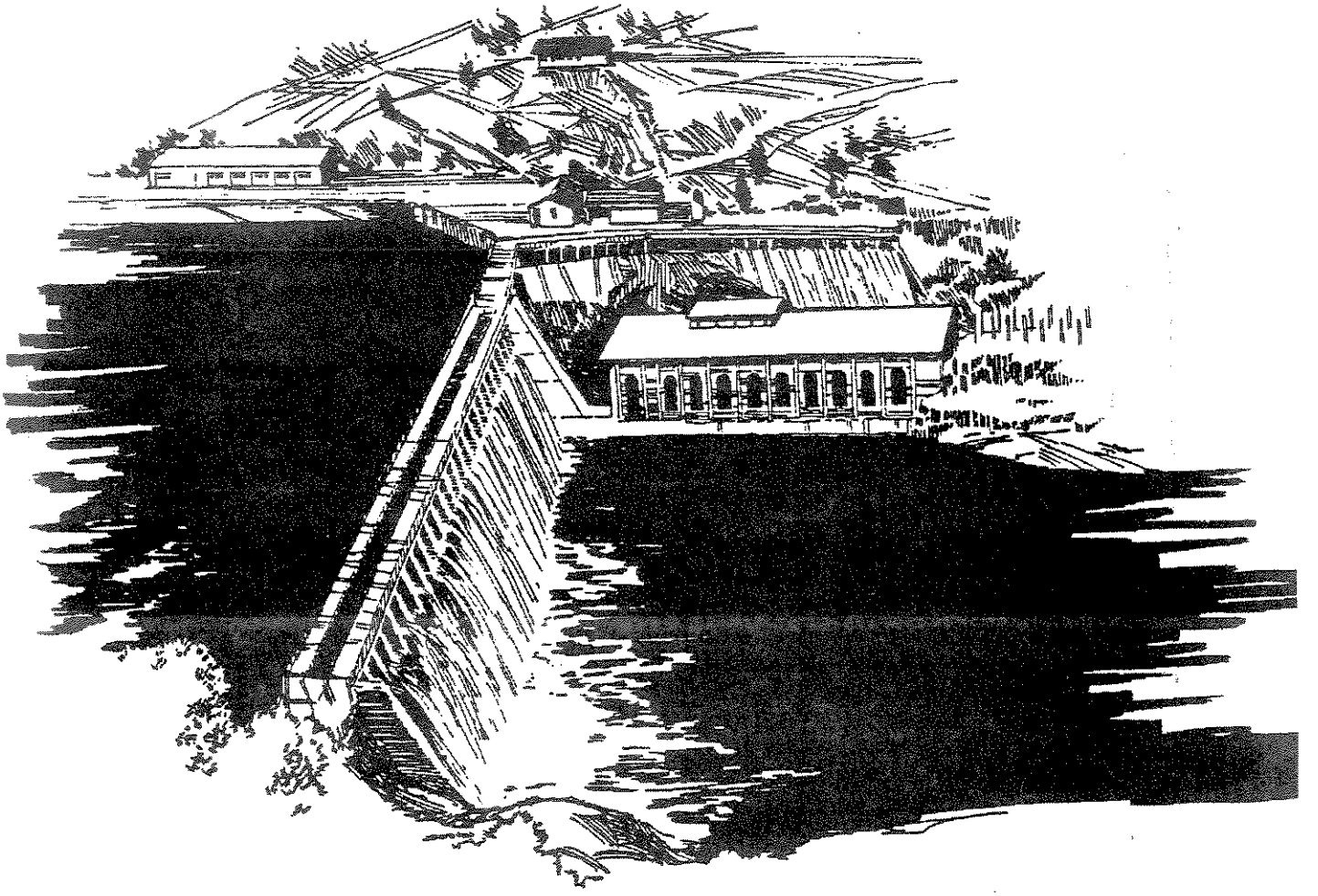
RIVER PROTECTION IN MONTANA



Janet Decker-Hess

Montana Fish, Wildlife & Parks

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Montana Department
of
Fish, Wildlife & Parks

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A Review of State Laws, Policies and Rules

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TABLE OF CONTENTS

INTRODUCTION

The state of Montana has an abundance of high quality rivers and streams totaling over 25,000 miles in length. The streams beginning on the eastern slopes of the Continental Divide form the headwaters of the Yellowstone and Missouri rivers. Headwater streams to major tributaries of the Columbia River begin on the west. Nowhere else in the nation can one state boast of providing such a spectacular contribution to major river systems. Many of these headwater rivers are recognized as world class wild trout fisheries and outstanding floating opportunities, maintained by high water quality in a primitive setting. Based on a recent economic analysis, Montana's stream fishing value was estimated at $122 million per year (Duffield et al. 1987).

Montana, like the rest of the nation, historically viewed their water resources for the benefits they could provide. The early settlement of Montana centered around the rivers as navigation routes and their gold and fur potential, irrigation water, and electrical power production. Throughout history, rivers were first the routes of explorations and later used as highways for commerce. Only recently have their recreational values and a desire to protect their natural characteristics become economic and social priorities.

Beginning in 1804, Lewis and Clark made the first recorded journey up the Missouri into what is now Montana. All but 15 miles of their 3,000 mile journey in the Missouri drainage was by boat, moving to land as they extended their exploration up and over the Continental Divide into the Columbia River basin. Fur trappers and traders were the major users of the rivers for 50 years following their exploration. The Missouri served as the major eastern transportation corridor for frontier commodities. The discovery of gold quickly changed the order of river business, with steamboats bringing food and mining equipment. By the 1860s, steamboats were common and the settling of Montana began. Navigation by steamboat was expanded to include the Yellowstone, lower Clark Fork, and Kootenai rivers and Flathead Lake (Malone 1976).

Rivers lost much of their commercial and passenger traffic with the completion of the Northern Pacific Railroad in 1883. Agricultural development and raising stock, primarily near the mining camps, became industries of their own. The first farmers adapted their eastern and European farming techniques to irrigation in the arid mountain valleys, using simple diversion channels and dams. Water fast became an important commodity resulting in a water law known as the Doctrine of Prior Appropriation--the rules of "*first in time, first in right.*"

Corporations were formed in order to provide needed capital and organization when watering the benchlands above the rivers became an interest. The problem of financing projects was addressed by state and federal legislation. By 1952, the State Water Conservation Board had helped build 173 projects in Montana and several large federal projects had also been constructed on the Sun, Marias, and Missouri rivers.

In addition to the use of water for agriculture, mining and transportation created a great demand for electrical power in Montana. The first hydroelectric generation facility was constructed in 1891 on the Missouri. The Black Eagle Dam was built to fuel the energy demands of the Boston and Montana Smelters. Numerous small plants were to follow. Major multi-purpose projects at Fort Peck Dam, Hungry Horse Dam, and Canyon Ferry Dam, however, were still a half century away.

The rivers had changed from what Lewis and Clark observed in the early 1800s. Many had lost their free-flowing nature to federal and private dams, thousands of miles were channelized to control their natural wanderings for highway and railroad construction, and stream dewatering to sustain irrigated agricultural production had become common. Watersheds were "*protected*" to prevent floods and reduce sediment to sustain the usefulness of irrigation projects.

With the end of World War II, the 40 hour week and leisure time became a reality. With it, thoughts of using our rivers and streams for recreation became an interest to significant numbers of Montanans and the nation. The issue of river protection was raised when Montana began to recognize the need to maintain the quality of their cool, clear waters.

The protection of our rivers and streams has been provided through a variety of statutes, rules, and codes dating back to the late 1950s. In 1959, the Montana Fish and Game Department (now the Montana Department of Fish, Wildlife and Parks) introduced the "Blue Ribbon Stream" concept which identified our premiere sport fishing streams. Ten years later, the Montana Legislature authorized claims to instream water rights on portions of 12 of these streams (*"Murphy Rights"*). In 1961, the Montana Department of Fish and Game put together a three part stream preservation strategy to protect physical habitat, water quality, and water quantity. Over the next 10 years, these strategies were implemented through the passage of state law. Bank protection was legislated in 1963, and reaffirmed in 1965, by the Stream Preservation Act. Stream protection was expanded to include private individuals through the Natural Streambed and Land Preservation Act of 1975. The Water Quality Act was passed in 1969 and strengthened throughout the 1970s. In 1973, the Montana Water Use Act specifically defined fish and wildlife as beneficial uses of our waters and provided a mechanism to reserve water for instream purposes. In 1978, the first instream flow reservation was granted by the Board of Natural Resources and Conservation on the Yellowstone River, including the main stem and 67 tributaries. The Clark Fork and the Missouri river systems are in the reservation process now.

Land-use control laws, such as the Floodplain Management Act of 1964 and the Subdivision and Platting Act of 1973, have been used as the primary means for regulating river corridor uses. The Open-Space Land and Conservation Easement Act of 1975 established guidelines for the use of conservation easements to protect river corridors. The Natural Areas Act of 1974 potentially could protect some river segments in a state natural areas system. State and federal land acquisition tools, such as earmarking sportsman's dollars for habitat protection, conservation easements, and the establishment of national wildlife refuges and waterfowl production areas, have protected stretches of our major rivers. Fishing access site acquisitions also provide some level of river corridor protection.

A strategy protecting a river system as a whole has not been developed in Montana. The State Recreational Waterways System of 1972 provided the framework to protect an entire river, but has not been authorized through legislation. The federal Wild and Scenic Rivers Act provides protection for two river systems in Montana, the three forks of the Flathead River and the central portion of the Missouri, but has been unused in recent years. Unlike many other states, Montana has no statutory river policy. A state wild and scenic river bill was introduced in the state legislature in the early 1970s, but fears of land confiscation killed the bill.

The following text summarizes the existing state laws, programs, and rules that help protect Montana's rivers and their corridors. Included is a discussion of their limitations and programs and policies other states have developed protecting their rivers.

EXISTING POLICIES, PROGRAMS, AND PRACTICES

The Preamble to Montana's Constitution states, *"We the people of Montana grateful to God for the quiet beauty of our state, the grandeur of our mountains, the vastness of our rolling plains, and desiring to improve the quality of life. . . ."*. Article IX, Section 1, states *"The state and each person shall maintain and improve a clean and healthful environment in Montana for present and future generations"* and that *"the legislature shall provide adequate remedies for the protection of the environmental life support system from degradation and provide adequate remedies to prevent unreasonable depletion and degradation of natural resources."*

The constitution addressed environmental protection through the executive branch by creating four state agencies. The Montana **Department of Fish, Wildlife, and Parks** (DFWP) has been given the duty to *"enforce all the laws of the state respecting the protection, preservation, and propagation of fish, game, fur-bearing animals, and game and nongame birds within the state; and is given the exclusive power to spend all state funds collected or acquired for that purpose"* (Section 76-13-101, Montana Codes Annotated (MCA)). The Fish and Game Commission may adopt and enforce rules governing recreational uses of all public fishing reservoirs, public lakes, rivers, and streams which are legally accessible to the public or in conjunction with a federal or state agency or private owner (Section 87-1-303, MCA). The **Department of State Lands**' (DSL) purpose is to protect and conserve forest resources, range, and water; the regulation of streamflow; and the prevention of soil erosion on lands owned by the state (Section 76-13-101, MCA). The **Department of Natural Resources and Conservation** (DNRC) is directed by a citizen board and is charged with the duties of administering the laws involved with water adjudication and appropriations, water conservancy districts, dams and reservoirs, interstate compacts, and facility siting. The environmental division of the **Department of Health and Environmental Sciences** (DHES) administers the laws pertaining to air and water pollution, environmental sanitation, subdivision development, solid waste disposal, and industrial hygiene.

Environmental Policy

Consistent with the constitution's commitment to improve the quality of life in Montana, the legislature passed the **Montana Environmental Policy Act** (MEPA) in 1971. The Act sets forth a policy which will *"encourage productive and enjoyable harmony between man and his environment, to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man, to enrich the understanding of the ecological systems and natural resources important to the state"*. (Section 75-1-102, MCA). The Act outlines a set of rules that state agencies must conform *"to the fullest extent possible"* when a proposed action would affect the quality of the human environment. The water resource factors evaluated for long-range plans under MEPA include impact of a facility on streamflow, inventory of effluents, relationship to water quality standards, effects of changes in quantity and quality on water uses by others, scenic impacts and effects on fish populations, and unique or significant ecosystems. The federal sister to this law, The **National Environmental Policy Act** of 1969, promotes environmental concerns by federal agencies. The goal of the Act is to promote the use of all practicable means to conduct federal activities that will promote the general welfare and be in harmony with the environment.

The **Major Facility Siting Act** provided a means for state input into the siting of major facilities. A major facility generates or transmits electricity, produces natural gas or oil or transmits them by pipeline, enriches uranium minerals, utilizes or converts coal, or utilizes geothermal resources (Section 75-20- 101, MCA). A joint application is submitted to DNRC and DHES for a certificate of environmental compatibility and public need. Effects on water quality, fisheries, and other natural resources related to river protection are addressed during the application review process and the preparation of an environmental review or environmental impact statement.

Blue Ribbon Concept

In the late 1950s, Montana state and federal fisheries managers became concerned over the state's claim of 20,000 to 30,000 miles of *"well-stocked"* fishing streams (Holton 1984). This concern came from a potential perception that with such an abundance of prime fishing waters, why worry about the loss of 20 or 30 miles each year by various development projects? As a result, an inventory of Montana's fishing streams followed by a comparative assessment was conducted in 1959. The assessment rated a stream's aesthetics, fishing use, productivity, and accessibility. Based on the rating, a stream was placed in one of five classes, with a Class I considered outstanding. In 1959, the Stream Fishery Classification Map for Montana was printed. Class I fishing streams were identified by the color blue--the traditional color of county fair 1st prize ribbons. The term *"blue ribbon trout stream"* became a designation of excellence familiar to anglers, conservationists, and developers (Holton 1984).

Only 400 miles of streams received a Class I rating in 1959, including Rock Creek near Missoula, the Madison, and portions of the Big Hole, Missouri, West Gallatin, Yellowstone, and Flathead rivers. The system was changed to include two ratings in 1980; one to assess a stream's sport fishery value and the other to assess a stream's habitat and species value for, but not limited to, fish species of special concern. Blue ribbon streams were streams with a Class I in the sport fishery value. In 1980, reaches of the Blackfoot, Beaverhead, Kootenai, Gallatin, Bighorn, Flathead, and North Fork of the Flathead rivers were added, bringing the total to 542 miles.

Although no statute or rule gave legal protection or recognition to the *"blue ribbon"* streams, the classification has been helpful in protecting instream values. It was the basis for the 12 streams identified for instream allocation in 1969 by the Murphy Rights. The DFWP also utilized the system in developing the stream list for the Northwest Power Planning Council's Protected Areas Program in 1988.

Stream Protection

Twenty-five years ago, the Montana Fish and Game Department developed a three-part stream preservation strategy to address a stream's physical habitat, water quality, and water quantity. The adverse effects on Montana streams from a variety of developments were documented in a survey conducted by the DFWP (Alvord and Peters 1963). The passage of the first statute which addressed maintaining streams and rivers in their natural state came in 1963 with the **Stream Protection Act.** It was the first state stream preservation act in the nation. The Act established the policy that ... *"its fish and wildlife resources and particularly the fishing waters within the state are to be protected and preserved to the end that they be available for all time, without change, in their natural existing state except as may be necessary and appropriate after due consideration of all factors involved"* ... (Section 87-5-501, MCA). The Act, referred to as a *"124 permit"* and administered by the DFWP, was directed at state agencies, county, municipality, or other subdivisions of state government. It addressed the construction, modification, or maintenance of construction or hydraulic projects which would modify or change the natural existing shape of any stream or its banks. At the same time, memorandums of understanding addressing stream protection were negotiated between the state and the U.S. Forest Service, the Bureau of Land Management, and the Bureau of Reclamation.

In 1975, the **Natural Streambed and Land Preservation Act** was passed to expand the protection of streams to projects constructed by private individuals. The Act gave authority for approval of these projects to the conservation districts. The landowners and DFWP serve on a team making recommendations on projects. The Act stated that *". . . natural rivers and streams and the lands and property immediately adjacent to them within the state are to be protected and preserved to be available in their natural or existing state and to prohibit unauthorized projects and in so doing to keep soil erosion and sedimentation to a minimum, except as may be necessary and appropriate after due consideration of all factors involved"* (Section 75-7-102, MCA). The law requires private (non-governmental) individuals and organizations to obtain a *"310 permit"* before undertaking a project that would alter or modify a perennial stream.

A portion of the **Federal Water Pollution Control Act of 1972** (now the **Clean Water Act of 1987**) is used in Montana when a stream project is proposed by a federal agency. A *"404 permit"* is required by the Army Corps of Engineers when discharge of dredged or fill material occurs into waters.

House Bill 754, the **River Restoration Program,** was passed in 1989 to establish a program to *"...preserve rivers and streams for social and economic importance to Montana by providing financial assistance with the design, planning, and construction of projects to restore streambeds, banks, and associated adjacent lands in order to conserve or enhance fish and wildlife habitat"*. The program is funded by a 50-cent and one dollar increase in the resident and non-resident fishing license, respectively. Guidelines and criteria to select projects to be funded have been drafted by DFWP. Projects could include fish habitat improvement, riparian enhancement, improvements to provide fish passage, bank stabilization, and river corridor clean-up programs.

Other stream protection strategies developed by DFWP include informal programs encouraging the use of alternative irrigation structures, sponsoring Stream Mechanic Workshops to state and federal natural resource employees, and producing landowner brochures and videos encouraging wise land use practices.

Water Quality

The water quality of Montana's rivers and streams has been protected by the **Water Quality Act** since its passage in 1969. The Act directs the public policy of the state to *"... conserve water by protecting, maintaining, and improving the quality and potability of water for public water supplies, wildlife, fish and aquatic life, agricultural, industry, recreation, and other beneficial uses (and to) provide a comprehensive program for the prevention, abatement, and control of water pollution"* (Section 75-5-101, MCA). Administered by the DHES, the Act establishes water purity standards for the classification of state waters based on present and future most beneficial uses, a permitting system for point discharge, and penalties for violations. A non-degradation policy in the Act states *"that any state waters whose existing quality is higher than the established water quality standards be maintained at that high quality unless it has been affirmatively demonstrated that a change is justifiable. . . and will not preclude present and anticipated use of these waters."*

Montana and other states were provided with a framework for addressing nonpoint source pollution (i.e., pollution which is diffuse, discharge occurring by dispersed pathways and are related to man's use of the land) by **Section 319 of the Federal Clean Water Act,** passed in 1987 (MDHES 1988a). Section 319 requests that the states prepare two documents, a comprehensive statewide Nonpoint Source Pollution Assessment Report identifying streams impacted by nonpoint source pollution and a management program to address the problems identified in the assessment report. Draft reports for Montana were completed in 1988 by the MDHES (MDHES 1988a and MDHES 1988b). After considerable review, the state's nonpoint management plan was fully approved by EPA in January 1990. The plan laid out milestones the DHES will attempt to meet addressing nonpoint source pollution from agriculture, forest practices, and mining. Because of full approval of the plan by EPA, DHES is able to apply for grants to help meet these goals.

Growing public concern regarding the effects of forest land management on watershed resources led to several efforts in the late 1980s. The efforts included the Watershed Cumulative Effects Cooperative, a cooperative consisting of private timber companies and public agencies; the Environmental Quality Council's Watershed Effects Working Group and Best Management Practices Technical Committee, resulting from HJR 49; the Montana Riparian Association's development of Best Management Practices for Riparian Forest lands; and the Flathead Basin Commission's Forest Practices-Water Quality and Fisheries Cooperative Program. Legislation and policy resulted from HJR 49 during the 1989 Legislative session. Best Management Practices (BMPs) were revised and adopted. A process to update and modify BMPs in the future was also adopted. House Bill 678, the **Forestry Information Act**, established a mandatory notification process for forestry activities on private lands. The Forestry Division of DSL became the responsible state agency for these notifications and their review. In addition, the Legislature also instructed another series

of timber sale audits occur in 1990 to determine how well Montana landowners and operators are implementing the new set of BMPs. The Department of State Lands will report these findings to the Legislature by January 1991.

Because nonpoint source pollution can result from a wide variety of activities, many existing statutes also address this type of pollution. State statutes include the Subdivision and Platting Act, Stream Protection Act, Environmental Policy Act, Major Facility Siting Act, Strip and Underground Mine Reclamation Act, Opencut Mining Act, Hardrock Mining Statutes, Solid Waste Disposal, and Hazardous Waste Act. Various portions of the federal Clean Water Act also address nonpoint source pollution, as well as strategies outlined by federal land management agencies.

Instream Values

Montana's instream flow protection strategies have been addressed in an issue paper produced by the Water Resources Division of the DNRC as part of the State Water Plan (MDNRC 1987 and 1988). A brief summary of the contents of that paper will follow.

The water policy of Montana specifies that *"the water resources of the state must be protected and conserved to assure adequate supplies for public recreational purposes and for the conservation of wildlife and aquatic life"* (Section 85-1-101 (5), MCA). As the maintenance of instream flows has grown to be a major use of western water, several strategies have become available to protect instream flows. Concluded in the DNRC issue paper, together they provide an uncoordinated, yet relatively comprehensive, set of strategies.

In 1969, the Montana Fish and Game Commission was given the authority by the legislature to file for water rights on the unappropriated waters of 12 streams to maintain stream flows necessary for the preservation of fish and wildlife habitat (Section 89-801 (2), RCM 1947). The appropriated *"Murphy Rights"* (named after the principal sponsor of the bill), have a priority only until a district court determines that such waters are needed for a more beneficial use. To date, the appropriations have not been challenged in court by other water users. No future instream values can be protected by the Murphy Rights because its statutory authority is no longer applicable.

The Montana Water Use Act was passed in 1973 and established a mechanism for the protection of instream values through a systematic and comprehensive approach (Section 85-2-316, MCA). The Act developed a process for future diversionary and consumptive uses by the state or the United States or any political subdivision or agency thereof to reserve water for existing or future beneficial uses or to maintain a minimum flow level for water quality (Section 85-2-316 (1), MCA). Instream flows were reserved on 2,078 stream miles in 69 stream segments in the Yellowstone River Basin in 1978. Applications are now pending in the Clark Fork River Basin on 400 stream miles and a basin-wide reservation process is underway in the Missouri River watershed.

A third strategy to protect instream values is the use of *"reasonable use" or "public interest"* criteria for initial permit applications and for changes in appropriative rights (Section 85- 2-311 (2)(c), MCA). Because the criteria only apply to applications for very large amounts of water, their effectiveness to protect instream flows are limited.

The use of two federal statutes which condition hydropower licenses have also been used to protect instream values of water in Montana. The **Federal Power Act** has been used by the state to condition licenses by requiring the release of a certain flow at specified times for the protection of valuable fisheries. A measure in the Northwest Power Planning Council's Fish and Wildlife Program addressed the protection of fisheries below the Hungry Horse Dam by requiring a minimum flow release from the reservoir. In addition to conditioning water rights permits, the state has also successfully negotiated with reservoir operators for voluntary releases of water.

The DFWP may represent the public in adjudication proceedings for purposes of establishing any public recreational uses of water prior to 1973 (Section 85-2-223, MCA). The policy of the DFWP is to represent the public only when a specific request is received.

HB 707, the **Instream Flow Leasing Act** addressed one of the major short-coming in state instream flow strategies identified in the DNRC paper. Passed by the Legislature during the 1989 session, the bill authorized the DFWP to conduct a study of water leasing for the purpose of maintaining instream flows. As part of the study, DFWP was authorized to enter into negotiations with potential lessors during the 4-year pilot program. The negotiated lease would be submitted to DNRC after approval by the Fish and Game Commission for a *"change of use authorization"* through existing law. Criteria were developed by the DFWP for the selection of up to five candidate streams for the pilot program. To date, a stream in the upper Yellowstone drainage and one in the Big Hole River drainage have been selected.

Stream Access

Protection of public access to Montana's streams and rivers was achieved through legislative action in 1985. The issue was in need of clarification after two cases were filed questioning the public use of rivers and their beds on private property. HB 265, the **Stream Access Bill,** states *"all surface waters that are capable of recreational use may be so used by the public without regard to the ownership of the land underlying the waters"* (Section 23-2-302, MCA). The law designated two classes of rivers, Class I waters being larger streams that have been declared navigable or are capable of supporting commercial activity such as float trips; and Class II waters being all other rivers and streams that are not Class I waters. The law addresses recreational restrictions on private lands including the operation of motorized vehicles, diversion of water, overnight camping, and big game hunting. Portaging around artificial obstacles above the ordinary high-water mark and landowner liability are also addressed.

Rules to implement the Act were adopted by the Fish and Game Commission in 1985. These rules describe the process by which people may petition the Commission to limit, restrict, or prohibit the level of recreational use of surface waters and portage procedures. Although not a protective measure, the stream access law clarifies the rights of individuals using streams and streambeds.

Floodway and Floodplain Management

The **Flood Control Act** of 1954 found that recurrent flooding caused loss of life, damage to property, and unsanitary conditions which were detrimental to the health, safety, and property of the people of the state (Section 76-5-102, MCA). The Act further concluded that it was necessary to manage and regulate flood prone lands and waters in a manner consistent with sound land and water use management. The Act provided a process to coordinate activities of state, local, and federal governments with respect to the floodplain, defined the floodplain and floodway, and encouraged local governmental units to manage flood prone lands. Local land use regulations have included flood management programs addressing activities and structures allowable within the floodplain and more restrictive land use regulations within the designated floodway.

Protection of a stream's corridor was an indirect benefit of the Act resulting from the more restrictive land uses allowable in the floodplain. Protection of the river corridor was provided through the denial of many activities and structures. Prohibited uses included buildings for living purposes, a structure or excavation causing water diversion, or permanent storage of an object.

Subdivision and Platting Act

The protection of water quality and river corridor land use from housing developments was addressed in 1973 by the **Montana Subdivision and Platting Act** (Section 76-3-102, MCA). Montana's stated policy on subdivisions is to promote public health, safety and general welfare by regulating subdivision of land; to extend existing laws controlling water supply, sewage disposal, and solid waste disposal including individual wells and sewage systems in order to protect the quality for public water supplies and for other beneficial uses relating to recreation and wildlife; and to require development in harmony with the natural environment. Water quality protection is achieved through plat approval based on the provisions that sewage will not pollute water or endanger public health, water supply will be adequate, and storm drainage will not pollute state waters.

Like the Floodplain Law, the Subdivision Act requires local governments to adopt and provide for the enforcement of subdivision regulations, allowing for stricter regulations at the local level. The City of Bozeman, for instance, has limited structures to be set back no less than 35 feet from the mean high water mark of the stream, while county regulations restrict construction to within 10 feet of live water.

Montana Natural Areas Act

In 1974, the **Montana Natural Areas Act** set forth legislation to preserve natural or potentially natural areas possessing significant scenic, educational, scientific, biological, and/or geological values in order to preserve their natural ecosystem integrity in perpetuity (Section 76-12-102, MCA). The idea originated from the Society of American Foresters, the Society of Range Management, and the Soil Conservation Society of America. The Act gave authority of the program to the DSL. For two years following the passage of the bill, a group of professionals laid the groundwork for an interagency natural areas system and held several statewide workshops. Working groups were established to identify natural area candidates from forest, geologic, aquatic, zoologic, and grassland and shrubland ecosystems. Streams were recognized as one habitat of interest under the aquatic section including the adjacent land necessary for the sites' maintenance. Natural areas were defined as *"essentially pristine lands where man's activities have not greatly influenced natural phenomena, and where natural processes have been allowed to dominate"*. Size could range from 10 to 1,000 acres.

Because of legal problems with the Act, efforts on the system following its passage were hampered for the next 10 years. In 1986, the Nature Conservancy became interested in the statewide natural areas program. Legislative action during the 1987 session amended the 1974 law. Workshops held in 1986 and

1987 were attended by personnel from numerous state and federal agencies, academicians, and other scientific professionals to nominate sites. A data base of the nominated sites has been constructed and is housed at the Big Sky office of the Nature Conservancy in Helena. Nominations in the aquatic sections have been limited to small riparian sections but have not included any aquatic systems as a whole. Funding difficulties continue to plague the program. An advisory board is currently formulating recommendations to address this and other problems.

Conservation Easements

House Bill 341, passed in 1975, amended the Open Space Land Act of 1969 to provide for conservation easements and changed the title of the Act to the **Open–Space Land and Voluntary Conservation Easement Act** (Section 76-6-102, MCA). An easement is a right in land which is less than full ownership, conveying the right to prevent development or other actions detrimental to the land's natural character (Nature Conservancy 1976). They do not prevent the owner from using the land for purposes consistent with the easement, nor does it permit the general public to use the land in any manner. In this Act, the legislature expressed concern that present and future population growth in urban areas could disrupted or alter the remaining natural areas, biotic communities, and geological and geographical formations. This disruption could potentially destroy the scientific, educational, aesthetic, and ecological values of such land. The purpose of the Act is to authorize and enable public bodies and certain qualifying private organizations to provide for the preservation of significant open-space land either in perpetuity or for a term of years. To encourage private participation in such a program, a policy was established to determine the property tax to be levied upon the conserved real property.

Conservation easements are typically given to conserve land as it is, maintaining existing natural resources by limiting landowner rights to subdivide, build new roads, or harvest timber commercially. In Montana, land subject to a conservation easement is taxed on the basis of the restricted purposes for which the property may be used. If the easement is granted in perpetuity, the landowner is permitted to deduct the value of the easement for income tax purposes. Landowners may receive an additional tax advantage if they donate an easement for public use. Easements have been obtained by public and non-profit organizations along portions of the Yellowstone, North and Middle Forks of the Flathead, Madison, Bitterroot, Big Hole, and most extensively on the Blackfoot River to protect the river's natural resource values. The Nature Conservancy and the Montana Land Reliance have been the major non-profit organizations involved in acquiring conservation easements in Montana.

Blackfoot River

In the late 1970s, a task force of individuals from the U.S. Bureau of Outdoor Recreation, the University of Montana, the Nature Conservancy, Missoula County, Champion Timber, state agencies, and private landowners established the **Blackfoot Conservation and Recreation Management Plan**. The objective of the plan was *"to accommodate the recreating public and protect the natural, scenic, and recreation integrity of the Blackfoot corridor through effective management of public recreation and restrictions on ecologically incompatible uses and development"* (Nature Conservancy 1976). To accomplish this, the plan recommended that recreation leases or recreation easements be used for formal agreements between private landowners and public agencies to assure responsible management of public use. A *"conservation corridor"* along both sides of the river from Johnsrud Park upstream to Three Rivers Junction was created through a series of conservation easements. The corridor provides a set-back from the river to protect the aesthetics and visual integrity, water quality, and fisheries of the Blackfoot. The easements were established to limit future development along the river yet allow existing agriculture and forest use to continue. Further restrictions were placed on timber harvest.

Land Acquisition

In Montana, no specific laws or rules address land acquisition strictly for the purpose of river protection. Various tools, however, can be used to acquire lands that are valuable fish or wildlife habitat that are within the banks and boundaries of a river or stream. The DFWP, with the consent of the Fish and Game Commission, *"may acquire by purchase, lease, agreement, gift, or devise and may acquire easements upon lands or waters for the purposes including lands suitable for game, bird, fish, or fur-bearing animal restoration, propagation, or protection; for state parks and outdoor recreation"* (Section 87-1-209, MCA). Fishing access sites have indirectly provided partial protection to over 19,000 acres of riparian habitat.

A land acquisition bill to protect wildlife habitat using a portion of hunting license fees was passed during the 1987 legislative session (Section 87-1-241, MCA). The policy established by the DFWP provided for a comprehensive analysis of the wildlife populations, current use of the property, and the potential value of the land for protection, preservation, and propagation of wildlife. DFWP regions were asked to prioritize potential lands. River bottoms are some of the areas being recommended.

As part of wildlife mitigation at Hungry Horse and Libby Dams, the Northwest Power Planning Council has stated in its Fish and Wildlife Program they will consider approval of funding for the acquisition of suitable off-site or on-site wildlife habitat. For black and grizzly bears, the program states that Bonneville Power Administration (BPA) shall fund projects to protect over 8,000 acres of riparian habitat through the acquisition of conservation easements.

Proactive River Protection Strategies

Northwest Power Planning Council Protected Areas Program

In 1980, Congress passed the Northwest Power Planning and Conservation Act, designed to balance power needs, hydropower development, and natural resources in the Columbia River Basin. The Act called for the formation of the Northwest Power Planning Council (the Council), which was mandated to develop the Columbia Basin Fish and Wildlife Program with funding provided by the BPA. Included in the program was a measure to develop a protected areas program, identifying stream reaches with critical anadromous or resident fish habitat or wildlife habitat that should be protected from future hydroelectric development. The Pacific Northwest Rivers Study (PNWRS), which assessed and rated the significance of river related natural resource values in Montana, Idaho, Washington and Oregon, was used to identify these critical reaches (Northwest Power Planning Council 1988a).

In Montana, only streams within the Columbia River Basin were included in the Council's program. Protected areas criteria for fishery streams were stream reaches containing essential habitats for fish species of special concern, streams with outstanding recreational fisheries, or essential spawning habitats for outstanding recreational fisheries determined by the PNWRS (Decker-Hess et al. 1988). For wildlife, the criteria included habitats identified as essential to the recovery of federally threatened and endangered species, streams which support Montana riparian species of special concern, or essential big game winter range. A total of 2,056 miles or 30 percent of the 6,800 stream miles assessed in western Montana were recommended to the Council for protection from future hydroelectric development.

On August 10, 1988 the Council adopted a proposal that designated some 44,000 stream miles in the Northwest as areas that should be protected from future hydroelectric development. The 2,056 miles in western Montana recommended by DFWP were included in this mileage. The protected areas' designation formally amends the Council's Fish and Wildlife Program and the Northwest Conservation and Electric Power Plan. While the Council does not license hydroelectric facilities, the Federal Energy Regulatory Commission (FERC) is required by law to follow the Council's recommendations *"to the fullest extent practicable"* when licensing non-federal hydroelectric projects (Northwest Power Planning Council 1988b). In addition to the Council's plans, the BPA has concluded that it can deny access to its intertie system to new hydroelectric projects that FERC may license in protected areas identified in the Council's Program.

This is the first occurrence of a comprehensive plan for stream protection in western Montana that appears to have specific legal authority.

Federal Wild and Scenic River System

The idea of preserving a river in its *"wild"* state originated in Montana with John and Frank Craighead (Palmer 1986). While opposing the Army Corps of Engineers' Spruce Park Dam proposal on the Middle Fork of the Flathead River, John Craighead wrote in a 1957 edition of Montana Wildlife that conservationists should have a rivers program rather than being continually forced to act on the defensive. He wrote, wild rivers were a *"species now close to extinction"* and were needed *"for recreation and education of future generations"* (Palmer 1986).

Over the next 10 years, the Craigheads and other citizen advocates of river protection helped in the passage of the **National Wild and Scenic Rivers Act** (16 U.S.C. 1271), a federal program aimed at river conservation. The Act, passed in 1968 and amended in 1982, established a policy *"that certain selected rivers of the nation which, with their immediate environments, possess outstandingly remarkable scenic, recreation, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations."* The Act initially designated parts of eight rivers for protection and identified 27 others for study and possible inclusion. The Act allows for rivers to be designated through legislative authorization by an act of Congress or an act of a state or states' legislature. If a river is

designated through a state program, the state has the option to use Section 2 (a)(ii) of the Act, which enables the US Secretary of the Interior to designate state-managed streams as components of the federal system subject to all of its protections.

With the passage of the Act, the National Wild and Scenic Rivers System was established. A classification system was developed and a three-step process which determined eligibility, potential classification, and suitability for river designation was outlined. The Act allows for the establishment of management standards for each classification by the U.S. Departments of Interior and Agriculture. Land acquisition limits were established and the Act encourages the use of easements--allowing residents to retain their property. Language was written prohibiting FERC to license the construction of any dam, transmission line, or any other project works under the Federal Power Act on a designated river. The issue of state's rights with respect to hunting and fishing, water rights, and access were also addressed in the Act.

Each river included in the Act was classified, designated, and administered as one of the following:

1) **Wild River** – *Those rivers, or sections of rivers, that are free of impoundments and generally inaccessible except by trail. Standards for management of these rivers attempt to maintain the primitive nature of the river through no timber harvest, prohibition of new mining claims, and no road construction or any recreational development within the corridor.*

2) **Scenic River** – *Those rivers, or sections of rivers, that are free of impoundments, with watersheds and shorelines still largely primitive and undeveloped but accessible in places by roads. Standards of management allow for silvicultural practices, mining, road construction, agricultural practices, and recreational development that do not cause substantial adverse effects and maintain the river area in a near natural environment.*

3) **Recreational River** – *Those rivers, or sections of rivers, that are readily accessible by road or railroad and may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past. Standards of management parallel standards established for rivers outside the Wild and Scenic Rivers system except for the prohibition of dam construction for hydroelectric development.*

Two river systems have been included in the federal system in Montana. The Middle, North, and South forks of the Flathead River were included in the original bill as study streams and received designation in 1976. A 149-mile reach of the Missouri River from Ft. Benton to the Fred Robinson bridge, where Montana citizens, the Fish and Game Commission, and Interior Department planners had proposed national protection in the early 1960s, also was designated in 1976.

In an effort to identify potential rivers for inclusion in the Wild and Scenic Rivers System, the Nationwide Rivers Inventory (NRI) was undertaken by the National Park Service in 1982. The inventory, a compilation of information on the nation's significant free-flowing streams, listed 1,524 segments in 61,700 miles or two percent of the nation's river miles. Intended for use by Congress, government agencies and the private sector, the NRI provided information on the resource values, utilization, development, and protection needs for each river identified. Criteria used to select rivers for the inventory included a minimum length of 25 miles; no dams, channelization, or impoundments; and a lack of significant cultural development within a 1/4 mile of the river's banks. Montana was one of three states where the NRI was not completed. The inventory was stopped in Montana at the request of the Governor. The state felt the inventory's methodology did not adequately address a river's natural attributes.

The federal Wild and Scenic System has not been used extensively across the nation. Until 1986, only 66 major rivers and 7,200 miles of streams have been included (Palmer 1986). A recent revival of the system has come from Oregon's omnibus rivers bill which designated 40 streams for inclusion in the federal program in 1988. The system has been overshadowed by the wilderness program and hampered by funding problems, changes in administrations, and fear of condemnation of private landowner's property. Mixed ownership patterns, water development demands, a distrust of government, the absence of land acquisition funds, and the rights and needs of riparian landowners have also reduced the system's effectiveness.

In December, 1988 an agreement between Montana, the BLM, and the USFS was signed which addressed interagency cooperation in fulfilling the intent of the Wild and Scenic Rivers Act and the broader issue of river management and protection in Montana. The agreement addressed interagency preparation of an "Action Plan" including study criteria, priorities, and process. Natural Resource Council meetings were to be used as the forum for discussion of the agreement and its issues.

State Recreational Waterway Program

The State Recreational Waterway System Policy and Program was established by rulemaking by the DFWP in 1972 (Section 12.8.401). The program had three stated purposes: 1) to maintain and improve Montana's prime streams as free-flowing, productive waters; 2) to improve certain potential streams so they may be added to the system; and 3) to encourage and obtain multiple recreational attributes of streams in the system, with special emphasis on fishing. Public use of the designated streams was considered the major tool that will be used to maintain the streams in the system.

The program extended the *"blue-ribbon"* fisheries concept to other forms of recreation attempting to create *"blue-ribbon recreation drainages"*. The ten criteria to select streams for their inclusion in the system includes blue-ribbon fisheries, recreational potential, historic and scenic qualities, recreational economic opportunities, hunting areas, waterfowl habitat, freedom from pollution, adequate public access, stream protection potential, and popular request and interest.

Rivers designated into the system at the time of the rulemaking included portions of the Flathead River system above Flathead Lake and above Hungry Horse Reservoir, the Missouri River from Fort Benton to Fort Peck, Rock Creek near Missoula, the Smith River, and the Yellowstone River from Yellowstone National Park to Pompey's Pillar east of Billings. Although designated, these rivers received no formal recognition nor compensation as a result of the designation. The Flathead and the Missouri portions were subsequently designated under the National Wild and Scenic River System.

The program is not legislated nor specifically funded, but does outline a procedure for legislation. It recommends contacting the Legislative Council to determine how proposed legislation will affect the waterway system, research state laws to determine the restrictions of federal projects, and explore legislation to protect streams in the system. State laws recommended for investigation included legal recognition, dam construction, water pollution, land acquisition, and powers to regulate incompatible recreation uses of waters. Subsequent legislation has addressed other recommendations in the rule including the legal recognition that recreation is a beneficial use of water, access/ownership issues, and instream flows. Additional work from the DFWP's Parks' and Fisheries' divisions to meet the goals of the program was also outlined in the rule.

An element addressing recreational waterways was included in the Parks Division Program of the DFWP strategic plan for 1985-1990 (MDFWP 1986). The objectives of this element were the development of formal management plans for the Blackfoot and Smith rivers, development of objectives for quality levels, and to provide for an increase in activity days. Resource exploitation threatening in-stream values was the problem of most concern identified by the plan.

Coalition Approach

Although informal, the establishment of a local commission, coalition, or council has been an approach used in Montana to protect the valuable attributes of a river system. Usually organized around an issue threatening the aquatic resources, these groups have proven to be very effective because of their emotional appeal and local commitment. The Flathead Coalition, organized around the threat of a prospective coal mining operation in the Canadian headwaters of the Flathead River, is an example of a successful coalition that has now been formally recognized through state legislation. The Coalition was responsible for obtaining funding from the Environmental Protection Agency (EPA) to investigate the causes

of diminished water quality in the Flathead in order to establish a baseline of resource conditions. This was the first time a federally funded study of this magnitude was successfully managed by a steering committee of local citizens, state and federal agencies, tribal representatives, and private corporations (Flathead Basin Commission 1985).

Largely as a result of the study, the Montana Legislature created the Flathead Basin Commission in 1983. The Commission is a permanent quasi-government entity, addressing water quality and land use issues and economic development in the Flathead. The intent of the legislation was for citizens representing local interests to have a forum for communicating with the appropriate state and federal agency officials. Issues that the Commission has addressed have included support of the DHES's phosphorous reduction strategy for Flathead Lake, a legislated phosphorous detergent ban, a cooperative monitoring program of the basin's water quality, the investigation of forest practices on water quality and fisheries, and continued evaluation of the Canadian coal mine proposal in the Canadian portion of the North Fork of the Flathead River drainage.

The Clark Fork Coalition, the Rock Creek Advisory Council (RCAC), and several informal river advisory committees on the Madison, Missouri, and Marias, have all been organized around protection of a river's valuable natural resources. The RCAC was formed to administer a Trust Fund established to mitigate damages to the Rock Creek drainage resulting from construction activities and presence of a 500 KV powerline across the lower creek. The Trust is managed by the Montana Board of Natural Resources and Conservation. The funds are to be used for preserving open space and maintaining traditional uses of the land in the drainage. The RCAC has purchased 130 acres on lower Rock Creek, protecting 4,000 feet of the stream. It has also been involved in wilderness issues and recent mining proposals in the upper drainage. The Clark Fork Coalition has been actively involved in issues ranging from phosphate detergent bans in Montana and Idaho counties to the Superfund cleanup in the upper Clark Fork basin.

River Management Plans

The DFWP has become involved in developing river management plans in order to provide a high quality recreational experience for an increasing number of recreational users with conflicting interests and desires. The first fishery management plan was developed on the Bighorn River. Its goals were to address the angling public's concern with catch rates, access, and the quality of their fishing experience (MDFWP 1987a). More recent plans are now expanding into other areas, including users fees, limitation of access, and protection of a river and its corridor in order to provide and maintain the desired recreational experience. In November, 1987, the Fish and Game Commission instructed the DFWP to establish river management plans for the state's ten top fisheries. DFWP prioritized rivers in need of management plans based on a broad set of criteria including fisheries and recreation management and political and social issues. As a result, river management plans have been completed on Rock Creek near Missoula, the Big Hole River, the Stillwater River near Billings, and the Missouri River from Holter Dam to Great Falls. Plans for other major rivers are planned for 1990.

Smith River

The Smith River Plan resulting from efforts by the DFWP, federal land management agencies, the Concerned Citizens of the Smith River Ad Hoc Advisory Committee, and a private consultant. The goals of the plan were to identify ways to provide public recreational use consistent with the river's capabilities while maintaining a level of solitude, minimizing conflicts between users and private landowners, and protecting the integrity of the river's water and canyon (MDFWP 1987b). Strategies were established to increase the authority of the Fish and Game Commission to regulate recreational use on the Smith, establish policies for specific user groups, and have the ability to assess user fees to accomplish the goals of the plan.

The plan outlines a management regulation strategy based on use levels and provides river corridor management options to protect the natural scenic integrity of the Smith River Canyon. Corridor management included a set-back policy within the canyon of one mile on either side of the river, a recommendation to

secure development rights on vacant river bottom, and a means to preserve and protect the floater's view shed. The tools to be used to accompiish corridor management on private lands are outlined and zoning districts were established within each county the river crosses. Objectives, problems, and existing tools to maintain water quality and quantity were also addressed. During the 1989 legislative session HB 655, the **Smith River Management Act,** was passed which reiterated the goals of the management plan. Rulemaking authority was granted to the Fish and Game Commission to administer the Smith River waterway and allow for user fees to be established, if necessary.

River Assessment Tools

Several valuable tools are now available in Montana which other states have used in assessing their rivers to determine protection strategies. The completion of the Pacific Northwest Rivers Study (PNWRS) in 1985 allowed Montana to join the ranks of states with a data base that assesses and rates the natural resource values of their remaining free-flowing rivers (Decker-Hess et al. 1988). Although originally developed to address future hydroelectric development in the Columbia River Basin, the assessment includes information on the fisheries and wildlife values and recreational, natural, and cultural features on over 3.500 stream reaches statewide. Using a comparative assessment of these values, each stream has been rated as Class I or containing an Outstanding Resource, Class II as Substantial, Class III as Moderate, or Class IV as Limited. **The Montana Rivers Information System** (MRIS), which houses these data bases, is available from the Natural Resource Information System (NRIS) in the State Library in Helena.

Completed in 1987, the net economic value for fishing and hunting in Montana was determined using a survey of Montana anglers and hunters (Duffield et al. 1987). The net economic value was determined for most of the major rivers and major river basins in Montana, providing a comparative analysis that could allow prioritization of rivers based on their recreational fishing value. The method employed to evaluate the recreational benefits of fishing in Montana was a regional Travel Cost Method, one of the most widely applied demand estimating techniques. The method did not quantify, however, the entire *"Total Economic Value"* of the fishing resource in Montana. Research indicates that for large scale irreversible changes to rivers (e.g. damming, dewatering, etc), existence (economic benefits deriving from knowing the fisheries resource and associated aquatic habitats exist) and bequest values (knowing that these resources exist for future generations) represent 80% of the total economic value. Recreation, therefore, reflects only about 20% of the total economic value. Most of the economic effects from management actions that result in relatively small changes in fish populations or habitats are limited to recreational users. Therefore, the angler values are of primary interest for evaluation of many land management actions by federal agencies.

Several other surveys conducted in Montana which provide recreation river information include The *Montana Outdoor Recreation Needs Survey* (Frost and McCool 1986), *the Governor's Forum on Montanans Outdoors* (State of Montana 1986), and *MDFWP State Comprehensive Outdoor Recreation Plan* (MDFWP 1988). The primary objective of the *Montana Outdoor Recreation Needs Survey*, conducted in 1985, was to assist in identifying needs for recreational facilities, opportunities, and programs (Frost and McCool 1986). Recreational needs were expressed through activity participation, barriers to participation, and preferences for settings, as well as opinions about outdoor recreation problems and concerns. The survey was conducted by telephone interview on the over 18 year-old population. The survey found that twenty-five percent of Montanans sampled floated a river or stream in Montana during 1985, over 56 percent participated in fishing, 11 percent canoed, and 18 percent rafted (Frost and McCool 1986).

LIMITATIONS IN EXISTING RIVER CONSERVATION POLICIES

The limitations in protecting rivers in Montana stem mainly from a lack of an overall strategy with a clear set of objectives and goals. An under-utilization of existing policies and administrative rules also hamper protection. Existing strategies have developed as the needs or opportunities arise. Interest has been generated by local community support, land acquisition has not played an integral part except to provide access, the cost has not been substantial, and the type of protection has been one of preservation.

As a state, Montana has successfully achieved a high level of river protection through the use of state and local programs. The state has not, however, determined that any of its rivers should be taken out of the general pool of development to be left in their natural state in perpetuity. The federal Wild and Scenic Rivers Act is available to protect rivers in Montana in perpetuity but has not been used extensively. There is no legislated program that endorses the total protection of a river or encourages intergovernmental cooperation to discourage the unwise use or over-utilization of these resources by all management agencies. The State Recreational Waterway Program appears to be Montana's attempt at a state recreational river program but the system has never been used since its development in 1972.

The development of scenic river policies is the most common river protection strategy used in 32 states (Hoffman and Fletcher 1988). Many of these programs were developed out of a frustration with the complexity and slowness of the federal wild and scenic law. State governments were found to be more accessible and both conservationists and landowners saw more opportunity to affect the designation and planning process. While it has been easier to designate a stream at the state level, it has also been easier to withdraw designated rivers. State systems do not necessarily prevent hydroelectric licensing, although recent court action addressing the FERC's need to consider state comprehensive plans in their licensing considerations may strengthen states' rights. The states do not have the financial resources to purchase land and the question of eminent domain authority has been highly controversial (Hoffman and Fletcher 1988).

Although many state river policies have passed, many have proven ineffective. Rivers have either never been added to a system or only a few rivers were included with the passage of original state legislation. As of 1987, 317 streams totaling 11,404 miles have been protected by state systems (Appendix A). Of the 28 state programs inventoried by the survey, half of the states had protected less than 150 miles of river, 16 had no rivers currently under study, and only 11 states had funding provided for the program. Only three western states, Washington, Oregon and California, have developed a state river policy (Hoffman and Fletcher 1988). In all three states, no new streams have been added since the passage of the original legislation and the systems in California and Washington have remained relatively small. The Oregon Scenic Waterways Program established by Oregon voters by statewide ballot in 1969 is considered one of the nation's best. Oregon has protected nine streams; addressed land management, water and mining projects; and has included a consistency provision which brings other state agencies into compliance. The program has also been successful in bringing the public into the process.

The State of Maine has also adopted a successful state rivers program (Hoffman and Fletcher 1988). During the energy crunch of the 1970s, the state took the first step to resolve future hydropower conflicts by inventorying the state's rivers. The study identified significant natural and river resource values, potential use conflicts, and possible alternatives and tools for management. The broad-based nature of the study resulted in the growth of a large constituency for a river conservation plan. The Maine Rivers' Policy amended existing statutes to integrate the policy into state law and required the passage of new statutes which prohibited the construction of new dams on designated segments. In addition, new statutes streamlined the process for obtaining hydropower permits from the state on unprotected streams. A measure to form river corridor commissions to conduct assessments of present and potential uses of major river corridors was established.

The recent DNRC instream flow protection issue paper concluded Montana's approach to instream flows lacked a comprehensive plan. Coordination between state and federal agencies was also fragmented. Shortcomings in existing strategies identified that Murphy Rights have a priority only until a district court

determination that the water is needed for a more beneficial use; a reservation process that is cumbersome and efficient only in very large river basins; the reasonable use/public interest criteria applying only to water permit applications for very large amounts of water; and the difficulty to enforce instream flow claims in river basins that have not been adjudicated (MDNRC 1988).

Several existing policies could be modified, enhanced, or further utilized to increase their effectiveness to protect rivers. The "conservation corridor" developed on the Blackfoot River in 1975 was considered a pilot project for the Open-Space and Conservation Act. Easements have been acquired on other rivers but the approach has not been comprehensive. The Natural Areas Act, listed under the "Wild and Scenic" chapter of Montana's annotated codes, has the potential to protect pristine river reaches. Protection of riparian areas has not been a major part of the lands recommended for inclusion, however and problems continue to plague the system.

CONCLUSIONS

Over the past 30 years, Montana has developed a strong set of statutes and policies addressing the protection of a river's water quality, their instream flow values, the preservation of their banks, and management of their recreational resources. In comparison to many other states, Montana has traditionally been in the forefront in river protection, leading the way in 1963 with the first stream preservation act in the nation. All branches of government as well as extensive public participation on a formal and informal level has lead to the continued wise use of one of Montana's most valuable resources- it's rivers and streams.

Unlike other Pacific Northwest states, however, Montanans' sentiment towards preserving rivers in perpetuity have not been clearly surveyed and goals and strategies to meet such an objective have not been developed. River management was identified most frequently as one of the top five barriers to meeting recreation objectives in several outdoor recreation surveys (MDFWP 1988). The *Montana Outdoor Recreational Survey of 1985* indicated one out of every four Montanans floated a river or stream in Montana (Frost and McCool 1986). The positive public reaction to the Northwest Power Planning Council's Protected Areas Program may be an indication of the public's acceptance to establish development limits on one of our most valuable resources--our free-flowing rivers.

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STATE RIVER CONSERVATION PROGRAMS
GENERAL INFORMATION
(Effective July 1, 1984)

STATE	Date of Enactment	Lead Administering Agency	River Management Agency	Management Budget	Acquisition Budget	No. of Staff	No. of Rivers Protected	No. of River Miles Protected	No. of Rivers Under Study	No. of Rivers Proposed for Protection	No. of Rivers in Nationwide Rivers Inventory (NRI)	No. of River Miles in NRI	Status of NRI in State	Status of State Inventory
ARKANSAS	1979	N&S RIVCOM	N&S RIVCOM	40000	0	1	0	0	14	11	33	2250	FINAL	ONGOING
CALIFORNIA	1972	RESOURCES	FISH&GAME	0	0	0	47	1277	0	0	108	3062	FINAL	NONE
CONNECTICUT	1984	DEP	DEP	0	0	0	0	0	0	0	19	123	FINAL	NONE
FLORIDA	1972	REC.&PARKS	VARIES	0	0	0	1	5	0	0	46	1938	FINAL	NONE
GEORGIA	1969	DNR	GAME&FISH	[illegible]	0	0	4	74	0	0	45	2973	FINAL	FINAL
INDIANA	1973	DNR	DNR	40000	40000	3	3	108	4	3	14	1026	FINAL	FINAL
IOWA	1984	CONS. COM.	CONS. COM.	0	0	1	0	0	0	1	5	433	FINAL	FINAL
KENTUCKY	1972	DIV. WATER	DIV. WATER	0	0	1	8	110	0	0	40	1399	FINAL	NONE
LOUISIANA	1970	WILDL&FISH	WILDL&FISH		0	1	47	1260	1	1	9	460	FINAL	NONE
MAINE	1983	VARIES	VARIES				18	1500	0	0	64	1315	FINAL	FINAL
MARYLAND	1968	DNR-LPS	LPS		0	1	9	441	25	0	54	751	FINAL	ONGOING
MASSACHUSETTS	1971	DEM	DEM	50000	2450000	1	4	86	1	4	29	229	FINAL	FINAL
MICHIGAN	1970	DNR	DNR	47000	0	1	12	1240	26	0	70	3026	FINAL	NONE
MINNESOTA	1973	DNR	DNR	472000	175000	17	8	955	6	0	62	2336	FINAL	FINAL
NEW JERSEY	1977	DEP	DEP			1	1	14	1	0	67	474	FINAL	ONGOING
NEW YORK	1972	DEC-APA	DEC-APA			3	82	1248	15	15	136	2339	FINAL	ONGOING
NORTH CAROLINA	1971	DNRCD	DNRCD	0	0	0	2	40	1	0	76	2661	FINAL	FINAL
OHIO	1968	DNR	DNR	200000	0	6	10	632	2	2	53	1200	FINAL	NONE
OKLAHOMA	1977	OSRC	OSRC	130000	0	5	5	151	0	0	8	475	FINAL	NONE
OREGON	1969	DOT	DOT-P&R	50000	75000	2	11	840	1	1	37	1931	FINAL	FINAL
PENNSYLVANIA	1972	DER	DER	200000	0	6	6	271	8	1	42	625	FINAL	FINAL
SOUTH CAROLINA	1974	WR COMM.	WILDL&MARR	15000	0	1	1	5	4	4	28	1827	FINAL	ONGOING
SOUTH DAKOTA	1972	BNRD	BNRD	0	0	0	0	0	1	1	11	1010	FINAL	NONE
TENNESSEE	1968	DOC	DOC	45000	0	4	10	318	0	0	91	2371	FINAL	NONE
VIRGINIA	1970	P&R	VARIES		0	1	9	147	65	1	86	2420	FINAL	ONGOING
WASHINGTON	1977	P&R	P&R		0	1	4	75	0	0	37	1508	FINAL	NONE
WEST VIRGINIA	1969	DNR	DNR	0	0	0	5	236	0	0	26	929	FINAL	NONE
WISCONSIN	1965	DNR	DNR			2	10	371	0	0	44	1445	FINAL	FINAL

Appendix A. State River Conservation Programs (Hoffman and Fletcher 1988).