



Fires of 2000, Bitterroot National Forest



A cross-boundary approach to make an impact on landscape management in the Bitterroot Valley.

2020 CFLRP PROPOSAL

Ravalli Roots CFLRP - Tier 2 Proposal Contents

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Ravalli Roots CFLRP - Tier 2 Proposal

Proposal Overview

- **Project Map**

At first glance, the amount of fire activity shown on the Ravalli Roots CFLRP map since the year 2000 is astonishing, indicating the significant role fire plays on the Bitterroot landscape. The recent impacts to values, both public and private have been significant. This coupled with the amount of high priority [Wildland Urban Interface \(WUI\)](#) present along the main fringes of the Bitterroot Valley (the highest concentrations in Region 1) makes clear the need for increased landscape scale fuel and vegetation treatments. Approximately 73% of the CFLRP area is classified as either “Moderate”, “High”, or “Very High” Wildfire Hazard Potential (WHP). WHP is a measure of the probability of a fire occurring, possible intensities, and the effects to resources and assets. Within the WUI, that number jumps to 95%. Towns and cities in Ravalli County (displayed on the map) identified as “at risk” in the [Bitterroot Community Wildfire Protection Plan \(2009\)](#) include Sula, Springer, Painted Rocks, Conner, Darby, Hamilton, Sleeping Child, Corvallis, Pinesdale, Victor, Stevensville, Lone Rock, and Florence.

Many of the streams shown are high value habitat for fisheries including endangered bull trout. Wildlife habitat for big game species including Rocky Mountain elk, mule deer, and bighorn sheep are present across much of the area. Recreation opportunities such as hiking, camping, climbing, horse back riding, biking, and off-highway vehicle use are popular across the CFLRP and demand is expected to increase. The balance of management also requires the restoration and maintenance of critical habitat and watershed resources in this CFLRP which are essential to long-term ecological sustainability and the economic success of communities.

Additional key CFLRP map data include:

- [Bitterroot National Forest project areas](#) in planning and those ready for implementation;
- Previously treated private lands by local non-profit - [Bitter Root Rural Conservation & Development \(RC&D\)](#);
- Forested private lands that have potential cross boundary vegetation and fuel reduction treatments by partners including [Montana Department of Natural Resources](#), [USDA Natural Resource Conservation Service](#) (NRCS), the local [Bitter Root RC&D](#);
- [Healthy Forest Restoration Act \(HFRA\) areas](#) prioritized by the State of Montana;
- Montana Department of Natural Resources (DNRC) [Good Neighbor Authority \(GNA\)](#);
- Local wood utilization industry; and
- [High use recreation areas](#).

- **Landscape Boundaries**

The Ravalli Roots CFLRP area is a jurisdictional mix of private, city, county, State, and Federal lands that provide an exceptional opportunity for cross-boundary approaches to landscape management. The multiple ownerships within the project area present a unique challenge to planning and implementation of landscape-scale treatments. Effective treatments will address fire risk to local communities, restoration of impaired watersheds, improved habitat conditions for fish, wildlife and multiple at-risk species, and enhance recreation opportunities. The CFLRP boundary encompasses all lands within [Ravalli County, Montana](#). Ravalli County also includes 33,390 acres of the Lolo National Forest, most of which is wilderness.

Table 1. Ravalli Roots CFLRP Ownerships and Proposed Treatment Acres of Vegetation, Fuels, Watershed, Habitat, And Invasives for the 10 year Project.

Land Owner or Manager	Ownership (acres)	CFLRP area (%)	Estimated total area treated (acres)	Ownership/Type Treated (%)
Bitterroot NF within Ravalli County (includes Wilderness, Inventoried Roadless, Research Natural Areas, and All Forest Plan Management Areas)	1,126,091	72%	Approx.~239,465	21%
Wildland Urban Interface (WUI) – (subset of all Bitterroot NF lands above)	244,431	16%	Approx.~ 7,800	15%
Lolo National Forest (mostly Wilderness)	8,157	<1%	0	0%
Private	385,114	26%	Approx ~140,225	36%
MT State	45,853	3%	Approx.~ 11,500	24%
FWS – Lee Metcalf	2,814	<1%	Approx. ~ 700	25%
TOTAL:	1,568,029	100%	Approx.~379,690 (WUI included)	28%

Bitterroot National Forest (BNF) lands cover 1,126,091 acres, approximately 72% of the CFLRP area. A portion of the [Selway-Bitterroot Wilderness](#) is included to address management of natural ignition fires in the wilderness that enter east/west drainages of the Bitterroot Mountains. These drainages present a very high wildfire hazard potential since they act as flow paths for wildfires originating within the Selway-Bitterroot Wilderness area. Potential projects with objectives that maintain wilderness character using manager ignited prescribed fire would enable the possibility of managing future natural ignitions where the current state of vegetative and corresponding fuels conditions threaten values outside of wilderness.

Addressing resource management needs at the scale of Ravalli County will enable the BNF to more effectively identify opportunities and address cross boundary resource needs with partners, private landowners, and the public. Examples of current opportunities include fuel reduction with Bitter Root RC&D and Montana DNRC – GNA projects, weed treatments with the [Ravalli County Weed Department](#), and sediment reduction from roads improvements through Schedule A agreement with the [Ravalli County Road Department](#).

Economic, Social, and Ecological Context

- **Current Economic and Social Conditions and Resources, Services, and Values at Risk**

The priority economic project outcome over the ten year period is to promote the continued growth of the recreation economy through watershed and habitat restoration and increased forest restoration economy, including timber products and related jobs, in Ravalli County.

Economically speaking, Ravalli County sits at just over half the national earnings average at \$32,899 and above the National unemployment rate at 4.2%. Approximately 67% of the jobs in the County are service related, 17% natural resource related, and 16% government employed; with 17% of the total jobs having some relation to tourism. With at least one third of all jobs in

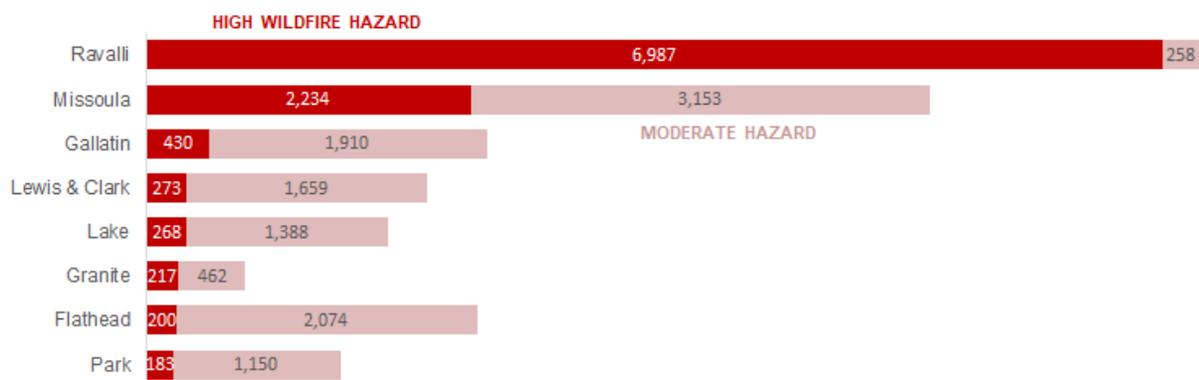
the County tied to natural resources or tourism, restoration and conservation of the natural resources and beauty, that drive both visitation of and migration to the Bitterroot Valley would have a major impact on sustaining the local socio-economic outlook. Opportunities to improve the recreation economy will address the increase in use, mitigate impacts to natural resources, and increase benefits to the local communities through bull trout conservation and habitat improvements for fisheries, vegetation management, and invasive plants treatments to improve wildlife habitat.

According to a 2016 study done by [Montana Fish, Wildlife, & Parks](#), tourism related to big game hunting alone contributed almost \$9 million to the Ravalli County economy, with the vast majority of that hunting being done on National Forest land. A recent survey conducted by the [Univ. of Montana Bureau of Business and Economic Research](#) showed 73% of respondents felt that tourism was a moderate to very important purpose of local, federal, and public lands.

The historical economy of Ravalli County lies predominantly in agriculture and timber. An improved timber and forest restoration economy is something that is desperately needed following years of [declining harvests and closure of local mills](#) and associated businesses. Economic conditions & drivers related to restoration include: commercial and pre-commercial thinning (logging industry and fuel reduction contracts) as well as development of new markets for small diameter wood material. Social conditions and drivers related to restoration include: a need for more harvest and fuels treatments (voice of the missing middle); improved motorized and non-motorized access and opportunities; improved habitat; and dependable water supplies.

Along with the recent growth and new service related jobs, Ravalli County is experiencing growing pains. In 2008, voters repealed the [county’s growth policy](#) which regulated residential and commercial zoning, stream-side setbacks, and other land-use restrictions. As a result, new homes and developments were built in forested areas. The population of Hamilton, the County Seat, is up more than 10 percent since 2010 and [Ravalli County is currently the second fastest growing county in Montana](#), behind Gallatin County. In a 2018 [report](#) on new housing being built in wildfire-prone areas, *more than 90%* of all new homes in Ravalli County in the last two decades were built in “high wildfire hazard areas,” almost twice the number of all other Montana counties combined (see Figure 1).

Counties with the Most Homes Built in Wildfire Hazard Areas, 1990 to 2016



Housing data: MT Dept. of Revenue; Wildfire data: Pyrologix



Figure 1. Number of new homes built in high hazard areas by Counties in Montana.

The Ravalli County Commissioners and local state legislators have been very vocal in their support and requests for increased vegetation management and fuels reduction projects on National Forest System lands. In fact, County Commissioners recently filed an objection to one of our largest fuels-reduction projects, the [Gold Butterfly Project](#) located in the Sapphire Mountains, because they wanted *more* commercial timber harvest and thinning done in the project area. This sentiment is further corroborated by a [2018/2019 survey](#) conducted by the Bureau of Business and Economic Research and Region 1, where 82% of the respondents felt that utilizing local, federal public lands for the purpose of providing timber to the economy was moderately to extremely important. In general, the local community is supportive of active forest management, watershed restoration, and fuels mitigation. There are several groups that have not been supportive of active management as documented by various objections to BNF projects. CFLR would provide further opportunity to collaborate with these groups, as well as work with the public who are supportive.

- **Current Wildfire Hazard**

The BNF has experienced multiple large (10,000-300,000 acre) wildfire events in the last 20 years, with [Lolo Peak \(2017\)](#) and [Roaring Lion \(2016\)](#) being the most recent. Most of these events forced evacuations and impacted private property, including the loss of structures. Nearly 46% of the Forest’s total 1.6M acres has burned since 2000. Additional economic impacts occurred through lost revenue to recreation and tourism based industries due to closures, smoke and associated air quality impacts.

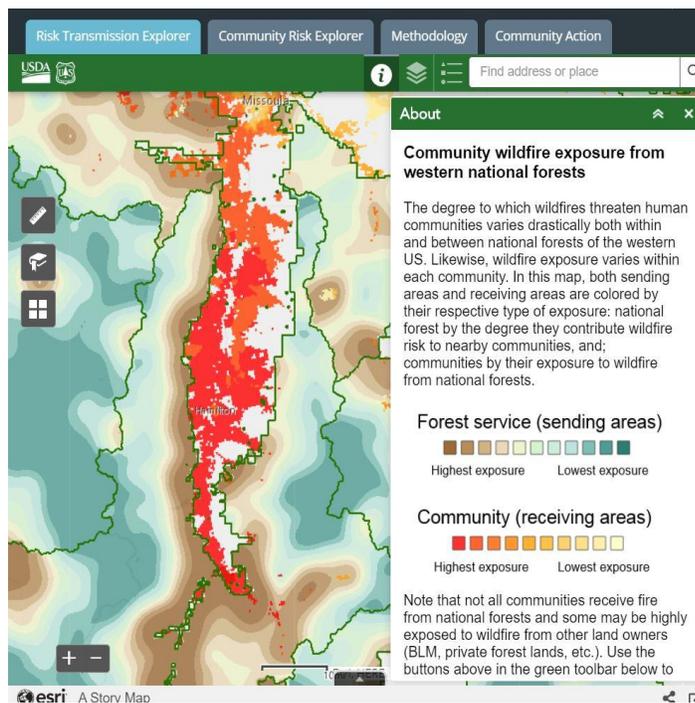


Figure 2. The above image shows where USFS lands, the Bitterroot National Forest, are likely to send wildfire into WUI and communities as well as what communities and other ownerships have the highest exposure for receiving wildfires.

These wildfire events have impacted low elevation dry ponderosa pine to high elevation alpine larch types. The lowest elevations are dry ponderosa pine and grass types in varying states and ages of succession. Outside of recent (20 years) wildfire boundaries and fuel treatments, stands are mostly overstocked with dense understories and have not experienced fire disturbance leaving them outside their historic mean fire return interval. This forest type comprises the majority of the forest boundary with similar conditions common on private ownership. Cross boundary treatment of these ponderosa pine/grass habitat types will be a focus for the upcoming [Bitterroot Front](#) project. Warm and dry Douglas-fir shade intolerant mix stands that abut the pine stands and are in a similar state with regards to recent disturbance. The main difference is noticeable in the understory and closed canopies, both of which contribute to higher occurrence of stand replacing fire

intensities rather than mixed severity effects that were historically common. Further up in

elevation and common on north aspects are the cool and moist spruce/fir, lodgepole pine and mixed mesic conifer and shade tolerant mixes. These regime class III and IV stands are closer to their normal variances but have experienced increased insect and disease activity since 2000.

County residents are highly engaged in fire/smoke detection and are attentive to management decisions concerning new fire starts during fire season as the main valley provides good views to a large portion of the forest. The same scrutiny is applied to prescribed fire operations with concerns mostly focused on smoke production.

The current [Ravalli County Community Wildfire Protection Plan](#) (CWPP) was completed in 2006 with a minor update in 2009. In October of 2019, the Ravalli County Commissioners passed a motion to pursue grant opportunities to update the CWPP. The 10 fire districts comprising the Ravalli County Fire Council have been engaged and supportive partners in WUI education efforts within each of their respective fire districts. The “[Fire in the Root](#)” program is a prime example of this collaborative effort that provides “one stop shopping” for the public.

- **Consequences of No Action**

Scenarios that identify no action alternatives are expected to have consequences similar to the recent large fire events like [Roaring Lion](#) and [Lolo Peak](#). In addition to the current state of fuels, the agency’s ability to defend or limit fire spread onto private property is relatively limited due in large part to geography. Limited suppression opportunity exists between private land and the slopes and major ridgelines of the Bitterroot Mountain range. Fire managers are forced to accept potential losses to balance successful operations with risk to responders. The potential for structure losses within the WUI from wildfires originating on both federal and private lands will continue to increase as the population continues to increase. Fire suppression as the primary response in the Selway Bitterroot Wilderness will continue within the west side drainages, further exacerbating the existing high risk conditions and promote wildfire to occur as a disturbance agent when initial attack efforts fail.

- **Current Ecological Conditions and Values at Risk**

Much of the WUI on the BNF and adjacent private lands is a dry, lower elevation habitat type composed of mixed Douglas-fir and ponderosa pine in well-stocked to overstocked stands. Many areas are heavily overstocked with Douglas-fir regeneration in the understory, creating ladder fuels to the forest canopy. Dwarf mistletoe infests much of the Douglas-fir and adds to tree mortality. Symptoms of declining vigor include narrow growth rings and scattered pockets of bark beetle mortality. Western spruce budworm is moderate to heavy in Douglas-fir regeneration. Mountain pine beetle is moderate to severe in many of the ponderosa pine stands. On the higher elevations (6,000+ feet), ponderosa pine is less evident and the stands are a mix of Douglas-fir and lodgepole pine. Ponderosa pine is more prevalent on south and west aspects.

Disturbance strongly influences individual species, natural communities and ecosystems, and is attributed to both natural and human causes ([Landres et al. 1999](#)). Fires on the BNF historically burned in a range of sizes, intensities, and intervals throughout an area, which created a mix of stand ages, structures, and species. Insects, forest pathogens, and other disturbances also changed vegetation through time. Diversity of vegetation species, ages, and structures across the landscape is desirable because forest conditions are more resilient to disturbance.

- **Invasive and Exotic Species/Insect and Disease Concerns**

Current invasive plant conditions in Ravalli County are based on the priorities of the [Montana Noxious Weed List](#). Noxious weeds present include close to twenty species with

[Spotted knapweed](#) and [cheatgrass](#) being widespread. New invaders such as [Rush Skeletonweed](#), [Blueweed](#), and [Ventenata](#) pose serious threats to habitat and are being aggressively eradicated upon discovery. The consequences of not actively treating the invasives would result in increased competition for native species, greatly reducing forage and habitat for wildlife. Erosion would also increase due to the shallower root systems of invasive plants as they displace native species. There are currently no aquatic invasives present on the BNF and we are working hard with partners such as MT FWP to continue [prevention and public education](#).

The primary insect concerns are western spruce budworm; Douglas-fir beetle; Mountain pine Beetle, and Western Balsam Bark Beetle. These insects are native to Montana forests and have historically caused damage and tree mortality on the BNF. Armillaria root disease and dwarf mistletoe is actively killing large and small Douglas-fir and blister rust is a concern for white bark pine. Many of these areas were also identified as [Insect and Disease priority areas by the Governor in the 2014 Farm Bill - Healthy Forest Restoration Act \(HFRA\)](#). Approximately 340,990 HFRA acres are identified in the CFLRP and overlap with current & proposed projects.

Pollinator's habitat has been in decline due to urban sprawl, invasive species, fragmented landscapes, ornamental plantings, residential/commercial construction, pesticides/herbicides, agricultural practices, and disease. This decline in pollinator species has greatly impacted not only the economic value to communities but to the surrounding environment and ecosystems.

- **Fish, Wildlife, Threatened and Endangered Species**

Wildlife habitat conditions vary greatly depending on the species and life history needs. While the BNF hosts a number of terrestrial and avian species, each has its own specific set of habitat needs. For the most part, the variation of habitats on the BNF fulfills some or all of the habitat needs of the species found here, however, old growth and multi-storied mature forests may benefit the greatest number of species due to the complexity of these habitat types for various species. While old growth and multi-storied mature forests are scattered throughout the Forest, larger blocks and connectivity between patches is generally lacking in the non-wilderness and front country areas. The BNF does not have critical habitat for [Canada lynx](#) or [Grizzly Bear](#) but are mapped as "may be present" by the FWS.

The Montana portion of the BNF provides habitat for one ESA threatened fish species (bull trout), one Region 1 sensitive fish species (westslope cutthroat trout), and one Region 1 sensitive mussel species ([western pearlshell mussel](#)). The Bitterroot is an example of a watershed where the systematic decline of the migratory life history form of bull trout has resulted in isolated and fragmented populations of resident fish. Most of the local bull trout populations on the BNF are resident populations, and most are declining. The primary threats to bull trout on the BNF are (1) displacement and replacement by non-native brook and brown trout, (2) loss of connectivity due to dewatering and related habitat modifications on downstream private lands; and (3) warming waters due to climate change. The westslope cutthroat trout situation on the BNF is much better than that of bull trout. Westslope cutthroat trout probably still occupy close to 100% of their historic distribution on the Forest.

- **Watershed Condition**

Many Ravalli Roots CFLRP streams headwaters originate in wilderness and traverse through managed BNF lands before entering private land where they join the Bitterroot River. Sixteen watersheds are currently classified as Class II with 10 identified for Active Restoration within the CFLRP boundary while seven Class I watersheds are identified for Active Restoration to reduce threats that may lead to a lower classification in the future. Several streams are listed as water

quality limited on the [303\(d\) list with Total Maximum Daily Load's \(TMDLs\)](#) identified for sediment, temperature. Project development includes opportunities to improve these degraded stream conditions. Current concerns include chronic sources of sediment from roads, disturbances to riparian areas by unmanaged human use or overuse by livestock, and lower elevation stream reaches affected by irrigation withdrawals that dewater streams during the late summer months reducing the ability for fish to migrate, increasing water temperature and limiting transport capabilities.

- **Roads, Trails, and Recreation**

The BNF has approximately 2,800 miles of Forest system roads within the CFLRP boundary. Approximately 1,415 miles are open to public access by full size vehicles with an additional 265 miles open to Off-Highway Vehicles (OHV) less than 50 inches wide ([BNF Motor Vehicle Use Map](#)). Road access and condition continually pose challenges for vegetation and fuels management on the BNF. Access into high priority WUI greatly emphasizes the need for cross boundary management and support from private landowners. The BNF will be compiling access data for the [Bitterroot Front](#) project Spring of 2020 in order to acquire needed access to this high priority WUI area. Generally road conditions on the forest vary upon characteristics of native material, road grade/design, road location and use by the public. The geology and grade of the prism greatly influences road condition in most locations. Some areas have coarse native material that result in hard, rocky surfaces. Others have decomposed granitics that are highly susceptible to erosion creating large rills and stream/sediment issues if not regularly maintained.

The BNF has close to 1,250 miles of trails within the CFLRP boundary, offering opportunities for hiking, horses, ATV's, motorcycles, mountain bikes, cross-country ski, and snowmobiles. Approximately 65% of the trails are located within Wilderness or Inventoried Roadless Areas. Many of the existing trails are described as "legacy trails" dating back to the early 1900's. They were created for mining and water rights with more built in the 1930's for firefighting access.

The BNF's recreation niche is "our wild backyard." There are approximately 93 developed recreation sites and over 400 dispersed sites offering a wide array of multiple-use recreation opportunities within the project area (camping or picnicking in developed and dispersed sites, renting a historic facility or a group site for family reunions or weddings, motorized and non-motorized water activities, downhill skiing at [Lost Trail Powder Mountain](#), and learning about nature on an interpretive trail, just to name a few). There are two heavily used recreation areas within the CFLRP ([Lake Como](#) and [Bass Creek Recreation Areas](#)).

- **White Bark Pine - Benefits**

Based on the orientation of the landscape, predominant wind patterns common during fire season and past wildfire events that displayed the ability to rapidly move from the west to east and threaten values, natural ignitions have been highly scrutinized and presented unacceptable risks to downwind values. Thus one of the ecological conditions that would benefit from increased use of natural ignitions would be white bark pine regeneration, a priority on this forest.

Desired Conditions and Strategy

- **Vegetation Treatments/Wildlife Habitat Improvement**

Decades of fire exclusion has allowed stem densities to reach a point of hazardous surface and ladder fuels coupled with stands susceptible to insects and diseases. Mechanical thinning is

needed in many stands to restore tree composition, structure, and function which will enable natural and human-induced fire to be used as a tool to maintain stand conditions, reduce susceptibility to uncharacteristic wildfire effects, and improve resistance to insects and diseases.

Vegetation and fuels treatments should promote diversity including natural mosaic of habitat types (early seral, mid-successional, riparian, and mature/multi-story with open meadows, wetland/bogs, and edge areas that provide for a suit of habitats) for the varied local species. Targeted vegetation treatments in key habitats will be important to move undesirable forested stands towards old growth/mature multi-story that will provide connectivity and structure for TES species such as Canada lynx.

The two primary threats to old growth stands on the BNF are high intensity wildfire and mortality due to insects and diseases. The fires of 2000 on the southern BNF burned 33,000 acres of old growth stands. From 2000 to 2005 in the East Fork Bitterroot River drainage, 56% of old growth stands were lost due to mountain pine beetle mortality. These two examples exemplify the current condition of old growth stands on the BNF. Reducing stem densities to levels more aligned with historic conditions will improve old growth stand resilience to wildfire and insects and diseases. This approach will also reduce inter-species competition in mid-successional stands, allowing improved recruitment to old growth levels. Public concerns regarding treatments in old growth provide opportunities for CFLR collaboration to inform and monitor treatment outcomes in old growth.

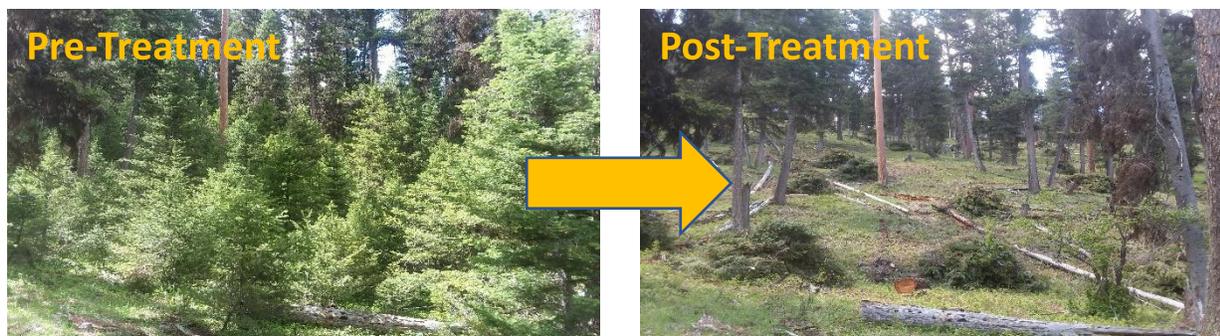


Figure 3. Pre and post thinning of an overstocked stand. Fuels have been stacked in hand piles for burning. Future under-burning will be completed to maintain fuel loading in the stand.

Thinning and prescribed fire will be completed in stands to increase the nutritional capacity of forest vegetation to reduce private land/wildlife conflicts. Collaboration with Montana Fish, Wildlife, and Parks (MT FWP) and cross boundary landowners will promote landscape level treatments and identify road systems that preserve access to public lands and improve habitat functionality and connectivity for terrestrial wildlife for both game, non-game, Threatened and Endangered, and sensitive species.

- **Invasive and Exotic Species**

Infestations of new invader weeds will be eradicated through mechanical, spray, or biocontrol treatments to restore native species of grasses and forbs that provide terrestrial species habitat and forage. Reduction in populations of existing noxious weeds would occur through spraying all roads, trails and any other vector corridors in addition to biological control with the [Ravalli County Biological Control Youth Program](#). Education encouraging the use of certified weed seed free feed and removal of seeds from all clothing, gear and equipment would continue to reduce and eliminate the introduction and spread of new invaders. Partnership with Ravalli County and private landowners through a Wildlife Habitat Improvement ([WHIP](#)) grant will greatly increase

opportunities to improve wildlife habitat. Ravalli County has an aggressive weed treatment program with plans to treat over 20,000 acres of private lands annually in the next 10 years.

Pollinator decline can be combated by collecting genetically appropriate seed from native plants that are pollinator plant species. Seed can then be grown out and increased and either planted or seeded in areas that need revegetation or select areas could be promoted as pollinator islands such as rehabilitated timber landing sites. These “[pollinator islands](#)” act as havens for habitat and food for pollinators that can help to increase populations, and to help create areas that pollinators can use to bridge the gap in fragmented landscapes.

- **Insect and Disease Concerns**

Stands with insects and disease concerns will be thinned followed by prescribed fire treatments to improve stand resilience. Native plant species diversity will be improved in monocultures to increase tolerance to insect and disease susceptibility. Seeding with genetically, locally adapted native seed in disturbed areas will create long-term resilience and function of forest communities, increase wildlife forage productivity, and pollinator food and habitat.

- **Roads, Trails, and Recreation**

Road surface drainage improvements are needed in many locations across the CFLRP project to improve access and minimize erosion/sediment. Drainage improvements that limit the length water running on road surfaces are critical to reducing sediment losses that impact fisheries habitat including ESA listed bull trout. Roads in drainages, segments close to streams, or those with high public use have been prioritized for improved surfaces and Best Management Practice (BMP) upgrades. The forest has been able to upgrade 141 miles of the 209 miles of open roads within 100 feet of perennial streams. There are still 69 miles to upgrade and maintenance to complete on the miles that have already received upgrades.

Historical use/need for many trail systems on the BNF is considerably different than those built for today’s recreationalist which require continual maintenance and improvements to sustain the type and increased frequency of use. There is growing public interest for BNF trails that tie to the local communities and offer loop opportunities. A specific example is a trail connecting Ward Mountain (just outside of Hamilton) to the [Coyote Coulee trail system](#).

Recreation use continues to increase on the forest. The increased use has led to increased disturbances from illegal off road use, erosion on system trails, and resource effects at dispersed camp sites. Rehabilitation treatments are required to address multiple resource concerns. CFLR funding will enable the rehabilitation of recreation disturbances while BNF appropriated dollars can be used to enhance existing developed recreation facilities. Facilities improvements will enhance the existing recreation opportunities and attract more users that have historically overflowed to dispersed sites. Recreation planning has been completed for BNF high use recreation areas. In 2017, the Bitterroot National Forest hosted multiple public open houses to discuss the Lake Como Recreation Area and the need for a [Master Plan](#) to identify actions that enhance opportunities while protecting the resources. For example, there are a series of user-created trails to the north and south of Lake Como. Since these trails are already being utilized and are very popular, the Forest incorporated the user-built trails into the BNF system and made improvements to ensure sustainability and resource protection. CFLR will promote collaboration with recreation partners and enable additional, similar recreation and restoration activities. Newly acquired land near the popular [Bass Creek Recreation](#) area provides the next opportunity.

- **Water Quality, Watershed Function and Condition, Fisheries Habitat**

Watershed objectives would address stream flow, sediment, and temperature regimes from headwaters on the BNF to the mouth of streams on private lands adjoining the Bitterroot River. Opportunities to improve Class II watersheds to Class I, maintain or improve Class 1 streams and critical bull trout habitat, and improve water quality in [303d listed streams](#) would be priority.

Restoration activities would include upgrades to improve road conditions for public use and forest management and reduce sediment contributions. Vegetation treatments in riparian areas would be completed where appropriate to alter stand structure, contribute large wood to streams and stimulate native vegetation. Dispersed recreation in the riparian areas would be managed, allowing use where appropriate but limiting it where compaction and distance to streams causes sediment or other pollutant contributions. Evaluation of livestock use and adaptive management to improve riparian conditions would be completed. The CFLRP would provide opportunity to collaborate with downstream water users on private lands to explore/identify needed improvements for irrigation systems that could increase water in streams during low flows for improved fish connectivity and cold stream temperatures.

CFLRP will increase implementation of the fish passage barrier removals that increase spawning and rearing habitat as well as [cold water refugia](#), helping bull trout populations persist during warming climate or natural disturbance such as wildfire. Over the course of the next decade, the CFLRP fisheries goal is to upgrade BMPs to 100% on all arterial roads mentioned in the [Bull Trout Conservation Strategy](#). The BNF will continue to collaborate with Montana FWP to implement two fish removal projects targeting brook and/or brown trout over the next 10 years in watersheds identified in the [Bull Trout Conservation Strategy](#) (Nez Perce Fork; Blue Joint Creek; Overwhich Creek). Vegetation treatment in riparian areas will also be promoted to trend sites to mimic natural conditions such as planting trees and shrubs on disturbances in riparian areas. The CFLRP will also increase the opportunities to collaborate with adjacent landowners to achieve the lofty goal of relocating roads out of riparian areas.

- **Connection to Regional, State, and Partner Strategies**

A recent [Region 1 out-year planning effort](#) assessed cross-boundary forest health and fire risk to construct a multi-Forest coordinated and prioritized 5 year program of work. Ravalli County ranks out as a high priority with nearly 7,000 residences located within areas classified as high fire risk, more than all the other Montana counties combined. The imminent threat posed to residents has been dramatically reinforced in recent years with the [Roaring Lion Fire \(2016\)](#) and the [Lolo Peak Fire \(2017\)](#), both resulting in numerous homes being lost and the evacuation of hundreds of residences. Additional State and National level fire risk assessments all put Ravalli County at or near the top of the list for landscapes in need of active management to reduce the risk of catastrophic fire across all ownerships.

The NRCS Hamilton Field Office has identified forest health as their 2020 priority and will utilize the Ravalli County local working group to prioritize treatments, including fuels and risk mitigation. Outreach has been conducted on the east side of the valley and continues on the west side concurrent with the Bitterroot Front planning efforts. Partnerships between the USFS, Bitterroot RC&D, Montana DNRC, and NRCS will enable the planning of projects and treatments that will be effective at reducing fire risk and improving watershed conditions by working across ownerships. The historic approach of treating only on public land is not effective for managing the landscape as a whole and achieving the needed outcomes. Moving away from “fenceline ecology” and towards a cross-boundary outcome-based approach is the goal. There are currently

2 separate GNA projects, 3 Mile and Buckhorn, both of which span multiple ownerships in their treatment areas. Project planning is underway on the [Bitterroot Front](#) (~150,000 acres), which runs from Florence to Darby and covers the areas of highest density of private residences in the WUI, will focus primarily on utilizing cross-boundary treatments to reduce fire risk and improve chances for successful suppression actions.

The State of Montana is presently revising their [Forest Action Plan \(FAP\)](#). The effort is similar to the Region 1 assessment, improving forest health and reducing fire risk to communities. The Montana FAP will setup a framework for implementing restoration actions to address wildfire risk and forest health across boundaries, statewide. The State of Montana is also including watershed restoration and tiering to the [State Wildlife Action Plan](#) objectives.

The Montana Department of Environmental Quality has designated the Bitterroot watershed as its focus watershed for water quality over the next 3 years. Approximately \$500,000 of its \$800,000 statewide funding from the EPA 319 program will be dedicated to the Bitterroot basin.

BNF and Ravalli County proposal for a Montana Fish, Wildlife, and Parks [WHIP grant](#) in excess of \$1 million would greatly increase weed treatments over 5 years along with \$200,000 obligated to complete native plant restoration on the Bitterroot and CFLRP projects. Private landowner matching dollars for weed treatment/wildlife habitat improvement projects in Ravalli County are currently estimated at over \$8 million.

- **Best Available Science, Climate Change Considerations**

Forest interdisciplinary specialists have been incorporating state-of-the-art data and models into BNF planning efforts, including but not limited to: spatially explicit models of landscape water deficit; solar radiation; topographic convergence; [NDVI](#) (i.e. greenness index); and erosion models. These data and models account for inter-annual variability in climate, portray climate trajectory, and allow forest ID Teams to evaluate how differential landscape response to edaphic and climatic controls may be affected by management activities. Further, treatment priorities are identified through spatially-explicit data queries generated from regional vegetation databases, forest health aerial detection surveys, satellite imagery, and fire behavior models. This process has been adopted as part of the [Region 1 out-year planning](#) process. On-the-ground treatment options within priority areas are further refined based on a number of criteria, including site-specific conditions, location objectives, and Forest Plan guidance. These previously unavailable tools, datasets, and map applications help specialists make informed and accurate decisions regarding landscape conditions and potential response to management. The current body of best available science justifying use of and supporting these modeling and planning efforts is documented through specialist's resource reports and are incorporated into each project's record.

The Governor for the State of Montana has recently executed an Executive Order in response to climate change to establish the [Montana Climate Solutions Council](#). Climate projections for Montana indicate substantial changes in temperature and precipitation by 2050. The state is taking this very seriously, looking for a proactive approach rather than reactive. The assessment will focus on forest and soil health and how forest management can further promote the active growth of trees for carbon sequestration and soil moisture retention. The state will be urging agencies and partners to work on actions to minimize the effects of the coming changes.

Wildfire Risk Reduction

The Ravalli Roots CFLRP and the associated implementation funding will allow the forest and our partner groups ([Bitter Root RC&D](#), [NRCS](#), [Confederated Salish & Kootenai Tribes](#)),

engaged in private property and BNF mitigation efforts, to pursue wildfire risk and abatement treatments on an accelerated timeline. These initial (10-15 years) efforts are expected to be relatively expensive (mechanical thinning such as helicopter logging) and carry elevated implementation risks due to their proximity to values and a relatively high portion of roadless and recommended wilderness designations. Regardless of these challenges, our dynamic fire adapted systems will continue to degrade without intervention which leaves the identified WUI, communities, and infrastructure at risk. After initial treatments and stands are moved to a state of readiness, maintenance entries will bring lowered costs of implementation, meet anticipated out-year forest targets and provide reduced wildfire risk with less available fuels in the WUI.

It is expected that following Bitterroot Front country treatments there will be an expansion of managing natural fire starts to further restore fire's natural role both in and out of wilderness areas. This strategy is in-line with expected climate predictions on Montana forests detailed in the [2017 Montana Climate Assessment](#) of increasing fire risk as a result of prolonged fire seasons due to increased temperatures and past fire suppression. Treating targeted stands and conditions under typical prescribed fire parameters versus conditions at or above the 90th percentile would yield less severe fire effects and promote heterogeneity thus attempting to limit negative impacts of climate change on our dry forest types.

Benefits to Local Communities

One of the largest benefits of this project to local communities would be increased recreation, restoration, and timber products and related jobs in Ravalli County. The historical economy of Ravalli County lies predominately in agriculture and timber. Despite its recent reputation as an amenity area and retiree destination, Ravalli County suffered as much from the Great Recession (2007-2009) as anywhere else in the state, according to the Bureau of Business and Economic Research (BBER) at the University of Montana. "The surprisingly large cyclic decline in Ravalli County is partially due to the bursting of the large construction sector associated with recreational and second-home building. In addition, the doldrums in U.S. housing market significantly impacted the local wood products industry, especially the log home manufacturers who were producing for the high-end market." With the recent upswing in new home construction, both in the Valley and across the West, there is an increased demand for wood products from these local producers.

Earnings from residents working in other counties continues to be the largest source of income to Ravalli County. Approximately 48% of county residents currently commute to Missoula each day for work. Recently more of Ravalli County's economy stems from tourism. The [Lost Trail Powder Mountain](#) ski area on the Montana/Idaho border on US-93 gets 50,000 visitors annually. [Lake Como](#) on the Darby Ranger District is visited by 250,000+ visitors annually, the most visited recreation area in Region 1. People come from across the country to hike, horseback ride, mountain bike, hunt, fish, and camp on the National Forest lands that surround the Bitterroot Valley. Restoration treatments will serve to bolster the draw for visitors with improvements to wildlife habitat and streams through active forest management.

The largest need, though, is to reduce the risk to local residents from catastrophic wildfire. Having nearly 7,000 new homes bordering the Forest within the WUI creates many challenges for today's land managers, especially during fire seasons. In the last three summers alone, the devastating Lolo Peak and Roaring Lion fires in the Bitterroot Mountains burned 19 homes, forced the evacuation of an additional 500 homes, cost nearly \$60 million to fight, and claimed one life. There is a demonstrated advantage to active management in these areas to provide for

increased likelihood of successful suppression actions. The objective of much of the project work will be to increase potential control line effectiveness by treating lands across ownerships to reduce fuel loading effectively.

Maintaining access to the BNF and improving quality of outdoor recreation opportunities ([\\$7 Billion/year industry in Montana](#)) boosts the local economy. Maintaining roads increases access for all outdoor activities including hunting and fishing. Construction activity in rural areas fuels rural communities. All construction projects in some way benefit the community as contractors utilize local hotels, restaurants, gas stations, entertainment, etc. All forest contracts are set-aside for small local businesses. On average, these small businesses employ 10 – 12 workers, with the majority being equipment operators, truck drivers, and general labor. These workers and their families are buying houses locally and stimulating the economy by keeping their business local.

- **Metrics**

Enhance community sustainability:

- Maintain or increase the number and diversity of wood products that can be processed locally
- Maintain or increase the number and/or size of contracts offered/year to do restoration work
- Maintain or increase acceptance of frequent, low intensity wildfire or prescribed fire

Improve or maintain quality of life:

- Maintain or increase acres protected from fire through creation of defensible space, fuel breaks, and other fuels reduction projects
- Maintain or increase fuels reduction acres in relation to areas considered to be at highest risk from wildfire

Improve capacity for collaboration:

- Maintain/increase extent which stakeholders previously in conflict are now working together
- Maintain or increase perceived benefits of restoration activities

Utilization of Forest Restoration Byproducts

The BNF is confident that we will have strong markets and competitive bids for the timber and byproducts generated by this project. We have strong mill and logging infrastructure in the area that includes different scales of operation with diverse fiber outputs ranging from large international sawmills to smaller family owned mills and schools using biomass for energy. BNF annual sale volume over the life of the CFLRP averages 40,000 CCF. Byproducts typically consist of saw logs with average diameter at breast height (DBH) of 11.5 inches with 92% of material greater than 6 inches diameter.

- **Relevant Industry Infrastructure**

[Pyramid Mtn. Lumber \(PML\)](#) (Seeley Lake, MT), processes 72,000 CCF saw logs annually, and is one of the top purchasers of BNF Timber Sales. PML is currently investing in an automated grading machine and 5 new sorting trays to maximize efficiency and increase production by 25%. Byproducts of sawlog processing at the mill include saw dust, chips, and planer shavings. PML provides approximately 100,000 tons annually of these by products to [Roseburg](#) forest products in Missoula, MT and [Weyerhaeuser](#) in Columbia Falls, MT. Additionally PML provides bark to [Mountain West](#) in Rexburg, ID which sells beauty bark as a landscaping product.

[Idaho Forest Group \(IFG\)](#) (St. Regis, MT), is one of the primary purchasers of BNF Timber Sales. IFG purchases and processes 110,000 CCF of timber volume annually with the short term

goal of increasing production by 31%. Currently 60% of IFG's raw material come from NFS Timber Sales. By products of saw log processing include saw chips, which are sent to [Weyerhaeuser](#) in Columbia Falls, MT, [Inland Empire Paper](#) in Spokane, WA, and [Ponderay Newsprint](#) in Usk, WA. Shavings and sawdust generated go to [Roseburg](#) in Missoula, MT.

[S&S Logging](#) (Corvallis, MT), purchases BNF Timber Sales and processes oversized sawlogs at locally owned mill. The current processing rate is 5,000 CCF annually with additional sales of 2,000 CCF of firewood directly to the public on an annual basis.

[Finley Lumber](#) (Florence, MT), is a local small mill that processes 400 CCF annually and sells directly to the public in Ravalli County. The Finley family has expressed wishes to increase production, but cite the limited supply of raw materials as a limiting factor. [Frontier Post and Pole](#) (Stevensville, MT) participates as purchaser and receives raw materials from timber sales on the BNF. Frontier is currently processing 6,000 CCF of small diameter (4-6" DBH), non-saw material with potential to increase by 25%. Additional post and pole opportunities exist outside the CFLRP including [Big Sky Forest Products](#) in St. Regis, MT.

[Willis Enterprises](#) (Bonner, MT), receives and processes 55,000-75,000 CCF annually. All products are non-saw material, either dead or undersized material down to a 2" diameter that is chipped and sold to facilitate the making of paper products. Willis sells chips to [Weyerhaeuser](#) in Columbia Falls, MT, and [Clearwater paper](#) in Lewiston, ID and other paper manufacturers in the state of Washington and Canada.

[Bachman Log Homes](#) (Darby, MT), [MT Custom Log Homes](#) (Victor, MT), and [Rocky Mountain Log Homes](#) (Hamilton, MT) have all received logs harvested on NFS lands, here in Ravalli County. Additionally, other log wood products manufacturers in the area include: [Montana Idaho Log homes](#) (Victor, MT), [Bitterroot Valley log & Timber](#) (Victor, MT), [Bos Log Builders](#) (Hamilton, MT), [Master Log Homes](#) (Darby, MT), [Quality Truss & Design](#) (Stevensville, MT), and [High Mtn Truss](#) (Darby, MT).

[Darby School district](#) (Darby, MT) has received BNF logs for chipping in their boiler system under the fuels for schools program. Their average annual need is 315 CCF of non-saw material. Much of this material has come off of NFS lands in Ravalli County. [Victor School district](#) (Victor, MT) has a boiler system utilizing approximately the same quantity of saw chips as Darby School district, which go toward heating the schools.

- **Potential Biomass Infrastructure Opportunities**

In addition to the small-diameter wood and byproducts that are harvested from the BNF and go to strong traditional markets for post and poles, pulp chips and wood energy, there are a few other prospective markets/users developing. [Superior Pellet Mill](#) (Superior, MT) is an existing pellet mill that is currently not in operation but current owners are taking steps to get the facility running again. [Riverstone School](#) (Hamilton, MT) is exploring a biomass/chip system for their campus which would be modeled after the Darby school and require a similar volume of chips.

- **Strategies, Infrastructure, Future Costs**

Commercial timber harvest costs are not expected to vary greatly in the future. As BNF offers more acreage/volume, sale costs will increase due to the projected increase in size of sales. Future plans within the CFLRP area include Stewardship (IRTC, 2400-13) sales that will generate residual/retained receipts that will be available toward funding approved stewardship activities (currently estimated at \$120,000/year for restoration projects).

- *Fuel Reduction – Future Costs*

After initial treatments and stands are moved to a state of readiness, maintenance entries will bring lowered costs of implementation, meet anticipated out year forest targets and provide reduced wildfire risk with less available fuels in the WUI.

Collaboration

- **Collaborative Process – General Public/Stakeholders**

The BNF intends to use CFLRP to bolster its current collaborative process with partners and stakeholders. The BNF is working closely with the [Ravalli County Collaborative \(RCC\)](#) as the formal group to guide the success of forest management. We also recognize the importance of continually developing our collaborative process with multiple parties to truly gain social acceptance and achieve success through restoration treatments. Collaboration efforts with the State of Montana – DNRC & FWP have expanded greatly in the last year with the implementation of several GNA projects ([3 Mile](#) & [Buckhorn](#)). Discussions to increase GNA to complete service work involving fuels, watershed, and habitat restoration are ongoing. BNF leadership is also closely tied with the State [Forest Action Advisory Council](#) and is the leader for the emerging development of the [Montana Restoration Initiative](#) (MRI) that will be used to implement statewide projects prioritized through this collaborative process.

The BNF has a rich history of strong partnerships with multiple groups, some of which include: [Trout Unlimited](#), [Rocky Mountain Elk Foundation](#) (RMEF), [National Wild Turkey Federation](#), Bitter Root RC&D, [Bitterroot Water Forum](#) (BRWF), Ravalli County Off Road User Association, Backcountry Horsemen, Montana Conservation Corps, Ravalli County Weed Department, and Framing our Communities. Recent examples of success stories with partners include collaboration with BRWF to complete [bull trout restoration, 20 miles road reclamation, & sediment reduction in Sleeping Child & Rye Creek](#) (both [Watershed Condition Framework](#) priorities). Recent collaboration with RMEF enabled the acquisition of the [Bitterroot Trails](#) parcel to prevent subdivision development. This area will continue to provide critical winter range for big game and enhance the popular [Bass Creek Recreation](#) area for public users.

Project specific collaboration on the BNF has evolved rapidly over the last 2 years and further development of new ideas will continue to be incorporated, specifically on projects like the [Bitterroot Front](#). Bitterroot Front project collaboration has included a series of meetings/workshops occurring at VFDs from Florence to Darby with the public (collaborators, partners, [Confederated Salish & Kootenai Tribes](#), and other interested stakeholders). At these workshops, the public has shared opportunities with Forest Service personnel and partners and presented activities/treatments they would like to see implemented, help determine project locations, design components, methods, mitigation measures, and collaborative monitoring opportunities. Private land owners along the Forest Boundary and in the WUI will be invited to collaborate and participate in implementation and monitoring of treatments through GNA and efforts with the Bitterroot RC&D programs Hazardous Fuels Reduction Grants. Project specific collaboration on the Bitterroot Front will be completed through boundaries established with Bitterroot Valley Volunteer Fire Departments (8 total VFDs). The “[Fire in the Root](#)” program will continue to be expanded to inform and prepare citizens to safely co-exist with wildfire and to find information concerning wildfire preparation, coordination, education and communication in Ravalli County. Education efforts focus on fire adapted communities and landscapes as well as traditional fire safety and firewise curriculums.

With the multitude of activities that inundate our society, we need to find creative approaches to meet people where they are. The BNF will increase efforts from all employees to get out into the community and present our information at schools (*current programs with local schools reach up 850 students/year*), non-profits, civic organizations and other platforms where people choose to spend their time. Our Forest currently has a [Facebook](#) and [Twitter](#) page with thousands of followers. The experience of our Forest Social Media Team will help us design informational posts and graphics to tell the CFLRP story and help educate the public. Other tools such as YouTube and Podcasts will be explored. These platforms can be used to help inform people that don't have the time to attend meetings. A series of 10-15 minute videos can be used for people to watch or listen. The local school [Classroom without Walls](#) program, along with a [MAPS](#) (media/video making) programs can be utilized to make informational videos about local forest resource management and collaborative monitoring ventures. These videos and podcasts will be shared on our website and social media.

The local [Bitterroot College](#) and the [Salish Kootenai College](#) present opportunities to develop resource oriented education courses. There are several experts that are willing to teach from the University of Montana, Missoula Forest Service Fire Lab or \Technology and Development Center.

- Collaborative Group – [Ravalli County Collaborative \(RCC\)](#)

The BNF has collaborated with the RCC regarding forest management since the group's formation in 2017. RCC is a diverse group of volunteers appointed by the Ravalli County Commissioners in 2017 to promote the wise use and management of public natural resources by local, state, and federal agencies within Ravalli County. The RCC was founded to assist the BNF and other local, state, and federal agencies as appropriate by providing input and/or identifying and designing comprehensive, efficient and timely projects of mutual benefit. RCC seeks to resolve conflict among varied interests, find common ground, and listen to and consider cultural, ecological, economic, and social concerns expressed by members and incorporate all concerns, to the extent possible, into RCC natural resource management recommendations and decisions.

RCC is a consensus based decision making body that strives to ensure that all members understand and support the final decisions. [By-laws](#) define how consensus builds decisions and works through conflict. RCC holds monthly, facilitated meetings that are open to the public. RCC is currently pursuing a plan that evaluates natural resource issues both site specifically and Forest wide. RCC has developed three standing committees (*Fish/Wildlife/Water*; *Forest Management/Health/Fire*; and *Recreation/Land Use/Access*) to evaluate site specific issues at the project level and make recommendations to the full committee for collaborative decision.

RCC has collaborated on a number of BNF issues including [Senator Daines bill S.2206](#) proposing the release of Wilderness Study Area management. Most recently, RCC has worked with the BNF through the development of the [Gold Butterfly](#) EIS, [Mud Creek](#) EA, and [Piquett Creek](#) EA. They also have provided specific comments and filed supportive [objections](#).

Multi-party Monitoring

Collaborative monitoring will be key to determining effectiveness of treatments and design features on CFLRP lands (includes cross boundary State/private lands), specifically on projects such as the [Bitterroot Front](#). Project specific collaboration and recommendations from the [RCC](#) will help guide monitoring plans. The collaborative and interdisciplinary monitoring approach will add credibility to current landscape level NEPA analyses. Past examples of multi-party

monitoring such as [Big Fire Lessons Learned in the Bitterroot Valley](#) (Pinchot Institute, 2004) from the fires of 2000, form an excellent collaborative monitoring foundation to expand upon.

- **Collaborative, Stakeholders, Public**

The BNF is currently pursuing a [Citizen Science grant](#) to further develop monitoring efforts with citizens, local schools, and collaborative groups to address resource effects and further promote connection of communities with the larger landscapes and ecosystem processes. Specific monitoring efforts will be developed with the public on the [Bitterroot Front](#) and [Mud Creek](#) projects. This monitoring will aim to address public issues related to landscape level NEPA and project implementation and provide a feedback loop to improve treatments and minimize resource effects.

The close proximity to the [University of Montana](#) has made the BNF home to numerous studies and research such as the latest study on large wood and sediment storage in Lost Horse Creek by [Welling, 2019](#). This relationship allows great potential to further engage college students and the dozens of other stewardship groups in Missoula in multiparty monitoring. Local schools also provide potential to further develop student monitoring sessions through programs such as [Classroom without Walls](#). Other student opportunities include the [Ravalli County Biological Control Youth Program](#) and private landowners monitoring of biocontrol weed treatments. Over 10,000 biocontrol releases are anticipated to be completed throughout the project area with each recorded using [EDDMapS](#).

The BNF will continue to consult and work closely with the [Confederated Salish & Kootenai Tribes](#), specifically through monitoring of CFLRP treatments. [Natural resource programs](#) with [Salish Kootenai College](#) can link students to ancestral Bitterroot homelands through landscape management/monitoring.

The BNF will continue long-term monitoring with agency partners including FWP (fisheries, big game, & carnivore monitoring), DNRC (timber and roads BMPs evaluations) and MT DEQ (303d streams, TMDLs). Existing efforts and new opportunities to expand partnership monitoring efforts through non-profit groups such as [Bitterroot River Protection Association](#), [Ravalli County Fish & Wildlife Association](#), [Bitterroot Chapter of Trout Unlimited](#), and [Bitterroot Water Forum](#) will be promoted by forest staff.

- **Implementation and Effectiveness Protocol**

Concurrent with the project specific collaborative monitoring mentioned above, the BNF is developing an [Implementation and Effectiveness Monitoring Protocol](#) for use during and after project implementation that will: 1) document the effectiveness of project design elements and BMPs, 2) allow for design element adjustments and additional mitigation measures, as needed, as project implementation proceeds, and 3) inform the development of future projects so that past deficiencies are addressed prior to implementation. This Implementation and Effectiveness Monitoring Protocol will be incorporated into the implementation plan for the landscape level NEPA approach on the Forest. The implementation plan will be Forest's formalized process to go from a signed NEPA decision to developing on-the-ground treatment.

- **Forest Staff Roles**

The Forest recognizes the importance of incorporating both public collaboration and resource-specific monitoring into this process to provide Line Officer decision making transparency as well as opportunities for external and internal input to guide projects that meet desired objectives while minimizing associated resource impacts.

Readiness to Implement Strategy

The BNF currently has completed NEPA decisions for approximately 6,500 acres of mechanical vegetation treatments (commercial harvest) and 40,000 acres of fuel reduction involving pre-commercial thinning, slashing, and prescribed fire and considerably more acres for invasives treatments/native vegetation restoration within existing project boundaries. The forest also has NEPA clearance on all AOPs forest wide, with 10 designs ready for implementation, and [burned area restoration work](#) from the Fires of 2000 which includes watershed improvements.

Approximately 40,000 acres of mechanical vegetation treatments and over 122,000 acres of fuel reduction are under pending NEPA. The BNF currently has several tools available to accomplish restoration work. Force account, contracting, with several in-place Regional and local contracts, and partnership agreements such as [Bitterroot Water Forum](#), [Montana Conservation Corps](#), [Back Country Horseman](#), and the [Ravalli Off Road User Association](#) as a few examples. We have an excellent working relationship with [Trapper Creek Job Corp](#) in Darby, MT and [Anaconda Job Corp](#) in Anaconda, MT. These centers provide materials and students to help with restoration and fuel reduction projects. Students have completed restoration work for the past 20 years. The BNF has a force account road and watershed restoration crew and associated equipment that is instrumental in accomplishing our restoration work. CFLRP will leverage our force account capacity.

The restoration work on the BNF will remain viable for implementation with the current [Forest Plan](#) and following Forest Plan revision. This work is important to many of our resource areas and when implemented will add value to our landscape and the resources we manage.

Unit Capacity and Project Funding

The BNF is considering hiring a Shared Stewardship Coordinator position to manage the CFLRP program, working directly with the RCC and other partners, coordinate grant applications, and further develop the Montana Restoration Initiative. Line, Staff Officers, and Program Managers will be closely involved with project planning, implementation, and monitoring over the 10 year life of the project and beyond.

The Forest would look to complete increased implementation and monitoring workloads through recommendations from the RCC, project specific collaboration, partnership agreements, contracting, GNA, Strike Teams, volunteers, and training positions through Pathways. In 2009-10, the BNF had great success with the [American Recovery and Reinvestment Act](#) (ARRA). [ARRA Projects](#) in excess of \$9 million focused on road improvements, recreation, fuel reduction, and timber harvests were completed with existing staffing, partnerships, Job Corps, and contracting over the two year period.

In order to meet increasing forest and regional fuels targets, the forest has increased capacity both in the operations and fuels arenas. The standardization of regional fire crew modules to four permanent employees with longer tours of duty than past strategies is expected to yield additional prescribed fire targets for both planning and implementation. The BNF also hired a fire prevention officer in 2019 who has launched an aggressive education program with the Ravalli County school districts. The BNF and Lolo NF are also engaged in sharing fuels and fire planner duties to increase capacity and keep pace with increasing targets.

Cross boundary efforts are currently ongoing with the [Canyon Creek](#) project west of Hamilton, MT being the most recent. The Bitter Root RC&D has treated over 6,300 acres since 2001 and will continue to be a major factor in future successful cross boundary mitigation treatments. While not selected for a [Joint Chiefs'](#) project for FY20, the forest will be pursuing a

Joint Chiefs' project with the NRCS in 2021 to further pursue a landscape approach to forest health and wildfire mitigation. Additionally, fuel reduction efforts with MT DNRC and GNA are ongoing and identified on our 5 year program of work.

Certainty of CFLRP funds will lead to a more efficient contracting process with awards in 1st and 2nd quarter of the fiscal year. NEPA efficiencies will enable the BNF to complete more restoration work at the landscape scale and provide flexibility of treatments over the life of the NEPA decision, enabling resource specialists to devote more time to implementation and monitoring. [New proposed CE authorities](#) will be explored to complete smaller, focused projects.

Engineering will play a key role in the implementation of the CFLRP. Main tasks include survey, design, contract preparation, and contract administration. The force account road crew has been and will be instrumental in restoration and BMP work. The force account crew completes a majority of the forest roads accomplishments each year. Additional funds will enable longer seasonal work. Contract will be used to complete the majority of engineering work CFLRP funding. Trapper Creek Job Corps students will assist with Forest signage, recreation maintenance and facilities upgrades, fuel reduction and watershed restoration work.

BNF is currently collaborating with the MT DNRC to offer federally owned timber for sale under the [GNA](#). The BNF 3-Mile GNA has 167 acres with 1815 CCF for sale and was sold in late November 2019. [Buckhorn GNA](#) is approx. 1,250 acres and 11,000 CCF and will also be partnered with MT DNRC for an April 2020 advertisement.

- **Projections in Core Treatment Costs**

CFLR funding will enable costs savings over time. Contractors who are able to schedule and plan work earlier will be able to offer lower costs. There will also be more competition on the contracts with a steady out year program of work. Stewardship funds and other matching grant funds can leverage CFLRP funding, leading to more implementation. In regards to fuel treatments, unit costs are expected to remain relatively high for initial treatments around communities with substantially less investment required for long-term fuel maintenance.

- **Equipment Acquisition**

The BNF has leased an excavator for the [last 10 years to successfully complete watershed restoration projects such as road decommissioning](#). Purchase of an excavator and attachments (mastication head) would save lease costs and enable the Forest to complete additional year-round CFLRP restoration projects including fuel reduction, fisheries, and recreation projects. This equipment would be critical for fuel reduction work near FS boundaries where access is limited and wood byproduct values are low. The estimated purchase cost for the excavator is \$188,000 and [mastication head](#) \$60,000. Over the 10 year CFLRP, this force account program alone could achieve 1,000 acres of boundary fuel reduction, 10 Aquatic Organism Passage (culvert) upgrades, 30 miles of road decommissioning, 5 miles in-stream rehabilitation, and rehabilitation of recreation disturbances from unauthorized trails and dispersed camp sites.

- **Post CFLRP**

The BNF will continue to aggressively pursue post CFLRP funding and partnership opportunities including but not limited to: [MRI](#), [Joint Chiefs'](#), [319](#), [WHIP](#), monitoring, partnership, and private contributions. Other initiatives include: continued support of GNA and resources State/contractors can provide; [Trapper Creek Job Corps](#) for implementation of fuels, recreation, and resource program needs; and shared employees, working across neighboring Forests (Bitterroot/Lolo sharing) & Regional boundaries.

[MRI](#) is currently under development with multiple agency and non-profit partners. MRI is a partnership based program being developed to maintain or restore high priority watersheds, improve aquatic and terrestrial habitat function, restore ecosystem processes, improve resiliency to fire, and provide economic opportunities through restoration in Montana. This future program will be a key source of non-federal match for CFLRP projects. Funding for priority projects will come from a variety of public, private, and non-profit partners.

The Bitterroot currently has a very flexible workforce. Using the tools we have, new permanent staffing would be limited. The majority of CFLRP work would be accomplished using Pathways students, journey level positions, [Trapper Creek Job Corps](#) students, GNA, and/or contracts, and partners. When the funding is close to expiring, there would be vacancies associated with retirements (15% BNF workforce is eligible to retire in 2023 and another 15-20% in 2031). There will also be agency opportunities for upward movement based on anticipated retirements nationally. By keeping the workforce flexible and only adding a few positions, the BNF would be able maintain the improved conditions after CFLR funding expires.

- **Federal and Non-Federal Investments**

All implementation completed by BNF road, watershed, trails, recreation, invasives, silviculture, timber, and [Trapper Creek Job Corps](#) crews will provide federal match.

Current timber sale values averages \$325 per acre harvested. Our 10-year plan shows harvesting of 3,000 acres annually into the future (plus additional GNA acreage), yielding approximately \$682,000 in federal match annually.

The [Bitterroot RC&D](#) has a track record of treating 350-600 acres/per year at a cost of \$1,160/ac and a yearly average of \$192,000. Total investment in Ravalli County since 2001 is \$3.4M for 6,300 acres treated. RC&D averages 43 projects annually and have utilized over 615 contractors to accomplish program objectives that have cost share percentage of 47% grant funded and 53% landowner funded.

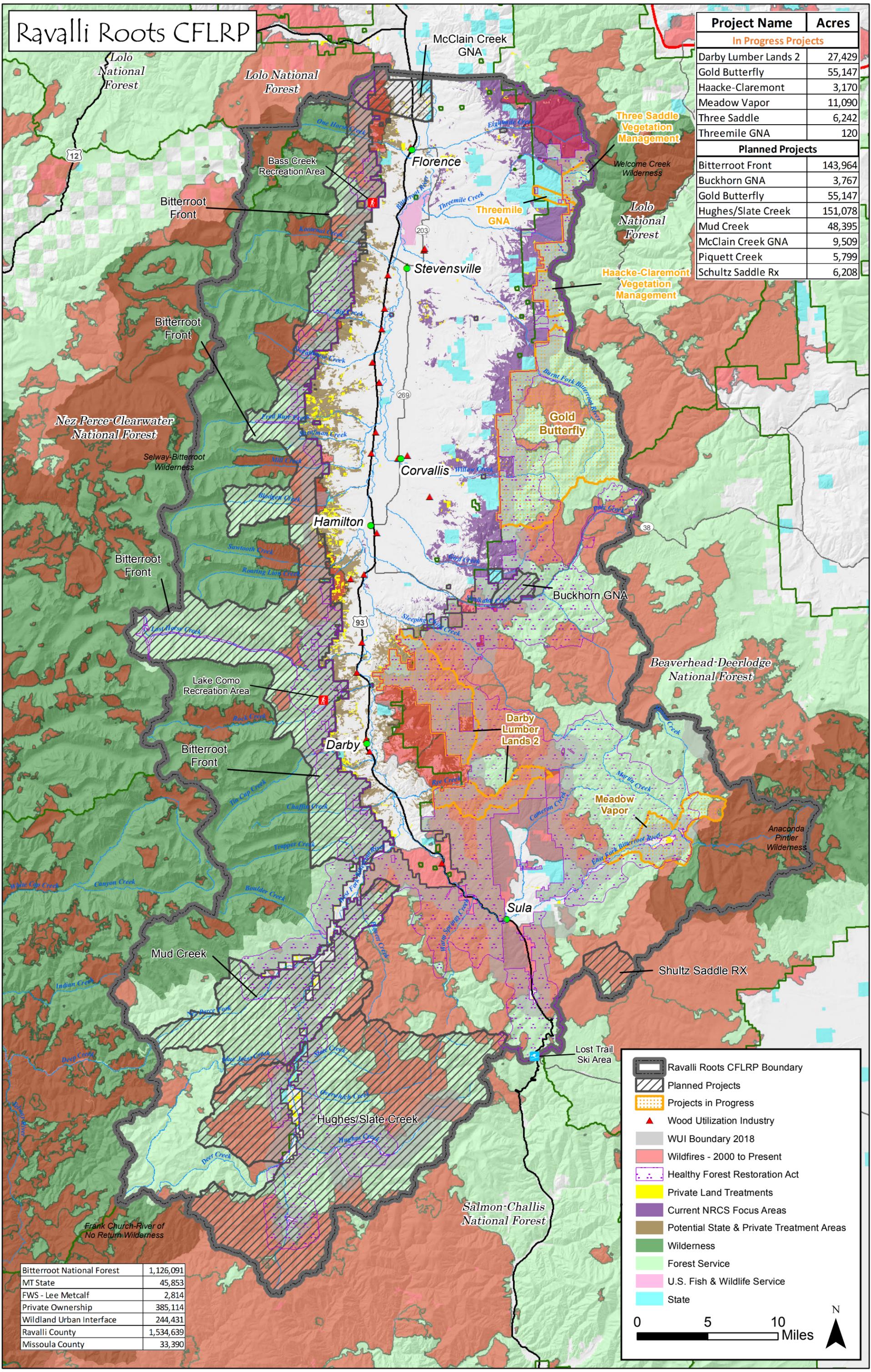
The [Montana NRCS EQIP](#) program is another funding source for this landscape and has identified forested landscapes as the 2020 priority. Over \$200,000 is available for project implementation next for the next 3-4 years. [Rocky Mountain Elk Foundation](#), [National Wild Turkey Federation](#), and [Wild Sheep Foundation](#) are all potential funding sources for projects associated with vegetation/habitat improvement. Collaboration with the [Confederated Salish & Kootenai Tribes](#) includes fuel reduction with the [Reserved Treaty Rights Lands](#) program.

All road improvements completed through force account, Schedule A with Ravalli County, GNA, [Comprehensive Capitol Improvement Program](#) (CCIP), [Federal Highways](#), and [Emergency Relief for Federally Owned Roads](#) (ERFO) will provide CFLRP match. Watershed partnerships with [TU](#) and [BRWF](#) will continue and likely accelerate. BRWF partnership has approximately \$200,000 in agreements ready for watershed restoration projects, in addition to the MDEQ Bitterroot priority funding from the 319 program (\$500,000/yr for next 3 years).

Bitterroot invasives program continues to complete a large portion of work through force account, contracts, [Montana Conservation Corps](#), and Ravalli County agreements. Over \$330,000 was invested in FY19, achieving 6,000 acres of survey and weed treatment with private landowners. Additional opportunities through grant programs like [WHIP](#) will continue.

Trail maintenance of approximately 350 miles per year at \$225/mile would be doubled through CFLRP and partnership contributions, totaling over 7,000 miles maintained over the life of the project.

Ravalli Roots CFLRP



Project Name	Acres
In Progress Projects	
Darby Lumber Lands 2	27,429
Gold Butterfly	55,147
Haacke-Claremont	3,170
Meadow Vapor	11,090
Three Saddle	6,242
Threemile GNA	120
Planned Projects	
Bitterroot Front	143,964
Buckhorn GNA	3,767
Gold Butterfly	55,147
Hughes/Slate Creek	151,078
Mud Creek	48,395
McClain Creek GNA	9,509
Piquett Creek	5,799
Schultz Saddle Rx	6,208

Bitterroot National Forest	1,126,091
MT State	45,853
FWS - Lee Metcalf	2,814
Private Ownership	385,114
Wildland Urban Interface	244,431
Ravalli County	1,534,639
Missoula County	33,390

- Ravalli Roots CFLRP Boundary
- Planned Projects
- Projects in Progress
- Wood Utilization Industry
- WUI Boundary 2018
- Wildfires - 2000 to Present
- Healthy Forest Restoration Act
- Private Land Treatments
- Current NRCS Focus Areas
- Potential State & Private Treatment Areas
- Wilderness
- Forest Service
- U.S. Fish & Wildlife Service
- State

0 5 10 Miles

CFLRP proposals are **not** expected to include ALL of the core treatment types below in their strategy - highlight those treatments that are core to your stated treatment objectives. Note that there are options to use "other" in this table.

Estimated treatments should include **all** planned treatments in the proposed CFLR landscape, regardless of landownership type. Provide an estimate of the % you expect to occur on NFS lands in column J, and list the other landownership types where you expect treatments to occur, if applicable, in column K.

Core Restoration Treatment Types	Please briefly fill in additional background information for the prompts below	Year 1*	Year 2	Year 3	Year 4	Years 5-10	TOTAL	Key treatment objectives	Estimated % accomplished on NFS lands (across all ten years)	Other landownership types (other federal, tribal, state, private, etc.) where treatments will occur
Hazardous Fuels Reduction (acres)		7400	11500	12500	13000	14000	58400	Existing 5 year POW for the BRP and treatments on other ownerships accomplished by partners and other agencies, ie RC&D, NRCS, DNRC	82%	State & Private
Mechanical Thinning (acres)		4500	6500	7000	6500	6000	30500	Treatments are a combination of force account and contracts to reduce and treat or change fuel structure in targeted stands that are in or adjacent to values within the WUI.	82%	State & Private
Prescribed Fire (acres)		2900	5000	5500	6500	8000	27900	RX fire treatments increasing over time as	90%	State & Private
Other (acres)		500	500	500	500	3000	5000	Fuel reduction accomplished in allotments through grazing reduction.	90%	State & Private
Wildfire Risk Mitigation Outcomes - Acres treated to mitigate wildfire risk		7400	11500	12500	13000	14000	58400	All hazardous fuels reduction acres are accounted for here.	82%	State & Private
Wildfire Risk Mitigation Outcomes - WUI acres	Please list the source of the WUI designation: Ravalli County CWPP 2009	4500	9500	10000	11500	11500	47000	Ravalli County CWPP 2009 Edition	90%	State & Private
Invasive Species Management (acres)		16,900	22,100	23,600	23,600	141,600	227,800	Treatment (Herbicide, Biocontrol, Native Species Seeding) of new invaders & exiting noxious weeds, wildlife habitat improvement, roadside and trail treatments (reduce vector sites)	20%	State & Private
Native Pest Management (acres)		27,950	38,000	42,500	45,500	189,700	343,650	Native pest mangement = Fuels reduction + Invasives + Stand Imp + Timber Harvest	100%	
Road Decommissioning (miles)		1	3	3	3	20	30	Roads decommissioned from FS system, lands restored and returned to productive management	100%	
Road Maintenance and Improvement (miles)		440	540	590	600	3600	5770	Miles of road maintained, surface and drainage improvements to reduce sediment are priority.	90%	State -GNA, County Schedule A & Private
Road Reconstruction (miles)		12	12	22	32	424	502	Road reconstruction necessary to meet Forest management needs, i.e. fuels and timber	90%	State -GNA, County Schedule A & Private
Trail Reconstruction (miles)		700	700	700	700	4200	7000	Trail maintenance -miles of trail maintained to standard	100%	
Wildlife Habitat Restoration (acres)		6500	9125	10000	10000	60000	95625	Thinning, prescribe fire treatments, invasives treatments, and rangeland vegetation improvements to increase native forage.	50%	State & Private
Crossing Improvements (number)		4	4	4	4	26	43	AOP upgrades that primarily include bridge and culvert replacement. Several fords and trail bridges.	100%	
In-Stream Fisheries Improvement (miles)		7	11	12	12	74	116	Improve fisheries habitat through sediment reduction and AOP	90%	State & Private
Lake Habitat Improvement (acres)		0	2	2	0	10	14	Lake habitat improvement for bull trout	100%	
Riparian Area Improvements (acres)		3	8	8	8	48	75	Removing roads in RHCAs and rehabbing/obliterating riparian dispersed campsites that create stream degradation/riparian shrub/tree planting and burn pile rehab	75%	State & Private
Soil and Watershed resources enhanced or maintained (acres)		350	530	550	550	3300	5280	Site specific treatments that improve soil productivity and prevent soil loss	90%	
Priority watersheds moved to improved condition class (number)		0	1	1	1	2	5	Upper Rye, Lower Rye, Willow, + 2 additional (Mud Creek & Bitterroot Front)	100%	

Stand Improvement (acres)		800	1500	2000	3800	12500	22800	Forest stand improvement treatments include release, weeding and thinning in managed stands to favor seral species to reduce native pest damage and restore key tree species and structure across the landscape	90%	State -GNA & Private
Reforestation and revegetation (acres)		1300	1900	2200	2900	12000	22400	Planting of ponderosa pine, whitebark pine and western larch, site preparation for natural regeneration of seral species, and certification of natural regeneration without site preparation.	90%	State -GNA & Private
Timber Harvest (acres)**	Articulate % ground based, steep-slope (cable and tether logging) and helicopter	2,851 Acres 35% Tractor 65% Skyline	2,900 Acres 61% Tractor 34% Skyline 5% Helicopter	4,400 Acres 43% Tractor 54% Skyline 3% Helicopter	5,100 Acres 47% Tractor 50% Skyline 3% Helicopter	Total = 18,000ac @ 3,000 Acres/ year 50% Tractor 48% Skyline 2% Helicopter	37851	Resiliency to Insect, Disease and Fire (WUI), Species composition, Stand Density & Structure.	90%	State -GNA & Private
Rangeland Vegetation Improvement (acres)		500	500	500	500	3000	5000	Rangeland vegetation forage improvement, water source upgrade, riparian management	90%	State & Private
Abandoned Mine Reclamation/Remediation		0	0	6	6	12	24	Reclamation of Crystal Mountain Mine waste rock	90%	Private - Abandoned Mine
Other - Trail New Construction (miles)		2	4	2	1.5	7	16.5	Recreation restoration opportunities within close proximities to communities by providing sustainability and resource protection for trails.	100%	
Other - Recreation Enhancement (sites)		92	92	91	91	542	912	POW = 90 rec sites are maintained to standard every year. Recreation restoration opportunities would increase the economic benefits to the communities; restore impacts from over-use and sprawl by expanding sites and concentrating use on hardened sites	100%	
Other - Dispersed Site Rehabilitation (acres)		4	4	3	3	20	34	Reduce the impacts from dispersed camping on riparian areas by pulling sites back from the creeks, decrease the size of the sites, rehabilitate disturbed areas	100%	
Other - Developed Recreation Sites - Fire Prevention (measure: # of recreation campsites)		10	25	25	25	139	224	Purchase and installation of new, accessible fire rings to replace deteriorating older rings that pose a fire hazard in developed recreation sites	100%	

*Assume funding requested for Year 1 will be allocated in February 2020 at the earliest

Total Acres - this includes sites (each site counted = 1 acre) and miles of road and trail treatments converted to acres. Wildlife and native pest management acres not included in this total since they are accounted for in other treatment categories.	379690
Total USFS	239465
Total State & Private	140225

**Note that timber volume produced from the treatment is estimated in a separate attachment - Attachment C.

CFLRP proposals are **not** expected to include ALL of the core treatment types below in their strategy - highlight those treatments that are core to your stated treatment objectives. Note that there are options to use "other" in this table.

Estimated treatments should include **all** planned treatments in the proposed CFLR landscape, regardless of landownership type. Provide an estimate of the % you expect to occur on NFS lands in column J, and list the other landownership types where you expect treatments to occur, if applicable, in column K.

Core Restoration Treatment Types	Please briefly fill in additional background information for the prompts below	Year 1*	Year 2	Year 3	Year 4	Years 5-10	TOTAL	Key treatment objectives
	Regular Program Of Work (POW)	7400	8500	9000	9500	10000	44,400	
Hazardous Fuels Reduction (acres)	CFLRP Addition	0	3000	3500	3500	4000	14000	Existing 5 year POW for the BRP and treatments on other ownerships accomplished by partners and other agencies, ie RC&D, NRCS, DNRC
	POW	4500	5000	5000	3500	3000	21,000	Treatments are a combination of force account and contracts to reduce and treat or change fuel structure in targeted stands that are in or adjacent to values within the WUI.
Mechanical Thinning (acres)	CFLRP Addition	0	1500	2000	3000	3000	9500	
	POW	2900	3500	3500	4500	5000	19,400	RX fire treatments increasing over time as mech treatments are accomplished and more stands are moved into a maintenance stage.
Prescribed Fire (acres)	CFLRP Addition	0	1500	2000	2000	3000	8500	
	POW	100	100	100	100	600	1,000	Fuel reduction accomplished in allotments through grazing reduction.
Other (acres)	CFLRP Addition	400	400	400	400	2400	4000	
	POW	7400	8500	9000	9500	10000	44,400	All hazardous fuels reduction acres are accounted for here.
Wildfire Risk Mitigation Outcomes - Acres treated to mitigate wildfire risk	CFLRP Addition	0	3000	3500	3500	4000	14000	
	POW	4500	7000	7000	8500	8500	35,500	
Wildfire Risk Mitigation Outcomes - WUI acres	CFLRP Addition - Please list the source of	0	2500	3000	3000	3000	11500	Ravalli County CWPP 2009 Edition- all treated WUI acres included
	POW	16,000	18,500	20,000	20,000	120,000	194,500	Treatment (Herbicide, Biocontrol, Native Species Seeding) of new invaders & exiting noxious weeds, wildlife habitat improvement, roadside and trail treatments (reduce vector sites)
Invasive Species Management (acres)	CFLRP Addition	900	3,600	3,600	3,600	21,600	33300	
	POW	26,300	30,200	33,900	36,500	154,000	280,900	Native pest management = Fuels reduction + Invasives + Stand Imp + Timber Harvest
Native Pest Management (acres)	CFLRP Addition	1650	7,800	8,600	9,000	35,700	62,750	
	POW	1	1	1	1	6	10	Roads decommissioned from FS system, lands restored and returned to productive management
Road Decommissioning (miles)	CFLRP Addition	2	2	2	2	14	20	
	POW	240	240	240	240	1440	2,400	Miles of road maintained, surface and drainage improvements to reduce sediment are priority.
Road Maintenance and Improvement (miles)	CFLRP Addition	200	300	350	360	2160	3370	
	POW	10	8	15	22	364	419	Road reconstruction necessary to meet Forest management needs, i.e. fuels and timber
Road Reconstruction (miles)	CFLRP Addition	2	4	7	10	60	83	
	POW	350	350	350	350	2,100	3500	Trail maintenance -miles of trail maintained to standard
Trail Reconstruction (miles)	CFLRP Addition	350	350	350	350	2,100	3500	
	POW	2500	4500	5000	5000	30000	47000	Thinning, prescribe fire treatments, invasives treatments, and rangeland vegetation improvements to increase native forage.
Wildlife Habitat Restoration (acres)	CFLRP Addition	4000	4625	5000	5000	30000	48625	
	POW	1	1	1	1	6	10	AOP upgrades that primarily include bridge and culvert replacement. Several fords and trail bridges.
Crossing Improvements (number)	CFLRP Addition	3	3	3	3	20	33	
	POW	5	7	8	8	50	78	Improve fisheries habitat through sediment reduction and AOP
In-Stream Fisheries Improvement (miles)	CFLRP Addition	2	4	4	4	24	38	
	POW							Lake habitat improvement for bull trout
Lake Habitat Improvement (acres)	CFLRP Addition		2	2		10	14	
	POW	1	1	1	1	6	10	Removing roads in RHCAs and rehabbing/obliterating riparian dispersed campsites that create stream degradation/riparian shrub/tree planting and burn pile rehab
Riparian Area Improvements (acres)	CFLRP Addition	2	7	7	7	42	65	
	POW	200	230	250	250	1500	2430	Site specific treatments that improve soil productivity and prevent soil loss
Soil and Watershed resources enhanced or maintained (acres)	CFLRP Addition	150	300	300	300	1800	2850	
	POW		1				1	Upper Rye, Lower Rye, Willow, + 2 additional (Mud Creek & Bitterroot Front)
Priority watersheds moved to improved condition class (number)	CFLRP Addition			1	1	2	4	
	POW	300	800	1000	2500	6000	12800	Forest stand improvement treatments include release, weeding and thinning in managed stands to favor seral species to reduce native pest damage and restore key tree species and structure across the landscape
Stand Improvement (acres)	CFLRP Addition	500	700	1000	1300	6500	10000	
	POW	1000	900	1350	1500	5000	11850	Planting of ponderosa pine, whitebark pine and western larch, site preparation for natural regeneration of seral species, and certification of natural regeneration without site preparation.
Reforestation and revegetation (acres)	CFLRP Addition	300	1000	850	1400	7000	10550	
	POW - Articulate % ground based, steep-slope (cable and tether logging) and helicopter	2,601 Acres, 38%Tractor, 62% Skyline	2,400 Acres, 59% Tractor, 41% Skyline	3,900 Acres 45% Tractor, 55% Skyline	4,500 Acres, 47% Tractor, 53% Skyline	3,000 Acres/ year, 50% Tractor, 50% Skyline Total = 18000	32401	Resiliency to Insect, Disease and Fire (WUI), Species composition, Stand Density & Structure.
	CFLRP Addition - Articulate % ground based, steep-slope (cable and tether logging) and helicopter	250 Acres, 100% Tractor	500 Acres, 70% Tractor, 15% Helicopter	500 Acres, 50%Tractor, 25% Skyline, 15% Helicopter	600 Acres, 25% Tractor, 50% Skyline, 15% Helicopter	25% Tractor, 50% Skyline, 15% Helicopter, Total = 3600	5450	Resiliency to Insect, Disease and Fire (WUI), Species composition, Stand Density & Structure.
	POW	100	100	100	100	600	1000	Rangeland vegetation forage improvement, water source upgrade, riparian management
Rangeland Vegetation Improvement (acres)	CFLRP Addition	400	400	400	400	2400	4000	
	POW			1	1	2	4	Reclamation of Crystal Mountain Mine waste rock
Abandoned Mine Reclamation/Remediation	CFLRP Addition			5	5	10	20	
	POW	0	0	0	0	0	0	Recreation restoration opportunities within close proximities to

Other - Trail New Construction (miles)	CFLRP Addition	Survey and design on 2 miles of new trail	Survey and design on 3 miles of new trail; new	2 miles of new construction (Como north)	1.5 miles of new construction (Larry Creek)	2024-1 mile new construction (implement TROADS in Hart Bench); 2025-2030: 6 miles	16.5	Recreation restoration opportunities from these projects will benefit communities by providing sustainability and resource protection for trails.
Other - Recreation Improvement (sites)	POW	90	90	90	90	540	900	POW = 90 rec sites are maintained to standard every year. Recreation restoration opportunities would increase the economic benefits to the communities; restore impacts from over-use and sprawl by expanding sites and concentrating use on hardened sites
	CFLRP Addition	2 (survey and design for Burnt Fork & Willow Creek TH)	2 (Construction of Burnt Fork & Willow Creek TH)			2 (survey and design for Lick Creek Horse Camp; Survey and design for non-motorized boat launch at Como); 6	12	
Other - Dispersed Site Rehabilitation (acres)	POW	2	2	1	1	8	14	Reduce the impacts from dispersed camping on riparian areas by pulling sites back from the creeks, decrease the size of the sites, rehabilitate disturbed areas
	CFLRP Addition	2	2	2	2	12	20	
Other - Developed Recreation Sites - Fire Prevention (measure: # of recreation campsites)	POW							Purchase and installation of new, accessible fire rings to replace deteriorating older rings that pose a fire hazard in developed recreation sites
	CFLRP Addition	10	25	25	25	139	224	

*Assume funding requested for Year 1 will be allocated in February 2020 at the earliest

Total Acres - this includes sites (each site counted = 1 acre) and miles of road and trail treatments converted to acres. Wildlife and native pest management acres not included in this total since they are accounted for in other treatment categories.	379690
Total USFS	239465
Total State & Private	140225

**Note that timber volume produced from the treatment is estimated in a separate attachment - Attachment C.

CFRLP Proposal Attachment C: Utilization of Forest Restoration Byproducts

*Note that acres treated includes all acres treated within the CFLRP boundary. However, the projected annual harvested volume is only for NFS lands.

Fiscal Year	Estimate of acres treated annually that will generate restoration byproducts	Total projected annual harvested volume (ccf) from NFS lands	Expected percentage commercially utilized* from NFS lands
2020	2801	41,275	*81%
2021	2600	38,400	*79%
2022	3900	48,400	*86%
2023	4200	50,000	*86%
2024	3000	40,000	*80%
2025	3000	40,000	*80%
2026	3000	40,000	*80%
2027	3000	40,000	*80%
2028	3000	40,000	*80%
2029	3000	40,000	*80%
TOTALS:	31,501	418,075	*81%
<i>Estimated % of TOTAL acres accomplished on NFS lands:</i>		100	
<i>Estimated % of TOTAL acres accomplished on other landownerships within the CFLRP boundary:</i>			

*Commercially utilized refers to the volume you expect to sell across all product classes (sawtimber,

Forest Service staff representative(s) working with collaborative: (Please provide list of key staff):

Cole Mayn - Resource Staff Officer
 Seth Carbonari - West Fork District Ranger
 Matt Anderson - Forest Supervisor

Collaborative Member/Partner Name	Organizational Affiliation (if applicable)	Was this person involved in proposal development?	Primary Issue Category	Second Issue Category	Third Issue Category	If "other," briefly describe
Steve Schmidt	Ravalli County Collaborative	Yes	Wildlife	Fire Management	Environmental	
Larry Jakub	Ravalli County Collaborative	Yes	Environmental	Recreation (non-motorized)	Wilderness	
Jeff Burrows	Ravalli County Collaborative	Yes	Other	Forest Products	Environmental	1.Public Health/Safety 2. Forest Management
Jeff Duus	Ravalli County Collaborative	Yes	Watershed	Other	Fire Ecology	Integrated Forest Management
Kelsey Milner	Ravalli County Collaborative	Yes	Environmental	Forest Products	Wildlife	
Kris Bayer	Ravalli County Collaborative	Yes	Fire Management	Other	Forest Products	Wise Use of Funding
Marc Cooke	Ravalli County Collaborative	Yes	Wildlife	Wilderness	Other	Water
Margaret Gorski	Ravalli County Collaborative	Yes	Fire Management	Tourism	Community Development	
Rod Daniel	Ravalli County Collaborative	Yes	Recreation (non-motorized)	Fire Ecology	Wilderness	
Tom Henderson	Ravalli County Collaborative	Yes	Tourism	Wilderness	Fire Ecology	
Wayne Rusk	Ravalli County Collaborative	Yes	Fire Management	Forest Products	Watershed	

Ravalli Roots CFLRP

Letter of Commitment
January 3, 2020

▶ **CFLRP Selection Committee**

We support the Ravalli Roots CFLRP proposal and the opportunities it will generate to implement and monitor landscape scale forest management through a collaborative process.

The Ravalli Roots CFLRP area is a jurisdictional mix of private, city, county, State, and Federal lands that provide exceptional opportunity for cross-boundary approaches to landscape management. Fuel reduction treatments in the Wildland Urban Interface (WUI) along the main fringes of the Bitterroot Valley (the highest concentrations in Region I), are a focus for cross boundary treatment in forested landscapes. However, in addition to fuels and vegetation treatments, effective treatments will also address much needed restoration of impaired watersheds, improved habitat conditions for fish, wildlife, and multiple at-risk species, reduced invasive species, and enhanced recreation opportunities and access in the Bitterroot Valley.

Collaborative framework is currently being developed for the Bitterroot Front project, a 150,000 acre project along the Bitterroot Range on the west side of the valley. The Bitterroot National Forest has recently conducted public meetings to solicit pre-scoping input to collaboratively determine what the desired condition looks like for a number of forest resources. We look forward to the continuation of this collaborative process through implementation of treatments and collaborative monitoring.

We are committed to continue working together with the Bitterroot National Forest, private landowners, and other partners to implement and monitor landscape treatments at a scale that can truly make a difference.

Sincerely,

See attached list.

Organization	Contact	Job Title	Email	Phone
Bitter Root Water Forum	Heather Barber	Executive Director	heather@brwaterforum.org	406-375-2722
Ravalli County Working Group of the Bitterroot Conservation District	Kent Myers	Urban Supervisor	kent.myers@bresnan.net	406-381-4236
Bitterroot RC&D	Byron Bonney	Community Forester	bountifulbkts@gmail.com	406-241-1867
National Wild Turkey Federation	Collin Smith	District Biologist - ID, MT, WY, ND	csmith@nwtf.net	406-570-9103
Idaho Forest Group	Willy Peck	Forestry	Willy.peck@idfg.com	406-822-2536
Sanders County Collaborative	Zachary Whipple-Kilmer	Co-Chair	zachcore@hotmail.com	814-490-9848

Ravalli County Collaborative

215 S. 4TH STREET SUITE A
HAMILTON, MT 59840

Ravalli County Montana

With this letter, the Ravalli County Collaborative (RCC), is expressing their support for the Collaborative Forest Landscape Restoration Program (CFLRP) application submitted by the Bitterroot National Forest (BNF). Our Collaborative has participated in this CFLRP application and is eager to work with the BNF to implement projects.

The membership of the Ravalli County Collaborative (RCC), by design, includes a diversity of perspectives and interests. As such, the RCC believes that it is well positioned to represent the diverse public interests relative to natural resource management within Ravalli County. By including diverse perspectives, seeking public discourse, and employing dialogue to achieve consensus, the RCC believes it can aid the Bitterroot National Forest and other agencies in developing sound and defensible projects and management plans.

To achieve these objectives, the RCC has adopted Bylaws that define how consensus will build RCC decisions. Furthermore, the RCC is pursuing a plan that evaluates natural resource issues both site specifically and Forest wide.

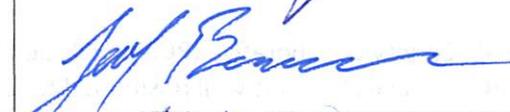
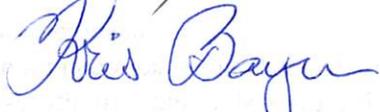
1. The first step in this plan has been the establishment of three standing committees to evaluate site specific issues at the project level and make recommendations to the full committee for a collaborative decision. The three standing committees are:
 - a. Fish, Wildlife, and Water
 - b. Forest Management/Health and Fire
 - c. Recreation, Land Use, and Access

2. The second step, which is currently being pursued by the full membership, is to build County wide interest/position statements on key resource issues. All such statements will be developed through consensus and will help to identify what members share in common and will commit in concept to support.

The end result of this plan will be a collection of statements that can be considered by the RCC when assembling proposal responses to the Forest and other agencies. These statements will increase the capacity of the RCC to respond to both project specific and Forest wide proposals. Further, Forest wide interest/position statements will have the added benefit of providing a foundation for the RCC to address a potential Forest plan revision or a large programmatic proposal that includes a number of projects.

The RCC recognizes the complexity of its plan. However, it believes that over time, the RCC will become more effective at understanding not only natural resource management options in Ravalli County but also the diverse perspectives held by the public. Hence, RCC products will be founded on sound information and will benefit and be supported by a majority within Ravalli County.

These statements are evidenced by the signatures of RCC members below:

Steve Schmidt	
Larry Jakub	
Jeff Burrows	
Jeff Duus	
Kelsey Milner	
Kris Bayer	
Marc Cooke	
Margaret Gorski	
Rod Daniel	
Tom Henderson	
Wayne Rusk	

MINERAL COUNTY RESOURCE COALITION

P.O. Box 730
Superior, Montana 59872

Monday 8/12/19

Matt Anderson, Forest Supervisor
Bitterroot National Forest
1801 N. 1st
Hamilton, Montana 59840

Dear Matt,

The Mineral County Resource Coalition (MCRC) is a diverse group of citizens that work with a broad range of National Forests across Western Montana and Eastern Idaho to help develop projects that provide opportunities to improve the economic stability of our rural counties, communities, and their citizens. Our work was originally focused on Mineral County and the Lolo National Forest. However, in 2015 we became aware of the impact that other forests were having on our rural communities and recognized the need to expand the work we do to incorporate more forests, including the Bitterroot.

Unless there is something that we missed, our records indicate that we first began working with and commenting on, projects on Bitterroot National Forest in the spring of 2017. At that time, working with the Tricon Timber (now the Idaho Forest Group) forestry staff, we began a field review of the Gold Butterfly Project and later provided comments on the DEIS, copy attached.

In the spring of 2018, we performed field work the DNRC's proposed Gird Creek timber sale. At this time, we were in the very early stages of learning how to use GNA as a tool to get work done on the ground. We submitted comments to the DNRC on the Gird Creek project, copy attached, requesting that this project be proposed under the GNA authority. In retrospect, we should have made the GNA request to the Forest. We did cc Matt Arno and Eric Winthers on the comments and request. We continued to press the DNRC to use the GNA authority and were informed at a later MCRC meeting by Matt Arno that our request was being implemented and Gird Creek would be a GNA project.

More recently, we filed a supportive objection, copy attached, on the Gold Butterfly Record of Decision. This was done to get us a seat at the table in the event another party objected, which they did.

We have had a slow start with our activities on the Bitterroot but intend to substantially increase our involvement in the near future. We hope that the information provided above demonstrates our desire to be part of your program of work on the Bitterroot Forest and brings us to the main reason for this letter.

The MCRC has been working with the Lolo National Forest to develop a proposal for the CFLRP Program. However, we just learned that there can be no new permanent roads built on a CFLR Project. The projects we had planned on the Lolo all have the need for permanent road construction. Therefore, we will not be pursuing this program on the Lolo.

However, the CFLRP is a huge opportunity that may not be available again in the future. If you have not been approached by any other collaborative groups in your area to pursue this on the Bitterroot, we would like to visit with about working together to prepare a proposal and help the Bitterroot get more work done on the ground.

Time is not currently our friend, Tier 1 submittals need to be in by August 23rd, 8 working days from today. Please let us know if there is an opportunity to work with you on this project.

Sincerely,

William R. Peck
406-822-2536
Co-Chair, Mineral County Resource Coalition

**DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION**
Southwestern Land Office



STEVE BULLOCK, GOVERNOR

STATE OF MONTANA

PHONE: (406) 542-4200
FAX: (406) 542-4285

1401 27TH AVENUE
MISSOULA, MT 59804

January 3, 2020

To: Selection Committee, Collaborative Forest Restoration Program

Re: Montana DNRC Letter of Commitment for the Ravalli Roots Collaborative Forest Restoration Program Proposal

The Montana Department of Natural Resources and Conservation (DNRC) is committed to working with the Bitterroot National Forest on the proposed Ravalli Roots Collaborative Forest Landscape Restoration (CFLR) Project. DNRC has fire protection interests in this area and manages State Trust Lands in the vicinity. Our agencies share the common goals of reducing fire risk and improving forest health in Montana's forest landscapes. DNRC has a long history of sharing information and coordinating management with the Bitterroot National Forest. We recently initiated an agreement for a Good Neighbor Authority (GNA) program and sold our first GNA sale on the Forest. DNRC has been working closely with the Forest and the Ravalli County Collaborative on several large restoration projects in this area.

The Bitterroot National Forest has critical forest health and wildfire risk issues that need attention at a large scale. Since 1990 over 7,000 new homes have been built into the wildfire hazard areas in Ravalli county, and growth is continuing. Forest conditions have been impacted by fire suppression and historical land use, creating conditions that could facilitate widespread stand-replacing fires. A high proportion of forest stands are overly-dense, dominated by late successional species and are at high risk for insect and disease mortality. Habitats and water quality have been degraded by poorly located and maintained roads and past management. The wood products industry is not operating at full potential in this area. Accelerated restoration across boundaries is needed to improve forest conditions, reduce threats, support a diverse forest products industry, and strengthen the local economy.

Several large wildfires have threatened communities in the Bitterroot Valley. The Roaring Lion Fire, which exploded on the outskirts of Hamilton in 2016, served as a dramatic display of the potential for loss in this area due to rapid growth amidst heavy fuel accumulations in an area prone to wildfires. The county, communities, and residents are seeing the magnitude of the threat and the need for action.

The current pace and scale of treatments is not adequate to address the growing threats to the landscapes and communities on the Bitterroot National Forest. The CFLR program would draw resources and support to address these issues and greatly increase the acres treated and habitats restored. The Bitterroot Forest has strong, proactive leadership and is energizing the local

communities, partners, and agencies with progressive planning on the Bitterroot Front project and several other large restoration projects in this area. What is greatly needed now is a well-organized, collaborative, large scale implementation and monitoring effort. The CFLR program would be an exceptionally good fit for this area and would serve as a catalyst for moving to the next level in addressing the serious issues in these landscapes. The State of Montana is committed to Shared Stewardship. Montana's Forest in Focus 2.0 initiative reflects our commitment to an "all lands, all hands" approach to working across boundaries to improve forest health and wildfire risk and retain forest industry.

As a willing and proactive partner, DNRC is highly committed to working collaboratively with the Forest and its partners to accomplish accelerated restoration and monitoring in this landscape.

Sincerely,

A handwritten signature in cursive script that reads "Michael P. O'Herron".

Mike O'Herron
Area Manager, Southwestern Land Office
MT Department of Natural Resources and Conservation

CC: Thayer Jacques, Forester, Southwestern Land Office; Stephen Kimball- Local Government Forest Advisor; Nate Arno, GNA Forester



*Assisting collaboration in forest and grassland restoration, conservation, and resource utilization
— for the benefit of all.*

December 21, 2019

RE: SUPPORT OF RAVALLI ROOTS CFLRP PROPOSAL

CFLRP Selection Committee,

The Montana Forest Collaboration Network (MFCN) works to assist collaboratives across the State of Montana. MFCN provides support and services to local collaboratives while encouraging collaboratives' efforts to be diverse in their approach to natural resource issues; to include diversity in their make-up; to be autonomous and transparent in operation; and to be respectful with meaningful, civil dialogue.

Therefore, we support the Ravalli Roots CFLRP proposal and the opportunities it will generate to implement and monitor landscape scale forest management through a collaborative process. The Ravalli Roots CFLRP area is a jurisdictional mix of private, city, county, State, and Federal lands that provide exceptional opportunity for cross-boundary approaches to landscape management. Fuel reduction treatments in the Wildland Urban Interface (WUI) along the main fringes of the Bitterroot Valley (the highest concentrations in Region 1), are a focus for cross boundary treatment in forested landscapes. However, in addition to fuels and vegetation treatments, this effort will also address much needed restoration of impaired watersheds, improved habitat conditions for fish, wildlife, and multiple at-risk species, reduced invasive species, and enhanced recreation opportunities and access in the Bitterroot Valley.

Collaborative framework is currently being developed for the Bitterroot Front project, a 150,000-acre project along the Bitterroot Range on the west side of the valley. The Bitterroot National Forest has recently conducted public meetings to solicit pre-scoping input to collaboratively determine what the desired condition looks like for a number of forest resources. We look forward to the continuation of this collaborative process through implementation of treatments and collaborative monitoring.

Ravalli Roots is committed to continue working with the Bitterroot National Forest, private landowners, and other partners to implement and monitor landscape treatments at a scale that can truly make a difference.

Sincerely,

MONTANA FOREST COLLABORATION NETWORK

A handwritten signature in black ink, appearing to read "Gordy Sanders". The signature is fluid and cursive, written over a white background.

Gordy Sanders, Chair
406.239.3145





**ROCKY MOUNTAIN
ELK FOUNDATION**

December 27, 2019

US Forest Service, FM
1400 Independence Ave., SW
Mailstop Code: 1103
Washington DC 20250-1103

CFLRP Federal Advisory Committee,

Please accept this letter of support from the Rocky Mountain Elk Foundation (RMEF) for the Collaborative Forest Landscape Restoration Program (CFLRP) proposal on the Bitterroot National Forest: Ravalli Roots. The CFLRP is designed to support ecological, economic, and social sustainability while leveraging local resources with national and private resources. Long-term, landscape projects such as these that cross programs and landownership are a continued interest to RMEF and partners.

RMEF is a conservation organization whose mission is to ensure the future of elk, other wildlife, their habitat and our hunting heritage. Healthy wildlife habitat is one of our core values and ensuring critical habitat linkages, like those found within the proposed project area, are a priority. Active management of forest resources through prescribed burning, thinning and other treatment helps reduce fuels, provides early seral habitat for diverse wildlife and builds resilient landscapes.

Over the past several years, RMEF has committed financial and technical assistance to habitat enhancement and land protection efforts within this important region. We encourage approval of the Ravalli Roots CFLRP proposal and would be a proud partner in this effort.

Sincerely,

Karie Decker
Director of Habitat Stewardship Programs



Christine Brissette
312 N. Higgins Ave., Suite 200
Missoula, MT 59802
406-544-9649; cbrissette@tu.org

RE: Ravalli Roots CFLRP Proposal

December 23, 2019

To whom it may concern,

As Trout Unlimited's project manager in the Bitterroot Valley, Montana, I'd like to express my support for Bitterroot National Forest's "Ravalli Roots" CFLRP proposal. Trout Unlimited has a long history of partnership with Bitterroot National Forest, including projects to reduce chronic sediment delivery from Forest roads and reconnect migratory corridors for native trout by eliminating passage barriers. CFLRP funds would offer an unprecedented opportunity to address some of the most critical aquatic resource concerns on Bitterroot National Forest lands, and Trout Unlimited looks forward to being an active partner in this effort.

The Bitterroot National Forest supports a wide range of aquatic species, including ESA-listed Bull Trout and Westslope Cutthroat Trout, a Montana species of concern. These native fish rely on connected, high quality habitat, much of which occurs in the headwater streams managed by the Forest. Over the years, Bitterroot National Forest specialists have identified priority restoration projects with high potential to benefit native trout populations. Many of these projects, described in documents like the Forest's Bull Trout Conservation Strategy and passage barrier prioritization, are fully designed with signed NEPA decisions, but simply lack implementation funding. CFLRP funds could provide the funding necessary to see these shovel-ready, crucial projects through to fruition.

Trout Unlimited also supports the Forest's proposed landscape assessments and monitoring efforts to identify new watershed health projects and better understand the impacts of land management on aquatic systems. For example, the proposed road systems analysis will assess minimum road system needs, identifying opportunities for road removal from riparian areas and locations where road BMP improvements could benefit stream health. Similarly, monitoring the impacts of fire, forest management activities and mitigation strategies like BMP's is crucial to making informed decisions on where and how we effectively manage Forest resources. We fully support Bitterroot National Forest's efforts to include integrated terrestrial and aquatic monitoring on all projects.

Trout Unlimited is committed to working collaboratively with Forest staff and partners to ensure the success of the Ravalli Roots project, balancing the need for forest management with genuine watershed restoration. Please feel free to contact me with any questions.

Sincerely,

Christine Brissette
Trout Unlimited

Complete the table below and respond to the question at the bottom of the tab.
 For 2010 Project extensions, fill in the annual funding request for the number of years requested for the extension (up to 10)

Fiscal Year 1*	TOTAL	FUELS	INVASIVES / Rangeland	ROADS / Fisheries / Soil & Water	WILDLIFE- see fuels, invasives	TIMBER HARVEST	REFORESTATION
	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested
Partner fund contributions on NFS lands	\$277,600	\$50,000	\$93,600	\$50,000			
Partner in-kind contributions on NFS lands	\$154,460	\$10,000	\$9,960	\$10,000			
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$191,170						\$191,170
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$2,613,337	\$400,000	\$207,000	\$817,000	\$55,000		\$713,047
Total non-CFLRP funding for NFS lands	\$3,236,567	\$460,000	\$310,560	\$877,000	\$55,000		\$904,217
CFLRP Funding Request	\$1,457,300	\$0	\$50,000	\$905,000			\$6,000
Total CFLRP funding for NFS lands	\$1,457,300	\$0	\$50,000	\$905,000	\$0		\$6,000
Partner fund contributions on non-NFS lands	\$1,100,167	\$486,687	\$508,480	\$75,000	\$30,000		
Partner in-kind contributions on non-NFS lands	\$140,000	\$35,000	\$25,000	\$50,000	\$5,000		\$25,000
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands	\$20,000		\$20,000				
Total non-CFLRP funding for non-NFS lands	\$1,260,167	\$521,687	\$553,480	\$125,000	\$35,000		\$25,000

*Assume funding requested for Year 1 will be allocated in February 2020 at the earliest

Fiscal Year 2	Funding Planned/Requested						
Partner fund contributions on NFS lands	\$393,600	\$40,000	\$93,600	\$150,000	\$20,000		
Partner in-kind contributions on NFS lands	\$192,270	\$10,000	\$2,270	\$50,000			
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$247,000						\$175,000
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$2,549,007	\$400,000	\$211,007	\$817,000	\$55,000		\$615,000
Total non-CFLRP funding for NFS lands	\$3,381,877	\$450,000	\$306,877	\$1,017,000	\$75,000		\$790,000
CFLRP Funding Request	\$2,962,000	\$577,500	\$200,000	\$1,137,500			\$650,000
Total CFLRP funding for NFS lands	\$2,962,000	\$577,500	\$200,000	\$1,137,500	\$0		\$650,000
Partner fund contributions on non-NFS lands	\$1,228,480	\$550,000	\$508,480	\$120,000	\$50,000		
Partner in-kind contributions on non-NFS lands	\$165,000	\$50,000	\$25,000	\$50,000	\$10,000		\$30,000
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands	\$55,000	\$25,000	\$30,000				
Total non-CFLRP funding for non-NFS lands	\$1,448,480	\$625,000	\$563,480	\$170,000	\$60,000		\$30,000

Fiscal Year 3	Funding Planned/Requested						
Partner fund contributions on NFS lands	\$471,933	\$40,000	\$166,933	\$150,000	\$25,000		
Partner in-kind contributions on NFS lands	\$189,270	\$10,000	\$2,270	\$50,000			
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$302,450						\$175,000
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$2,725,500	\$415,000	\$207,000	\$817,000	\$55,000		\$346,500
Total non-CFLRP funding for NFS lands	\$3,689,153	\$465,000	\$376,203	\$1,017,000	\$80,000		\$790,000
CFLRP Funding Request	\$3,431,750	\$630,000	\$200,000	\$1,303,750			\$800,000
Total CFLRP funding for NFS lands	\$3,431,750	\$630,000	\$200,000	\$1,303,750	\$0		\$800,000
Partner fund contributions on non-NFS lands	\$1,458,480	\$550,000	\$508,480	\$350,000	\$50,000		
Partner in-kind contributions on non-NFS lands	\$190,000	\$50,000	\$25,000	\$75,000	\$10,000		\$30,000
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands	\$55,000	\$25,000	\$30,000				
Total non-CFLRP funding for non-NFS lands	\$1,703,480	\$625,000	\$563,480	\$425,000	\$60,000		\$30,000

Fiscal Year 4	Funding Planned/Requested						
Partner fund contributions on NFS lands	\$481,933	\$50,000	\$166,933	\$150,000	\$25,000		
Partner in-kind contributions on NFS lands	\$184,270	\$10,000	\$2,270	\$50,000			
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$240,000						\$175,000
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$3,164,000	\$415,000	\$207,000	\$817,000	\$55,000		\$650,000
Total non-CFLRP funding for NFS lands	\$4,070,203	\$475,000	\$376,203	\$1,017,000	\$80,000		\$825,000
CFLRP Funding Request	\$3,812,000	\$645,000	\$200,000	\$1,319,000			\$1,310,000
Total CFLRP funding for NFS lands	\$3,812,000	\$645,000	\$200,000	\$1,319,000	\$0		\$1,310,000
Partner fund contributions on non-NFS lands	\$1,508,480	\$600,000	\$508,480	\$350,000	\$50,000		
Partner in-kind contributions on non-NFS lands	\$190,000	\$50,000	\$25,000	\$75,000	\$10,000		\$30,000
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands	\$55,000	\$25,000	\$30,000				
Total non-CFLRP funding for non-NFS lands	\$1,753,480	\$675,000	\$563,480	\$425,000	\$60,000		\$30,000

Fiscal Years 5-10	Funding Planned/Requested						
Partner fund contributions on NFS lands	\$2,519,933	\$300,000	\$634,933	\$900,000	\$125,000		
Partner in-kind contributions on NFS lands	\$1,090,070	\$60,000	\$13,070	\$300,000			
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$1,435,000						\$1,050,000
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$18,459,000	\$2,700,000	\$1,242,000	\$4,902,000	\$330,000		\$3,150,000
Total non-CFLRP funding for NFS lands	\$23,504,003	\$3,060,000	\$1,890,003	\$6,102,000	\$455,000		\$4,950,000
CFLRP Funding Request	\$22,847,000	\$4,290,000	\$1,200,000	\$8,234,000			\$6,660,000
Total CFLRP funding for NFS lands	\$22,847,000	\$4,290,000	\$1,200,000	\$8,234,000	\$0		\$6,660,000
Partner fund contributions on non-NFS lands	\$7,500,880	\$3,600,000	\$3,050,880	\$600,000	\$250,000		
Partner in-kind contributions on non-NFS lands	\$950,000	\$300,000	\$150,000	\$300,000	\$50,000		\$150,000
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands	\$300,000	\$150,000	\$150,000				
Total non-CFLRP funding for non-NFS lands	\$8,750,880	\$4,050,000	\$3,350,880	\$900,000	\$300,000		\$150,000

Please provide an estimate of any funding needed for NEPA and environmental compliance in support of the CFLRP Project. You may copy/paste the response to the Tier 1 template and/or elaborate with additional details as needed. NOTE: CFLN can only be used for implementation and monitoring (not planning).

Planning complete or in progress Planning complete or in progress

Complete the table below and respond to the question at the bottom of the tab.
 For 2010 Project extensions, fill in the annual funding request for the number of years requested for the extension (up to 10)

Fiscal Year 1*	STAND IMP	TRAILS-new construction	TRAILS-maintenance	OTHER - RECREATION	OTHER - DISPERSED SITE	
	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested	Funding Planned/Requested	REHABILITATION	REC - Fire Prevention
Partner fund contributions on NFS lands	\$84,000					
Partner in-kind contributions on NFS lands		\$7,500	\$107,000		\$5,000	\$5,000
Goods for Services or Revenue from GNA to be applied within CFLRP landscape						
USFS Appropriated, Perm, and Trust fund contributions on NFS lands		\$6,300	\$135,000	\$5,000	\$15,000	\$5,000
Total non-CFLRP funding for NFS lands	\$84,000	\$13,800	\$242,000	\$5,000	\$20,000	\$10,000
CFLRP Funding Request		\$6,300	\$168,000	\$10,000	\$55,000	\$7,000
Total CFLRP funding for NFS lands	\$0	\$6,300	\$168,000	\$10,000	\$55,000	\$7,000
Partner fund contributions on non-NFS lands						
Partner in-kind contributions on non-NFS lands						
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands						
Total non-CFLRP funding for non-NFS lands	\$0	\$0	\$0	\$0	\$0	\$0

*Assume funding requested for Year 1 will be allocated in February 2020 at the earliest

Fiscal Year 2	Funding Planned/Requested					
Partner fund contributions on NFS lands	\$90,000					
Partner in-kind contributions on NFS lands		\$3,000	\$107,000	\$10,000	\$5,000	\$5,000
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$72,000					
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$72,000	\$10,000	\$135,000	\$10,000	\$15,000	\$10,000
Total non-CFLRP funding for NFS lands	\$234,000	\$13,000	\$242,000	\$20,000	\$20,000	\$15,000
CFLRP Funding Request		\$29,000	\$256,000	\$50,000	\$55,000	\$7,000
Total CFLRP funding for NFS lands	\$0	\$29,000	\$256,000	\$50,000	\$55,000	\$7,000
Partner fund contributions on non-NFS lands						
Partner in-kind contributions on non-NFS lands						
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands						
Total non-CFLRP funding for non-NFS lands	\$0	\$0	\$0	\$0	\$0	\$0

Fiscal Year 3	Funding Planned/Requested					
Partner fund contributions on NFS lands	\$90,000					
Partner in-kind contributions on NFS lands		\$10,000	\$107,000		\$5,000	\$5,000
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$55,000					
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$95,000	\$15,000	\$135,000	\$5,000	\$15,000	\$5,000
Total non-CFLRP funding for NFS lands	\$240,000	\$25,000	\$242,000	\$5,000	\$20,000	\$10,000
CFLRP Funding Request		\$180,000	\$256,000		\$55,000	\$7,000
Total CFLRP funding for NFS lands	\$0	\$180,000	\$256,000	\$0	\$55,000	\$7,000
Partner fund contributions on non-NFS lands						
Partner in-kind contributions on non-NFS lands						
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands						
Total non-CFLRP funding for non-NFS lands	\$0	\$0	\$0	\$0	\$0	\$0

Fiscal Year 4	Funding Planned/Requested					
Partner fund contributions on NFS lands	\$90,000					
Partner in-kind contributions on NFS lands		\$5,000	\$107,000		\$5,000	\$5,000
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$30,000					
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$500,000	\$5,000	\$135,000	\$10,000	\$15,000	\$5,000
Total non-CFLRP funding for NFS lands	\$620,000	\$10,000	\$242,000	\$10,000	\$20,000	\$10,000
CFLRP Funding Request		\$20,000	\$256,000		\$55,000	\$7,000
Total CFLRP funding for NFS lands	\$0	\$20,000	\$256,000	\$0	\$55,000	\$7,000
Partner fund contributions on non-NFS lands						
Partner in-kind contributions on non-NFS lands						
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands						
Total non-CFLRP funding for non-NFS lands	\$0	\$0	\$0	\$0	\$0	\$0

Fiscal Years 5-10	Funding Planned/Requested					
Partner fund contributions on NFS lands	\$540,000	\$20,000				
Partner in-kind contributions on NFS lands		\$10,000	\$642,000	\$5,000	\$30,000	\$30,000
Goods for Services or Revenue from GNA to be applied within CFLRP landscape	\$210,000					
USFS Appropriated, Perm, and Trust fund contributions on NFS lands	\$1,195,000	\$30,000	\$810,000	\$80,000	\$90,000	\$30,000
Total non-CFLRP funding for NFS lands	\$1,945,000	\$60,000	\$1,452,000	\$85,000	\$120,000	\$60,000
CFLRP Funding Request		\$105,000	\$1,986,000		\$330,000	\$42,000
Total CFLRP funding for NFS lands	\$0	\$105,000	\$1,986,000	\$0	\$330,000	\$42,000
Partner fund contributions on non-NFS lands						
Partner in-kind contributions on non-NFS lands						
USFS Appropriated, Perm, and Trust fund contributions on non-NFS lands						
Total non-CFLRP funding for non-NFS lands	\$0	\$0	\$0	\$0	\$0	\$0

Please provide an estimate of any funding needed for NEPA and environmental compliance in support of the CFLRP Project. You may copy/paste the response to the Tier 1 template and/or elaborate with additional details as needed. NOTE: CFLN can only be used for implementation and monitoring (not planning).

Planning complete or in progress	These projects will be incorporated into the Bitterroot Front project for environmental review	These projects will be incorporated into the Bitterroot Front project for environmental review
		These projects will be incorporated into the Bitterroot Front project for environmental review
		No NEPA needed--replacing old firerings with new

File Code: 2000
Date: January 3, 2020

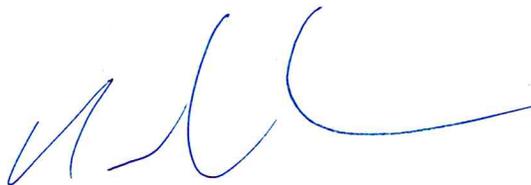
To: CFLRP Selection Committee

The Ravalli Roots CFLRP Project is very closely aligned with the intent of the authorization and will support rural communities across Western Montana as well as improve the Forest Health Crisis on the Bitterroot. The Bitterroot has embarked on a collaborative and science based program that will restore health in landscapes that are in desperate need of treatment. CFLRP will provide an incredible opportunity for the Bitterroot National Forest to engage further with our partners and private land owners to collaboratively focus on mitigating wildfire in the Wildland Urban Interface (WUI) as well as address a host of other Forest Health issues.

With this approach, there will be a huge benefit to cross boundary vegetation and fuel reduction to address the highest concentration of WUI in the Northern Region. Effective treatments will not only address issues on the Bitterroot National Forest, but they will also assist in reducing fire risk to local communities, restore diminished watersheds, recover habitat conditions for fish, wildlife and multiple at-risk species, and enhance recreation opportunities in the Bitterroot Valley.

Since arriving as the Forest Supervisor in March of 2019, the consistent concern I heard from the public was the issue of wildfire risk, impacts of smoke, and impacts to natural resources from stand replacing fires. Our goal with this project is to create healthy and diverse ecosystems that more resilient to extreme wildfires that can risk lives and property, devastate watersheds, and destroy wildlife habitat.

The Bitterroot National Forest is excited for the opportunity and challenge of working with other agencies, partners, communities, non-profits, collaboratives and other interested parties to have a positive impact at a scale that matters in Ravalli County.



MATTHEW D. ANDERSON
Forest Supervisor