

FWP FORESTRY PROGRAM

REPORT TO THE 68TH MONTANA LEGISLATURE JANUARY 2023



K. Ross Toole Fishing Access Site (near Bonner, MT). Photo Credit: J. Parke



EXECUTIVE SUMMARY

This report summarizes forest management work undertaken by Montana Fish, Wildlife & Parks (FWP) for the Calendar Years 2021 and 2022. FWP is required by law to manage forested lands under its jurisdiction; prioritizing management on Fishing Access Sites, Wildlife Management Areas, and State Parks with 50 acres or more of contiguous forest land, as mandated by § 87-1-201(9)(iv), Montana Code Annotated (MCA). Furthermore, the legislature has directed FWP to manage its forested lands based on a forest management plan, as required by § 87-1-622, MCA. The legislature also created a special revenue account (per §87-1-621, MCA), called the forest management account, to deposit money generated from timber sales which shall be used to implement forest management projects.

Summary of On-going/Completed Projects CY21-22

Fishing Access Sites

Project Name	County	CY 21-22 Volume (MBF ¹)	Acres
Wood's Bay FAS	Lake	25.0	10
Swan River FAS Blowdown Salvage	Lake	56.5	10
K. Ross Toole FAS	Missoula	15.0	11
Swan River FAS Fuels Reduction 2022	Lake	0 (non-commercial)	10
Horseshoe Lake FAS Fuels Reduction	Lake	0 (non-commercial)	8

¹MBF = Thousand Board Feet

Wildlife Management Areas

Project Name	County	CY 21-22 Volume (MBF)	Acres
Sun River WMA	Lewis & Clark	0 (non-commercial)	349
Wood's Ranch Blowdown Salvage	Lincoln	35.0	86
Nevada Lake Blowdown Salvage	Powell	14.3	100
Elk Basin Restoration 2	Missoula	2,377.6	1,633
Mt Jumbo PCT and Piling	Missoula	0 (non-commercial)	92
Threemile 2 (on-going)	Ravalli	2,068.9	1,492
Bull River Blowdown Salvage (on-going)	Sanders	36.0	119
Nevada Lake Prescribed Burn (on-going)	Powell	0 (non-commercial)	138
Mt Haggin Habitat Project #4 (on-going)	Deer Lodge/Silver Bow	0 (non-commercial)	1,609
Mt Haggin Aspen & Erosion Control	Deer Lodge	0 (non-commercial)	70

State Parks

Project Name	County	CY 21-22 Volume (MBF)	Acres
Thompson Chain of Lakes (TCL)	Lincoln	299.3	86
TCL – McGregor Lake Blowdown	Flathead	13.3	10
Salmon Lake	Missoula	26.2	24
TCL – Cibid/Cad Fuels Reduction	Lincoln	73.8	50
TCL – PCT & Piling	Lincoln	0 (non-commercial)	45
Lone Pine State Park Rx Fire	Flathead	0 (non-commercial)	7
TOTAL		5,041 MBF	5,959 ac

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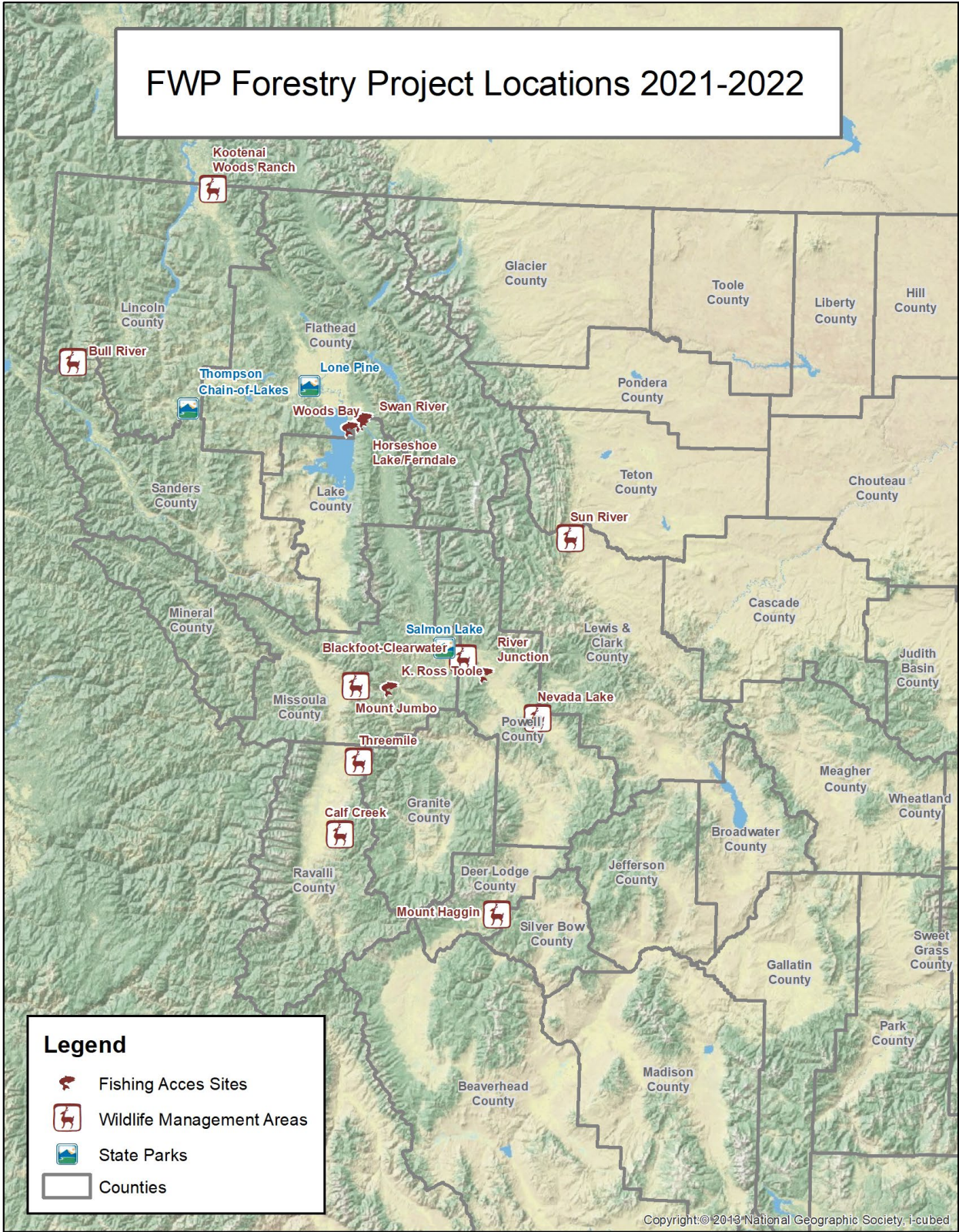


Figure 1 - FWP Forestry Project Locations 2021-2022

OVERVIEW

This report summarizes Montana Fish, Wildlife & Parks' (FWP) forestry work, project activities between January 1, 2021 and December 31, 2022, and the status of Forest Management Account balances for fiscal years (FY) 2021 and 2022. The forestry program was legislatively mandated in 2009 with House Bill 42. The bill required FWP to implement programs to address fire mitigation, pine beetle infestation, and wildlife habitat enhancement with a priority placed on forested Wildlife Management Areas, Fishing Access Sites, and State Parks greater than 50 acres [§ 87-1-201(9)(a)(iv), Montana Code Annotated (MCA)]. The legislature also established the Forest Management Account to implement forestry projects using revenue generated from timber sales (§ 87-1-621, MCA).

In 2011, the Legislature added a provision with House Bill 619 requiring FWP to calculate an annual sustainable yield on its forested lands and adopt forest management plans based on that yield. The annual timber sale requirement for the timber sale program administered by FWP may not exceed the annual sustained yield [§ 87-1-622(3), MCA]. FWP contracted with Mason, Bruce & Girard, Inc., a forestry consulting company, to conduct an independent sustained yield calculation which was completed on December 31, 2013. The legislature also required the Fish and Wildlife Commission and Parks and Recreation Board to "review and redetermine the annual sustainable yield" every 5 years [§ 87-1-622(4), MCA]. The 2018 report found that 158,195 acres were commercially viable for timber production with 58,922 acres (37.2%) available for timber harvest. Of the acres available for harvest, 519 are on Fishing Access Sites (FAS), 6,121 are on State Parks (SP), and 52,282 are on Wildlife Management Areas. The report calculated that over the next 50 years, an annual sustained yield of 4.2 million board feet (MMBF) could be harvested on FWP lands.

In 2017, the 65th Legislature authorized a permanent base forester position to continue development of the forestry program, to develop and implement forest management plans and projects, and to keep forestry projects on schedule.

The State Parks and Recreation Board and Fish and Wildlife Commission are required by law to adopt forest management plans for lands under their jurisdiction [§ 87-1-622(1), MCA]. FWP completed a statewide programmatic forest management plan in 2018. The plan was adopted by the State Parks and Recreation Board in February 2018 and the Fish and Wildlife Commission in April 2018. This is a strategic plan that provides FWP with a framework for developing property-specific forest management plans and guidelines for implementing forest management projects. The plan defines a forest management approach for evaluating current conditions, developing desired future conditions, determining actions that can be implemented to achieve desired future conditions, and monitoring that will be done to track progress towards achieving desired future conditions.

Based on the forest management plan and site-specific objectives, the FWP forester works with the site manager (FAS manager, Park manager, area wildlife biologist) to design a project. The project approval process involves going through Montana Environmental Policy Act (§75-1-101 *et seq.*, MCA) (MEPA)

requirements and, if the project involves sale of commercial timber, going through the Fish and Wildlife Commission or State Parks and Recreation Board approval process. Once the project is through MEPA and the Commission or Board (if required), then a draft contract is prepared specifying project requirements and deliverables. FWP bids out these projects through its procurement office following state contracting laws (§18-4-101 *et seq.*, MCA).

FWP primarily uses two contract formats, a timber sale contract and a service contract. A timber sale contract is used when the value of commercial timber exceeds the cost of the service work performed. The “purchaser” pays FWP for the timber based on stumpage (e.g., \$/ton). Revenue generated from timber sales is deposited in FWP’s Forest Management Account as required by law (§ 87-1-621, MCA). Service contracts are used for work in which FWP pays a contractor to perform the services necessary to complete the project. These projects are typically funded using the FWP Forest Management Account and grants from various sources. FWP also completes some work through interagency cooperative agreements with other state and federal agencies such as the U.S. Forest Service (USFS) and Montana Department of Natural Resources and Conservation (DNRC). The FWP forester typically conducts field inspections and performs contract administration duties for the duration of the contract.

SUMMARY OF ACCOMPLISHMENTS, 2009-2022

Since the establishment of the FWP forestry program in 2009, dozens of forest management projects have been completed (see Table 1 below). These projects have treated 11,241 acres and generated 143,874 tons of forest products (approximately 4,796 log truck loads).

Table 1 - Forestry Projects Summary, 2009-2022

Project	Region	Acres	Harvest Volume (Tons)	Completion Year	Description
Thompson Chain of Lakes SP	1	748	8,056	2010	Fuels reduction, hazard tree mitigation and habitat improvement.
Flathead Lake SP – Wayfarers	1	15	0	2010	Dwarf mistletoe mitigation.
Flathead Lake SP – Wild Horse Island	1	215	0	2011	Pine beetle suppression and ponderosa pine, grassland habitat restoration.
Blackfoot-Clearwater WMA (Ovando Mountain)	2	365	10,028	2012	Treatments included improve forage, restore desirable forest structure, aspen enhancement, lodgepole pine salvage, and fuels reduction.
River Junction FAS	2	5	175	2012	Mountain pine beetle salvage of ponderosa pine.
Marshall Creek WMA Blowdown Salvage	2	8	406	2013	Blowdown salvage, cleared public roadway.

Project	Region	Acres	Harvest Volume (Tons)	Completion Year	Description
Stuart Mill Bay FAS	2	80	6,432	2014	Lodgepole pine salvage and thinning, slash disposal, tree planting, and fence removal.
Mount Haggin WMA #1	3	400	12,163	2014	Lodgepole pine salvage, aspen enhancement.
Mount Haggin WMA #3/Fleecer WMA	3	289	0	2015	Elk and mule deer winter range enhancement, conifer removal to promote grass, sagebrush, bitterbrush, and aspen.
Mount Haggin WMA #2	3	732	19,529	2016	Elk and mule deer winter range enhancement, salvage, fuels reduction.
West Kootenai WMA	1	251	6,988	2016	White-tailed deer winter range enhancement, fuels reduction.
Threemile WMA	2	342	4,864	2016	Elk and deer winter range enhancement, aspen restoration, fuels reduction, pine beetle risk reduction.
Lone Pine SP	1	20	0	2016	Reduce bark beetle risk, improve tree vigor, remove mistletoe infected trees.
Milltown SP	2	17	0	2016	Reduce bark beetle risk, improve public safety, aesthetics, and wildlife habitat.
Flathead Lake SP/Finley Point	1	14	234	2017	Campsite and road development.
Libby Field Station	1	1	39	2018	Parking area expansion.
Mount Silcox WMA Forest Habitat Project	1	88	2,471	2018	Elk, bighorn sheep, and mule deer winter range; fuels reduction; bark beetle risk reduction; habitat diversity.
West Kootenai WMA Fire Salvage	1	506	16,378	2018	Elk, mule deer, and white-tailed deer winter range; natural regeneration; salvage.
Blackfoot-Clearwater WMA Forest Restoration Project	2	354	4,837	2018	Elk and white-tailed deer winter and spring range, aspen enhancement, restore historic forest structure, fuels reduction, and pine beetle risk reduction.
Elk Basin Restoration 1 (Blackfoot-Clearwater WMA)	2	420	9,402	2019	Elk winter range, aspen enhancement, restore historic forest structure, fuels reduction, and pine beetle risk reduction.

Project	Region	Acres	Harvest Volume (Tons)	Completion Year	Description
Nevada Lake WMA Forest Habitat Restoration	2	444	5,455	2019	Elk and mule deer winter range, aspen enhancement, restore historic forest structure, fuels reduction, and pine beetle risk reduction.
Libby Field Station	1	2	0	2019	Fuels reduction and hazard tree removal.
Placid Lake State Park	2	15	98	2019	Hazard tree removal.
Johnsrud Park FAS	2	6	52	2019	Fuels reduction, forest health, and hazard tree removal.
Mt. Haggin WMA #4/Phase 1	3	845	0	2020	Big game winter and transitional range and aspen enhancement.
Robb-Ledford/Blacktail WMA Conifer Removal	3	1,550	0	2020	Year-round big-game habitat, ruffed and sage-grouse habitat.
Blackleaf WMA Conifer Removal #1	4	30	0	2020	Elk and mule deer winter and transitional range, aspen enhancement.
Wood's Ranch WMA Blowdown Salvage	1	86	1,592	2021	Elk and deer winter range, fuels reduction, bark beetle risk reduction.
Wood's Bay FAS	1	10	225	2021	Bark beetle risk reduction.
Swan River FAS Blowdown Salvage	1	10	620	2021	Blowdown and hazard tree removal.
Thompson Chain of Lakes Hazard Tree	1	96	2,742	2021	Hazard tree, bark beetle risk reduction, and blowdown removal (McGregor Lake)
Nevada Lake WMA Blowdown Salvage	2	100	93	2021	Blowdown removal (associated with fireline construction).
Mt Haggin WMA #4/Phase 2	3	208	0	2021	Big game summer range habitat improvement.
Sun River WMA Habitat Project #1	4	349	0	2021	Elk winter range.
Swan River FAS Fuels Reduction 2022	1	10	0	2022	Fuels mitigation.

Project	Region	Acres	Harvest Volume (Tons)	Completion Year	Description
Horseshoe Lake FAS Fuels Reduction	1	8	0	2022	Fuels mitigation.
Lone Pine State Park Prescribed Fire	1	7	0	2022	Fuels mitigation.
Thompson Chain of Lakes – Cibid/Cad Lake Fuels Reduction	1	50	663	2022	Fuels mitigation and bark beetle risk reduction.
Thompson Chain of Lakes – PCT & Piling	1	45	0	2022	Bark beetle risk reduction.
K. Ross Toole FAS	2	11	198	2022	Fuels mitigation and bark beetle risk reduction.
Elk Basin Restoration 2 (Blackfoot-Clearwater WMA)	2	1,633	26,012	2022	Big game winter range habitat improvement, fuels mitigation, and bark beetle risk reduction.
Mt Jumbo WMA PCT & Piling	2	92	0	2022	Fuels mitigation.
Salmon Lake State Park	2	24	260	2022	Bark beetle risk reduction.
Mt Haggin # 4/Phase 3	3	131	0	2022	Big game summer range habitat improvement.
Nevada Lake WMA Prescribed Burn	2	138	0	On-going	Big game winter range habitat improvement and fuels mitigation.
Bull River WMA Blowdown Salvage	1	119	664	On-going	Blowdown removal and fuels mitigation.
Threemile 2	2	1,492	2,069	On-going	Elk and deer winter range habitat improvement, fuels mitigation, bark beetle risk reduction.
Mt Haggin WMA Aspen & Erosion Control	3	70	0	On-going	Aspen enhancement and gully erosion control.

FOREST MANAGEMENT ACCOUNT

The following tables summarize Forest Management Account activities within each FWP division for fiscal years (FY) 2021-2022.

FISHING ACCESS SITES

Table 2 – Fisheries Division’s Forest Management Account Balance, FY 21-22

STARTING BALANCE (JULY 1, 2020)		\$71,702.00	
FWP SITE/TRANSACTION	EXPENSE	INCOME	
River Junction FAS	\$213.67		
Swan River FAS	\$477.68	\$5,152.35	
Interest		\$11,522.16	
ENDING BALANCE (JUNE 30, 2022)		\$77,807.80	

WILDLIFE MANAGEMENT AREAS

Table 3 – Wildlife Division’s Forest Management Account Balance, FY 21-22

STARTING BALANCE (JULY 1, 2020)		\$670,112.54	
FWP SITE/TRANSACTION	EXPENSE	INCOME	
Kootenai Falls WMA (BPA Hazard Trees)		\$250.00	
Wood’s Ranch WMA		\$43,725.22	
Blackfoot-Clearwater WMA	\$12,422.76		
Nevada Lake WMA	\$40,272.08		
Marshall WMA	\$1,369.99		
Threemile WMA	\$62,500.00	\$9,452.72	
Mt Haggin WMA	\$8,318.38		
Sun River WMA	\$6,147.22		
Overhead (indirect costs)	\$30,621.23		
Base (salary, operating costs)	\$164,744.68		
Interest		\$14,977.22	
ENDING BALANCE (JUNE 30, 2022)		\$412,121.36	

STATE PARKS

Table 4 – Parks Division’s Forest Management Account Balance, FY 21-22

STARTING BALANCE (JULY 1, 2020)		\$7,973.38	
FWP SITE/TRANSACTION	EXPENSE	INCOME	
Thompson Chain of Lakes State Park	\$5,365.12		
Overhead	\$617.74		
Interest		\$66.83	
ENDING BALANCE (JUNE 30, 2022)		\$2,057.35	

PROJECTS

FISHING ACCESS SITES

For calendar years 2021 through 2022, five forest management projects were completed and three are under contract.

Wood's Bay FAS Forestry Project



Figure 2 – LTL Enterprises, LLC operating near the boat launch on Wood's Bay FAS, January 2021. Image: J. Parke

2021. The project generated 162 tons of sawlogs and 62 tons of non-sawlogs (9 total log-truck loads). Logs were sold to Weyerhaeuser (Evergreen) and Pyramid Mountain Lumber (Seeley Lake), which helped offset the cost of the project. The project cost \$14,100 and was paid for using FWP's FAS maintenance account (\$3,525) and a USDA-USFS Forest Health Western Bark Beetle Grant (\$10,575) administered by the Montana DNRC.

In October 2019, the Fish and Wildlife Commission approved FWP's proposal to implement forest treatments on approximately 10 acres of the Wood's Bay FAS near Bigfork, MT. The objectives of the treatment are to mitigate hazard trees in the developed recreation site, reduce hazardous fuels in the wildland-urban interface (WUI), and increase resiliency to insects and diseases.

FWP awarded a contract to LTL Enterprises, LLC (Kalispell) and the project commenced in January

Swan River FAS Blowdown Salvage

In January 2021, a severe wind event impacted the Swan River FAS near Ferndale. A contractor, Long Shot Logging (Ferndale), was working on an adjacent DNRC trust lands project and was able to move in and remove the blowdown timber in March 2021.

The timber sale generated 367 tons of sawlogs and 252 tons of non-sawlogs. Logs were sold to Pyramid Mountain Lumber and Willis Enterprises (Bonner). The project generated \$7,965 for the Fisheries Division's Forest Management Account.

K. Ross Toole FAS Forestry Project

In October 2019, the Fish and Wildlife Commission approved FWP's proposal to implement forest treatments on approximately 11 acres of the K. Ross Toole FAS near Bonner, MT. The objectives of the treatment are to mitigate hazard trees in the recreation site, reduce hazardous fuels in the wildland-urban interface (WUI), increase resiliency to insects and diseases, and maintain/enhance aesthetics.



Figure 3 - Feller-buncher operating on the K. Ross Toole FAS, February 2022. Image: J. Parke

FWP contracted King Mountain Forestry, LLC (Deer Lodge) to perform the thinning project. The project generated 97 tons of sawlogs and 101 tons of non-sawlogs (8 total log-truck loads). Logs were sold to Pyramid Mountain Lumber and Willis Enterprises, which helped offset the cost of the project. The project cost \$18,800 and was paid for using the FAS Maintenance Account (\$4,950) and a USDA-USFS Forest Health Western Bark Beetle Grant (\$13,850) administered by the Montana DNRC.

Swan River FAS Fuels Reduction 2022

In February 2022, FWP entered into an agreement with Swan Valley Connections (Condon) to perform fuels reduction treatment on the Swan River FAS, with the objective of treating 10 acres per year for the next 3 years. The objective of the project is primarily hazardous fuels mitigation in the wildland-urban interface.

Swan Valley Connections subcontracted CRC Land Improvement (Bigfork) to perform mastication in the Fall of 2022. The contractor completed the 10-acre project in November 2022. The project cost \$12,850 and was paid for using the Fisheries Division's Forest Management Account (\$5,850) and a USDA-USFS Western States Wildland Urban Interface Grant (\$7,000) awarded to Swan Valley Connections through Montana DNRC.

Horseshoe Lake FAS Fuels Reduction

In February 2022, FWP entered into an agreement with Swan Valley Connections to perform fuels reduction treatment on the Horseshoe Lake FAS, with the objective of treating 8 acres, primarily for hazardous fuels mitigation in the wildland-urban interface.

Swan Valley Connections subcontracted CRC Land Improvement to perform mastication in the Fall of 2022. The contractor completed the 7-acre project in November 2022. One acre was

removed from the project because it was too steep for the contractor to operate on. The project cost \$13,600 and was paid for using the Fisheries Division's Forest Management Account (\$8,700) and a USDA-USFS Hazardous Fuels Reduction Grant (\$4,900) awarded to Swan Valley Connections through Montana DNRC.



Figure 4 - Horseshoe Lake FAS prior to treatment, October 2022. Image: M. Mayernik, Swan Valley Connections.



Figure 5 - Horseshoe Lake FAS after mastication treatment, November 2022. Image: M. Mayernik, Swan Valley Connections.

Swan River FAS Fuels Reduction 2023 and 2024

FWP's agreement with Swan Valley Connections is scheduled to continue until December 2024. Under this agreement, Swan Valley Connections plans to treat 10 acres per year for the next two years on the Swan River FAS with the primary objective of reducing fuels in the WUI.

The remaining treatments are expected to cost \$26,200, or \$13,100 per project. The treatments are non-commercial and will utilize either mastication, lop and scatter, or pile and burn. FWP will split the costs of the projects with Swan Valley Connections, using the Fisheries Division's Forest Management Account to pay the FWP share, and Swan Valley Connections will seek out grant programs to pay the remainder.

River Junction FAS Forestry Project

In October 2019, the Fish and Wildlife Commission approved FWP's proposal to implement forest treatments on approximately 66 acres of the River Junction FAS near Ovando, MT. The objectives of the treatment are to mitigate hazard trees within the developed recreation site, reduce susceptibility to crown fire, increase resiliency to insects and diseases, and maintain/enhance aesthetics.

FWP awarded a contract to Bull Creek Forestry, Inc (Seeley Lake) in April 2022. The project size was reduced to 36 acres due to inoperable slopes, wetlands, and access issues. The treatment is projected to generate approximately 600 tons (equating to approximately 20 total log-truck loads) of forest products for local forest products manufacturing facilities. The estimated cost of the project is \$37,000, which will be covered out of the Fisheries Division's Forest Management Account and a USDA-USFS Western States Wildland Urban Interface grant administered by the Montana DNRC.

WILDLIFE MANAGEMENT AREAS

For the calendar years 2021 through 2022, 7 forest management projects have been completed, 4 projects are on-going/under contract, and 2 projects are in MEPA process/contract development. Projects include both commercial timber harvest and non-commercial treatments such as hand-thinning and prescribed fire.

Sun River WMA Habitat Project #1

The Sun River WMA is critical elk winter range and up to 95 percent of the Sun River elk herd (as many as 2,700) can be found on the WMA during the peak of winter. In October 2016, FWP and the Helena-Lewis and Clark National Forest entered into an interagency cooperative agreement under the Wyden Amendment authority which allowed the USFS to conduct work on state lands. Under this agreement, the USFS planned to thin and burn 465 acres on the Sun River WMA approximately 12 miles west of Augusta, MT. Thinning and prescribed burning focused on the removal of Douglas-fir with the objectives of promoting native grass and forb production; improving aspen stands; and improving forest health and resilience to insects, disease, and wildfire. The USFS contributed labor, equipment, and supplies and materials. The agreement expired in December 2021.

Under this agreement, FWP was to reimburse the USFS up to \$65,530 using the Wildlife Division's Forest Management Account and grant funds. The USFS completed 349 acres of the 465 acres planned for treatment. The treatments were non-commercial, utilizing a combination of lop and scatter, pile and burn, girdling, and prescribed fire. The total cost for the project was \$29,793. FWP used the Wildlife Division's Forest Management Account (\$19,434) and grants from the Rocky Mountain Elk Foundation (\$10,359) to pay for the project. FWP and the USFS entered into a new cooperative agreement in April 2022 to continue the project and treat the remaining acres.

Wood's Ranch WMA Blowdown Salvage Timber Sale

In April 2020, the Fish and Wildlife Commission approved FWP's proposal to salvage blowdown timber on the Wood's Ranch WMA north of Eureka, MT. A windstorm on November 27, 2019

caused significant blowdown on approximately 86 acres of the WMA, which had the potential to negatively affect deer and elk movement and foraging, recreational use, bark beetle activity, and potential fire intensity and severity in the event of a wildfire.



Figure 6 - Loaded log truck getting ready to head to Weyerhaeuser, January 2021. Image: J. Parke

In August 2020, FWP awarded a contract to Doble Enterprises, Inc (Fortine). The project was completed in February 2021. The timber sale generated 1,512 tons of sawlogs and 15 tons of non-sawlogs (65 total log-truck loads). The logs were sold to Weyerhaeuser. The timber sale generated \$43,725 for the Wildlife Division's Forest Management Account. FWP is monitoring the area for bark beetle outbreaks resulting from the blowdown event for the next several years. Following field monitoring in

the summer of 2022, FWP determined there was a need to remove bark-beetle infested trees and is planning to conduct a tree removal project in the winter of 2022-23.

Nevada Lake WMA Blowdown Salvage

A severe wind event in January 2021 resulted in a minor amount of blowdown on the Nevada Lake WMA within the area previously thinned in 2019. FWP is conducting prescribed burns in the thinned units and hired a contractor, Bull Creek Forestry, Inc. to construct firelines in preparation for the burn. FWP elected to have the contractor remove the blown-down trees to reduce the potential for bark beetle infestation and reduce the fuel load created from the blown-down trees. Salvaging the blown-down trees generated 93 tons (3 total log-truck loads) of sawlogs. The logs were sold to Big Sky Sawmill (Vaughn) and the value was credited to FWP on the bill for the fireline construction work. The project cost \$4,500 and was paid for with a grant from the Blackfoot Challenge.

Elk Basin Restoration 2

The Elk Basin Restoration 2 project is the second phase of the Blackfoot-Clearwater WMA (BCWMA) Conifer Expansion and Native Grassland Restoration Project that was approved by the Fish and Wildlife Commission in April 2017. The objectives of the project are to maintain and restore rough fescue/Idaho fescue grassland, ponderosa pine savannah, aspen habitats, and mixed-



Figure 7 - Elk and deer foraging in active timber harvest operations, February 2021. Image: J. Parke

conifer forest on elk winter range. The project utilized a combination of commercial timber harvest and non-commercial treatments such as lop and scatter, pile and burn, and prescribed burning.

The Elk Basin Restoration 2 contract, totaling 1,633 acres, was awarded to Bull Creek Forestry, Inc. in October 2020. Work commenced in November 2020 and was completed in November 2022. The project involved a combination of commercial timber harvest, understory thinning, road maintenance, and slash disposal. The project generated 19,384 tons of sawlogs and 11,860 tons of non-sawlog material (908 total log-truck loads). Logs were delivered to Pyramid Mountain Lumber, Big Sky Sawmill, Willis Enterprises, and Weyerhaeuser and the value from the timber helped offset the overall cost of the project. The total cost of the project was \$176,805 and was paid for with the Wildlife Division's Forest Management Account (\$19,201), a Rocky Mountain Elk Foundation Grant (\$25,000), and a USDA-USFS Western States Wildland Urban Interface Grant (\$132,604) administered by Montana DNRC.

Mount Jumbo WMA Forest Habitat Restoration Project



Figure 8 – Mount Jumbo WMA post-thinning and piling. Piles will be burned in the fall of 2023. July 2022. Image: J. Parke

City of Missoula Conservation Lands and the adjacent Marshall Woods Timber Sale on National Forest System Lands administered by the USFS-Lolo National Forest. The project involves a combination of commercial timber harvest and non-commercial forest treatments such as cut, pile and burn, and broadcast burning.

In October 2020, The Fish and Wildlife Commission provided final approval of FWP's proposal to implement 100 acres of forest treatments on the Mount Jumbo WMA north of Missoula. The objectives of the project are to increase forage potential on elk and deer winter range, promote stand conditions that would allow fire to burn at a low severity appropriate for the habitat type, and reduce fuel loading in the Wildland-Urban Interface (WUI). FWP is coordinating the project with the

In June 2021, FWP awarded a contract to Summitt Forests, Inc. (Ashland, OR) to implement the understory thinning phase of the project on 92 acres (8 acres were removed to retain wildlife security cover). The contractor completed the hand-cutting and piling work in July 2022. The cost for the understory thinning and piling treatment was \$38,597. Funding was provided by the Wildlife Division's Forest Management Account (\$4,649), a Rocky Mountain Elk Foundation

Grant (\$5,000), and from a USDA-USFS Western States Wildland Urban Interface Grant (\$28,948) administered by the Montana DNRC. FWP is still seeking a contractor for the commercial thinning component of the project. A commercial thinning contract was put out for bid in January 2022 but no bids were received. The commercial thinning portion of the project involves logging 27 acres that would remove approximately 8 log-truck loads of timber. FWP entered into a cooperative agreement with the USFS in May 2021 to use prescribed fire to promote forage and further reduce fuels. Prescribed burning may begin in Spring 2024.

Threemile 2 Timber Sale



Figure 9 – Stroke-boom delimeter processing encroachment trees from grass/shrublands to improve winter range. January 2022. Image: J. Parke

DNRC and USFS-Bitterroot National Forest to treat an additional 320 acres of adjacent National Forest System Lands (NFSL) through the Good Neighbor Authority (GNA) program.

The Fish and Wildlife Commission provided final approval of FWP's proposal to implement the 1,492-acre Threemile 2 Timber Sale project in April 2019. The objectives of the project are to improve native grass and woody browse forage production for elk and mule deer, restore a more desirable species composition and successional stage, reduce susceptibility of treated stands to bark beetle epidemics and uncharacteristic stand-replacement fire, and improve aspen habitats. FWP coordinated the project with

In December 2019, Pyramid Mountain Lumber purchased the Threemile 2 Timber Sale. Pyramid Mountain Lumber subcontracted Hall Wood Processing (Potomac) to complete the road work and logging. Approximately 24 miles of road work were completed in 2020 to facilitate access to the project and repair chronic erosion and sediment delivery issues. FWP paid Pyramid Mountain Lumber \$125,000 for the cost of the road work using the Wildlife Division's Forest Management Account (\$62,500) and Habitat Montana funds (\$62,500). FWP also awarded a service contract to Hall Wood Processing, Inc in November 2019 to remove non-commercial conifers from a 227-acre grassland, which cost \$25,000, and was paid for with grant from the Rocky Mountain Elk Foundation. Logging started in December 2021 and is on-going at the time of writing this report. An additional logging contractor, Mark Waldbilig Contracting (Stevensville), was brought in by Pyramid in the summer of 2022. To-date, 778 acres have been treated and the project has generated 14,951 tons of sawlogs and 5,636 tons of non-sawlogs

(767 total log-truck loads). The sawlogs were delivered to Pyramid Mountain Lumber and the non-sawlogs were sold to Willis Enterprises. The project has generated \$22,980 for the Wildlife Division's Forest Management Account to-date.

Mt. Haggin WMA Habitat Project #4

The Mt. Haggin WMA Habitat Project #4 was approved by the Fish and Wildlife Commission in April 2018. The objectives of the project are to prevent loss of sagebrush, grassland, aspen, and riparian habitat by removing competing conifers and increase year-round forage and browse available to elk, mule deer, moose, pronghorn, and ruffed grouse by removing conifers that compete with forb, grass, and deciduous shrub and tree species.

FWP contracted with Northwest Management Inc. (Moscow, ID) for the first phase of the project totaling 1,182 acres. The contractor hired crews to conduct hand-cutting, girdling, and slash piling in the summer/fall of 2019. Slash pile burning was completed in December 2021. Phase 1 costs totaled \$263,554, with funding provided by the Wildlife Division's Forest Management Account (\$21,524) and grants from MDF (\$15,000), RMEF (\$30,125), and the Montana Natural Resource Damage Program (\$196,905).

Phase 2 treated 208 acres and FWP contracted Windswept Wildfire, LLC (Montana City) to perform the hand-cutting, girdling, and slash piling work. The cost for Phase 2 totaled \$54,680 and funding was provided by a grant from RMEF (\$35,000) and the Habitat Montana Account (\$19,680). FWP, with assistance from DNRC and volunteers, burned the slash piles in November 2022.

Phase 3 treated 131 acres and Worman Forest Management, LLC (Hayden, ID) was contracted to perform the hand-cutting, girdling, and slash piling work. The contractor completed the project in August 2022. The project cost \$30,597 and was paid for with a National Fish & Wildlife Foundation grant subawarded by The Nature Conservancy (\$16,859) and a RMEF grant (\$13,738). FWP will perform slash pile burning in Fall 2023.



Figure 10 - Mt Haggin WMA Habitat Project #4/Phase 3. Pre- and post-treatment. August 2022. Image: J. Parke

Phase 4 is under contract with 5 Star Forestry (Kooskia, ID) and will treat 434 acres with hand-cutting, girdling, and slash piling. Approximately 80 acres were completed in late-fall 2022. The remaining acres will be treated in the summer of 2023. Phase 5, the final phase of this project, which will treat 612 acres and will be bid out in the spring of 2023.

Bull River WMA Blowdown Salvage



Figure 11 - A wind event in January 2021 damaged approx. 120 acres on the Bull River WMA. Image: J. Parke

In January 2021, a severe wind event impacted the Bull River WMA resulting in blowdown timber across approximately 120 acres of the 1,576-acre WMA. The Fish and Wildlife Commission approved FWP’s proposal to remove the blown down trees in October 2021. The project objectives are to reduce susceptibility to bark beetle infestations, mitigate fuel hazard created from blown down trees, promote aspen growth and regeneration, and improve elk and deer movement and access to forage within the affected stands.

In May 2022, FWP awarded a timber sale contract to Clark Fork Posts, LLC (Plains) to remove the blown down timber. Clark Fork Posts subcontracted High Country Cutting (Troy) to perform the logging and work started in July 2022. The contractor completed approximately half of the project in the summer and will return in winter 2022-23 to finish the project. To-date the timber sale has generated 234 tons of sawlogs and 430 tons of post and pole logs (29 total log-truck loads). Logs were delivered to Idaho Forest Group (Moyie Springs, ID) and Clark Fork Posts. \$1,561 in revenue has been deposited in the Wildlife Division’s Forest Management Account. The project is estimated to produce approximately 1,300 tons of forest products once completed.

Nevada Lake WMA Prescribed Burn

FWP, with assistance from The Nature Conservancy and Montana DNRC, began implementing prescribed burns in 2021 in previously thinned stands. The Nature Conservancy assisted with writing the burn plans. Montana DNRC, and other agency partners, are providing the firefighting resources to implement the burns and perform mop-up and patrol. This is one of the first projects where FWP is utilizing broadcast burning as a forest treatment on WMAs. The primary objectives of the broadcast burns are to further reduce fuels and promote aspen and other forage species.



Figure 12 - Firing operations on Nevada Lake WMA, spring 2022. Image: M. Schaedel (TNC)

FWP plans to burn 244 acres of stands previously treated with mechanical treatments. FWP contracted Brushbull Forestry (Florence) and Bull Creek Forestry (Seeley Lake) to construct firelines. To-date, 138 acres of broadcast burning has been implemented at a cost of approximately \$56,817. Expenses have been paid for with grants from Blackfoot Challenge (Ovando), RMEF, and the Wildlife Division's Forest Management Account.

Mt Haggin WMA Aspen and Erosion Control

FWP, in partnership with the Big Hole Watershed Committee (Divide) and the Montana Department of Justice, Natural Resource Damage Program (NRDP), are working to implement an aspen enhancement and erosion control project on the Mt Haggin Injured Area, which is part of the Upper Clark Fork Superfund site. The project will remove conifers from aspen stands to promote growth and regeneration of aspen and utilize the cut material to plug severely eroded gullies in order to reduce sediment transport.

FWP contracted with Worman Forest Management, LLC to perform the hand-cutting and erosion control work. The project is 70.2 acres and will treat approximately 27,000 linear-feet of eroded gullies. The project will cost \$41,067 and will be paid for with NRDP funds through an MOU between FWP and Montana Department of Justice. The contractor completed 30.4 acres in October 2022 and will complete the rest of the project in the summer of 2023.



Figure 13 - Cut material from the adjacent aspen stand was placed in this eroded gully to reduce sediment transport into Oregon Creek, October 2022. Image: J. Parke

Calf Creek WMA Habitat Restoration Project



Figure 14 - Over the past 60 years conifers have gradually expanded into grass/shrublands on the Calf Creek WMA, reducing forage availability on elk and deer winter range. Image: J. Parke

and is coordinating the project implementation with the Bitterroot National Forest, who is also working to implement the Gold-Butterfly project adjacent to the Calf Creek WMA. The project could start in the summer of 2023, if funding can be secured.

Doney Lake Forest Habitat Improvement Project

In October 2021, the Fish and Wildlife Commission endorsed FWP's proposal to proceed with development and analysis of this project located on the Blackfoot-Clearwater WMA near Ovando. FWP plans to release the Draft EA for public comment in January 2023. The objectives of the project are to improve forage production for big game, promote a stand structure that would allow fire to burn at a low-severity appropriate for the habitat type, reduce susceptibility to bark beetle infestation and armillaria root disease, and promote aspen growth and regeneration. The project would treat 1,500 acres with a combination of commercial and non-commercial

In August 2021, the Fish and Wildlife Commission approved FWP's proposal to treat 1,116 acres of the Calf Creek WMA near Hamilton. The objectives of the project are to improve elk and deer winter forage, restore grasslands through conifer removal, promote stand conditions that would allow fire to burn at a low severity appropriate for the habitat type, and promote aspen growth and regeneration. The project involves a combination of commercial timber harvest, noncommercial treatments, and prescribed burning. The estimated cost of all treatments is \$300,000. FWP is pursuing grant funding opportunities for this project



Figure 15 - The Doney project would treat young stands previously owned by Plum Creek Timber Company. Image: M. Schaedel (TNC)

thinning treatments. If given final approval by the Fish and Wildlife Commission, the project could start as early as the summer of 2023. The project is estimated to generate 2.2 million board feet (MMBF) of sawlogs and 5,000 tons of non-sawlog material, create/maintain 20 direct forestry jobs, and cost \$500,000 to implement. FWP would seek grant funding to pay for the project.

STATE PARKS

For calendar years 2021 through 2022, 5 forest management projects were completed and one is in planning stages.

Thompson Chain of Lakes Forestry Project



Figure 16 - Logan State Park, a heavily developed campground, during January 2021 operations. Image: J. Parke

In December 2019, FWP published a Decision Notice to proceed with implementation of the Thompson Chain of Lakes Forest Management Project near Happy's Inn. The project would treat roughly 460 acres of forested lands in and around McGregor and Little McGregor Lakes, Lower Thompson Lake, Middle Thompson Lake, Upper Thompson Lake, Horseshoe Lake complex, and Loon and Little Loon Lakes. The objectives of the project are to remove hazard trees within the developed recreation site,

reduce hazardous fuels in the WUI, increase resiliency to insects and diseases, and maintain/enhance aesthetics. The project would also involve planting ponderosa pine and western larch to replace trees removed around campsites.

The first phase of the project was initiated in December 2020, when FWP awarded a contract to Thompson Contracting (Libby) to treat 137 acres with commercial timber harvest, non-commercial treatments, and slash disposal. The project generated 2,031 tons of sawlog material and 710 tons of non-sawlogs (97 total log-truck loads). Timber was sold to Weyerhaeuser and other small mills in Libby to help offset the cost of the project. The project cost \$20,865 and was paid for with a USDA-USFS Forest Health Western Bark Beetle Grant administered by the Montana DNRC (\$15,649) and FWP's Parks Division's Forest Management Account (\$5,216). The project was completed in November 2021.

The second phase of the project, Cibid/Cad Lake Fuels Reduction, involved fuels mitigation treatments west of Happy's Inn to reduce hazardous fuels in the wildland-urban interface. FWP awarded a contract to Mountain Logging (Kalispell) to treat 50 acres with a combination of commercial thinning and non-commercial treatments (mastication). The project generated 480 tons of sawlogs and 183 tons of non-sawlogs (26 total log-truck loads), which were sold to Weyerhaeuser to help offset the cost of the project. The project cost \$32,776 and was paid for using Kootenai Forests to Rivers Initiative grant provided by Lincoln County (\$29,610), Parks maintenance funds (\$2,000), and the Parks Division's Forest Management Account (\$1,166). Montana DNRC assisted with contract administration, pruning, and slash pile burning. The project was completed in November 2022.



Figure 17 - The Cibid/Cad Lake fuels reduction project used a grant from Lincoln County requiring a 10 to 15 spacing between crowns to reduce the risk of crown fire. August 2022.

Image: J. Parke

The third phase of the project involved non-commercial treatments (hand-thinning and piling) on 45 acres. FWP awarded a contract to Worman Forest Management, LLC to perform the work. The project was completed in December 2022. FWP will burn the slash piles in Fall 2023. The project cost \$20,855 and was paid for using a USDA-USFS Forest Health Western Bark Beetle Grant administered by the Montana DNRC (\$16,651), Parks maintenance account (\$2,744), and FWP's Parks Division's Forest Management Account (\$1,460).

Salmon Lake State Park Forestry Project

In October 2020, FWP published a Decision Notice to proceed with implementation of the 30-acre Salmon Lake State Park Forest Health Improvement Project near Seeley Lake. The objectives of the project are to remove hazard trees within the developed recreation site, reduce susceptibility to crown fire, increase resiliency to insects and diseases, and maintain/enhance aesthetics.

FWP awarded a contract to King Mountain Forestry (Deer Lodge) in June 2021 to implement timber harvest and slash disposal on 24 acres. Six acres were removed due to streamside management zones and inoperable slopes. The project generated 188 tons of sawlogs and 72 tons of non-sawlog material (11 total log-truck loads), which were sold to Pyramid and the logger to help reduce the cost of the project. The estimated project cost a total of \$19,950,

which was paid for using a USDA-USFS Forest Health Western Bark Beetle Grant administered by the Montana DNRC (\$15,000) and Parks Hazard Tree funds (\$4,950). FWP also hired a temporary worker to perform hand-cutting of non-merchantable trees. FWP staff, volunteers, and AmeriCorps also assisted with cleaning up slash and hand-thinning.

Lone Pine State Park Forest & Grassland Improvement Project



Figure 18 - Drone footage of the prescribed burn implemented in spring 2021. Image: B. Schwartz

The goals of this 127-acre project are improving forest structure; promoting a balanced composition of a diversity of tree species and forest types; maintaining habitat for wildlife species; improving native bunch grasses; and educating the public on forest stewardship, active forest management, and the use of prescribed fire. Treatments will include implementing prescribed fire to revitalize native bunchgrass

prairie, commercial and noncommercial thinning of Douglas-fir, and planting of western larch and ponderosa pine.

In April 2021, DNRC implemented a 7-acre prescribed burn at the Park to rejuvenate native bunchgrasses on the grassland portion of the project. FWP is currently working on a Draft Environmental Assessment for the forest treatment. The prescription for the forest treatment is to remove Douglas-fir trees infested with mistletoe and plant western larch and ponderosa pine. The project is estimated to cost \$65,000 and is being funded by a Montana Forest Action Plan Implementation grant awarded to FWP from Montana DNRC in 2021.

GRANTS

Several projects did not produce merchantable byproducts and/or the cost of the treatment exceeded the value of the merchantable timber removed. The projects listed below received grant funding to help pay for the cost of the treatment.

Table 5 – Active grants awarded to FWP

GRANT	PROJECT	AMOUNT
Rocky Mountain Elk Foundation	Mt Haggin #4/Phase 3	\$25,000
	Nevada Lake WMA Prescribed Fire	\$5,000
	Elk Basin Restoration 2	\$25,000
	Mount Jumbo WMA PCT and Piling	\$5,000
	West Kootenai WMA Tree Planting	\$35,000
Mule Deer Foundation	Mt. Haggin #4/Phase 4	\$30,000
Montana Natural Resource Damage Program	Mt. Haggin Aspen and Erosion Control	\$96,000
	Mt. Haggin WMA Forest Inventory	\$35,800
	Garrity Mountain WMA Forest Inventory	\$14,300
Safari Club International	Mt Haggin #4/Phase 4	\$15,000
Bitter Root Water Forum	Threemile WMA – Wheelbarrow Creek Road Repairs	\$52,000
Kootenai Forest to Rivers Initiative	Thompson Chain of Lakes – Cibid/Cad Lake Fuels Reduction	\$29,610
Blackfoot Challenge	Nevada Lake WMA Prescribed Burns	\$11,000
USDA-USFS Western States Wildland Urban Interface Grant	Multiple sites	\$270,000
USDA-USFS Forest Health Western Bark Beetle Grant	Multiple sites	\$64,775
TOTAL ACTIVE GRANT FUNDS AWARDED TO FWP		\$713,485

FUTURE PROJECTS

The following table shows project areas that have been identified by FWP as priorities for forestry treatments. The project areas were identified through the 2013 Sustained Yield Calculation process, 2018 Sustained Yield Review and Update, and statewide planning processes as well as site-specific priorities identified by FWP site managers. FWP completed a statewide forest management plan in 2018 which provides a framework for identifying, prioritizing, and implementing forest management projects. Additional priority areas may be identified in the event of unforeseen forest disturbances (e.g., blowdown, wildfire, insect infestation), opportunity, or through the annual call for project proposals. The acreages and volumes listed are estimates and subject to change depending on issues identified during project development and input received during public participation.

Table 6 - Forestry Project List, 2023-2028

Project Area	Region	Est. Acres	Est. Sawlog Volume (MBF)	Implementation Date	Description
River Junction FAS	2	36	100	2023	Fuels mitigation, bark beetle risk reduction
West Kootenai WMA Tree Planting	1	210	0	2023 - 2025	Reforestation from 2017 Caribou Fire
Lone Pine State Park	1	127	50-150	2023 - 2025	Douglas-fir dwarf mistletoe sanitation, tree planting
Kootenai Falls WMA	1	100	500-1,000	2023 - 2026	Bark beetle risk reduction, bighorn sheep habitat improvement
North Swan WMA	1	500-1,000	500-1,500	2023 - 2026	Habitat diversity, fuels mitigation, bark beetle risk reduction
Ray Kuhns WMA	1	190	500	2023 - 2026	White-tailed deer winter range, fuels mitigation, bark beetle risk reduction
Wayfarers SP	1	25	30	2023 - 2026	Hazard tree removal, fuels reduction, insects and diseases, aesthetics
Calf Creek WMA	2	1,116	2,500	2023 - 2026	Elk and mule deer winter range enhancement

Project Area	Region	Est. Acres	Est. Sawlog Volume (MBF)	Implementation Date	Description
Doney Lake Forest Habitat Improvement – Blackfoot-Clearwater WMA	2	1,500	1,500	2023 - 2026	Elk winter range habitat enhancement, fuels mitigation, bark beetle risk reduction
Mount Jumbo WMA – Commercial Thin	2	27	36	2023 - 2026	Elk and deer winter range enhancement, fuels mitigation, bark beetle risk reduction
Marshall WMA	2	400-1,000	100-2,500	2023 - 2028	Fuels mitigation, habitat diversity
Alberton Gorge Recreation Corridor	2	100-250	500-1,500	2023 - 2026	Fuels mitigation, bark beetle risk reduction
Mt. Haggin WMA – Phase 4 & 5	3	1,046	0	2023 - 2026	Big game summer range (non-commercial)
Gallatin WMA	3	400	0	2023 - 2026	Taylor Fork, elk and mule deer winter/transitional range, aspen enhancement (non-commercial)
Sun River WMA #2	4	116	0	2023 - 2026	Elk winter range, aspen enhancement, prescribed fire (non-commercial, USFS Cooperative Agreement)
Blackleaf WMA	4	500	0	2023 - 2026	Elk and mule deer winter/transitional range, aspen enhancement (non-commercial)
Smith River State Park	4	50-100	0	2023 - 2026	Hazard trees, bark beetle risk reduction
Fireman’s Point FAS	5	20-150	0	2023 - 2026	Fuels mitigation
Rosebud Battlefield State Park	7	100-500	0	2023 - 2028	Conifer encroachment, fuels mitigation
Thompson Chain of Lakes	1	250-400	1,000-2,000	2024 - 2028	Fuels mitigation, bark beetle risk reduction
Mt Silcox WMA	1	200-400	500-1,000	2024 - 2028	Elk, deer and bighorn sheep winter range; fuels mitigation; bark beetle risk reduction

Project Area	Region	Est. Acres	Est. Sawlog Volume (MBF)	Implementation Date	Description
Island Lake FAS	1	10	100	2024 - 2028	Fuels mitigation10+
Corrick's River Bend FAS	2	10	50-100	2024 - 2028	Bark beetle risk reduction
Blackfoot-Clearwater WMA	2	250-500	1,000-3,000	2024 - 2028	Big game winter range habitat
Garrity Mountain WMA	2	250-1,000	100-2,000	2024 - 2028	Big game summer/fall range
Mt Haggin WMA	3	250-1,000	250-3,000	2024 - 2028	Big game summer/fall range
TOTAL		7,783-11,863	9,316-22,516		

The next table (Table 6) shows project areas and approximate acres that may be proposed for commercial forest treatments over the next 30 years. Additional non-commercial treatments are expected. This table was developed based on information compiled for the 2013 Sustained Yield Calculation and statewide planning. It is subject to change in the event of unforeseen forest disturbances (e.g., wildfire, insect infestation), opportunity, or additional forest planning efforts. The acreage of State Park and Fishing Access Site forestry projects will vary based on funding availability.

Table 7 - Long Range Planning of FWP Commercial Forest Treatments

Project Area	Region	6-15 Years (acres)	16 -30 Years (acres)	Management Objectives/Regime
Woods Ranch WMA	1	-	115	Elk and deer winter range. Uneven-aged; single-tree selection, promote multi-story development
Mount Silcox WMA	1	120	120	Elk and bighorn sheep winter/spring range. Uneven-aged; thin from below and group selection
Bull River WMA	1	250	70	Whitetail deer/multiple wildlife objectives. Uneven-aged; thin from below to promote mature forest cover
North Swan Valley WMA	1	-	500	Whitetail deer/multiple wildlife objectives. Uneven-aged; promote mixed conifer, multi-storied stand structure
West Kootenai WMA	1	-	500	Elk and deer winter range. Uneven-aged and even-aged – precommercial and early commercial thin in 2017 Caribou Fire area in approximately 30 years.
Blackfoot-Clearwater WMA	2	500	1,800	Elk and mule deer winter range. Uneven-aged; conifer expansion, thin from below, group selection

Project Area	Region	6-15 Years (acres)	16 -30 Years (acres)	Management Objectives/Regime
Threemile WMA	2	-	350	Elk and mule deer winter range. Uneven-aged, single tree and group selection
Nevada Lake WMA	2	-	100	Elk winter range. Uneven-aged management; conifer expansion and thin from below
Garrity Mountain WMA	2	-	200	Elk, mule deer, and bighorn sheep winter/spring range. Even and uneven-aged; lodgepole salvage, aspen enhancement, conifer expansion
Fish Creek WMA	2	-	-	Elk and deer winter/summer range with multiple other wildlife objectives. Even and uneven-aged; commercial harvest expected in approximately 30 years
Spotted Dog WMA	2	50	-	Elk winter range. Even-aged (lodgepole) and uneven-aged, aspen enhancement
Marshall WMA	2	270	900	Lynx habitat and summer/fall elk range. Even-aged and uneven aged; shelterwood and group selection
Mt. Haggin WMA	3	900	630	Year-round elk and mule deer habitat. Even and uneven-aged; salvage, commercial thin, group selection, and conifer expansion
Canyon Creek WMA	3	-	150	Elk summer range and fall security. Uneven-aged; single tree selection
Haymaker WMA	5	70	-	Elk winter range. Uneven-aged; group selection
Fishing Access Sites	All	20	20	Safety, aesthetics, insects and disease risk mitigation, hazardous fuels reduction, and riparian habitat enhancement
State Parks	All	300	300	Safety, aesthetics, insects and disease risk mitigation, hazardous fuels reduction

PARTNERSHIPS AND COLLABORATION

Montana DNRC

Ray Kuhns WMA Seedling Survival Study Memorandum of Agreement (MOA)

In September 2017, FWP and DNRC entered into a MOA to cooperate on a seedling survival trial on state trust lands adjacent to the Ray Kuhns WMA. As many as 500 white-tailed deer per square mile may use the area during severe winter months. Due to heavy deer browse, conifer regeneration is not being established on previously harvested state trust lands which could jeopardize the potential future growth and yield from these lands. Likewise, FWP is interested in using timber harvest to enhance white-tailed deer habitat. It is of mutual interest to determine optimal seedling establishment methods for the area. FWP and DNRC are splitting the costs of the trial, which are primarily fencing, browse deterrent materials, the purchase of seedlings, and labor. DNRC and FWP have been monitoring the seedling and browse prevention methods for the past 5 years. 2023 will be the last year of monitoring/measurements.

Cooperative Agreement Between Montana Fish, Wildlife & Parks and Montana Department of Natural Resources and Conservation

In March 2020, FWP and Montana DNRC entered into a cooperative agreement which allows FWP to reimburse DNRC for assistance with project planning, design, and layout; contract administration; and prescribed burning. DNRC and FWP are currently working together on several projects under this agreement including the Threemile 2 Timber Sale, Blackfoot-Clearwater WMA Conifer Expansion and Native Grassland Restoration Project, Nevada Lake WMA Forest Habitat Enhancement Project, Bull River WMA Blowdown Salvage, Thompson Chain of Lakes State Parks Forestry Project, and Lone Pine State Park Grassland and Forest Improvement Project. The agreement is effective through June 30, 2023 and will likely be renewed for another 3 years.

U.S. Forest Service (USFS)

Sun River WMA Habitat Project #2

FWP has partnered with the USFS to implement conifer removal treatments on elk winter range. FWP is compensating USFS for labor, supplies, and materials through a combination of grant funding and the Wildlife Division's Forest Management Account. The agreement is in effect through February 1, 2027.

Threemile 2 Timber Sale

FWP is working with the DNRC and USFS-Bitterroot National Forest on National Forest System Lands parcels in the Bitterroot National Forest that are landlocked or immediately adjacent to the Threemile WMA. Through collaborative efforts by the three agencies, DNRC and USFS-

Bitterroot National Forest executed a Good Neighbor Authority (GNA) project that allowed DNRC to oversee a 320-acre timber sale in addition to FWP's 1,492-acre timber sale. DNRC advertised both timber sales under one Notice of Sale which allowed FWP and DNRC to award both timber sale contracts to one Purchaser. FWP is working with the DNRC GNA foresters to coordinate the on-going treatments. FWP is also collaborating with the USFS to develop burn plans and implement prescribed burn following the completion of the mechanized treatments.

Mount Jumbo WMA Habitat Restoration Project

FWP is working with USFS-Lolo National Forest and City of Missoula Conservation Lands Program to coordinate timber harvesting operations on Mount Jumbo WMA and adjacent Marshall Woods Timber Sale. The USFS-Lolo National Forest is also assisting FWP with slash disposal and burn plans to conduct cross boundary broadcast burning on the WMA, City of Missoula Conservation Lands, and NFSL adjacent to the WMA. FWP signed a cooperative agreement with the USFS in May 2021 for this project.

The Nature Conservancy

Western Montana Shared Forester

FWP, The Nature Conservancy (TNC), Blackfoot Challenge, the Bureau of Land Management, the USFS, and the University of Montana partnered to establish a forester position housed with The Nature Conservancy to assist with forest management in the greater Blackfoot watershed area. FWP committed funds from its Wildlife Division's Forest Management Account to support the position for work to be completed on Blackfoot-area WMAs. The shared forester, Michael Schaedel, has assisted in the planning and implementation of projects on the Blackfoot-Clearwater and Nevada Lake WMAs as well as working to develop a forest management plan for the Marshall WMA. FWP and TNC plan to renew the agreement in 2023.

Southwest Montana Sagebrush Conservation Partnership

The Nature Conservancy helps agencies organize and implement sagebrush ecosystem restoration projects across southwest Montana. TNC has assisted FWP in implementing several hundred acres of conifer removal treatments on the Robb-Ledford WMA, Blacktail WMA, and Mt Haggin WMA.

FOREST MANAGEMENT PLANS/INVENTORY DATABASE

Forest Inventory Database

In 2016, FWP started working on the development of a forest inventory database in order to track forest stand attributes that are necessary for forest management plans, monitoring, reporting, and reviewing and updating the sustained yield calculation every 5 years as required by law in § 87-1-622(4), MCA. FWP's forester and Technical Services Section developed a centralized database system.

FWP completed several inventory projects from 2021 to 2022. Stand digitization was completed for Mt. Haggin WMA, Garrity Mountain WMA, Fleecer WMA, and North Swan WMA. Photo interpretation (data collected from aerial imagery) was completed for Mt. Haggin WMA and North Swan WMA through a contract with BDL Forestry (Missoula). Photo interpretation was also completed for Fleecer WMA. FWP contracted with Quality Forest Management (Clinton) to perform field data collection on Mt. Haggin WMA and Garrity Mountain WMA in the summer of 2023.

Fleecer WMA Forest Management Plan

FWP completed photo interpretation for Fleecer WMA in 2021. FWP is currently drafting a forest management plan and expects the plan to be completed by 2026.

Mt Haggin WMA Forest Management Plan

FWP contracted BDL Forestry to perform photo interpretation for Mt Haggin WMA in 2022. FWP contracted Quality Forest Management to perform field data collection in 2023. FWP is currently drafting a forest management plan and expects the plan to be completed by 2026.

Garrity Mountain WMA Forest Management Plan

FWP contracted BDL Forestry to perform photo interpretation for Mt Haggin WMA in 2023. FWP contracted Quality Forest Management to perform field data collection in 2023. FWP is currently drafting a forest management plan and expects the plan to be completed by 2026.

Marshall WMA Forest Management Plan

TNC performed stand delineation and aerial photo interpretation of the entire WMA in the summer of 2019. FWP and TNC are currently drafting a forest management plan and expect the plan to be completed by 2026.

Big Snowy Mountains WMA Management Plan

Following the acquisition of Montana's newest WMA in 2022, FWP committed to drafting a management plan within one year. The WMA is partially forested and FWP will prepare a forest management plan section as part of the WMA management plan.

FWP Forestry Programmatic Environmental Assessment

FWP is planning to start the process of drafting a programmatic Environmental Assessment (EA) for routine forestry practices such as conifer expansion and aspen enhancement treatments, as well as for small-scale urgent/emergency actions such as blowdown removal. FWP expects the process to take 2 years to complete. The programmatic EA would save time and resources for implementing routine habitat management activities as well as increase the pace of implementing urgent/emergency forest management actions.

TECHNICAL ASSISTANCE, COMMUNICATION AND OUTREACH

In addition to implementing the legislative requirements of the forestry program, FWP's forester provided technical forestry assistance on FWP land interests, participated in educational outreach, and served as the spokesperson for external communication regarding FWP's forestry program.

Technical Assistance

Wheelbarrow Creek Project

FWP's forester helped coordinate a grant agreement between FWP and the Bitter Root Water Forum to secure funding to replace two stream crossings and improve 1.7 miles of road to reduce sediment delivery into Wheelbarrow Creek and provide fish passage for native cutthroat trout. A portion of the project occurs on the Bolin Ranch, through which FWP holds a conservation easement, and the work would occur on an FWP road easement through the property. FWP's forester and FWP Design and Construction staff plan to coordinate the work with the on-going Threemile 2 Timber Sale road improvements in 2023.

Communication and Outreach

Montana Natural Resources Youth Camp

The Montana Natural Resources Youth Camp (MNRYC) introduces youth to a variety of natural resources conservation and management disciplines including geology, soils, water, wildlife, range, and forestry. FWP has been involved in MNRYC since its inception. FWP's forester has served on the Board of Directors since 2016 and instructs the forestry course.

The University of Montana, W.A. Franke College of Forestry and Conservation (FCFC)

The FWP forester assists in providing hands-on learning opportunities for forestry students at the University of Montana. In 2021 and 2022, the FWP forester provided a guest lecture to the FCFC Forest Planning Class.

Society of American Foresters

FWP's forester has been a member of the Society of American Foresters (SAF), a professional forestry association, since 2002 and participates in the Montana SAF Executive Committee and Forest Policy Committee.

Montana Logging Association/Montana Wood Products Association

Timber harvest and timber sales remain a key tool in FWP's forest management toolbox and revenue generated from timber sales help ensure the fiscal sustainability of FWP's forestry program. FWP's forester continues to maintain communication with accredited logging professionals and forest products manufacturers by providing updates to these organizations at their request.