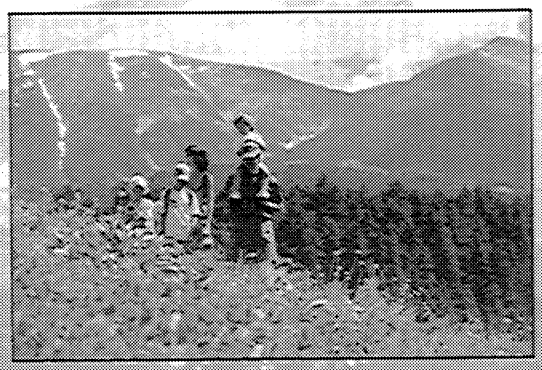
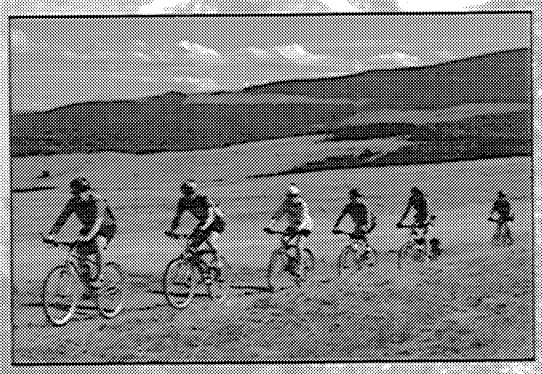
State Trails Grant Program:

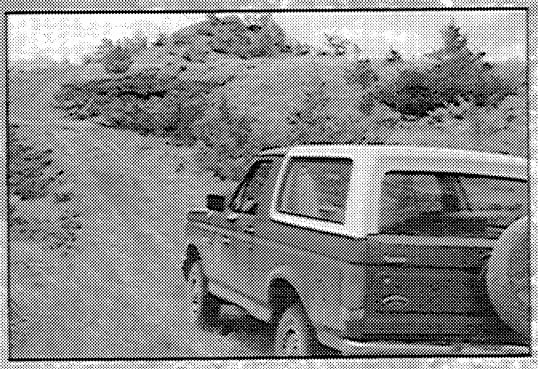
Programmatic Environmental Impact Statement

Draft Executive Summary

August 2000







State Trails Program

Montana Fish, Wildlife & Parks

HOW TO COMMENT

Questions and comments about the *Montana State Trails Plan* and *Programmatic Environmental Impact Statement (PEIS)* are encouraged. If you you have questions, please contact either Jeff Erickson (406-444-3818) or Bob Walker (406-444-4585) at the FWP office in Helena. If you would like to comment on either document, send your thoughts to Jeff Erickson by Monday, September 25, 2000, at the following:

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EXECUTIVE SUMMARY

Montanans and visitors alike highly value Montana's natural environment and outdoor recreation opportunities. Fish, Wildlife & Parks (FWP), along with other federal, state, and local land and trail managing agencies, is dedicated to providing opportunities for the public to enjoy these resources. However, opportunities for public outdoor recreation, including Montana's trail system, could be enhanced.

The FWP State Trails Program has undertaken a number of planning projects to address statewide trail issues while fulfilling federal and state outdoor recreation and environmental planning mandates, culminating with the Montana State Trails Plan (MSTP) and State Trails Program Programmatic Environmental Impact Statement (PEIS). The primary goal of these planning documents is to guide enhancement of the state's public trail system and to increase opportunities for public enjoyment while protecting natural and cultural resources.

Although the federal government, especially the U. S. Forest Service (USFS), manages most of the state's public land and trails, other managing agencies, including local governments, manage smaller but integral portions of the overall system. Collaboration among trail managing agencies, organizations, and individuals, is crucial for improvement of the overall system, especially in times of shrinking trail budgets for many agencies.

Trail related activities are among the most popular and fastest growing outdoor recreational activities, both nationally and statewide. Montana's trail system is an integral component of outdoor recreation in the state. More than 55 percent of Montanans (FWP 1998) use trails. Trails are often utilized for other very popular outdoor activities, including picnicking, sightseeing, wildlife and nature viewing, photography, fishing, and hunting. Trails are an important element of the parks, open space, and alternative transportation network for many Montana communities.

Enjoying nature, physical fitness, stress release, adventure, and affiliating with others interested in the same activity are all important motivations to resident trail users (ITRR 1994b). In general, "trails provide all the myriad personal and social benefits generated by participation in outdoor recreation, such as improved health and fitness, relaxation, challenge and adventure, family togetherness, and an increased awareness of nature (Moore and Ross 1998). Montanans agree that more trails are needed, especially near the communities where they live.

Trails and trail-related activities also play a role in attracting visitors and new residents to the state. Day hiking, wildlife watching, and nature photography are the three most popular activities for summer vacationers, according to a 1996 summer travel survey conducted by the Institute for Tourism and Recreation Research (ITRR 1997). In a 1998 study by the Liz Clairborne and Art Ortenberg Foundation, the most popular reasons given for choosing Montana as a home were scenic beauty and open space, with opportunities for outdoor recreation the fifth most popular reason (Bozeman Daily Chronicle 1999).

The State Trails Program, administered by the Parks Division of FWP, is responsible for three statewide trail grant programs: the Recreational Trails Program (RTP), Off Highway Vehicle (OHV) Program, and the Snowmobile Grant Program. FWP implemented the preferred alternative for the Snowmobile Grant Program, identified in a Programmatic Environmental Impact Statement (PEIS) completed in 1993. The following PEIS compares the environmental impacts of three management alternatives for the Recreational Trails and OHV Grant Programs. Summarized below are the primary components of the PEIS.

Trails must satisfy certain minimum specifications to qualify for funding from these trail grant programs. Complete specifications are available from the State Trails Programs office, FWP. Backcountry trails must satisfy the specifications in Chapter 2350, U. S. Forest Service Handbook (FSH). Urban trails must satisfy minimum specifications identified by the Federal Highway Administration, 1999 Interim Guidance.

Montana State Trails Program

Recreational Trails Program

The federally funded Recreational Trails Program (RTP) offers grants to federal, state, county, tribal, and municipal agencies, and private organizations for trail development, renovation, maintenance, acquisition, safety, and interpretation.

The RTP allows 7 percent of a state's appropriation to be used for administration and 93 percent to be used for grants. Assurances in the federal law set aside:

- 30% for motorized recreation
- 30% to non-motorized recreation
- 40% for diversified trail use

FWP has flexibility within these regulations to spend RTP funds in a manner that furthers state trails goals.

RTP Guidelines and Qualifying Requirements:

- States are required to devote a portion of state funds for trail projects.
- States are encouraged to rank grant applications according to issues identified in state trail plans in a manner that furthers goals of the State Comprehensive Outdoor Recreation Plan (SCORP).
- States are required to create a State Trails Advisory Committee to provide guidance for the grant program. Montana's committee is composed of members representing hiking, snowmobiling, cross country skiing, horseback riding, ATV riding, bicycling, four wheel driving (4WD), and off-road motorcycling.

Allowable uses of RTP funds:

- Maintenance and restoration of existing recreational trails.
- Development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails.
- Purchase and lease of recreational trails construction and maintenance equipment.
- Construction of new recreational trails, except in the case of new recreational trails crossing federal lands, construction of the trails shall be: 1) permissible under other law; 2) necessary and required by a statewide comprehensive outdoor recreation plan that is required by the Land and Water Conservation Fund Act of 1965; 3) approved by the administering agency of the state designated under this act; and 4) approved by each federal agency having jurisdiction over the affected lands.
- Acquisition of easements and fee simple title to property for recreational trails or recreational trail corridors.
- Payment of costs to the state incurred in administering the program, but in an amount not to exceed 7 percent of the apportionment made to the state during a fiscal year to carry out this act.
- Operation of educational programs to promote safety and environmental protection as those objectives relate to the use of recreational trails, but in an amount not to exceed 5 percent of the apportionment made to the state for any fiscal year.

Uses not permitted with RTP funds:

- Condemnation of any kind of interest in property.
- Construction of any recreational trail on National Forest System land or Bureau of Land Management land for any motorized use unless: 1) the land has been designated for uses other than wilderness by an approved forest land and resources management plan or a Bureau of Land Management resource management plan or has been released to uses other than wilderness by an Act of Congress; and 2) the construction is otherwise consistent with the management direction in the approved forest or BLM management plan.
- Upgrading, expanding or otherwise facilitating motorized use or access to recreational trails predominantly used by non motorized recreational trail users and on which, as of May 1, 1991, motorized use was prohibited or had not occurred.

All projects seeking funding from the RTP must comply with existing federal, state, and jurisdictional laws, regulations, policies, and ordinances.

The RTP provided $486,295 for 66 trail projects in 1999 and $734,545 is earmarked for Montana trail projects in 2000, a significant increase from 1993 when $120,000 was available. For fiscal years 2001-2003, an estimated annual apportionment of $734,545 will be available for trail projects.

Off-Highway Vehicle Program

The OHV Program is a grant program for the renovation and maintenance of OHV trails and riding areas. OHV decal fees and a portion of the state gasoline tax finance this program. OHV safety education receives 10 percent of these funds and up to 10 percent can be used to repair areas that are damaged by OHV use. The remaining funds are used to develop and maintain facilities free of charge to the general public.

The program focuses on projects that provide renovation or maintenance to existing OHV trails or trail systems or deliver ethics education to OHV users.

Projects fundable under the OHV Program:

- Trail maintenance and renovation.
- Soil stabilization measures to prevent or diminish erosion and provide a safe riding experience.
- Trail signing to provide route information, natural resource or historic interpretation, and information about ethical conduct.
- Measures to reduce or eliminate resource impacts.
- Multiple-use benefits.
- Noxious weed control.
- Trail inventory using GPS or other technology.
- Special studies that provide information for OHV program planning and management.
- Ethics information and education.

The amount of money available is dependent on the number of OHVs registered in Montana and allocation of budget authority by the state legislature. The total budget for FY 1999 was $180,858, with $144,003 granted to 22 projects.

Statewide Trail Issues

The issues listed below are based on comments received during the public scoping process, as well as agency input and research, and were used as criteria for judging the three management alternatives evaluated in the PEIS

Trail Policy, Planning, Design, and Construction Issues:

- Trail information collection and dissemination needs to be improved, in order to assure that limited trails resources are being allocated efficiently, are meeting user needs appropriately, and are addressing the trail issues discussed below.

- Resource protection. Trails and trail related outdoor recreation can impact natural resources such as water quality, air quality, vegetation, soils, fish, and wildlife, as well as cultural resources, including historic sites, archaeological resources, and Native American religious sites. Trails and trail related recreation should be planned and managed in a manner that minimizes resource damage.

- Safety and liability issues need to be addressed in future planning, design, and construction of trail facilities.

- Disabled accessibility. More trails that are accessible to elderly and disabled users are needed in some locations

Trail Conflict and Use Issues:

- Conflicts can occur between trails users, especially between motorized and non-motorized users. Most trail users feel that motorized trail use is inherently incompatible with non-motorized activities. The potential for conflict is higher on trails where permitted and prohibited uses are unclear. Conflicts can also occur between trails users and adjacent landowners, residents, and people using public lands for other purposes. Sometimes, a lack of clear information about property boundaries and user responsibilities contributes to this problem.

- Use restrictions. Trails users often disagree on how restrictive trails rules and regulations should be (e.g., what uses should be permitted, seasonal restrictions, etc.).

Trail Supply and Funding Issues:

- Trail supply. Non-motorized urban trails and non-motorized trails in natural settings are the types of trails most in demand by trail users. During the scoping period, the public identified a need for more or improved rail-trails, greenways, interpretive trails, loop trails, long-distance trails, trailheads, and trails system linkages.

- Alternative transportation. There is a need for more non-motorized alternative transportation trails—particularly urban trails. Trails need to be more effectively integrated with local transportation and land use planning, providing connections among workplaces, shopping areas, and recreation sites.

- Access problems have reduced or eliminated the ability to use some trails and trailheads.

- Non-motorized trail funding. A need for state non-motorized trails funding exists.

Maintenance, Management, and Enforcement Issues:

- Maintaining current trail systems. Because of Montana's large trail system and uncertain federal budgets, maintaining the existing network will be increasingly difficult. Land managers see an increasing need to rely on volunteers and trail user organizations for many trail-related activities due to lack of funding and personnel. Trails user organizations will need to work more closely with managing agencies on both trails management and maintenance.

- Management and enforcement. Many trail users feel that enforcement of trails rules and regulations is insufficient in certain areas.

On some heavily used multiple-use trails, there is a need for creative management options to reduce conflicts.

Education and Communication Issues:

- Trail information. Many trail users feel there is a need for better trail maps, signs, and other information detailing closures, permitted uses, etc.
- Training and education. Trail-related training and education opportunities need to be improved to diminish conflicts, reduce resource impacts, and improve ethics and safety.
- Communication. Improved inter-agency cooperation and communication is needed to improve efficiency and maximize effective use of limited resources.

Program Alternatives

Alternatives were developed in response to the issues discusses above to determine whether the current program could be improved and the negative impacts associated with the program minimized.

Alternative I

Continue the current programs.

Alternative II

Reduce funding of trail projects within legislatively mandated constraints by discontinuing administration of the Recreational Trails Program and limiting OHV Program funds to educational, mapping, and special projects with no on-ground or site-specific trail component (the OHV Program can not be eliminated entirely without legislative action). Other aspects of the program would remain as described in Alternative I.

Alternative III (the preferred alternative)

The preferred alternative, Alternative III will continue implementation of the OHV and Recreational Trails Programs with modifications designed to accomplish improved environmental and cultural resource oversight, increased efficiency, and improved service to trail users. This alternative also integrates key recommendations from the State Trails Plan into grant programs.

Modifications include an improved environmental review process, requiring consultation with the U. S. Fish and Wildlife Service for impacts on plants and animals, and with the State Historic Preservation Office (SHPO) for impacts on cultural resources. A weed management plan is also required of applicants. The process for evaluation and selection of trail projects would be more quantitative, and would include a more standardized and detailed methodology for prioritizing projects.

The preferred alternative contains recommendation for a number of new trail program elements intended to improve cooperation, coordination, and communication among trail managing agencies, including committees and summits, and the gathering and disseminating of trail and trail user data, including trail user surveys.

Affected Environment

Natural Environment

Soils

Montana contains a diversity of soil types resulting from the wide range of topographic, geologic, local climatic and vegetative conditions across the state, with the underlying geology a primary factor. Stream and river valleys throughout Montana are composed of soils that are normally deep and fertile. Soils of Western

Montana are generally poorly developed and associated with cool environments. East of the Rocky Mountains, soils range from well developed and fertile to poorly developed and saline. Soils of southeastern Montana are well developed, and associated with hot, dry prairie environments. The glaciated plains of northeastern and north central Montana are generally composed of poorly developed and shallow soils.

Soil disturbances resulting from trail construction, maintenance, and use patterns can cause changes in erosion and runoff patterns resulting in slope failures of various intensities and sizes, impacting adjacent soil, vegetation, and water resources. A number of studies have concluded that road building has the biggest negative impact to soil resources, and secondarily to water quality, of any land use pattern in the western United States, especially as lack of maintenance increases the erosion processes. Trails can influence the erosion forces similarly, although to a lesser extent.

Vegetation

The vegetation of Montana consists of plant communities adapted to diverse soils, topography, climate, fire regimes, and biological influences. These communities occupy a range of ecosystems, including alpine tundra at the highest elevations, coniferous forests at the sub-alpine and montane zones, shrublands and grasslands of intermontane valleys and plains, and riparian forests and meadows along rivers and streams, and wetlands.

The plant species known to occur in Montana include a number of plants listed as sensitive by the Montana Natural Heritage Program. Currently, the Montana Natural Heritage Program (MNHP) is tracking 365 vascular plants and 96 moss species as sensitive including two species, water howellia and Ute ladies-tresses, listed as threatened by the United States Fish and Wildlife Service under the Endangered Species Act of 1973.

The most direct effect of trail development and trail use is injury and destruction of vegetation, which results in changes in species composition and diversity. Changes in vegetation can in turn impact soil resources, water quality, and wildlife and aquatic resources. Stream morphology and water quality is dependent on vegetation in a number of ways. Riparian habitats provide key wildlife habitat, and are especially important in water quality and aquatic habitat.

Trails and trail-related activities, by disturbing native plants and soil, and introducing seeds that are easily spread by clothing, equipment, or vehicles, can initiate infestations noxious weeds. Noxious weeds are a significant threat to native vegetation and wildlife habitat in Montana. For a number of weed species, legislation and regulations at the federal, state, and local level mandate control.

Water Quality and Hydrology

The major river basins in Montana are the Hudson Bay basin (465 mi^2) and the upper Missouri River basin (120,700 mi^2) east of the Continental Divide, which together drain about 82 percent of the State and provide slightly less than 50 percent of the total stream flow. The upper Columbia River basin (6,000 mi^2) drains 18 percent of the state and provides slightly more than 50 percent of the total stream flow west of the Continental Divide (Shields et al. 1994).

Trails and associated use patterns can impact water quality and hydrology, generally resulting from impacts to soils and vegetation. Pollution and human waste resulting from recreational activities can directly impact water quality. Inappropriate location of roads and poorly maintained primitive roads are significant sources of water quality degradation in the Western United States. In a similar fashion, inappropriate location or poor maintenance of trails and off-trail use patterns contribute to water degradation.

Fish and Other Aquatic Resources

Montana's 53,221 miles of perennial and 116,609 miles of intermittent rivers and streams, and 10,246 lakes, ponds, and reservoirs covering 844,802 surface acres feature a wide variety of aquatic habitat types that support cold water, cool water, and warm water fish species.

Montana contains 86 known species of fish — 56 native species, and 30 introduced. The species composition of Montana waters has changed considerably as a result of legal and illegal introductions and habitat changes.

Trail projects can alter or increase recreational impacts, including fishing, on water bodies and associated aquatic resources, as well as increase the likelihood of illegal introductions of exotic species. Trails directly adjacent to water bodies can result in the loss of riparian vegetation from trampling. However, the greatest potential impact of trails and trail use on fish and aquatic resources is degradation of habitat and water quality resulting from impacts to vegetation and soil resources within a watershed.

Wildlife

Montana's biological diversity is comparable to its diversity in topography, physiography and climate, with vertebrate fauna consisting of 357 bird species, 107 mammal species, 4 lizard species, 3 turtle species, and 10 snake species native to Montana. Native vertebrates fill niches ranging from riparian to alpine, from arid grasslands to forested mountains.

The approximately 15,000 miles of trails in Montana occur in or near all types of wildlife habitat. Regardless of the type or location of use or the kind of user, all trails and trail users have some impacts on wildlife and wildlife habitat.

Impacts on certain species, due to legal considerations or concerns relative to actions that may affect population numbers and critical habitats, are of particular concern. The United States Fish and Wildlife Service, under the Endangered Species Act of 1973, lists 47 bird species, 26 mammal species, 8 amphibian and five reptile species. Four species are listed as threatened (bald eagle, grizzly bear, piping plover, lynx), and four as endangered (black-footed ferret, gray wolf, whooping crane, and least tern). The Montana Natural Heritage Program lists 37 bird species, 25 mammals, 5 amphibians and 5 reptiles as species of special concern. Three of these species are listed as threatened and five are endangered under the Endangered Species Act.

Human Environment

Land Use

Approximately 61 percent of land in Montana is in private ownership, while 36 percent is public and 3 percent is within Indian Reservations. Almost 18 percent of the total land area (16,752,700 acres) is managed by USFS, while 6 percent is owned by the state, and less than 1/10 of 1 percent owned by cities and municipalities.

In many of the larger urban areas of Montana, changes in land use and land ownership from urban and suburban sprawl, especially residential development in rural areas, is causing significant changes in traditional outdoor recreation, with many informal trails and accesses lost as a result.

Demographic Patterns

Montana's population grew from 787,000 in 1980 to 800,000 in 1990 to 880,0000 in 1997. An accelerated growth rate of over 8 percent has occurred during the last five years with 69 percent of the population growth attributed to in-migration. In 2000 the state is estimated to have a population of 950,000 residents, a gain of more than 25 percent since 1990.

Most of Montana's population growth occurred in Western Montana. By 1993 over 60 percent of Montana's population lived in 8 counties. This trend is continuing. Montanans are also increas-

ingly urban as a result of the overall aging of the population, a decline in the farming and ranching population, and migration to high amenity urban areas in the mountainous portions of the state. Although average incomes are low in Montana, surprisingly few would trade their lifestyle for higher incomes elsewhere. A 1999 survey identified natural amenities, such as scenic beauty and open space, as the most popular reasons given for choosing Montana as a home.

Social and Economic Patterns

The service sector continues to be the fastest growing sector of the economy, with employment increasing from 18 to 27 percent of total employment from 1970 to 1990, while at the same time farm employment declined significantly, a trend continuing into the 1990s.

At the same time, Montanans have grown increasingly poor compared to the nation as a whole since the 1980s. In 1996 Montana's per-capita personal income was 47th in the nation. The proportion of Montanans living below the poverty level increased from approximately 13 percent to over 16 percent in 1996 (compared with 13 percent for the United States in general).

Tourism is an increasingly important part of Montana's economy, and currently the second largest industry, after agriculture. Tourists spend an estimated $1.5 billion annually in Montana, accounting for 6 percent of total jobs, 3 percent of self-employed income, and 2 1/2 percent of property income. Nonresident visitors (not including those using commercial vehicles) paid an estimated $113 million in state and local taxes (more than 7 percent of all state and local taxes).

Montana's economy is predicted to grow at a moderate rate of approximately 2 percent until 2010, equaling or exceeding projected nationwide growth rates, but among the slowest growing of the Rocky Mountain Region states (Polzin 1998). The Rocky Mountain Region as a whole (Montana, Idaho, Wyoming, Colorado, and Utah) is expected to grow faster than other regions because of natural and social amenities of the region. Much of Montana's slower growth rate is attributed to low population, lack of urban and travel infrastructure, relative isolation, and distance from major metropolitan areas.

Montana's Trail System

Montana contains 2,294 public trails totaling more than 14,633 miles, based on a 1994 trail inventory (ITRR 1994). The United States Forest Service (USFS) manages 2,075 trails (90 percent of state total) and 13,496 trail miles (92 percent of the state total), concentrated in western Montana. The National Park Service (NPS) manages 148 trails (6 percent of state total), totaling 826 miles (6 percent of state total), with the BLM accounting for only nine trails totaling 167 miles. However, by 1999 the BLM reported 49 trails totaling 397 miles. Although none of the other trail managing agencies account for more than 1 percent of the state's total of either total trails or trail miles, they represent a very important part of Montana's trail system, particularly trails closest to the urban areas where most Montanans live.

Trail Settings: The majority of Montana's trails are located in a relatively natural and primitive setting, based on the Recreational Opportunity Classification (ROS) spectrum:

Primitive non-motorized	27%
Semi-primitive non-motorized	26%
Semi-primitive motorized	28%
Roaded natural	18%
Rural	<1%
Urban	1%

The relative lack of trails and trail miles in urban and rural settings, where the majority of the population lives, is a major weakness in Montana's trail system that is addressed in the following chapters. Alternatively, although a large percentage of trails is in the primitive end of the continuum, the preference for these settings by the majority of trail users is another issue that needs to be addressed, especially as trail use increases.

Use Restrictions: The most commonly mentioned restrictions on trail use identified in the *Montana Trail Inventory* (1994b) pertained to motorized vehicles. The specific restriction mentioned most frequently was a prohibition on vehicles over 40 inches wide (33 percent of trails), a rule that bans vehicles such as cars, trucks, jeeps, dune buggies and ATVs, but allows bicycles, motorcycles, snowmobiles (unless otherwise restricted). All motorized vehicles including snowmobiles are prohibited from 30 percent of trails, while mechanized vehicles (bicycles) were prohibited from 12 percent of trails.

Motorized vehicles less then 40 inches wide (motorcycles and most ATVs, but not 4X4s) are unrestricted on over 60 percent of trails for at least a portion of the year, and all year on over 40 percent. Urban trails are generally closed to motorized vehicles and stock animals.

Trail-Related Outdoor Recreation

Participation rates in trail related activities were obtained primarily from *The Montana Trail User's Study* (ITRR 1994b), which surveyed adult Montanans about participation in pre-selected activities. The percentages obtained during that study reflect total use, including on-trail and off-trail.

Outdoor Recreation Activities Within A Six-Month Sampling Period **(ITRR 1994b)**:

- 70% of adult Montanans went day hiking or walking for pleasure in a six-month period.
- 19% jogged.
- 20% bicycled.
- 20% went four-wheel driving.
- 17% went horseback riding.
- 14% went backpacking, and an equal number cross-country skied.
- 14% went mountain biking.
- 9% went off-road motorcycling.
- 12% used ATVs.

Trail Use: Trail use rates were obtained primarily from FWP's ***Montanan's Assessment of Montana Fish, Wildlife and Parks Programs*** (1998), which asked respondents if they had used a trail in a two-year period, and if so, what activity they were engaged in. Fifty-six percent of adult Montanans used a trail during the two-year sampling period. Participation by activity was as follows:

- 90% went hiking.
- 11% went horseback riding.
- 6% went bicycling.
- 4% went cross-country skiing.
- 2% used ATVs, while an equal number used 4X4s on trails.
- 2% used off-road motorcycles.

Large numbers of visitors to Montana National Forests and BLM lands also participated in trail-related activities. Likewise, Montanans engage in a number of outdoor activities when on a trail-related trip. 20 percent of respondents participating in fishing and 15 percent participated in hunting, while over 61 percent of summer trail users mentioned wildlife viewing as a primary factor for taking a trail trip (ITRR 1994b).

Montana attracted 2.5 million more visitors in 1995 then in 1983 (ITRR 1996). By 1998 over nine million tourists visited the state. Many of these visitors used trails and participated in recreational activities related to trails during their stay in Montana.

National Outdoor Recreation Trends: Both nationally and in Montana, outdoor recreation is increasing in popularity, with trail use and trail-related activities among the fastest growing. In 1995 over 94 percent of Americans participated in some form of outdoor recreation at least once, up from 89 percent in 1983 (Cordell, Teasley, and Super 1997).

An increased demand for inexpensive outdoor recreation, especially close to home and near urban centers, is contributing to increased use of trails and demand for more trail opportunities (Leisure Watch Canada 1998). Fitness activities that offer cheap alternatives to organized, expensive, and time-consuming activities, that can be included as part of every day life, are increas-

ingly popular, such as in-line skating, mountain biking, hiking, walking and jogging.

Trail-related activities, such as day hiking, backpacking, nature viewing, and wildlife photography, are among the most rapidly growing recreation activities nationally. Recreational use of OHVs grew by 40 percent in the last decade and is expected to continue to grow, although not at the rates seen for other trail related activities (Lundquist 1997).

Summary of Trail User Attitudes

Attitudes of Montanans on a number of significant issues, including trail supply, access to trails, trail use and management, trail use conflict and compatibility, and trail preference, are summarized below.

Attitudes about Montana's Trail Supply:

- 20percent of respondents felt there were enough trails in the state, 43percent of the respondents felt there were not enough, and 36percent were either neutral or didn't know (ITRR 1994b).
- Nearly 50percent of respondents agreed that more trails were needed in their communities, compared to approximately 20percent that disagreed.
- Strong support for urban trails, alternative transportation and commuter routes, and greenways was expressed during the public scoping period.
- Access to trails and public land were the most often identified statewide trail issue to be identified during the public scoping period, and the second most often identified local trail issue. However, only 14percent of Montana residents expressed dissatisfaction with access to public land for recreation, while 79percent expressed satisfaction (ITRR 1994b).

Attitudes about Trail Use and Management:

- Montanans are satisfied with their trail experiences, with 95percent expressing satisfaction, 4percent dissatisfied, and only 1percent with no opinion (FWP 1998).
- Montana trail users have some sense of being crowded while using trails, but from a statewide perspective the situation does not yet appear to be at a crisis level. Only 24percent of respondents felt their favorite trail was too crowded, compared to 30percent who disagreed.
- The need for quiet, non-motorized trails was the most important statewide trail issue identified during the written scoping period.
- Strong support for keeping existing motorized trails open was expressed during the 18 public scoping meetings held in cities throughout the state.

Attitudes About Conflict and Compatibility of Uses on Montana Trails: While conflicts between trail users do not appear to be especially severe when examined from a statewide perspective, the perceived lack of compatibility between mechanized and non-mechanized users, in particular, suggests a potential for increased conflict in the future if use increases and trail supply and management remain relatively constant.

- In general, trail users express some concern about conflicts on trails, but not strong agreement on the severity of the problem (ITRR 1994b). Over 9percent of the responding trail users reported experiencing some sort of conflict on their last trail trip.
- Of those reporting conflicts, nearly 80percent said they involved mechanized forms of trail uses (this includes motorized and non-motorized uses such as mountain bikes).
- Montanans have varied opinions of motorized trail use. Twenty eight percent of

Montanans strongly disapproved of legal motorized trail use; 13 percent percent disapproved, while alternatively; 22 percent strongly approved; 31 percent somewhat approved (FWP 1998); and 6 percent had no opinion on legal motorized trail use.

Trail Setting Preferences: Trail setting preferences by various user types can be helpful in understanding use patterns and trail supply and demand issues (ITRR 1994b). Generally, most trail users prefer backcountry settings, although motorized users are as likely to prefer roads as trails. Multiple preferences were allowed in the survey.

- A majority of respondents in most of the trail user categories expressed a preference for "backcountry" trails, including 60 percent of the largest group of trail users—walkers and day hikers.
- 55 percent of mountain bikers preferred backcountry settings while 49 percent preferred dirt roads.
- 70 percent of off-road motorcyclists prefer backcountry trails and dirt roads.
- Approximately 70 percent of ATV and four wheel drive users also prefer dirt roads, although just under 60 percent prefer backcountry trails.

Cultural Resources

Cultural resources are natural and cultural landscape features that preserve or embody elements of historic, pre-historic, and traditional cultures. Prehistoric and historic cultural resource sites occur throughout Montana, including historic trails, ranging from prehistoric trading routes to settlement trails, to early Forest Service trails. Native Americans have special interest in landscape features and areas found on the 7 Indian Reservations in Montana and throughout mountain ranges, waterways and other land forms of the state.

Trail construction and maintenance can impact cultural resources directly, while trail users can cause unintentional or intentional damage. The potential for impacts to undocumented resources is more likely due to the relatively unsurveyed nature of much of the state. Trail projects can be planned and designed to protect resources by directing public use. Careful trail planning and design can also provide historical education and interpretation opportunities.

Comparison of Alternatives

Table ES-1 compares the impacts of the three management alternatives for the state trails program. Actual impacts are dependant on what activities and programs are initiated, which in turn is dependant on what projects are actually proposed. Impacts under Alternative I, the current program, are also based on the discussion above, since field inspections or other quantifiable data on the impacts of projects funded in the past are not available.

Table ES-1. Comparison of Impacts by Alternative

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Soils Disturbed, compacted, and altered soil, causing changes in infiltration and runoff, and increased erosion.	Under the current program negative impacts on soil resources from trail construction and maintenance are less likely to be avoided or mitigated. Impacts to soil resources resulting from on-the-ground projects or altered use patterns are possible under the current program. Due to existing oversight and management, the existing program should have minimal negative impacts. Projects that mitigate existing impacts to soil resources from trails and trail related activities could be funded, and are prioritized by the OHV Program.	This alternative would eliminate on-ground impacts. Elimination of on-the-ground projects would add to lack of funding for trail maintenance and other mitigation activities. Since the majority of projects have involved maintenance and renovation, Alternative II would result in negative impacts.	Alternative III would increase oversight of projects to mitigate impacts to soil resources. Improved communication with managing agencies will also reduce impacts from site-specific projects. This alternative is less likely to impact soil resources and more likely to fund projects that reduce impacts resulting from lack of maintenance of existing trails. Projects that reduce and mitigate erosion and sedimentation from trails and trail use will be prioritized.

Table ES-1. Comparison of Impacts by Alternative (continued)

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Vegetation Trail construction/ maintenance activities can injure and destroy vegetation, resulting in altered species composition and diversity.	This alternative is most likely to cause impacts to vegetation, although existing environmental oversight reduces the likelihood.	No on-the-ground projects would occur, eliminating both positive and negative impacts.	Increased environmental oversight under Alternative III would avoid, reduce, and mitigate impacts to vegetation.
Trail use patterns: Trail related activities can impact vegetation resources	Projects can be funded that alter/change use on existing trails.		More information about existing use patterns is included in the environmental assessment, reducing the potential for impacts.
Noxious weeds: Impacts to vegetation include the establishment and spread of exotic species, especially noxious weeds.	This alternative is most likely to result in localized establishment and spread of noxious weeds.	Funding noxious weed education and information projects could have a positive impact on noxious weeds.	Required project weed plans, field inspections and 5% of funds for on-ground grants for weed control reduce the likelihood of establishment or spread of noxious weeds caused by funded projects.
TES species: the trail programs could affect Threatened, Endangered, and Sensitive species.	The current program could result in impacts to TES plant species, although existing environmental oversight reduces the likelihood.	Educational projects could increase awareness and appreciation of TES species.	Clearance from biologists and the Fish & Wildlife Service reduce the likelihood of impacts to TES species.

Table ES-1. Comparison of Impacts by Alternative (continued)

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Hydrology/water quality Trail construction and maintenance can result in changes to hydrological patterns and water quality, including sedimentation and pollutants resulting from impacts to soils and vegetation.	The current program is the most likely to result in negative impacts due to current level of oversight. However, the program overall, by funding renovation and mitigation projects, which the OHV Program prioritizes, can have short-term negative impacts but positive in the long-term.	Reduced funding for erosion mitigation projects will result in long term negative impacts to hydrology and water quality statewide. Projects could be funded to study impacts to hydrology/water quality or educate users to reduce impacts.	Increased environmental overview, including enhanced oversight and permits from managing agencies, should reduce long-term negative impacts and mitigate impacts to hydrology and water quality.
Trail use patterns: Trail use can increase sedimentation and introduce contaminants, directly and resulting from impacts to soil and vegetation.	Changing use patterns resulting from funded projects are not monitored under the current program, increasing the potential for impacts.		Trail use patterns and possible changes in patterns are included in the environmental assessment, as well as monitored, decreasing the likelihood of impacts.
Fish/aquatic resources Aquatic habitat and water quality modifications may be secondary impacts resulting from project impacts to soil, vegetation, and water resources.	The current program could result in negative impacts although existing oversight reduces the potential. Construction projects could have short-term negative impacts while renovation and maintenance projects would have positive long-term impacts.	Alternative II eliminates both positive and negative impacts to fish and aquatic resources resulting from on-the-ground trail projects.	Improved environmental oversight and clearance from biologists and Fish & Wildlife Service are more likely to reduce or mitigate impacts.
Changing use patterns: Recreational activities can impact fish and aquatic resources directly and by altering habitat.	Impacts from changing recreation patterns would not be considered in reviewing or prioritizing projects.	Educational projects could increase awareness and appreciation for aquatic species and their habitat.	Changing use patterns would be monitored to minimize impacts, although negative impacts could still occur.

Table ES-1. Comparison of Impacts by Alternative (continued)

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Exotic Species: Recreational activities can result in the accidental or illegal introduction of exotic species.	Altered use patterns could result in the spread of exotic species.		Alternative III could result in the spread of exotic species. Public information/education could reduce this negative impact.
TES species: Trail projects that increase disturbances from recreationists could impact some species.	The current program has the greatest likelihood of impacting TES species, although existing oversight reduce the potential.		Impacts to TES species are less likely under the preferred alternative.
Wildlife Trails can modify wildlife habitat, form barriers to movement, and alter behavior.	The current program results in negative impacts to wildlife resources, although existing environmental oversight attempts to minimize impacts.	No on the ground projects would be funded, preventing immediate negative impacts.	Enhanced oversight, including review by professional biologists and contact with Fish & Wildlife Service, will reduce or mitigate impacts resulting from trail projects.
Trail use: Trail related activities could disturb and displace wildlife, and alter biodiversity.	This alternative is most likely to alter use patterns that impact wildlife resources	Projects studying or monitoring impacts to wildlife from trails and trail use could be funded.	Trail use patterns resulting from the program will be monitored and program priorities will evolve to have least negative impacts to wildlife.
TES species: Trail projects and trail use patterns can impact TES species.	The current program has the greatest risk of affecting TES species, although existing oversight reduces the likelihood, especially to species managed by the U.S. Fish and Wildlife Service or FWP.		By including review by professional biologists and the Fish &Wildlife Service for projects that may impact TES species, this alternative is least likely to negatively affect TES species.

Table ES-1. Comparison of Impacts by Alternative (continued)

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Land Use Changes in land use resulting from new trails.	The program would continue to fund projects that preserve or increase land devoted to trail related outdoor recreation, although not based on state wide use patterns or user needs.	This alternative will reduce the available funding for preserving or adding to the supply of land devoted for trails and trail related activities.	By emphasizing statewide trail issues and needs identified in the State Trails Plan, the modified program will add to public recreation. Improved coordination with local land-use, transportation and open space goals will result.
Trail Use Patterns: Altered trail use patterns could change trail settings and impact surrounding areas.	Negative impacts to trail settings from altered trail use patterns are possible under the current management.		Changes in trail use patterns would be included in the project assessment and monitored as part of the follow up for funded projects to identify, avoid or mitigate impacts.
Social Trails and trail related activities are an important component of outdoor recreation and community in general.	The current program can have positive societal impacts by funding trails that benefit communities and promote outdoor recreation.	Reduced funding for urban trail systems will have a negative social impact compared to the current program.	Alternative III is will have a positive impact on Montana communities by increasing the responsiveness of the program to the needs of trail users.
Trail Use: Projects that influence use patterns or change use patterns can increase trail user dissatisfaction and conflict	The current program can potentially fund projects that alter use patterns or cause conflicting trail uses. Education and information projects could decrease conflicts and increase ethical trail behavior.	The OHV Program could fund educational or information gathering projects.	Trail use patterns would be included in the review process and monitored, decreasing the likelihood that trail projects will contribute to a decline in the potential benefits provided by a project.

Table ES-1. Comparison of Impacts by Alternative (continued)

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Economic The trails program has positive impacts on the state economy. Trails contribute to the local economy. Negative impacts can result such as the spread of noxious weeds and control, reduction of game populations with corresponding loss of revenues, etc.	The current program contributes directly to the economy. However, lack of responsiveness to statewide trail issues reduces the effectiveness of the program in contributing to local economies.	Reduced funding for on-the-ground trails will have a negative impact on the economy compared to the current program. However, the OHV Program would contribute to the study of economic impacts of trails and trail use.	The modified program would contribute directly to the economy. FWP would prioritize projects to satisfy needs identified in the State Trails Plan.
Cost of Impacts on Natural Resources: Trail projects resulting in negative impacts to the environment can be costly to the state and public.	Trail projects under the current program are most likely to result in impacts that cost government agencies and taxpayers although, given current levels of review, this impact would be minimal.	No on-the-ground projects will be funded.	Trail projects are less likely to result in costly environmental impacts under this alternative because of enhanced project review and inspections.
Outdoor Recreation Trails are an important part of outdoor recreation in Montana and are used by many recreationists with a wide range of trail opportunity preferences.	The current program funds trail projects that increase and improve trail opportunities statewide but, without a state plan or up-to-date data, may not be satisfying trail recreational needs most efficiently.	Alternative II, by reducing funding for maintenance and new trails, has the greatest negative impact on trail opportunities.	Prioritizing projects based on the needs identified in the State Trails Plan, increased communication among managing agencies and the public, and better trail user information collection and evaluation would result in improved trail opportunities.
Trail user satisfaction and conflict: Trail users have a range of opinions on trail management, appropriate uses, and user conflict.	This alternative is most likely to add to the potential for trail user dissatisfaction and conflict resulting from altered trail use patterns.	The OHV Program could fund education projects, as well as fund data collection and user survey projects.	The preferred alternative will increase trail user satisfaction and reduce the likelihood of conflict by increasing responsiveness to trail user needs.

Table ES-1. Comparison of Impacts by Alternative (continued)

Impacts	Alternative I- Current Management	Alternative II- No 'On-the-Ground' Projects	Alternative III- Modified Program
Cultural Resources Construction, maintenance, and use of trails can damage sites with cultural resources.	This alternative is least likely to avoid or mitigate impacts to cultural resources, although existing oversight limit the likelihood, especially to documented sites.	No on-the-ground projects would be funded, preventing both positive and negative impacts to cultural resources.	FWP would be more certain that trail projects have no negative impacts to cultural resources through input from SHPO and other agencies.
Trail Use: Trail related recreation can impact documented and undocumented cultural resources	The likelihood of impacts to cultural resources from trail use is possible under the 5current program, depending on oversight by trail managing agency.		The possible impacts of trail use on cultural resources are reduced through enhanced project review.
Education, information and interpretation: Projects can improve recreational opportunities and can decrease impacts.	This alternative could fund projects that provide education, information, or interpretation opportunities.	Educational projects that increase public appreciation of cultural resources could be funded.	Projects that improve interpretive opportunities or educate trail users can reduce impacts to cultural and historical resources by trail users.

Cumulative and Irreversible Impacts

Although individual trail projects may cause cumulative and/or irreversible impacts under the preferred alternative, no significant cumulative or irreversible impacts are anticipated due to the implementation of new elements contained in the preferred alternative. A number of features of this alternative will prevent, reduce, or mitigate cumulative impacts, including improved environmental and cultural review and oversight, a selection process that prioritizes projects with positive impacts on resources, and responsive management that emphasizes sustainable use of the human and natural environment. Impacts resulting from specific projects will be determined through analysis of the specific project as required by the Montana Environmental Policy Act (MEPA).

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GLOSSARY OF ACRONYMS

AARP: American Association of Retired Persons

ADA: Americans with Disabilities Act

ATV: All-terrain Vehicle

BLM: Bureau of Land Management

CARA: Conservation and Reinvestment Act

CMAQ: Congestion Mitigation and Air Quality Improvement Program

CTEP: Community Transportation Enhancement Program

DNRC: Department of Natural Resources and Conservation

EIS: Environmental Impact Statement

4WD: Four-wheel Drive Vehicle

FWP: Montana Fish, Wildlife & Parks

FY: Fiscal Year

GIS: Geographic Information Systems

GPS: Global Positioning System

ISTEA: Intermodal Surface Transportation Efficiency Act

LWCF: Land and Water Conservation Fund

MDT: Montana Department of Transportation

MEPA: Montana Environmental Policy Act

MOU: Memorandum of Understanding

MPO: Metropolitan Planning Organization

NEPA: National Environmental Policy Act

NPS: National Park Service

NRTA: National Recreational Trails Act

OHV: Off-highway Vehicle (includes ATVs, off-road motorcycles, and off-road 4x4 use)

ORV: Off-road Vehicle (same as above)

PEIS: Programmatic Environmental Impact Statement

RTP: Recreational Trails (grant) Program

STAC: State Trails Advisory Committee

STIP: Statewide Transportation Improvement Program

TIIP: Tourism Infrastructure Investment Program

TIP: Transportation Improvement Program

TIPMONT: Turn in Poachers—Montana

USFS: United States Forest Service

USFWS: United State Fish and Wildlife Service