

MONTANA FOREST LEGACY PROGRAM ASSESSMENT OF NEED



Kootenai Forestlands Conservation Easement. Photo credit Chris Boyer Kestrelaerial.com

DECEMBER 9, 2020



MONTANA FISH, WILDLIFE & PARKS



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ABBREVIATIONS

AON —Assessment of Need	HUC —Hydrological Unit Code
BLM — Bureau of Land Management	MFSSC — MT Forest Stewardship Steering Committee
CAPS — Crucial Areas Planning System	MTNHP —MT Natural Heritage Program
CE — Conservation Easement	NPRR —National Pacific Railroad
DNRC —MT Dept. of Natural Resources and Conservation	SOC —Species of Concern
USDO I — US Dept of Interior	USFS —US Forest Service
FLA —Forest Legacy Area	USFWS —US Fish and Wildlife Service
FLP —Forest Legacy Program	USGS —Us Geological Survey
FWP —MT Dept. of Fish, Wildlife and Parks	WMA —Wildlife Management Area
GIS —Geographic Information System	

Executive Summary

The Forest Legacy Program has operated in Montana since 2000. The program is administered by the USDA Forest Service and managed by Montana Fish, Wildlife and Parks. This voluntary program provides funding through nationally competitive grants to conserve high priority forests. These are working forests that provide social, economic, and ecological values, important to the people of Montana. The program preferentially funds conservation easements as well as fee title acquisitions. Nearly 261,000 acres of Montana forests have been conserved through the program, with a focus on wildlife and aquatic habitats, sustainable timber production, drinking water, public recreation, and other values. The voluntary program has benefited greatly from a broad and diverse partnership.

The Forest Legacy Program is guided by a mix of federal and state statutes, rules, strategic plans, and information included in this Assessment of Need. We have included in this document a goal, priorities, geographic areas of eligibility, and annual processes for implementing Forest Legacy in Montana.

The Assessment of Need is a requirement of Forest Legacy and is intended to complement the Montana Forest Action Plan and Forest Assessment (DNRC 2020), which have also undergone revision in 2020 and are part of a broader Executive Order of the Montana Governor's Office creating the Montana Forest Action Advisory Council (Executive Order No. 7-2019), administered by the Department of Natural Resources and Conservation. **Whereas the aim of this Assessment of Need is to frame Montana's FLP and identify forest conservation priorities, the central purpose of the 2020 Montana Forest Action Plan is to serve as Montana's authoritative plan for addressing forest health and wildland fire risk issues across all forested lands in the state.** For topics where the documents overlap, we have selectively incorporated narrative from the Forest Action Plan and Assessment into this Assessment of Need.

This document was assembled and written by a team of FWP staff, often referred to as "we," with the benefit of input by the Montana Forest Action Advisory Council, the Montana Forest Stewardship Steering Committee, DNRC, and a number of other partners.

For helpful reference, this document includes a key of abbreviations and a glossary of Forest Legacy terms (see Table of Contents).

Introduction

Montana Fish, Wildlife and Parks' Wildlife Habitat Conservation Program

The mission of Montana Fish, Wildlife & Parks, through its employees and citizen commission and board, provides for the stewardship of the fish, wildlife, parks, and recreational resources of Montana, while contributing to the quality of life for present and future generations.

Habitat conservation has been a core function of FWP since the purchase of the Judith River Game Range in 1940. Many of the conservation efforts came about as money was available until the 1987 Montana Legislature provided a steady funding source from state hunting licenses that is now known as the Habitat Montana Program. This funding helps conserve priority wildlife habitats and pay for maintenance of wildlife properties administered by FWP. Through its administrative rules, Habitat Montana provides overarching direction for all wildlife habitat projects implemented by FWP. These include broad goals for conserving wildlife populations, recreational opportunities, and land and water resources in a manner that is compatible with traditional agricultural, economic, and cultural values (see Guiding Resources and Rules).

To guide conservation, FWP developed a State Wildlife Action Plan in 2006, with an updated version in 2015. These helped define FWP's broader mission and priorities for conserving non-game fish and wildlife Species of Greatest Conservation Need and Habitats of Greatest Conservation Need. FWP has since focused additional effort and funding on conserving grassland habitats that are important to declining populations of grassland birds. More recently, FWP has worked with a partnership of agencies and organizations to identify and initiate conservation and restoration of important habitat linkages that allow uninhibited movements of ungulates, large carnivores, and other wildlife within and between intact natural landscapes.



Figure 1. Aspen forest treatment conducted by DNRC on the Blackfoot Clearwater Forest Legacy Project. Photo credit Mike Thompson

All of these programs are directed by FWP to help perpetuate our state wildlife and recreational resources for current and future generations. With the agency's long history of program development and habitat conservation accomplishments, FWP is well-suited to manage the FLP in Montana.

Montana's Conservation Partnership

The history of conservation in Montana is largely founded on shared vision and collaboration among a cross section of landowners, recreationists, businesses, conservation organizations, agencies, and elected officials. Successful conservation programs and extraordinary conservation accomplishments have been the result. A diversity of partners has individually and collectively played critical roles supporting the completion of many complex land projects. From identifying conservation opportunities and facilitating negotiations to contributing funding and rallying public support, key partners have stepped up to ensure success.

While FWP and the USFS have administrative responsibilities to the FLP, a broader conservation partnership has again proven essential for effective program delivery. As a voluntary program, all of the Forest Legacy projects in Montana were made possible by the landowners who demonstrated their strong commitment to forest conservation by permanently dedicating their lands for the benefit of present and future generations. F. H. Stoltze Land & Lumber Company, Stimson Lumber, the former Plum Creek Timber Company who later merged with Weyerhaeuser, and many other smaller, private forest landowners have also demonstrated their commitment to forest conservation by donating significant monetary value to these transactions. The Montana Forest Stewardship Steering Committee was involved with program development from the start and has continued their contributions through state-level recommendations and prioritization of proposed projects. The Montana Department of Natural Resources and Conservation has provided valuable leadership for the stewardship committee and has also participated as a key landowner and contributed financial resources for several Forest Legacy projects. National land trusts including the Trust for Public Land, The Nature Conservancy, The Vital Ground Foundation, and the Rocky Mountain Elk Foundation, along with many local land trusts, have provided financial resources and staff expertise to initiate and ultimately guide many very complex projects through to successful completion. They have also played a critical role by building and maintaining public and political support for the program and individual projects. The Montana congressional delegation, governor's office, county commissioners, and city governments have all offered their support whenever it was needed. Members of the public and organized outdoor groups have overwhelmingly supported each of the individual projects. None of these conservation successes of Montana's FLP would have been possible without the support and participation of all these organizations and key individuals, which are too numerous to list here.

To everyone involved, we say thank you for your dedication to Montana's extraordinary natural resources, your efforts to promote a healthy and diverse economy, and your commitment to sustaining Montana's outdoor identity.

Origins of the Forest Legacy Program

The FLP is administered by the USDA Forest Service, in collaboration with state agencies. The program was established in 1990 in response to the conversion of private timberlands to other uses in the northeastern United States. Private forestlands had for more than a century provided a variety of products and services that could be lost. These included timber and other forest commodities, fish and wildlife habitat, water supply and quality, aesthetic qualities, historical and cultural resources, and recreational opportunities. The term "working forests" was coined to capture the variety of public values that are conserved through Forest Legacy. The program eventually expanded to 49 states and 4 U.S. territories. Forest conservation is accomplished through two means – perpetual conservation easements and fee simple acquisitions. These interests in land are acquired voluntarily through cash purchases, donations, or a combination of these. Nationally, the program has helped conserve about 2.8 million acres of working forests.

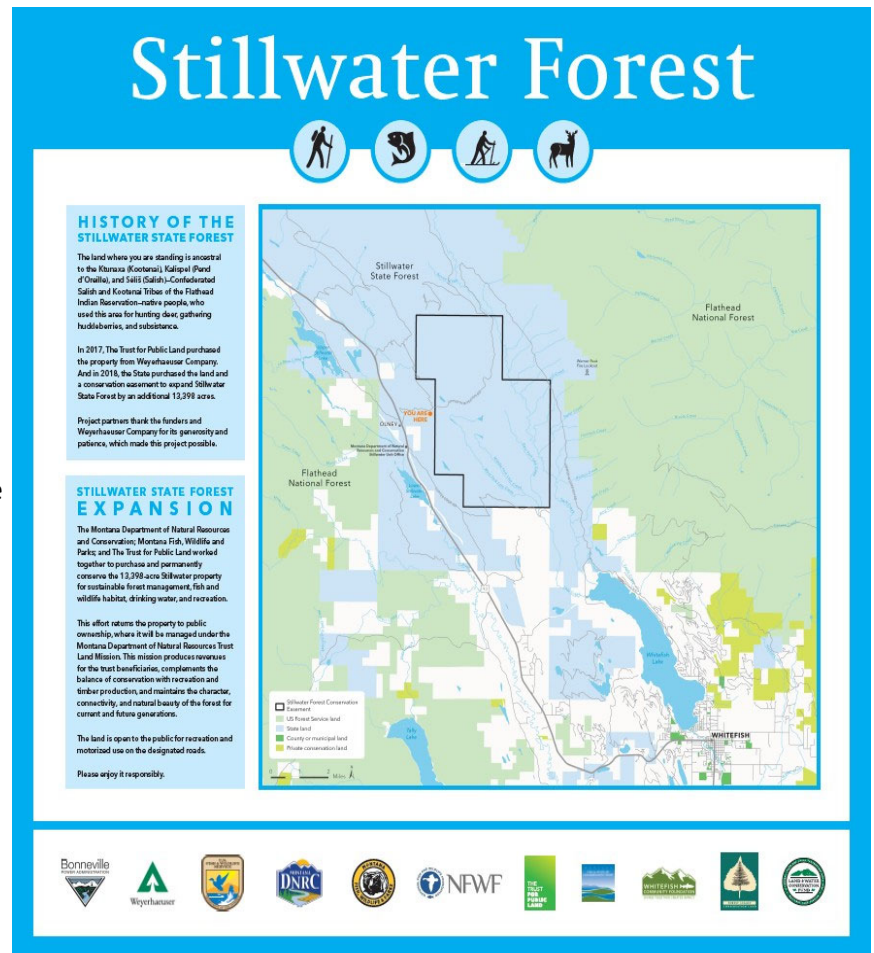


Figure 2. Whitefish Lake Watershed (a.k.a. Stillwater) project entrance sign graphic, recognizing its many partners. Image credit Trust for Public Land

Origins of the Montana Forest Legacy Program

In the mid-1990s, the practice of converting corporate timberlands in western Montana to other uses, including various types of housing developments, became increasingly popular and lucrative. Realizing the far-reaching implications of such developments, a diverse team of agency and organization conservation partners worked with FWP, DNRC, and the MFSSC to evaluate how Forest Legacy could fit within Montana’s existing conservation efforts. The group helped establish the first Montana Forest Legacy Program Assessment of Need, which was published February 29, 2000. Through that process, FWP was designated by Governor Marc Racicot as the lead state agency, to work in coordination with DNRC and the MFSSC. This would soon become Montana’s premier voluntary, incentive-based forest conservation program. The original AON identified most forests across the state as being eligible for program participation. As FWP and partners have implemented Forest Legacy, competed for grants, and completed projects over the past 20 years, the program’s strengths and niche in Montana have become more apparent. We have recognized that a subset of Montana’s forests are more suited to the program’s national priorities. That is, some forestlands in Montana have a much higher likelihood of competing nationally for grant funds as they align with national FLP ranking criteria. Through experience, we have also realized considerable overlap in habitat conservation priorities—economically important timberlands, watershed values, and highly-prized recreation—all of which have integrated well with FWP’s mission and its other wildlife, fish, and recreation programs.

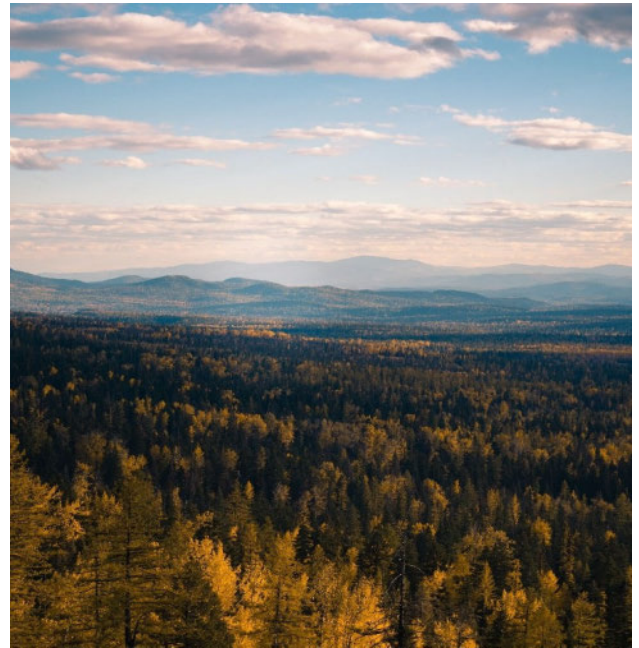


Figure 3. Whitefish Watershed Conservation Easement, completed in 2018. Photo credit Chris Boyer Kestrelaerial.com

Assessment of Need—Purpose and Process

This AON serves as an update and replacement for the 2000 AON and covers three main functions. The AON:

1. provides a summary of the current status of forests and potential threats that may be addressed through the FLP;
2. identifies Montana’s Forest Legacy Areas and general forest conservation priorities;
3. provides an updated framework for how the program is intended to be operated in Montana, including program objectives and ranking criteria.

The update of this AON was initiated in 2019 by a team of FWP staff in collaboration with the Montana Forest Action Advisory Council, the MFSSC, DNRC and other partners who frequently work with the FLP. The document was released for 30-day public review and comment, followed by further editing and response to comments (see **Public Involvement** section). The final draft will be presented to the USDA Forest Service, State and Private Forestry for multiple steps of review and, ultimately, final approval by the U.S. Secretary of Agriculture. Whereas this document provides a broad strategy and steps for implementing the FLP in Montana, individual conservation projects that are proposed and developed subsequent to this AON will follow requirements of the Montana Environmental Policy Act and other pertinent statutes, including normal due diligence and public review processes.

Montana Forest Legacy— Purpose, Goal, and Accomplishments

Looking back over the past two decades, FWP and conservation partners have remained true to the overall goal of the Montana FLP (2000 AON):

“To conserve and enhance land, water, wildlife, and timber resources while providing for the continued working of Montana’s forestlands and maintenance of natural and public values.”

The FLP has been instrumental in accomplishing working forest conservation in Montana. To date, program accomplishments total 260,742 acres of permanent conservation, including 243,172 acres of conservation easements and 17,570 acres of fee title acquisitions (Figure 4). Included with these accomplishments, the FLP accepts donated conservation easements for qualifying forestlands, typically by helping cover transaction or due diligence costs, which has involved 30,940 acres of forest.

From its beginning in Montana, the FLP has served as a hub for partner collaboration as well as a critical funding source for forest conservation. At present, the FLP has contributed \$83.4M and leveraged another \$102.5M in value, directly accomplishing permanent conservation of working forests. Sources of leveraged contributions have included funding from conservation organizations, state and federal conservation agencies, donated value by individual landowners, Habitat Montana, and other conservation funding entities.

These conservation accomplishments encompass a broad sweep of working forest values including wood product materials; wildlife habitat for game and species of concern including federally-listed species; publicly-accessible recreation; watershed values for municipalities, aquatic habitats, and agricultural irrigation systems; cultural and aesthetic values; carbon sequestration; and a host of other ecological and societal values that are integral to these landscapes. The conservation niche and ongoing pursuit of Forest Legacy in Montana has largely been defined by these forest values.

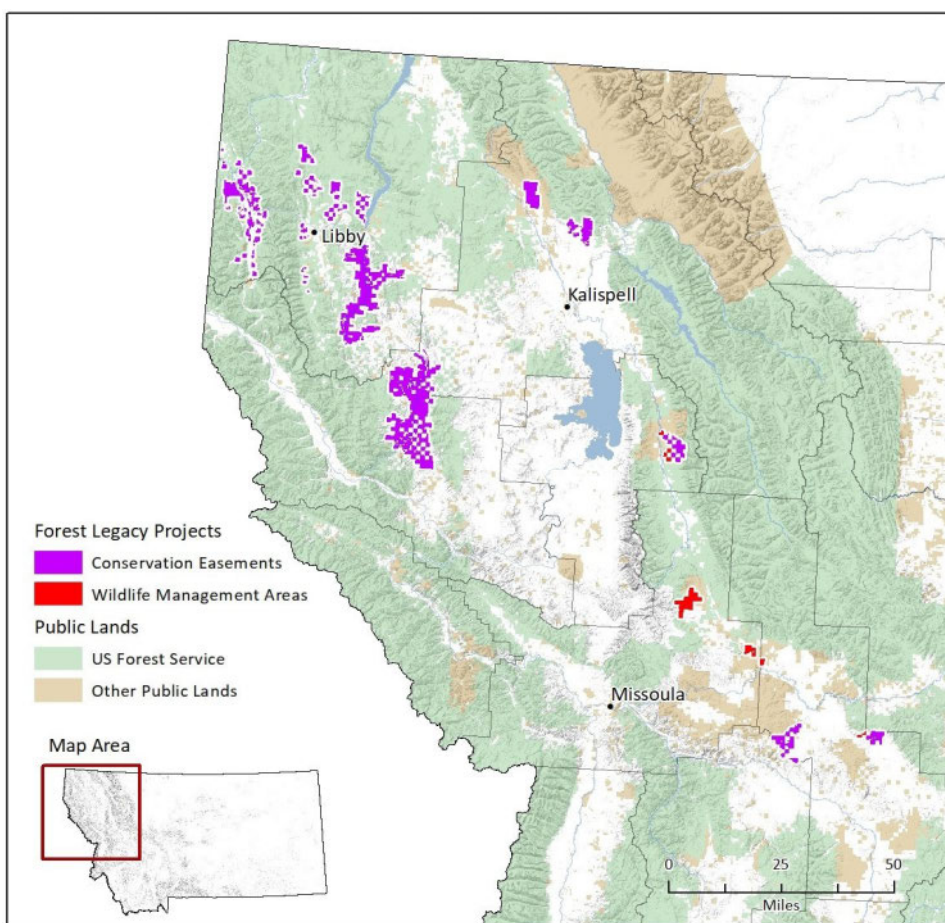


Figure 4. Location of conservation easements and fee title purchases funded in part through the FLP, totaling 260,742 acres in Montana

Guiding Resources and Rules

The FLP in Montana is guided and shaped to serve the needs of the state through a variety of legislation, rules, and planning. This section provides an overview of these resources that are directly pertinent to the program's operation. This is not an exhaustive list, as we have not included an array of related state and federal statutes, rules, and policies. For instance, land projects are subject to statutes requiring specific analyses, public processes, and due diligence, which we have chosen to not include here.

Cooperative Forestry Assistance Act

The following is excerpted from the FLP Implementation Guidelines (USFS 2017):

The Forest Legacy Program was established in 1990 through an amendment to the Cooperative Forestry Assistance Act of 1978 (16 USC 2101 et seq.) to promote the long-term integrity of forestlands. This amendment recognized that:

- The majority of the Nation's forestlands are in private ownership;
- Private landowners face increased pressure to convert their forestlands to other uses;
- Private lands provide a wide variety of products and services from working forests, including timber and other forest commodities, fish and wildlife habitat, watershed function, water supply and quality, aesthetic qualities, historical and cultural resources, and recreational opportunities; and
- Good stewardship of privately held forestlands requires a long-term commitment that can be fostered through a partnership of Federal, State, local government, and individual efforts.

When the FLP was originally authorized in the 1990 Farm Bill, initial FLPs were established in the states of Maine, New York, New Hampshire, and Vermont in furtherance of the recommendations in the Northern Forest Lands Study, as well as in the State of Washington. The law also directed the Secretary of Agriculture to establish additional FLPs throughout the country upon the completion of assessments of need for such programs.

The Secretary of Agriculture was directed to establish the FLP in cooperation with state, regional, and other units of government. The Secretary then delegated this authority to the Forest Service to carry out this mandate. The Forest Service is authorized to acquire lands and interests in lands in perpetuity for inclusion in the FLP. The FLP acquires and accepts donations of perpetual conservation easements that permanently limit property interests and uses of forestland to protect specific conservation values. In these cases, the properties remain in private ownership. The FLP also purchases and accepts, as donations, forested properties in full fee. These properties are acquired by State or local governments and can become new state parks, state forests, wildlife management areas, and other public land. Landowner participation in the FLP is entirely voluntary.

Originally, all lands or interests in lands acquired through the FLP were held by the federal government. In 1996, Congress amended the law to permit the Forest Service to make FLP acquisition grants to states. This "state grant option" allows lands or interests in lands to be held by the state or local units of government.

The FLP is funded through the Land and Water Conservation Fund. These funds are generated through royalties from offshore drilling activities. Congress determines the FLP budget as part of the annual Forest Service appropriation.

Montana Forest Action Plan

The Montana Department of Natural Resources and Conservation is responsible for maintaining and updating the state's Forest Action Plan to conserve working forestlands, increase forests' resiliency to fire and disease, and enhance public benefits from forests throughout the state. Governor Bullock established a diverse collaborative in May 2019, known as the Forest Action Advisory Council, to assist with developing the Forest Action Plan. The Council also has served as a sounding board and reviewer for this Assessment of Need. The AON and the Forest Action Plan will guide forest management and conservation in Montana and are required prerequisites for the USFS State and Private Forestry programs. The AON and Forest Action Plan documents provide both unique and overlapping information and functions but are intended to be fully complementary for advancing forest health, addressing wildland fire issues, and promoting conservation of forest values.

Habitat Montana

The 1987 Legislature passed House Bill 526, which established an ear-marked funding source for FWP to conserve wildlife habitats and to help fund ongoing maintenance of wildlife lands administered by FWP. The program, known generally as "Habitat Montana" has provided \$2-6M annually toward the purchase of conservation easements, fee simple acquisitions, and leases through voluntary cooperation with private landowners. The program includes administrative rules (ARM 12.9.508-512) that are intended to pertain to all FWP wildlife programs, where appropriate. Within the rules, there are three goals and a list of intended services and public benefits that also influence FWP's administration of the FLP. These are as follows:

1. Conserve Montana's wildlife populations and natural communities via management strategies that keep them intact and viable for present and future generations; maintain wildlife population levels that sustain or enhance current recreational opportunities; and maintain diverse geographic distribution of native wildlife populations and their habitats.
2. Conserve Montana's land and water resources in adequate quantity and quality to sustain ecological systems.
3. Implement habitat management systems that are compatible with and minimize conflicts between wildlife values and traditional agricultural, economic and cultural values. Habitat Montana will enhance Montana's quality of life and be compatible with the conservation of soil, water and existing biological communities.

Intended services and public benefits of Habitat Montana:

1. Conserve and enhance land, water, and wildlife
2. Contribute to hunting and fishing opportunities
3. Provide incentives for habitat conservation on private land
4. Contribute to non-hunting recreation
5. Protect open space and scenic areas
6. Promote habitat-friendly agriculture
7. Maintain the local tax base, through payments in lieu of taxes for real estate, while demonstrating that productive wildlife habitat is compatible with agriculture and other land uses. (Note: MCA 87-1-603 requires FWP to pay "a sum equal to the amount of taxes that would be payable on county assessment of the property if it was taxable to a private citizen.")

The working forest focus of Forest Legacy matches well with the goal and intended benefits of Habitat Montana. This compatibility between programs, following a similar approach toward working lands conservation, has greatly facilitated FWP's ability to implement the FLP.

Forest Legacy Program Implementation Guidelines

An updated set of guidelines for implementing Forest Legacy was published in 2017. This update provides a framework within which all agencies and partners are intended to comply. The guidelines provide information on project eligibility and selection processes, project funding requirements, and acquisition, reporting, and ongoing stewardship requirements. The guidelines specify required information for Assessments of Need, as contained herein. Future updates to the guidelines will be incorporated into FWP's implementation of Forest Legacy.

State Wildlife Action Plan 2015

Originally completed in 2005 as the Comprehensive Fish and Wildlife Conservation Strategy and then updated in 2015 as Montana's current State Wildlife Action Plan, this document identifies community types, focal areas, and species in Montana that warrant special conservation attention. The plan is not meant to be just an FWP plan but is intended to guide conservation throughout the state. 128 fish and wildlife Species of Greatest Conservation Need are identified in the document, along with habitat priorities that are identified as Community Types of Greatest Conservation Need.

The list of Species of Greatest Conservation Need is exclusively vertebrate species and is equivalent to vertebrate species identified as "Species of Concern" which also involves other taxa such as invertebrates and plants (see Natural Heritage Program below).

Natural Heritage Program

Montana's Natural Heritage Program provides a continuously updated inventory and data dissemination service for native species of concern including fish, wildlife, plants, and other life forms. The species data presented for each of the Forest Legacy Areas was largely derived from this resource. MTNHP includes a powerful mapping system with actual species detections and modelled distributions, along with their life history and other useful information—all helpful for evaluating species presence and related conservation values for prospective conservation projects.

Crucial Areas Planning System

In 2008, FWP conducted a Crucial Areas Assessment to evaluate fish, wildlife and recreational resources of Montana in order to identify crucial areas and fish and wildlife corridors. This effort was part of a multi-state initiative coordinated through the Western Governor's Association. Information was incorporated into a geographic information prioritization and planning system (CAPS) for helping guide various forms of development and conservation. The broad scale prioritization used in this AON includes a fish and wildlife habitat layer derived in part from this planning system.

Wildlife Movement and Terrestrial Connectivity

FWP is currently collaborating with a variety of agencies, organizations, landowners, and others on the topic of expanding voluntary conservation efforts to include habitats that are critical for supporting key wildlife movements – within and between seasonal habitats as well as genetic connectivity linkages, particularly for big game animals and widely-dispersed carnivores such as grizzly bears, Canada lynx, and wolverines. This partner effort includes research to refine understanding of movements and connectivity zones, local coordination with landowners across ownerships, designing and constructing infrastructure to reduce or eliminate barriers, conducting habitat conservation, and providing public outreach on this topic. Past Forest Legacy accomplishments demonstrate landscape-scale conservation that assures effective habitat connectivity, serving as a basis for future endeavors.

The following are two specific instances of this statewide collaborative effort:

- Montana Action Plan for Secretarial Order 3362 – In February 2018, the Department of Interior Secretary, Ryan Zinke, signed SO3362 (Order) to improve habitat quality and western big game winter range and migration corridors for pronghorn, elk, and mule deer. Various federal funding sources have been allocated for implementing this Order. FWP has identified 5 priority areas for advancing conservation measures and conducting research to better understand ungulate

movements. Data and priorities resulting from this Order will help clarify ungulate movement patterns and linkages. Forested habitats that provide linkages are priorities for conservation.

- Memorandum of Agreement for Coordination on Wildlife and Transportation Issues Between Montana Department of Transportation and Montana Fish, Wildlife and Parks – As mentioned earlier, FWP and partners are investing in research and conservation pertaining to terrestrial wildlife movement patterns, geographic corridors, and barriers. This Agreement between two state agencies emphasizes a commitment for collaboration and planning to assist with this effort, making highways safer for travelling humans and wildlife. A key aspect of conserving wildlife movement linkages is working collaboratively across all ownerships and rights-of-way, making Montana Department of Transportation an important partner in these endeavors.

Overview of Montana Forest Values and Trends

Montana is fortunate to support extensive and diverse forestlands, totaling 25.6 million acres, or about 27% of the state (Menlove et al. 2012). The state's forest types range from arid ponderosa pine forests of the eastern plains to wetter and warmer forests influenced by the Pacific Ocean, west of the Continental Divide. Watersheds, forest products, fish and wildlife habitat, public recreation, aesthetics, and a host of other ecological and social values are inherent to these forests.

We provide here an overview of Montana's forestlands, as pertinent to the FLP, largely excerpted from the state's Draft Forest Action Plan and Forest Assessment (DNRC 2020). For readers seeking more comprehensive information on these and related topics we recommend consulting these documents.

Montana's Forest Values – Historic to Present Day

[Montana Forests and Indigenous Peoples](#) - This italicized section was written by the Séliš-Qłispé Culture Committee, Confederated Salish & Kootenai Tribes, and by tribal representatives, as selected excerpts during drafting of the Montana Forest Action Plan (DNRC 2020).

The state of Montana is now 131 years old. Indigenous peoples have lived in our valleys, mountains, prairies—and woodlands—from at least the end of the last ice age, over 12,000 years ago. Over that period, native nations developed broad understandings of forest ecosystems and what it means to live with them in healthy and sustainable ways.

Eight federally recognized tribal nations, seven reservations, 12 major tribes, and speakers of 12 Indigenous languages and dialects are present within the state of Montana. Each has a distinct culture and history, and each can provide unique insights into the diverse forest types and their management. In all of Montana's disparate tribal cultures and histories there are certain shared aspects, many of which bear directly upon efforts to reassess forest management. In the traditions of all 12 tribes, the world we inhabit is a gift. Human beings were given a good and bountiful world, prepared for and entrusted to us, full of everything we need to sustain life. We were given clean waters and fine land, abundant in all the plants needed for food and medicine and materials, and plentiful in animals and fish and birds, who offered to be food or provide clothing or tools for us, the human-beings-yet-to-come.

Tribal relationships with forests rest upon this shared foundation: a cultural imperative to remember that these are gifts that were given to human beings. We are therefore obligated to respect and care for them. The ethic of avoiding waste of the natural world, and of ensuring its well-being for future generations, is woven deeply into the fabric of all the tribal cultures of the region. Those cultural values of respect are reflected not only in creation stories and in ceremonial and spiritual practices, but also in many of the formally adopted policies and programs of modern tribal governments, including policies relating to forest management.



Figure 5. Boyd Mountain deer and elk winter range, purchased through the Forest Legacy Program as part of the Blackfoot Clearwater Wildlife Management Area in 2004. Photo credit Mike Thompson

For hundreds of generations, Indigenous peoples in Montana subsisted entirely or primarily by hunting, fishing, and gathering. They moved with the seasons and the fluctuating populations of animals and plants in a finely tuned seasonal cycle of life, which necessitated a highly developed understanding of the region's ecology. Tribal people generally gathered enough food and medicine and material things for their own use, and perhaps a little surplus to exchange with other groups, bands, or tribes. In short, this was an economy based on subsistence needs and on tribalism as the organizing social system (McNickle 1993). People conducted many activities communally, for the collective needs and well-being of the community, and owned little personal property. There was no concept of land as something that could be owned or exchanged in a marketplace.

An important and fundamental understanding of the historical changes to Indigenous culture exists in understanding how the way of life nineteenth century non-Indians introduced to the region - and its forests - constituted such a far-reaching transformation. When the fur trade arrived, trappers regarded beaver, bison and other animals as commodities and killed them, not for direct use of the hides or meat, to make money by shipping them to national and international markets. Driven by this new economic dynamic, trappers quickly decimated populations of fur-bearing species in entire drainage systems (Ott 2003).

When the railroads reached Montana in the 1880s, non-Indians were able to apply this intensity of exploitation to other resources that had until then been protected by geographic barriers from the phenomena of commodification and marketization. The railroads enabled the transport of goods of virtually any quantity or weight. Now livestock, grain, ore, and trees were connected to the demands of a rapidly industrializing world. The railroads thus sparked the explosion of the agricultural, mining, and timber industries.

Non-Indian settlement grew dramatically, and with it came increased hostility toward Indians exercising off-reservation rights. With trains available to haul logs either to Montana mines or to distant cities, the forests were now seen as a valuable commodity. Many of the richest timberlands were now owned by the Northern Pacific Railroad (NPRR) itself, which Congress had helped fund through the allocation of vast land grants (Schwinden 1950). Over the course of the late nineteenth and early twentieth centuries, the NPRR gradually inventoried the potential merchantable timber of its forests and logged them heavily, often running into conflict with tribal parties exercising their off-reservation rights to hunt, and their historical practice of burning. NPRR managers frequently enlisted federal and state officers to protect the railroad's interests against Indian hunting parties, despite their guaranteed rights delineated in duly ratified treaties.

The last quarter of the nineteenth century also saw removal or dispossession of Indian people from large areas of Montana. The executive order of President Rutherford B. Hayes, given in 1880, included the drastic reduction of native people from:

The northern Montana reservation for the Gros Ventre, Piegan, Blood, Blackfeet, and River Crow tribes;

The government's forced removal of the Salish from the Bitterroot Valley in 1891, and;

The government's taking of the "ceded strip" from the Blackfeet in 1895.

Gradually, from the 1930s to the present, tribal nations throughout Montana have reclaimed their sovereignty and developed their governing capacities. They have been supported by additional federal laws and policies that expanded upon the Indian Reorganization Act, including the Indian Self-Determination and Education Assistance Act of 1975 (Public Law 93- 638). Many Indigenous communities have organized and funded efforts to document, protect, and revitalize the languages and cultural practices — including the use of fire to manage the land.

Montana's rich history involving thousands of years of Indigenous peoples and European settlements in more recent times have left behind cultural resources that merit preservation. Where overlapping with other conservation values, Montana's Forest Legacy's conservation projects offer a means for keeping lands intact and protected from developments and other activities that might otherwise damage cultural resources.

[Timber and Forest Products](#) – Across time to present day, forests have continually played a crucial role for human habitation. Montana forests figured prominently in the state's development throughout European settlement,

statehood, and establishment of the railroad and mining industries. Timber harvest was critical for developing infrastructure that enabled communities to grow, drawing people to settle in the state in search of economic opportunity, and providing essential materials for the railroads that ultimately connected Montana to the rest of the country.



Figure 6. Private timber company forestlands, part of the Kootenai Forestlands Phase II conservation easement project, currently underway. Photo credit Chris Boyer Kestrelaerial.com

The earliest sawmills predate statehood, with the first constructed in 1845 at St. Mary's Mission in the Bitterroot, followed by a second at St. Ignatius in 1856 (Strong and Schutza 1978). Timber development increased rapidly in the following decades to provide the rapidly growing mines with infrastructure materials. Sawmills in western Montana supplied lumber for the mines to be used in sluices, flumes, tunnels, structures, and for firewood. By 1902, there were 26 mills in the Bitterroot Valley alone, from Missoula to Darby (Strong and Schutza 1978).

Timber resource development continued to drive economic growth well into the 1920s, essentially up until the Great Depression, associated with both mining

industry expansion and growth of the railroads. Montana's forests supplied timber for railroad ties, tunnels, bridges, and structures. Early mills also supplied the lumber needed for residences and commercial enterprises as Montana's towns grew into cities, trade centers, and thriving communities. Timber quality in the early decades of the industry also attracted national attention. Demand for ponderosa pine (*Pinus ponderosa*), Douglas fir (*Pseudotsuga menziesii*), larch (*Larix occidentalis*), and lodgepole pine (*Pinus contorta*) increased and began to supply timber to growing markets in communities throughout the Pacific Northwest.

The early decades of forestry in Montana set the stage for the post-war period that defined forest policy and management throughout the "industrial era" of the 1940s to 1980s. In the post-war decades, the timber industry expanded to include other wood products, such as plywood and pulp products (Hirt and Goble 1999). The rapid growth of the housing market was met by new harvest technologies, which enabled timber production to increase over these decades. Production peaked twice, in 1966 and 1987, at about 1.3 billion board feet per year (Bureau of Business and Economic Research 2019). As of 2017, there are approximately 80 mills remaining in Montana (Bureau of Business and Economic Research 2017). The eight largest sawmills account for nearly 95% of the state's timber production (Hayes and Morgan 2016).

Today, timber harvested in Montana is milled into commodity lumber and distributed locally as well as throughout national markets by wholesalers. Montana's wood products sector has been evolving and Montana's forests have been garnering interest from new wood products producers and industries due to the state's favorable business climate and forest resources. There are several noteworthy forest industry highlights for Montana. The state's larger mills have been upgrading processing lines with new equipment and technology as resources allow. Montana has been at the forefront of the movement to adopt mass timber (a suite of engineered wood products, manufactured from dimensional lumber to create a product with exceptional strength) into commercial construction. The first commercial mass timber building in the United States was built in Montana and is home to the first U.S. manufacturer of cross-laminated timber. In 2019 the region's first thermally modified wood production facility started fabrication in Montana to capture a portion of the rapidly growing North American siding market. In 2013 one of the larger sawmills in the state began producing co-generated electricity in their biomass boiler, supplementing their income from mill by-products while upgrading their kilning infrastructure.

The majority of mill residuals in the state are utilized at secondary manufacturing facilities producing medium density fiberboard, particle board, and a variety of paper and cardboard products. Bark is also used extensively for providing heat for the kilns used in the lumber drying process and various soil amendments. Commercializing additional markets for mill residuals has been progressing slowly and would require substantial increases in primary product volume being

milled to produce enough residuals to significantly exceed the existing demand for residuals. The overlap in existing secondary products between mill by-products and non-sawlog products in the woods continues to be an additional challenge to removing those non-sawlogs due to the lower cost associated with using by-products already located at a mill site. Slash utilization has only advanced incrementally, but a focus on commercializing biochar (engineered charcoal with many beneficial uses) and biofuels (petroleum replacements made from plants) has resulted in the establishment of small-scale bio-char production in the state.

Additionally, the state is home to several niche enterprises selling finished wood products. These secondary producers have demonstrated commercial success with small amounts of log volume and are a critical part of our state's wood products infrastructure. From custom flooring, doors, trim packages, furniture and frames, many Montanans rely on the sustainable management of our forests for their livelihood.

The forest industry is often defined by four broad sectors: wood products manufacturing, forestry and logging, forestry support activities and paper manufacturing (Hayes et al. 2020; US Bureau of Economic Analysis 2019; US Census Bureau 2019; US Bureau of Labor Statistics 2019). In 2019 total employment in Montana's forest industry was 7,975



Figure 7. Timber harvest on Kootenai Valleys Conservation Easement, completed 2012. Photo credit FWP

full- and part-time workers (Hayes et al. 2020). Wood products manufacturing combined with forestry and logging employment is currently around 4,500 jobs and forest industry support employment, such as tree planters, tree thinners, wildland firefighters, and other relevant positions was estimated at 3,498 jobs in 2018 (US Bureau of Economic Analysis 2019; US Bureau of Labor Statistics 2019); nearly \$358 million was earned in labor income by the forest products industry (Hayes et al. 2020). Mill wages are typically competitive with other Montana industries. The average primary wood products manufacturing employee earned \$49,966 during 2018 (Hayes et al. 2020; US Bureau of Economic Analysis 2019; US Bureau of Labor Statistics 2019).

Retaining forest industry resources is a critical part of forest management in Montana. The forest industry provides an economic return for many types of forest treatments, often offsetting the high cost of forest restoration and making such projects more cost effective (Montana Forest Collaboration Network 2007; Forest Products Laboratory USFS 2013).

In addition to these broad forest industry sectors, carbon sequestration and other ecosystem service markets are becoming more common. These emerging economic opportunities fit well with working forests, realizing the potential financial value of a variety of ecological and social benefits that are derived from intact forests.

Montana's FLP has been instrumental in conserving working forests that support the wood products industry and related values that are threatened with conversion. For more information on how we intend to focus the FLP based in part on forest product values, see Conservation Priorities, later in this AON.

Outdoor Recreation – Montana's first sporting clubs were established in the 1870s, prior to statehood. Hunting and fishing and other outdoor pursuits are woven into the fabric of Montana. Forests and open landscapes have framed our cultural values and ways of life. State, federal, and private forestlands offer extraordinary opportunities for outdoor recreation, including hiking, backpacking, paddling, wildlife viewing, hunting, fishing, berry picking, nature study, and countless other activities.

Fortunately, Montana's forested ecosystems have retained much of their natural character and high-quality fish and wildlife habitats, supporting a robust and diverse mix of fish and wildlife species. In 2011, an estimated 570,000 Montanans and visitors to the state were involved in hunting, fishing, and wildlife-watching activities, spending an estimated \$1.4 billion in the state on trip-related costs (USDOI 2014).

Regardless of the specific activity, the popularity of recreating on forested landscapes has increased dramatically. A recent survey conducted by the state Office of Economic Development showed that 98% of Montanans consider outdoor recreation important to their quality of life (Montana Office of Outdoor Recreation 2018). Outdoor recreation, much of it on forested lands, has become the second-largest sector of the state's economy, contributing

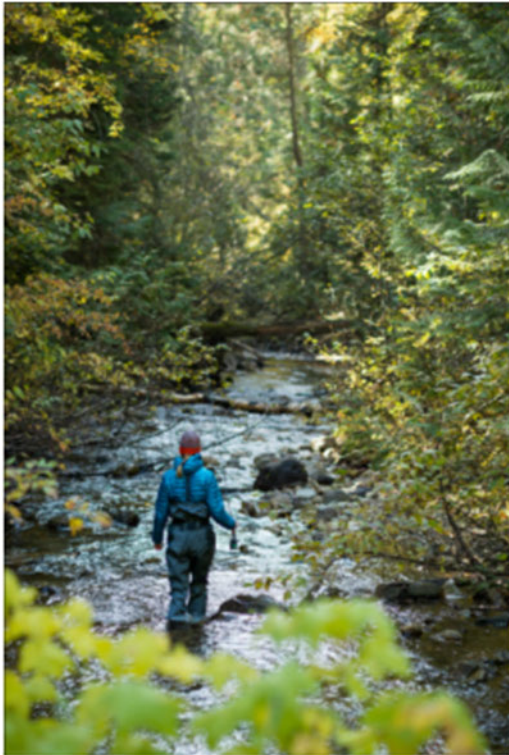


Figure 8. Haskill Basin Conservation Easement, completed 2016. Photo credit Steven Gnam

\$7.1 billion in consumer spending, supporting more than 71,000 jobs (Montana Office of Outdoor Recreation 2018). According to the US Bureau of Economic Analysis (2019), Montana ranked second only to Hawaii in terms of the percentage of the state gross domestic product attributable to outdoor recreation.

Fish and Wildlife – The forested ecosystems in Montana are diverse and extensive and provide habitat of sufficient quality and extent to support species and ecosystems that are of conservation priority. Fish and wildlife provide ecological, recreational, economic, and aesthetic values to the state, its citizens and visitors. Many species serve as indicators of ecological integrity, with direct ties to human wellbeing. With improvements in technology and over exploitation during the 1800s, many wildlife species in Montana were on the brink of extermination. However, through the 1900's a recognition for the need for conservation, enforced hunting and fishing regulations, wildlife transplanting activities, and science-based restoration, management, and conservation programs, have resulted in the return of most species that were prevalent prior to the arrival of European man (Picton and Lonner 2008).

Many fish and wildlife populations today, however, have been impacted by habitat changes. Wildlife habitats have experienced conversion to other land uses, urban sprawl, fragmentation of habitat blocks into smaller patches, barriers disrupting movement patterns, invasion by non-native species, and changes to climate patterns. One or a combination of these changes can result in human-wildlife conflicts, displacement, population declines, and even the threat of extinctions (USFWS 2019; Laverty and Gibbs 2007). Maintaining functional habitats of sufficient extent and quality that are connected over larger landscapes is necessary for retaining Montana's rich mix of fish and wildlife (Montana's State Wildlife Action Plan 2015). The FLP has supported extensive landscape-scale conservation easement projects that ensure high-value fish and wildlife habitats remain intact and functional. Forest habitats supporting a variety of species, and in particular federally listed species, are priorities for conservation, making a compelling case for competitive grant applications. For more information on how wildlife habitat is part of the prioritization criteria for the FLP, see Conservation Priorities, later in this AON.

Water and Aquatic Resources – Water is essential to the health and economic well-being of all Montanans. Not only is water critical for our municipal and domestic uses, water also supports agricultural and mining industries, fisheries, and recreational activities. Forested landscapes play an important role in ensuring that both our surface and groundwater are clean and abundant by slowing runoff, reducing erosion, and enabling groundwater recharge.

The majority of Montana's water originates in forested landscapes across the state. The northern Rockies of Montana are the headwaters for three major river systems of North America – the Columbia River Watershed flowing west, the Missouri River Watershed flowing east, and the Belly River drainage, which makes its way to the Hudson Bay. Although only 17% of Montana's land surface is west of the Continental Divide, this area cumulatively drains 25 million acre-feet/year compared to 16 million acre-feet/year on the east side of the divide (Montana State Water Plan 2015). Climate is also different west and east of the divide, with the western portion receiving more rainfall and snowpack at high elevations and the eastern portion receiving less rainfall with more extreme temperature fluctuations (Montana State Water Plan 2015).

Groundwater is also an important source of water in Montana. Surficial aquifers, which are shallow aquifers in sand and gravel substrates along the floodplains of major streams and rivers, are critical water sources for agricultural, municipal, domestic, and industrial uses. Predominantly in eastern Montana, bedrock aquifers are formed where water is confined within hard bedrock layers. They occur along fractures and fault lines in western Montana and in sandstone and limestone formations in central and eastern Montana. Bedrock aquifers provide a source of water for individual households and small public systems through wells in the west, while in the east they can provide a source of water to households, livestock uses, and occasionally for larger municipal and industrial uses, but typically not irrigation. Groundwater also contributes flows to surface water systems, known as base flow, which is critically important for maintaining surface water flows throughout the year (Montana State Water Plan 2015).



Figure 9. Goat Creek flowing through the North Swan Conservation Easement, completed 2006. Photo credit FWP.

In Montana, we use 84 million acre-feet of water per year. This number includes consumptive use, which means that the water does not return to the system, and non-consumptive use, which means that the water eventually makes its way back into the surface and/or groundwater system. Of all the water usage in the state, 86% is for electric hydro-power generation, a non-consumptive use. Approximately 4.3% of water use in the state is consumptive – 1 million acre-feet are evaporated from reservoirs, 2.4 million acre-feet are consumed through agricultural irrigation, and 166 thousand acre-feet are used for municipal, industrial, domestic, and livestock purposes (Montana State Water Plan 2015). With a growing population and expanded irrigation, consumptive uses are projected to increase by another 100,000 acre-feet.

Montana's forests also support vital aquatic ecosystem functions. Connected upland and aquatic forested ecosystems provide a range of services that humans depend on, including flood mitigation, buffering against drought, water filtration, improved soil fertility, preventing runoff and sedimentation, and protecting critical drinking water resources (Karjalainen et al. 2010). The primary drinking water supply for 44 municipalities in Montana are from surface water sources whose headwaters are in forested areas, mostly on public land. Healthy aquatic ecosystems have direct impacts on downstream water quality and on human health for these communities. Sustainable working forests in these watersheds provide wetland cover, stream buffers, and native forest vegetation with direct positive benefits on stream health and water quality (Horner et al. 2001). Conversely, forestlands that are cleared and converted to other uses, such as building developments have limited ability to provide those ecosystem services for ecological and human benefit.

Drinking water and aquatic habitats are important resources that the Montana FLP has been effective in helping conserve. For more information on how water resources will be incorporated into future priorities, see Conservation Priorities, later in this AON.

[Additional Ecosystem Services](#) –Working forests of Montana support other values which may be less obvious but are also important, socially and ecologically. These include air purification, carbon sequestration, soil formation and stability, nutrient cycling, and aesthetics. Scenic and cultural heritage values associated with forests are enjoyed by Montana's citizens and are an attraction from out of the area visitors. National and state recognized scenic resources associated with Montana forests include six Scenic Drives and Byways (254 miles; visitmt.com), the Continental Divide National Scenic Trail (820 miles; visitmt.com), 5 rivers designated as Wild and Scenic (388 miles; rivers.gov), 5 National Park Service Areas (visitmt.com), and 11 National Forests (fs.usda.gov). Montana is also home to 28 National Historic Landmarks (nps.gov), of which many are associated with forestlands.

All of these values, as well as those mentioned earlier, are part of a working forest, commonly conserved through Montana's FLP. Of course, such public values are not evenly distributed across all forests. That is, areas where multiple values overlap represent conservation priorities, which are described later in this AON.

Forest Status and Trends

Ownership and Conservation - Montana's forest owners include private industrial and non-industrial forest landowners, tribal nations and local (municipal/county), state and federal public land management agencies. The majority (59%) is federally managed by the USFS, followed by non-industrial private ownership (19%), tribal ownership (5%), industrial private (5%), BLM (4%), state (4%), and a collection of other federal and local land managers (4%). Nearly a quarter of Montana's forests are therefore privately owned. Of these, approximately 9% are protected through conservation easements involving a variety of agency and non-governmental programs.



Figure 10. Wetland habitats, providing water storage and extremely productive habitat for many wildlife species, including spring grizzly habitat. Whitefish Lake Watershed Conservation Easement. Photo credit Chris Boyer Kestrelaerial.com

Industrial private forests have experienced considerable churn in ownership over recent decades including transfers between timber companies, subdivision and sales to private individuals, as well as sales to conservation organizations and, in some cases, subsequent transfers to public agencies or other organizations. A few standout examples:

- The Montana Legacy Project involved a broad partnership led by The Trust for Public Land and The Nature Conservancy resulting in the purchase of 310,000 acres of Plum Creek Timber lands that were intermingled with USFS and other public lands. The final phase of this project was completed in 2010. Conservation outcomes of this project included lands incorporated into the National Forest System, new state Wildlife Management Areas, BLM additions, and sales to private landowners in association with permanent conservation easements. As part of this overall effort, four Forest Legacy projects were completed – Murray Douglas Conservation Easement, a portion of the new Marshall Creek Wildlife Management Area, and fee title additions to the Nevada Lake and North Swan WMAs.
- The Nature Conservancy purchased the 117,000-acre block of land from Plum Creek Timber in 2015 known at the time as the Clearwater Blackfoot lands, which are located northeast of Missoula. These lands are slated for various final ownerships including federal and state agencies and the possibility for a community-managed forest.
- In 2016 Weyerhaeuser Company purchased Plum Creek Timber Company, transferring ownership of extensive forested lands in Montana. In 2020 the Weyerhaeuser Company in turn sold all of their Montana timberlands, totaling 630,000 acres, to Southern Pine Plantations, a Macon, Georgia-based firm (referred to as SPP Montana). At this time, the fate of these lands is uncertain. Some portion of these holdings support conservation values that are considered priorities by the Montana FLP. In fact, as of the writing of this AON, 130,000 acres are being proposed for conservation easement through a FLP application and another 100,000 acres are being proposed for conservation easement by the USFWS.

The rights of private landowners to manage their properties as they see fit is a core American value. Private forests face increasing pressure for converting to other land uses. The potentially lucrative venture of dividing forested lands into smaller parcels and subsequent residential development has become increasingly common during the past 3 decades (Pohl 2018). Dividing large forest ownerships into smaller parcels often increases habitat fragmentation, makes landscape-scale forest management practices more difficult, and expands the wildland urban interface.

Various statistics provide an enlightening view of such changes across the Montana landscape (Headwaters Economics 2019, 2020; Pohl 2018):

- Since 1990, 1.3 million acres of undeveloped land in Montana has been converted to housing.
- One-quarter of all homes in Montana were constructed since 2000.
- Nearly half of the homes built from 1990 to 2018 were constructed on large lots exceeding 10 acres.
- Over half of the homes occurring in moderate and high hazard categories within wildland-urban interfaces of Montana were constructed since 1990.
- Montana counties experiencing moderate to high rates of growth are generally associated with opportunities for outdoor recreation, where growth is likely to continue. Along these lines, 12 of Montana’s counties have been identified as “nonmetro recreation-dependent counties” by the USDA Economic Research Service (Johnson and Beale 2002), based on sources of income, temporary lodging receipts, and other measures. Nearly all of these counties support significant forest resources (Figure 11).
- At least temporarily, Montana has experienced a steep real estate surge since the start of the COVID-19 Pandemic.

Sprawling development within environmentally important forest areas can impact ecological and social values. The FLP offers another option for landowners intending to conserve their forestlands and associated working forest benefits into the future.

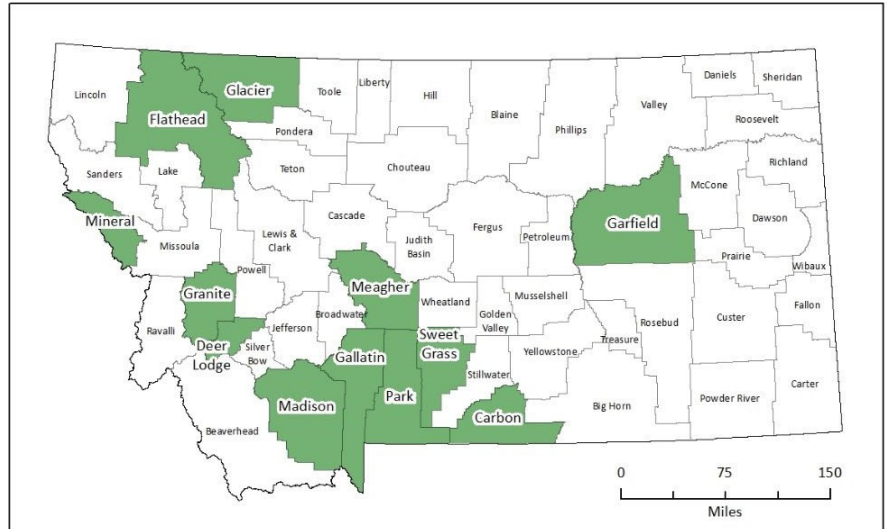


Figure 11. Counties recognized for their recreation resources and associated high likelihood of urban expansion (Headwaters Economics 2019; Johnson and Beale 2002).

Forest Condition - Montana’s Forest Action Plan (DNRC 2020) provides considerable details on the general condition of forests across the state and identifies areas of concern as relates to forest health and fire concerns. As a high-level overview, forests have been influenced by fire suppression, large scale wildfires, variable approaches to forest management across ownerships and time, a changing climate, widespread insect and disease issues, and exotic invasive species. This makes for a complex picture of forest conditions that is beyond the scope of this AON. Forests conserved through the FLP are required to be managed in a sustainable manner through an approved multi-resource management plan. In addition to conserving lands from conversion to other uses, these plans assure working forest values are sustained.

Forest Legacy Eligibility Criteria and Conservation Priorities

The FLP has been successful in part because of detailed program eligibility requirements and prioritization processes that occur at both the state and national levels. This section describes those basic requirements along with criteria for targeting and ranking prospective projects.

Eligibility Criteria

Prospective projects must meet minimum requirements to participate in the FLP. Based on the May 2017 Forest Legacy Guidelines, national eligibility requirements are as follows:

- It is within, or partially within, a designated Forest Legacy Area;
- It has a minimum of 75 percent forestland or a documented plan that includes sufficient landowner capacity to reforest to at least 75 percent forestland;
- It can be managed consistent with the purpose for which it was acquired by FLP;
- The landowner is willing to sell or donate the interest in perpetuity; and
- The landowner acknowledges that the conservation easement will be held by a government entity if federal funds are used for the acquisition.

This AON also recognizes the following Montana program eligibility requirements:

- Based on definitions in the Glossary of Terms, forestlands must be *environmentally important* and *threatened* and managed under *compatible uses*.
- Participating lands must be a minimum of five acres.

Simply stated, forestlands that are not threatened with conversion or do not serve environmentally important functions or would not be managed in a manner that is compatible with working forests would not be considered eligible. Also, whereas it is our intent to accomplish landscape-scale conservation, there may be circumstances where strategically located smaller landholdings may have national significance. This relatively small minimum acreage provides for that flexibility if there were a compelling but small forest holding.

Conservation Priorities

Identifying priorities is an important strategy for directing funding to projects where the greatest benefits might be realized. This AON includes both *broad scale* and *fine scale* priorities for consideration.

[Broad Scale Prioritization](#) - This scale provides a statewide perspective for where the conservation values sought by Montana's FLP are most prevalent. Watersheds at the 6th level hydrologic code (HUC) were selected as the unit of analysis for this prioritization (Figure 12). We chose to use watersheds because of the circumstances and values that often are associated in a watershed context, such as wildlife habitats, drinking water, topography, and ownership patterns. The analysis area for this prioritization is confined to HUCs comprising a minimum 10% forested habitat (Figure 13). That is, among the cover types within a HUC, forest cover types made up at least 10% of the area to be included as part of this analysis.

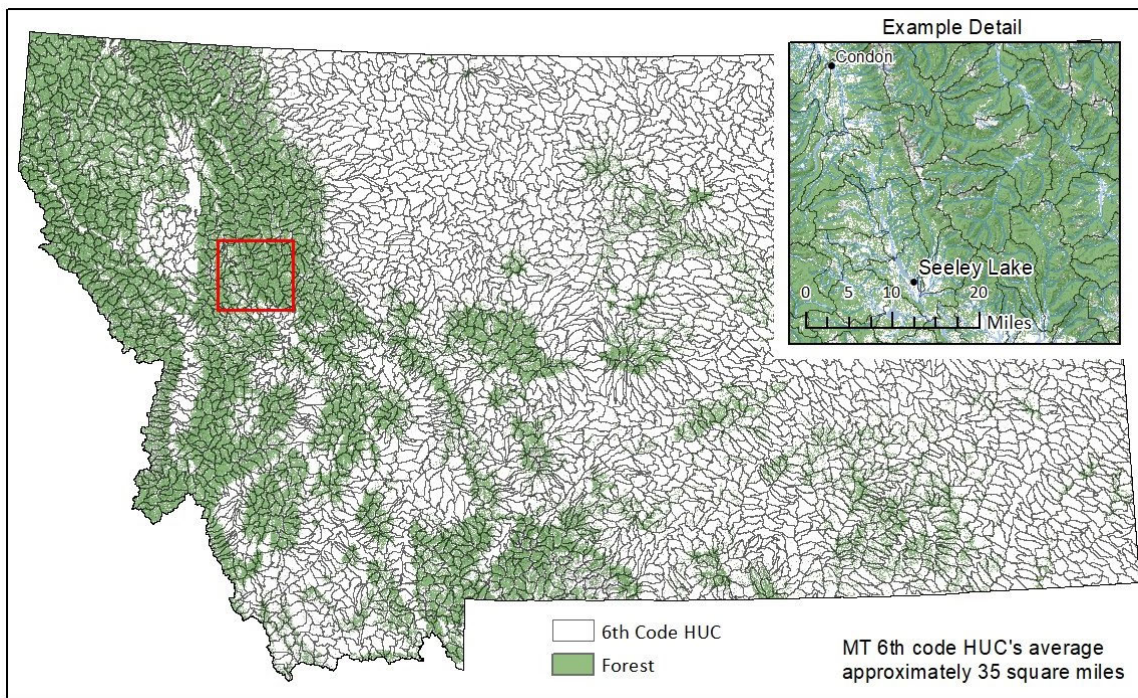


Figure 12. Watersheds at the 6th hydrologic code (HUC) were used as the unit of analysis for broad scaled prioritization.

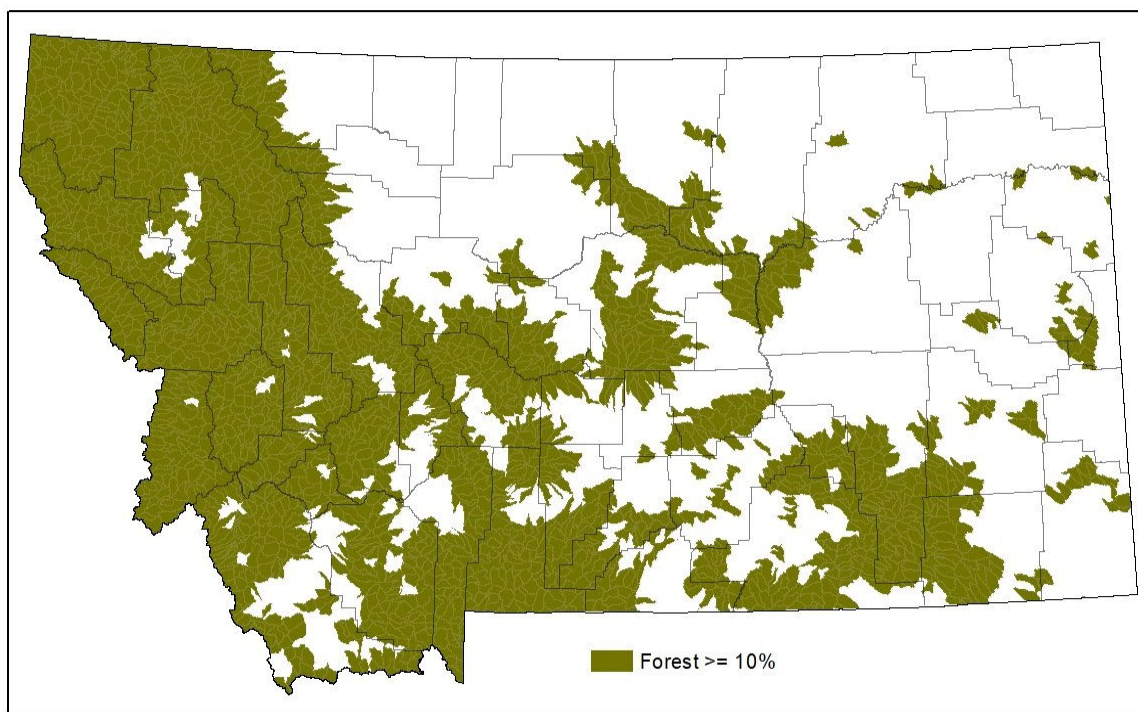


Figure 13. Watersheds that comprise a minimum 10% forested cover types. These make up the analysis area for broad scale prioritization of the FLP in Montana.

A variety of attributes were *considered* when developing this broad scale analysis. They included potential threats of forest conversion, seasonal habitats of game species, bird conservation areas, juxtaposition to public lands, conservation area designations, and various conservation initiative rankings. After reviewing each of these, we found some layers operated at much larger or smaller scales than were appropriate for this particular analysis, or the data supporting some layers was duplicative with other layers resulting in overemphasized values, or the results were not helpful for keying in on true priorities and could better be used for project-specific (fine scale) analyses.

After considerable review and incorporating recommendations from both citizen advisory committees, three criteria were selected for this broad scale prioritization. Fittingly, these criteria closely align with the stated values of Montana’s goal for the FLP (page 9):

- **Drinking water** - The Forests to Faucets model layer developed by the USFS was used to prioritize HUCs according to drinking water values (Figure 14). As earlier described, water is a critical resource across Montana and even more so as a headwater state. Our ranking from “high to low” should not be interpreted as some watersheds lacking value, but instead this represents our best effort to rank watersheds that are all generally of high or very high value.
- **Priority wildlife habitat** – Two data layers were combined into one ranking for representing high value forested wildlife habitat (Figure 15). These are FWP’s Crucial Areas Planning System layer and the American Wildlands Priority Linkage Assessment layer (American Wildlands 2008). Details on how we developed this particular layer are included in the GIS metadata.
- **Timber resource values** – a combination of forest productivity (77.7% weighting) and direct distance to woodproduct mills (22.3% weighting) was used to establish this ranking layer (Figure 16). For assigning productivity, we used the Montana Department of Revenue’s (2018) forest productivity site index.

Broad scale prioritization for the FLP in Montana combines these three criteria, each equally weighted. To further refine this, we conducted separate ranking prioritizations for HUCs that are predominantly public lands (95% or more public land) and for HUCs that comprise more private lands. By ranking these separately, we have a prioritization specific for forestlands where the FLP is more likely to invest in conservation – private land HUCs. Conversely the public land HUCs provide context, particularly for prospective projects that may be in adjacent HUCs. As an example, a proposal involving a lower elevation watershed may have greater importance because of drinking waters flowing through it from upstream, high value public land watersheds. Figures 17 and 18 show these final prioritization layers, the first with a different coloration scheme for predominantly public lands and the second using the same coloration scheme for both groups of HUCs.

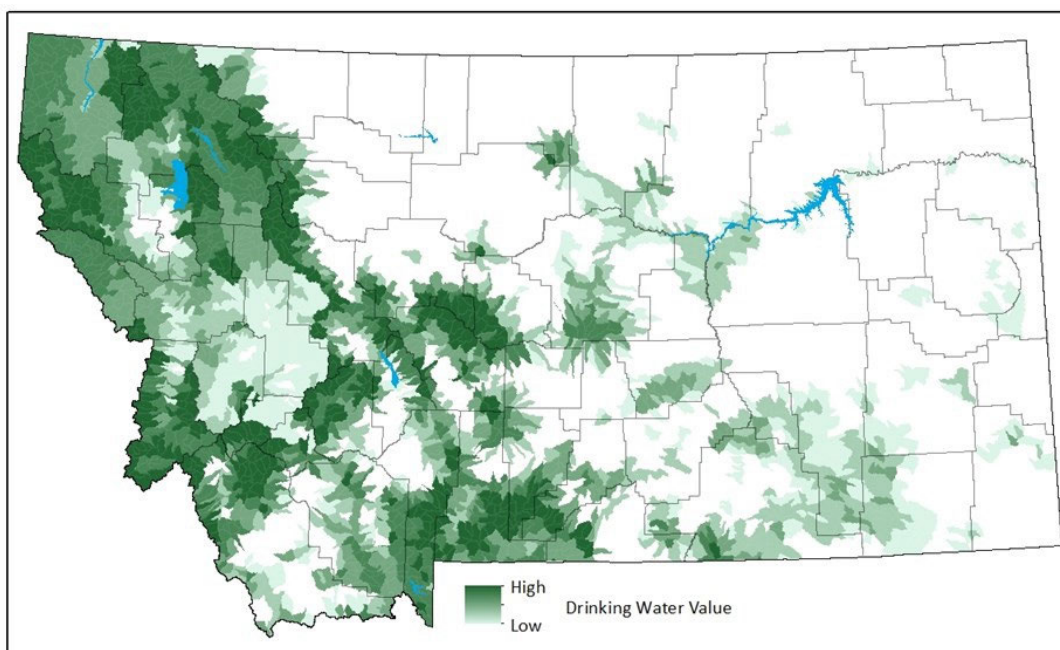


Figure 14. Drinking water volumes within the analysis area.

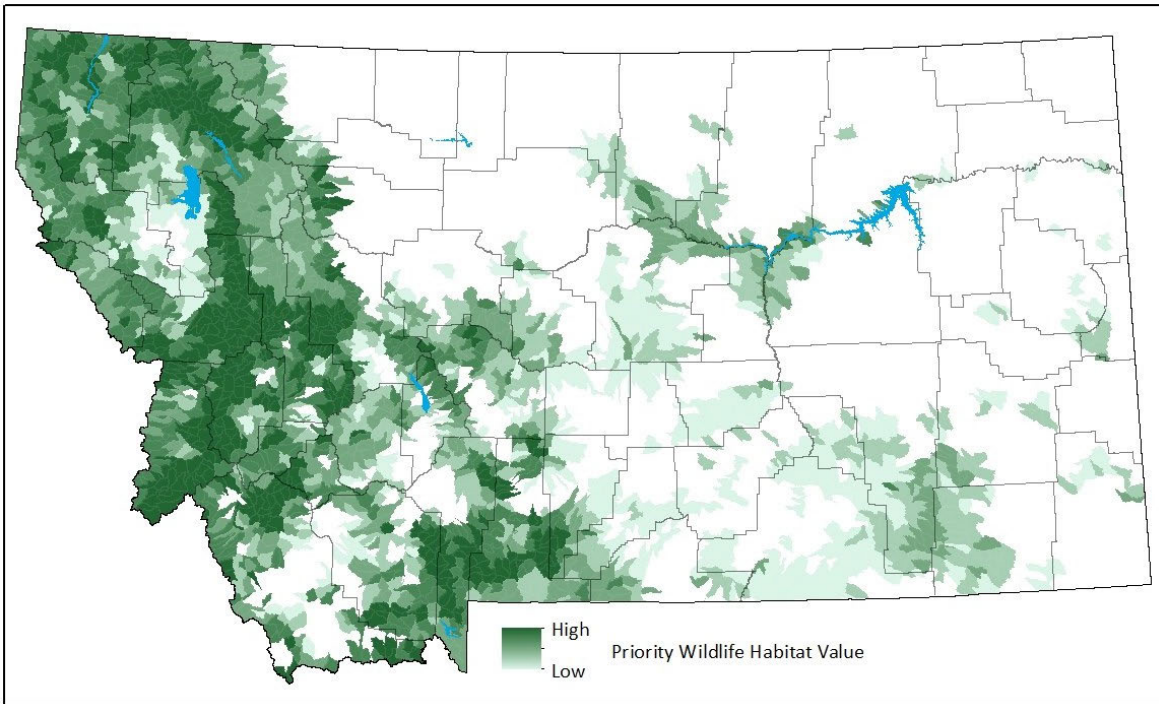


Figure 15. Wildlife resource values within the analysis area.

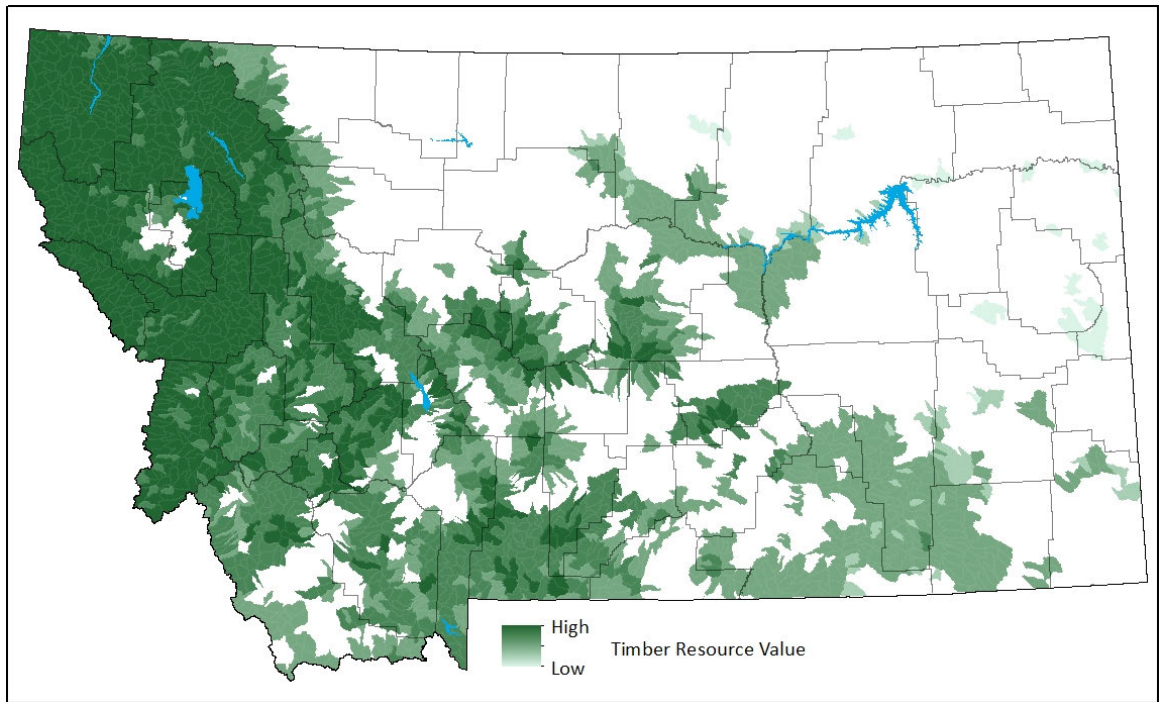


Figure 16. Timber resource values within the analysis area.

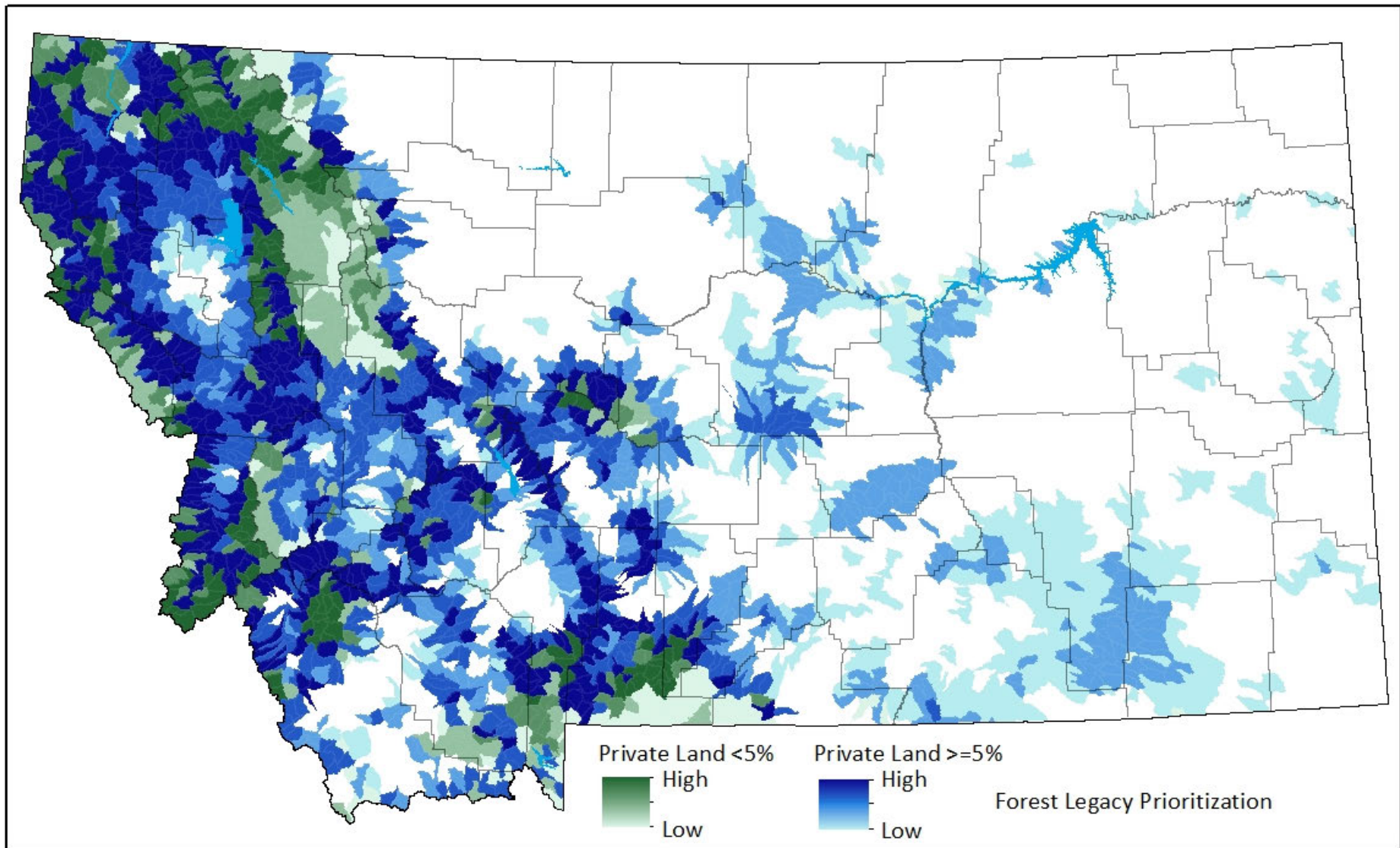


Figure 17. Broad scale prioritization of forestlands in Montana. Green-shaded HUCs are 95% or more public land.

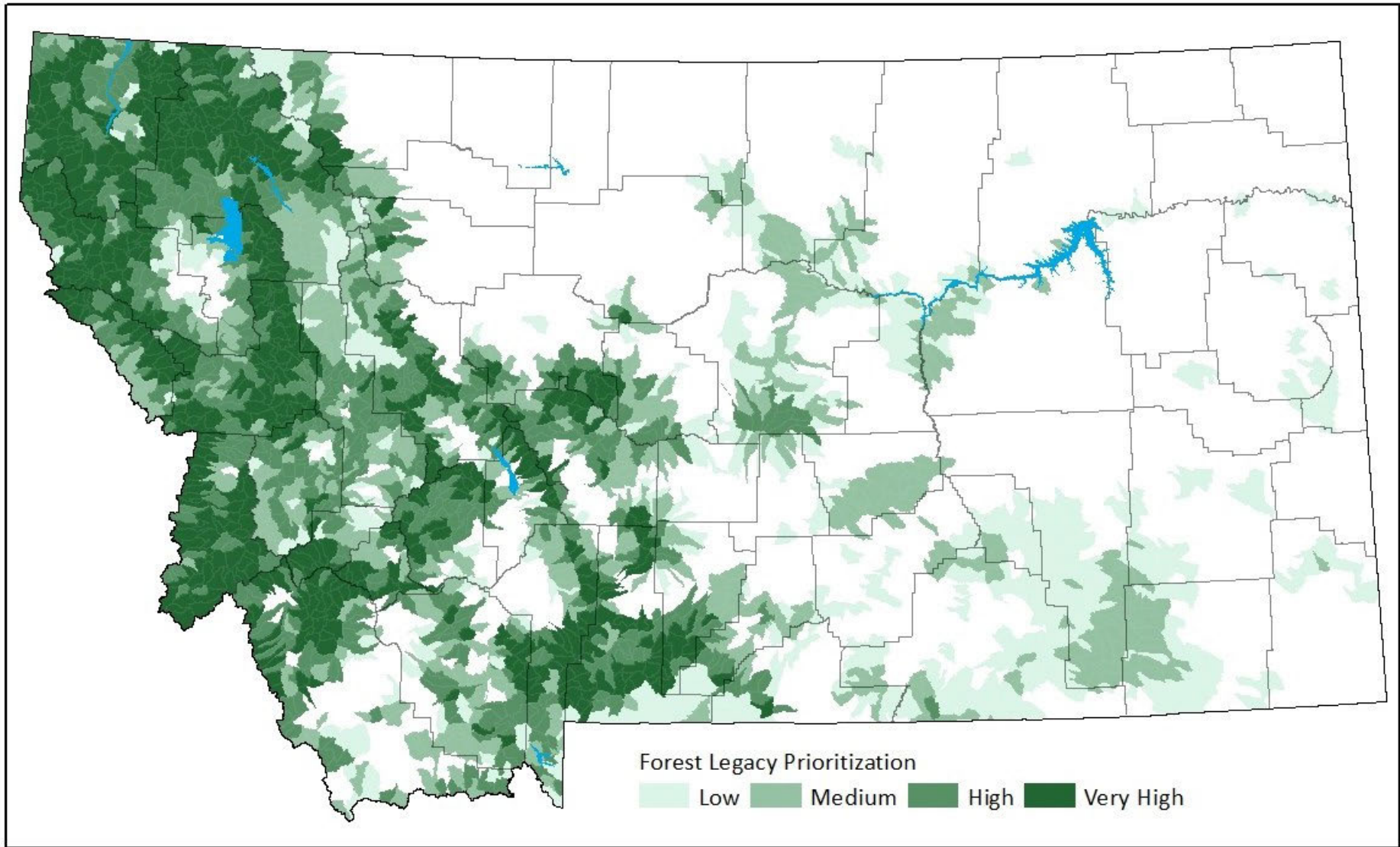


Figure 18. Broad scale Forest Legacy prioritization of forestlands in Montana using the same color scheme for public and private land HUCs.

[Fine Scale Prioritization](#): This level of prioritization is applied at a proposal or project level analysis. FWP will continue using the Forest Legacy’s national core criteria when assessing the viability and ranking of individual Montana proposals. These criteria are grouped into three categories as follows (USFS 2017):

- **Importance** – The public benefits gained from the protection and management of the property, including environmental values and the economic and social benefits;
- **Threatened** – Conversion to non-forest uses is imminent or likely and will result in a loss of forest values and public benefits;
- **Strategic** – Contributes to larger conservation plans, strategies, and initiatives, complements existing federal land and other protected areas, and enhances previous conservation investments.

In addition to the factors commonly considered within these three categories, a brief analysis of the resilience of forest cover and diversity in the face of climate uncertainty has been added to the Montana Forest Legacy Application and Evaluation layout (Appendix A). As described by Halofsky et al 2018, “species, genetic, and landscape diversity (spatial pattern, structure) is an important ‘hedge your bets’ strategy that will reduce the risk of major loss of forest cover.” Topography, elevation, and aspect strongly influence climatic variability and species diversity (Halofsky et al. 2018). The question of forest resilience and climate change would bring into consideration these variables, the anticipated approach to forest management, and other site-specific characteristics.

Forest Legacy Areas

The parts of Montana where the FLP is eligible to fund projects are known individually as a Forest Legacy Area. Identifying these areas is, in a sense, the coarsest scale of prioritization in this AON. We have selected these areas based on three general criteria, all of which have been instrumental in successfully competing for funding in past national rankings.

First, Montana's forestlands provide habitat for a wide variety of plant and animal species, some of which are identified as state Species of Concern. These species are considered "at risk" due to declining population trends, threats to their habitats, and/or restricted distribution and include 377 animal and vascular plant species associated with Montana forestlands (MTNHP 2020). Nine of these species are listed as threatened or endangered under the federal Endangered Species Act (ESA) and 2 species are under consideration for listing. Federal listed species associated with forests occur predominately in the western third of the state. The FLP has been instrumental in helping to conserve (in perpetuity) working forest habitats that support many of these species. Such conservation projects directly support delisting or avoiding federal listings. Conserving habitats that are important to these species is of national interest, and a great fit with Montana forests.

Second, forests that include a mix of private, state, and federal lands represent unique opportunities for conserving and managing forestlands and accomplishing a broad array of conservation values at landscape scales. Managing forests across multiple landownerships is a priority of the Montana Forest Action Plan (DNRC 2020). Conducting conservation in a manner that complements adjacent federal public lands is also of national interest.

The third criterion for identifying FLAs takes into consideration the broad scale ranking defined earlier. Those areas of lower ranking do not fit as well with Montana's goal for the FLP.

Based on the combination of these factors – forest species of concern with particular emphasis on federal ESA species; ties to federally administered forestlands; and broad scale prioritization – we have identified three Forest Legacy Areas (Figure 19).

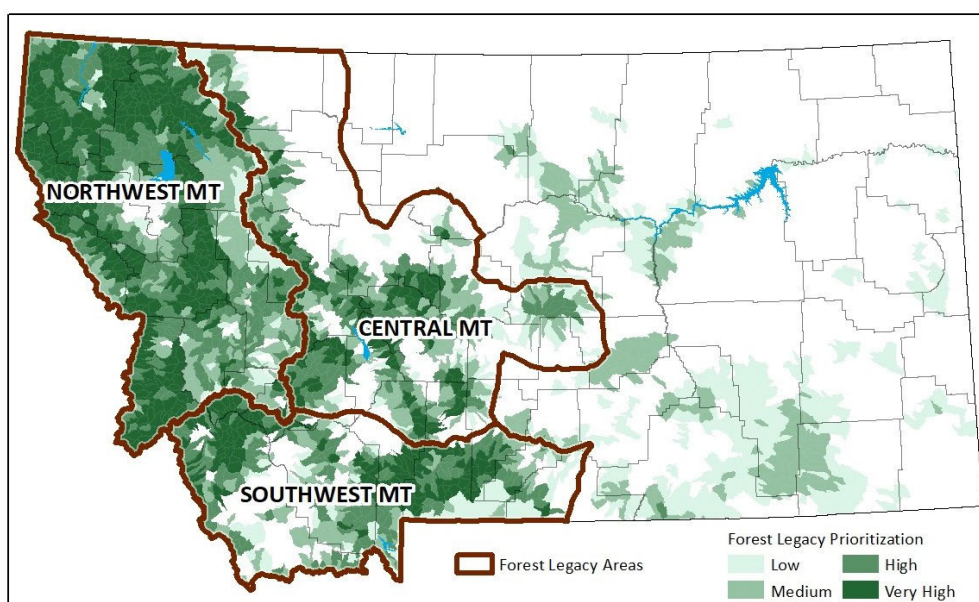


Figure 19. The FLP in Montana is composed of three Forest Legacy Areas – Northwest, Southwest, and Central Montana.

Description of Forest Legacy Areas

Each of the three FLAs has unique characteristics in terms of land use, industry, human population trends, natural resource values, and opportunities for conservation. This section provides an overview of these FLAs as relates to the FLP.

Northwest Montana Forest Legacy Area

The Northwest Montana FLA encompasses the upper Columbia Basin of Montana, bordering Canada to the north, Idaho to the west, and the Continental Divide to the south and east (Figure 20). This is the headwaters to the Columbia watershed, supporting a host of water users extending to the Pacific Coast. Forests primarily include national forestlands, corporate timberlands, the west half of Glacier National Park, tribal forests that are within Flathead Indian Reservation, state-owned forests, and then smaller private ownerships. Combined, these make up some of the largest remaining blocks of intact forested habitats in Montana. The northern part of this FLA includes a portion of the internationally recognized Crown of the Continent, an 81 million-acre ecosystem bridging the United States and Canada, including Glacier and Waterton Lakes National Parks.

The Columbia Basin is generally moister with warmer minimum temperatures compared with the rest of the state. Precipitation in these forests ranges from 20 to over 100 inches annually (USGS 2004). The fastest growing forests in Montana for timber production occur in this FLA, which is one reason why timber companies have historically purchased lands here, currently comprising over 800,000 acres. Private timberlands occur both in blocks and intermingled ownership, primarily associated with national forest and DNRC trust lands. The Northwest Montana FLA includes about 25 primary processing facilities (i.e., sawmills, post/pole, and

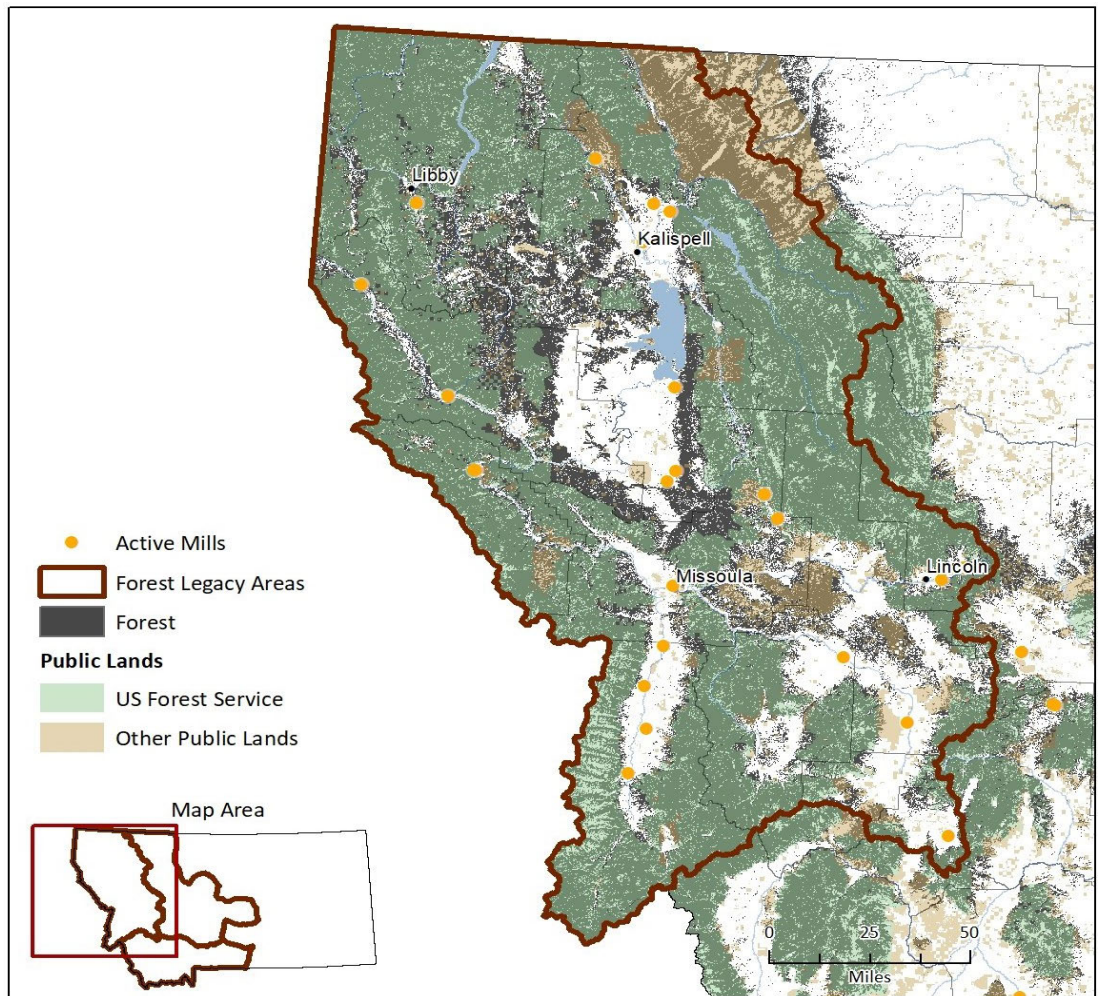


Figure 20. Northwest Montana Forest Legacy Area in relation to public landownership patterns, forested habitats, and primary wood product mills. The black areas that are not overlaid with color are privately-owned forest.

pulp/chip operations).

In addition to wood products, timber company lands have traditionally provided substantial year-round public access in a manner similar to publicly managed forests. Outdoor recreation and tourism are an important industry and economic driver, supporting nationally significant opportunities for hiking, biking, hunting, fishing, camping, sightseeing, and a host of other recreational pursuits. Averaged over 2017 and 2018, out of state tourism and recreation visitors expended an estimated \$1.2 billion across 7 counties within this FLA, with Flathead County receiving the second largest expenditures in the state, \$614 million (Institute for Tourism and Recreation Research 2019). Hunting and fishing are an important part of the recreation economy; resident and nonresident big game hunting generated an estimated \$90 million of expenditures within this FLA in 2016 (FWP 2018). Other industries occurring in and around forestlands include livestock grazing, real estate development, and hard rock mining. Mining occurs mostly along the far western and southern parts of this FLA (Montana Tech 2012).

These forests provide habitat for approximately 256 plant and animal species of concern, including federally threatened (T) and endangered (E) species: grizzly bear (T); Canada lynx (T); bull trout (T); white sturgeon (E); water howellia (T); and meltwater lednian stonefly (T) (MT Natural Heritage Program 2020). They also support a variety of game, furbearer, mammal, reptile, amphibian, bird, and fish species. All of these species benefit from conservation measures that retain intact ecosystems, supporting seasonal, year-round, and connectivity habitats.

Human uses of water derived from these forestlands support agricultural irrigation, public water supplies, power generation, and industrial uses (US Geological Survey 2004). These waters also are critical for aquatic ecosystems and water-related recreation.

With one exception (Deer Lodge), counties in this part of Montana have experienced steady population growth over the past ten years, ranging from 0.6 to 14.2% growth between 2010 and 2019, with the highest growth in Flathead (14.2%), Granite (9.9%), Missoula (9.4%), and Ravalli (8.9%) counties (U.S. Census Bureau 2019). Over a 28-year period, from 1990-2010, 15% of new houses built in Montana were constructed in Flathead County, surpassed only by Gallatin County in southwest Montana (Headwaters Economics 2020). Across the Northwest Montana FLA, private forests are under increasing pressure of being divided and developed with seasonal or permanent residences or developed subdivision complexes. This is particularly true for some commercial timberlands. Depending on location, these kinds of development can directly impact important social and ecological values. To date, all of Montana's completed Forest Legacy projects are within this FLA.

Southwest Montana Forest Legacy Area

The Southwest Montana FLA encompasses the upper Missouri and upper Yellowstone watersheds of Montana, bordering Yellowstone National Park to the south, Idaho to the west, Interstate 90 to the north, and Highway 72 to the east (Figure 21). Unique from the other FLAs, the vast majority of forested lands are part of the national forest system, followed by BLM, National Park Service, DNRC trust lands, and private forests. Private forests are generally managed as ranches, investment or recreation properties, or residential/developed acreages. There are very few private forest tracts under single ownerships that exceed 3,000 acres. Opportunities for large-scale conservation of privately held forestlands are therefore more limited. However, this area has many values worthy of conservation investment.

Southwest Montana includes forests within the Greater Yellowstone Ecosystem and adjacent mountain complexes with semi-arid intermountain valleys. Forested habitats of the FLA support a diverse mix of animal and plant species that include approximately 176 species of concern. Federally listed species include grizzly bear (T), Canada lynx (T), yellow-billed cuckoo (T), and western glacier stonefly (T) (MT Natural Heritage Program 2020). They also support a variety of game, furbearer, mammal, reptile, amphibian, bird, and fish species. Some mountain foothill grasslands or shrublands adjacent to forest fringes provide critical big game winter range habitats – southwest Montana in particular supports some of the largest elk herds in the state.

This FLA includes about 6 primary processing facilities for wood products (i.e., sawmills, post/pole, and pulp/chip operations). Other industries associated with forestlands include livestock grazing, outdoor recreation, real estate

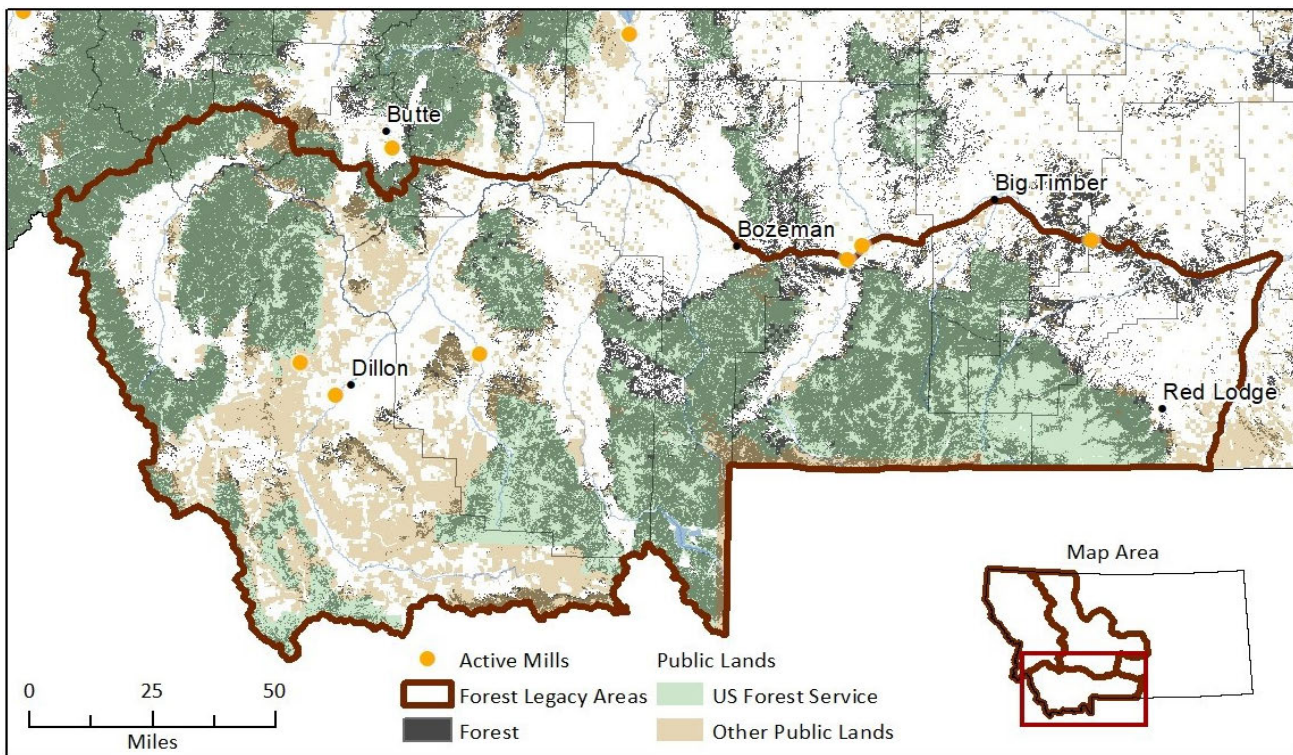


Figure 21. Southwest Montana Forest Legacy Area in relation to public landownership patterns, forested habitats, and primary wood product mills. The black areas that are not overlaid with color are privately-owned forest.

development, and hard rock mining, which is scattered across the FLA (Montana Tech 2012). With its location adjacent to Yellowstone National Park, this area is a destination for national and international tourists. Non-resident tourism and recreation visitors to the area were estimated to have expended an average of \$1.2 billion annually during 2017 and 2018, with Gallatin County receiving the highest expenditures in the state, \$814M (Institute for Tourism and Recreation Research 2019). This area also is popular for hunting and fishing by residents and out of state visitors. For example, expenditures of big game hunters in 2016 was estimated at \$83 million within this FLA (FWP 2018).

Southwest Montana’s watersheds, some of which originate in Yellowstone National Park, are the start of the Missouri River system and therefore very important to local and interstate uses extending to the Gulf of Mexico. Precipitation in these forests generally ranges from 20 to 50 inches annually (USGS 2004). These watersheds support extensive agricultural irrigation, power generation, and public water supplies (USGS 2004). These waters also support extensive aquatic ecosystems and water-based recreation.

Bozeman and the associated Gallatin Valley make up the largest community in southwest Montana. The Bozeman International Airport is the largest airport in the state, with direct flights to 16 different cities (Bureau of Business and Economic Research 2019). The area has been recognized as the number one fastest growing “micropolitan city” in the US (Bureau of Business and Economic Research 2019). Between 2010 and 2018, counties within this FLA have experienced growth ranging from 1.7 to 27.8% (US Census Bureau 2019). Gallatin (27.8%), Madison (11.8%) and Park (6.2%) counties experienced the greatest growth. Expansion of housing and business developments has occurred across this FLA, making construction one of the largest local industries. In fact, from 1990-2018, 15% of new houses built in Montana were constructed in Gallatin County, the number one county in Montana for home construction (Headwaters Economics 2020). Housing developments extend from intermountain valleys upslope to low and mid-elevation forests. Depending on location, these kinds of development can directly impact important habitats and other forest values.

Central Montana Forest Legacy Area

The Central Montana FLA is within the Missouri and Yellowstone watersheds and includes forests along the east slopes of the northern Rocky Mountains extending south along the Continental Divide to Homestake Pass and east encompassing isolated forested mountain ranges around the Lewistown area. Forests are composed of mostly national forestlands, followed by private, tribal forests that are within the Blackfeet Indian Reservation, BLM, and DNRC trust

lands.

Along the Rocky Mountain eastern front, west and north of Great Falls, forestlands generally blend into prairie habitats following along the national forest boundary (Figure 22). The Blackfeet Indian Reservation includes forestlands that are contiguous with Glacier National Park. The mountain foothills along the front make up the eastern side of the Crown of the Continent, the focus of considerable conservation effort by a collaboration of landowners, conservation organizations, and agencies. The area supports extensive biological, aesthetic, and cultural values.

For the balance of this FLA south from Great Falls, private lands make up a larger portion of forested habitats. Private ownerships mostly involve large ranches (some single-ownership forestlands exceed 10,000 acres) followed by smaller, less than 1,000-acre ranch holdings and residential/developed acreages. Many of these privately-owned forests are contiguous with publicly administered forests. This southern part of the FLA includes all 9 primary processing facilities for wood products within the FLA (i.e., sawmills, post/pole, and pulp/chip operations). Other industries associated with forestlands across the Central Montana FLA include outdoor recreation and livestock grazing. Hard rock mining activities are scattered across the southern portion of the FLA (Montana Tech 2012).

Annual expenditures of non-resident tourism and recreation visitors were estimated to average \$427 million during 2017 and 2018 across this FLA (Institute for Tourism and Recreation Research 2019). Hunting and fishing are also popular; big game hunting within this portion of central Montana generated an estimated \$76 million in 2016 (FWP 2018).

Outside of Glacier National Park, precipitation in these forests generally ranges from 20 to 50 inches annually (USGS 2004). The Missouri River and major tributaries are a critical source of water for agricultural irrigation scattered across this FLA (USGS 2004). Over 20 active public surface water systems support 11 different municipalities, including the two largest communities in this FLA, Great Falls and Helena (MT Department of Environmental Quality 2018). The forest habitats in the Central Montana FLA support approximately 128 animal and vascular plant species of concern (MT Natural Heritage Program 2020) and are also highly valued for big game and forest grouse hunting. Some of the undeveloped lands (including forests) across this FLA are considered critical linkages that includes connecting the

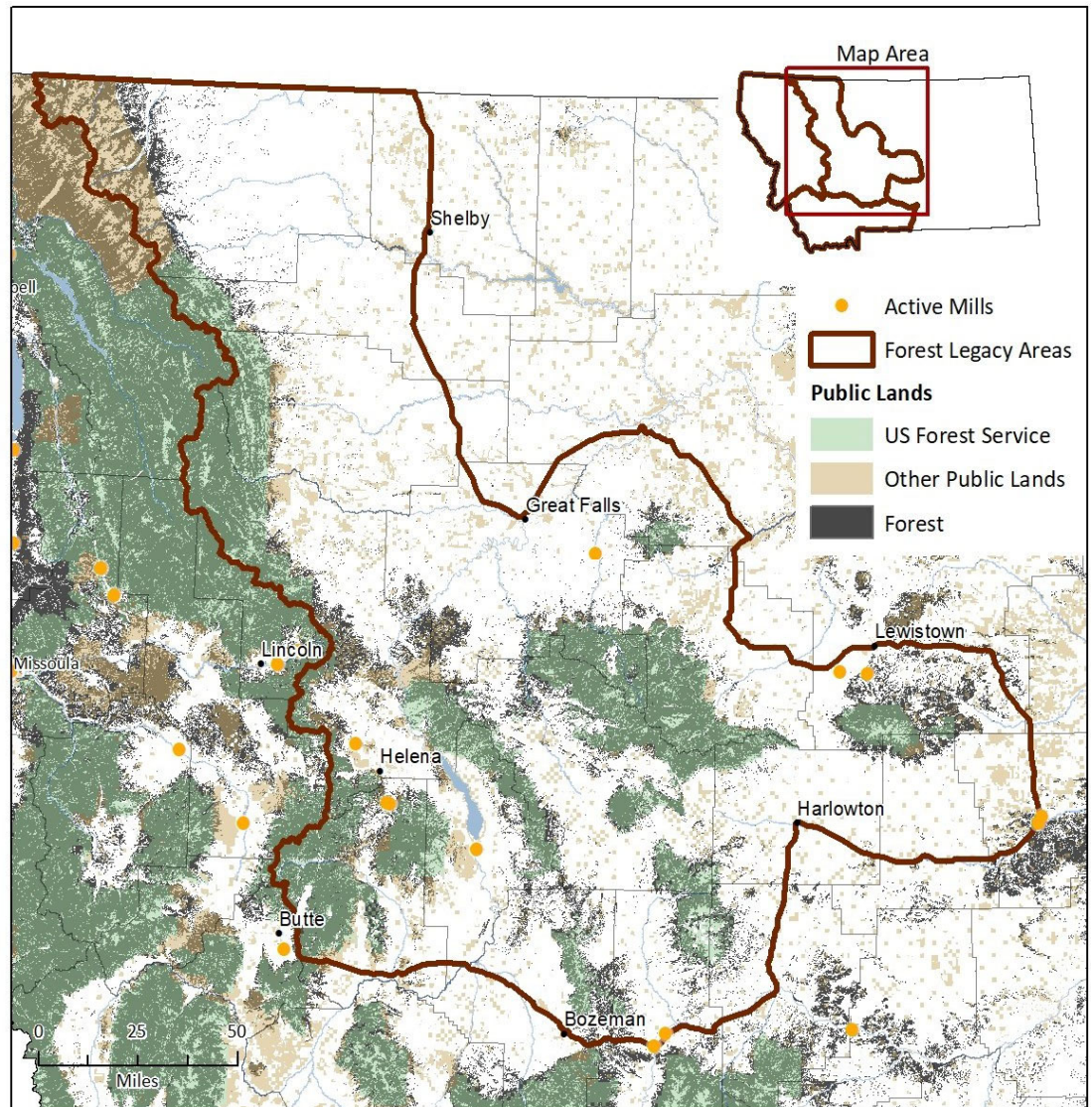


Figure 22. The Central Montana Forest Legacy Area in relation to public landownership patterns, forested habitats, and primary wood product mills. The black areas that are not overlaid with color are privately-owned forest.

Yellowstone ecosystem with the northern Rocky Mountains, particularly for large carnivores including grizzly bears, wolverine, and Canada lynx. Potential threats to these linkages include transportation corridors or other such barriers and housing developments, which can result in animal-human conflicts and the subsequent demise of affected animals. Similar to the other FLAs, some mountain foothill grass or shrub habitats and associated forests are critical habitats for wintering ungulates and are also potential sites for human development.

Human population trends between 2010 and 2019 (US Census Bureau 2019) vary across this FLA from declining populations in the eastern counties (Fergus -4.7%, Judith Basin -3.1%, Golden Valley -7.1%) to considerable growth in more western counties (Lewis and Clark 9.5%, Broadwater County 11.2%). Housing developments have expanded mostly in association with communities, including Helena, Great Falls, and Townsend, extending from valley bottoms into forested areas.

Montana's Program Sequence and On-going Operation

FWP is the state lead agency for administering the FLP in coordination with the Western Region of the USFS, through the designated Regional FLP Manager. Administering the FLP spans the initial solicitation for proposals to the ongoing involvement in completed projects. This section lays out these processes and associated responsibilities.

Annual Application Sequence

The following sequence is conducted annually; dates are approximate and based on calendar year. The federal fiscal cycle runs October 1 through September 30. Timelines may shift, see the Forest Legacy Program website for the most current schedule:

1. **Early May** (Year 1) – FWP announces a call for applications through an email list which includes land trusts, conservation districts, conservation organizations, state and federal agencies, and other interested parties that work with private landowners. The deadline for submission to the FWP Program Coordinator is early July. The application format follows the Forest Legacy national ranking format but allows for more images and narrative length (See Appendix A – Montana FLP Application Format).
2. **Early July** (Year 1) – the FWP Program Coordinator assembles all of the applications and forwards copies to each FLP subcommittee member of the Montana Forest Stewardship Steering Committee (MFSSC). The subcommittee comprises private landowners and staff from agencies and conservation organizations.
3. **July/August** (Year 1) – subcommittee members review each of the applications to confirm they meet FLP eligibility requirements and to assign a ranking score, following the national FLP ranking criteria. The chair of the subcommittee may request a field visit to review the proposal and ask questions of the landowner and involved partners.
4. **Mid-August** (Year 1) – the subcommittee makes a ranking recommendation (if there is more than one application) and confirms their eligibility, typically in the form of a motion, to the full MFSSC, which in turn discusses the recommendation and votes accordingly. The committee's vote serves as an official recommendation to FWP. MFSSC members also provide observations and recommendations to help strengthen applications as they proceed further through the process.
5. **September-October** (Year 1) – FWP assigns priority and works with applicants to write, edit, and finalize proposals for submission through the Forest Legacy Information System by the national deadline.
6. **November** (Year 1) – National Ranking occurs.
7. **October– February** (Years 2-3) – Funding is committed to specific FLP projects through passage of the national budget.
8. **Spring/summer** (Year 3) – Grant funds are typically available the spring or summer two years after the original solicitation.

Forest Legacy Properties— Ongoing Operation

Upon completion of a project, FWP has responsibility for ongoing maintenance of these property interests in perpetuity. This ensures conservation values are retained, while also fulfilling specific FLP grant obligations and general program requirements. FWP employs a team approach for managing interests in property. The following speaks to these obligations and provides a general overview of how the team effort takes place.

[Conservation Easements](#) – Completed CEs entail an ongoing partnership between the landowner and the State of Montana. Once a CE is established, FWP’s interaction with the CE landowner and ongoing management of the property occurs through two different forms. First, regional staff and the landowner interact on an as-needed basis, which may involve multiple interactions per year. These are typically day-to-day management questions, clarifications, or requests for solutions to concerns that may involve CE terms. After a “breaking in period” for a few years, these interactions often become less frequent as all involved become accustomed to how the CE works. The second interaction, led by the Conservation Easement Stewardship Manager or their hired contractor, is a formal annual visit to review all of the CE terms and management plan details to confirm that the land has been managed in a manner consistent with these requirements. Although lead by the Stewardship Manager, ideally, these visits involve both the landowner and FWP regional staff. This is also a good opportunity to discuss how the CE is working and whether there are needs for updating the management plan.

Results of annual monitoring are reported to the FLP each year through the Forest Legacy Information System database. Any issues requiring program guidance or assistance will be coordinated by the state Program Coordinator with FLP staff.

FWP retains two conservation easement policies, which help direct the agency as issues arise. These policies are available from FWP upon request.

- The *CE Amendments/Restatements Policy* lays out the specific standards, process, and staff involvement that are required of FWP when contemplating a CE amendment. CEs are written to preserve specific conservation values in perpetuity, and amending a CE is a substantial undertaking. This policy, in part, assures that such an amendment isn’t taken lightly and requires specific outcomes that are true to the original intent of (and dollar investment in) the CE.
- The *CE Enforcement Policy* describes the steps that FWP will take to avoid and/or reduce the potential for violations, evaluate and address actions that result in suspected violations, and resolve established violations of conservation easements in a judicious and consistent manner.

[Fee Acquisitions](#) - FWP (or another state or local government agency) will manage properties consistent with program requirements while retaining the conservation values identified at the time of securing the FLP grant. To date, FLP fee title lands are part of FWP’s system of Wildlife Management Areas. These properties are managed by regional staff, typically involving the Area Wildlife Biologist, Maintenance Staff, and the Regional Wildlife Program Manager, along with support from the statewide Wildlife Habitat Bureau Chief. Forest management activities are led by FWP’s Staff Forester. Current FLP guidelines require reporting the status of each FLP fee title property on a five-year basis. FWP will report the status of all FLP fee title properties in a single report every five years, with the first report by December 31, 2020.

Glossary of Terms

- **Compatible Forest and Non-Forest Uses¹** – management or land use activities that sustain or are well-suited to forests and other native habitats and related ecological and social values. This includes use by wildlife, sustainable timber harvest and livestock grazing, watershed maintenance, compatible ecosystem services such as carbon sequestration, low impact public recreation, and land management treatments that help maintain native plant communities and ecological processes and functions. Employing forestry best management practices (DNRC - Forestry Division 2015) is an important part of sustainable forestry.
- **Conservation Easement** - A legal agreement a property owner makes with a governmental entity or a nonprofit organization to restrict activities allowed on the land in order to protect specified conservation values. Conservation easement restrictions are tailored to the particular property and to the interests of the individual landowner. All FLP conservation easements are held in perpetuity (USFS 2017). Under a conservation easement, the landowner retains ownership of the land and is subject to the same property taxes as they were prior to placing a conservation easement on the land.
- **Environmentally Important Forest Areas¹** – forestlands that support one or more priority ecological or social values such as habitat for priority fish and wildlife species, valued timberlands, watersheds supporting municipal water, critical aquatic habitats or other important water-related values, public recreation, cultural and aesthetic values, or carbon sequestration.
- **Fee Title Acquisition** – also known as a “fee simple” purchase, transfers full ownership of the property, including the underlying title, to another party (USFS and William D. Ruckelshaus Institute of Environment and Natural Resources 2011).
- **Forestlands¹** – lands comprising 75% or more tree-dominated habitat types. The term “habitat type” here refers to the natural tendency of a site to support forests with a minimum canopy cover of 10%. Lands that have been converted to non-forest use may be considered as forestlands if the property is covered by an approved Forest Stewardship Plan that intends to re-establish forest cover.
- **Forest Legacy Area** – A geographic area with important forest and environmental values identified in a state Assessment of Need. Acquisition of lands and interests in lands for the FLP can only occur within approved FLAs.
- **Priority Fish and Wildlife Species** - species of conservation concern, game species, or other species that are recognized by the state of Montana for their ecological, economic, or recreational values.
- **Threatened Forest Area** – forestlands that are potentially vulnerable to conversion to non-forest uses which would eliminate or substantially change natural forest functions, character, and values. Threats might include residential developments, golf courses, small grain or forage croplands, various industrial developments, landfills, gravel pits, and surface mining.
- **Working Forest** - Intact, undeveloped forests that are managed sustainably, supporting social and ecological values including forest commodities, livestock production, fish and wildlife habitat, water supply, recreation opportunities, aesthetic qualities, historical and cultural resources, and other values.

¹These terms are required to be defined in each state Assessment of Need

Public Involvement

The public review process for this Assessment of Need was completed as laid out in the Introduction (**Assessment of Need—Purpose and Process**, page 8). The public comment period ran October 1-30, 2020 and was initiated with a statewide news release, email notifications to a standard mailing list for FWP public notices, and subsequent notifications were made to organizations who receive updates specifically on Forest Legacy Program information.

During the 30-day public comment period, FWP received a total of 3 comments. The following is a summary of comments with FWP's responses.

Comment: The AON does not mention climate change as a rationale for identifying forest areas to be considered for funding.

Response: Predictive climate models operate on large regional scales that may be of limited use for integrating into a prioritization scheme. Connectivity habitats are recognized in the Assessment of Need and National Core Criteria as priorities for the program, which would help assure the ability of plants and animals to shift their range as climates change. Also, landscape-scale conservation projects, which generally rank as higher priorities, will help assure intact forestlands are retained as climates change over time. FWP agrees that focusing conservation on forestlands that are likely to be more resilient in the face of a changing climate is a valid consideration. We have added a paragraph in the **Fine Scale Prioritization** section and a corresponding requirement for additional information as part of the **Montana Forest Legacy Program Project Application and Evaluation** template that emphasizes consideration of forest resilience in a changing climate (Page 28 and Appendix A, page 44 - item 14).

Comment: Recommend adding an eligibility allowance for the conservation of small but important or unique/rare plant or animal habitats (such as a fen) or unique connectivity areas that might not meet the 5-acre minimum.

Response: Riparian areas, wetlands, and other ecological values are important considerations in ranking proposed Forest Legacy projects. However, FWP has retained the 5-acre minimum in the Assessment of Need, because even 5 acres would be a very small conservation project for FWP to administer and it would be challenging for such a small project to successfully rank against other proposals in the national competition. Montana's conservation partnership has a number of options for pursuing one or more alternative funding sources (state, federal, or private) that may be better suited for such small conservation projects.

Comment: Recommend adding the threat of invasive species to the definition of Threatened Forest Areas.

Response: The purpose of the definition for Threatened Forest Areas is to clarify what forestlands would meet the minimum eligibility requirements to participate in Montana's Forest Legacy Program. FWP agrees that invasive species are a substantial threat to native fish and wildlife and their habitats, but we do not agree that the occurrence or potential occurrence of invasive species would be a compelling reason for purchasing, or not purchasing, an interest in land for conservation purposes. That said, management plans associated with either fee title or conservation easement projects funded through Forest Legacy emphasize control of noxious weeds

and other management practices that help assure preservation of conservation values.

Comment: Motorized access needs to be managed to avoid impacts to water, wildlife, and landscapes.

Response: The terms and details laid out within conservation easements and management plans for Forest Legacy projects are customized for each unique property and developed to perpetuate a property's conservation values. A variety of potential threats are dealt with in these agreements, including how public recreation is managed to avoid conflicts with conservation values. This is further described in the **Forest Legacy Properties— Ongoing Operation** section (page 35).

Comment: In a headwater state like Montana with the ever-increasing demands for water and ever decreasing inputs due to climate change, all water production areas should be considered high or very high priority.

Response: FWP agrees, and we used the Forests to Faucets model layer as one of three criteria for identifying broad scale priorities. We agree that readers could have interpreted Figure 14 as suggesting some watersheds have low value, which was not FWP's intent. We have added clarifying language in the **Broad Scale Prioritization – Drinking Water** section (page 24) to characterize how this ranking generally involves watersheds that are of high or very high value.

Comment: We need to find ways to expand the Forest Legacy Program and other conservation efforts.

Response: As the Assessment of Need describes (see the **Montana Forest Legacy-Purpose, Goal, and Accomplishments** section, page 9), the Forest Legacy Program has been very successful in Montana and we hope the program will continue to effectively support working forest conservation needs. The Assessment of Need is intended to guide and facilitate future conservation successes. Expansion of Legacy or other programs is beyond the scope of the document.

Comment: Consider the following priorities in order - wildlife habitat, clean water, and public access for recreation.

Response: For broad scale prioritization, the Assessment of Need applied three criteria – Wildlife Habitat, Drinking Water, and Timber Resource Values – to help identify forest areas of highest conservation priority. The fine scale prioritization considers property-specific characteristics, including values like public recreation access. In fact, as the state agency charged with administering Forest Legacy, public recreation is a core value typically sought with habitat conservation projects (see the **Montana Fish, Wildlife and Parks' Wildlife Habitat Conservation Program** section for more information, page 6).

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Appendix A

Montana Forest Legacy Program Application Format



Figure 23. Managed Forest of the Whitefish Watershed Conservation Easement. Photo credit Chris Boyer Kestrelaerial.com

Montana Forest Legacy Program Project Application and Evaluation

FY20XX

The Goal of the Montana Forest Legacy Program is to conserve and enhance land, water, wildlife, and timber resources while providing for the continued working of Montana's forestlands and maintenance of natural and public values. The focus of the program is environmentally important forest areas that meet eligibility criteria and are threatened by conversion to non-forest uses.

Please submit Forest Legacy projects using the following template. Please limit narrative (maps or images may be separate) to a maximum of **12** pages, minimum size 12 font, 1inch margins, 8.5"X11" page. Not following these dimensions may result in reduced scoring. Template follows:

- 1) **TRACT NAME:**
- 2) **APPLICANT NAME, ADDRESS** if different from landowner.
- 3) **LANDOWNER INFORMATION:**

Name: _____

Address: _____

City, State, Zip: _____

- 4) **TRACT LOCATION** (town, township, county)

-
- 5) **CONGRESSIONAL DISTRICT:** At Large

- 6) **STATE:** Montana

- 7) **STATE CONTACT PERSON:**

Forest Legacy Program Coordinator

Montana Fish, Wildlife & Parks

1420 East 6th Avenue

P.O. Box 200701

Helena, MT 59620-0701

- 8) **TOTAL ACRES:** _____

- 9) **ESTIMATED TOTAL VALUE:** \$ _____

- 10) **FEDERAL FOREST LEGACY FUNDS REQUESTED:** \$ _____

- 11) **PROJECT IS FOR:** FEE OR CONSERVATION EASEMENT, please specify

- 12) **ONE-LINE DESCRIPTION OF TRACT:**

- 13) **ELIGIBILITY CRITERIA** (See the following pages for criteria and associated attributes. Please list each criterion and confirm the proposal is eligible)

- 14) **NATIONAL CORE CRITERIA** (See the following pages for criteria and associated attributes. In the order listed, please describe how attributes of the proposal fulfil the ranking criteria. This information will be used for ranking/prioritizing proposals.)

Note: *Within the Core Criteria descriptions, please include information on property characteristics as relates to anticipated resilience against the loss of forest cover and diversity with potential changes in climate (See the Montana Assessment of Need, **Fine Scale Prioritization** for more information).*

- 15) **MAPS** attached including: a) tract(s) with surrounding protected land/public lands identified and b) aerial photo of tract(s) that includes surrounding landscape

MONTANA ELIGIBILITY CRITERIA FOR THE FOREST LEGACY PROGRAM

To be eligible for funding, the proposal must meet all criteria, including A-H listed below. Proposals must list and confirm that each of the criteria is met as listed:

- (A) Forestland at least five acres in size and the landowner must be a willing seller of the parcel, to which he or she must hold a clear and unencumbered title.
- (B) An environmentally important forest area that is threatened by conversion to non-forest uses. Forestland is defined as any land with trees that has at least ten-percent canopy cover or that formerly had such tree cover and is not currently developed for non-forest use. Lands that had formerly been forested, but that have been converted to non-forest use may be considered as forestlands if the property is covered by an approved Forest Stewardship Plan that intends to re-establish forest cover.
- (C) At least 75% forested under this definition to qualify for funding.
- (D) Specific land interest would be held by a willing governmental organization. Montana Fish, Wildlife and Parks administers the Forest Legacy Program in Montana and is responsible for all grants that pass through the department. By policy, FWP must be participant to negotiating terms of conservation easements and must maintain an ownership interest in all land projects to assure grant terms are adhered to.
- (E) The property must be threatened by one of the following:
1. Conversion to non-forest uses,
 2. Further subdivision into smaller parcels, or
 3. Other detrimental impacts to a remnant forest type in Montana.
- (F) The property must possess one or more of the following public values:
1. Social and economic values;
 2. Natural aesthetic or scenic values;
 3. Public education opportunities;
 4. Public recreation opportunities;
 5. Riparian areas;
 6. Fish and wildlife habitat;
 7. Threatened or endangered species;
 8. Cultural and historical resources;
 9. Traditional forest uses; and/or
 10. Other ecological values.
- (G) The property must meet one of the following planning requirements:
1. Have a Forest Stewardship Plan approved by the State Forester of his or her designated representative in accordance with National Forest Stewardship Program Criteria, or
 2. In the case of a corporate forest landowner, have a multi-resource management plan that achieves long-term stewardship of forestland, or
 3. Where land is acquired in fee or timber management rights are transferred in the conservation easement, a management plan will be developed by the organization acquiring those rights.
 4. The Forest Stewardship Plan or Multi-Resource Management Plan must be completed and approved before the land transaction is finalized.
- (H) There must be non-federal matching funds of at least 25% available in the form of cash and/or in-kind contributions. The applicant must have written confirmation from a state or local government willing to hold and monitor the conservation easement or own and manage the land in fee. For Montana Fish, Wildlife and Parks, the authorized signature is the Wildlife Division Administrator. For other governmental agencies, the applicant must determine the appropriate party, which will be subsequently verified by FWP.

[NOTE – The current National Core Criteria would be attached after this page]