

Appendix I. Conservation Standards Used to Protect Montana's Wetlands and Riparian Areas

The examples appearing below summarize information from case studies found in Chapter 5.

Location and Date Enacted	Type of Regulation	Size of Setback or Other Standard	Area Protected	Notes	Page
Meagher County (2000)	Growth Policy/ Comprehensive Plan	300-foot setbacks: from delineated wetlands and riparian areas (for non-agricultural structures). 200-foot setbacks: from all streams (for non-agricultural structures). 100-foot setbacks: from streams, lakes and identified 100-year floodways (for wells and septic systems).	All streams, lakes, and delineated wetlands.	Because these setbacks occur in the growth policy they are not regulatory. The 300-foot and 200-foot setbacks apply to "new developments, including subdivisions approved under Meagher County Subdivision Regulations." The well and septic tank setbacks apply as follows: at least 100 feet from streams, lakes and identified 100-year floodways; and 300 feet from identified riparian areas.	5-3
City of Missoula (September 1999)	County or Municipal Zoning	Ecologically based setbacks determined on a case-by-case basis from vegetation (for all construction activities).	All streams, lakes, wetlands and other bodies of water.	<ul style="list-style-type: none"> Ecologically based riparian resource protection standards triggered by any activity that requires a building permit. The regulations prohibit buildings from being built that "impact areas of riparian resources." Buffer size is determined on a case-by-case basis, and is decided based on vegetation and the impacts to wildlife and fish habitat, water quality or quantity, or other aquatic resources. A management plan describing how the riparian resources will be protected must be approved by the governing body. 	5-4
Gallatin County: Bridger Canyon Zoning Regulations (1971)	Rural Zoning District	50-foot setbacks: from all streams (for buildings and structures). Density Standards Include (minimum lot size): <ul style="list-style-type: none"> 10-acre density standard (recreational business district) 40-acre density standard (recreation and forestry district) 	Setback applies to all streams. Wetlands and riparian areas are protected as a byproduct of the density standard.	The majority of land is divided into two districts: 1) in the recreational business portion of the district, parcel sizes may not be less than 10 acres in size, a minimum of a 50-foot setback from streams is required of all facilities, and no residential development is allowed; and 2) in the recreation and forestry portion of the district, the minimum parcel size is 40 acres and the setback for facilities is 50 feet from any stream.	5-5
Jefferson County: Milligan Canyon/ Boulder Valley Agricultural Zoning Regulations (Revised October 2000)	Rural Zoning District	640-acre density standard (for non-farm/ranch dwellings)	Wetlands and riparian areas are protected as a byproduct of the density standard.	The zoning district was originally set up in 1992 under a temporary emergency zoning ordinance. In 1995 it was adopted as a permanent district. Subsequent revisions have occurred.	5-6

Location and Date Enacted	Type of Regulation	Size of Setback or Other Standard	Area Protected	Notes	Page
Park County: East Yellowstone Zoning District (November 1997)	Rural Zoning District	100-foot setbacks: from the Yellowstone River (for buildings or structures) 30-acre density standard (for single family dwellings)	Setback applies to the Yellowstone River. Wetlands and riparian areas are protected as a byproduct of the density standard.		5-6
Choteau County (Revised March 1997)	Development Permit Regulations	For new residential development from Coal Banks Landing Recreational Area to the eastern Chouteau County line: <ul style="list-style-type: none"> • 3 horizontal mile setback from the Missouri River; and • 160-acre density standard. For new residential development in Fort Benton City Planning Board jurisdiction boundary to Coal Banks Landing: <ul style="list-style-type: none"> • 400-foot setbacks from the Missouri River, and • 8-acre density standard. 	Setbacks apply to the Missouri River. Wetlands and riparian areas are protected as a byproduct of the density standards.	<ul style="list-style-type: none"> • The setback regulations were initially adopted in 1985. • The 3 horizontal mile setback applies on the Missouri River, from Coal Banks Landing Recreational Area to the eastern Chouteau County line, for new residential development when the development “would be visible along a line of sight from any point between the high water marks.” 	5-7
Powell County (Revised November 2000)	Development Permit Regulations	75-foot setbacks: from the Blackfoot River, including North Fork of the Blackfoot River (for new residential, commercial or industrial structures). No residential, commercial or industrial structures within 100-year floodplain for Blackfoot, Clark Fork and Little Blackfoot Rivers. 160-acre density standard for new lots (non-farm/ranch dwellings) in northern 3/4 of county.	Setback applies to Blackfoot River. Wetlands and riparian areas are protected as a byproduct of the density standard.	Subdivisions in northern 3/4 of the county containing lots smaller than 160 acres must be part of a Planned Unit Development and have an average density of not less than 160 acres.	5-8
Madison County (Adopted November 1993; Revised October 1995 and November 2000)	Subdivision Regulations	500-foot setbacks: from the Madison River (for new subdivisions). 150-foot setbacks: from the Big Hole, Jefferson, Ruby, Beaverhead, and South Boulder Rivers (for new subdivisions). 100-foot setbacks: from all other streams (for new subdivisions).	Initially just Madison, Big Hole, and Jefferson Rivers. Now all streams and rivers.	Under certain circumstances, the Madison River setback may be reduced and the 150-foot setback may be increased.	5-10

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City of Missoula (Amended July 1999) and Missoula County (Amended December 2000)	Subdivision Regulations	Ecologically based setbacks determined on a case-by-case basis from vegetation (for all construction activities related to subdivisions).	All streams, lakes, wetlands and other bodies of water.	<ul style="list-style-type: none"> • Ecologically based riparian resource protection standards triggered by any activity that requires a building permit. The regulations prohibit buildings from being built that “impact areas of riparian resources.” Buffer size is determined on a case-by-case basis, and is decided based on vegetation and the impacts to wildlife habitat, water quality or quantity, fish, or other aquatic resources. • A management plan describing how the riparian resources will be protected must be approved by the governing body. 	5-10
City of Bozeman (Revised July 2002)	Subdivision Regulations	100-foot setbacks: from East Gallatin River. 75-foot setbacks: Sourdough and Bozeman Creek. 50-foot setbacks: all other streams. For wetlands adjacent to streams: buffer width extends by width of wetlands.	All streams and rivers, wetlands adjacent to riparian areas.	<ul style="list-style-type: none"> • Setbacks apply to any residential or commercial structures, parking or other similar improvements. They include delineated 100-year floodplains and adjacent wetlands. A natural vegetation component is required (various widths). • Setbacks in areas platted prior to the effective date of the regulation are a minimum of 100 feet on the East Gallatin and 35 feet on all other streams. 	5-10
Ravalli County (March 1999)	Floodplain Regulations	No residences within 100-year floodplain	Bitterroot River, including the East Fork and the West Fork (to Painted Rock Dam).	Most counties do not prohibit new residences in the 100-year floodplain. However, buildings built in floodplains must be constructed on fill so that the lowest floor elevation (including the basement) is 2 feet above the floodplain elevation. Additionally, no septic systems are allowed in floodplains.	5-18
Missoula County (1999)	Floodplain Regulations	Regulates bank stabilization structures. 50-foot prohibition on large-scale clearing of native vegetation on all streams.	Designated river and stream sections.	<ul style="list-style-type: none"> • Creation of new levees is prohibited. • Maintenance of an existing levee is allowed in three situations: if the levee is publicly maintained; if relocating, elevating, or flood-proofing the structures protected by the levee is not feasible; or if a streamside levee is to be reconstructed away from the stream bank. • Riprap is only permitted to protect an existing residence, commercial or industrial use, or public infrastructure that cannot be relocated. • Builders are responsible for locating new structures a safe distance from the waterway. • Riprap is not permitted to protect a structure built after adoption of the floodplain regulations. • “Softer” bank stabilization techniques, including logs and other woody debris instead of rock, may be allowed after review of administrators. • New bridge construction must be designed to cause minimal change to the stream. • Road approaches must not block normal overflow channels. 	5-18

Location and Date Enacted	Type of Regulation	Size of Setback or Other Standard	Area Protected	Notes	Page
Flathead County	Lakeshore Regulations	Regulates construction activity within 20 feet of lakeshore.	Lakes	Regulations include criteria for issuing construction permits, design standards for projects, and a 50-foot limit on docks. For streams and springs running through the Lakeshore Protection Zone, a 25-foot minimum setback is required for all structures.	5-20
City of Whitefish	Lakeshore Regulations	Regulates construction activity within 20 feet of lakeshore.	Lakes	Similar specifications as Flathead County, however, Whitefish does not permit individual boat ramps to be built on Whitefish Lake. This restriction reduces the amount of development along the lakeshore and, consequently assists in protection of riparian vegetation on the shore.	5-20
Missoula County	Lakeshore Regulations	Regulates construction activity within 20 feet of lakeshore.	Lakes	Similar specifications as Flathead County, however, Missoula County prohibits impervious material (asphalt), parking areas, jetties, roads, overhead power lines, and more from its Lakeshore Protection Zone. Additionally a minimum setback of 50 feet is required to important fishery streams and springs.	5-20

Appendix II: Suggested Language for Local Policies & Regulations

Wetlands or riparian area protection provisions can be incorporated into local growth policy plans, subdivision regulations, and zoning or development permit regulations. It is essential that the growth policy plan establish that wetland and riparian values are important to the community. Local government protection of these areas must begin with a statement that wetland and riparian areas are important to the community; and with clear goals, objectives, and policies for resource protection. Any local government regulations protecting wetland or riparian areas must conform to the adopted growth policy plan. If land use regulations restrict development in wetland or riparian areas, the growth policy plan must clearly state the community's interest in protecting those areas. The following is suggested language that can be incorporated into growth policy plans, subdivision regulations and zoning and development permit regulations to protect wetlands and riparian values.

Growth Policy Plans

Protection language in the growth policy plan for wetlands and riparian areas establishes a local community commitment to these areas and is legally vital to setting the stage for implementing measures to ensure that protection. To accomplish this, a local growth policy plan should 1) state the value and benefits of these areas to the community; 2) express clear goals, objectives and policies regarding wetland and riparian protection; 3) identify the locations of those areas; and 4) describe the intent and measures that the community will use to implement that protection. As further background information, the growth policy plan should estimate the number of acres of important wetlands and riparian areas in the county, and the wildlife species and other values supported by those areas. The following language is suggested:

Statement of Values and Benefits:

Wetlands and riparian areas are important assets and resources to the county. The biological diversity supported by these areas provide critical and productive wildlife habitat, especially for waterfowl, shorebirds, songbirds, and water-related animals. These areas are vital to freshwater fish for spawning, feeding, or protection against predators. They also play a critical role in flood protection, and act as water filters, controlling water pollution and maintaining water quality of surface and ground waters. Wetland and riparian vegetation is very valuable for shoreline stabilization. In addition to the natural and ecological values of these areas, they provide important opportunities for outdoor recreation. And finally, poor soils, high ground water, flooding, and other physical features make wetlands and riparian areas unsuitable, or poorly suited, for development.

Goal:

To preserve important wetlands and riparian areas within the county.

Objective:

To discourage or prevent development that is incompatible with preservation of important wetlands and riparian areas.

Policies:

- Development will be prohibited in riparian areas and delineated wetlands, or will be designed to avoid or minimize loss of these areas.
- Subdivisions will only be allowed in wetland or riparian areas where the design of lots and improvements will avoid the loss of wetland or riparian values.

Implementation of the Policy:

The growth policy plan should describe the actions that the local government will take in order to accomplish the stated goals and policies. Suggested actions include:

- Incorporate into the county subdivision regulations provisions that 1) require construction of structures, excavation or any other disturbance

of the natural vegetation and soils be prohibited within 300 feet of wetlands or riparian areas identified in the growth policy plan; 2) establish building envelopes on each lot that will not interfere with or affect identified wetlands or riparian areas; and 3) encourage the location and design of required parkland to include identified wetlands and riparian areas as natural undisturbed open space.

- Incorporate setbacks in zoning and development permit regulations that prohibit development, construction, excavation or any disturbance of wetlands and riparian areas identified in the growth policy plan.
- Adopt floodplain regulations that comply with the growth policy plan.
- Work with agencies or land trust organizations to obtain conservation easements that protect wetlands and riparian areas.

Maps and Text Describing the Wetlands and Riparian Areas and Values:

The following basic background information on wetlands and riparian areas in the community should be gathered and set out in the growth policy plan.

- Identify locations of flood prone areas and important wetland areas;
- Determine the number of acres of important wetlands and riparian areas;
- Identify wildlife species supported by wetlands and riparian areas; and
- Identify other values represented by wetlands and riparian areas.

Sources of maps and information appear Appendix III.

Zoning or Development Permit Regulations

Zoning and development permit regulations can establish setbacks and building envelopes, and can simply restrict development in wetland or riparian areas. The following are suggested provisions that can be incorporated into local zoning or development permit regulations to protect these areas:

- No structures, septic systems or drainfields may be located within 300 feet of any riparian area

or flowing stream. All native vegetation within this setback must be left undisturbed. The setbacks shall be shown on a final plan, which must be submitted as part of the permit application.

- The subdivider shall submit a plan for approval by the governing body that identifies “building envelopes”—areas where buildings and structures may be constructed or located that do not affect wetlands and riparian areas identified by the growth policy plan.

Subdivision Regulations

Subdivision regulations can establish setbacks, building envelopes, or use parkland to protect wetlands and riparian areas. The following are suggested provisions that can be incorporated into local subdivision regulations to protect these areas:

- No structures, septic systems or drainfields may be located within 300 feet of any riparian area or flowing stream. All native vegetation within this setback must be left undisturbed. The setbacks shall be shown on the final plat, or on documents accompanying the final plats.
- The subdivider shall submit a plan for approval by the governing body that identifies “building envelopes”—areas where buildings and structures may be constructed or located so as to protect wetlands and riparian areas identified by the growth policy plan.
- The governing body may require that part or all of required parkland be located and designed to incorporate wetlands or riparian areas, to be protected and maintained as undisturbed open space.

Appendix III. Identifying Local Wetlands & Riparian Resources: Sources for Maps & Other Information

An important tool for local governments that wish to protect wetlands and riparian areas is the development of a base map that identifies the location of these areas. Developing these maps can be expensive. The maps listed below can either be used by themselves, or they can be used to construct a base map. Base maps may eventually need to be supplemented with other types of information such as the number of wetlands of a particular type, the location of important riparian areas, and the identified values, uniqueness, ownership, existing uses, and threats from proposed development.

The sources identified in this appendix are available in Montana, although sometimes a specific source does not contain information for a particular area of the state. The general location of riparian areas is fairly easy to locate because of their association with streams or rivers that are readily identified on topographic maps. Information about the location of wetlands is more challenging to obtain.

In using the sources identified below, it is important to note that maps provide only a portion of the information needed to identify the location of wetlands and riparian areas. On-site investigation may be needed to define boundaries. For this reason, when developing conservation measures, it is helpful if communities use both maps and written criteria (for example, a list of common plants associated with protected areas) that can be applied on-the-ground during field investigations. It is also important to note that the boundaries of wetlands and riparian areas shift over time because of new channels cut by a stream or river, changes in drainage patterns, and other factors.

Topographic Maps

(Source: U.S. Geologic Survey ~ USGS)

USGS topographic maps show the location of streams, rivers, water bodies, and the approximate location of some larger wetlands. Enlarged, these maps can be used to develop a base map where the general location of wetlands and riparian areas is identified. The location of streams and rivers is the easiest way to identify the location of riparian areas. These maps are not as accurate in locating wetlands. The maps are 7.5 minutes of latitude by 7.5 minutes of longitude, with a scale of 1" = 2,000 feet (1:24,000).

National Wetland Inventory Maps

(Source: U.S. Fish & Wildlife Service ~ USFWS)

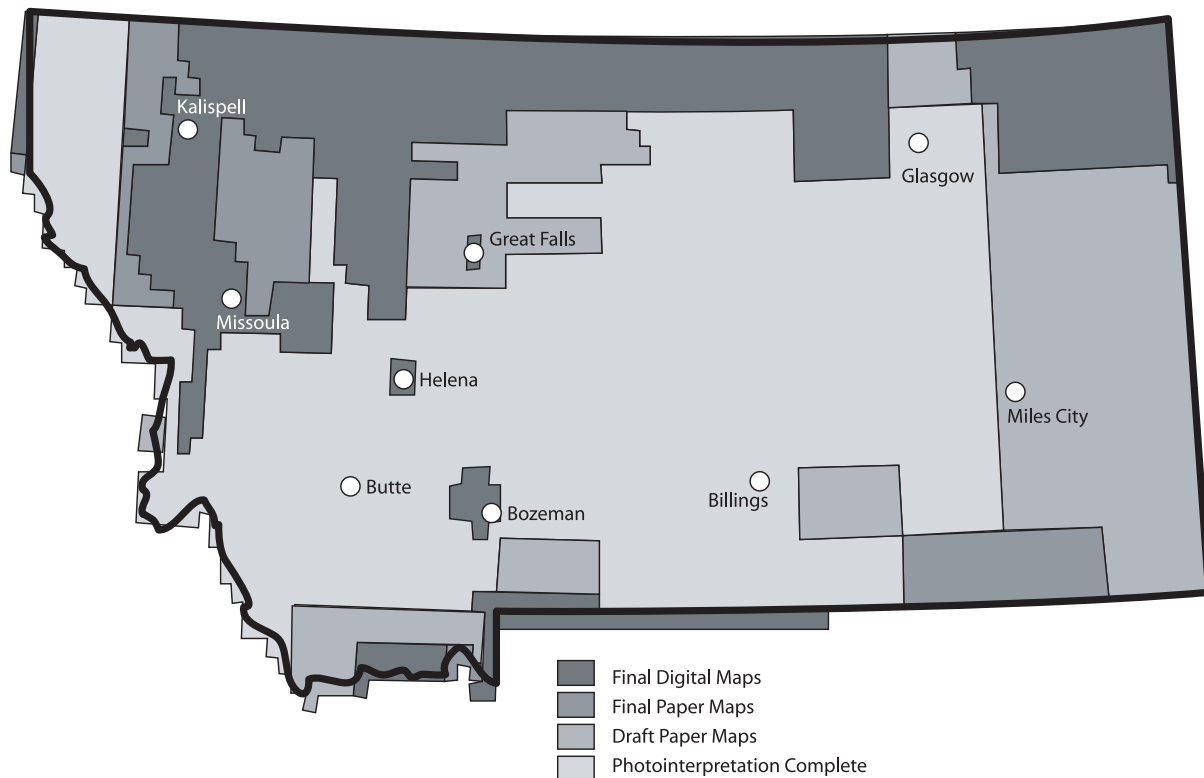
Although mapping is not complete for much of Montana, portions of the state have National Wetlands Inventory (NWI) maps, a project of the USFWS. These maps are based on interpretation of aerial photographs and are projected onto USGS topographic maps.

When using NWI maps, it is important to understand their limitations. Because of their scale, only major wetlands are shown, giving a broad-scale picture of



Figure 5. Portion of standard NWI Map showing wetland classifications near Helena.

Figure 6. Status of NWI maps in Montana. Fall, 2002



existing wetlands. Smaller, yet still ecologically vital wetlands are sometimes not identified on these maps. Consequently, if a wetland area is identified on a NWI map, the area is probably a wetland. However, the absence of a wetland designation on a particular map does not necessarily mean that the area is not a wetland. Other limitations to NWI maps include: field investigations are rarely done to verify the existence of wetlands; aerial photography done in a dry year will not identify ephemeral wetlands; forested wetlands can be missed because they are not visible on aerial photographs; and the maps do not identify the location of most riparian areas. Users of the maps need to be knowledgeable of wetland types. A manual is available that explains the numerous symbols appearing on the maps. NWI maps are helpful when compiling a wetland base map for a community. The scale on these maps is 1" = 2,000 feet (1:24,000). As NWI maps are completed in Montana, they will become available on the website of the Natural Resource Information Center at the State Library <http://nris.state.mt.us/wis/wetlands/>

mtnwi.html (1515 East Sixth Ave., Helena, MT 59620-1800; (406) 444-5354), as well as other locations.

Soil Survey Maps

(Source: Natural Resources Conservation Service ~ NRCS)

These maps show soil types that occur on the land. Because hydric soils are an important indicator for wetlands, the maps can be used as a starting point for baseline wetland maps. The NRCS definition of a hydric soil is "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part." State lists of hydric soils are available from two sources: electronically from the USDA-NRCS Hydric Soils Homepage <http://www.statlab.iastate.edu/soils/hydric/state.html>, or as hard copy from the NRCS Montana State Conservationist (Natural Resources Conservation Service, 10 East Babcock, Room 443, Bozeman, MT

59715; (406) 587-6868). The NRCS also maintains, for each conservation district in the United States, lists of map units that contain, or may contain, hydric soils. These detailed lists are also available by contacting the NRCS Montana State Conservationist. Currently the NRCS is in the process of digitizing their soil maps to make them more available to landowners, local governments, and others. Some NRCS field offices have infra-red photography and historical aerial photographs. These photographs are invaluable for observing land use changes, particularly the loss of wetlands.

Limitations to NRCS soil maps include the fact that they contain information about hydric soils, but not information about the presence or absence of wetlands. For a variety of reasons, wetlands may not be located everywhere where hydric soils are located. Additionally, soil map units listed on state or local hydric soil lists may contain a hydric soil as a minor component. This minor component may be small or non-existent at any one location on the ground. Consequently, it is very important to understand the details of each soil series and soil map unit—which may require professional interpretation. Users of these maps need to be knowledgeable of soil data and their information. The scale of these maps is 1:24,000; 1" = 2,000 feet.

Floodplain Maps

(Source: Federal Emergency Management Agency ~ FEMA)

FEMA, which makes federally-backed flood insurance available to residents and communities, has developed floodplain maps along waterways in more developed areas of Montana. Floodplain and floodway boundaries have been officially delineated on these maps. In areas where 100-year floodplains have not been designated, local governments can use maps of "flood prone" areas, which approximate the floodplain based on the best available information. It is important to understand the limitations of floodplain maps. First, streams without mapped floodplains still have floodplains and can flood. Second, these maps do not really identify the location of wetlands or riparian areas—only the location of where flooding

occurs. However, this information can be used to determine the general location of riparian areas and their associated wetlands. Finally, it should be noted that these maps are not always accurate (*see Missoula County, page 5-18*). The maps are expensive to create and, consequently, they are rarely revised. Because rivers are dynamic systems, flooding can change the channel structure and location of the floodplain. Check with local planning officials, local floodplain managers, or the Floodplain Management Section at the Montana Dept. of Natural Resources and Conservation (P.O. Box 201601, Helena, MT 59620-1601, (406) 444-6610) to determine whether a 100-year floodplain has been designated for a stream of interest. The scale of these maps is approximately 1" = 2,000 feet (1:24,000) or 1" = 1,000 feet (1:12,000).

404 Wetlands Permit Information

Section 404 of the Clean Water Act is administered by the Army Corps of Engineers (Corps). Because this program is the primary permit process that regulates activities impacting wetlands areas, information about the permits issued in a specific location can be helpful in identifying local threats to wetland resources. Consequently, the Montana Natural Resource Information System has established a website making this information available: <http://nris.state.mt.us/mapper/Corp404/corpannounce.html>. The website allows users to access quantitative information about project descriptions; type of activity; size of the project area, in linear feet or acres; location, including maps of project locations; and the date a permit was issued. Permit information can be obtained through queries to the permit database using a number of categories, including:

- **Year of issue** (since 1990);
- **Permit type** (The Corps issues a variety of permit types): nationwide, general, and individual permits; letters of permission; and modifications to previously-issued permits);
- **Wetland type**: Lacustrine (associated with a lake), Riverine (associated with a river), Palustrine (most other wetlands), and Other Waters;
- **Location by**: County; Township, Section, and

Range; Stream name; and U.S.G.S. Hydrographic Unit.

Users can view a list of the permits that have been issued, as well as summary information about selected permits (the total number of acres filled, linear feet of streambank riprap, the total number of permits for a specific year, etc.). In addition, maps showing permit locations can be created for each query made.

Rare and Threatened Species Habitat Information

There are at least two sources of information in Montana about the location of rare or threatened species or natural communities. Because many of Montana's rarest animals and plants depend on wetlands or riparian areas, these sources can provide valuable information to a community.

U.S. Fish and Wildlife Service (USFWS). The USFWS administers the federal Endangered Species Act (ESA). The ESA provides legal protection for certain rare plants and animals. The USFWS can provide up-to-date information about critical habitat for Montana's rarest species. For more information contact the USFWS, 100 North Park, Suite 320, Helena, MT 59601; (406) 449-5225; <http://www.rb.fws.gov>.

Montana Natural Heritage (Heritage) Program.

The Heritage Program, located at the Montana State Library, collects information on the location and condition of the state's rare and threatened species, and natural communities. The program has information on high quality wetland and riparian areas for portions of the state. Additionally, Heritage has developed a system for internet use to search for wetland indicator species <http://nris.state.mt.us/wis/SearchWetlands.html>. All Heritage information is housed in a computerized database and mapping system. To obtain site-specific information, you must fill out a data request form, which is available on the internet or through the mail. Fees sometimes apply for data searches done by Heritage staff. For more information, contact the Montana Natural Heritage Program, Montana State Library, P.O. Box 201800, 1515 East Sixth Ave., Helena, MT 59620; (406) 444-3009; <http://nhp.nris.state.mt.us/>.

Other Sources of Information

Natural Resource Information System (NRIS).

In addition to 404 permit information discussed above, NRIS has developed the Water Information System, which collects and provides access to data on surface water, ground water, water quality, riparian areas, water rights, and more. For more information, contact NRIS, Montana State Library, P.O. Box 201800, 1515 East Sixth Ave., Helena, MT 59620; (406) 444-3009; <http://nris.state.mt.us/>.

DEQ Wetlands Program. In addition administration of a wetlands grant program and coordinating the state's efforts to complete National Wetland Inventory (NWI) maps for the state (*see DEQ Wetlands Program, page 6-10*), the DEQ Wetlands Program serves as a clearinghouse for wetlands information, including maintaining a wetlands clearinghouse website: <http://nris.state.mt.us/wis/wetlands/>. For information about the DEQ Wetlands Program, contact Lynda Saul, Wetlands Coordinator, Dept. of Environmental Quality, 1520 East 6th Ave., Helena, MT 59620, (406) 444-6652.

Publications useful for local governments on Montana's wetlands and riparian areas, include:

- *Field Guide to Montana's Wetland Vascular Plants* (Lesica and Husby, 2001);
- *A Landowners Guide to Montana's Wetlands* (Montana Watercourse, 2001); and
- *Classification and Management of Montana's Riparian and Wetland Sites* (Hansen et. al., 1995).

The first two publications are available through the DEQ Wetlands Program, 1520 East 6th Ave., Helena, MT 59620, (406) 444-6652, <http://nris.state.mt.us/wis/wetlands/>. The *Classification* manual is available at University bookstores; and through the School of Forestry, The University of Montana, Missoula, MT 59812, (406) 243-2050; or on the web at <http://www.rwrp.umt.edu/Montana.html>.

As a final source of information, **local or project-specific maps or studies** may be available. Check with local planners, Water Quality District staff, Watershed Groups, and similar sources to determine

if any studies have been conducted locally that may have identified wetlands or riparian areas. As an example of the kinds of local studies that may be available, the Army Corps of Engineers required a wetlands biologist to complete a map and inventory of wetlands occurring in a portion of the Gallatin Valley targeted for development.

APPENDIX IV: Regulatory Programs

Local governments have numerous reasons to consider implementing conservation measures for wetlands and riparian areas (*see Why Local Governments Protection Programs Make Sense, page I-XXX*). However, before taking on this task, it is helpful to have a basic understanding of federal, state, tribal, and local programs that regulate activity in these areas—programs outside the traditional land use planning framework. Although these regulatory programs provide some level of protection for streams and wetlands, elected officials often decide that local regulations and policies are needed to achieve community conservation goals and priorities.

The following descriptions briefly summarize the major regulatory laws and programs impacting wetlands and riparian areas. This overview parallels *A Guide to Stream Permitting in Montana* (Montana Association of Conservation Districts, 2000). For complete information about specific programs, contact the agency in charge listed in Box X on page A-15 and lists the permits that may be required for projects located in wetlands or streams.

Please note that the wetland permitting system can be difficult for applicants to negotiate. To assist permit applicants, several agencies have developed a cooperative application. Cooperating agencies are identified in Box X (*). This joint application form is available at offices of any cooperating agency, or it can be downloaded at www.dnrc.state.mt.us/permit.html. Local governments should also request a copy of this application, as the information it contains can assist with planning decisions by describing impacts of a project on natural resources and highlighting opportunities for mitigation.

Federal Programs

All federal programs, including projects that contain federal funding, are subject to two important Presidential Executive Orders:

Executive Order 11990: Protection of Wetlands (1977)

This order is an overall wetland policy for all federal agencies managing federal land, sponsoring federal projects, or providing funding assistance to state and local projects. It requires federal agencies to avoid, if possible, adverse impacts to wetlands and to preserve and enhance the natural and beneficial values of wetlands. This order affects protection for wetlands in state and local projects using federal funding. A complete copy of the Executive Order can be found at www.wetlands.com/fed/exo11990.htm.

Executive Order 11988: Floodplain Management (1977)

This order requires each federal agency to take action to reduce the risk of flood loss; to minimize the impact of floods to human safety, health and welfare; and to restore and preserve the natural and beneficial values served by floodplains. Because many wetlands and riparian areas are associated with floodplains, this order has the potential for providing some protection. A complete copy of this Executive Order can be found at www-lib.fnal.gov/library/worksmart/eo11988.html.

Section 404 of the Clean Water Act.

The primary federal law that regulates projects that impact wetlands and riparian areas is Section 404 of the Clean Water Act. Section 404 regulates the “discharge of dredged or fill material” into “waters of the United States.” “Waters of the United States” include all streams to their headwaters with an average annual water flow of a minimum of 5 cubic feet per second, lakes over 10 acres, some isolated wetlands, and wetlands adjacent to waters of the United States. The “discharge of dredged or fill material” involves the physical placement of soil, sand, gravel, dredged material or other such material into waters of the United States. Under the Act, it is unlawful to discharge dredged or fill materials into waters of the United States without first receiving authorization (known as a “404 Permit”) from the U.S. Army Corps of Engineers (Corps). 404 permits are central to the conservation of streams and

wetlands. Information about how to access 404 Permit information for a specific location appears on Appendix III.

Other Federal Regulatory Programs

Section 10 Rivers and Harbors Act applies to activities in, on, or over federally listed navigable waters of the United States. A list of these designated waters appears in Box X. The **National Pollutant Discharge Elimination System (NPDES) Permit** regulates activities that may cause water pollution on Tribal Reservations in the state.

State Programs

There are 10 state-level permits that regulate activities in streams and wetlands. The **Montana Stream Protection Act (SPA 124 Permit)** only regulates government projects; it is designed to protect the natural or existing state of streams, and minimize soil erosion and sedimentation. Under the **Montana Land-Use License or Easement on Navigable Waters**, the state of Montana regulates activities that may impact the property it owns under navigable streams. This act is designed to protect the beneficial uses of these state lands, protect associated riparian areas, and preserve the navigable status of these streams. Four state-level permits primarily regulate activities that may cause water pollution and reduce water quality: the **Storm Water Discharge General Permit; Short-term Water Quality Standard for Turbidity (318 Authorization); Montana Pollutant Discharge Elimination System (MPDES);** and the **General Mining Laws/Small Miner's Placer and Dredge Operations**. The **Montana Water Use Act (Water Rights and Change Authorizations)** regulates water rights and other water quantity issues. The **Streamside Management Zone Law (SMZ)** regulates logging and other forest-harvest activities adjacent to streams that may cause erosion and other water quality and quantity problems. The **Montana Dam Safety Act** specifically regulates dams that may have safety hazards associated with them. And finally, the **Fish Stocking Permit for Private Fish Ponds** was developed to regulate the introduction of fish that

may pose a hazard to Montana's fisheries.

Local Programs

Seven regulatory programs are administered at the local level. Three of these are administered by county or municipal governments: the **Montana Floodplain and Floodway Management Act** (*see Floodplain Regulations, page 5-17*) regulates activities in the 100-year floodplain; **County Septic System Regulations** protect surface and ground water through regulation of sewage disposal systems; and the **Lakeshore Protection Act** (*see Lakeshore Protection Act, page 5-19*) is designed to minimize erosion on lakes 160-acres or larger. Conservation Districts administer two local permits. First, the **Montana Natural Streambed and Land Preservation Act (310 Permit)** (*see Natural Streambed and Land Preservation Act, page 6-7*) is designed to protect streams in their natural or existing state, and minimize soil erosion and sedimentation. The 310 Permit is for non-government projects and is the equivalent of the SPA 124 Permit discussed above. Second, Conservation Districts also administer water reservations within their jurisdiction under the **Montana Water Use Act** (Water Reservations).

Tribal Programs

Two tribal programs on the Flathead Reservation apply. The **Shoreline Protection and Aquatic Land Conservation Ordinance** regulates all projects that may impact streams, rivers, lakes, and wetlands. And the **Confederated Salish and Kootenai Tribes' Water Quality Program** regulates activities that may cause pollution of any waters on the Reservation. Fort Belknap adopted its first wetland regulations in late 2002.

Permits Needed for Projects Impacting Wetland and Riparian Areas

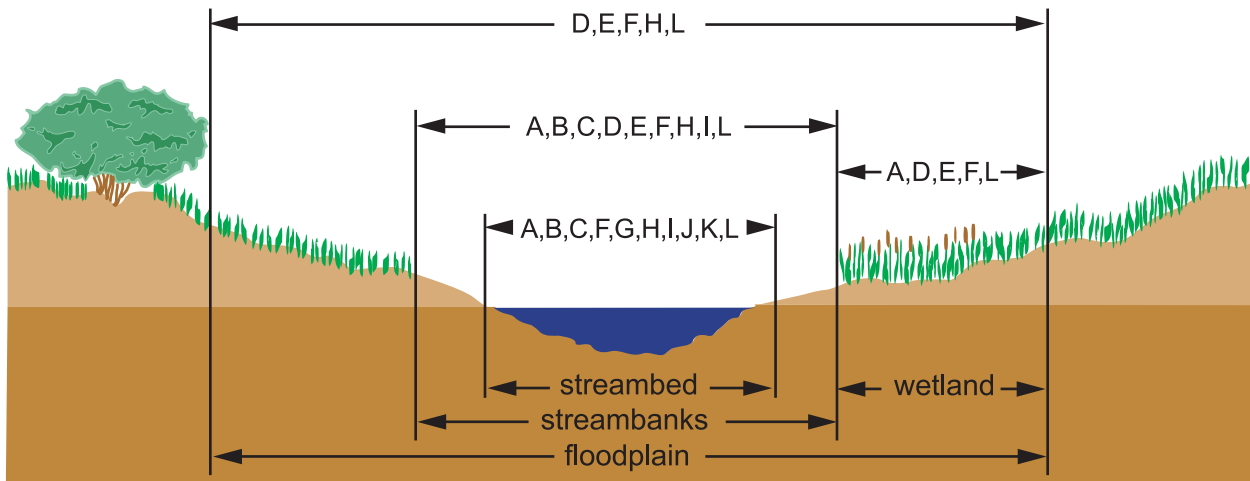


Figure 7. This illustration indicates which regulatory permits may be required for projects impacting wetlands and riparian areas in the state of Montana. The letters in the illustration refer to the permits listed in Box X. The diagram is used with permission (MT Association of Conservation Districts, 2000).

Box X. Regulatory Programs for Streams and Wetlands in Montana

Diagram Letter	Name of Program	Program Description	Contact Information
A	Federal Clean Water Act (404 Permit)*	For projects that will result in the discharge or placement of fill material (including dredged material) into waters of the United States. "Waters of the United States" include lakes, rivers, streams, wetlands, and other aquatic sites.	U.S. Army Corps of Engineers 10 West 15th Street, Suite 2200 Helena, MT 59626 (406) 441-1375
B	Federal Rivers and Harbors Act (Section 10 Permit)*	For projects in, on, or over any federally listed navigable water. Designated navigable waters in Montana include the Missouri River from Three Forks downstream to the Montana-North Dakota border; the Yellowstone River from Emigrant downstream to its confluence with the Missouri River; and the Kootenai River from the Canadian border to Jennings, Montana.	U.S. Army Corps of Engineers 10 West 15th Street, Suite 2200 Helena, MT 59626 (406) 441-1375
C	Montana Stream Protection Act (SPA 124 Permit)*	For federal, state, and local government projects proposed in or near a stream that may affect the bed or banks of the stream.	Fisheries Division MT Dept. of Fish, Wildlife & Parks 1420 East Sixth Ave. P.O. Box 200701 Helena, MT 59620-0701 (406) 444-2449
D	Storm Water Discharge General Permit	For construction, industrial, or mining activity that will discharge storm water—and its associated sediments, chemicals, petroleum products, etc.—into state waters.	Water Protection Bureau Permitting and Compliance Division MT Dept of Environmental Quality 1520 East Sixth Ave. P.O. Box 200901 Helena, MT 59620-0901 (406) 444-3080
E	Streamside Management Zone Law (SMZ)	For accessing, harvesting, or regenerating trees within at least 50 feet of streams.	Forestry Division MT Dept. of Natural Resources & Conservation 2705 Spurgin Road Missoula, MT 59804-3199 (406) 542-4300

Diagram Letter	Name of Program	Program Description	Contact Information
F	Short-term Water Quality Standard for Turbidity (318 Authorization)*	For initiating a short-term activity (such as construction) that may cause unavoidable short-term violations of state surface water quality standards.	Water Protection Bureau Permitting and Compliance Division MT Dept of Environmental Quality 1520 East Sixth Ave. P.O. Box 200901 Helena, MT 59620-0901 (406) 444-3080
G	Montana Land-use License or Easement on Navigable Waters*	For projects that may impact land below the low water mark on navigable waters. Contact DNRC for information about its list of 37 navigable streams sections; this list is different than the Army Corps of Engineers' list above.	Special Use Management Bureau MT Dept. of Natural Resources & Conservation P.O. Box 201601 Helena, MT 59620-1601 (406) 444-2074
H	Montana Floodplain and Floodway Management Act*	For new construction within a designated 100-year floodplain.	Local Floodplain Administrator
I	Montana Natural Streambed and Land Preservation Act (310 Permit)*	For any person or entity (non-governmental) proposing work in or near a stream that may affect the bed or banks of the stream.	Local Conservation District
J	Montana Water Use Act (Water Rights Permit and Change Authorization)	For new or additional water rights, or to change an existing water right in the state.	Water Rights Bureau, MT Dept. of Natural Resources & Conservation P.O. Box 201601 Helena, MT 59620-1601 (406) 444-6610
K	Montana Water Use Act (Water Reservations)	For water for a new or existing development within the boundaries of a conservation district.	Local Conservation District

Diagram Letter	Name of Program	Program Description	Contact Information
L	Montana Pollutant Discharge Elimination System (MPDES Permit)	For activities that may discharge anything into surface or ground water—including activities related to construction, dewatering, suction dredges, and placer mining.	Water Protection Bureau Permitting and Compliance Division Dept. of Environmental Quality 1520 East Sixth Ave. P.O. Box 200901 Helena, MT 59620-0901 (406) 444-3080
L	County Septic System Regulations	For construction, alterations, extensions, or operation of sewage treatment and disposal systems.	County Sanitation
L	Lakeshore Protection Act	For work in or near a lake within a county's jurisdiction.	County Planning Office
L	Fish Stocking Permit for Private Fish Ponds	For stocking fish in human-made lakes, ponds, or private fishponds. Applicants must verify that stocking fish will not pose an unacceptable risk to game fish or species of special concern in adjacent waters.	Fisheries Division Montana Dept. of Fish, Wildlife & Parks 1420 East Sixth Ave. P.O. Box 200701 Helena, MT 59620-0701 (406) 444-2449
L	General Mining Laws/Small Miner's Placer and Dredge Operations	For placer, dredge, hardrock, coal, sand, or gravel mining.	Water Protection Bureau Permitting and Compliance Division Dept. of Environmental Quality 1520 East Sixth Ave. P.O. Box 200901 Helena, MT 59620-0901 (406) 444-3080
L	Montana Dam Safety Act	For construction, repair, or removal of any dam that impounds 50 acre-feet or more at the normal operation pool.	Dam Safety Program MT DNRC P.O. Box 201601 Helena, MT 59620-1601 (406) 444-0860

Diagram Letter	Name of Program	Program Description	Contact Information
L	National Pollutant Discharge Elimination System (NPDES) Permit	For activities that may discharge pollutants into waters of the United States—including activities related to construction, storm water, dewatering, suction dredges, and placer mining—on all Tribal Reservations in Montana.	NPDES Program Environmental Protection Agency 10 West 15th Street, Suite 3200 Helena, MT 59626 (406) 457-5000
L	Shoreline Protection and Aquatic Land Conservation Ordinance	For work in, over, or near any stream, river, lake, or wetland on the Flathead Reservation.	Shoreline Protection Confederated Salish & Kootenai Tribe 103 Main Street Polson, MT 59860 (406) 883-2888
L	Confederated Salish and Kootenai Tribe's Water Quality Program	For activities in a location where they are likely to cause pollution of any waters on the Flathead Reservation.	Tribal Water Quality Program Confederated Salish & Kootenai Tribe 103 Main Street Polson, MT 59860 (406) 883-2888
A single application form can be used when applying for permits marked with an asterisk (). The form is available at offices of any cooperating agency, or can be downloaded at www.dnrc.state.mt.us/permit.html .			

APPENDIX V: Suggested Language for Conservation Easements

A conservation easement can contain many provisions to secure, monitor and enforce the terms of the easement. The following provisions are suggested “core” or substantive language within a conservation easement as specific restrictions on a land owner to protect wetlands and riparian areas. Additional legal or administrative provisions are included in a conservation easement, depending on whether the easement is a donated or purchased easement and whether the agreement is a permanent or term easement. Also, it is important to realize that each agency and land trust organization requires specific provisions and language in their individual conservation easements. The conservation easement language found in this Appendix is modeled after easements used by the U.S. Fish & Wildlife Service.

Suggested Language:

WITNESSETH:

WHEREAS, the lands described below contain wetlands, riparian areas and habitat suitable for wildlife.

NOW THEREFORE, the lands to which the terms of this agreement apply are described and located in _____, State of Montana, to wit:

(Legal Description of Property)

The Grantors (owners of the property) agree that they will cooperate in the maintenance and protection of all wetlands, riparian, and wildlife habitat areas delineated on the attached map, and that they will comply with the restrictions and requirements hereby imposed on the use of said Grantors’ lands unless express prior written consent is provided by the Grantee. This commitment shall run with the land and shall be binding on the Grantors, their successors, assigns, lessees, all subsequent owners, and parties having right, title, or interest in the property. These restrictions include:

1. Draining, causing or permitting the draining by any means, direct or indirect, of any surface waters in or appurtenant to these wetland areas delineated on map. This includes lakes, ponds, marshes, sloughs, swales, swamps, potholes, and other wholly or partially water-covered areas, now existing or subject to recurrence through natural or man-made causes; provided, always, that the lands covered by this conveyance shall include any enlargements of said wetland areas from normal or abnormal increased water.
2. Altering the topography or other natural features by digging, excavating, plowing, disking, cutting, filling, removing or otherwise destroying the vegetative cover, including no agricultural crop production upon said lands delineated on map, unless prior approval in writing is granted by the Grantee.
3. Subdividing or de facto subdividing, and/or developing the area for residential, commercial, industrial or any other purposes;
4. Erecting, building or placing any structure, including any temporary living quarters, on said land, except for the renovation or replacement of existing buildings with buildings of the same purpose and/or utility, in substantially the same location.
5. Exploring for or developing and extracting any minerals, coal, oil or gas, sand, gravel, soil, peat or rock) by any surface extraction method.
6. Establishing or maintaining any commercial feedlot, defined for purposes of this easement as a facility used for the purposes of receiving, confining and feeding livestock for hire.
7. Dumping or disposing of any material that is toxic to wildlife or considered to contaminate soil, ground water, streams, lakes, or wetlands.

Appendix VI: Montana Private Land Trusts That Handle Conservation Easements

Bitter Root Land Trust

120 So 5th Street Suite 203
Hamilton, MT 59840
(406) 375-0956

Blackfeet Land Trust

P.O. Box 730
Browning, MT 59417
(406) 338-2992

Five Valleys Land Trust

P.O. Box 8953
Missoula, MT 59807
(406) 549-0755

Flathead Land Trust

P.O. Box 1913
Kalispell, MT 59903
(406) 752-8293

Gallatin Valley Land Trust

P.O. Box 7021
Bozeman, MT 59771
(406) 587-8404

Mid-Yellowstone Land Trust

503 5th Ave. NW
Park City, MT 59063
(406) 633-2213

Montana Land Reliance

P.O. Box 355
Helena, MT 59624
(406) 443-7027

Prickly Pear Land Trust

P.O. Box 892
Helena, MT 59601
(406) 442-0490

Save Open Space

1001 East Broadway, Suite 2
Missoula, MT 59802
(406) 549-6083

The Nature Conservancy

32 South Ewing
Helena, MT 59601
(406) 443-0303

Montana Wetlands Trust

517 Waukesha
Helena, MT 59601
(406) 442-3199

The Rocky Mountain Elk Foundation

2291 W. Broadway
P.O. Box 8249
Missoula, MT 59807
1-800-225-5355
1-406-523-4500

Appendix VII: References

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- Fact Sheet 1: Functions of Riparian Areas for Flood Control, 6 pages
 - Fact Sheet 6: Functions of Riparian Areas for Ground water Protection, 7 pages
- Connecticut River Joint Commission. 2000. Riparian Buffers for the Connecticut River. *Living With the River* Fact Sheet Series. Connecticut River Joint Commissions of New Hampshire and Vermont, Charlestown, NH. September 2000, accessed November 5, 2002, at URL: <<http://www.crjc.org/riparianbuffers.htm>>.
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http://www.bozeman.net/planning/Zoning/Res_links/Res_links_index.htm

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