Protecting rivers while managing forests

FOREST STEWARDSHIP ON MONTANA'S FLATHEAD WILD AND SCENIC RIVER

MARCH 2026

PREPARED BY:

Lisa Ronald, Northern Rockies Associate Conservation Director, American Rivers and Ben Long, Resource Media

CARTOGRAPHY AND PHOTOGRAPHY BY:

Lisa Ronald

Executive summary

President Theodore Roosevelt created the Flathead National Forest in 1908 as a reserve for multiple-use land management in the public good. Sixty years later, President Lyndon Johnson signed the Wild and Scenic Rivers Act into law, creating a framework for protecting America's best remaining free-flowing rivers. Today, there is some debate as to how the provisions of the Wild and Scenic Rivers Act affect the modern management needs facing our national forests.

During forest plan revisions, the Forest Service is legally required to assess whether streams are eligible for inclusion in the National Wild and Scenic Rivers System. In some instances, eligibility determinations have been denied out of concern they may limit land managers' ability to implement active forest management within river corridors—particularly vegetation treatments, fuels reduction, and timber harvest. This can also hamper new Wild and Scenic River designations, as elected leaders often require rivers to be found eligible as a prerequisite for granting permanent legislative protections.

This report examines 50 years of experience on the Flathead National Forest to evaluate whether those concerns are supported by management history. We selected this forest because it is home to 219 miles of Wild and Scenic Rivers that have been designated for a half century, and 284 additional miles of eligible rivers that were identified in the 2018 Forest Plan. Consequently, it provides a long-term, real-world case study of how the Wild and Scenic Rivers Act operates within a multiple-use national forest.

The central conclusion of this report is clear: designation and eligibility under the Wild and Scenic Rivers Act do not preclude active forest management. **On the Flathead National Forest, a wide range of forest management activities have occurred within both eligible and designated Wild and Scenic River corridors, including:**

- **Commercial and pre-commercial thinning**
- **Hazardous fuels reduction**
- **Prescribed fire**
- **Tree planting and regeneration**
- **Weed and invasive species treatment**
- **Trail and recreation infrastructure improvements**

These activities have taken place within river segments classified as wild, scenic, and recreational; inside and outside the Wildland Urban Interface; and adjacent to private lands and in remote settings.

Forest managers have retained access to the full suite of management tools. The Wild and Scenic Rivers Act has functioned not as a prohibition on forest management, but rather as a framework for guiding how various treatments are designed to maintain or enhance the Outstandingly Remarkable Values for which rivers were designated to protect. In practice, projects were frequently refined—not abandoned—to better complement scenic, recreational, fisheries, and wildlife values while still achieving fuels reduction, forest health, and timber objectives.

Agency documentation consistently concluded that management actions within designated corridors did not degrade the Outstandingly Remarkable Values and, in several cases, enhanced them. Commercial harvest units were sometimes designed specifically to improve scenic values, forest resilience, or wildlife habitat.

The Flathead experience demonstrates that Wild and Scenic River designations and eligibility determinations are compatible with active, science-based forest management. Rather than tie land managers' hands, Wild and Scenic River designations and eligibility determinations clarify management intent, strengthen analytical rigor, and support durable decision-making.

For land managers engaged in forest plan revision, this case study provides clear evidence that Wild and Scenic River stewardship and active forest management can successfully coexist over decades.

Key findings

1. **Active management occurs within designated and eligible corridors**
   Since 1976, the Flathead National Forest has implemented extensive vegetation and fuels management within designated Wild and Scenic River corridors. Following completion of the 2018 Forest Plan, similar activities have occurred within eligible Wild and Scenic River corridors.

   Projects reviewed in this report include commercial and pre-commercial logging, fuels reduction, prescribed fire, regeneration planting, and invasive species control. These activities were not isolated or exceptional; they occurred across thousands of acres over multiple decades.

   Wild and Scenic designation and eligibility did not prevent management. Instead, they provided an interim planning framework requiring consideration of river values during project design.

2. **The full suite of management tools remains available**
   Wild and Scenic designation and eligibility did not take away forest management tools. Instead, treatments within river corridors were often adjusted in intensity or configuration to ensure consistency with Outstandingly Remarkable Values. Documentation shows that:

   - Cutting and burning treatments clearly occurred within the corridor.
   - Vegetative manipulation was permitted to reduce wildfire risk and maintain forest health.
   - The same categories of management tools were used inside and outside the corridor.
   - Treatment intensity differences reflect desired conditions and Outstandingly Remarkable Values considerations—not categorical restriction.

   In sum, Wild and Scenic Rivers Act protections influence project design; they do not prevent action.

3. **management has maintained and enhanced river values**
   National Environmental Policy Act analyses and decision documents consistently found forest management projects had no adverse effects on Outstandingly Remarkable Values. In several cases, forest management enhanced river values. Examples include:

   - Thinning and fuels reduction that improved long-term forest resilience near recreation sites.
   - Commercial harvest units designed to open viewsheds along river corridors.
   - Vegetation treatments used to improve habitat diversity and stand structure.

   The record demonstrates compatibility between forest stewardship and river protection.

4. **Wildland urban interface pressures reinforce the need for integrated management**
   The Flathead River watershed is experiencing rapid population growth, increased recreation use, and rising wildfire risk. Management within Wild and Scenic River corridors has included fuels reduction and hazard mitigation near communities, infrastructure, and access points.

   The Wild and Scenic Rivers Act has operated alongside these pressures without preventing proactive risk reduction.

IMPLICATIONS FOR LAND MANAGEMENT

The Flathead National Forest's five decades of experience demonstrate that:

- Determining a river to be eligible for designation does not remove it from active management.
- The Wild and Scenic Rivers Act does not preclude active forest management, however it does require that Outstandingly Remarkable Values be protected.
- Treatments can be tailored to protect river values while advancing fuels reduction, forest health, recreation, and timber objectives.

Wild and Scenic River designations and eligibility determinations can strengthen analytical rigor and long-term defensibility.

The coexistence of river protection and forest management on the Flathead National Forest is not theoretical—it is documented across multiple decades, projects, and forest plans. For Forest Service land managers, Wild and Scenic River designation and eligibility should be viewed as planning clarification tools—not constraints that foreclose active stewardship. The evidence from the Flathead shows that rivers can remain protected and enhanced while surrounding forests are actively managed to meet ecological and community needs.

Introduction to the crown of the continent

The rugged mountains of the Flathead National Forest in northwestern Montana are sometimes called the Crown of the Continent. The Blackfeet language calls it *Miistakis*, the Backbone of the World.

Fed by mountain snowpack, three largely pristine rivers drain the Flathead National Forest: the North, Middle, and South forks of the Flathead River. The forks of the Flathead River converge and eventually flow into Flathead Lake, the largest, cleanest freshwater lake in the western United States. The forks of the Flathead provide clean water for drinking, boating, hydropower, and irrigation at the headwaters of the Columbia Basin. The Flathead River system provides critical habitat for federally threatened bull trout and is one of the last remaining strongholds for native westslope cutthroat trout, which are prized by anglers. Because of its clean, clear rivers and healthy fisheries, the Flathead River system attracts millions of visitors from across the country and around the world to fish, raft, and marvel at the clarity of the water and the polished, multi-colored river stones.

Once threatened by a series of federal dams, the three forks of the Flathead inspired the idea for the Wild and Scenic Rivers Act, America's landmark river conservation law. The Flathead River was added to the National Wild and Scenic River system in 1976 and celebrates its 50th anniversary this year.

The bulk of the Flathead River Basin is federal public land managed by the Forest Service and National Park Service. The North and Middle forks form the western and southwestern border of Glacier National Park.

Part 1. The Flathead National Forest

The 2.5 million-acre Flathead National Forest is largely defined by rugged, forested mountains, built of billion-year-old rocks and shaped by Ice Age glaciers. Topography ranges from peaks approaching 10,000 feet above sea level, to Flathead Lake at about 3,000 feet. Winters are long and wet, with snow measured in meters in the high country.

The Flathead is the traditional home of the Kootenai people or, as referred to in Canada, the Ktunaxa people. This culture remains closely tied to the region's lakes and rivers. Historically, the Kootenai were known for their unique cedar bark canoes, which transported them throughout what is now northern Idaho, northwestern Montana, and southeastern British Columbia.

Roughly half of the Flathead National Forest is within the Bob Marshall Wilderness Complex, considered a flagship of the National Wilderness Preservation System. While wilderness is part of today's local culture, the Flathead has also supported a local timber industry, with thousands of acres designated as suitable for timber production in the 2018 Forest Plan. This plan reflects the multiple-use mandate and guiding philosophy of the Forest Service. Besides clean water, wilderness, and timber, the Forest Service manages for recreational opportunities, fish and wildlife habitat, and to lesser extent, minerals and grazing.

TIMBER AND FIRE MANAGEMENT

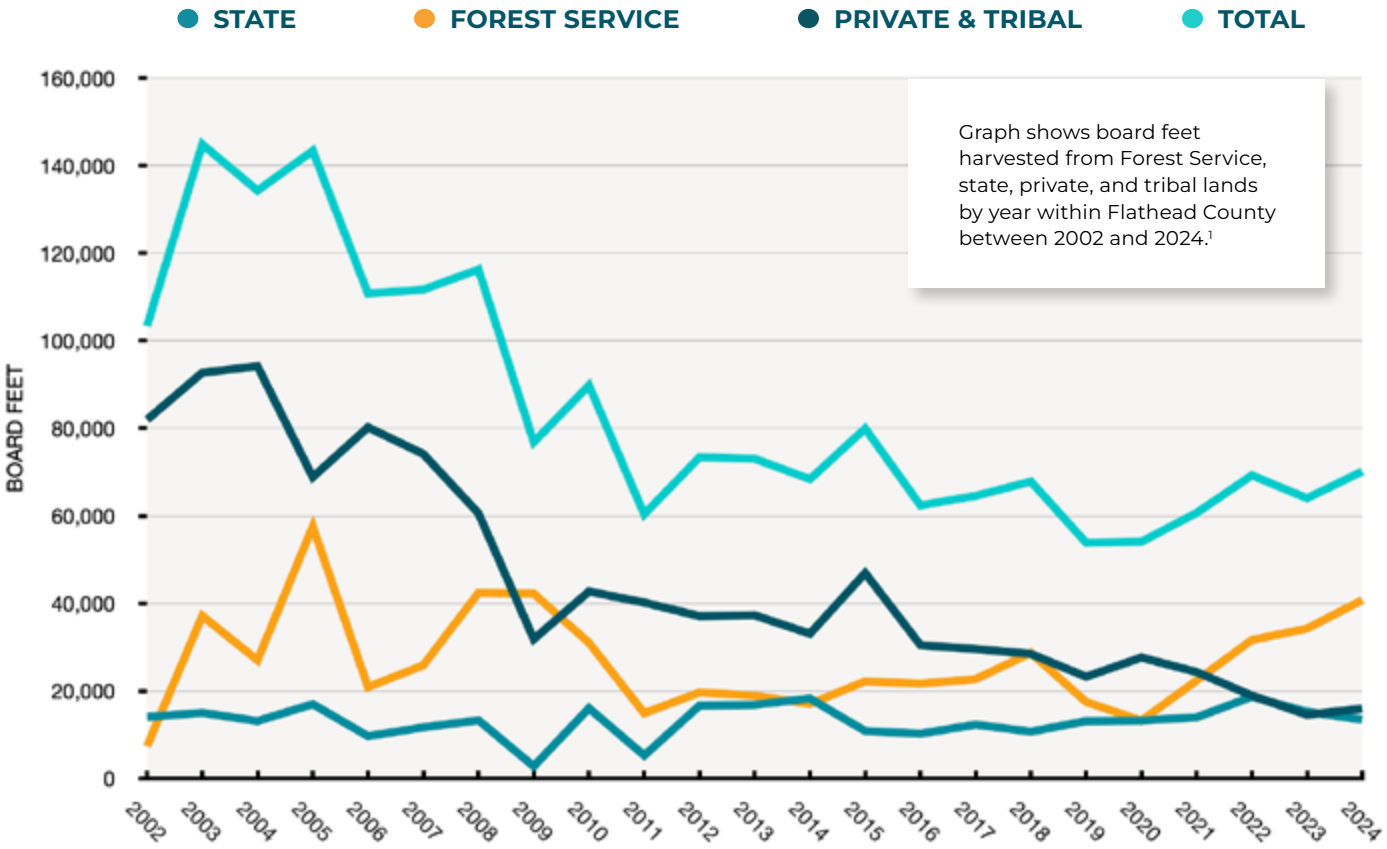
Fire management has always been a key mission of the Forest Service, especially since increasing areas of many forests lie within the Wildland Urban Interface. This landscape is naturally prone to fire. Indigenous people maintained low elevation meadows and pine and fir savannahs and cleared trails deep into the mountains by widespread intentional burning. Other portions of the Forest, such as the South and Middle fork drainages, have lusher stands of spruce and subalpine fir that historically saw less frequent fires, but experienced hotter stand replacement fires when they did burn.

While spared the worst of the Great Burn of 1910, the Flathead saw major fires in the 1920s and 30s. After World War II, the Forest Service became more successful at suppressing wildfires. In recent decades, a combination of warming climate and growing fuel loads has resulted in several major forest fires, starting with the Red Bench fire of 1988. The 2003 fire year was particularly severe, with more than 300,000 acres burning in 16 fires across northwestern Montana.

Wildfire mitigation is increasingly driving management decisions on national forest lands throughout the West. It is a focal point for the second Trump Administration and the 119th Congress through executive orders, nationwide timber production mandates, new wildfire mitigation bills, and efforts to rescind the 2001 Roadless Rule.

Since the early 2000s, timber harvest in Flathead County has generally declined. Until 2010, private and tribal lands produced the most logs. Since 2020, however, harvest on Forest Service lands has begun to increase, partially due to the natural cycle of tree growth and maturity.

TIMBER HARVEST IN FLATHEAD COUNTY



BOOMING HUMAN POPULATION

Meanwhile, the human population of northwestern Montana has grown substantially. Flathead County, Montana, has grown from 33,000 people in 1968 to 115,000 today, making it one of the fastest growing counties in the United States. About two-thirds of the development associated with this population growth is occurring on private land *outside* of the three incorporated cities within Flathead County. Thousands of homes have been built in the Wildland Urban Interface, largely unrestricted by planning and zoning. According to data collected on Flathead County electrical permits, which serve as a proxy for new rural housing starts, nearly 600 new homes have been built since 2011 within two miles of the Middle and North forks of the Flathead River and other eligible Wild and Scenic Rivers on the Flathead National Forest.[2]

As the population of Flathead County has grown, visitor numbers have likewise increased dramatically. Tourism numbers are difficult to assess on the Flathead National Forest itself, but visitors are counted precisely at adjacent Glacier National Park. In the 1990s, visitation in Glacier hovered under two million visitors a year, mostly during July and August. Since 2021, Glacier has recorded more than three million visitors annually. While summer remains the peak tourist season, visitation has grown in the shoulder seasons of spring and autumn. Many of these visitors come to fish, camp, and boat in the Wild and Scenic River corridor.

The combination of rapid exurban growth, substantial wildfire risk, and increasing timber harvest on public lands has created a challenging situation for land and river managers.

---

[1] Forest Industry Research Program, Bureau of Business and Economic Research, University of Montana. "Timber Harvest for Flathead County, Montana." https://www.bber.umt.edu/FIR/HarvestT1.aspx?co=30029

[2] Derek Sheehan, Economist at the University of Montana Bureau of Business and Economic Research, personal communication, October 15, 2025.

RIPARIAN HABITATS AND WILDLIFE

The Flathead National Forest is exceptional in that it is one of the few places in the lower 48 States that still has a full complement of native biodiversity. One exception may be mountain caribou, which are rarely seen in Montana today. Many native species are associated with riparian habitats. According to the Montana Department of Fish, Wildlife & Parks, riparian habitats make up only three percent of Montana's land base, but are used by 80 percent of Montana's wildlife species.[3]

Federal land management is guided by many federal laws, including the Endangered Species Act. Under the Endangered Species Act, the Forest Service must consult with the U.S. Fish & Wildlife Service to ensure that land management activities don't "jeopardize" species listed as threatened or endangered. On the Flathead National Forest, bull trout, Canada lynx, and grizzly bears are listed as threatened under the Endangered Species Act. Sensitive species are recognized in forest plans, but are not listed under the Endangered Species Act. Within the Flathead National Forest, sensitive river-dependent species include the harlequin duck and westslope cutthroat trout.

Part 2. The Wild and Scenic Rivers Act

In the mid-1950s, wildlife biologist John Craighead took an army surplus inflatable raft down the Middle Fork Flathead River, a trip which was considered by some locals to be a reckless stunt. Like many other western rivers of that time, the Middle Fork was threatened by a dam proposed by the federal government. That trip sparked Craighead to come up with the idea for a national system of protected rivers to complement the Wilderness Act, which targeted higher elevation "rock and ice." It was the genesis of the Wild and Scenic Rivers Act.

In 1968, Congress passed the Wild and Scenic Rivers Act. While there are Wild and Scenic Rivers in eastern states in areas dominated by private land, for the purposes of this report we are focusing on the interface between the Wild and Scenic Rivers Act and western public land managed by the federal government, particularly the Forest Service.

Under the Wild and Scenic Rivers Act, Congress is authorized to protect designated rivers from any federally permitted activities within a half-mile-wide corridor (a quarter-mile on either side of the river). The Act also directs land managers to identify the Outstandingly Remarkable Values that make these rivers special. These values can include scenery, recreation, fish, wildlife, culture, etc.– characteristics that make each river unique and exemplary. Land managers must then develop plans for managing those river corridors in ways that maintain or enhance their Outstandingly Remarkable Values.

The law recognizes three classifications of rivers based on accessibility and the extent of riverside development: wild, scenic, and recreational. Wild segments are undeveloped and accessible by trails. Scenic segments have limited development and intermittent motorized access. Recreational segments feature more development, such as easy road access, campgrounds, or other facilities. Recreational segments are often paralleled by developed road networks.

[3] Szcodronski, K. E., Wade, A. A., Burton, S. E., & Hossack, B. R. (2024). Incorporating projected climate conditions to map future riparian refugia. Conservation Science and Practice, e13183. https://doi.org/10.1111/csp2.13183

WILD AND SCENIC RIVERS ON THE FLATHEAD NATIONAL FOREST

In 1976, Congress designated 219 miles of rivers in the Flathead River system under the Wild and Scenic Rivers Act. These river segments include:

- **The North Fork Flathead River** from the border with Canada to its confluence with the Middle Fork Flathead River near Blankenship Bridge. The river here forms the boundary between Glacier National Park and the Flathead National Forest.
- **The Middle Fork Flathead River** from its source deep within the Bob Marshall Wilderness Complex to its confluence with the South Fork Flathead River. Outside the Wilderness at Bear Creek, the river borders U.S. Highway 2 and forms part of the southern boundary between the Flathead National Forest and Glacier National Park.
- **The South Fork Flathead River** from its source deep in the Bob Marshall Wilderness Complex at the confluence of Youngs and Dannaher creeks to the slackwater of Hungry Horse Reservoir.

Of the 219 designated Wild and Scenic River miles on the Flathead National Forest:

- **98 miles are classified as wild**, mostly flowing within wilderness.
- **80 miles are classified as recreational**, mostly along U.S. Highway 2, but also on the South Fork above Hungry Horse Reservoir.
- **41 miles are classified as scenic**.

The Flathead National Forest has identified 10 Outstandingly Remarkable Values across the three forks of the Flathead River. These include fisheries, geology, water quality, wildlife, botany, recreation, scenery, history, culture, and ethnography.

Congress passed the National Forest Management Act in 1976 and the National Environmental Policy Act in 1970. These bedrock laws were designed as legal frameworks for agencies to follow when making impactful decisions about resource management. On the Flathead National Forest, implementing the new Wild and Scenic River designations went hand-in-hand with developing new forest plans, as required under the National Forest Management Act and National Environmental Policy Act.

While only Congress can formally designate Wild and Scenic Rivers, federal land managers can identify eligible rivers that have worthy qualities and provide them with temporary protection under forest plans.

The Flathead National Forest created its first official forest plan in 1988. In a plan revision that began in the early 2000s but was not completed until 2018, the Flathead National Forest recognized its first eligible Wild and Scenic Rivers. These included wilderness waterways like the White and Spotted Bear rivers. The plan also recognized the values of front country streams like Logan Creek near Tally Lake; Whale and Trail creeks in the North Fork Flathead drainage, and Glacier and Elk creeks in the Swan River drainage. Under the 2018 Forest Plan, the Flathead National Forest identified 24 stream segments totaling 284 stream miles as eligible Wild and Scenic Rivers, protecting 90,880 acres of wildlife-rich riparian lands.

The Flathead Forest Plan assigns every acre of the forest into management areas. For example, 637,000 acres are identified as “general forest,” Management Area (MA) 6. About a million acres of wilderness is categorized as MA 1. Wild and Scenic River corridors represent a unique land management category in the Flathead Forest Plan. Categorized as MA 2a, these 42,161 acres include the quarter mile buffer on each side of the Congressionally protected Flathead Wild and Scenic River and represent less than half of one percent of the entire Flathead National Forest.

GLACIER NATIONAL PARK AND THE WILD AND SCENIC RIVERS ACT

Portions of the Flathead Wild and Scenic River corridor encompass lands managed by both the Forest Service and Glacier National Park. The North and Middle forks of the Flathead River form the western and southern boundaries of Glacier National Park. While the Flathead National Forest has a multiple-use mandate, the National Park Service Organic Act requires Glacier National Park to prioritize preservation and recreation. Even under stricter conservation mandates, it is worth noting that the National Park Service has conducted management activities within the Wild and Scenic River corridor, including prescribed burns and constructing campgrounds.

OTHER RIVER-RELATED REGULATIONS ON THE FLATHEAD NATIONAL FOREST

The forks of the Flathead River provide vital habitat for native fish, particularly native bull trout and westslope cutthroat trout. They harbor both resident fish, which remain in streams their entire lives, and adfluvial fish, which migrate from streams to Flathead Lake and back at different times of the year.

Because bull trout are protected under the Endangered Species Act, the Forest Service must follow federal guidelines such as the 1998 Inland Native Fish Strategy (INFISH) standards. These standards restrict activities within a 300-foot riparian management zone on either side of bull trout bearing streams. That buffer is split between a stricter 150-foot zone immediately adjacent to the river and a more lenient 150-foot zone further out. This is concurrent with the quarter-mile buffer prescribed by the Wild and Scenic Rivers Act.

Rivers in Montana are also subject to Best Management Practices (BMPs) adopted to minimize non-point source water pollution from forest practices. While not required by regulation, the use of BMPs has been widely accepted by the forest products industry, private forests, tribes, and federal land management agencies. As with INFISH, BMPs are applied concurrently within Wild and Scenic River corridors during project implementation.

Finally, 430,000 acres of land in the North Fork Flathead River watershed were withdrawn from mining and mineral leasing by the North Fork Watershed Protection Act, passed by Congress in 2014.

Part 3. Review of forest management projects occurring within the Flathead Wild and Scenic River Corridor

On the Flathead National Forest, Wild and Scenic Rivers Act protections apply to 219 miles of the Flathead Wild and Scenic River totaling 42,161 acres of riverside land, and 284 miles of eligible Wild and Scenic Rivers totaling 90,880 acres of riverside land.

Since 1976, the Flathead National Forest has actively managed these riverside lands in a variety of ways. For every formal action, the Forest Service has been legally required to protect the Outstandingly Remarkable Values that have been identified for each river segment, including recreation, scenery, fish, wildlife, and others.

Using Forest Service project spatial data, we identified vegetation and fuels management projects that occurred within recreational and scenic classified segments of the Flathead Wild and Scenic River, and within the areas of six of the Flathead National Forest's eligible rivers: Lion Creek, Logan Creek, Spotted Bear River, Twin Creek, Upper Swan River, and Whale Creek. The projects we reviewed covered a much larger area, with portions taking place within eligible and designated Wild and Scenic River corridors. We reviewed spatial data and National Environmental Policy Act records for 16 projects that occurred on the Flathead Wild and Scenic River after 1976, and on eligible Wild and Scenic Rivers after 2018. Consultation with former and current Forest Service staff informed the selection of representative projects for more detailed investigation. Overall, we found a variety of management actions that not only have maintained river values, but at times enhanced them.

We elected not to examine smaller projects, such as those allowing for access to adjacent private land or rehabilitating roads and trails. We also chose not to focus on portions of projects occurring within wild segments of the Flathead Wild and Scenic River or eligible rivers. Wild classified segments on the Flathead National Forest generally flow through designated wilderness, where the Wilderness Act dictates stricter limits on human manipulation than the Wild and Scenic Rivers Act. It is also important to note that the scope of this analysis is limited to forest management activities occurring within the Wild and Scenic River corridor—which extend a quarter-mile on either side of the river. Later in this report, we compare activities occurring within the Wild and Scenic River corridor to activities occurring outside it.

The following is not an exhaustive list of projects. Rather, they are representative samples that illustrate the nexus of river protection and forest management—how river protection under the Wild and Scenic Rivers Act has been compatible with efforts to manage the Flathead National Forest.

Wild and Scenic Rivers on the Flathead National Forest

Flathead Wild and Scenic River (recreational segments)

Flathead Wild and Scenic River (scenic segment)

Eligible Wild and Scenic Rivers (scenic and recreational segments)

AMERICAN RIVERS

BELTON HILLS FUELS REDUCTION PROJECT, 2007-2015

As is common elsewhere in the west, the Flathead region has seen rapid residential growth in the Wildland Urban Interface. This, along with longer fire seasons and increasingly intense wildfires, has prompted the Forest Service to invest in reducing forest fuels in rural/residential areas.

"The purpose and need was centered around the concern of hazardous fuel concentrations located on National Forest System lands near private or other non-federal areas and how they may affect or influence a wildland fire. … These concerns have become very real in our area after the fire seasons of 2001 and 2003, which affected large portions of land on the Flathead National Forest and neighboring Glacier National Park," Forest Supervisor Cathy Barbouleltos wrote in the Decision Notice.[4]

This project included logging, commercial, and pre-commercial thinning. The agency's analysis area included the Middle Fork Flathead Wild and Scenic River corridor. The analysis found: *"There would be no effect on the scenic values of the river corridor because treatments in the two units in the corridor (Units 16 and 27) would not be visible from the river. This would be due to the retention of a buffer strip of untreated forest in Unit 16, and natural vegetative screening and topographic breaks in Unit 27."* [5]

"Vegetation management within the Wild and Scenic River corridor would appear natural and blend well within the existing vegetative pattern. In Unit 16 veg. management would be restricted to above the existing topographical break above the riverbank." [6]

CRYSTAL CEDAR PROJECT, 2020-2024

Similarly, the Crystal Cedar Project included forest thinning and trail rehabilitation on the Hungry Horse/Glacier View Ranger District.

Forest Supervisor Kurtis Steele wrote in the Decision Notice: *"The purposes for the Crystal Cedar project are identified below, which compel the need for action.*

- *Provide sustainable trail-based recreation opportunities close to local communities that are compatible with other resources.*
- *Reduce tree densities and fuel loadings within the wildland-urban interface to result in less intense fire behavior near communities and facilitate safe wildland fire operations.*
- *Improve the diversity and resilience of forest vegetative communities and associated wildlife habitat.*
- *Provide a mix of forest products to contribute to economic sustainability, providing jobs and income to local economies."*[7]

This project included four work units within recreational segments of the Flathead Wild and Scenic River. The Forest Service analysis concluded that management activities to reduce fuels, diversify vegetation, and reduce discernable edges between land ownerships would have no effect on the Outstandingly Remarkable Values identified for these river segments.[8]

---

[4] U.S. Department of Agriculture Forest Service. (2008, October 30). Decision notice and finding of no significant impact for the Belton Fuels Reduction Project. Flathead National Forest. p. 19. https://www.fs.usda.gov/r01/flathead/projects/archive/18908

[5] U.S. Department of Agriculture Forest Service. (2008, August). Environmental assessment for the Belton Fuels Reduction Project. Flathead National Forest. p. 49. https://www.fs.usda.gov/r01/flathead/projects/archive/18908

[6] Ibid. p. 16.

[7] U.S. Department of Agriculture Forest Service. (2020, March 16). Decision notice and finding of no significant impact for the Crystal Cedar Project. Flathead National Forest. p. 1. https://www.fs.usda.gov/r01/flathead/projects/archive/52844

[8] Ibid. p. 14, 25.

LAKE FIVE PROJECT, 2022

Another Wildland Urban Interface thinning project was near the exurban community of Lake Five.

According to the Decision Notice signed by Hungry Horse-Glacier View District Ranger Robert Davies: *"The following purposes for the Lake Five Project compelled the need for action:*

- *Reduce tree densities and fuel loadings within the wildland-urban interface to result in less intense fire behavior near communities and facilitate safe wildland fire operations.*
- *Improve the diversity and resilience of terrestrial ecosystems and vegetation.*
- *Provide a mix of forest products to contribute to economic sustainability, providing jobs and income to local economies."* [9]

The Lake Five Project included cutting in the recreational segment of the Middle Fork Flathead River. The reviewing officer noted: *"The proposed action and the no-action alternatives do not affect the free-flowing condition, water quality, and Outstandingly Remarkable Values of the Middle Fork recreation segment of the Three Forks of the Flathead Wild and Scenic River (Lower Middle Fork). Both alternatives are consistent with the Flathead Wild and Scenic River Management Plan direction (1980).*

The Flathead Wild and Scenic River Management Plan allows for vegetative manipulation in the Lower Middle Fork "to reduce a safety hazard and to maintain a healthy, vigorous timber stand" (USDA 1980). The proposed action meets the conditions the plan specifies for vegetation manipulation by reducing safety hazards associated with wildfire and improving forest stand health and resiliency in a way that does not degrade river values."[10]

ROUND STAR PROJECT, 2024

In the front country Tally Lake Ranger District, the Flathead Forest Plan recognizes Logan Creek as an eligible Wild and Scenic River that is classified as recreational. The Round Star Project is a complex forest management project including 9,000 acres of logging for timber and forest health. It is about 15 miles from the city of Whitefish.

According to the Decision Notice:

"The purposes for the Round Star Project are identified below, which compel the need for action.

- *Reduce tree densities and fuel loadings within the wildland-urban interface to result in less intense fire behavior near communities and improve egress access to facilitate safer wildland fire operations.*
- *Improve the diversity and resilience of vegetative communities.*
- *Contribute to continued timber production and economic sustainability.*
- *Enhance and expand high quality recreation opportunities in the Round Meadow area."*[11]

The reviewing officer noted: *"The Round Star proposed action includes vegetation treatment on 406 acres within an eligible wild and scenic river corridor (units 88, 89, 90, 93, 94, 244, 401, 402, and 403). The proposed units are along the north side of the Tally Lake Road that runs adjacent to Logan Creek…Timber harvest and vegetation treatments would achieve desired vegetative conditions (i.e., fuels reduction in WUI) while maintaining the outstandingly remarkable values associated with the eligible river segments."*[12]

---

[9] U.S. Department of Agriculture Forest Service. (2022, August 9). Decision notice and finding of no significant impact for the Lake Five Project. Flathead National Forest. p. 1. https://www.fs.usda.gov/r01/flathead/projects/archive/58984

[10] U.S. Department of Agriculture Forest Service. (2021, June). Environmental assessment for the Lake Five Project. Flathead National Forest. p. 70. https://www.fs.usda.gov/r01/flathead/projects/archive/52844

[11] U.S. Department of Agriculture Forest Service. (2024, April 3). Decision notice and finding of no significant impact for the Round Star Project. Flathead National Forest. p. 1. https://www.fs.usda.gov/r01/flathead/projects/archive/60892

[12] U.S. Department of Agriculture Forest Service. (2024, April). Environmental assessment for the Round Star Project. Flathead National Forest. p. 58. https://www.fs.usda.gov/r01/flathead/projects/archive/60892

Part 4: Forest management over time on the South and North Forks of the Flathead River

While looking at specific projects helped us understand the compatibility of forest management within Wild and Scenic River corridors in the context of larger forest management goals, we also chose to review forest management conducted over time (during numerous different projects) in the same place. The segments we chose to review included the recreational segment of the South Fork and the recreational and scenic segments of the North Fork directly upstream and downstream of the Camas Creek confluence. We chose the South Fork recreational segment because it has the most concentrated and diverse history of forest management projects; we selected the North Fork segment for the opportunity to assess forest management near the Wildland Urban Interface, near private lands.

SOUTH FORK FLATHEAD RECREATION SEGMENT

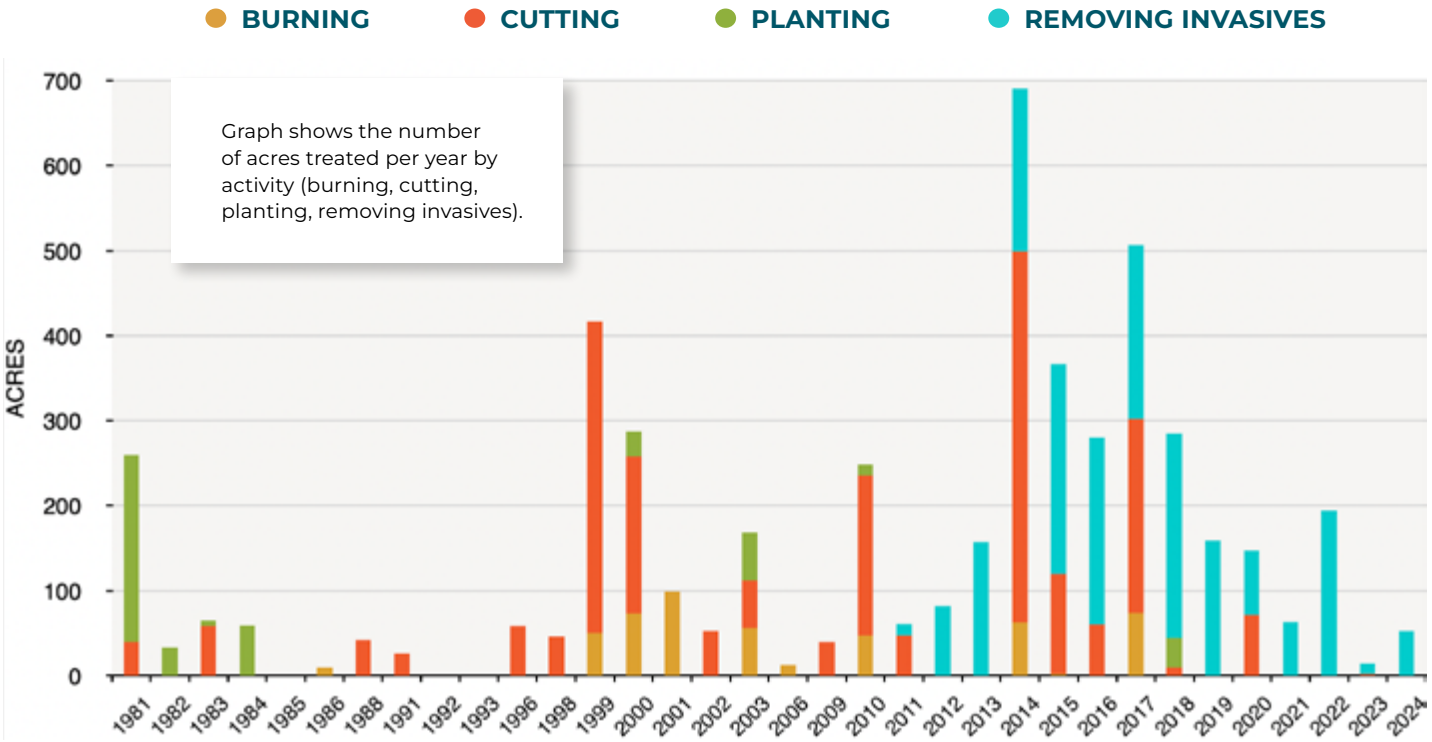
The Spotted Bear Ranger Station is a hub of summer activity above the slackwater of Hungry Horse Reservoir. This area is more than 50 miles away from a paved road and any year-round human habitation. It is even further from a sawmill. Yet, permanent area infrastructure includes an airstrip, a seasonal ranger station, and outfitter complexes including Spotted Bear Ranch, Diamond R Guest Ranch, and Montana Wilderness Lodge, some of which are within the Flathead Wild and Scenic River corridor or the Spotted Bear River eligible Wild and Scenic River corridor.

The South Fork Flathead River is classified as recreational from the edge of the Bob Marshall Wilderness just upstream of Meadow Creek Gorge to the beginning of the reservoir. It is known for dramatic limestone cataracts and excellent fishing and is popular with campers and huckleberry pickers. Although long distances can make hauling logs expensive, it has also been the scene of extensive logging and other forms of timber management over decades.

Not only was active forest management, including commercial timber harvest compatible with the South Fork's Outstandingly Remarkable Values, but some commercial logging units were designed to *enhance* those values. It is notable that some of the logging units along the East Side Reservoir Road were designed to provide saw logs for the mill, but at the same time enhance the opportunity for forest visitors to enjoy the scenery of the South Fork Flathead River, both by vehicle and from the river. The road was flanked by monocultures of lodgepole pine, and logging units opened the viewshed. This was one example of how Outstandingly Remarkable Values were enhanced by active management through commercial timber harvest. We noted similar commercial logging units along the North Fork Flathead River, opening views of the North Fork corridor and the Livingston Range in Glacier National Park for drivers along the North Fork Road.

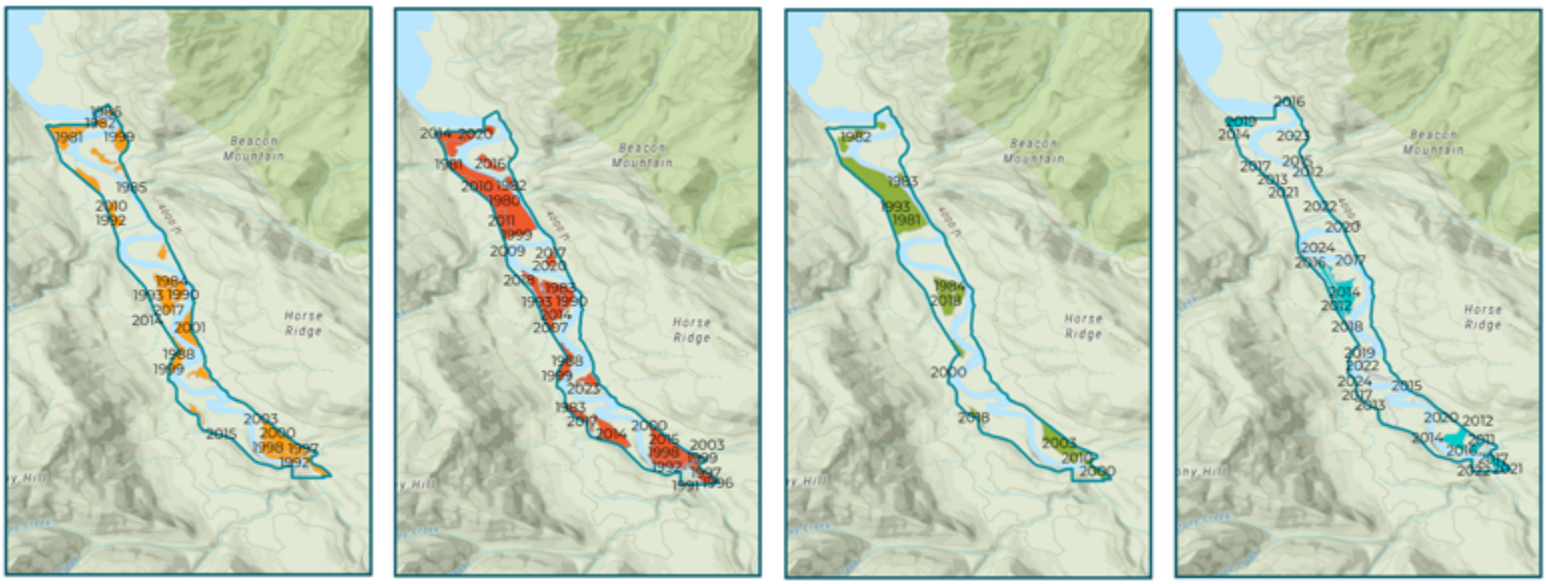
Between 1981 and 2024, the Flathead National Forest conducted forest management actions covering more than 4,000 acres within the recreational segment of the South Fork Flathead River corridor near the Spotted Bear Ranger Station. Forest management activities during this period included commercial logging, commercial and pre-commercial thinning, fuels reduction and burning, planting trees and shrubs, and using chemicals to control weeds. The simple categories shown in the graph and maps below condense a lengthy and diverse list of pre-harvest, harvest, and post-harvest activities. For example, the cutting category includes different types of harvest, such as thinning and shelterwood cuts as well as complementary activities like yarding and slashing. Similarly, the burning category includes different types of prescribed fire, such as underburning and jackpot burning.

ALL PROJECTS GRAPH



FOREST MANAGEMENT WITHIN THE WILD AND SCENIC RIVER CORRIDOR

The maps accompanying this graph present the same information in geographical form by showing the size and location of activities by category. Since cutting, burning, planting, and removing invasives can, and were, applied to the same areas sequentially over time, the separate maps of each type of activity help illustrate the extent and timing. The years given correspond to the year of completion for individual activities.



AMERICAN RIVERS

SPOTTED BEAR RANCH AND CAMPGROUND

To assist with understanding how the above maps and graph relate to one another, an online storymap tours five locations, including this one, that illustrate conclusions from this report. One such area is located between the east side road and Spotted Bear Ranch and adjacent to Spotted Bear Campground. The timber stands outlined in red in the map above are nearest to much of the infrastructure located along the South Fork Flathead River and thus have been more heavily managed than elsewhere. In summer 2000, this area was commercially thinned—undesirable Lodgepole Pine and Spruce/Subalpine Fir trees of marketable value were cut to improve the growth and vigor of the remaining Ponderosa Pine, Western Larch, and Douglas Fir. Slash piles were burned later in the fall. The following spring, a jackpot burn further targeted clusters of downed branches, either naturally occurring or those remaining from the prior thinning. In spring 2003, Ponderosa Pines were planted and more slash piles were burned. Then, for more than a decade the stands here regenerated. In fall 2015, smaller trees without commercial value were cut as an early intervention to reduce wildfire risk. The photo above shows the resulting stand in fall 2025, 15 years after treatment. The resulting open, mixed canopy is visible on satellite imagery when compared to lesser managed areas on the opposite side of the river.

NORTH FORK RECREATIONAL AND SCENIC SEGMENTS

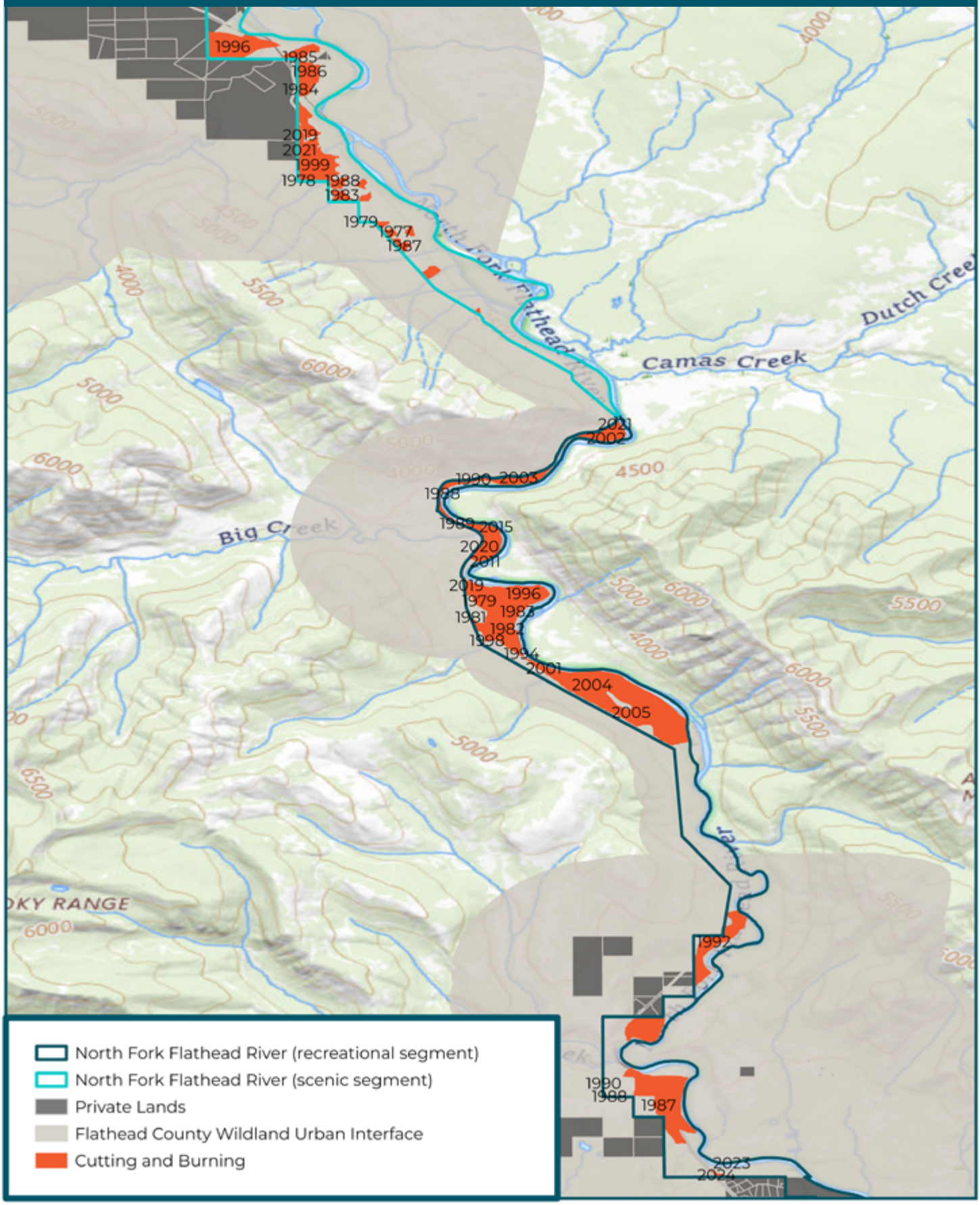
The North Fork Flathead River flows south from the Canadian border to join the Middle Fork near Blankenship Bridge, just north of Columbia Falls, Montana. The Camas Creek bridge, just downstream of the confluence with Camas Creek, marks the transition of the North Fork from scenic to recreational. While scenic segments are not paralleled by roads as many recreational segments are, they can have occasional road access or road networks farther from the river. From Camas Creek bridge north to the Canadian border, the North Fork is accessible in places by the North Fork Road, a gravel road dating back to the settlement of the Polebridge area in the early 1900s.

Here, the Montana Department of Natural Resources and Conservation has defined the entire North Fork corridor as within the Wildland Urban Interface through its community wildfire protection planning process. The Wildland Urban Interface includes lands within the zone where human development (e.g., homes and town) meets or mixes with undeveloped forested land. These areas are often focal points for social tensions around fire mitigation, habitat fragmentation, and urban sprawl.

For simplicity, the map of the North Fork lumps together the same cutting and burning categories as was used for the South Fork and overlays Flathead County land ownership data to show proximity to private lands. The years given on the map correspond to the years in which different forest management activities were completed. As with the South Fork, much of the North Fork has been managed through cycles of cutting, burning, and planting. However, forest management on the North Fork has been less frequent through much of the scenic section, with the highest frequencies at the southern end near where it transitions from scenic to recreational. This area is illustrated in the map below. In total, 4,800 acres of cutting and burning took place along the length of the North Fork between 1977 and 2024.

As with the project policy analysis above, together the North and South Fork examples show that active forest management has happened in recreational and scenic corridors, inside and outside the Wildland Urban Interface, and both near and far from private lands.

Forest management on the North Fork Flathead Wild and Scenic River



AMERICAN RIVERS

Part 5: Comparing forest Mmanagement inside and outside the Wild and Scenic River boundary

▲ This road, on the west side of the South Fork Flathead River generally marks the boundary between the Wild and Scenic River corridor and the lands outside it. The lands on the left side in the above photograph are within the river corridor and have been treated in a manner that complements the Wild and Scenic Rivers Act.

The Wild and Scenic Rivers Act tempers, though does not prevent, forest management within protected river corridors, due to the law's mandate to maintain or enhance Outstandingly Remarkable Values. In the available documentation for the seven projects that occurred within the South Fork Flathead River corridor, we found explicit acknowledgement of the differences between treatments inside vs. outside: *"The proposed treatments are intended to improve stand health and probability of survival during beetle infestation while retaining more trees (than other similar units proposed outside of the wild and scenic river corridor) to meet recreation, scenic, forest health, and wild and scenic river goals."* [13]

Although Wild and Scenic River designation does not preclude forest management, as shown previously, it *may* restrain or refine treatments to ensure Outstandingly Remarkable Values are preserved. Within practical application, this means that treatments can be different inside the Wild and Scenic River corridor when compared to outside it. We grouped forest management activities involving cutting and burning (see table below) and applied these groupings to 1) activities within the South Fork Flathead River recreational segment; and 2) nearby activities outside this segment (within one mile).

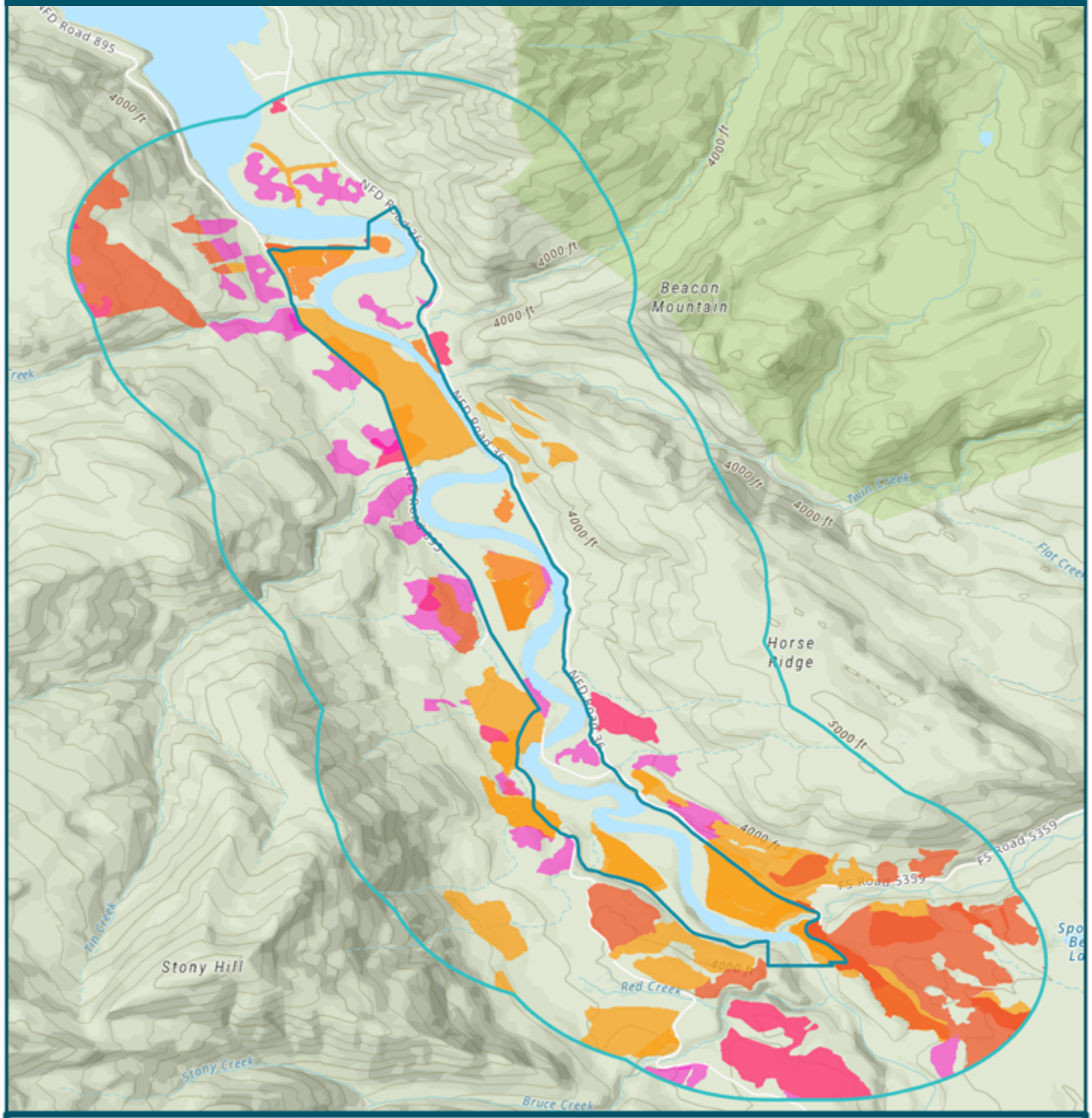
[13] U.S. Department of Agriculture Forest Service. (2009, July). Environmental Assessment for the Soldier Addition Project. Flathead National Forest. p. 20. https://www.fs.usda.gov/r01/flathead/projects/archive/26393

TABLE 1. TYPES OF FOREST MANAGEMENT ACTIVITIES [14]

ACTIVITY	CATEGORY	TYPE
BROADCAST BURNING - COVERS A MAJORITY OF THE UNIT	BURNING	COMPLIMENTARY BURNING
BURNING OF PILED MATERIAL	BURNING	COMPLIMENTARY BURNING
JACKPOT BURNING - SCATTERED CONCENTRATIONS	BURNING	COMPLIMENTARY BURNING
UNDERBURN - LOW INTENSITY (MAJORITY OF UNIT)	BURNING	TREATMENT BURNING
WILDLIFE HABITAT PRESCRIBED FIRE	BURNING	TREATMENT BURNING
COMMERCIAL THIN	CUTTING	CUTTING (LEAST)
PRECOMMERCIAL THIN	CUTTING	CUTTING (LEAST)
THINNING FOR HAZARDOUS FUELS REDUCTION	CUTTING	CUTTING (LEAST)
VISUAL ENHANCEMENT	CUTTING	CUTTING (LEAST)
VISUAL REHABILITATION	CUTTING	CUTTING (LEAST)
WILDLIFE HABITAT CREATE OPENINGS	CUTTING	CUTTING (LEAST)
GROUP SELECTION CUT (UA/RH/FH)	CUTTING	CUTTING (MODERATE)
LIBERATION CUT	CUTTING	CUTTING (MODERATE)
SALVAGE CUT (INTERMEDIATE TREATMENT, NOT REGENERATION)	CUTTING	CUTTING (MODERATE)
SALVAGE CUT (INTERMEDIATE TREATMENT, NOT REGENERATION)	CUTTING	CUTTING (MODERATE)
SHELTERWOOD PREPARATORY CUT (EA/NRH/NFH)	CUTTING	CUTTING (MODERATE)
TWO-AGED SHELTERWOOD ESTABLISHMENT AND REMOVAL CUT (W/ RES) (2A/RH/FH)	CUTTING	CUTTING (MODERATE)
TWO-AGED SHELTERWOOD ESTABLISHMENT CUT (W/RES) (2A/RH/NFH)	CUTTING	CUTTING (MODERATE)
PATCH CLEARCUT (EA/RH/FH)	CUTTING	CUTTING (MOST)
SEED-TREE REMOVAL CUT (W/ LEAVE TREES) (EA/NRH/FH)	CUTTING	CUTTING (MOST)
SEED-TREE SEED CUT (WITH AND WITHOUT LEAVE TREES) (EA/RH/NFH)	CUTTING	CUTTING (MOST)
STAND CLEARCUT (EA/RH/FH)	CUTTING	CUTTING (MOST)
STAND CLEARCUT (W/ LEAVE TREES) (EA/RH/FH)	CUTTING	CUTTING (MOST)
TWO-AGED SEED-TREE SEED AND REMOVAL CUT (W/RES) (2A/RH/FH)	CUTTING	CUTTING (MOST)
TWO-AGED STAND CLEARCUT (W/RES) (2A/RH/FH)	CUTTING	CUTTING (MOST)
VISTA CLEARING	CUTTING	CUTTING (MOST)

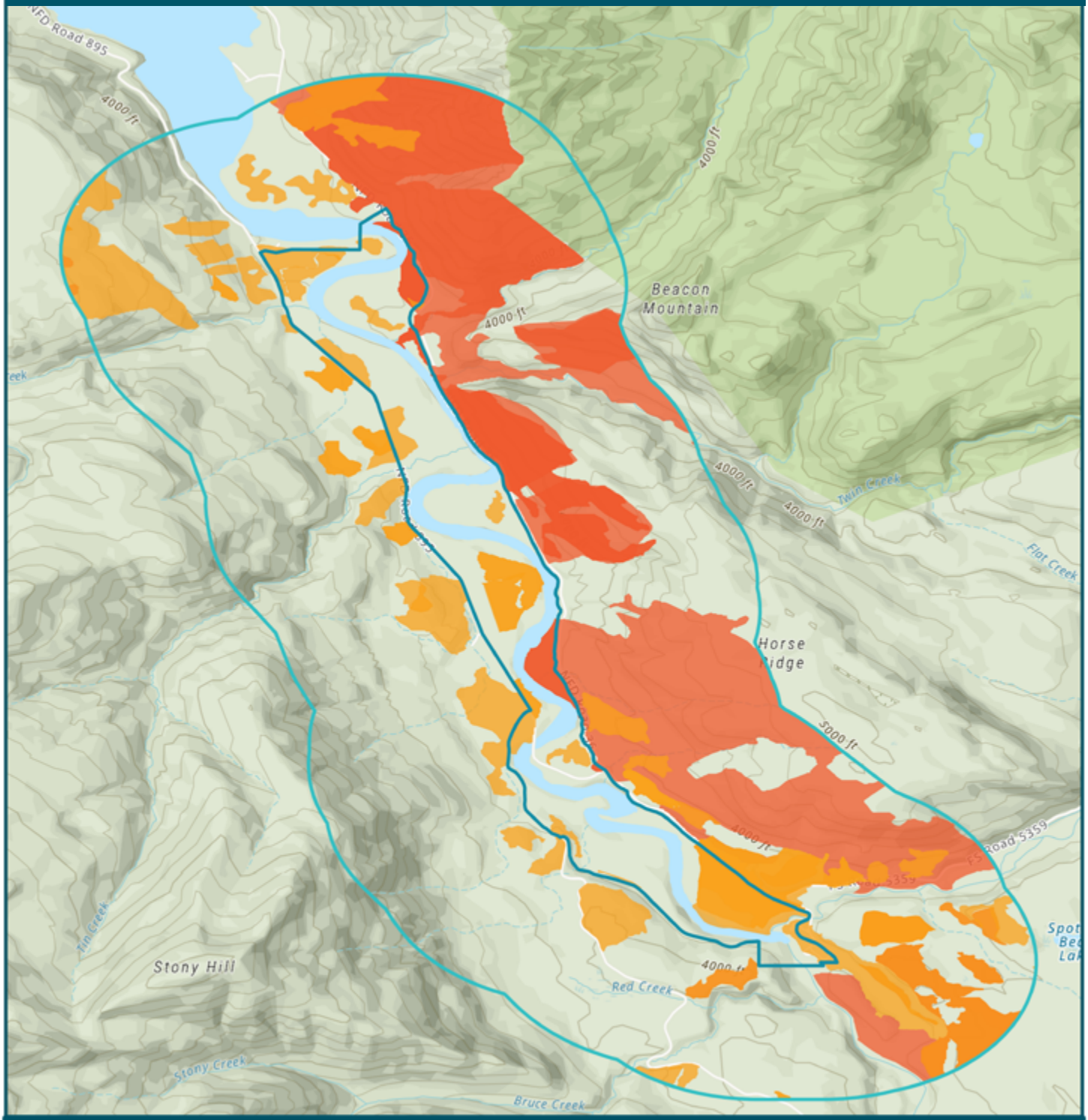
[14] One of the shortcomings of the Forest Service's Forest Activity Tracking System geospatial database is that it does not account for pre-existing conditions. This means that a pre-commercial thin, for example, will harvest different amounts and types of trees depending on whether it is applied to a monoculture or an area recently burned by wildfire. This table groups together different types of treatments. Complimentary burning treatments generally occur after cutting treatments. Cutting treatments are generally grouped according to those that cut the least, most, and moderate number of trees, when compared to one another independent of pre-existing conditions or management goals. The cutting categories focus on primary harvest activities and do not include complimentary activities like yarding, slashing, mastication, chipping, or piling of fuels.

Cutting inside and outside the Wild and Scenic River Corridor



AMERICAN RIVERS

Burning inside and outside the Wild and Scenic River Corridor



AMERICAN RIVERS

Part 5: Cont.

Darker, pinker areas on the maps above indicate increased frequency of treatments that harvest more trees, while lighter, more orange areas illustrate the frequency of treatments that harvest fewer trees. Darker, redder areas indicate increased frequency of burning treatments, while lighter, more orange areas illustrate the frequency of complementary burning (burning that happens post-cutting).

Since the projects we reviewed for this report were conducted across broad swaths of the Flathead National Forest, and few were specific to the Flathead Wild and Scenic River, comparing activities inside/outside the protected river corridor shows that more intense treatments were generally, though not always, applied outside the Wild and Scenic River corridor where lands can be within the suitable timber base. Since the suite of tools available to managers is the same inside and outside the river corridor, selected treatments are driven by desired conditions, which can differ. This is consistent with conversations with current and retired Flathead National Forest employees who described how initial project plans were often modified and refined to better complement the Outstandingly Remarkable Values while still achieving other stated goals for timber production, forest health, and fire resilience. They also described how achieving balance between timber harvest, fire mitigation, and river protection interests has long relied on important elements of agency culture on the Flathead National Forest, including:

- Vocal, well-trained, veteran specialists, such as fish biologists, hydrologists, and silviculturists
- High degrees of trust bestowed upon these specialists by line officers, who are the ultimate decision-makers on projects
- Proactive collaboration and coordination among project teams with highly engaged leaders
- A “what’s possible” mentality applied to resolving tensions between different, and sometimes conflicting, goals and needs
- Continuity and conformity that result when values and ways of thinking are institutionalized among staff across specialties and passed down to successors

Conclusions

The National Forest System comprises 193 million acres of diverse lands, and each national forest is a unique treasure. The Flathead National Forest makes for an excellent case study because it is ecologically rich, it faces strong social and ecological pressures, and it is under intense scrutiny by the public as it completes its new Comprehensive River Management Plan for the Flathead Wild and Scenic River. The Flathead National Forest also has 50 years of experience managing Wild and Scenic Rivers while also conducting forest management activities in designated and eligible river corridors.

Forest managers face a complex job with many competing social interests and budgetary and legal restraints. There is, and should be, robust public debate over what successful management looks like on public lands and waters, including along designated and eligible Wild and Scenic Rivers. These riverside lands have been, and continue to be, actively managed via a variety of treatments. Over the past 50 years, most of the acreage within the scenic and recreational segments of the Flathead Wild and Scenic River have been subject to management activities such as pre-commercial thinning and weed control, and even commercial timber harvest to provide raw materials to industry.

Although forest management also took place along eligible Wild and Scenic Rivers, our analysis suggests that the consideration these rivers have received is inconsistent when compared to the designated Flathead Wild and Scenic River. River protection advocates generally view Wild and Scenic eligibility within forest planning as providing valuable interim protections. However, higher quality, more consistent consideration within forest management exemplifies one of the tangible differences between the safeguards granted to congressionally designated rivers versus eligible rivers.

The purpose of this report is to explore the occurrence of active forest management within the context of Wild and Scenic Rivers. The sheer number and diversity of forest management activities that have occurred within designated and eligible Wild and Scenic River corridors on the Flathead National Forest clearly demonstrates that Wild and Scenic River protections can be maintained and even enhanced while active forest management takes place. Elements of agency culture—specifically having experienced scientists and silviculturists who advocate for the needs of the river and prioritize compromises that meet multiple-use goals—influence how the demands of the Act are practically weighed when planning forest management projects.

As development continues to intrude into the Wildland Urban Interface and demand for raw materials increases, the Flathead National Forest will surely face increased pressure to undertake forest management activities. By examining the coexistence between river protection and forest management on the Flathead National Forest, we hope this report provides valuable insights to land and river managers, foresters, timber companies, environmental advocates, and community decision-makers that participate in debates around the management of natural resources and public waters.

Meanwhile, the three forks of the Flathead Wild and Scenic River flow wild and clear, as Congress intended, into the next 50 years.

References

The following information sources were consulted to inform this report.

GIS DATA

Flathead County. Montana Cadastral Framework (Montana State Library). 2025. https://ftpgeoinfo.msl.mt.gov/Data/Spatial/MSDI/Cadastral/Parcels/Flathead/

Forest Service. Natural Resource Manager (NRM) Forest Activity Tracking System (FACTS): Region 1 (feature layer). Washington, D.C.: USDA Forest Service, 2025. https://data-usfs.hub.arcgis.com/datasets/usfs::activity-facts-common-attributes-feature-layer/about

Forest Service. National Wild and Scenic Rivers: Legal Status (feature layer). Washington, D.C.: USDA Forest Service, 2017. https://data-usfs.hub.arcgis.com/datasets/usfs::national-wild-and-scenic-rivers-legal-status-feature-layer/about

Forest Service. Eligible Wild and Scenic Rivers on the Flathead National Forest. Obtained via email from Luke Floch, GIS Program Manager, Flathead National Forest.

Montana Department of Natural Resources and Conservation. Community Wildfire Protection Plan Wildland Urban Interface. 2024. https://services2.arcgis.com/DRQySz3VhPgOv7Bo/arcgis/rest/services/CWPP_Wildland Urban Interface_Update_2024/FeatureServer

NATIONAL ENVIRONMENTAL POLICY ACT PROJECT DATA

Forest Service. Flathead National Forest Projects Archive. https://www.fs.usda.gov/r01/flathead/projects/archive

FLATHEAD TIMBER HARVEST HISTORY DATA

University of Montana. Bureau of Business and Economic Research. Forest Industry Research Program. https://www.bber.umt.edu/FIR/HarvestT1.aspx?co=30029

AMERICAN RIVERS
Life Depends on Rivers℠

FOR MORE INFORMATION CONTACT:

Lisa Ronald, Northern Rockies Associate Conservation Director at American Rivers
LRonald@americanrivers.org

ABOUT AMERICAN RIVERS

American Rivers is a national conservation organization working to make every river clean and healthy for people and wildlife. We combine evidence-based solutions with enduring partnerships to safeguard the 4.4 million miles of rivers and streams that are essential to our nation's clean drinking water, extraordinary wildlife, and the strength of our communities. For more than 50 years, our staff, supporters, and partners have been driven by a common belief: Life Depends on Rivers. **AmericanRivers.org**