum extent of this treatment type. This treatment is categorized as a regeneration harvest method that is designed to improve conditions for successfully establishing a new cohort of trees. The National Forest Management Act requires that harvested areas in this category are adequately restocked within five years of final harvest (36 CFR219.27).

Clearcutting treatments are the preferred regeneration treatments for lodgepole pine dominated forests when accounting for the species inherent shade intolerance, natural regeneration methods, and associated insect and disease concerns. These treatments will be designed to retain approximately six to 10 residual sawtimber sized trees per acre for future recruitment of snags and downed woody debris, as well as for species diversity and other ecological benefits. Desired trees will be retained based on their species type, health/vigor, and size, with a general preference of leaving preferred tree species (Douglas-fir, Engelmann spruce, whitebark pine) of the largest sizes without observed health concerns.

Clearcuts will be limited to 40 acres in size and any openings will be separated by 300 feet to provide non-regenerated areas of forest for size class diversity and other ecological benefits.

Remaining sub-merchantable material (less than seven-inch diameter-at-breast-height) within the treatment units will be treated with a secondary treatment (non-commercial or prescribed fire) following the commercial treatments to meet the purpose and need. The goal of the secondary treatment will be to reduce fuels, address lodgepole pine dwarf mistletoe concerns, and enhance species composition.

Commercial Thinning

Commercial thinning treatments will be the primary commercial treatment for stands dominated by Douglas-fir and spruce-fir vegetation types and lodgepole pine stands that are of commercial size but less than 80 years old. This treatment is categorized as an intermediate cutting method with the objective of reducing stand density primarily to reduce natural fuels, improve growth, and enhance forest health. A benefit to commercial thinning is that stands will remain fully forested and therefore maintain a higher visual aesthetic.

Within these intermediate treatments, residual stand densities will be driven by existing size classes and tree species. Large diameter stands primarily comprised of Douglas-fir will be reduced to target stand densities of 25 to 50 trees per acre (30 to 40 foot spacing), while residual densities will be increased to 70 to 194 trees per acre (15 to 25 foot spacing) within smaller diameter stands comprised of smaller diameter lodgepole pine and spruce-fir. Where commercial treatments are planned within Douglas-fir and spruce-fir old growth stands, treatment specifications will require post-treatment retention of applicable old growth criteria for each stand type.

Where commercial thinning treatments are located in Douglas-fir dominated stands, Land Management Plan standards, enhance herbaceous communities, and lower fuel loading across the landscape, additional tree removal is preferred adjacent to herbaceous communities dominated by sage and grassland vegetation. This can be accomplished by increasing residual spacing by 10 feet within 100 feet of these openings. Where inclusions of aspen forest cover are found within or are adjacent to commercial thinning units, additional conifer removal is preferred to enhance aspen retention and regeneration.

Group Selection

The modified group selection treatment will be used in stands dominated by spruce-fir and Douglas-fir cover types with observed forest health concerns and mixed dominance with lodgepole pine. The modified group selection treatment is a multi-entry cutting method as part of an uneven aged management system. This treatment method requires the creation of regeneration openings (approximately three to five-acre openings) throughout the stand. This treatment will consist of three commercial entries spaced approximately 30 years apart. Each entry will remove a portion of the stand with the objective of creating three distinct age classes. The first entry will remove approximately 40 percent of the stand with the remaining entries removing approximately 30 percent in each entry. The matrix (areas between the group openings) will be thinned as appropriate (commercial and sub-merchantable thinning) during each entry.

The location of the initial group selection openings proposed in this project will be prioritized in areas of units with lodgepole pine codominance, inclusions of aspen, areas containing or adjacent to meadows, and areas with the greatest observed forest concerns. Within the group selection cuts, approximately six to10 residual sawtimber sized trees will be retained per acre for future snag recruitment, downed woody debris, species diversity, and other ecological benefits. Desired trees will be retained based on their species type, health/vigor, and size, with a general preference of leaving preferred tree species (Douglas-fir, Engelmann spruce, whitebark pine) of the largest sizes without observed health concerns.

This treatment is categorized as a regeneration method that is designed to improve conditions for successfully establishing a new age class. The National Forest Management Act requires that harvested areas in this category be adequately restocked within five years of final harvest (36 CFR219.27).

Remaining sub-merchantable material (less than seven inches diameter at breast height) within the treatment units will be treated following the commercial treatments. The goal of this follow-up treatment will be to reduce fuels, address lodgepole pine dwarf mistletoe concerns, and enhance species composition.

Non-Commercial Treatments

Non-commercial treatments address non-merchantable and downed trees to remove potential fuels from identified units. Where these units overlap with aspen enhancement units, riparian restoration units, or whitebark pine units, the non-commercial treatment will be applied to achieve the appropriate restoration goals identified below.

Mechanical Fuels

These treatments primarily utilize mechanized equipment instead of hand crews to remove trees and downed fuels. Examples of equipment that may be used include masticators (mulchers), harvesters, feller bunchers, grapples, chippers and more. Some mechanical treatments may also include handwork with chainsaws. Materials generated from these activities would be treated using mastication/chipping, or machine piling. Mulch generated from mastication/chipping would be scattered in the treatment units. Machine piling would treat fuels in a similar manner to hand piling, with piles six by eight feet in size to be burned once fuels have dried.

Aspen Enhancement

Where communities of aspen exist outside of commercial harvest treatment units, the removal of competing vegetation (conifers) will be implemented through mechanical and non-mechanical fuels treatment methods. The goal of these treatments will be to enhance the longevity of these habitat types by retaining healthy mature aspen trees with vigorous aspen regeneration. Treatments will specify the removal of conifers less than 12 inches in diameter within these aspen communities and girdling trees 12 to 25 inches in diameter where necessary to create snags and reduce competition to aspen in order to move toward desired conditions in the Forest Plan.

Riparian Restoration

This project aims to maintain or restore riparian structure and functions that are altered by conifer encroachment into riparian areas. For inner riparian management zones, where a departure from desired riparian vegetation composition is documented, conifers may be removed using non-commercial hand-thinning. The purpose of these treatments is to restore the ecological integrity of aquatic and riparian-associate resources.

Non-Mechanical Fuels

Crews will use chainsaws, loppers and hand-pulling to complete hand thinning treatments by removing smaller trees (less than eight inches diameter at breast height). Activity fuels, or those combustible materials generated from vegetation management activities, will be treated using lop-and-scatter, and/or hand piling. Lop-and-scatter spreads treated vegetation away from remaining trees to increase decomposition rates. Hand piling will arrange fuels in piles of approximately six feet in height by six to eight feet in length. When piled fuels have adequately dried, they would be burned.

Whitebark Pine Treatments

During the period of 1964-2006, regeneration harvests were conducted in high elevation forest cover types with whitebark pine codominance within the project area. In order to enhance the potential of whitebark pine regeneration and dominance within these past treatment areas, follow-up non-mechanical thinning treatments are planned to remove competing vegetation greater than one foot tall and up to seven inches in diameter to release advanced regeneration of whitebark pine. Trees to be cut will not include any five-needled pine species. Residual slash will be lopped and scattered within the treatment areas in order to prevent the need to burn residual slash piles which would increase the potential to damaging whitebark pine regeneration.

Prescribed Fire

Pile Burning

Pile burning is a form of prescribed fire in which crews ignite, and fire consumes hand or machine constructed piles of woody material under predetermined weather, fuel, and operational conditions. Crews burn these piles after they have adequately cured to ensure efficient ignition and complete consumption. Pile burning reduces concentrations of activity fuels, limits the risk of high intensity surface fire, and helps meet desired fuel loading objectives. Because the fire is confined to discrete piles, this method provides a controlled and effective way to remove large amounts of flammable material while minimizing impacts to surrounding vegetation and soil.

Broadcast Burning

Broadcast burning is a type of prescribed fire that fuels managers use to reduce fuel loading across a designated burn unit. Prior to ignition, crews identify and construct burn units using a combination of natural features, constructed fire-line, roads, and trails to create containment boundaries. These units may overlap other treatment areas, such as thinning units or pile-burn units, or they may stand alone as independent treatments. Depending on how they are applied, broadcast burns may function as primary, secondary, or tertiary treatments within this project.

Managers use broadcast burning to reduce concentrations of activity fuels, lower naturally occurring surface and ladder fuels, and prepare sites following timber harvest. Broadcast burns also help recycle nutrients, enhance regeneration of fire-adapted species, and promote desired vegetation conditions. When applied under appropriate weather, fuel moisture, and prescription parameters, broadcast burning provides a controlled and effective method for reducing fire hazard, improving ecosystem resilience, and achieving multiple resource objectives across the landscape.

Roads

To facilitate project activities, road maintenance will be completed on necessary National Forest System roads to ensure route safety and improve existing water quality conditions. This maintenance is authorized outside this environmental assessment and will be completed prior to implementation of treatments. Routine road maintenance may also be performed during implementation by the contractor or purchaser as needed.

Temporary Roads

Temporary project roads are constructed to a standard appropriate for their intended use to support project activities, used, and then closed to all motorized use. Temporary roads will not be a permanent part of the road system. After use, temporary roads will be decommissioned to the state existing prior to implementation, which may include obliterating, slashing, recontouring, ripping, blocking, and seeding. Temporary road locations are always approximate and may change during implementation with Forest Service approval.

Two types of temporary road will be constructed as defined below:

Temporary roads on existing templates

About 9.2 miles of temporary project roads will be constructed on existing templates. An existing template is a constructed road surface that was once used but is not currently part of the transportation system. It has an overall template that has not been entirely re-contoured and is closed to full-sized motor vehicle use. Using existing templates for temporary project roads minimizes new disturbance and associated negative environmental effects compared to constructing new templates.

Temporary roads requiring new construction

About 7.7 miles of temporary project roads will be constructed on new templates. These roads will be constructed to the minimum standards necessary for log hauling. Temporary road surface width would be limited to truck bunk width plus four feet, which is typically a 12-foot-wide road.

Preliminary Effects

Resources Not Analyzed in Detail

Resource	Evaluation	Rationale
Scenery	The scenic integrity objective in the project area is low and moderate. Project activities have been designed to meet or exceed these integrity levels.	Low is defined as landscapes in which the scenic character appears altered, management activities are recognizable and may be visually dominant but borrow some visual attributes from the scenic character. Moderate is defined as landscapes in which the scenic character appears slightly altered, management activities can be discernible but must remain visually subordinate. Scenic integrity objectives apply to the results of project work, including temporary roads or landings, stumps, tree markings, and unit edges or shapes. The project has been designed to meet Forest Plan standards, and design features are under development to further reduce potential project effects on scenic character.
Cultural Resources	Cultural sites will be avoided in treatment units. Cultural resources will be analyzed under the National Historic Preservation Act, Section 106.	The proposed action will have no adverse effect on cultural resources as defined in the National Historic Preservation Act implementing regulations (no significant impacts). The impacts to cultural resources will be mitigated by design features. Hand thinning and removal of heavy fuels within site boundaries will have a beneficial effect by reducing wildfire risk.
Noxious Weeds	Project activities will occur within known invasive species infestations. There are approximately 519 acres of known invasive species within the project area. The proposed	Adherence to land management plan components in alignment with the treatment methods. Noxious weeds will be treated along haul roads on National Forest System lands pre- and post-haul. The amount of pre- and

	implementation of the project is expected to initially increase the densities of invasive species within current populations and has the potential to create new populations if no weed management is implemented.	post-project noxious weed treatment and monitoring is dependent on funding, staff resources, and partnerships.
Lands Special Uses	Project activities would take place adjacent to existing permitted powerlines, communication tower, and snow data collection site within the project area boundary.	To ensure project actions do not adversely impact existing permitted powerlines, communication tower and snow data collection site, the Forest will work with special use permit holders to develop treatments that do not create negative outcomes (windthrow, etc.). This need will be captured in design features.
Hydrology	The proposed action would not significantly affect floodplains or wetlands, and no project activities would occur within or adjacent to a municipal watershed. This project would support Forest Plan direction regarding the sustainability of the health, diversity, and productivity of the nation's forests and grasslands. Project activities would not occur near a source water protection area. No sections of any streams in the project area are on Montana Integrated Water Quality Report 303(d) listing for impaired waters (MDEQ 2025) and no total maximum daily loads have been completed or scheduled for this area.	The proposed action would ensure watershed resources are protected and enhanced in the long term. Preliminary sediment transport modeling indicates that sediment delivery to streams within the project area will be negligible. As such, the proposed action complies floodplain management and protection of wetlands, respectively.

Preliminary Effects for Resources Analyzed in Detail

Effects to Fire and Fuels

The current fuels conditions in the Bear Palmer project area present potential risk of fire impacts to the wildland urban interface (WUI), ingress and egress corridors, and other highly valued resources and assets. The use of a variety of forest management activities will meet the need for action for this project by reducing fuel loading and continuity in the project area which has exhibited a departure from natural stand conditions due to the absence of fire over the last century. These treatments will increase the effectiveness of fire management response, increase public and firefighter safety, and reduce potential impacts to highly valued resources and assets.

The proposed action would reduce fuel accumulation below current conditions and prevent further departure in forested conditions by implementing treatments that are a surrogate for natural fire such as thinning or treatments that mimic natural fire such as prescribed fire. The proposed action is compliant

with the current Land Management Plan including desired conditions for low-intensity fire to reduce impacts to critical values (FW-DC-FIRE-02) and guidelines for fuels treatments to achieve low-intensity fire (FW-GDL-FIRE-02). All treatments will have a direct impact on fuel loading, continuity, and structure within the unit boundaries. Fuels may be reduced (tons-per-acre of available fuel), rearranged into smaller size classes, scattered to reduce continuity and increase decomposition, or any combination of these. Canopy base height will increase while canopy bulk density will be reduced leading to less crown fire potential and lower probability of extreme fire behavior. Fire intensity would decrease causing an increased probability of wildland fire control within wildland urban interface. Over the short-term, some units may see an increase in fuels from treatment activities that could result in an increase in surface fire flame length. Some units may also see an increase in surface fire rates of spread due to more open canopies from thinning treatments. However, an overall reduction in fire intensity, crown fire and extreme fire behavior is expected after treatments are conducted.

Over 99 percent of the Bear Palmer project proposed treatments are within the wildland urban interface (WUI) as defined by the Healthy Forests Restoration Act (HFRA) 16 USC 6511(1)(a)(ii) and 16 USC 6511(16)(b) because it is adjacent to an at-risk community and associated evacuation routes and consist of an appropriate buffer. Jardine is an “at-risk community” because it consists of a group of homes or other structures with basic infrastructure and services, adjacent to federal land, that has conditions and values at high risk for wildfire and significant threats to life and property. The project area is also within the emergency situation determination areas identified by the Secretary of Agriculture and the Chief of the Forest Service in April 2025.

Effects to Forested Vegetation

The absence of fire within the forested stands and low amount of regeneration harvests within the Bear Palmer project area have resulted in conditions that favor insect and disease outbreaks and high risks to the long-term sustainability of vigorous forests that are resistant and resilient to future disturbance. The use of a variety of forest management activities will meet the need for action for this project by decreasing density levels, regenerating new forests, decreasing the potential for negative effects caused by insect and disease, and enhancing populations of aspen and whitebark pine. Proposed silvicultural treatments will address forested vegetation desired conditions relevant to tree species diversity (FW-DC-VEGF-01, 02) and forest resilience and sustainability (FW-DC-VEGF-03, 04, 08, 09).

Currently it is estimated that 67 percent of the lodgepole and whitebark pine dominated stands possess characteristics of high hazard rated stands to mountain pine beetle, followed by an estimated 33% of stands with moderate hazard class designations. Effects from forested vegetation treatments are expected to reduce mountain pine beetle hazard levels to a more sustainable level and increase the long-term health, productivity and sustainability of these forest cover types.

Due to the absence of fire and the increased density of fire sensitive, shade tolerant tree species, it is currently estimated that 72% of Douglas-fir dominated stands have developed 60% or greater canopy cover. This increases the likelihood of uncharacteristic, stand-replacing wildfires within this cover type. Douglas-fir and spruce-fir cover types have recently been heavily impacted by western spruce budworm and are prone to impacts from additional stressors and declines in productivity. Effects from forested vegetation treatments are expected to decrease Douglas-fir bark beetle hazard levels within Douglas-fir

dominated stands, increase vigor to respond to western spruce budworm and other stressors, and reduce the likelihood of stand-replacing fires within these cover types.

The existing diameter class distribution of forested cover types within the project area are very skewed to the high dominance of the 10-14.9" size class (69%), with only 8% of forested stands in the 0-4.9" size class and less than 1% in the greater-than-or-equal-to (≥) 15" size class. The lack of young forests presents a concern to the long-term persistence of forest cover following a large-scale disturbance within the project area. Average diameters of Douglas-fir stands will increase following intermediate thinning treatments, resulting in a higher abundance of large diameter size class (≥15") within the project area.

Effects to Recreation

Several Forest Service recreation sites including a campground, trailheads, and system trails are found within the project area. Existing recreation infrastructure within or near treatment units includes trail signs, bulletin boards, hitching rail, horse corral, and outhouses. Recreation infrastructure could be damaged during operations. All recreation infrastructures such as campground improvements, trailhead improvements, trail signs, trails, etc. will be protected from damage, or if damaged be repaired to original condition.

The Pine Creek, Specimen Creek, and the Bear Creek winter ski trails would have short term effects primarily from commercial activities and may require temporary closures. Pine Creek Trail 627 overlaps with a proposed temporary road and passes through a commercial harvest unit. The cross-country ski trail system in Bear Creek provides valued winter recreation opportunities within the project area. Commercial activity would be prohibited along the Bear Creek trails (January – March) as logging activities would likely preclude the ability to groom or use ski trails in the Bear Creek portion of the project area.

Recreation special uses in the project area include 3 priority use outfitter and guide businesses and one recreation event that occurs annually in September. Holders of special use permits (such as recreation event organizers and outfitters) will be notified as early as possible prior to treatment in the vicinity of their authorization and may need to shift their use to other areas not affected by the project.

The project has the potential to negatively impact recreation while proposed treatments are ongoing. Recreation users may experience temporary closures of roads, trails or areas. Increased noise levels, heavy equipment, logging traffic, or smoke may be short-term impacts from project activities. Visitors could decide to use other areas to recreate during these times. These disturbances will be temporary and will not affect long-term recreational opportunities in the project area.

Recreation impacts will be mitigated with on-the-ground signage and social media announcements to the public about any road, trail, or area closures. Roads and trails should be accessible throughout the project with only limited time closures when needed to protect public safety. Upon completion of the project there should be no adverse impacts to recreation.

Effects to Inventoried Roadless Area

The Bear Palmer project area boundary contains portions of the North Absaroka Inventoried Roadless Area (IRA). This IRA totals 180,138 acres and is bordered by designated Wilderness. The project proposes to treat 796 acres within the IRA, 0.44 percent of the total IRA area. There are no proposed road

construction, reconstruction, or temporary roads within the IRA. Approximately 3.9 miles of Forest Service and County roads currently exist within the IRA.

This proposal will be weighed against the Wilderness Attributes and Roadless Characteristics crosswalk noted in Forest Service Handbook 1909.12 and 2001 Roadless Area Conservation Rule (36 CFR Subpart B 294.11). The crosswalk highlights the following attributes: natural, undeveloped, outstanding opportunities for solitude and primitive and unconfined recreation, special features and values, and manageability.

The exception(s) in the Roadless Rule that would allow the for the Proposed Action is described in 36 CFR 294.14(b)(1) and is as follows: "… timber may be cut, sold, or removed in inventoried roadless areas if the Responsible Official determines that one of the following circumstances exists. The cutting, sale, or removal of timber in these areas is expected to be infrequent. The cutting, sale, or removal of generally small diameter timber is needed for one of the following purposes and will maintain or improve one or more of the roadless area characteristics as defined in § 294.11: (i) To improve threatened, endangered, proposed, or sensitive species habitat; or (ii) To maintain or restore the characteristics of ecosystem composition and structure, such as to reduce the risk of uncharacteristic wildfire effects, within the range of variability that would be expected to occur under natural disturbance regimes of the current climatic period."

Proposed activities would contribute to the natural condition (wildlife, soil, air quality, water) of the forested environment and vegetation and increase the resiliency of forests to insects and pathogens. Potential impacts to this natural condition and associated recreation values would result from not addressing the risk of uncharacteristic wildfire in the project area. A lack of proactive treatment for high-severity fires could also include health and safety risks to the public, private property, critical infrastructure, and first responders.

The project proposal would have short-term direct impacts to roadless resources during implementation, such as increased presence of people, smoke from prescribed fire, and noise within the project area. The proposed treatments would result in long-term resiliency for the roadless expanse with reduced risk of negative impacts from wildfire. The long-term indirect effects from the project proposal to roadless resources would be generally beneficial and help to maintain the existing recreation settings and scenic qualities within the project area.

Impacts would be stable or improving for the majority of roadless area characteristics and wilderness attributes. There would be short-term impacts to the natural and undeveloped character from the removal of generally small diameter trees and prescribed fire activities, as well as short-term impacts to solitude during project implementation.

Most roadless characteristics pertain to resource specific issues that were analyzed by other resource specialists for this project (i.e. water quality, wildlife, cultural resources, vegetation, scenery, and soils). Please refer to those sections for a more complete effects analysis for each resource.

Effects to Soils

The Bear Palmer proposed action is designed to be consistent with Land Management Plan components, including the detrimental soil disturbance (DSD) plan standard (Custer Gallatin Land Management Plan page 21). The interdisciplinary planning process, through development of the proposed action and design

features, ensures compliance with the Land Management Plan. Design features used to limit DSD include post-implementation restoration, skid trail spacing, burn pile rehabilitation, moisture operability restrictions, and utilization of existing disturbance when feasible. Avoidance areas are included as spatial representations of Land Management Plan components and design features to protect the soil resource.

Preliminary data collection and analysis for the soil resource show that a subset of proposed units would exceed the 15% DSD threshold if harvested using summer operations and whole-tree-yarding. These units have excess DSD because of high levels of disturbance from past management activities and/or disturbance associated with temporary roads used for access. Through subsequent analysis, alternative harvest methods (cut to length harvest, winter harvest only) are being considered to reduce DSD below the threshold.

Other plan components outlined in the Land Management Plan were considered in project development and are in the process of being analyzed. This includes unit-level coarse woody debris, rehabilitation of soil disturbances associated with commercial timber harvest, and avoidance of landslide prone areas.

Effects to Aquatic Resources

Potential adverse effects from vegetation manipulation and associated treatment activities can include altered riparian vegetation composition resulting in bank instability, reduction of thermal shading and instream wood; toxicant spills into surface water; mobilization and transport of sediment from disturbed surfaces to surface water and spawning gravels; and both short-term and long-term effects on aquatic biota populations. Potential beneficial effects from fuels reduction include reducing the likelihood of sedimentation from catastrophic wildfire and other disturbances. Beneficial effects of removing encroaching conifers into riparian areas include increasing bank-stabilizing root masses, reducing streambank erosion, increasing water availability and permanence on the landscape, and increasing the extent and vigor of deciduous and wetland obligate species. These beneficial effects may result in improved conditions for individual aquatic organisms and populations of aquatic species.

The magnitude and duration of effects on aquatic resources from vegetation management projects depend greatly on site-specific conditions and mitigations, and may vary widely between proposed actions, landscapes, aquatic habitats, and aquatic community compositions. Custer Gallatin National Forest watershed personnel attempted to address this uncertainty by surveying the project area for waterbodies and potential aquatic resource concerns, which were used to inform development of the proposed action and ensure compliance with law, regulation and policy.

While the Bear Palmer Forest Health Project may adversely affect aquatic habitat quality in the short term, these effects are mitigated by the potential long-term beneficial effects from riparian restoration and reduction in likelihood of sedimentation from catastrophic wildfire. Minimal effects on water yield and hillslope erosion are anticipated, neither of which are sufficient to measurably affect the stability of stream channels in the project area. And while the project may result in small, adverse effects to fine sediment delivery in the short-term, the proposed riparian restoration work would result in small, beneficial effects in the long-term. When compared with the no action alternative, the proposed action could result in a beneficial effect to channel stability and fine sediment delivery. Thus, assuming adherence to design features, implementation guide, and BMPs during implementation, the proposed action would result in long-term beneficial effects to aquatic habitat.

The project may adversely affect aquatic habitat quality and individual fish in the short term; these effects are outweighed by the potential long-term beneficial effects from riparian restoration and reduction in likelihood of adverse effects from catastrophic wildfire. The proposed action was designed to comply with all applicable law, regulation, and policy related to aquatic resources. The project would not likely contribute to a trend towards federal listing of Yellowstone Cutthroat Trout.

Effects to Threatened and Endangered Species, At-Risk Plants, and Species of Conservation Concern

Canada Lynx and Critical Habitat

The project area lies within the Gardiner-Tom Miner Lynx Analysis Unit (LAU), which is the area used to analyze direct, indirect, and cumulative effects to Canada lynx. Approximately two thirds of the Gardiner Tom Miner LAU falls under mapped Critical Habitat but all of the LAU is outside any tiers as defined by the 2022 Canada Lynx Habitat Management Framework.

Vegetation management, road management, and associated activities may disturb lynx during implementation. The project is expected to result in the modification of existing suitable foraging and critical habitat for lynx resulting in a temporary reduction in the level of available foraging habitat within the LAU. Following implementation, the LAU would still contain a mosaic of habitats for lynx to forage in and travel through. Although proposed vegetation management would narrow some forested connections and reduce the effectiveness of existing cover, overall connectivity across the landscape would remain intact. All project activities would be consistent with the Northern Rockies Lynx Management Direction including applicable exemptions and exceptions for treatment within the wildlife urban interface, as required by the Custer Gallatin National Forest Land Management Plan. Based on a preliminary assessment, the proposed action may affect and will likely adversely affect both Canada lynx and Canada lynx critical habitat.

Grizzly Bear

The project occurs within the Greater Yellowstone grizzly bear recovery zone within the Hellroaring-Bear Management Unit (BMU) and within the Hellroaring-Bear 1 subunit. A BMU is used to measure the distribution of females with young while subunits allow better resolution of habitat measurement. Effects to grizzly bears would be addressed by analyzing the changes in percent secure habitat, open motorized access route density, and total motorized route density. The presence of motorized roads influences the availability of secure habitat. Secure habitat is important to the survival and reproductive success of the species, especially adult female grizzly bears. In the Greater Yellowstone Ecosystem, secure habitat is defined as areas more than 500 meters (approximately 547 yards) from an open or gated motorized access route or reoccurring helicopter flight line that are greater than or equal to 10 acres in size.

The project will likely result in a temporary reduction in available secure habitat within the BMU subunit. The Hellroaring BMU contains high levels of secure habitat currently at 91.1 percent with secure habitat within the Hellroaring-Bear 1 subunit at 80.6 percent so bears disturbed by project activities could move to more secure areas nearby. Temporary project roads would be closed to public motorized use during project implementation. Temporary roads would be rehabilitated following completion of project activities and closed to motorized use. All other roads used for implementation of proposed project activities would occur on existing roads open to public motorized use. Vegetation management, road management, and associated activities could disturb or displace grizzly bears during implementation, but

these impacts would be temporary and short-term. Secure habitat within the subunit would not be reduced below baseline for more than four consecutive years. Although proposed vegetation management would narrow some forested connections and reduce the effectiveness of existing cover, connectivity would not be severed through implementation of project activities. There is currently no designated critical habitat for grizzly bears. Based on a preliminary assessment, the proposed action may affect but is not likely to adversely affect grizzly bears.

North American Wolverine

Approximately 10 percent of the project area provides maternal wolverine habitat however none of this habitat is within proposed units. Approximately one half of the proposed units are within modeled primary habitat, which composes about one third of the project area. The entire project area provides potential dispersal habitat for wolverines. Given the lack of modeled maternal/denning habitat, direct impacts to wolverine denning are not expected. Wolverines may temporarily avoid areas while implementation is occurring. Considering the size of the project area in relation to the home range size of wolverine, these impacts would be insignificant. Proposed activities could also change the distribution of prey species, including forest ungulates, over the short-term. Treatments have potential to improve habitat conditions for these species over the long-term by increasing the variety of habitat and forage production. It is unlikely that available prey resources would change appreciably at the scale of a wolverine home range. Proposed project activities would not create a barrier to wolverine movement in or through the project area. There is currently no designated Critical Habitat for wolverine. Based on a preliminary assessment, the proposed action may affect but is not likely to adversely affect wolverine.

Monarch Butterfly

Direct effects (injury, mortality) to monarch butterflies are unlikely given the mobility of the species. The risk of vehicle collisions is low given the slow speeds driven on most National Forest System roads due to the unpaved road conditions. Direct effects from ground-based machinery are likely discountable due to the mobility of the species and because there is a low likelihood that monarchs occur in the project area given the lack of breeding habitat and limited amount of foraging habitat. Ground-based machinery would be used primarily within forest stands, although there could be some minor use in open areas. Weed spraying may occur as needed prior to implementation, but this would most likely be confined to trailheads and trail corridors within monarch habitat. Fuels management and vehicle strikes are activities that are not primary drivers affecting monarchs at the population or species level. Based on a preliminary assessment, the proposed action would not likely jeopardize the continued existence of monarch butterflies.

Suckley's Cuckoo Bumble Bee

Direct effects to Suckley's cuckoo bumble bee could occur if any individuals are present. Prescribed burning would remove mulch/litter and could reduce the quality of hibernacula. Crushing of underground nests is possible if any are present. However, use of ground-based machinery would be focused within forest stands where western bumble bee nests are typically less common and thus the risk of crushing nests is lower, although some minor use may occur in open areas. Weed spraying may occur as needed prior to implementation but this would most likely be confined to trailheads, road and trail corridors. The proposed activities would not occur in areas with known occurrences, and the habitat is characterized by low to moderate suitability. Based on a preliminary assessment, the proposed action would not likely jeopardize the continued existence of Suckley's cuckoo bumble bee.

Whitebark Pine

Whitebark pine potential habitat exists in over 85% of project activity areas. Whitebark pine is known to occur in roughly 40% of units across the project but that number is likely higher. All demographic stages are present, but seedlings and saplings are the most prevalent. Project activities may directly affect whitebark pine through damage or destruction. Protections for whitebark pine would be applied; however, damage may not be preventable in all circumstances, particularly of smaller trees which can be difficult to avoid. Project activities may also provide beneficial effects for whitebark pine primarily through the removal of competing trees. While the project may affect-is likely to adversely affect whitebark pine it falls within the sideboards of the Biological Opinion (BO) for the Range wide Whitebark Pine Programmatic for Forest Management Activities –U.S. Forest Service Regions 1, 2, 4, and 5. All activities of the Bear Palmer project with the potential to affect whitebark pine will adhere to the conservation measures mandated by the BO well as additional conservation recommendations.

At-Risk Plants

Effects to at-risk plants are possible from project activities. Direct effects are those that happen to at-risk plants either through modification of their habitat or impacts to populations or individuals themselves. Compliance with the Forest Plan components provides for the maintenance of at risk habitats and their ability to support at-risk plants within the project area.

Species of Conservation Concern

There are three Species of Conservation Concern (SCC) in the project area: *Eleocharis rostellata, Castilleja exilis, Grayia spinosa* and one state Species of Concern (*Muhlenbergia andina*) all in the southwest corner of the project area but outside of proposed activity areas. Habitat for SCC plants does exist, most prevalently for those species in the riparian/wetland and grassland/shrubland habitat guilds. Field surveys of high potential habitat surveys discovered no new occurrences of species of conservation concern in activity areas. There may be short term impacts to these plant guilds, but application of Forest Plan components, design features and implementation measures promote improvement or maintenance of these habitats in the long term.

Preliminary Economic Analysis

A preliminary estimate suggests that the proposed timber removed would result in approximately 35,352 CCF (hundred cubic feet) of volume available for sale, contributing toward the project's purpose and need, as well as to the attainment of the Forest Land Management Plan objective for the harvest and offering of timber (FW-OBJ-TIM). This works toward the Forest Plan desired conditions to support a regularly scheduled timber harvest program that provides for jobs and income, sustains ecological integrity, and supports regional timber harvesting and processing infrastructure (FW-DC-TIM). The initial feasibility analysis for the commercial logging portion of this project indicates that a timber sale is feasible.

Sale feasibility is used to determine if the timber portion of a project is feasible, that is, will it sell, given current market conditions. The estimation of sale feasibility was based on the Region 1 sale feasibility model, which is a residual value timber appraisal approach that takes into account logging systems, log hauling, timber species and quality, volume removed per acre, lumber market trends, costs for slash treatment, and the cost of specified roads, temporary roads, road maintenance, as well as other associated costs.

Non-sawtimber, which consists of commercial post & pole material and/or firewood, may be present in some treatment units, but was not entered into the sale feasibility model. Non-sawtimber is not generally included as a mandatory removal item in most timber sale contracts for the region of the proposal. It is typically dealt with post award, or optionally, as timber subject to agreement. Non-sawtimber treatment for this project is a possibility and may be dealt with as timber subject to agreement if both the Forest Service and purchaser agree in writing.

Conclusion

As the responsible official, Clint Kolarich, Custer Gallatin National Forest, Gardiner District Ranger, has reviewed and considered this document along with additional information from past projects and the interdisciplinary work completed to date. Based on this preliminary analysis, the District Ranger has determined that the proposed action will not have significant effects on the quality of the human environment. As a result, the preparation of an environmental impact statement is not anticipated. The responsible official will review this determination after the full environmental analysis has been completed. A full finding of no significant impacts will be prepared at that time.

Next Steps

The Bear Palmer Forest Health Project has been approved under the Emergency Action Determination authority of the 2021 Infrastructure Investment and Jobs Act, Section 40807. Therefore, this will be the only opportunity to comment on the Bear Palmer Forest Health Project. **There will be no administrative review process per agency guidance and the authority granted in the Infrastructure Investment and Jobs Act.**

How to Comment

Comments received will help us identify additional issues for analysis. Please provide comments directed towards the proposed actions and the reasoning behind your feedback to help the Responsible Official understand and consider your comments.

Comments on the proposed project will be accepted for 30 days beginning April 10, 2026. If the comment period ends on a Saturday, Sunday or Federal holiday, comments will be accepted until the end of the next Federal working day.

Comments should be within the scope of the proposed action, have a direct relationship with the proposed action, and must include supporting reasons for the Responsible Official to consider.

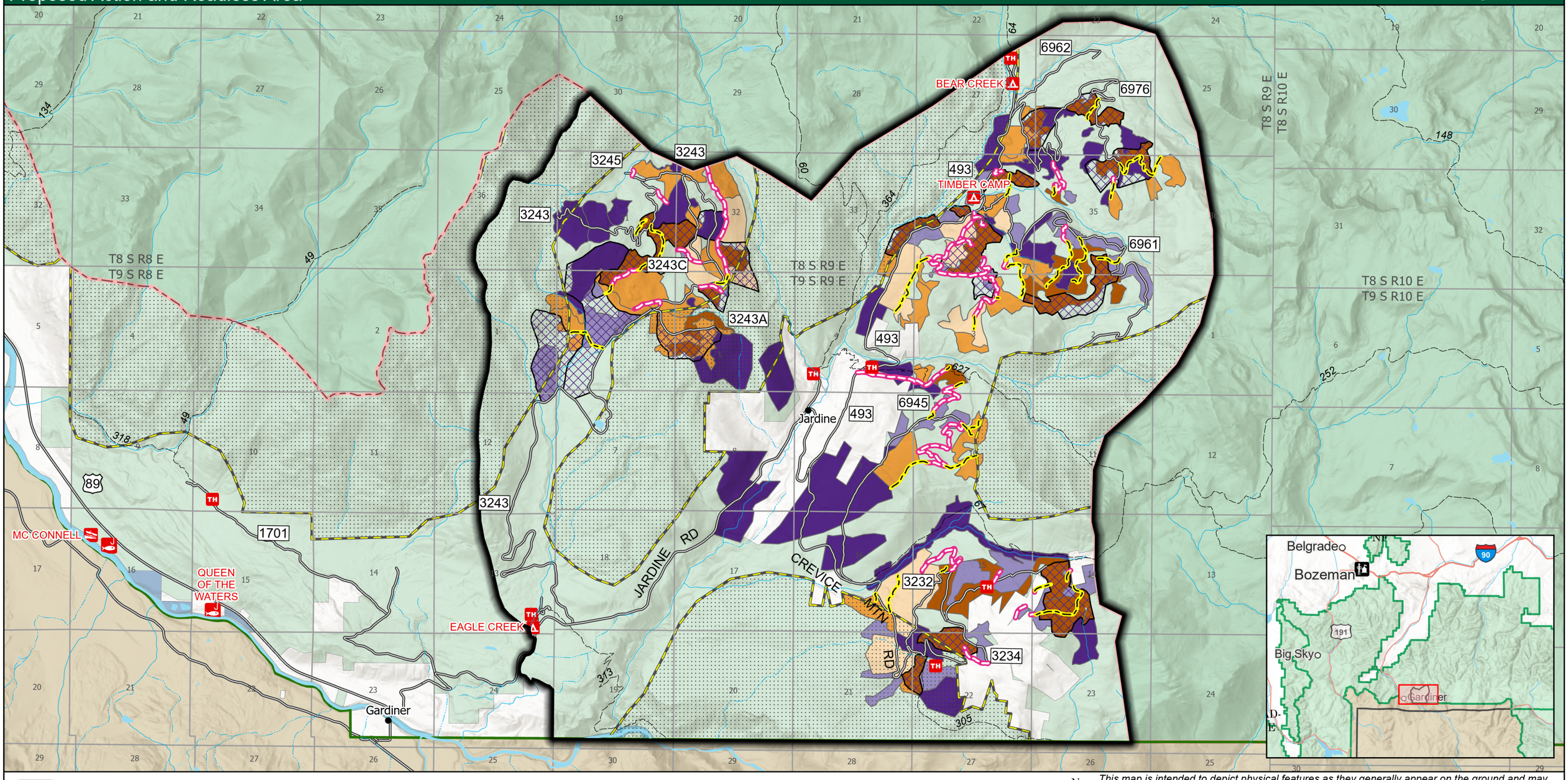
Please submit comments through the Forest Service's CARA database, which is available at:

https://cara.fs2c.usda.gov/Public/CommentInput?project=68985

USDA Forest Service
U.S. DEPARTMENT OF AGRICULTURE

Bear Palmer
Proposed Action and Roadless Area

Custer Gallatin National Forest
Gardiner Ranger District



- Bear Palmer Project Area
- Primary Treatment
  - Clearcut
  - Commercial Thinning
  - Group Selection
- Mechanical Fuels
- Non-Mechanical Fuels
- Prescribed Fire
- Boating Site
- Campground
- Fishing Site
- Trailhead
- Road
- Trail
- Proposed Temporary Road
- Existing Template
- New Construction
- Administrative Forest
- National Wilderness Area
- Roadless Area
- National Forest System Lands
- Non-Forest System Lands
- State Lands
- Yellowstone National Park

N

0 0.5 1 Miles

This map is intended to depict physical features as they generally appear on the ground and may not be used to determine title, ownership, legal boundaries, legal jurisdiction, including jurisdiction over roads or trails, or access restrictions that may be in place on either public or private land. Obtain permission before entering private lands, and check with appropriate government offices for restrictions that may apply to public lands. Lands, roads and trails within the boundaries of the National Forest may be subject to restrictions on motor vehicle use. Obtain a Motor Vehicle Use Map, or inquire at the local Forest Service Office for motor vehicle access information. Natural hazards may or may not be depicted on the map, and land users should exercise due caution. This map may not be suitable for navigation.

4/7/2026