Montana Department of Natural Resources and Conservation

To Help Ensure Montana's Land and Water Resources...

Provide Benefits for Present and Future Generations

Fiscal Year 2008 Annual Report

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DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

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HELENA, MONTANA 59620-1601

Dear Montanans,

Thank you for your interest in the Department of Natural Resources and Conservation (DNRC). As an agency, we provide management for Montana's treasures–our land and water. Although we face change and controversy, we are so fortunate to have the privilege of caring for these precious resources. As you read the details of our programs and activities, keep in mind the dedication of not only our DNRC staff but also the thousands of Montanans who benefit from and contribute to the continued health of our water systems, forests, and rangelands.

Here are some highlights of our activities for Fiscal Year (FY) 2008 (July 2007-June 2008):

- On our state school trust lands, we are improving our notification and management of oil and gas lease sales as interest in energy continues. We are also working with three developers for wind farms on state land.
- The Board of Oil and Gas approved the use of carbon dioxide in the first enhanced recovery project in Montana.
- Information Technology (IT) is the backbone of our operations, and we added staff to help with IT needs in eastern Montana. We have also played a significant role in purchasing an Enterprise GIS license for the state–since we are one of the biggest users!
- Our Conservation and Resource Development Division funded $52 million in reclamation, infrastructure, and technical assistance for our communities and citizens.
- We helped suppress numerous wildland fires in Montana burning 778,079 acres at a cost of $50 million. We are tackling fire and forestry restoration projects–an important part of Montana's economy.
- In the Flint Creek Valley, DNRC replaced a siphon on the East Fork, securing the use of state waters. We are also implementing legislation that helps permitting of new wells in closed basins–where we have most of our population growth!

While this report has a lot of facts and figures, we understand the importance of information sharing and accountability in our operations. We constantly strive to serve you better!

Sincerely,

Mary Sexton,
Director

Introduction

Introduction

"Helping to ensure Montana's land and water resources provide benefits for present and future generations" is the mission of the Montana Department of Natural Resources and Conservation (DNRC).

First established in 1971 as a result of the Executive Reorganization Act of 1971, the DNRC provides leadership in managing the state's natural resources. It is presently responsible for promoting the stewardship of Montana's water, soil, forest, and rangeland resources; for regulating forest practices and oil and gas exploration and production. In the past eight years, the agency has generated $425 million for Montana school children through the sound management of state lands.

Department Organization

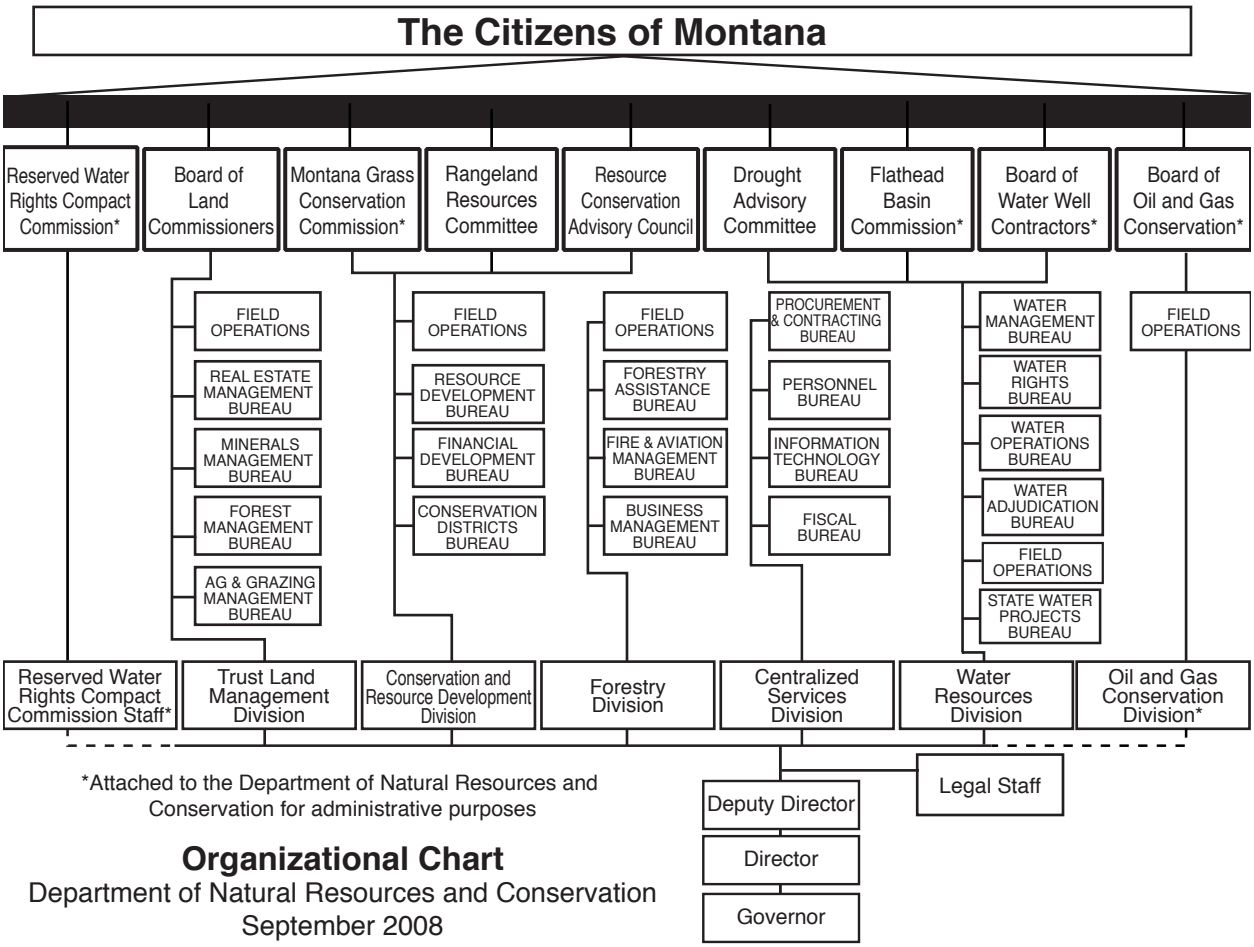
The director of the DNRC is Mary Sexton.

As shown in the organization chart, nine boards and commissions are attached to the department. Six of them—the Board of Land Commissioners, Reserved Water Rights Compact Commission, Board of Oil and Gas Conservation, Board of Water Well Contractors, Flathead Basin Commission, and Montana Grass Conservation Commission—have decision-making authority. The other three—the Resource Conservation Advisory Council, Rangeland Resources Committee, and Drought Advisory Committee—act in an advisory capacity only.

The department is organized into seven divisions:

- Centralized Services
- Conservation and Resource Development
- Forestry
- Oil and Gas Conservation
- Reserved Water Rights Compact Commission
- Trust Land Management
- Water Resources

Two of the divisions—the Oil and Gas Conservation Division and the Reserved Water Rights Compact Commission—are attached to the department for administrative purposes only.



Organizational Chart
Department of Natural Resources and Conservation
September 2008

About the Director

Mary Sexton

Originally from Great Falls, Mary graduated from CMR High School and has degrees from Stanford University and The University of Montana.

She taught high school in Hamilton, and was administrator of The Nature Conservancy's Pine Butte Swamp Preserve, west of Choteau.

She is involved with both agriculture and tourism businesses. Mary has served on boards including the Public Wildlife/Private Lands Council, Bureau of Land Management (BLM) Resource Advisory Council, and the Teton County Commission from 1999-2004.

Mary is married with one daughter.

To contact the director's office, please call 406/444-2074.

Deputy Director

Joe Lamson

Joe has worked on a wide variety of Montana natural resource issues for the past 34 years. He has served as the state director for former Congressman Pat Williams, and as state land board staff and communications director for Superintendents of Public Instruction Nancy Keenan and Linda McCulloch.

Joe joined the DNRC in fall of 2007. He works directly with the director and division administrators on management, planning, and budgeting to fulfill DNRC's mission. He also oversees the agency's public information activities and the work of the Montana State Restoration Coordinator. To contact the deputy director, please call 406/444-9708.

Division Duties and Responsibilities

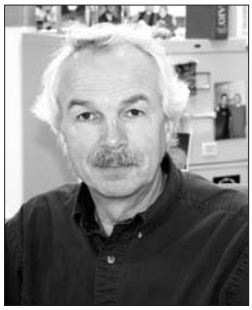
Centralized Services

Ann Bauchman

The Centralized Services Division (CSD) provides administrative and operational support to all DNRC divisions. Support services include financial management, purchasing, inforamtion technology processing, personnel, legal, reception, and mail. The division coordinates information services and prepares publications and graphic materials for printing. Trust revenues are collected and distributed, and ownership records for trust and nontrust lands are maintained.

The CSD administrator is Ann Bauchman. For more information, you can visit the CSD web site at www.dnrc.mt.gov/csd. To contact CSD, please call 406/444-2074.

Conservation and Resource Development


Ray Beck

The Conservation and Resource Development Division (CARDD) coordinates, supervises, and provides financial and technical assistance to Montana's 58 conservation districts. It also provides technical, financial, and administrative assistance to public and private entities to complete projects that put renewable resources to work, increase the efficiency with which natural resources are used, or solve recognized environmental problems. The division provides administrative support to the Montana Grass Conservation Commission. The division receives advice and guidance from two other attached bodies: the Resource Conservation Advisory Council and the Rangeland Resources Committee.

The CARDD administrator is Ray Beck For more information, you can visit the CARDD web site at www.dnrc.mt.gov/cardd. To contact CARDD, please call 406/444-6667.

Forestry

Bob Harrington

The Forestry Division protects the state's forested and nonforested watershed lands from wildfire; provides aviation services; operates a nursery and provides shelterbelt, windbreak, wildlife habitat improvement, reclamation, and reforestation plantings on state and private lands; and regulates forest practices and wildfire hazards created by logging or other forest management operations on private lands.

The Forestry administrator is Bob Harrington. For more information, you can visit the forestry web site at www.dnrc.mt.gov/forestry. To contact forestry, please call 406/542-4300.

Oil and Gas Conservation

Tom Richmond

The Board of Oil and Gas Conservation (BOGC) and its technical support staff are attached to the department for administrative purposes. The quasi-judicial board is comprised of seven members consisting of industry representatives, landowners, and an attorney. They administer Montana's oil and gas laws and the federal Underground Injection Control Program to promote conservation and prevent waste in the recovery of these resources through regulation of oil and gas exploration and production. The board and its staff issue drilling permits; classify wells; establish well spacing units and land pooling orders; inspect drilling, production, and seismic operations; investigate complaints; conduct engineering studies; and collect and maintain complete well data and production information.

The BOGC administrator is Tom Richmond. For more information, you can visit the BOGC web site at www.bogc.dnrc.mt.gov. To contact BOGC, please call 406/656-0040.

Reserved Water Rights Compact Commission

Susan Cottingham

The Reserved Water Rights Compact Commission (RWRCC), which is also administratively attached to the department, was created by the legislature in 1979 as part of the water rights adjudication effort. Commissioners are appointed by the governor, the attorney general, the speaker of the House of Representatives, and the president of the Senate. The nine-member commission and its support staff negotiate water rights with Indian Tribes and federal agencies to establish formal agreement on the amount of water to be allocated to each interest.

The RWRCC administrator is Susan Cottingham. For more information, you can visit the RWRCC web site at www.dnrc.mt.gov/rwrcc. To contact RWRCC, please call 406/ 444-6841 or e-mail dnrrwrcc@mt.gov.

Trust Land Management

The Trust Land Management Division (TLMD) is responsible for managing the surface and mineral resources of forested, grazing, agricultural, and other classified state trust lands to produce revenue for the benefit of Montana's public schools and other endowed institutions. The Board of Land Commissioners oversees the administration of the state trust land in Montana, as directed by the Montana Constitution. This board consists of Montana's top elected officials: the governor, superintendent of public instruction, secretary of state, attorney general, and state auditor.

Tom Schultz

The TLMD administrator is Tom Schultz. For more information, you can visit the TLMD web site at www.dnrc.mt.gov/trust. To contact TLMD, please call 406/444-2074.

Water Resources

John Tubbs

The Water Resources Division (WRD) is responsible for many programs associated with the uses, development, and protection of Montana's water. The division also develops and recommends water policy to the director, governor, and legislature. The division comprises five bureaus—State Water Projects, Water Management, Water Operations, Water Rights, and Water Adjudication—and eight regional offices. Attached to the Water Operations Bureau is the Board of Water Well Contractors, a quasi-judicial board that can issue, suspend, or revoke licenses; promulgate rules and regulations; investigate complaints; and hold disciplinary hearings. The Flathead Basin Commission was transferred from the Governor's Office to DNRC for the 2005 biennium for administrative purposes. The Drought Advisory Committee is also attached to the Water Resources Division.

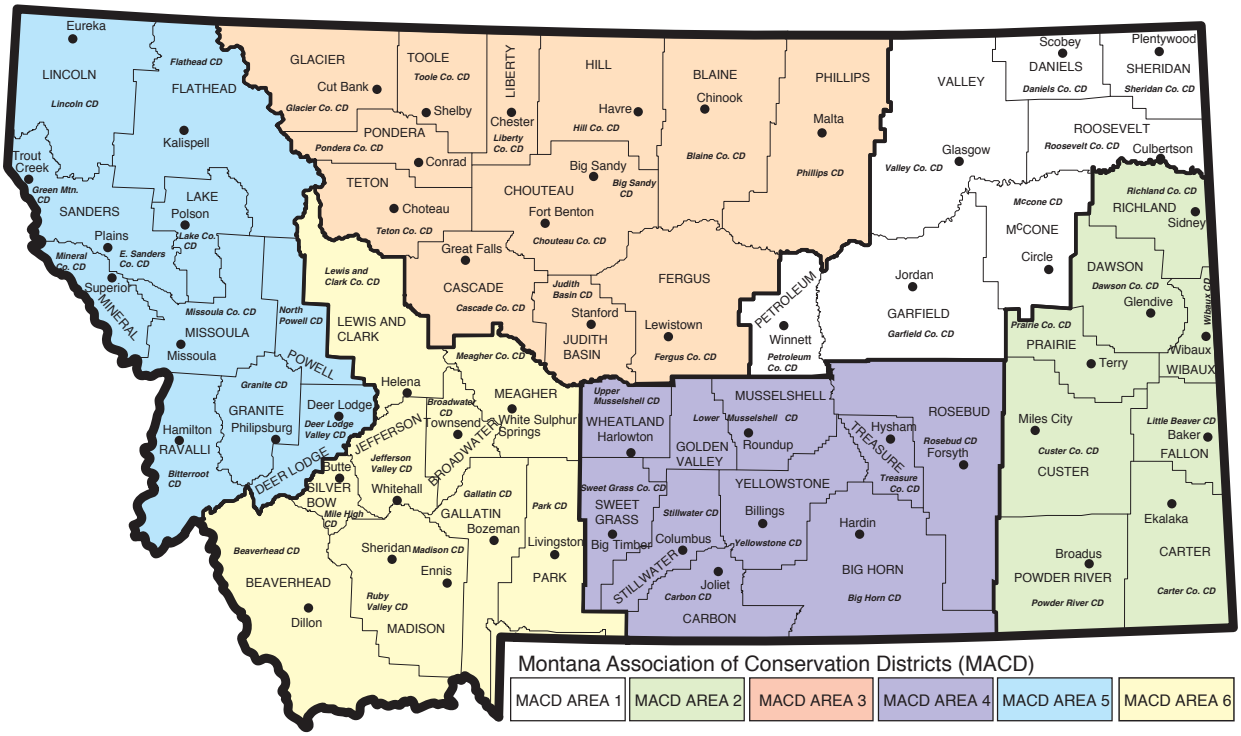
The WRD administrator is John Tubbs. For more information, you can visit the WRD web site at www.dnrc.mt.gov/wrd. To contact WRD, you can call 406/444-6601.

Field Operations

Although the department headquarters is located in Helena, field operations for the department's programs are performed through field offices and personnel in 29 different communities. Included are both full-time and seasonal employees from the Conservation and Resource Development; Forestry; Oil and Gas Conservation; Trust Land Management, and Water Resources divisions. To view area and current project information, please visit the field operations web site at www.dnrc.mt.gov/field_operations.

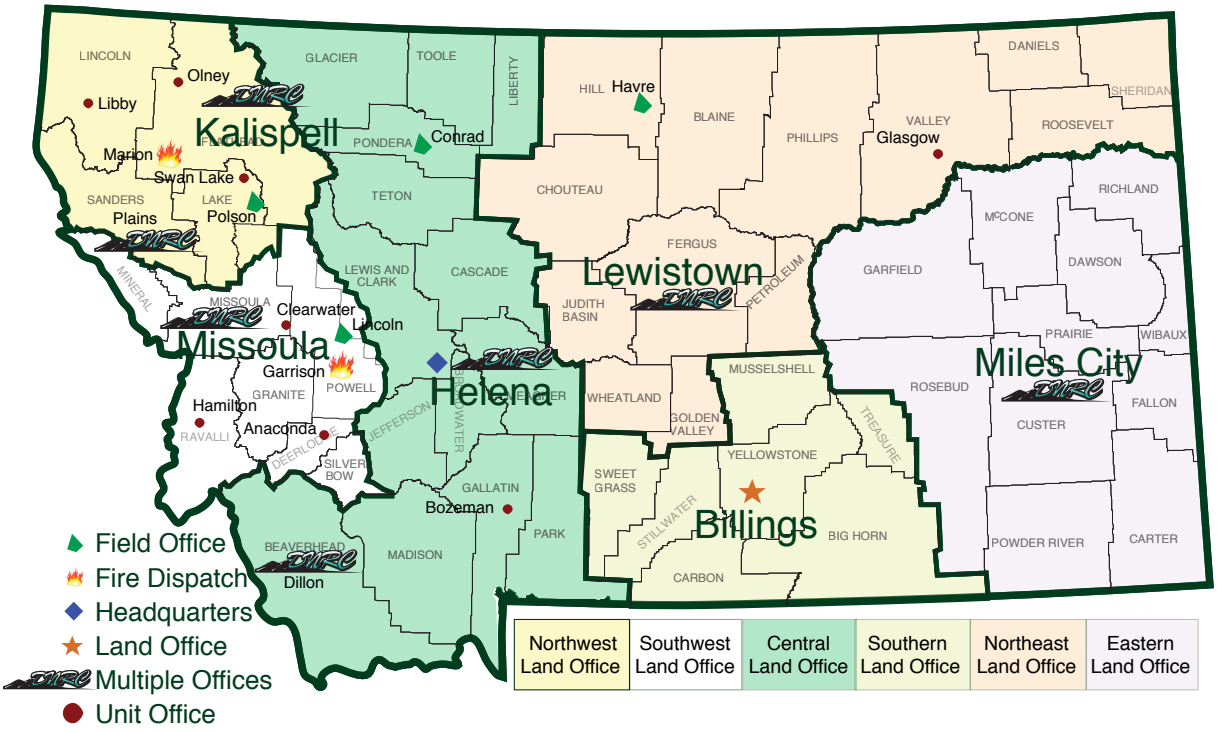
Conservation District Offices

Conservation and Resource Development offices are responsible for integrating and implementing programs for the Conservation and Resource Development Division.



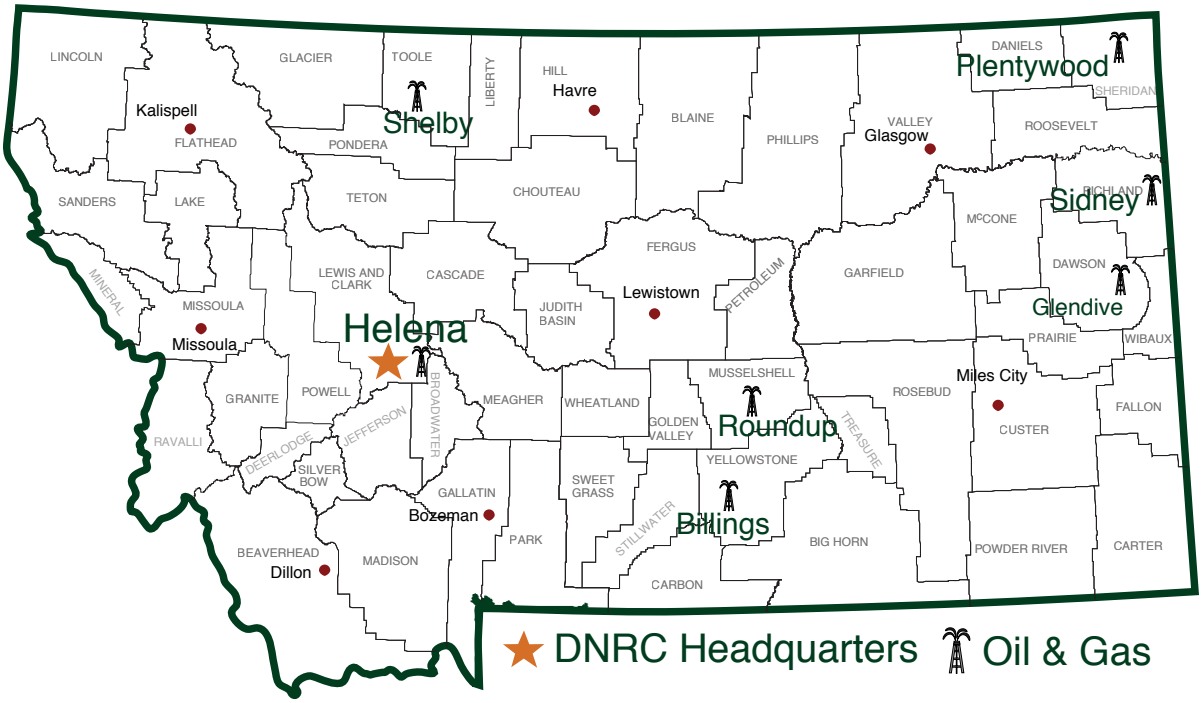
Area Offices

Area offices are responsible for managing and implementing programs for both Forestry and Trust Land Management divisions.



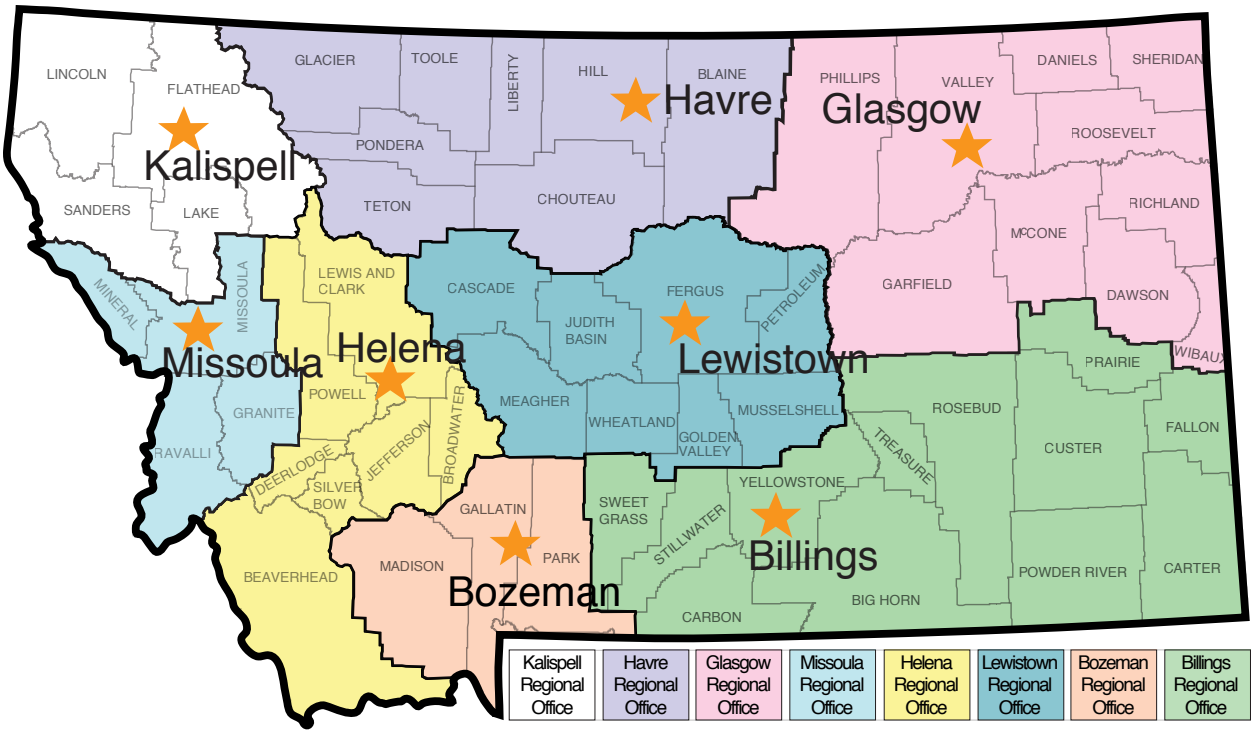
Board of Oil and Gas Conservation Offices

Oil and Gas offices facilitate programs for the Montana Board of Oil and Gas Conservation.



Regional Offices

Regional water offices are responsible for Water Resources Division operations and programs.



Financial Information

Table 1 presents expenditures by category and fund for the DNRC in FY 2008. An increase in personal services and operations is related to a severe fire season during the fiscal year.

Table 1
FY 2008 DNRC Expenditures

Total Expenditures by Activity

Personal services	$ 38,446,834
Operating expenses	93,524,871
Equipment	1,317,790
Capital outlay	69,788
Grants	6,291,518
Transfers	1,202,900
Debt service	411,282
Total	**$ 141,264,983**

Total Expenditures by Fund

General fund	$ 71,193,889
State special revenue	28,345,463
Federal special revenue	38,590,877
Debt service	559,891
Proprietary	2,058,088
Nonbudgeted private fund	516,775
Total	**$ 141,264,983**

Figure 1
Activity

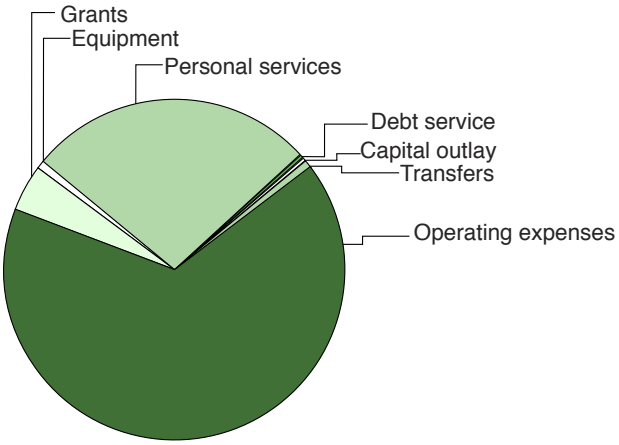
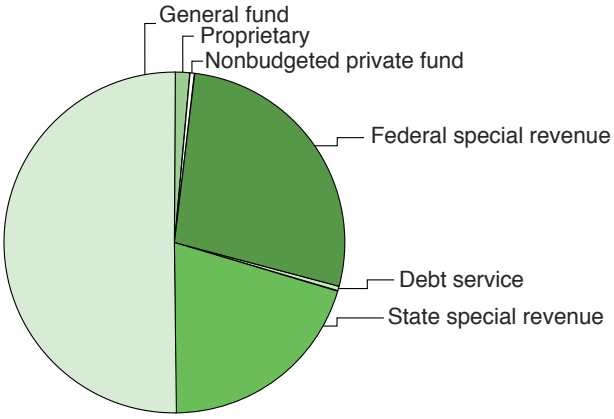


Figure 2
Funding



Web sites featured in this section:

www.dnrc.mt.gov/csd
www.dnrc.mt.gov/cardd
www.dnrc.mt.gov/forestry
www.bogc.dnrc.mt.gov
www.dnrc.mt.gov/rwrcc
www.dnrc.mt.gov/trust
www.dnrc.mt.gov/wrd
www.dnrc.mt.gov/field_operations

Centralized Services Division

Centralized Services Division

The Centralized Services Division provides managerial and legal services to the department through the Director's Office. The division also manages all financial activities, contracting, and procurement; oversees personnel policies and functions; coordinates computer systems; provides public information and media relations tasks; enhances web design and services; and provides general administrative support services.

Support services include payroll, data entry, reception, and mail. Fiscal responsibilities include trust revenue collection and distribution, as well as bond and loan accounting. In FY 2008, the division assisted with another catastrophic fire season, made significant strides in the area of Geographic Information Systems (GIS), and completed an assessment of department internal controls.

For more information, please see our web site at www.dnrc.mt.gov/csd.

Ann Bauchman, Centralized Services Division administrator, leads an employee orientation for new DNRC staff. The training helps new agency employees learn about department functions. The employees also learn about agency processes and policies on purchasing, computer operation, and travel expenses.

Purchasing and Contracting Bureau

The Purchasing and Contracting Bureau (PCB) revised the DNRC Procurement Manual to include significant changes to procurement operating procedures:

1. To expedite the contract review process, a section was added establishing a new procedure for obtaining "electronic" approvals via e-mail. This process has cut the review process from seven to 10 days to one to three days in most instances.

2. A new section on "contract administration" was added to assist DNRC personnel in properly administrating their contracts. This section covers all aspects of contract administration including the proper way to document deficiencies or breaches should they occur.

3. The delegated purchasing dollar limit for field personnel who completed the "advanced purchasing" course offered by the PCB was raised to $5,000. Two of these training sessions were completed in FY 2008. The Northwest Land Office was first with approximately 40 people attending and the Southwest Land Office was second with approximately 35 people attending.

4. The PCB took an active role in training the fire finance teams (state and federal) to help expedite processing fire payments to contractors and suppliers. A cover page "check list" of required documentation for the fire finance packages was utilized. The net result was shortening processing time for the payments once they were received in Helena from approximately 30 days to one or two days.

5. The PCB processed 250 requisitions for commodities utilizing Invitations for Bid or Limited Solicitations to procure the items and 60 requisitions for the procurement of services utilizing Invitations for Bids, Limited Solicitations, or Requests for Proposal to procure the services.

Personnel Bureau

The Personnel Bureau has been involved in a number of key human resources activities. For the past year, training efforts focused on supervisory tools through short training sessions. The bureau processed over 1,000 emergency fire fighter time sheets.

Fiscal Bureau

Based on the need for increased documentation of processes from the State's Accounting Policy and Legislative Audit Division, the bureau reviewed, improved, and expanded internal control documentation. The bureau completed a successful audit for the State Revolving Loan programs and is currently assisting in a department financial audit.

Information Technology Bureau

Accomplishments for the Information Technology Bureau in FY 2008 include:

1. Developed a new web-based version of the Contract, Grants, and Loans Program—now called CGL Tracker. The program improves functionality of the application used to track contracts and grants for the agency. The loans portion of the application will be developed in FY 2009.

2. Worked with the Department of Administration and other agencies to finalize the Enterprise GIS agreement with ESRI. This agreement will streamline use of GIS software for the agency and provide additional GIS training for staff.

3. Coordinated development of a photo database for the agency to provide better management of digital photos and ability to search for images.

4. Worked with other divisions on revisions to the F300 and F1000 forestry systems, St. Mary catalog document tracking system, Hazard Reduction Account system, numerous water right database and application updates, and new restoration applications and databases.

5. Deployed two video conference sites—Helena and Missoula. Helped plan for expansion of video conferencing to Kalispell, Bozeman, Lewistown, and Miles City and added an IT networking person for Billings and eastern Montana.

Web sites featured in this section:

www.dnrc.mt.gov/csd

Conservation and Resource Development Division

Conservation and Resource Development Division

Provide technical and financial assistance to local governments, state agencies, and private citizens for the conservation, development, protection, and management of the state's natural resources.

The Conservation and Resource Development Division (CARDD) helps manage natural resources and finance conservation, resource management, and reclamation activities. The division has 27 employees who administer the work of the Conservation Districts Bureau, the Financial Development Bureau, and the Resource Development Bureau.

For more information, please visit our web site at www.dnrc.mt.gov/cardd.

CARDD staff uses an educational event to promote wise stewardship of Montana lands and resources. Photo by Ross Campbell.

Conservation Districts Bureau

Under state law, the Conservation Districts Bureau (CDB) is responsible for assisting Montana's conservation districts and state grazing districts. A conservation district (CD) is a legal subdivision of state government that: (1) develops and carries out long-range programs that conserve and improve soil and water resources within its boundaries, and (2) encourages maximum participation by the general public and all local public and private agencies to fulfill this purpose.

CDB works with the people of Montana on these eight areas of conservation and resource management:

- conservation district supervision and assistance;
- watershed efforts and projects;
- rangeland management coordination;
- stream protection;
- natural resource conservation education activities;
- grant and loan programs;
- resource conservation and development, and
- salinity control.

Conservation District Supervision and Assistance

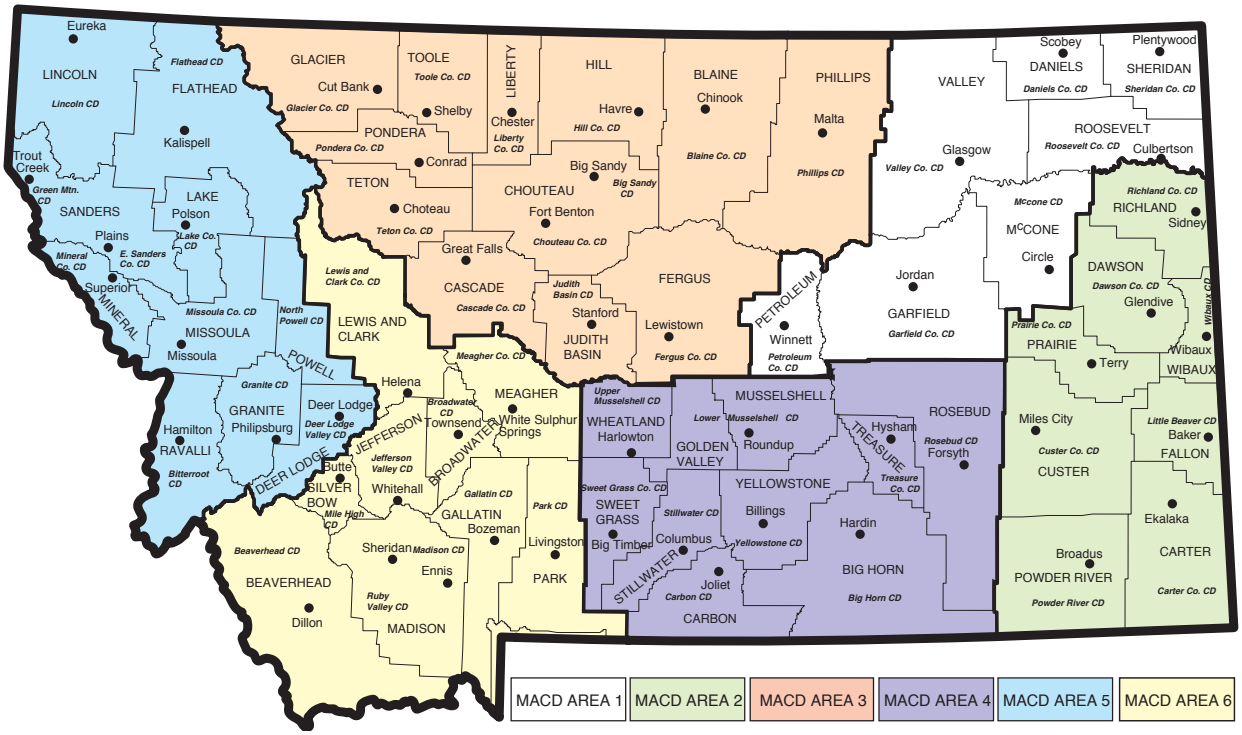
By law, the CDB is required to provide organizational, technical, legal, and financial assistance to Montana's 58 conservation districts (see Figure 3). This assistance is provided to CDs through a variety of programs developed to assist CDs in meeting mandated duties. CDs are political subdivisions of state government that address soil and water conservation and administer the Natural Streambed and Land Preservation Act. The CDB contracts for legal and technical services for conservation district administration of the act. Grants were provided to CDs for legal services for project review and procedural advice, contract review, water reservation assistance, and work associated with Dry Prairie Rural Water Authority, on which CD members serve. In FY 2008, CDB helped organize and participated in new CD employee orientation sessions and supervisor workshops focusing on watershed planning and financial responsibility; conducted real estate workshops; and participated in stream-permitting workshops for contractors, CD supervisors, and landowners.

The Resource Conservation Advisory Council, which consists of seven members serving at the pleasure of the Governor, meets four times a year, provides advice and assistance on conservation matters, and sets guidelines for CDB grant programs.

Current members are:

Member	Town	Representing
Ramsey Offerdal	Conrad	North Central Montana
Pete Dallaserra	Butte	General Public
Robert Fossum	Richland	Eastern Montana
Marieanne Hanser	Billings	South Central Montana
Dave Schwarz	Terry	Conservation Districts
Buzz Mattelin	Culbertson	Conservation Districts
Lauraine Johnson	Plains	Western Montana

Figure 3
Montana's Conservation Districts



The Conservation Districts Bureau also works with the Montana Association of Conservation Districts (MACD) and the National Association of Conservation Districts to address natural resource concerns on the state and national level.

Watershed Efforts and Projects

Through the capacity-building program, conservation districts have identified the need for watershed planning as a high-priority goal. Conservation districts, the local entity responsible for addressing nonpoint source water pollution, play a key role in developing local watershed plans. CDB provides technical and financial assistance to conservation districts in support of watershed efforts. In addition, CDB participates on the Watershed Coordinating Council, a group of state and federal agencies and private organizations that coordinates programs in Montana that address aspects of watershed management.

Watershed Planning and Assistance Grant Program

The purpose of the Watershed Planning and Assistance Grant Program is to assist conservation districts and affiliated local watershed groups with expenses associated with watershed planning. Funds can be used for collection of baseline resource information, facilitators, development of a watershed management plan, training, educational efforts, or incidental costs associated with watershed planning.

In FY 2008, 12 grants totaling $99,895 were awarded to 10 districts. Eleven coordination grants and one education grant were funded. The resource areas included weeds, water quantity, and water quality. The size of these projects ranged from small watersheds to large basins. The projects funded are listed in Table 2.

Stream Assessments

During FY 2008, CDs throughout Montana conducted several comprehensive stream corridor assessments in collaboration with the Natural Resources Conservation Service (NRCS) and DNRC. Assessments included:

- East Buffalo Creek–Fergus CD
- Marias River–Pondera, Toole, Liberty, and Glacier counties CDs
- Yellowstone River–eleven CDs

The purpose behind these stream assessments is to provide baseline resource information to conservation districts, watershed groups, landowners, and agencies to further their understanding about stream conditions and function in their areas. Most assessments eventually lead to voluntary restoration projects that utilize DNRC grant funds and/or NRCS conservation programs.

Table 2
Watershed Planning and Assistance Grants Awarded in FY 2008

Conservation District	Project Name	Grant Amount
Beaverhead CD	Big Hole Watershed Committee	$ 8,600
Beaverhead CD	Beaverhead Watershed Group	10,000
Cascade County CD	Sun River Watershed Group	5,250
Chouteau County CD	Teton River Watershed Group	5,250
Granite CD	Granite Headwaters Watershed Group	10,000
Liberty County CD	Marias River Watershed Group	10,000
Lower Musselshell CD	Mid-Musselshell Watershed Group	10,000
Park County CD	Upper Yellowstone Watershed Basin	10,000
Petroleum CD	Musselshell Mosby Watershed Group	10,795
Phillips CD	Milk River Alliance	10,000
Rosebud CD	Tongue River Watershed Group	5,000
Rosebud CD	Rosebud Watershed Group	5,000
	Total	**$ 99,895**

Rolling Rivers Trailers

CDB collaborates with MACD in the Rolling Rivers Trailer Program by providing technical support. The Rolling River is a five- by ten-foot utility trailer with a six-inch-deep bed that is filled with "sand" (actually, recycled plastic granules). A meandering river or two is scooped out, running from one end to the other. Small figures of buildings, animals, and machinery are placed on top. When water is turned on at the top of the watershed, it flows through the river and demonstrates a variety of water-related lessons, including stream health and good stewardship.

Four trailers operate in the state: (1) a demonstration trailer coordinated by CDB out of Helena, (2) a trailer in northwestern Montana sponsored by Flathead CD, (3) a trailer in eastern Montana coordinated by Richland County CD in Sidney, and (4) a trailer based out of Cascade County CD in Great Falls.

Since 2003, the four Rolling Rivers trailers have made presentations to more than 24,000 people. Audiences included both adults and children. During FY 2008, CDB staff made 28 presentations and participated in the development of training workshops and promotional/educational materials, which increases effectiveness of the trailers. Initial efforts in presentations to youth have been very successful. CARDD is trying to expand its usage to other audiences, including realtors and small acreage owners. New topics, such as floodplain management, are also being added to the trailer.

Rangeland Resource Program Coordination

The Rangeland Resource Program has four major areas of emphasis:

- working with county range committees, conservation districts, and producer groups to foster sound rangeland management;
- encouraging coordination and cooperation between private, state, and federal entities involved in range management;
- administering the Rangeland Improvement Loan Program; and
- co-sponsoring the Governor's Range Tour, Winter Grazing Seminar, and Montana Youth Range Camp.

The program receives guidance from the Rangeland Resource Executive Committee, which is composed of six ranchers located across the state and appointed by the Governor.

Members include:

Chairman: Steve Hedstrom, Raynesford
Vice-Chair: John Hollenback, Gold Creek
Les Gilman, Alder
Diane Ahlgren, Winnett
Tracy Hentges, Wolf Point
Noel Keogh, Nye

In addition, an ad hoc committee of agency and organization personnel serves in an advisory capacity to the executive committee.

CD staff work to strengthen local grazing management programs by helping sponsor workshops, tours, and demonstration projects. Examples of these activities include the Governor's Range Tour, Montana Youth Range Camp, and Winter Grazing Seminar. The 2005 Legislature and the executive branch approved the re-establishment of funds for a rangeland resource program specialist.

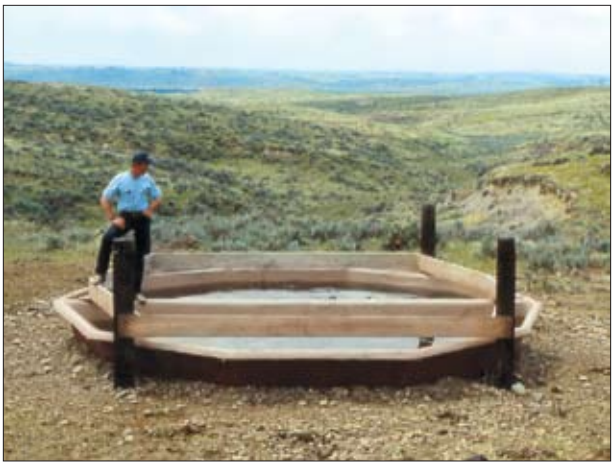
The Governor's Range Tour was hosted by Sweet Grass County CD in September 2007 and featured landowners affected by the 2006 Derby fires south of Big Timber. Ruby Valley CD hosted the tour in September 2008 and featured tour stops along the upper and lower Ruby Valley area; the tour attracted 125 participants.

The Winter Grazing Seminar was hosted by Richland County CD in January 2008 in Sidney with a well-known speaker and attendance of over 150 people.

A loan program was started in 1979 to improve rangelands in Montana. To date, 251 applications have been received for loans totaling $5,010,089, with 40 loans totaling $450,007 in repayment status. A typical rangeland loan project involves drilling a well and installing underground water lines to supply stock tanks. These stock tanks are usually in areas where water is insufficient or unsuitable for livestock. The projects are sometimes combined with cross fencing and an overall grazing plan to improve the rangeland. Over 1 million acres of Montana range land have been improved using funds from this program.

Grazing District Supervision and Assistance

State law provides for the creation of cooperative, nonprofit grazing districts. The law also sets up a permitting system that aids in management of grazing lands, where ownership is intermingled, to conserve, protect, restore, and properly utilize grass, forage, and range resources. In its administration of the Montana Grass Conservation Act (grazing district law), the Montana Grass Conservation Commission, administratively attached to DNRC, advises, supervises, and coordinates the formation and operation of these grazing districts. Uniform plans that conform to recognized conservation practices are developed for the use of lands within the boundaries of the districts. The 27 state grazing districts represent 1,353 permittees and cover 10,501,070 acres of land.



New design of a stock water tank. Photo by Steve Schmitz.

Solar-powered water pumps for stock water. Photo by Steve Schmitz.

Placement of stock water tanks affect the land and its stewardship. Photo by Steve Schmitz.

In FY 2008, the commission was composed of these five members:

Steve Barnard, Hindsdale
Sonny Obrecht, Turner
Leo Solf, Winnett
Dan Teigen, Teigen
Alvin Windy Boy, Box Elder

Stream Protection

CDB provides assistance to conservation districts in administration of the Natural Streambed and Land Preservation Act, commonly referred to as the "310 law." Under it, CDs issue permits for projects on perennially flowing streams.

CDB also works to coordinate permitting activities among permitting agencies to help provide better service to applicants. CDB hosts a web site with information about stream-permitting forms and project selection. It also provides information about stream-permitting agencies to assist the public.

In FY 2008, CDB revised, reprinted, and distributed *A Guide to Stream Permitting in Montana*, which provides information about when permits are needed and agency contract information. CDB convened the 310 Committee, made up of state, federal, and local agencies, as well as other groups interested, to update and improve the Joint Application for Streams and Rivers in Montana. The group is reviewing the 310 law and administrative rules to determine if updates or revisions are needed. A survey was sent to all conservation districts in Montana to gather information about how the law is working on the ground. At this writing, over 50% of the CDs have responded. Results will be compiled to help determine if changes are needed to the 310 law.

CDs processed 1,470 stream permits and CDB distributed $100,000 to 50 conservation districts; the amount allocated to each district was based on the number of permits issued so it would help offset the cost of administering the act.

CDB participated in four 310 workshops for conservation district supervisors covering basic subjects such as permit review process, Department of Fish, Wildlife & Parks (DFWP) participation in team inspections, forms, and communicating with applicants. CDB also participated in two workshops for realtors and provided 310 permit information.

Through contracted services, CDB provided legal services for CD administration of the 310 law and technical services for review of complex 310 projects.

Yellowstone River Conservation District Council

CDB provides administrative and technical services to the 14-member Yellowstone River Conservation District Council (YRCDC). In FY 2008, CDB distributed $100,000 provided by the Legislature to help support activities of the YRCDC. The YRCDC has three employees who coordinate a $6 million, multifaceted cumulative effects study on the entire 660-mile length of the Yellowstone River. CDB also distributed grant funds to the YRCDC for a variety of projects, including a fish passage retrofit of a ditch in Park County; a Cottonwood regeneration demonstration; a study of fish passage barriers on Pryor Creek; an analysis of bank stabilization methods; weed mapping in Sweet Grass County; a 310 database using Google Earth as a base; and a conference for large watershed coordinators.

The CDB assisted the YRCDC with hosting a tour for the undersecretary of the ArmyCorps of Engineers (ACE) to highlight the importance of ACE funding. Seventy-five percent of a cost-share agreement between Custer County CD and the ACE is funded by federal funds. The YRCDC also hosted a river cleanup week, covering the Yellowstone River from Park County into North Dakota. The council is planning for a channel migration study and hazard zone mapping, a helpful tool for CDs and anyone owning land on the river. In addition, the council is also planning an educational effort to assist conservation districts in using a database that houses and maps permit information.

Preliminary and final reports can be found at: www.dnrc.mt.gov/cardd/yellowstonerivercouncil.

Missouri River Conservation District Council

CDB distributed $114,000 to the Missouri River Conservation District Council (MRCDC) which is made up of 16 CDs. Funding supports planning and educational efforts on the Missouri River. The MRCDC secured formal advisory seats with two federal agencies that manage significant parts of the Missouri River corridor. Working with the BLM and U.S. Fish and Wildlife Service will allow the MRCDC to participate in planning to provide consistent management. The MRCDC will strive to provide input and participate in the $85 million federal recovery efforts along the Missouri River.

The MRCDC is working with other organizations like the Rancher Stewardship Alliance and the Lower Missouri Charles M. Russell Group. When MRCDC works with such groups, they can achieve common goals. They can work together on noxious weed control and education issues and

MRCDC can recognize successful management practices and promote their use.

Another task of the MRCDC was to forward to CDs and their constituents information about coal development, hydropower development, land-use planning, and programs available to help them practice stewardship of their property.

Natural Resource Conservation Education Activities

This program provides grant funding and policy guidance for resource conservation education programs. In FY 2008, the CDB assisted conservation districts in sponsoring adult education, elementary and secondary school activities, and several annual events: the Envirothon at Lewistown, Montana Youth Resource Camp at Lubrecht State Forest (east of Missoula), and Natural Resources Youth Range Camp in Musselshell. Program goals include promoting discussion of resource issues and providing the knowledge and skills necessary to make decisions regarding the management, protection, and wise use of our natural resources.

The 2008 Montana Envirothon team going to national competition. Photo by Ross Campbell.

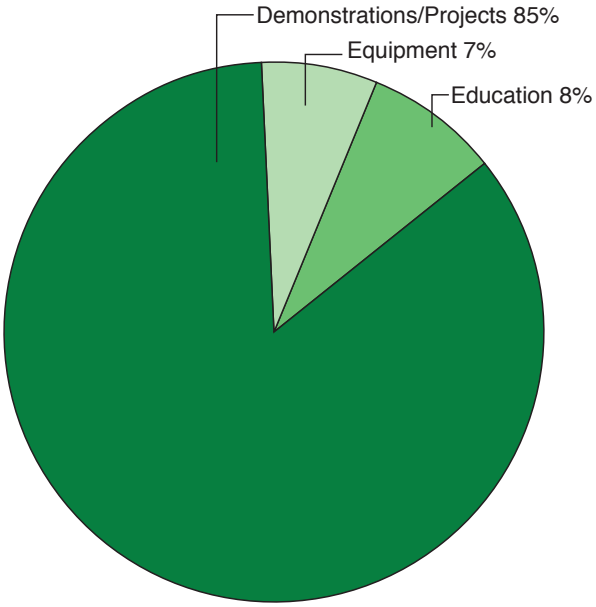
Conservation Education Mini-Grant Program

Mini-grants up to $500 each are available to conservation districts working with schools on natural resource conservation education projects or for adult education. Funds have been used for a wide variety of projects, ranging from building outdoor classrooms to purchasing water-quality and soil-testing equipment for use in outdoor curricula. Funds were also used for weed seminars and for a fire prevention workshop for adults. The 223 Program provides funds for the mini-grants. In FY 2008, the 20 mini-grants listed in Table 3 were funded for a total of $8,500.

Table 3
FY 2008 Conservation Education Mini-Grants Awarded

Conservation District	Project	Amount
Beaverhead CD	Big Hole Water Rights/Quality	$ 460
Carbon CD	Carbon Conservation Days	500
Cascade County CD	Watershed Stewardship Field Days	332
Cascade County CD	Plant Central Garden	500
Flathead County CD	Small Acreage Workshop	469
Gallatin CD	Soil Painting Kits	353
Gallatin CD	2008 Water Summit	500
Garfield County CD	Fairview Hall Shelterbelt	500
Lewis and Clark CD	Native Plant Garden–Capital High	424
Lewis and Clark CD	Native Plant Garden–Helena High	454
Lewis and Clark CD	Bluebird House Project	216
Missoula CD	Outdoor Explorers Club	416
Missoula CD	Lolo Landowner Awareness Tour	500
Pondera County CD	Natural Resources 4th Grade Outdoor Class	493
Roosevelt County CD	Bringing Science to Life in Rural Montana	52
Teton County CD	Watershed Stewardship Field Days	332
Teton County CD	Alternative Energy–Wind and Solar	500
Teton County CD	9th Annual Creeks & Critters	499
Valley County CD	15th Annual Outdoor Classroom	500
Yellowstone CD	Crooked Mile Creek Noxious Weed Education	500
	Total	**$ 8,500**

Figure 4
FY 2008 Allocation of Grant Funds for Conservation District Projects



Small Acreage Stewardship Education

CDB works cooperatively with conservation districts and other local groups to implement a small acreage stewardship curriculum. Major benefits of this program are:

- providing landowners with the tools to manage their property to meet their goals and address resource concerns; and
- giving local resource agencies an opportunity to contact and develop working relationships with small acreage owners.

CDB worked with a group of local weed coordinators from across the state to produce a hands-on guide to weed management for small acreage owners.

Grant Programs

The bureau administers five grant programs. Conservation Education Mini-Grants, Watershed Planning and Assistance Grants, and Legal and Technical Assistance Grants were discussed earlier in this section.

Conservation District Project Grants

The Conservation District Project Grants Program was established in 1981 to provide funding for CDs' lawful duties and responsibilities. The program funds a variety of CD activities such as: stream bank protection, erosion control, new conservation technology demonstrations, soil and water conservation projects, youth and adult educational activities, and conservation equipment rental programs. In FY 2008, $383,579 was granted to CDs for various projects. All projects funded in FY 2008 are listed in Table 4 and the allocation of funds is shown in Figure 4.

Administrative Grants

In FY 2008, the CDB distributed $308,000 from the General Fund and the Coal Tax Fund as grants to 37 CDs where county mill levies were inadequate to support district operations. These funds are for administrative purposes only in conservation districts in some of the smallest communities in Montana. Funding is also used for other general operating expenses. Information on the Coal Severance Tax and Resource Indemnity Tax (RIT) is presented in Appendix A.

Resource Conservation and Development Areas (RC&D)

In a cooperative effort with NRCS, the bureau has taken a lead role in assisting in activities of the NRCS partnership coordinator and the Central Montana RC&D Area. The partnership coordinator is helping to develop key issues and providing assistance to RC&Ds in Montana (see Figure 5).

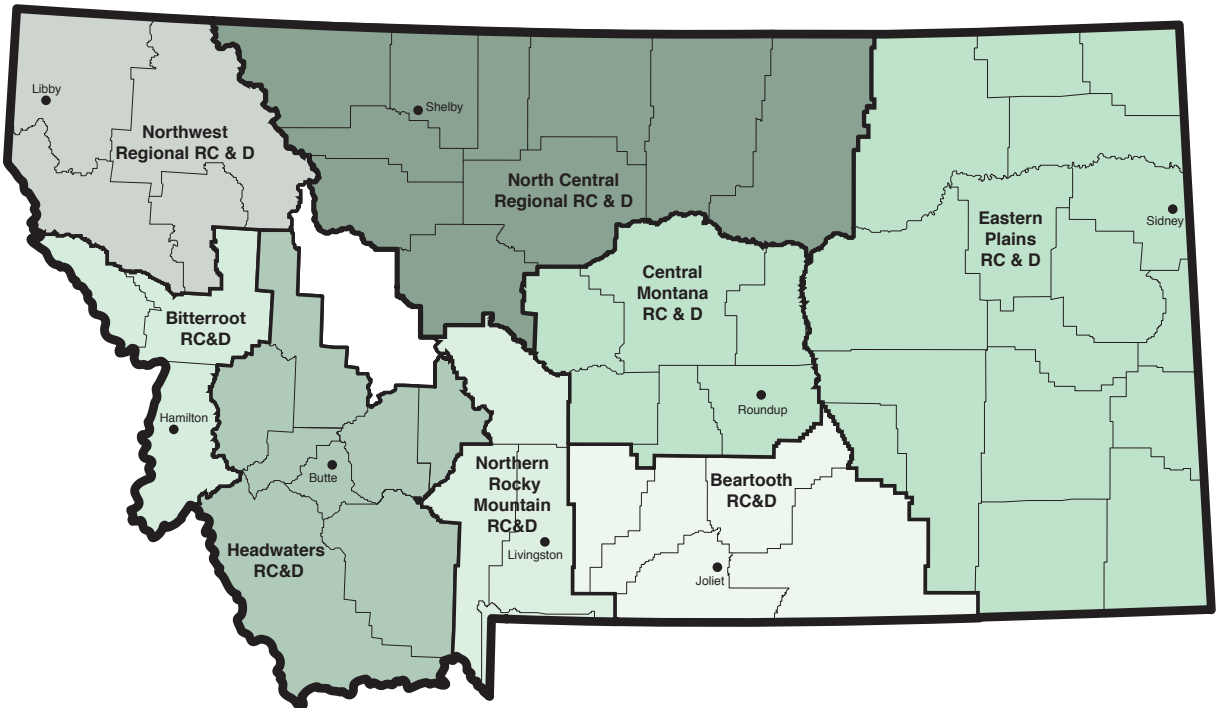
The Central Montana RC&D was involved in the following activities:

- completed annual plan of work;
- conducted six First-Time Homebuyer Training sessions (average eight participants);
- the Clean Renewable Energy Bonds program is being conducted in multiple counties;
- continued to assist Canadian Home Manufacturing Company start-up in Roundup/Malta area–projected employment 130;
- worked with Snowy Mountain Development Corp. to assist location of new major retailer in Musselshell County–projected employment 20-25;
- continued Western States Wildland Urban Interface grant program in Judith Basin and Musselshell counties;
- continued work with five county regional municipal water projects. Secured one $300,000 grant, one $289,000 appropriation, three additional federal appropriation requests, assisted authorization of preliminary feasibility study, and completed single alternative appraisal report;
- technical assistance for completion of one county housing plan;

Table 4
FY 2008 Conservation District Project Grants Awarded

Conservation District	Project	Amount
Beaverhead CD	Blacktail Meadows Tree Project, Phase 2	$ 9,742
Beaverhead CD	No Adverse Impact Conference	3,860
Carbon CD	AFO/CAFO Groundwater Monitoring	15,000
Daniels County CD	Grass Drill	20,000
Dawson County CD	Strip Till Machine	15,000
Dawson County CD	Grass Drill	14,950
DNRC	Heliseeder	5,000
DNRC State Nursery	Russian Olive Removal	3,480
Eastern Sanders County CD	Sanders County Water Festival	3,546
Eastern Sanders County CD	Sanders County Water Festival	3,059
Fergus CD	Well Education Program	10,000
Flathead County CD	Host, Annual CD Admin. Meeting	12,126
Flathead County CD	Riparian Education Media Campaign	15,000
Gallatin CD	Community Outreach Project	6,605
Gallatin CD	What's in Your World—Outdoor Ed.	1,650
Gallatin CD	Reprint Watershed Publication	2,645
Gallatin CD	2008 Noxious Weed Calendar	9,450
Glacier County CD	Ownership Maps and Books Update	2,300
Green Mountain CD	No Till Drills	4,928
Hill County CD	Brochure and Signs for Nature Trail	7,500
Lake County CD	Fuel Reduction Coordinator	15,000
Lewis and Clark CD	Lake Helena Watershed Festival	3,150
Lewis and Clark CD	Heritage Lands Outreach Program	3,000
Lewis and Clark CD	Publication of MACD Newsletter	14,410
Liberty County CD	Watershed Coordinator	15,000
Liberty County CD	Statewide CD Employee Education	8,000
Lincoln CD	Educational Equipment Upgrade	3,000
Lower Musselshell CD	Mid-Musselshell Work Plan	3,000
McCone CD	Tree Storage Building	20,000
North Powell CD	Conservation Planning and Project Development	15,000
Richland County CD	2008 Winter Grazing Seminar	4,336
Ruby Valley CD	Governor's Range Tour	6,245
Sheridan County CD	Storage Building	4,500
Sweet Grass County CD	Dornix Park Berm Removal Assessment	15,000
Sweet Grass County CD	Boulder River Irrigation Diversion	7,702
Sweet Grass County CD	Governor's Range Tour	10,702
Teton County CD	Weather Stations	9,000
Teton County CD	Biodiesel for Education	2,750
Teton County CD	Teton River Monitoring	10,500
Treasure County CD	Range Camp 2008	9,773
Various	Reimburse CDs for Education	9,978
Various CDs	Electronic Equipment Updates	2,192
Various CDs	Conservation Education Mini-Grants	8,500
Wibaux CD	Shallow Bury Pipeline Plow	14,000
Wibaux CD	Update Ownership Map	3,000
	Total	**$ 383,579**

Figure 5
Resource Conservation and Development Areas in Montana



- worked with Extension Service for leadership training at the community level through the Horizon's Program;
- scheduled multicounty public carbon sequestration presentations;
- began public outreach initiative with multicounty database information system to index each county's resources;
- participated in and co-sponsored Bio-Mass Conference, and
- participated in and co-sponsored multicounty regional watershed planning effort.

Montana Salinity Control Association

The Montana Salinity Control Association (MSCA) is a satellite program for conservation districts established to reclaim and prevent saline seeps and other agricultural-related water quality problems, on an individual farm and/or watershed basis. MSCA originated in 1979 in nine counties but has expanded to serve 34 counties. MSCA is partially funded from mineral taxes administered by CARDD/DNRC, receiving $250,000 in FY 2008. Additional funding is generated through specific project grants, landowner cost-share, and/or other user fees for projects.

Conservative estimates indicate that over 300,000 cropland acres in Montana were affected by salinity problems. MSCA has developed individual reclamation plans for 1,171 sites, with 138,250 planned acres, to address 18,318 salinized acres that were no longer productive. Fourteen salinity-based watershed projects ranging from 4,000 acres to over 625,000 acres are in progress or have been completed. MSCA provides significant technical assistance in these watersheds and will incorporate additional projects to complement overall benefits. Each watershed project has a local advisory group that contributes funds and/or provides coordination between landowners and technical agencies.

Several irrigation-based salinity projects have been initiated by MSCA working with producers, NRCS, Bureau of Indian Affairs (BIA), and irrigation districts/companies. Projects involve detecting seepage from irrigation infrastructure and implementing methods to reduce leakage. MSCA is involved in the organization of individual and watershed saline projects, through local conservation districts, with the CDB/DNRC staff often assisting. Each year MSCA receives requests from CDs, private landowners/operators, U. S. Department of Agriculture (USDA) personnel, irrigation groups, and watershed projects for technical assistance. While the geographical emphasis changes, the overall requests remain consistent, indicating the need to maintain the MSCA technical assistance program.

MSCA coordinates with state and federal agencies to utilize and adapt their technical assistance and funding programs to address nonpoint source pollution and other resource concerns. MSCA works with watershed groups and conservation districts to develop reasonable and science-based Total Maximum Daily Load plans on specific watersheds. Federal programs within USDA and Environmental Protection Agency (EPA) are utilized to assist individual producers in implementing the remediation methods MSCA recommends to achieve saline reclamation.

In addition, MSCA has a strong relationship with Canadian provincial salinity specialists to share information through the Prairie Salinity Network. Similar cooperation has been established over the years through Australian research and landowner groups. MSCA staff participated in the International Salinity Forum in April 2005 and 2008, presenting information on successful dryland saline reclamation in Montana. A video documenting the MSCA field procedures and reclamation techniques for dry-land salinity is available for USDA training purposes. A brochure prepared by MSCA and CDB concisely describes the program coordination and technical assistance available.

Financial Development Bureau

The Financial Development Bureau is responsible for preparing and managing the cash flow of the division's programs. The bureau also issues loans to borrowers and manages the financial administration of Montana's Water Pollution Control State Revolving Fund (WPCSRF) and Drinking Water State Revolving Fund (DWSRF) loan programs. Functions of the bureau include:

- issuing general obligation bonds;
- issuing coal tax bonds;
- monitoring the operating budget of the division;
- preparing cash flows for;
  - Water Pollution Control Program;
  - Drinking Water Program;
  - Reclamation and Development Grants Program;
  - Renewable Resource Grant and Loan Program;
- monitoring financial statements of public borrowers;
- monitoring arbitrage calculations for all DNRC bonds; and
- administering loans made to public entities.

Table 5
Loan Portfolios

Type of Loan	Amount
Coal Tax Loans	$ 36,367,411
Water Pollution Control Loans	236,905,967
Drinking Water Loans	122,570,892
Total	**$ 395,844,270**

With passage of the WPCSRF and DWSRF legislation, the volume of work dictated formation of the Financial Development Bureau. The loan portfolios alone have grown to over $395.8 million (see Table 5).

Disbursements to grantees can be as much as $6.5 million per year. Approximately 750 to 1,000 contracts are outstanding at any one time. Financial expenditures on each contract are tracked separately. Cash flows are produced monthly. For the revolving fund programs, investments must be made for repayment funds in the program.

Bond sales are planned to meet the construction schedules of the borrowers. On average, $5 million to $10 million in bonds is issued each year. In FY 2008, more than $5 million in bonds and notes was issued. Loan disbursements were over $30 million in FY 2008.

Water Pollution Control State Revolving Fund Loans

The WPCSRF was created by the 1989 Legislature. It is designed to combine federal grant money with state matching money to create a low-interest loan program that funds community wastewater treatment projects. DNRC and the Department of Environmental Quality (DEQ) co-administer the WPCSRF program. EPA grants federal funds to the state. The state must match at least 20% of that grant. The state's share is derived from the sale of state general obligation bonds. From 1991 to 2003, the interest rate was 4% for up to 20 years. In FY 2004, the interest rate dropped to 3.75%; this rate continued in FY 2008.

Since the program started, the state of Montana has issued $26.3 million in general obligation bonds and notes, and EPA has contributed $128.6 million in grants. These state bonds and federal grants, together with $82 million in "recycled" (repaid) loan funds, account for the $236.9 million program level. Twelve loans totaling $24.7 million were closed in the 2008 construction season. See Table 6 for a listing of current loans. Program staff expect to make loans of $25 million in FY 2009.

Table 6
Water Pollution Control State Revolving Fund Loans

Completed Loans	Loan Amount
Augusta	$ 502,981
Belgrade	1,058,000
Belgrade II	1,940,000
Belgrade III	1,339,247
Big Sky I	5,513,000
Big Sky II	417,000
Big Sky III A	7,000,000
Big Sky III B	6,500,000
Big Timber	384,719
Bigfork	1,000,000
Bigfork	2,267,480
Bigfork	162,843
Bigfork	2,025,000
Billings	4,515,000
Billings SID	516,000
Bozeman	400,000
Butte-Silver Bow	5,307,390
Cascade I	201,609
Cascade II	1,217,987
Choteau Refinance	109,212
Choteau I	500,000
Choteau II	352,595
Colstrip	300,000
Colstrip	503,000
Columbia Falls	2,509,405
Columbus	1,539,627
Conrad	710,510
Conrad Refinance	233,000
Corvallis GAN	235,155
Corvallis Sewer District	351,000
Cut Bank I	531,000
Cut Bank II	800,000
Darby	111,000
Denton I	55,000
Denton III	139,130
Dillon I	1,992,914
DNRC-RDB I	1,500,000
DNRC-RDB II	1,750,000
DNRC-RDB III	2,000,000
DNRC-RDB IV	2,225,000
DNRC-RDB V	2,100,000
DNRC-RDB VI	2,500,000
DNRC-RDB VII	1,300,000
DNRC-RDB VIII	1,600,000
DNRC-RDB IX	1,725,000
DNRC-RDB X	1,800,000
DNRC-RDB XI	1,900,000
DNRC-RDB XII	2,200,000
Dodson	88,000
Drummond	52,920
East Helena I	91,000
East Helena II-A	1,983,000
East Helena II-B	1,408,460
East Helena	500,000
Ennis I	500,000
Ennis II	886,000
Flathead County	
Bigfork	424,000
Evergreen I	3,600,000
Evergreen II	700,000
Forsyth	1,302,534

Completed Loans	Loan Amount
Fort Benton	$ 1,177,000
Froid	60,846
Gallatin Co./Hebgen Lake	4,076,371
Gallatin Co.-Logan Landfill	2,242,000
Geraldine	113,000
Glasgow I	402,000
Glasgow II	1,048,000
Glasgow III	778,470
Glasgow GAN	251,740
Glendive I	236,000
Glendive II	376,000
Glendive	374,000
Great Falls	11,295,267
Great Falls Storm Sewer	4,390,491
Hardin	2,026,390
Harlowton	777,073
Harrison W&S	319,472
Havre I	2,160,770
Havre II	500,000
Havre III	1,015,000
Helena	9,320,000
Hinsdale W&S	85,402
Hot Springs	158,442
Kalispell I	3,913,000
Kalispell II	1,475,860
Kalispell	14,470,000
Kessler School	185,283
Kevin	47,000
Kevin II	42,982
Laurel	1,376,478
Lavina	121,000
Lewis and Clark County	3,043,858
Lewis and Clark-Woodlawn	143,000
Lewistown I	500,000
Lewistown II	5,400,000
Lincoln	308,914
Livingston I	155,000
Livingston SID	158,580
Livingston TIF	333,353
Livingston	1,911,000
Manhattan I	636,000
Manhattan II	220,000
Manhattan III	4,757,000
Missoula	
39th Street	1,306,984
Broadway Birch	1,997,000
California Street	502,000
Gilbert Street SID	244,000
Lincolnwood SID	254,000
Lincolnwood II SID	438,000
Lincolnwood II	419,000
Mullan Road	1,820,000
NW Broadway	943,000
Pineview SID	658,000
Rattlesnake	304,000
Reserve Street	2,221,000
Reserve Street Interceptor	459,162
Reserve Street/Pineview SID	718,000
Reserve Street SID 526	2,671,000
SID 520	2,634,000
Storm Sewer	4,577,000

Completed Loans	Loan Amount
Wapikiya/Bellevue Clarifier I	$ 2,465,000
Wapikiya/Bellevue Clarifier II	1,177,000
Wapikiya/Bellevue SID 503	324,000
Wastewater Phase-I	5,000,000
Wastewater Phase-II	3,800,000
Wastewater Phase-III	3,688,000
Missoula County	
County Crest	281,199
El Mar	169,000
Golden West	14,000
Linda Vista I	241,000
Linda Vista II	1,943,000
Lolo	649,936
Mullan Road RSID 8474	4,498,121
Mullan Trail	31,000
N. Valley St. Maries WSD	150,000
Nashua	193,769
Northern Montana Refuse District	1,035,315
Park City County WSD	692,000
Park County I	378,000
Park County II	83,000
Red Lodge	390,000
Red Lodge BAN	3,876,731
Richey	57,041
River Rock WSD	3,100,000
Ronan	619,905
Ronan	350,000
Ronan BAN	75,000
Scobey I	500,000
Scobey II	755,511
Shelby	481,000
Shelby Refinance	453,000
Superior	82,000
Superior II	234,885
Sweet Grass WSD I	80,000
Sweet Grass WSD II	123,231
Three Forks	720,000
Townsend	1,071,000
Troy	1,817,281
Upper Lower River Rd. WSD	115,000
Valier	600,000
Valier I	200,000
Valier II	19,008
Vaughn-Cascade WSD	248,128
Victor W & S	300,000
Virginia City	366,000
Virginia City	500,000
Whitefish	200,000
Whitewater WSD	120,000
Wolf Point	453,000
Worden-Ballentine WSD	260,000

Total of all Water Polllution Control State Revolving Fund loans $ 236,905,967

In FY 2008, the city of Havre borrowed $1.5 million to rehabilitate its wastewater lines. The 20-year loan has an interest rate of 3.75%. Many communities are facing the same problem; they work with the Montana Department of Transportation to replace lines before new paving is put in place.

Also in FY 2008, the town of Dodson borrowed $88,000 to make wastewater system improvements. This community demonstrated hardship and received a 2.75% interest rate. The loan term is 20 years. This loan was combined with grants from other programs to complete the project.

The 1997 Legislature authorized the WPCSRF to start financing landfills for small communities. The first landfill loan was made to the Northern Montana Refuse District in FY 2003. The Gallatin County Logan Landfill loan was completed in FY 2008, and more are expected to close in FY 2009.

Water Projects sign for the Sheridan water improvements State Revolving Fund loan. Photo by Bob Fischer.

Drinking Water State Revolving Fund Loans

The DWSRF provides funds for training, technical assistance, and the issuance of low-interest loans to local governmental entities to finance drinking water facilities and implementation of the Safe Drinking Water Act. State enabling legislation was passed in 1995 and amended in 1997, after the U.S. Congress passed federal enabling legislation in August 1996. DNRC and DEQ co-administer the Drinking Water Program. The two agencies first applied for federal funds in January 1998.

The state has issued $16.3 million in general obligation bonds and notes, EPA has obligated $97.2 million, and $33.6 million in "recycled" (repaid) loans have been used to fund loans for a program level of $147.1 million. Eighteen loans totaling over $17.66 million were closed in the 2008 construction season. See Table 7 for a listing of current loans. Program staff expect to make loans of $14 million in FY 2009.

Of the 18 loans closed, one was to the city of Miles City. The project loan was for $2.2 million at 3.75% interest. These funds were used for rehabilitation of the city's drinking water storage tank. Miles City also borrowed another $2 million to work on its water lines.

These projects continue to improve the communities that participate in the loan programs. The loan interest rate also helps to make the projects affordable. In the past, no loans were made over the 4% interest rate. As with the WPCSRF Program, interest rates before FY 2003 were 4%; in FY 2004, the interest rate decreased to 3.75%.

Resource Development Bureau

The Resource Development Bureau (RDB) administers several grant and loan programs and provides assistance to conservation districts for the administration of water reservations and to landowners to develop new irrigation. The programs include:

- Reclamation and Development Grants Program;
  - Project Planning Grants
- Renewable Resource Grant and Loan Program;
  - Public Grants
  - Project Planning Grants
  - Emergency Grants
  - Private Grants
  - Private Loans
- Public Loans;
- Conservation District Water Reservations;
- Irrigation Development Program; and
- Regional Water Coordination.

FY 2008 was a successful year for these programs. More than $7 million in grant and loan funds was disbursed for projects throughout the state, and 750 contracts were actively administered.

Reclamation and Development Grants Program

The Reclamation and Development Grants Program (RDGP) is designed to fund projects that "indemnify the people of the state for the effects of mineral development on public resources and that meet other crucial state needs serving the public interest and the total environment of the citizens of Montana" (90-2-1102, Montana Code Annocated (MCA)). The program was established in 1987. Any department, agency, board, commission, or other

Table 7
Drinking Water State Revolving Fund Loans

Completed Loans	Loan Amount	Completed Loans	Loan Amount
Big Sandy	$ 353,000	Laurel I	$ 5,250,000
Big Sky I	534,000	Laurel II	2,541,000
Big Sky II	1,966,000	Lewistown	3,549,000
Big Sky III	5,000,000	Livingston I	155,000
Billings SID	818,000	Livingston SID	322,088
Billings	17,300,000	Livinston TIF	676,472
Boulder	1,294,000	Livingston Revenue	700,000
Bozeman	94,000	Livingston Revenue	200,000
Broadview	203,000	Lockwood WSD	1,700,000
Brockton	44,998	Lockwood WSD II-A	500,000
Cascade	129,998	Lockwood WSD II-B	500,000
Charlo WSD	85,000	Lockwood WSD III-A	500,000
Choteau	332,000	Miles City	1,007,697
Colstrip I	563,000	Miles City II-A	500,000
Colstrip II	829,000	Miles City II-B	2,200,000
Columbia Falls I	907,000	Miles City III-A	500,000
Columbia Falls II	502,000	Miles City III-B	2,200,000
Columbus	110,000	Missoula County Fair	206,194
Conrad I	650,000	Missoula/Sunset West	291,000
Conrad II	1,543,172	Neihart	107,617
Cut Bank I	283,000	Philipsburg	238,322
Cut Bank II	576,000	Philips Co. Green Meadows WSD	63,727
Dry Prairie Rural Water Authority	313,000	Philips Co. Green Meadows WSD (GAN)	100,000
Dry Prairie II	507,000	Plains	265,000
East Helena I	228,000	Plentywood	577,000
East Helena II	3,234,000	Plentywood II-A	500,000
Elk Meadows Ranchettes	200,000	Plentywood II-B	500,000
Ennis I	59,701	Power-Teton WSD	400,000
Ennis II	500,000	Power-Teton WSD	375,000
Eureka	619,000	Richey	45,000
Fort Peck WSD	1,520,000	River Rock WSD	2,100,000
Gardiner Park County WSD-A	161,504	Seeley Lake	1,340,000
Gardiner Park County WSD-B	330,000	Shelby I	866,000
Gardiner Park County WSD-C	267,000	Shelby II	677,000
Gardiner Park County WSD	463,784	Shelby III	700,000
Gardiner Park County WSD	125,000	Shelby IV	709,000
Geraldine	129,000	Sheridan	265,200
Glendive	1,565,000	Sheridan BAN	167,622
Great Falls	3,000,000	Sheridan II	423,000
Hamilton I	220,000	Spring Meadows WD	309,000
Hamilton II-A	500,000	Superior I	500,000
Hamilton II-B	318,000	Superior II	1,229,105
Hamilton II-C	380,000	Thompson Falls	500,000
Hamilton	170,000	Thompson Falls	897,596
Hardin	453,900	Three Forks BAN	22,570
Havre I	600,000	Three Forks	336,000
Havre II	8,401,000	Three Forks III	268,000
Havre III	500,000	Twin Bridges	286,515
Havre IV	956,000	Upper Lower River Rd. WSD	500,000
Helena	1,250,000	Upper Lower River Rd. WSD	195,000
Helena	2,850,000	Upper Lower River Rd. WSD	234,479
Helena III	2,750,000	Upper Lower River Rd. WSD BAN	843,160
Highwood WSD	75,000	Virginia City	66,000
Hill County	758,000	Whitefish I	400,000
Jette Meadows WSD BAN	44,477	Whitefish II	5,839,000
Jette Meadows	300,000	Whitefish III	895,835
Kalispell	1,500,000	Whitefish IV	900,000
Kalispell	761,000	Wolf Point	730,000
Kalispell Refinance	1,283,159	Worden-Ballantine WSD I	500,000
LaCasa Grande WSD I	150,000	Worden-Ballantine WSD II	368,000
LaCasa Grande WSD II	500,000	Yellowstone County RSID	373,000
Lakeside	400,000	**Total of all Drinking Water SRF Loans**	**$122,570,892**

division of state government or any city, town, county, or other political subdivision or Tribal government within the state may apply for an RDGP grant. Grants of up to $300,000 are available per application. Funding for this program comes from interest income from the RIT Trust Fund and mineral taxes. In FY 2008, the RDB administered 35 reclamation and development grants totaling nearly $9.5 million.

The 2007 Legislature authorized 18 projects for funding, as shown in Table 8. Thirteen of these projects were contracted in FY 2008, and CARDD anticipates that the five remaining projects will be contracted during 2009. Figure 6 demonstrates the types of projects funded. In May 2008, RDGP received 29 grant applications requesting $7.8 million. CARDD will continue evaluating those applications and prepare recommendations for the 2009 Legislature.

Planning grants can provide up to $50,000 to local governments to retain services of a consulting or engineering firm to help plan and design a natural resource project. A total of $800,000 was authorized by the 2007 Legislature.

On June 30, 2007, DNRC announced the commencement of the first of four planning grant cycles. Through March 31, 2008, the department has awarded the full amount of $800,000 to 21 local projects.

It is DNRC's intent to request planning grant funding from the Legislature again in 2009.

Renewable Resource Grant and Loan Program

The Montana Legislature established what is now called the Renewable Resource Grant and Loan (RRGL) Program in 1993 by combining the Water Development Program and the Renewable Resource Development Program. The RRGL Program was established to promote development of renewable natural resources. Funding from RIT interest and mineral taxes is available to research, plan, design, construct, or rehabilitate projects that conserve, develop, manage, and/or preserve Montana's renewable resources. RRGL funds a variety of natural resource projects including groundwater studies, irrigation rehabilitation, water and soil conservation, municipal drinking water improvements, public wastewater, renewable energy, and forest enhancement.

The 2007 Legislature restructured the funding for both the RRGL and RDGP programs. They created a "natural resource projects" account within the state special revenue fund that will fund both programs. Most of the money in this account is from the interest income or the resource indemnity trust fund and various other natural resource-based taxes. It is expected that the RRGL Program will have approximately $5 million for RRGL grants and $500,000 for RRGL planning grants available in the 2011 biennium. The loan program is funded through issuance of general obligation and coal severance tax bonds. The majority of private loans are for irrigation or water user association projects.

Table 8
Reclamation and Development Grants Approved by the 2007 Legislature
(in order of their ranking)

Project Sponsor	Project Name	Approved Funding
Montana BOGC	'07 Northern District Orphaned Well Plug Abandonment & Site Restoration	$ 300,000
Montana BOGC	'07 Southern District Orphaned Well Plug Abandonment & Site Restoration	300,000
Montana DEQ	Snowshoe Mine Reclamation Project	300,000
Montana DEQ	Bald Butte Mine & Millsite Reclamation Project	300,000
Montana DNRC	St. Mary Facilities Rehabilitation	300,000
Powell County	Milwaukee Roundhouse Voluntary Cleanup	286,000
Montana DNRC	Reliance Refinery	300,000
Central Montana Water Authority	Utica Well 2	300,000
Montana BOGC	Southern District Tank Battery Cleanup	300,000
Meagher County Conservation District	Hydrologic Investigation of the Smith River Watershed	300,000
Montana DEQ	Belt Acid Mine Drainage Mitigation	282,000
Montana DEQ	Swift Gulch Placer Tailings and Wetland Establishment	300,000
Broadwater Conservation District	White's Gulch Reclamation Fish Barrier Project	24,500
Montana DEQ	Landusky Mine-Characterization of Surface Water/Groundwater	150,000
Big Horn Conservation District	Montana Regional Coal Bed Methane	160,000
Gallatin Local Water Quality District	Assessment and Distribution of Pharmaceuticals	294,000
Flathead Basin Commission	British Columbia-Montana Action Plan	300,000
Montana Tech of The University of Montana	Butte Native Plant Propagation Nursery	289,922
	Total	**$ 4,786,422**

Figure 6
Allocation of Reclamation and Development Grant Projects Approved by the 2007 Legislature

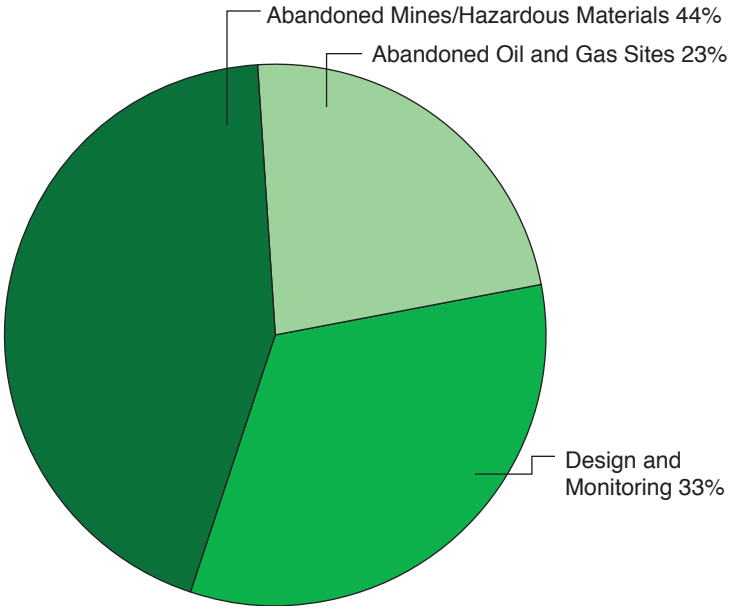
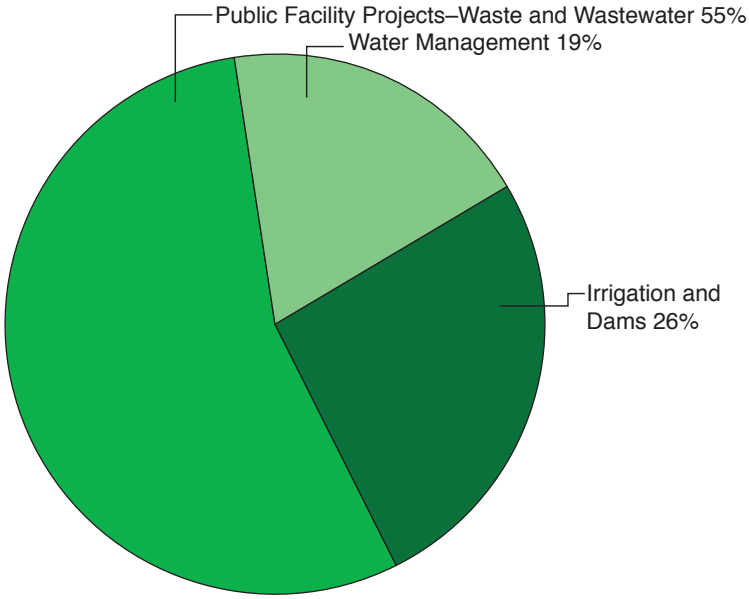


Figure 7
Allocation of Funds for Renewable Resource Grant and Loan Projects Approved by the 2007 Legislature



Public Grants

Up to $100,000 is available per grant application. The total cost of a project usually includes funds from other sources, in addition to RRGL grants and loans. In FY 2008, the bureau administered 141 renewable resource grants and $2,346,749 was disbursed. Table 9 lists RRGL projects in the order in which they were approved and ranked by the 2007 Montana Legislature; the allocation of funds is shown in Figure 7.

An example of a renewable resource project funded by an RRGL grant is the Sanders County grant, "Eliminating Failed and Obsolete Septic Systems in Sanders County." The county sanitarian wrote the grant in response to an overwhelming number of failing septics in the county. The county has a low median household income and many of the homeowners with failing septics could not afford to replace them. The RRGL grant established a revolving loan program for low-income people in the county to replace failing or outdated septics or pay to have the homes hooked into a nearby municipal system. At countywide workshops, demonstrations of how to best care for and maintain septic systems were presented. The county sanitarian also began writing a column in the local paper, "Get your Poop in a Group," to alert citizens of potential problems with the failing septics. As of June 30, 2008, four loans have been made to needy citizens. The county sanitarian's goal is to make sure all septic systems in the county are up to code. Besides the obvious health and safety issues related to failing septics, water quality in both groundwater and surface water will significantly improve as these septic systems are replaced.

In FY 2008, RRGL received 92 applications for renewable resource grants requesting $8.9 million. These grant projects are currently being reviewed and ranked and will be presented to the 2009 Legislature for its approval.

Table 9
Renewable Resource Grant and Loan Projects Approved by the 2007 Legislature
(in order of their ranking)

Project Sponsor	Project Name	Grant	Loan
Green Mountain CD	Crow Creek Restoration Project	$ 70,559	$ 100,000
Twin Bridges, Town of	Wastewater System Improvements	100,000	
Fort Peck Tribes	Fort Peck D-4 Drain Water Conservation Improvements	100,000	
North Powell CD	Blackfoot Drought & Water Conservation Project	84,347	
Bainville, Town of	Wastewater System Improvements	100,000	
Petrolia Irrigation District	Petrolia Irrigation Rehabilitation Project	100,000	
Montana DNRC	Ackley Lake Dam Rehabilitation	100,000	200,000
Cut Bank, City of	Water System Improvements	100,000	
Whitehall, Town of	Wastewater System Improvements	100,000	
Montana DNRC	East Fork Siphon Replacement & Main Canal Lining Project	100,000	400,000
Loma Co. WSD	Water System Improvements	100,000	
Panoramic Mountain River Heights Co. WD	Water System Improvements	100,000	
Montana DNRC	Smith Creek Canal Seepage Abatement & Rehabilitation	100,000	50,000
Goodan-Keil Co. WD	Water Improvement Project	100,000	
Montana DNRC	Middle Creek Dam Automated Instrumentation	100,000	
Polson, City of	Water System Improvements	100,000	
Hill Co.	Beaver Creek Dam Seepage Control Berm	100,000	
Gallatin Co., Hebgen Lake Estates RID 322	Wastewater System Improvements	100,000	
Three Forks, City of	Wastewater System Improvements	100,000	
Mineral Co. Saltese WSD	Wastewater System Improvements	100,000	
Carbon CD	Ph 1 Hydrogeology & Water Balance of East/West Bench Aquifers	100,000	
Fergus Co. CD	Upper and Lower Carter Pond Dam Reconstruction	100,000	
Brady Co. WSD	Wastewater System Improvements	100,000	
Beaverhead CD	Big Hole Ditch Improvement Project	100,000	
Superior, Town of	Water System Improvements	100,000	
Sunny Meadows Missoula Co. WSD	Water System Improvements	100,000	
Tri County WSD	Water System Improvements	100,000	
Philipsburg, Town of	Wastewater System Improvements	100,000	
Fort Peck Tribes	58 Main Structure Replacement for Water Management	100,000	
Sanders Co.	Eliminating Failed Septic Systems	100,000	
Malta Irrigation District	Dodson North Canal Regulating Reservoir	100,000	
Red Lodge, City of	Water System Improvements	100,000	
Elk Meadows Ranchettes Co. WD	Water System Improvements	100,000	
Rae WSD	Water System Improvements	100,000	
Stillwater CD	Stillwater-Rosebud Watershed, Surface Water/Groundwater Interaction	100,000	
East Bench Irrigation District	East Bench Irrigation District Canal Lining	100,000	
Dayton Lake Co. WSD	Wastewater System Improvements	100,000	
Milk River Irrigation Project Joint Board of Control	St. Mary Canal, Halls Coulee Drop 3, Plunge Pool Concrete Repair	100,000	
Yellowstone CD	Modeling Aquifer Response to Urban Sprawl, West Billings Area	60,000	
Ravalli Co.	Improved Resource Protection, Floodplain Hazard Mapping	100,000	
North Valley Co. WSD	Water System Improvements	100,000	

Table 9 (cont'd)
Renewable Resource Grant and Loan Projects Approved by the 2007 Legislature
(in order of their ranking)

Project Sponsor	Project Name	Grant	Loan
Sheridan, Town of	Wastewater System Improvements	$ 100,000	
Neihart, Town of	Water System Improvements	100,000	
Greenfields Irrigation District	Muddy Creek Wastewater and Erosion Reduction Project	100,000	
Bynum Teton Co. WSD	A New Source of Drinking Water for Bynum, Phase 1	100,000	
Whitefish, City of	Wastewater System Improvements	100,000	
Power Teton Co. WSD	Power Teton Co. WSD	100,000	
Sidney Water Users Irrigation District	Increasing Irrigation Efficiency, Phase 2	100,000	
Jordan, Town of	Wastewater System Improvements	100,000	
Beaverhead Co.	Blacktail Deer Creek Flood Mitigation Project	100,000	
Seeley Lake Missoula Co. WD	Water System Improvements	100,000	
Manhattan, Town of	Water System Improvements	100,000	
Lewis and Clark Co.	Lewis and Clark Fairgrounds, Dunbar Area Water System Improvements	100,000	
Columbia Falls, City of	Wastewater System Improvements	100,000	
Hamilton, City of	Wastewater System Improvements	100,000	
Hysham Irrigation District	Infrastructure Improvement	100,000	
Shelby, City of	Water System Improvements	100,000	
Montana DNRC	Community Tree-Planting Grants	100,000	
Ronan, City of	Wastewater System Improvements	100,000	
Pondera Co. CD	Marias River Watershed Baseline Assessment	100,000	
Sheridan Co.	Raymond Dam Rehabilitation	100,000	
Montana DEQ	Geothermal Assessment and Outreach Partnership	99,963	
Thompson Falls, City of	Water System Improvements	100,000	
Missoula Co. Lolo RSID 901	Wastewater System Improvements, Phase 2	100,000	
Chester Irrigation District	Chester Irrigation Project: Phase 2, Water Service Contract Application	100,000	
Pinesdale, Town of	Water System Improvements	100,000	
Ekalaka, Town of	Water and Wastewater System Improvements	100,000	
Sweet Grass CD	West Boulder Point of Diversion Rehabilitation	44,500	
Livingston, City of	Glass Pulverizer for the City of Livingston	100,000	
Montana State University	Channel Response Assessment for the Upper Blackfoot	100,000	
Darby, Town of	Water System Improvements	100,000	
Sunburst, Town of	Sunburst Backup Water Supply Wells	99,236	
Sunset Irrigation District	Sunset Irrigation District Gravity Flow Group Irrigation Pipelines	100,000	$ 1,465,265
Geyser Judith Basin Co. WSD	Water System Improvements	100,000	
Black Eagle WSD	Water System Improvements	100,000	
Glacier Co. CD	Marias River Bridge Road Stabilization	100,000	
Buffalo Rapids Project, District 2	Open Lateral Conversion Pipeline	100,000	
Buffalo Rapids Project, District 1	Open Later 34.5 Conversion to Pipeline	100,000	
Deer Lodge Valley CD	Upper Clark Fork River Habitat, Water Quality and Restoration Enhancement	97,406	
Meagher Co. CD	Hydrologic Investigation of the Smith River Watershed	100,000	
	Total	**$ 7,856,011**	**$ 2,215,265**

Project Planning Grants

Project planning grants provide up to $15,000 to governmental entities for completion of a preliminary engineering report or any other approved planning activities. Applications must explain how the project would contribute to the conservation, management, development, or preservation of renewable resources in Montana. The grants are given on an "open-cycle" basis. In FY 2008, 40 planning grants were contracted for a total of $400,000. Several planning grant contracts from prior years were also monitored.

Emergency Grants

The 2007 Legislature included $100,000 in its House Bill 6 appropriation for emergency grants for the 2009 biennium. DNRC may qualify a project as an emergency if it is one that, if delayed until legislative approval can be obtained, will cause substantial damage or legal liability to the entity seeking assistance. The emergency is typically associated with an unanticipated system failure and is not the result of normally expected use and deterioration. Emergencies do not include studies or planning efforts. Examples of emergencies include dam failures, failure of irrigation structures during irrigation season, and failed wastewater-pumping stations. All other reasonable sources of funding must be identified and exhausted before emergency funding is recommended.

In February 2007, a water main connecting the town of Brockton's drinking water supply with its storage reservoir and distribution system ruptured beneath the Burlington Northern Santa Fe Railroad tracks. A permanent cased crossing was constructed in December 2007 at a total cost of $102,000. A $30,000 RRGL emergency grant was awarded for the construction of this project. In February 2008, the Helmville (Powell County) School District received an administrative order from the Department of Environmental Quality giving it 60 days to design and have in operation a disinfection system for its water supply. For several months, water samples from the well had repeatedly exceeded total coliform limits. An emergency grant of $10,000 was awarded to offset the $14,000 project cost to install a chlorine disinfection system on the system.

As of June 30, 2008, and for the remainder of the 2009 biennium, $60,000 of the emergency grant appropriation was available.

Private Grants

Financial assistance is also available to any individual, association, partnership, or corporation (both for-profit and nonprofit). By law, grant funding for a single project may not exceed 25% of the total estimated cost. Half of the funds are targeted to assist small, privately owned water systems. Owners of small systems have difficulty in meeting Safe Drinking Water Act regulations, but must meet the same requirements that municipal water systems face. DNRC has identified 105 private water systems for potential funding. The average size of a grant is $2,538; the grant must be matched on a 3-to-1 basis. In FY 2008, DNRC awarded two grants totaling $6,750.

Emergency grant to Helmville School District for installation of a disinfection system for its water supply. Photo by Bob Fischer.

Private Loans

Loans for private water development projects are available from DNRC. Loans to individual private entities may not exceed the lesser of $400,000 or 80% of the fair market value of the security given for the project. Private loans to individuals must be secured with real property. Loans up to $3 million are available for such organizations as water user associations and ditch companies. These loans are secured by the revenue produced by the system. Irrigation system improvements–for example, conversion from flood irrigation to sprinkler irrigation–are the most common type of project funded through private loans.

To finance loans, the law provided authority to issue general obligation renewable resource bonds up to a total outstanding balance of $30 million. The current outstanding balance on the loans is $18.1 million. In FY 2008, 433 loans were being administered.

In FY 2008, the private loan program sold $2.2 million in taxable general obligation bonds. The interest rate on these bonds is 3.75%, which is 2% to 3% below traditional market rates. Adding a 0.3% charge for a loan loss reserve, DNRC offers potential borrowers a very low interest rate of 4.05% for irrigation improvement projects. All loans must qualify as "nonpoint pollution control projects." Because

the program primarily funds irrigation improvement projects, all new loan requests have qualified for these low-interest funds.

Public Loans

This program makes loans to governmental entities for renewable resource projects. The program was started in 1981 by the Montana Legislature, which granted $250 million in coal tax bonding authority. In FY 2008, 40 public loans with a balance of approximately $36 million were outstanding. The public loans are listed in Table 10. The Legislature has approved $2.7 million in loans for which funds have not yet been drawn.

The Renewable Resource Public Loan Program has been evolving into a new role over the last decade. Before 1990, the public loan program was one of the few low-cost sources of public loan funds available to municipalities. Many of the early loans in the public loan program were for municipal water and wastewater projects. However, since creation of the Water Pollution Control and Drinking Water State Revolving Fund (SRF) Loan programs, municipalities are borrowing funds at 3.75% from the SRF programs. This has freed capacity in the public loan program for other types of projects. In fact, the number of irrigation loans that the program has funded has steadily increased, which reflects the need for repair of aging ditches, diversions, and other irrigation infrastructure, as well as lack of any federal assistance for these projects. The public loan program also provides a safety net for municipal projects, such as solid waste projects, that may not qualify for SRF funding.

Conservation District Water Reservations

In 1978, the Board of Natural Resources and Conservation granted water reservations to 14 CDs in the Yellowstone River Basin. Nine CDs were granted reservations in the Upper Missouri River Basin in 1992, and 11 CDs were given reservations in the Lower and Little Missouri River basins in 1994. Some CDs have reservations in more than one basin. The RDB provides legal, technical, and programmatic assistance to conservation districts in the administration of these water reservations.

CDs continue to make major progress toward developing their water reservations. Work is ongoing to obtain low-cost electric power for irrigation through the Pick-Sloan Program. At the end of the 2007 irrigation season, CDs in the Yellowstone River Basin had allocated water to 183 projects, using 75,854 acre-feet of water, or 15% of the CDs' total allocation. CDs in the Missouri River Basin have issued 66 authorizations for water use, using 27,652 acre-feet of water, or 9%of the CDs' total allocation.

Table 10
Public Loans

Applicant	Balance Due	Applicant	Balance Due
Antelope Co. WSD	$ 39,288	Forsyth, City of	$ 186,180
Beaverhead Co./Red Rock WSD	1,418,187	Fort Benton, City of	314,882
Bitterroot Irrigation District	422,605	Gardiner-Park Co. WD	30,216
Bozeman, City of	60,727	Huntley Irrigation District 1	176,799
Bozeman, City of	83,002	Huntley Irrigation District 2	64,705
Broadwater Power Project	14,885,000	Huntley Irrigation District 3	197,519
Buffalo Rapids Irrigation District	730,169	Huntley Irrigation District 4	737,647
Cut Bank–North Glacier WSD	14,866	Hysham, Town of	115,529
Daly Ditches Irrigation District	276,375	Lower Willow Creek Irrigation District	90,322
DNRC/State Water Projects Bureau	-	Malta Irrigation District	1,794,648
Bair Dam	728,200	Miles City, City of	250,905
Broadwater-Missouri Pipespan	245,800	Mill Creek WSD	451,902
Deadman's Basin (Barber)	275,787	Sage Creek Co. Water District	293,285
Deadman's Basin-Canal	49,506	Sanders Co. Water District at Noxon	24,286
East Fork Rock Creek Dam	450,000	Sun Prairie SD	93,980
Nevada Creek Dam Rehab	389,686	Sun Prairie WSD	79,633
North Fork of the Smith River	382,402	Tin Cup WD	162,782
Petrolia Dam	209,456	Tongue River	8,692,308
Dutton, Town of	44,326	West Yellowstone, City of	24,459
East Bench Irrigation District	304,555	Wibaux, Town of	$ 60,883
Flathead Co.-Evergreen WSD	$ 1,514,604		
		Total	**$ 36,367,411**

Irrigation Development Program

The Irrigation Development Program was originated and funded by the 1999 Legislature. The purpose of this program is to provide financial and technical assistance to irrigation projects, both to develop new projects that would grow high-value crops such as potatoes and sugar beets, and to improve existing projects.

Through the Irrigation Development Program, DNRC awards grants to both private and public applicants for up to $15,000 per project. Projects are eligible if the grant is used to develop new irrigation or increase the value of agriculture for existing irrigated lands. Typically, grants are used for projects such as the installation of test wells for irrigation, conducting feasibility studies on irrigation system improvements or new irrigation projects, public information efforts, and water conservation projects. Grants awarded during FY 2008 totaled $150,000.

Recent projects in which the Irrigation Development Program provided financial and technical assistance include the Fort Peck Tribe's irrigation projects, a canal sealant study on the Pondera County canal and reservoir system, development of a water reuse project in the Fort Peck Water Users Association project, an evaluation of storage reservoirs on the Lower Musselshell River, and funding for a groundwater study in Richland County. Projects are described below:

- DNRC assisted and advised the Fort Peck Tribes on development of the North of Sprole and Fort Kipp irrigation projects. The Fort Peck Tribes intend to begin building the Fort Kipp project in fall 2008.
- DNRC worked with several irrigation districts and companies and with the Montana Salinity Control Association to study the effectiveness of using a canal sealant. Initial test canals are in the Pondera County canal and reservoir system.
- DNRC assisted the Fort Peck Water Users Association to develop water reuse plans.
- DNRC assisted the Lower Musselshell Water Users Association with public meetings to address possible development of a reservoir near Melstone with the potential to add 5,000 acre-feet to the lower basin for irrigation.
- DNRC worked with Richland County Economic Development, Richland County Conservation District, and the Montana Bureau of Mines and Geology for funding to complete a groundwater irrigation study near Sidney. This project would provide almost 5,000 acres of new irrigation.

Irrigation equipment installation in eastern Montana. Photo by Larry Bloxsom.

Pipe installation on the Dry Prairie Regional Water System. Photo by Marc Golz.

Water tanks for the Dry Prairie Regional Water System. Photo by Marc Golz.

Regional Water Coordination

Montana is participating in construction of two federally authorized regional water systems that will serve over 40 Montana communities and two Indian Reservations.

- **The Fort Peck / Dry Prairie Regional Water System** was authorized in 2000, under Public Law 106-382. This system will serve approximately 30,000 people. On the Tribal side of the system, intake facilities in the Missouri River and the raw water settling ponds at the water treatment plant (WTP) site have been constructed. The first two stages of WTP construction, clear wells, and washwater recovery basin, started in 2007 and are scheduled for completion in late 2008. For off-Reservation areas (Dry Prairie's jurisdiction), interim use of excess capacity of Culbertson's existing WTP via direct purchase of water from the town allowed Dry Prairie to serve the communities of Froid and Medicine Lake in 2004, and Bainville and 190 additional rural customers in 2006 through installation of regional pipeline. In addition to plans to connect the community of Fort Kipp (in cooperation with the Fort Peck Tribes), Dry Prairie has shifted part of its focus to southwestern portions of its region, seeking to construct regional pipeline to communities such as Nashua and adjacent rural customers in 2008-09. This regional project received a total of $7 million in federal continuing resolution funds for FY 2007; the Tribes and Dry Prairie split $10 million for federal FY 2008.
- **The Rocky Boy's / North Central Regional Water Project**, authorized in 2002, will serve approximately 30,000 water users. All required feasibility studies, an environmental assessment finding of no significant impact and Water Conservation Plan have been completed. Appropriations through the Energy and Water bill ($5.75 million for FY 2006) provided funds for construction of an intake facility, which was completed by the Chippewa-Cree Tribe and their contractors during summer 2007. The Tribe and the Rocky Boy's / North Central Regional Water Project Authority asked for $32 million for FY 2007, with plans to begin construction of the regional water treatment plant. Under the federal continuing resolution for that year they received $800,000, much less than the amount needed to keep pace with inflation/cost indexing on a system projected to cost $272 million in 2008 dollars (as estimated by the U.S. Bureau of Reclamation). The project received a $5 million appropriation from Congress for federal FY 2008. The Tribal construction corporation plans to install a pipeline from the reverse osmosis plant at the Northern Winz casino approximately six miles south to the town of Box Elder. Meanwhile, the North Central Authority is seeking approvals to bring water on an interim basis from the city of Havre to the North Havre County Water District. The latter system is under administrative order for water quality issues.

Work on water disinfection system in Helmville. Photo by Bob Fischer.

Two other regional water projects are advancing through planning stages, in accordance with requirements of the Federal Rural Water Supply Act of 2006.

- **The Dry-Redwater System** will bring regional water to portions of five counties in eastern Montana, between the Missouri and the Yellowstone rivers, and reaching from the lower Musselshell to the Montana-North Dakota border. A feasibility study has been completed, with findings published in spring 2006. Project sponsors have a bill draft request before Congress, seeking federal authorization of a $115 million system utilizing Missouri River water from the Dry Arm of Fort Peck Reservoir. In addition to a permit from ACE for placement of an intake facility there, a water

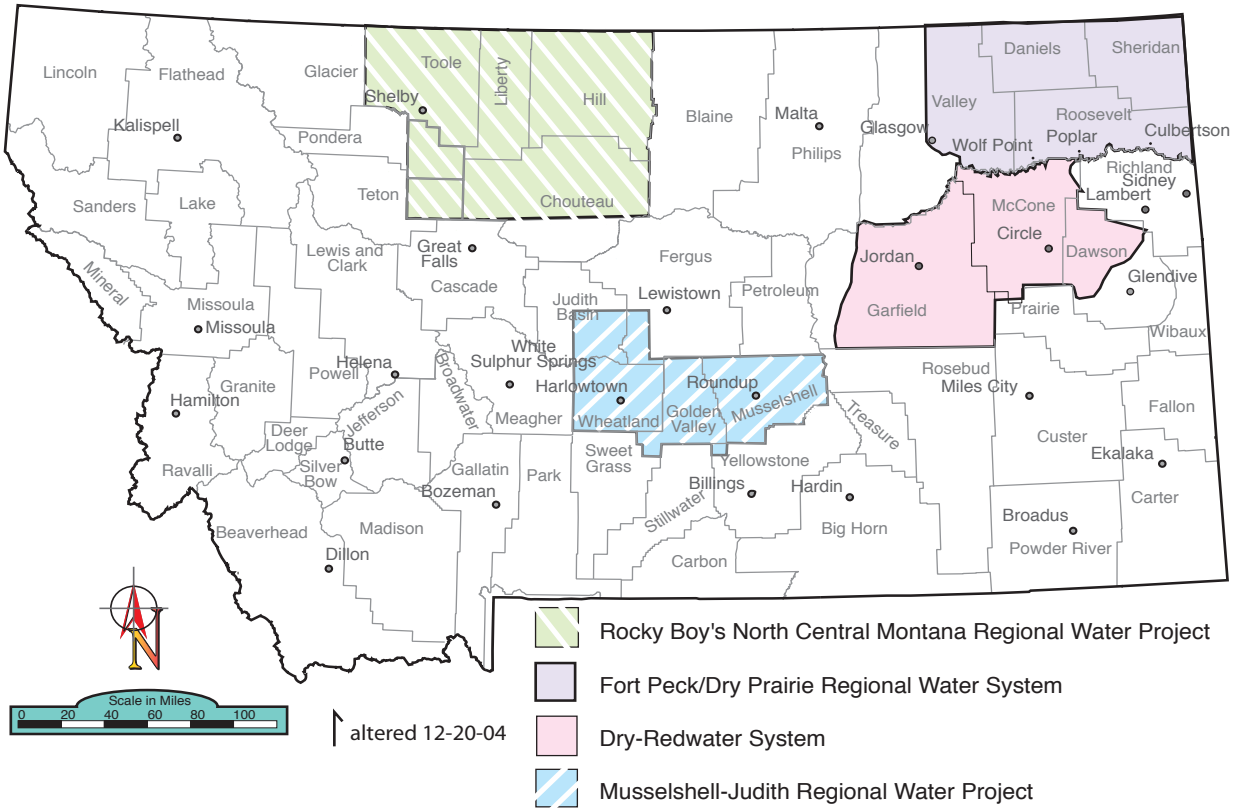
treatment plant location has been secured for a site positioned between the lake and the town of Circle. The Dry-Redwater Authority has also contracted with an environmental consulting firm to perform limited preliminary environmental studies, including a wetlands survey and endangered species investigation for the reservoir-to-Circle route.

- **The Musselshell-Judith Regional Water Project** is comprised of member systems along the Judith and lower Musselshell rivers through central Montana, reaching from the proposed well field site near Utica in Judith Basin County to the east, south, and southeast as far as Melstone in eastern Musselshell County. The communities of Harlowton and Roundup will be the two largest towns connected to the system. Water rights on the initial 3,700-foot-deep test well near Utica were secured in 2007. The project name was changed to the Musselshell-Judith Regional Water Project in 2007, to avoid confusion between this proposal and the North Central Montana Regional Water System. An appraisal level report has been published by the Musselshell-Judith Regional Water Authority's engineering firm, and a preliminary environmental study was begun in 2008.

Web sites featured in this section:

www.dnrc.mt.gov/cardd
www.dnrc.mt.gov/cardd/yellowstonerivercouncil

Figure 8
Regional Water System Service Areas



Forestry Division

Forestry Division

Ensure sustainability of Montana forests, rural lands, and communities through cooperative wildland fire protection, sound forest management practices, and by promoting a viable forest-based economy.

The Forestry Division, headquartered in Missoula, is responsible for planning and implementing forestry programs administered by the Fire and Aviation Management and Forestry Assistance bureaus through a network of field offices across the state. The division achieves this through the following goals:

- protecting the state's natural resources from wildfire, insect pests, and disease;
- sustaining Montana's forest and agricultural resources;
- promoting and supporting conservation practices on all lands in Montana;
- enforcing the state's forest practices laws in a manner both fair and consistent to all parties, and that meets the intent of the legislation, and
- encouraging the maintenance, planting, and management of trees and shrubs in Montana communities.

The Smokey Bear balloon visited Missoula, Kalispell, Helena, Lewistown, and Billings this spring. Photo by Pat Cross.

The division is also responsible for implementing legislative and policy-related mandates:

- ensuring the state's interests are represented in management of private, state, and federal forestlands;
- promoting the sustainability of Montana's forests and the human and natural resources derived from them, and
- providing informed decision-making support on forestry-related issues through accurate, timely, and objective analysis.

For more information on the division's organization, programs, and activities, please see our web site at www.dnrc.mt.gov/forestry.

Fire and Aviation Management Bureau

DNRC works with local and federal governments to ensure wildfire protection on state and private land within Montana.

The Fire and Aviation Management Bureau (F&AMB) works to *"provide resources, leadership, and coordination to Montana's wildfire services, accomplished through wildfire prevention, training, preparedness, and safe, aggressive suppression actions to protect lives, property, and natural resources."*

Protection

The F&AMB provides wildland fire leadership to Montana to protect the natural resources of the state by preventing and suppressing wildland fires. All wildlands in Montana have some form of fire protection. A total of 50,454,902 acres of state-owned and private lands is protected (see Figure 9). The F&AMB staffs 65 engine and water tender companies and seven helicopters to provide direct protection to 5.2 million acres. The program also loans over 350 engines and water tenders to local fire agencies and provides large fire assistance to local government.

Figure 9
Community Wildfire Protection Progress Map

Shaded counties are those with completed community wildfire protection plans.

Fire Prevention and the National Fire Plan

In FY 2008, the Fire Prevention Program conducted its annual Keep Montana Green (KMG) poster contest for Montana students. Contest winners and winners of the annual Keep Montana Green Prevention Awards were honored at the annual KMG Luncheon in Butte on the Montana Tech campus.

Firewise Workshops were conducted in Billings, Philipsburg, and Seeley Lake, providing participants with crucial information and insight on subdivision design and considerations in making communities Firewise. With the addition of Helena's Woodland Hills, Montana now boasts 10 communities that have been recognized as Firewise Communities.

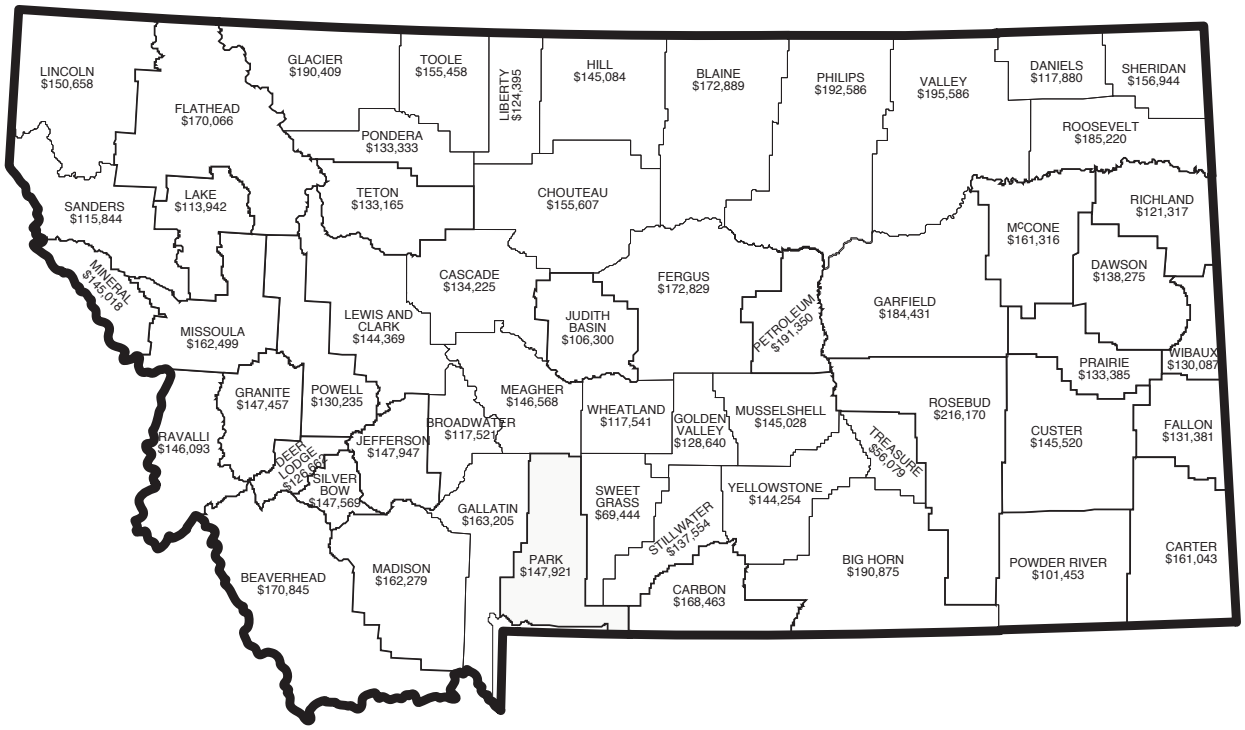
During FY 2008 the Prevention Program was awarded an $112,000 Federal Emergency Management Agency (FEMA) Assistance to Firefighters Grant. Among other things, this grant allowed the Prevention Program to:

- produce professional radio spots that ran across Montana nearly 9,000 times;
- produce professional artwork for 13 billboards that were displayed for three months in Missoula, Helena, Billings, Great Falls, Kalispell, Butte, Miles City, Lewistown, and Bozeman, and
- contract with the Smokey Bear Hot Air Balloon for a tour across the state highlighting the 2008 Wildfire Awareness Week. During the tour the Smokey Bear Balloon attracted thousands of visitors to launch events in Kalispell, Missoula, Helena, Lewistown, and Billings.

FireSafe Montana™

FireSafe Montana™ works in partnership with local, state, and federal agencies, as well as stakeholders and individuals, to provide locally led conservation and fire management programs and services. DNRC is a partner organization, providing financial assistance in the form of grants to support the mission of the organization. In February 2008, FireSafe™ hosted the second Montana Communities and Wildfire Conference, designed to bring together those involved with fuels mitigation and protecting communities from wildland fires.

Figure 10
Montana VFA/RFA Allocations by County for 2001-2008



Total allocations = $8,599,450 Including $357,560 statewide (not county-specific)

Table 11
Fire Protection by DNRC in FY 2008

Category	State and Private Lands (Acres)	Public Lands (Acres)	Total Acres
DNRC Direct Protection			
State and Private Lands	3,473,442		5,143,873
BLM Lands		694,665	
USDA Forest Service (USFS) Lands		950,322	
Tribal/BIA Lands		4,551	
U.S. Bureau of Reclamation (BOR) Lands		2,776	
U.S. FIsh and Wildlife Service (FWS) Lands		18,117	
State/County Cooperative Fire Protection[1]	45,309,480	0	45,309,480
Federal Direct Protection[2]			1,671,980
Protected by BIA (Tribal)	137,148		
Protected by BLM	68,561		
Protected by USFS	1,429,401		
Protected by FWS	36,870		
TOTALS	**50,454,902**	**1,670,431**	**52,125,333**

[1]**Includes all 56 counties in Montana** [2]**Subcontracted to federal agencies**

Community Wildfire Protection Plans (CWPP)

DNRC continues to assist local governments in developing CWPPs as directed in the Healthy Forest Restoration Act. Preparing a CWPP encourages collaboration and cooperation among interested stakeholders. It requires a risk assessment and prioritization of projects to mitigate those risks, regardless of land ownership. It encourages Firewise principles, providing homeowners with information on creating defensible space to reduce potential structure ignitability. By prioritizing projects, the program ensures that available funding goes to projects with the greatest needs within a county or community. Landowners receive direction on management activities that they can integrate into their own long-term plans. The process requires extensive public outreach, and the plan must be approved by local, county, and state governments and land management agencies.

Fuels Mitigation

A cornerstone of the DNRC National Fire Plan Program is delivery of fuels mitigation cost-share funding to communities and individual landowners statewide. In FY 2008, DNRC received $981,527 in cost-share assistance for 12 fuels mitigation projects statewide through the Western States Fire Managers Wildland Urban Interface Grant Programs and the Community Protection Fuels Mitigation Grant Program. Both programs are funded by the USFS and delivered by DNRC and its partners.

Volunteer and Rural Fire Assistance (VFA/RFA)

The Volunteer and Rural Fire Assistance Program provides grants to county fire agencies for equipment, training, and fire prevention materials. The program is funded by the USFS and U.S. Department of the Interior BLM. Local fire organizations submit requests to their respective county leaders, who prioritize proposals and forward a packet of requests to DNRC. Projects are funded based on recommendations from an interagency selection committee with members from the funding agencies. The Fire and Aviation Management Bureau administers agreements for approved projects in Montana.

Figure 10 shows the VFA/RFA funding allocation by county.

Fire Suppression

Direct Protection

DNRC provides direct protection to 5,143,873 acres. This includes 3,473,442 acres of state and private lands and 1.67 million acres of public lands (see Table 11).

State/County Cooperative Fire Protection

Under the State/County Cooperative Fire Protection Program, the department assists with protection of 45,309,480 acres of state and private lands. A network of 400 fire departments provides initial response to wildfires in 56 counties. DNRC assists on fires that escape the capabilities of the county and provides training, prevention materials, and equipment.

Figure 11
Number of Fires on State-Protected Land

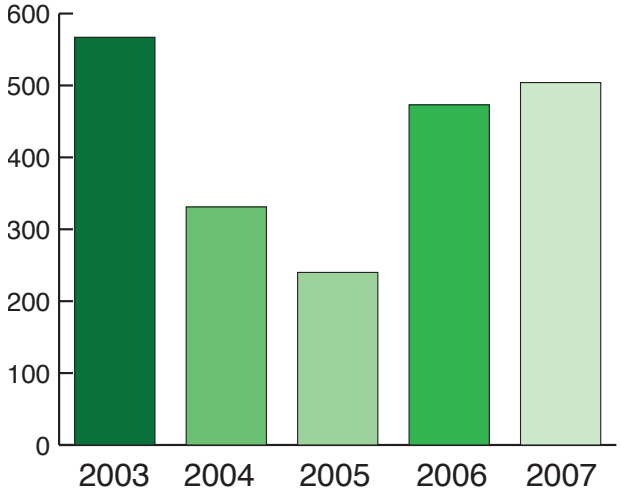
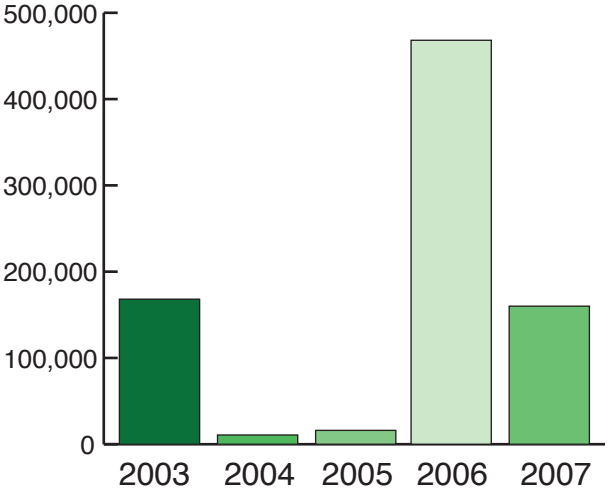


Figure 12
Acres Burned on State-Protected Land



DNRC contained an average of 94% of the direct protection fires to less than 10 acres in 2007. Figures 11 and 12 are based on direct protection and county assist fires.

Fire Prevention Poster from the 2008 Keep Montana Green Prevention Campaign.

Contracted Federal Protection

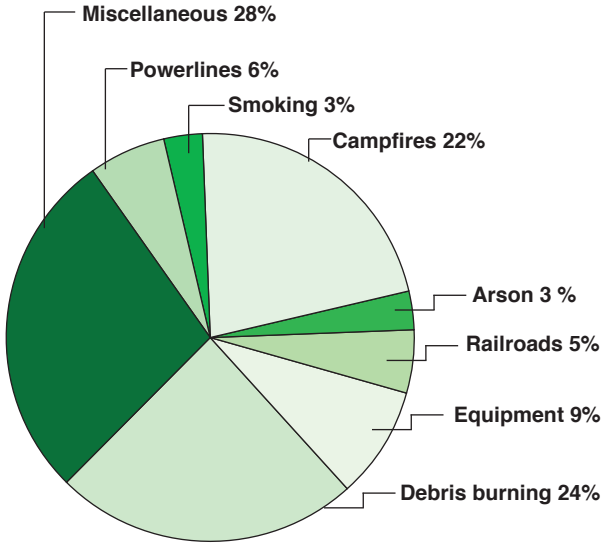
DNRC subcontracts fire protection for 1,671,980 acres of state and private lands to federal agencies. F&AMB also provides support and assistance to federal fire agencies and other states when appropriate.

The number of fires during the 2007 fire season was above the five-year average; 504 fires burned a total of 160,024 acres (see Figures 11 and 12). The average number of fires over the last five years is 423 per year, and the average number of acres burned over each of the last five years is 162,381. The annual acreage burned varied from 10,712 in 2004 to 468,164 in 2006.

Fire Training

The F&AMB provides training in fire prevention, detection, investigation, suppression, aviation, communications, safety, prescribed fire, participation on incident management teams, and wildland fire training instruction. In addition, F&AMB staff provide training opportunities for DNRC and local government overhead and management personnel at the Northern Rockies Interagency Training Center, National Fire Academy, and National Advanced Fire and Resource Institute.

Figure 13
Percentage of Human-Caused Fires, by Cause in Montana[3]
(5-Year Average)



[3] Lightning starts 50.4% of the fires; it is the most frequent cause of wildfires.

In FY 2008, 43 employees attended upper-level fire management/suppression courses conducted by the Northern Rockies Interagency Training Center for DNRC and local government. In the Northern Rockies Coordinating Group Zones, DNRC coordinated and instructed 138 courses for about 2,023 agency and local government participants, including DNRC employees. Through the State/County Cooperative Fire Protection Program, DNRC also sponsored 153 Suppression Skill, Incident Command System, Basic Wildland Firefighting, and Standards for Survival courses in 56 counties and nine specialized support training classes. DNRC maintains the

Interagency firefighters use a sand table to improve tactical decisions. Photo by Ted Mead.

Table 12
Equipment Development Program Projects in FY 2008

Built:	
Type 6 fire engines	26
Type 5 fire engines	2
600-gallon helicopter fuel truck	1
Flatbeds	37
Pump panels	37
Rebuilt pump heads	25

qualifications of and certifies several hundred DNRC and local government firefighters utilizing the Incident Qualification System.

Development and Support

Through its Equipment Development Program, DNRC obtains new vehicles and federal excess property and develops them into fire suppression equipment and vehicles. This equipment is used to support the DNRC Direct Protection and County Cooperative Fire Protection programs. In FY 2008, DNRC obtained supplies and vehicles through the Federal Excess Property programs. The state valued the acquisitions at $446,495, and an additional $601,396 was acquired directly for Montana counties.

The 128 individual development projects completed in FY 2008 are listed in Table 12.

Aviation

The Aviation Section operates and maintains a fleet of 10 aircraft, including seven helicopters and three fixed-wing airplanes. The three Cessna 180 series fixed-wing aircraft based in Helena, Missoula, and Kalispell are used primarily for fire patrol and personnel transportation. Three of the five Bell UH-1 series type 2 helicopters (also in Helena, Missoula, and Kalispell) are used for direct protection, and two are used for statewide fire support. Two light, type 3 Bell 206 B-III helicopters are stationed in Helena and are also available statewide. One is owned by the DEQ. DNRC maintains this aircraft and provides pilot services to DEQ in return for the right to use this aircraft for fire missions. The second light helicopter is used as a back-up aircraft or for additional coverage and fire administrative missions.

In FY 2008, these aircraft flew a total of 1,397.5 hours. Program statistics are shown in Table 13.

Table 13
FY 2008 Aviation Program Accomplishments

Water/retardant dropped	2,287,012 Gallons
Flight hours per operation	
Fire administration	6.2 hours
Fire detection/reconnaissance	594.1 hours
Fire suppression–initial attack and extended attack	466.8 hours
Fire training	308.1 hours
Non-fire missions	16.9 hours
False alarms	3.5 hours
Water bucket	1.9 hours
Total	**1,397.5 hours**

Forestry Assistance Bureau

The mission of the DNRC Forestry Assistance (FA) Bureau is to maintain and improve the health of Montana's forests, forested watersheds, and the communities that depend on them. FA promotes forest stewardship in communities and forestlands through information and education, technical assistance, financial assistance, partnerships, and forest practices regulation. The USFS State and Private Forestry Program provides funding for a variety of assistance programs.

State Conservation Seedling Nursery

The DNRC nursery produces and distributes seedlings for conservation plantings such as fire and logging reforestation, farmstead windbreaks, shelterbelts, wildlife habitat, stream stabilization, and other conservation uses. The nursery provides seedlings to private landowners in Montana, the DNRC Trust Land Management Division, the Conservation Reserve Program (CRP), Tribal agencies, the Wildlife Habitat Incentives Program, Pheasants Forever, and numerous other state and private conservation programs and organizations. The nursery has expanded its container production facilities and initiated production of numerous new species and stock types in response to the growing demand for restoration plant materials in the state. Table 14 summarizes seedling sales and nursery revenues from FY 2006 to FY 2008.

In FY 2008, all nursery operations and activities were funded from the nursery proprietary account. DNRC nursery seedlings were planted in 51 of 56 counties in the state, with the greatest number going to Rosebud, Silver Bow, Missoula, Fergus, and Lewis and Clark counties. The number of landowners using state nursery seedlings and the number of seedlings used in various conservation practices are itemized in Table 15.

Tree City USA sign in Libby. Photo by Jamie Kirby.

FY 2008 Nursery accomplishments include:

- increased greenhouse production space 50% by retrofitting a research greenhouse for seedling production;
- obtained new production contracts for Superfund site restoration, grayling recovery plantings, and private land reforestation, increasing seedling sales by 28.2%, and
- increased nursery program revenues by 24.1%.

Forest Pest Management Program

The Forest Pest Management Program provides technical assistance, training and workshops, and aerial surveillance data to help state land managers, professional forest resource managers, and private landowners recognize and manage forest insects and diseases. Projects are conducted in cooperation with the USFS Northern Region Forest Health Protection Group. (Some of the FY 2008 program accomplishments are listed in Table 16.)

Forest health conditions are highlighted in the *2007 Montana Forest Insect and Disease Conditions and Program Highlights* report available on the web at www.dnrc.mt.gov/forestry/assistance/pests.

Private Forestry Assistance

The Forestry Assistance Program provides a range of services to private forest landowners and economic development organizations (see Table 17). By conveying forestry knowledge, DNRC helps Montanans practice forestland stewardship.

Fire Hazard Reduction

The Fire Hazard Reduction Program ensures an appropriate level of forest fuel hazard reduction as a result of logging on private lands in Montana (see Table 18).

Forest Practices

The Forest Practices Program provides information and education about the Streamside Management Zone (SMZ) Law and forestry Best Management Practices (BMPs) to individuals, groups, corporations, and other agencies (see Table 19). The program encourages and/or requires the protection of soil and water resources during timber-harvesting operations.

Table 14
Nursery Seedling Sales from FY 2006 to FY 2008

	Conservation Seedling Program				Trust Land Seedling Program			
Fiscal Year	Seedlings Produced	Seedlings Delivered	Nursery Revenue	Nursery Expenditures	Nursery Cash Balance	Seedlings Requested	Seedlings Delivered	Seedling Expenditures
2006	826,443	767,000	$ 381,823	$ 387,027	$ 11,986	115,480	95,889	$ 35,111
2007	845,244	735,202	$ 467,132	$ 439,438	$ 39,680	114,400	110,000	$ 37,591
2008	1,036,772	944,050	$ 579,990	$ 559,891	$ 59,780	75,630	67,820	$ 29,919

Table 15
FY 2008 Conservation Seedling Use

Conservation Practice	Reforestation	Wildlife Habitat	Windbreaks/ Shelterbelts	Stream Restoration	Other Uses	Totals
Number of Seedlings	544,372	61,133	187,755	88,637	62,153	944,050
Number of Landowners	112	66	588	39	101	906

In cooperation with the Montana Logging Association, DNRC conducted SMZ/BMP workshops in seven Montana communities for 229 loggers and landowners.

Urban and Community Forestry

The Montana Urban and Community Forestry (UCF) Program assists communities with development and maintenance to sustain local urban forestry programs. The program provides technical, financial, and local volunteer coordination assistance to communities and tree care professionals, and information and education to the public. The program partners with federal agencies, Montana RC&D areas, universities, green industries, and private organizations. Staff members also participate with the Montana League of Cities and Towns, local tree and park boards, and volunteer organizations. Major categories of assistance are shown in Table 20.

Biomass Utilization and Fuels for Schools and Beyond (FFS&B)

As of July 2008, the DNRC FFS&B Program has awarded construction grants to 11 facilities, with nine in operation. Recent projects completed include wood biomass boiler installations in public schools in Eureka

Table 16
FY 2008 Forest Pest Management Activities

Technical assistance on state and private forest lands	154 assists
Training sessions and workshops for private landowners and professional land managers	742 people
Aerial surveillance for insect and disease activity	25 million acres
Gypsy moth surveillance in Missoula and Granite counties	53 traps

Table 17
FY 2008 Private Forestry Assistance Activities

Assistance Provided	Total Number	Total Dollars
Total forestry assists	579	
Timber sale assists	62 = 4,128 MBF	
Information/education/outreach (person days)[4]	318	
Conservation education–arborist training, Natural Resource Youth Camp		$ 7,500
Forestry Assistance Cost Share (Forest Lands Enhancement Program)	1 owner/1 cons. dist.	$ 49,000

[4] includes a variety of projects

Table 18
FY 2008 Fire Hazard Reduction Activities

Activity	Total (No. or Dollars)
Newly opened fire hazard reduction agreements (FHRAs)	794
Certified and closed FHRAs	1,253
Administrative fees collected	$ 94,722
Montana State Univerity (MSU) Extension Forestry–landowner education fees collected	$ 53,657

Table 19
FY 2008 Forest Practices Program Activities

Activity	Number
BMP pre-harvest informational packages mailed to landowners	1,056
Pre-harvest, during harvest, and post-harvest BMP/SMZ evaluations	145
Alternative practices issued	42
SMZ warnings issued	4
Forest practice violations with penalty	1

and Kalispell, on The University of Montana-Western campus in Dillon, and two whole-tree pellet-fired systems in Troy and Townsend schools. Program staff are working with Central Park Center and Montana State Prison, both in Deer Lodge, to implement their projects. Montana FFS&B commissioned over 60 pre-feasibility assessments, and DNRC and the RC&D areas continue to assist in identifying potential Montana projects.

Montana DNRC co-hosted a national workshop on implementing biomass boilers in October 2007, which was organized in partnership with the USFS, Bitter Root RC&D, and National Association of Resource Conservation & Development councils. The Bitter Root RC&D has coordinated voluntary stack testing at several Montana facilities, at the request and with the financial assistance of Montana FFS&B, to better understand emissions of modern biomass systems. A web-based forum for biomass boiler operators has been added to the program web site which includes technical, financial, and educational information for facilities and the general public.

The FFS&B Program continues to expand its partnerships with other state and federal agencies, energy providers, regional planners, economic development groups, and the forest products industry. While seeing success on a smaller scale with individual facilities, program staff are working to develop larger markets for biomass utilization for energy by exploring the potential for district heating/energy systems for larger developments and combined heat and power, as well as other value-added markets for forest residues.

Rick Scheele, boiler operator and city mayor, reveals the energy potential of wood chips in Darby School's biomass boiler system. Photo by Angela Farr.

Web sites featured in this section:

www.dnrc.mt.gov/forestry
www.dnrc.mt.gov/forestry/assistance/pests

Table 20
FY 2008 Urban and Community Forestry Activities

Activity	Total (No. or Dollars)
Communities with "developing" and/or "managing" programs[5]	86
Number of Montana "Tree City USA" communities[6]	40
Total population living in Montana Tree City USA communities	434,490
Total expenditures of Montana Tree City USA communities	$ 3.2 million
Total amount of UCF Arbor Day grants awarded	$ 41,700
Total amount of UCF Program Development grants awarded	$ 114,500
International Society of Arboriculture credits offered through Montana UCF	16

[5] 184 total Montana communities. "Managing" communities have a management plan, tree ordinance, tree board/advisory group, and professional staff. "Developing" communities have at least one of the four qualifications.

[6] Tree City USA is a national program through the National Arbor Day Foundation. Communities must have a tree ordinance, tree board, a $2 per capita annual budget, and a designated Arbor Day Celebration.

Oil and Gas Conservation Division

Oil and Gas Conservation Division

The Board and Staff

The quasi-judicial Board of Oil and Gas Conservation (BOGC) and its staff in the Oil and Gas Conservation Division regulate the exploration and production of oil and gas in the State of Montana and are attached to the DNRC for administrative purposes.

The BOGC consists of seven members appointed to four-year terms by the governor. The board meets seven times per year, usually in Billings, for business meetings and public hearings. Staff is based at the technical office in Billings, an administrative office in Helena, and a field office in Shelby. Field inspectors are stationed in Glendive, Plentywood, Roundup, Shelby, and Sidney.

Please visit the board's web site at www.bogc.dnrc.mt.gov and click on the "About MBOGC" tab for a listing of board members, office locations, and staff.

Board Chairman Linda Nelson, board member Joan Duffield and board member Ron Efta climb a drilling rig in Sidney Montana, July 2008. Photo by Steve Sasaki.

Programs

The board and staff administer two programs: the Oil and Gas Regulatory Program and the Underground Injection Control (UIC) Program.

The Oil and Gas Regulatory Program has four primary goals: prevention of waste of oil and gas, conservation of oil and gas, protection of correlative rights, and prevention of harm to surface or underground resources from oil and gas operations. To meet these goals, the board and staff regulate drilling locations, pits, surface locations, well plugging activities, and approximately 10,770 producing oil and gas wells in the state. The number of producing oil and gas wells in the state has steadily increased since 2002.

The UIC Program is administered through a primacy agreement with the U.S. EPA. The goal of the program is to protect underground sources of drinking water from contamination that could result from improper disposal of liquid oil field wastes. The board regulates over 1,000 injection wells under the EPA primacy agreement.

Funding

The Oil and Gas Conservation Division uses legislatively appropriated funds from six main sources to administer the programs of the board.

- **Privilege and license taxes**. The board receives a percentage of privilege and license taxes paid by oil and gas operators. Statute authorizes the board to receive up to 3/10's of one percent of the market value of crude petroleum and natural gas produced, saved, marketed, and stored in the state. The board again reduced its privilege and license tax allocation in 2006[7], from 1.8/10's of one percent to 0.9/10's of one percent. These funds support the Oil and Gas Regulatory Program.
- **Annual injection well fees**. The board is statutorily authorized to charge an annual fee of up to $300 per injection well to help defray the cost of administering the UIC Program. The board has set the annual injection well fee at $200 per well.
- **Federal grant funds**. The board receives grant funds from the EPA to administer the UIC Program.
- **Bond forfeitures**. Per statute, oil and gas operators in the state must post a bond with the board to assure their wells will be properly plugged and abandoned. The board can order forfeiture of those bonds, with notice, for failure to perform. The board uses forfeited bond funds to plug orphaned and abandoned wells.
- **Interest from the RIT Fund**. The board is statutorily appropriated up to $50,000 each

[7] The board first reduced its allocation in 2001, from 3/10's of one percent to 2.6/10's of one percent. In 2005, the board reduced it to 1.8/10's of one percent.

biennium from RIT interest income. The board uses RIT interest funds to support emergency clean-up or plugging activities, and to plug orphaned and abandoned wells.

- **State grant funds**. The board receives Reclamation and Development Grant (RDG) funds from the DNRC Conservation and Resource Development Division. These funds are used to plug orphaned and abandoned wells.

2007 Activity Review

Oil production in the state declined in 2007, primarily, due to decreased production from the Bakken Formation in Elm Coulee Field in the northeastern part of the state. Associated and non-associated gas[8] production continued to increase along with new oil and gas well completions.

2007 Program Highlights

- The board received 431 applications for public hearing and issued 366 orders.
- The board held its September 2007 business meeting and public hearing in Havre, and toured a gas plant and a drilling site in the area.
- The board plugged 23 orphaned wells and restored their locations at a cost of $270,949, and spent $12,500 for an emergency clean-up of a saltwater disposal site.
- Field staff performed 4,933 inspections: 404 of the inspections failed, 265 inspections were to witness plugging or mechanical integrity tests, 33 inspections resulted from complaints made to the board or staff, and 19 inspections were emergency responses.
- Staff received notice of 34 new seismic projects.

Web sites featured in this section:

www.bogc.dnrc.mt.gov

Table 21
2007 Summary

Production	Reported Volume	Change from Previous Years
Total liquids production	34,857,704 barrels	-3.84%
Oil	34,85.3,196 barrels	-3.83%
Condensate	4,508 barrels	-40.63%
Total gas production	120,765,222 MCF (thousand cubic feet)	5.86%
Associated gas	25,291,643 MCF	22.26%
Natural gas	95,473,579 MCF	2.23%
Permits		
Re-issued permits	503	
New wells permitted	839	
Horizontal wells	153	
Vertical wells	686	
Board Orders		
Total number of orders issued (included the following actions):	366	
Exception to spacing or field rule	99	
Field delineation,enlargement, or reduction	27	
Certification for tax incentive	2	
Temporary or permanent spacing unit designation	167	
Class II injection permits	22	

[8] Associated gas is gas produced from an oil well; non-associated gas comes from a gas well.

Table 22
2007 County Drilling and Production Statistics

	Production			Well Completions				
County	Oil Barrels	Assoc. Gas MCF	Gas MCF	Oil	Gas	CBM	Dry	Service
Big Horn	61,559	0	13,062,106	0	0	63	1	6
Blaine	228,270	0	13,035,474	2	39	0	13	0
Carbon	457,110	1,142,511	810,146	0	0	0	1	0
Carter	14,734	0	96,209	1	0	0	0	0
Chouteau	0	0	1,619,986	0	8	0	2	0
Custer	0	0	79,839	0	0	0	0	0
Daniels	10,033	0	0	0	0	0	0	0
Dawson	540,988	210,343	0	0	0	0	0	0
Fallon	7,251,299	4,899,863	21,893,648	2	116	0	0	2
Fergus	0	0	59,850	0	0	0	0	0
Garfield	14,733	2,190	0	0	3	0	0	0
Glacier	454,270	113,720	1,584,277	2	2	0	1	0
Golden Valley	0	0	94,673	0	0	0	0	0
Hill	2,151	0	14,684,022	0	53	0	7	0
Liberty	78,325	27,028	1,921,449	0	4	0	0	1
McCone	13,226	0	0	0	1	0	0	0
Musselshell	144,731	6,601	0	0	0	0	0	0
Park	0	0	0	1	0	0	0	0
Petroleum	26,326	3,936	0	2	0	0	0	0
Phillips	0	0	19,986,323	0	128	0	3	0
Pondera	131,204	0	548,295	0	3	0	1	0
Powder River	335,830	11,657	83,836	0	0	0	0	0
Prairie	93,051	8,039	1,442	0	0	0	0	0
Richland	20,148,381	16,731,033	40	117	0	0	1	1
Roosevelt	1,399,047	761,859	659	9	0	0	1	1
Rosebud	273,700	14,835	0	0	4	0	0	0
Sheridan	1,733,888	876,058	0	12	0	0	4	2
Stillwater	0	0	583,553	1	0	0	0	0
Sweet Grass	0	0	69,189	0	0	0	0	0
Teton	51,535	0	1,507	3	0	0	0	0
Toole	456,536	200,305	3,801,038	13	12	0	14	0
Valley	122,077	10,068	1,122,001	0	1	0	1	0
Wibaux	791,879	271,597	334,017	0	0	0	1	0
Yellowstone	22,821	0	0	1	0	0	6	0
Total:	**34,857,704**	**25,291,643**	**95,473,579**	**166**	**374**	**63**	**57**	**11**

Table 23
Five-Year Production

	2003	2004	2005	2006	2007
Oil Production (Barrels)					
Northern Montana	1,275,084	1,266,790	1,254,747	1,314,007	1,399,836
Central	598,971	565,150	535,904	501,704	468,604
South Central	572,145	555,662	534,180	555,731	530,323
Northeastern	16,823,588	22,164,424	30,296,287	33,695,855	32,103,869
Southeastern	141,033	158,632	158,002	175,332	350,564
Total	19,410,821	24,710,658	32,779,120	36,242,629	34,853,196
Number of Producing Oil Wells					
Northern Montana	1,769	1,798	1,827	1,874	1,901
Central	224	221	220	214	215
South Central	128	125	131	130	128
Northeastern	1,434	1,546	1,707	1,878	2,004
Southeastern	52	54	67	70	68
Total	**3,607**	**3,744**	**3,952**	**4,166**	**4,316**
Average Daily Oil Production Per Well (Barrels)					
Northern Montana	2.6	2.5	2.4	2.4	2.5
Central	9.5	9.0	8.6	8.2	8.2
South Central	14.3	14.0	13.7	12.9	12.8
Northeastern	36.7	45.8	56.8	56.3	49.2
Southeastern	8.4	9.5	9.3	8.4	18.1
State Average	**18.1**	**22.1**	**27.7**	**28.4**	**26.0**
Non-associated Gas Production in MCF					
Northern Montana	55,254,052	55,975,911	56,501,221	56,885,846	58,304,372
Central	201,358	126,541	180,941	254,610	154,523
South Central	8,492,510	13,598,459	12,881,341	13,065,601	14,524,994
Northeastern	14,188,647	17,559,564	21,944,174	23,009,195	22,229,806
Southeastern	287,241	256,582	196,211	177,262	259,884
Total	**78,423,808**	**87,517,057**	**91,703,888**	**93,392,514**	**95,473,579**
Number of Producing Gas Wells					
Northern Montana	3,939	4,114	4,276	4,426	4,616
Central	6	5	8	8	7
South Central	378	486	596	835	390
Northeastern	489	588	704	771	879
Southeastern	7	7	7	22	22
Total	**4,819**	**5,200**	**5,564**	**6,062**	**6,454**

Table 23 (cont'd)
Five-Year Production

	2003	2004	2005	2006	2007
Average Daily Gas Production Per Well (MCF)					
Northern Montana	41.7	41.1	39.6	38.1	38.2
Central	101.9	76.7	98.0	107.4	63.1
South Central	81.4	86.2	71.9	57.1	48.3
Northeastern	89.5	94.1	97.6	89.2	77.7
Southeastern	124.8	105.5	80.7	72.5	46.4
Total	**49.2**	**51.2**	**49.9**	**47.1**	**45.0**

Reserved Water Rights Compact Commission

Reserved Water Rights Compact Commission

Working to *"conclude compacts for the equitable division and apportionment of waters between the State and its people and the several Indian Tribes claiming reserved water rights within the state"* (85-2-701, MCA*) and "between the State and its people and the federal government claiming non-Indian reserved waters within the state"* (85-2-703, MCA).

The Montana Legislature created the Reserved Water Rights Compact Commission (RWRCC) in 1979, the same year that it created the Montana Water Court. The purpose of the commission is to negotiate water rights settlements, on behalf of the State of Montana, with Indian Tribes and federal agencies claiming federal reserved water rights in the state. For more information on the commission, and for links to the text of all completed compacts, please see the RWRCC web site at www.dnrc.mt.gov/rwrcc.

Kicking Horse Diversion Dam, Flathead Reservation. Photo by Ethan Mace.

The Compact Commission

The RWRCC comprises nine members who serve four-year terms. One member is appointed by the Attorney General's Office, four by the Governor's Office, two by the Speaker of the House, and two by the President of the Senate. Current RWRCC members are listed on the RWRCC web site. RWRCC is supported by an eight-member staff including hydrologists, an agricultural engineer, attorneys, a geographic information specialist, an historian, and a staff director.

Federal Reserved Water Rights

A federal reserved water right is a right to water that was created when Congress or the President of the United States reserved land out of the public domain. Federal reserves in Montana are shown in Figure 14. More background on federal reserved water rights may be found on the RWRCC web site.

Current Negotiations

In FY 2008, commission members and staff concentrated on the following Tribal and federal negotiations:

Blackfeet Tribe of the Blackfeet Reservation

In December 2007 the Tribe and the RWRCC came to agreement on reserved water rights for the Blackfeet Tribe. In addition, in January 2008, the Tribe and the Governor signed an agreement allowing that full use of the Tribe's Senior Birch Creek water right be deferred to mitigate the impact of the senior right on state-based water right holders on Birch Creek, and providing compensation to the Tribe. The 2007 Montana Legislature passed legislation creating a mitigation account within the state special revenue fund to mitigate impacts on water right holders. It created an infrastructure account for water-related projects on the Blackfeet Reservation. The DNRC administers both accounts. Federal legislation for the compact is being drafted for Congress and the compact will be presented to the 2009 Montana Legislature for approval.

Confederated Salish and Kootenai Tribes (CSKT) of the Flathead Reservation

The parties conducted monthly negotiating sessions and Tribal, federal, and state legal and technical teams have held meetings or telephone conferences at least once each month. The parties hope to submit a compact to the Montana Legislature in 2009.

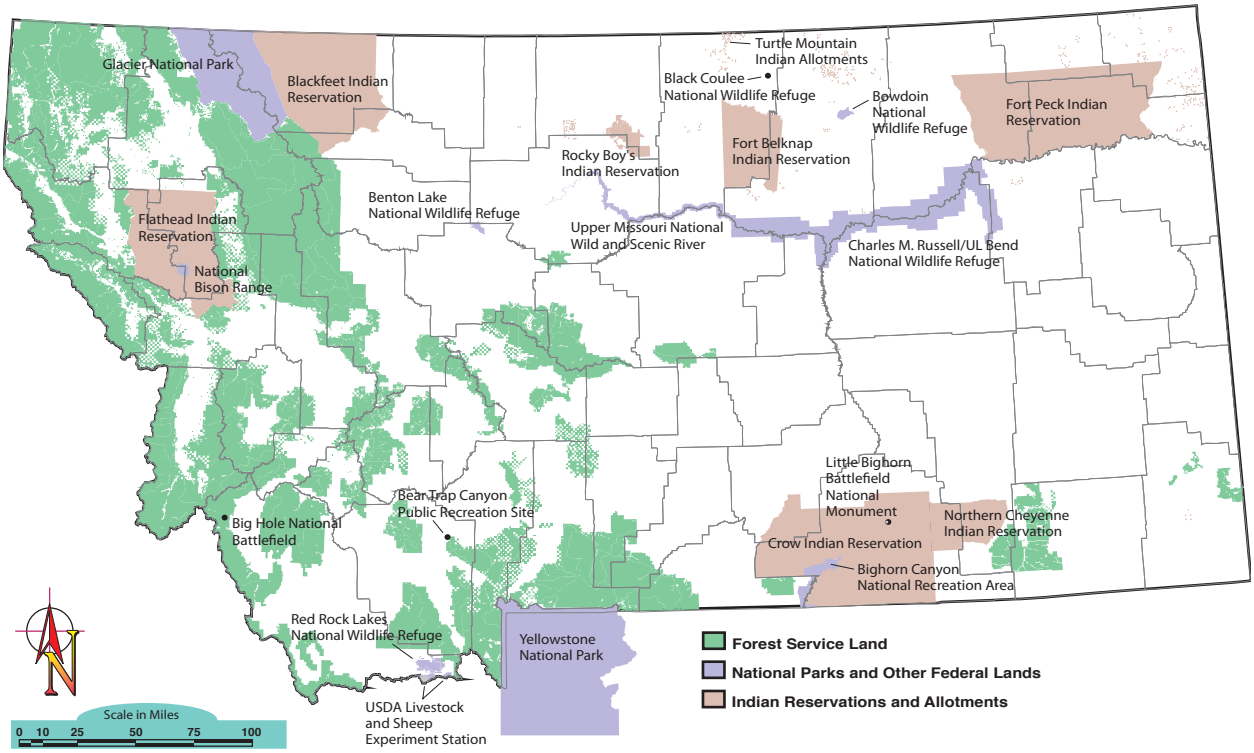
Crow Tribe of the Crow Reservation

Federal legislation drafted by the Crow Tribe and RWRCC legal counsel has been introduced to Congress. Following passage of federal legislation, the compact must be approved by a Tribal referendum and the Montana Water Court.

Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation

Tribal attorneys and RWRCC legal counsel are drafting federal legislation for submission to Congress. The compact must then be approved by a Tribal referendum and finally by the Montana Water Court.

Figure 14
Federal Reserves in Montana



U.S. Department of the Interior, Fish and Wildlife Service, National Wildlife Refuges

The RWRCC and the U.S. FWS agreed on a compact for Bowdoin National Wildlife Refuge near Malta. The compact passed the 2007 Montana Legislature and was signed by the Governor. In 2008, DNRC staff continued to monitor salinity levels in Beaver Creek, a tributary of the Milk River. RWRCC and FWS hydrologists are utilizing the data in designing a system to mitigate the impact of refuge salts on downstream water users.

Negotiations with FWS on two remaining units, Charles M. Russell/UL Bend National Wildlife Refuge and the National Bison Range, have not been completed. The National Bison Range will be negotiated under the umbrella of CSKT negotiations; refuge water rights will remain with the FWS.

U.S. Department of Agriculture, National Forests

A compact between the USDA Forest Service and the RWRCC was reached, passed by the 2007 Montana Legislature, and signed by the Governor and appropriate federal officials. The compact recognizes reserved water rights for the Forest Service for administrative uses and emergency fire fighting, and for instream flows for the South Fork Flathead Wild and Scenic River. The compact uses state law to create state-based water rights for instream flow on National Forest System lands. The compact is now going through the Montana Water Court process.

U.S. Department of Agriculture, Agricultural Research Service; Livestock, Range, and Research Laboratory (Fort Keogh); and Sheep Experiment Station

Compacts passed the 2007 Montana Legislature for the USDA Agricultural Research Service; Livestock, Range, and Research Laboratory (Fort Keogh), and the Sheep Experiment Station near Lima.

Other Reserved Rights

Members of the Turtle Mountain Band of Chippewa own numerous small allotments scattered throughout Montana. The RWRCC has met with the Tribe to discuss how to resolve potential water rights associated with the parcels. As of 2008, the United States has not assigned a federal team which is required for potential negotiations with the Tribe.

Completed Compacts

Table 24
Compacts Concluded by the Reserved Water Rights Compact Commission

Compact	Date Finalized
Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation 85-20-201, MCA	May 1985
Northern Cheyenne Tribe 85-20-301, MCA PL 102-374	April 1991
U.S. Department of the Interior, National Park Service Yellowstone National Park Glacier National Park Big Hole National Battlefield 85-20-401, MCA	January 1994
U.S. Department of the Interior, National Park Service Little Bighorn Battlefield National Monument Bighorn Canyon National Recreation Area 85-20-401, MCA	May 1995
U.S. Department of the Interior, Bureau of Land Management Wild and Scenic Missouri River Bear Trap Canyon Public Recreation Site, Madison River 85-20-501, MCA	March 1997
U.S. Fish and Wildlife Service Benton Lake National Wildlife Refuge Black Coulee National Wildlife Refuge 85-20-701, MCA	March 1997
Chippewa Cree Tribe of the Rocky Boy's Indian Reservation 85-20-601, MCA PL 106-163	April 1997
U.S. Fish and Wildlife Service Red Rock Lakes National Wildlife Refuge 85-20-801, MCA	April 1999
Crow Tribe 85-20-901, MCA	June 1999, Special Legislative Session
Gros Ventre and Assiniboine Tribes of the Fort Belknap Reservation 85-20-1001, MCA	April 2001
U.S. Fish and Wildlife Service Bowdoin National Wildlife Refuge 85-20-1301, MCA	March 2007

Table 24 (cont'd)
Compacts Concluded by the Reserved Water Rights Compact Commission

Compact	Date Finalized
U.S. Department of Agriculture Agricultural Research Service, Sheep Experiment Station 85-20-1201, MCA	March 2007
U.S. Department of Agriculture Agricultural Research Service, Livestock, Range, and Research Laboratory (Fort Keogh) 85-20-1101, MCA	March 2007
U.S. Department of Agriculture Forest Service 85-20-1401, MCA	April 2007

2007 State Legislation for proposed Blackfeet–Montana Compact

Blackfeet Compact–reserved 85-20-1501, 85-20-1503, 85-20-1504, 85-20-1505, and 85-20-1506, MCA	This legislation created a mitigation account within the state special revenue fund, among other things, and creates funding to mitigate economic and hydrologic impacts on water right holders. It created an infrastructure account to be used only for water-related infrastructure projects on the Blackfeet Indian Reservation. DNRC administers the accounts and funds may not be used unless a Blackfeet-Montana compact is ratified by the Legislature, Tribe, and United States. Draft federal legislation is moving forward.

Web sites featured in this section:

www.dnrc.mt.gov/rwrcc

Trust Land Management Division

Trust Land Management Division

Managing the state of Montana's trust land resources to produce revenues for the trust beneficiaries while considering environmental factors and protecting the future income-generating capacity of the land.

Overview

General background information on the Trust Land Management Division (TLMD) is available on the department's web site: www.dnrc.mt.gov/trust.

History

By the Enabling Act approved February 22, 1889, the Congress of the United States granted to the state of Montana, for Common Schools support, sections 16 and 36 in every township within the state. Some of these sections had been homesteaded, some were within the boundaries of Indian reservations, and others had been disposed of before passage of the Enabling Act. Other lands were selected by the state in lieu of these lands.

The Enabling Act and subsequent acts also granted acreage for other educational and state institutions, in addition to the Common Schools. The trust beneficiaries of these institutions include:

- The University of Montana
- Montana State University–Morrill Grant
- Montana State University–Second Grant
- Montana Tech of The University of Montana
- State Normal School (Montana State University–Billings and The University of Montana–Western)
- School for the Deaf and Blind
- State Reform School (Pine Hills)
- Veterans Home
- Public Buildings

In FY 2007, 2,599.88 acres were donated by the Anton Sir Estate for school trust land. This donation was split between the School for the Deaf and Blind, the Montana Developmental Center, and the Montana State Hospital.

The total acreage (see Figure 15) has fluctuated through the years due to land sales and acquisitions. Surface acreage at the end of FY 2008 totals more than 5.1 million acres; mineral acreage exceeds 6.2 million acres. Mineral acreage now exceeds surface acreage because the mineral estate has been retained when lands were sold.

School trust land in the foreground of the Sawtooth Mountain Range. Photo by Casey Kellogg.

FIGURE 15
CURRENT LAND OWNERSHIP
(as of August 19, 2008)

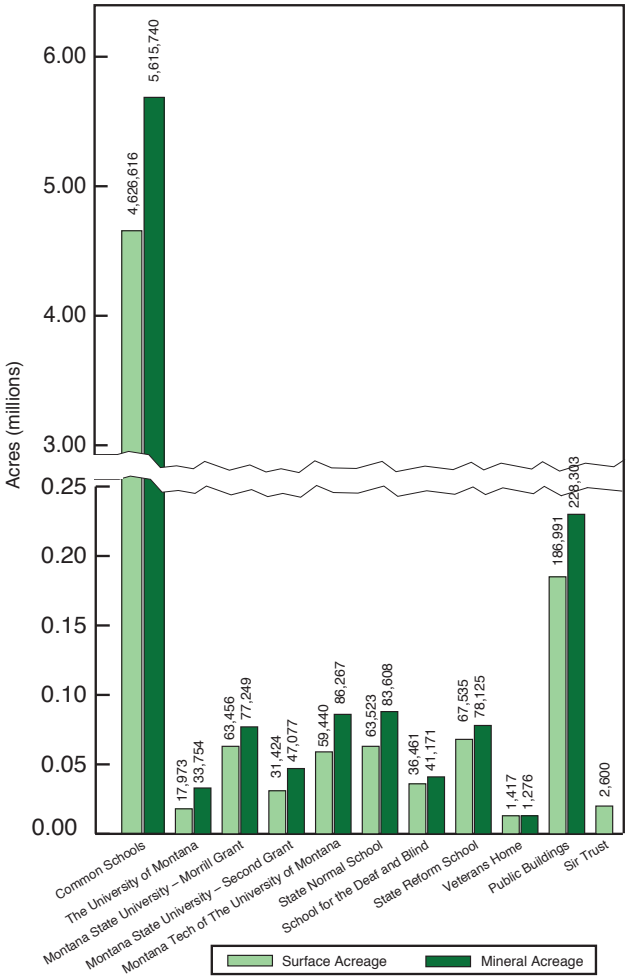
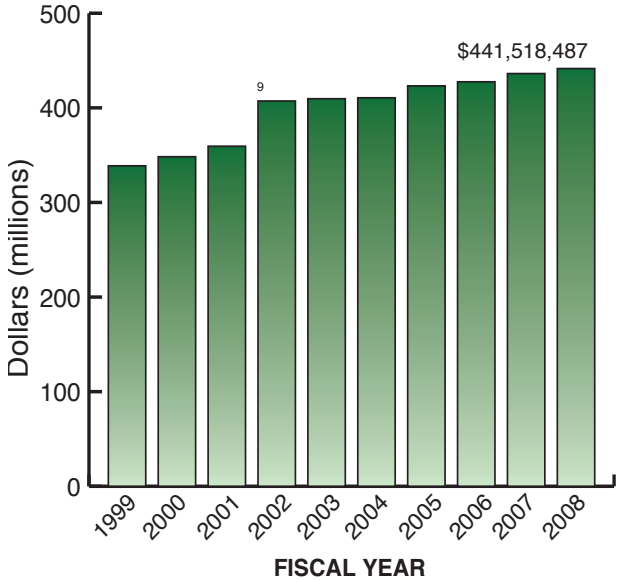


Figure 16
Permanent Fund Balance



[9] FY 2002 total includes $46.4 million in coal trust loan proceeds, pursuant to Senate Bill 495 (2001 Legislature).

The Permanent Fund

The Enabling Act states that proceeds from the sale and permanent disposition of any of the trust lands, or part thereof, shall constitute permanent funds for the support and maintenance of public schools and the various state institutions for which the lands had been granted. The Montana Constitution provides that these permanent funds shall forever remain inviolate, guaranteed by the state of Montana against loss or diversion. These funds are often referred to as "nondistributable." Figure 16 shows the Permanent Fund balance over the last 10 years. The balance of the Permanent Fund was $441,518,487 for FY 2008.

Other Revenues

Table 27 shows the gross distributable and nondistributable interest and income for each of the trust beneficiaries. In FY 2008, the division used a portion of trust land revenues to fund administrative appropriations as shown in Table 25.

In addition to management activities on behalf of trust beneficiaries, the division generated other revenues and distributions in FY 2008. The five-year summary presented in Table 28 shows gross revenues of over $107 million for all division activities. Table 26 provides a reconciliation of other revenues and distributions from the Table 27 and Table 28 summaries.

Technology Acquisition and Depreciation Fund

In FY 2008, the TLMD generated $1,948,830 from the sale of timber on Common Schools land for the Technology Acquisition and Depreciation Fund, pursuant to 20-9-343, MCA. This fund is administered by the Office of Public Instruction and used for purchases as defined in 20-9-533, MCA.

Senate Bill 495

The DNRC repaid the $46.366 million coal trust loan in FY 2008. Cumulative interest paid was $17.131 million, for a total loan cost of $63.497 million. Common Schools mineral royalty revenues available after loan payoff totaled $15.383 million, which was deposited into the School Facility Improvement Fund. The coal trust loan purchased $138.895 million in future royalty revenues, of which $101.832 million has been generated and redirected pursuant to the provisions of Senate Bill 495 and subsequent legislation. The department anticipates the remaining $37.063 million will be generated and

Table 25
Funding Sources of Trust Land Administration

Trust Administration Account (77-1-108, MCA) appropriation	$ 4,206,307
Timber Sale Account (77-5-204, MCA) appropriation	4,261,613
Forest Improvement Fees (77-5-204, MCA) collections	1,098,577
Resource Development Account (77-1-604, MCA) collections	858,217
Recreational Use Account (77-1-808, MCA) collections	96,176
Commercial Leasing Account (77-1-905, MCA) collections	69,162
Land Banking Account (77-2-362 (2)(b), MCA appropriation	255,001
Total	**$ 10,845,053**

Table 26
Reconciliation of Revenues and Distributions

Gross distributable revenues	$ 67,941,250
Gross nondistributable revenues	5,928,501
Technology Acquisition Fund	1,948,830
School Facility Improvement Fund	15,382,591
Senate Bill 495 debt service	11,856,582
Forest Improvement	1,098,577
Land Banking Sale Proceeds	2,781,630
General Fund revenues	41,444
Nonland grant Income and other revenues	160,847
Total	**$ 107,140,252**

Table 27
Revenues by Trust FY 2008

Distributable Revenues Trust	Gross Distributable Revenues	Resource Development	Timber Sale Account	Trust Admin. Account[10]	Recreational Use Account	Commercial Leasing Account	Net Distributable Revenues
Common Schools [11]	$61,319,054	$785,520	$3,117,074	$3,808,804	$86,328	$57,002	$53,464,326
University of Montana	268,915	5,344	21	0	346	333	262,871
MSU-Morrill Grant [12]	618,691	0	73,612		1,193	0	618,691
MSU-Second Grant	1,701,472	15,138	287,971	0	587	989	1,396,787
Montana Tech	1,091,974	22,021	2,875	0	1,106	5,713	1,060,259
State Normal School	590,185	6,189	4,323	0	1,192	2,210	576,271
School for the Deaf and Blind	340,501	3,965	0	695	683	869	334,289
State Reform School (Pine Hills)	447,268	7,009	0	0	1,260	1,603	437,396
Veterans Home	12,053	332	0	0	0	44	11,677
Public Buildings	1,540,777	12,389	456,737	85,035	3,481	399	982,736
MT Developmental Center Income	5,180	155	0	696	0	0	4,329
MT State Hospital Income	5,180	155	0	696	0	0	4,329
Total	**$67,941,250**	**$858,217**	**$3,942,613**	**$3,895,926**	**$96,176**	**$69,162**	**$59,153,961**

Nondistributable Revenues Trust	Gross Nondistributable Revenues	Timber Sale Account	Trust Admin. Account[10]	Net Nondistributable Revenues	Permanent Fund Balance[13]
Common Schools-permanent	$4,805,738	$0	$244,690	$4,561,048	$409,174,980
University of Montana	21,366	0	2,555	18,811	1,522,270
MSU-Morrill Grant [12]	172,657	0	6,880	172,657	3,949,873
MSU-Second Grant	79,332	0	9,487	69,845	8,775,215
Montana Tech	42,798	0	5,118	37,680	5,098,100
State Normal School	15,037	0	1,798	13,239	6,084,590
School for the Deaf and Blind	738,168	313,675	34,476	390,017	3,523,300
State Reform School (Pine Hills)	53,105	5,325	5,341	42,439	3,373,153
Veterans Home	300	0	36	264	17,006
Total	**$5,928,501**	**$319,000**	**$310,381**	**$5,306,000**	**$441,518,487**
Technology Acquisition Fund	$1,948,830			$1,948,830	
School Facility Improvement	$15,382,591			$15,382,591	
Total	**$91,201,172**	**$858,217**	**$4,261,613**	**$4,206,307**	**$96,176**	**$69,162**	**$81,791,382**	**$441,518,487**

10 Trust Land Admin. Account reflects the FY 2008 Appropriation less $400.00 Land Bank Nomination Fees.

11 Includes Common School mineral royalties of $31,047,977.30 less $11,856,581.87 in debt service costs, per SB 495.

12 MSU-Morrill Grant administrative costs were transferred to the appropriation from fund 02297 per HB 19.

13 Trust balances reflect deposit activity by DNRC only and do not include valuation adjustments from investment activities by the Board of Investments.

redirected to the school facility improvement account by mid-FY 2010.

Distribution of Revenues

Each section of state trust land is assigned to a specific trust. As explained in the following subsection, distribution of revenues is handled in three different ways, depending on the section of trust land that generated the revenue.

In addition to state trust land, the TLMD also utilizes some General Fund dollars to administer land for the MSU-Morrill Grant Lands and other state agencies. Revenue generated from other agency land is transferred directly to the appropriate state agency.

Common Schools, Universities, and Other Trusts

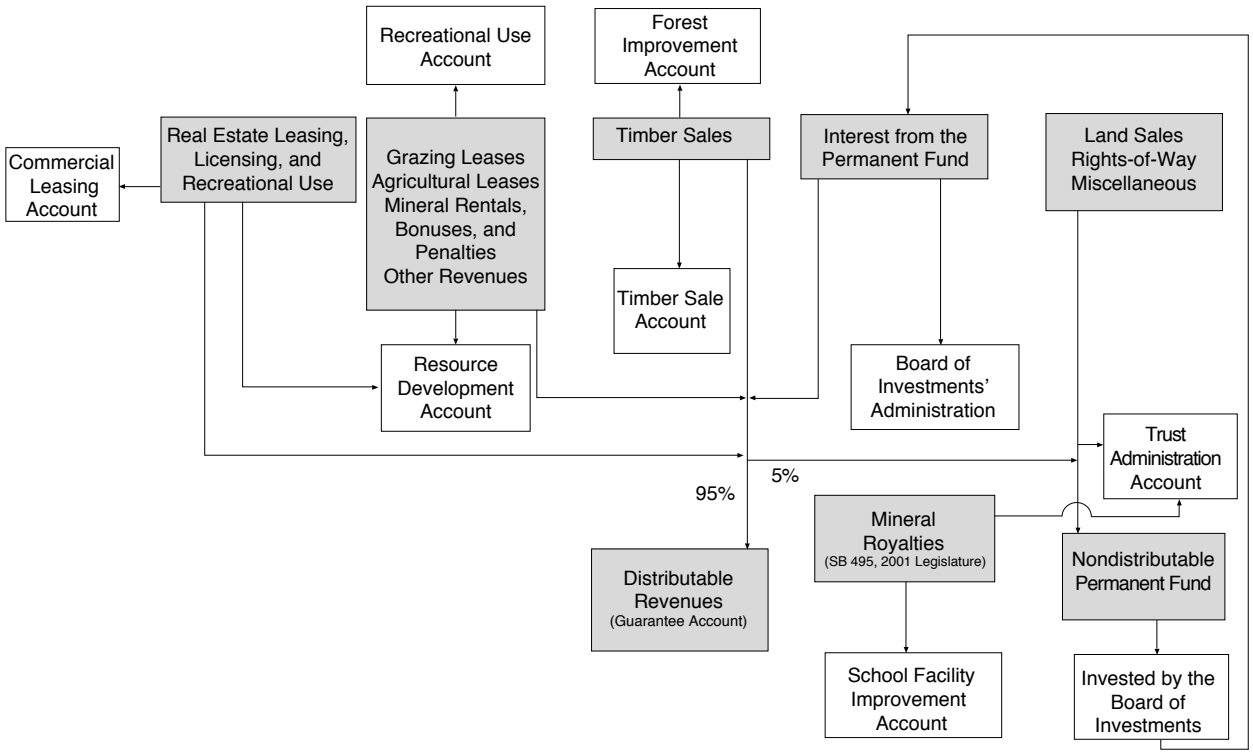
The distribution of revenues generated from Common Schools trust land is illustrated in Figure 17. From the distributable receipts, a small percentage is used to fund the Resource Development Account, the Timber Sale Account, the Recreational Use Account, and the Commercial Leasing Account (see Table 25). Ninety-five percent of the remaining distributable revenue is distributed yearly to the state Guarantee Account for use by public schools of the state. The other 5%, together with nondistributable revenue, comprise the Permanent Fund. The interest earned on the Permanent Fund is also distributed to the Guarantee Account for use by public schools, with the exception of 5%, which is returned to the Permanent Fund for reinvestment.

Distribution of revenues to the university trusts and other trusts is similar to that of the Common Schools trust. The exception is the Montana State University Trust for the Morrill Grant; its administrative costs are funded by the General Fund (HB 19, 2007 Legislature). For the university system trusts, timber sale revenues are considered distributable and for the other trusts, nondistributable. The Public Buildings Trust does not have a permanent fund, so remaining receipts are distributed to the Department of Administration.

Division Overview

The mission of the TLMD is to administer and manage the state trust timber, surface, and mineral resources for the benefit of the Common Schools and other endowed institutions in Montana, under direction of the Board of Land Commissioners. The board, also known as the "State Land Board," consists of Montana's top elected officials.

Figure 17
Distribution of Revenues from Common Schools Trust Lands



FY 2008 State Land Board Officials
Brian Schweitzer, Governor
Mike McGrath, Attorney General
Linda McCulloch, Superintendent of Public Instruction
Brad Johnson, Secretary of State
John Morrison, State Auditor

The division is divided into four primary programs: agriculture and grazing management, forest management, minerals management, and real estate management. Staff and program specialists in Helena and Missoula provide program administration, direction, oversight, and support. Field personnel throughout the state provide on-the-ground management.

The department's obligation is to obtain the greatest benefit for the school trusts pursuant to 77-1-202, MCA. The greatest monetary return must be weighed against the long-term productivity of the land to ensure continued future returns to the trusts. Total gross revenues generated by the TLMD over the last five years are listed by activity in Table 28. This table contains not only trust revenues, but also those revenues collected for other state entities and the General Fund, revenues generated to fund appropriations, and other miscellaneous revenues collected by the division.

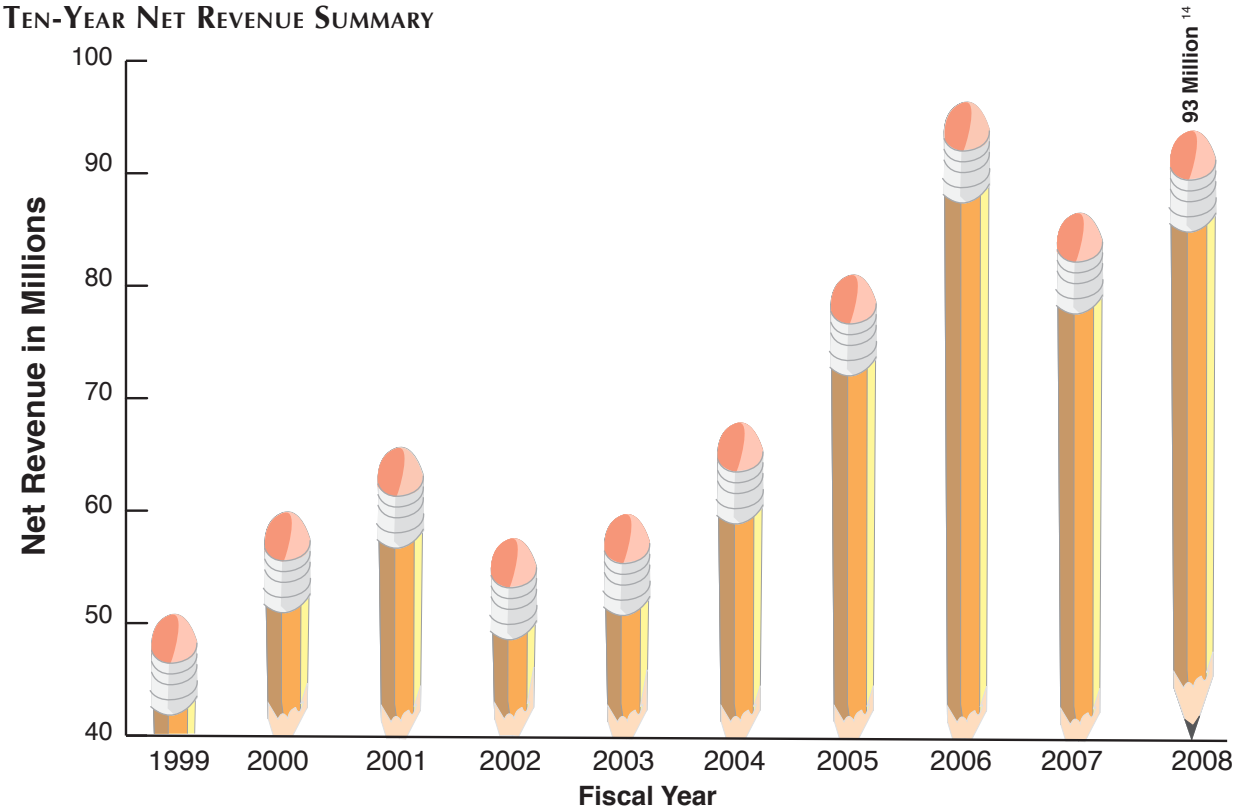
Ten-Year Net Revenue Summary

Figure 18 reflects net revenue growth from FY 1999 to FY 2008. Revenues from land management activities were combined with interest income generated from the Permanent Fund investments less annual expenditures. As a result, net revenue from all income sources, excluding Land Banking, increased from approximately $49 million in FY 1999 to $93 million in FY 2008.

Agriculture and Grazing Management

The Agriculture and Grazing Management Bureau supervises the management and leasing of approximately 10,000 agreements for crop and range land uses on 4.65 million acres of school trust lands throughout the state. Administrative staff and specialists in the department's Helena office and staff in field offices statewide accomplish these duties.

Figure 18
Ten-Year Net Revenue Summary



[14] Excludes revenue from Land Banking sales.

Table 28
Five-Year Summary of Gross Revenue Generated by Activity

Activity	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Agriculture & Grazing Management					
Grazing Leases	$5,467,667	$6,566,134	$6,984,191	$7,872,625	$7,098,951
Agriculture Leases	8,419,535	9,227,415	9,868,305	9,849,729	12,790,465
Totals	**$13,887,202**	**$15,793,549**	**$16,852,496**	**$17,722,354**	**$19,889,416**
Recreational Use					
General Licenses	286,352	64,246	52,759	58,211	71,754
Conservation Licenses	515,628	916,806	881,276	915,888	874,245
Special Recreation Use Licenses	112,304	109,378	103,613	118,181	107,588
Totals	**$914,284**	**$1,090,430**	**$1,037,648**	**$1,092,280**	**$1,053,587**
Forest Management					
Timber Sales	$9,013,900	$13,651,631	$13,000,338	$7,482,894	$10,000,724
Forest Improvement Fees	2,005,107	2,924,052	2,875,277	1,316,404	1,098,577
Totals	**$11,019,007**	**$16,575,683**	**$15,875,615**	**$8,799,298**	**$11,099,301**
Minerals Management					
Oil & Gas Revenues					
Rentals/Bonuses/Penalties	$3,187,540	$6,554,239	$16,656,283	$6,151,965	$6,037,002
Royalties	7,703,137	12,546,647	21,377,566	20,408,064	25,240,047
Seismic Exploration	4,690	4,796	5,459	7,323	9,976
Aggregate Minerals					
Rentals/Bonuses	600	100	250	200	100
Royalties	173,178	227,171	417,794	163,047	174,196
Coal					
Rentals/Bonuses	43,897	40,057	41,524	41,524	41,524
Royalties	4,676,964	4,239,865	4,179,503	3,729,473	5,865,071
Other Minerals					
Rentals/Penalties	20,009	25,584	32,295	55,661	81,215
Royalties	972	3,389	5,513	4,071	4,680
Totals	**$15,810,987**	**$23,641,848**	**$42,716,187**	**$30,561,328**	**$37,453,811**
Real Estate Management					
Rights-of-way/Easements	$2,117,993	$1,068,335	$1,075,914	$6,574,068	$2,113,540
Residential Leases/Licenses	929,995	1,024,125	1,129,768	1,288,897	1,439,506
Land Sales	2,900	25,797	0	10,913,599	2,781,630
Other Leases/Licenses	565,931	938,280			
Commercial			872,589	1,057,908	975,531
Conservation			94,098	92,241	101,034
Other					27,431
Navigable Rivers					4,000,300
Totals	**$3,616,819**	**$3,056,537**	**$3,172,369**	**$19,926,713**	**$11,438,972**
Other					
Trust and Legacy Interest	$30,140,513	$28,375,978	$24,850,054	$26,475,417	$25,289,682
Other Revenues	316,450	586,932	879,529	1,035,057	915,483
Totals	**30,456,963**	**28,962,910**	**25,729,583**	**27,510,474**	**26,205,165**
TOTALS	**$75,705,262**	**$89,120,957**	**$105,383,898**	**$105,612,447**	**$107,140,252**

Figure 19
Barley and Wheat Production

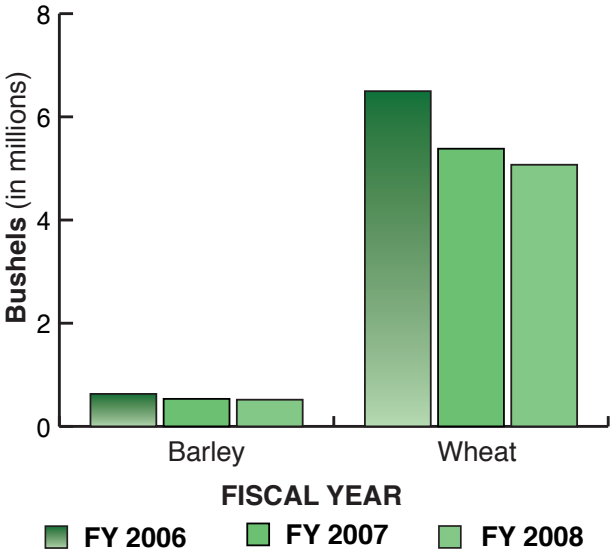
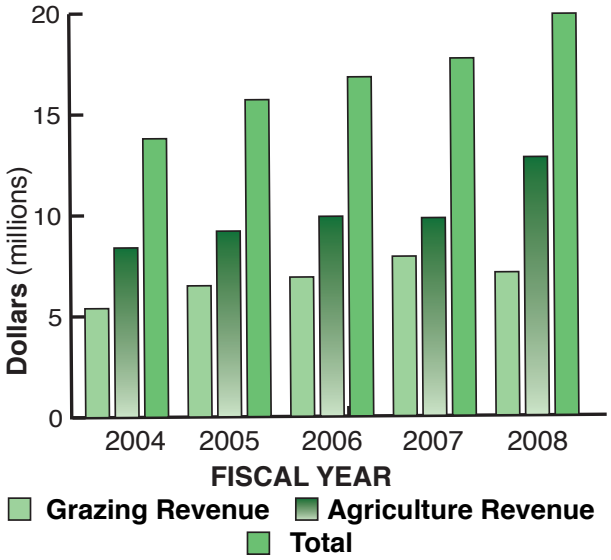


Figure 20
Agriculture and Grazing Revenue



Surface Leasing

The program is responsible for administrative functions associated with maintaining surface lease agreements. Annual activities include processing approximately 1,000 lease renewals; advertising, competitively bidding, and issuing approximately 50 new leases; reviewing and processing assignments, subleases, pasturing agreements, custom farming agreements, pledges and mortgages; and collecting, verifying, and posting rentals and fees.

Land Management

The program manages the agricultural and grazing resources on lands administered by the bureau. This responsibility includes evaluation and assessment of range and crop land condition; compliance with the Montana Environmental Policy Act (MEPA); administration of archaeological, paleontological, and historical properties on state trust land; investigations of lease noncompliance; participation in the federal Farm Program; and oversight of water developments, water rights, and improvement projects such as range renovation and resource development.

Agricultural and Grazing Lands

Currently, 3,000 agreements cover agricultural use of state trust lands. Crops raised on these lands are primarily dryland hay and small grains, but also include irrigated grain crops, corn, sugar beets, potatoes, peas, lentils, garbanzo beans, canola, safflower, alfalfa seed, and native grass seed (see Figure 19).

In FY 2008, revenues totaling $12,790,465 were received from agricultural leasing on 571,000 acres (see Figure 20). The majority of the leases are on a crop-share basis with the minimum share of 25% set by statute. In addition to receiving rental payments from lessees, the state participates in and receives Farm Program payments from the USDA Farm Service Agency. For FY 2008, this amount exceeded $3 million for direct payment contracts, lands enrolled in the CRP, and loan deficiency payments.

Approximately 8,500 agreements include grazing use of trust lands. The 4.3 million acres of classified grazing lands and forest lands have an estimated carrying capacity of 1 million animal-unit-months (AUMs). The minimum rental rate ($6.94/AUM) for grazing leases is set by a formula, which includes the average weighted price for beef cattle sold in Montana during the previous year. In FY 2008, grazing leases generated $7,098,951.

Recreational Use

The total number of wildlife conservation licenses sold in FY 2008 was 493,450, which generated $874,245 in gross revenue. A total of 6,472 general recreational use licenses were sold with gross revenues of $71,754. Special recreational use licenses generated $107,588.

Forest Management

Sustainably managing Montana's forested trust lands to maximize long-term revenue while promoting healthy and diverse forests.

Figure 21
Timber Volume Sold and Harvested

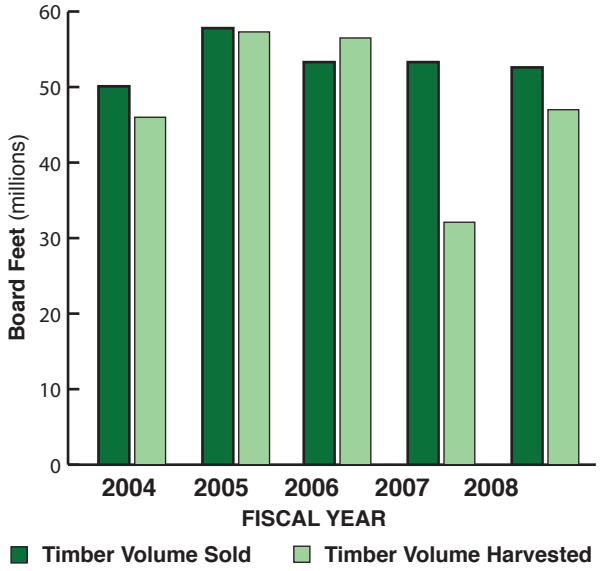
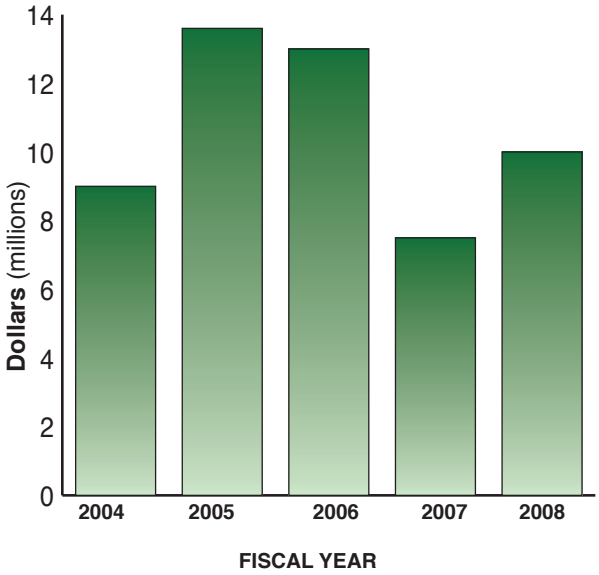


Figure 22
Timber Revenue Generated



The Forest Management Bureau oversees management of over 730,000 acres of forested state trust lands. Revenue from these lands is mainly derived from the sale of forest products. This requires the teamwork of 72 bureau and field staff.

The State Forest Land Management Plan (SFLMP), approved by the State Land Board in 1996 and associated rules (2003), guides the management of forested trust lands. This guidance is provided by a general management philosophy and specific resource management standards. The strategic guidance provided by the SFLMP is summarized in this excerpt:

> *Our premise is that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests. Our understanding is that a diverse forest is a stable forest that will produce the most reliable and highest long-term revenue stream. Healthy and biologically diverse forests would provide for sustained income from both timber and a variety of other uses. They would also help maintain stable trust income in the face of uncertainty regarding future resource values. In the foreseeable future timber management will continue to be our primary source of revenue and primary tool for achieving biodiversity objectives.*

Forest Product Sales

The forest product sales program incorporates activities and expenditures required to grow, harvest, and sell forest products from state trust lands efficiently. All timber sales and permits are developed, analyzed, and reviewed in the field by foresters and resource specialists to ensure that sales comply with all applicable laws, policies, and management direction.

The current annual sustained yield from forested trust lands is 53.2 million board feet as determined by the 2004 Sustained Yield Study.

In FY 2008, 24 timber sales (50.5 million board feet) and 52 timber permits (2.1 million board feet) totaling 52.6 million board feet were sold (see Figure 21). This sold volume has an estimated stumpage value of $9,478,839 and an additional $1,222,413 in Forest Improvement fees. An additional 2.1 million board feet were prepared and offered for sale, but this volume was not sold.

A total of 47 million board feet of timber (sale and permit volume) and a minor amount of other miscellaneous forest products (post and poles, boughs, biomass, etc.) were harvested from state trust lands during FY 2008. This volume generated $10,000,724 in revenue for the year (see Figure 22). An additional $1,098,577 in Forest Improvement fees were collected during FY 2008.

Total volume and value from harvest activities on forested trust lands in FY 2008 increased significantly from FY 2007. This was largely due to timber sale purchasers curtailing harvesting activity in 2007 in response to soft market conditions. Timber sale purchasers have up to three years to harvest a timber contract. The curtailment in harvest activity in 2007 created a temporary "backlog"

of unharvested volume going into FY 2008. While markets remained soft through FY 2008, harvest volumes from forested trust lands increased in FY 2008 due to the requirement for purchasers to complete harvest activities with the specified three-year window, thus decreasing some of the temporary backlog of unharvested volume from previous years.

The average price per thousand board feet for volume harvested in FY 2008 was $209 compared to $231 in FY 2007 and $230 in FY 2006, respectively. Due to soft market conditions, the average price received for volume sold in FY 2008 fell to $180 per thousand board feet compared to $236 in FY 2007 and $292 in FY 2006, respectively.

Forest Improvement

The Forest Improvement Program uses fees from harvested timber to improve the health, productivity, and value of forested trust lands. Use of these fees authorized by statute include disposal of logging slash, reforestation, acquiring access and maintaining roads necessary for timber harvest, other treatments necessary to improve the condition and income potential of state forests, and compliance with other legal requirements associated with timber harvest. In FY 2008, the department collected $1,098,577 in Forest Improvement fees. Table 29 shows the amount of Forest Improvement fees collected during FY 2008 by trust. The $297 correction to the State Reform School fund reflects reconciliation with FY 2007 fund distribution.

Table 30 lists the activities conducted to improve the health and productivity of forested state trust lands. Under the reciprocal access program, the state granted 3.37 miles of right-of-way and received 1.15 miles across state trust lands. This cooperative exchange of access with other parties allowed the state to gain new access to 640 acres of state trust land.

Table 29
FY 2008 Forest Improvement Fees Collected by Trust

Trust	Amount
Common Schools	$ 670,676
Montana State University–2nd Grant	119,209
Montana Tech	50
State Normal School	723
School for the Deaf and Blind	74,606
State Reform School	(297)
Public Buildings	233,610
Total	**$ 1,098,577**

Habitat Conservation Plan

The Forest Management Bureau is developing a programmatic Habitat Conservation Plan (HCP) in cooperation with the U.S. Fish and Wildlife Service. This series of conservation strategies is designed to minimize the impacts of DNRC management activities on threatened or endangered fish and wildlife species, while providing DNRC with long-term management assurances and overall flexibility. Conservation strategies for grizzly bears, Canada lynx, and three fish species (bull trout, westslope cutthroat trout, and red band trout) have been completed and have gone through technical and public review. The draft HCP and Environmental Impact Statement are being completed and are expected to be available for public review in winter 2008/2009. Completion of the HCP project is anticipated in 2010.

Forest Inventory/GIS

The Forest Inventory and GIS Program is managed by the Technical Services Section and is responsible for collection and analysis of forest resource inventory data on 730,000 acres of forested state trust lands. Stand-level resource data and the development and maintenance of a GIS are used to support planning for forest management activities, environmental analyses, sustainable yield calculations, and other activities and studies.

Each year the Technical Services Section processes and updates changes to the stand-level inventory data layer, road layer, and other GIS layers. In FY 2008, the inventory program collected 51,839 acres of stand-level inventory data, updated the stand map by collecting data for 64 timber sales and 51 permits, collected tree data on 1,750 plots in 185 stands, and updated or added 4,800 miles of roads in the GIS. Also the following technological advances were achieved: timber sale cruising and inventory plot compilation software was completed and distributed for use by DNRC foresters, electronic data recorders with data entry and cruising programs were distributed, and a new road inventory and data entry program was developed for use with electronic data recorders.

Resource Management

The Resource Management Section (RMS) provides technical assistance to field staff in the disciplines of hydrology, soils, geology, fisheries, wildlife, sensitive plants, road engineering, and riparian grazing. Technical assistance provided by the section staff includes field reviews, project analysis,

Table 30
FY 2008 Forest Improvement Activities by Trust

		Trust												
Activity	Units	Common Schools (CS)	University of Montana (UM)	Montana Tech (SM)	State Normal School (SNS)	State Reform School (SRS)	School for Deaf & Blind (DB)	MSU - Morrill (ACI)	MSU - 2nd Grant (ACB)	Veterans Home	Capitol Building (PB)	Reliance Refinery	Trusts Undetermined	Total
Total acres treated	acres	7,854	0	2,505.5	316.75	213.1	103.75	388	1,226.25	0	1,873	6.25	2,406	16,892.6
Plantation regeneration surveys	acres	691.5	0	20	37	70	0	5	37	0	10	0	0	870.5
Tree planting	acres	385	0	985	118	15	0	10	358	0	411	0	0	2,282
Tree browse prevention[15]	acres	53	0	932	37	0	0	0	37	0	80	0	0	1,139
Precommercial thinning	acres	274.5	0	35	33	23.1	0	0	0	0	112	0	0	477.6
Noxious weed spraying	acres	837	0	19.5	41.75	1	30.75	7.5	82.75	0	67	6.25	1,603	2,696.5
Herbicide application[16]	acres	0	0	460	0	0	0	0	0	0	40	0	0	500
Brush piling	acres	664	0	0	0	48	10	120	264	0	883	0	0	1,989
Pile burning	acres	4,373	0	54	50	52	63	245.5	425.5	0	236	0	150	5,649
Broadcast burning	acres	73	0	0	0	0	0	0	0	0	0	0	0	73
Tree improvement areas managed	acres	0	0	0	0	0	0	0	0	0	0	0	13	13
Road maintenance[17]	miles	81.4	0	8	5	3.9	0	2	4	0	9	0	0	113.3
Hand brush work	acres	88	0	0	0	4	0	0	22	0	34	0	0	148
Cone collection	bushels	0	0	0	0	0	0	0	0	0	0	0	406	406
ROW granted	miles		0	0	0	0	0	0	0	0	0	0	3.37	3.37
ROW received	miles		0	0	0	0	0	0	0	0	0	0	1.15	1.15
Trust Lands accessed	acres	0	0	0	0	0	0	0	0	0	0	0	640	640
New public access	acres	0	0	0	0	0	0	0	0	0	0	0	0	0
Bio-control bug releases	acres	415	0	0	0	0	0	0	0	0	0	0	0	415
Roads inventoried and database updated	miles	0	0	0	0	0	0	0	0	0	0	0	89.54	89.54

15 Tree browse prevention includes replacing, maintaining, or removing seedling netting or applying a chemical repellent.
16 Herbicide application is associated with tree planting.
17 Road maintenance includes grading, snowplowing, bridge removal and upkeep, installing culverts, etc. Many of these activities do not lend themselves to reporting by miles.

MEPA document preparation, recommendation and design of mitigation measures and other contract provisions, and timber sale document review. The RMS also reviews, evaluates, and monitors activities on forested trust lands to ensure compliance with applicable laws, rules and policies, and maintains appropriate levels of resource protection.

In FY 2008, the RMS provided technical assistance on 20 timber sales and conducted 136 monitoring projects on wildlife, fisheries, soil, and watersheds on forested state trust lands. Two stream restoration projects and one fire rehabilitation project were also completed or initiated during the year.

Minerals Management

The Minerals Management Bureau is responsible for leasing, permitting, and managing approximately 4,802 oil and gas, metalliferous and nonmetalliferous, coal, and sand and gravel agreements on 2 million acres of the available 6.2 million acres of school trust land and approximately 2,400 acres of other state-owned land throughout Montana. General background information on bureau activities is available on the department's web site: www.dnrc.mt.gov/trust/mmb.

A calendar of key lease activities and dates is posted, and lease sale lists and sale results are available for viewing and downloading.

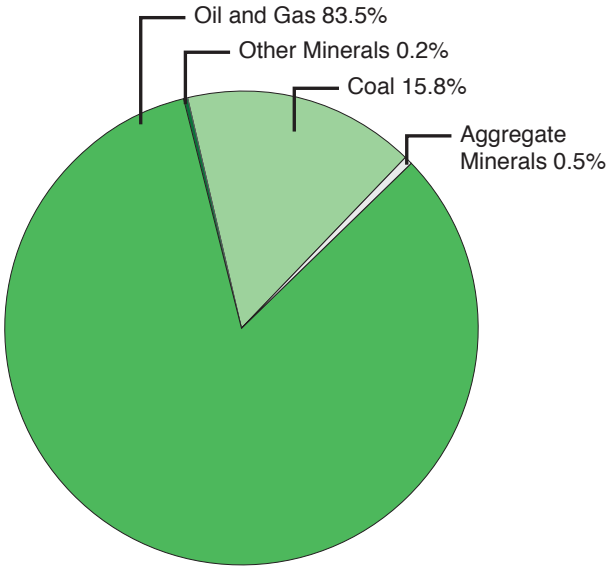
Mineral Leasing

The program is responsible for reviewing and processing all mineral lease and permit applications; advertising, competitively bidding, and issuing new leases; reviewing and approving lease assignments; and collecting, verifying, and posting lease rentals and production royalties. Revenues received in FY 2008 are listed in Table 28; the relative percentage of revenue derived from each mineral type is illustrated in Figure 23.

Oil and Gas Leasing

The program is responsible for the leasing and monitoring of 4,653 oil and gas leases, 606 of which are currently productive. The number of oil and gas leases managed is up 7%, while the number of currently producing leases increased by 3.9%, compared to FY 2007. Activities related to existing leases include collecting, verifying, and posting rental, royalty, delay drilling, and shut-in payments; reviewing and approving assignments and tracking working interest ownership; reviewing and preparing for approval communitization agreements and unit operating agreements; and coordinating with field offices the review and approval of all proposed physical operations on state leases. In addition, four oral auctions of new oil and gas leases are prepared and conducted each year.

Figure 23
Total Mineral Revenue by Mineral Type



In FY 2008, 1,808,692 barrels of oil were produced; 7,751,961 MCF of gas and 1,465,861 gallons of condensate were also produced. Oil production decreased 10.1% from FY 2007; however the average price increased by 59.1%, to $87.85 per barrel in FY 2008. Gas production in FY 2008 increased 0.6%, while the price increased 19.3% from FY 2007, for an average price of $6.12 per MCF. While production numbers all fell due to expected decline rates, especially for the newer Bakken Formation wells, oil prices reached record levels in FY 2008 making this year the most successful royalty revenue year in the bureau's history. Oil and gas revenues received over the last five fiscal years are shown in Figure 24.

Other Mineral Leasing

The program also administers a wide variety of leases–including metalliferous and nonmetalliferous leases, coal leases, gravel permits, and land use licenses for nonmechanized prospecting–for all other mineral activity on state trust land. In FY 2008, 4,720,487 tons of coal were mined, which is a 63.7% increase in production over FY 2007. The average price per ton increased 13.8% from FY 2007 for an average price of $10.87 per ton. Royalties increased 57.3% compared to FY 2007. The volume mined can vary significantly from year to year, as mining activity moves onto or off state trust land within the normal sequence of mining operations. A five-year summary of

Figure 24
Oil and Gas Revenues
(excluding seismic exploration)

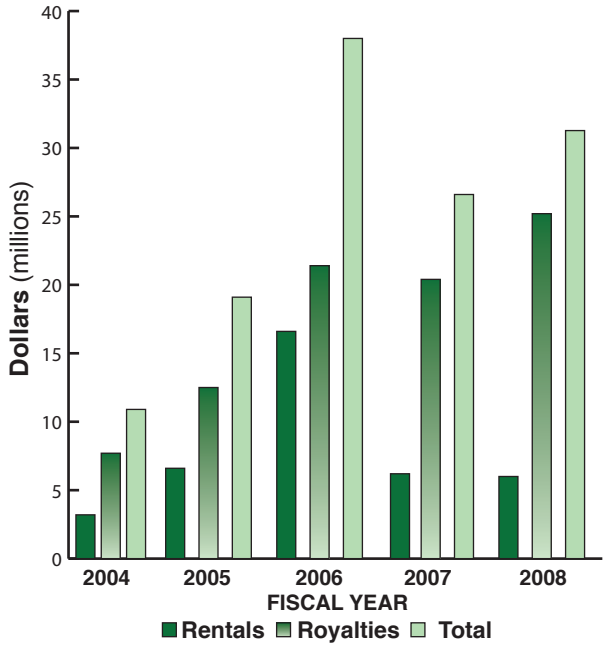
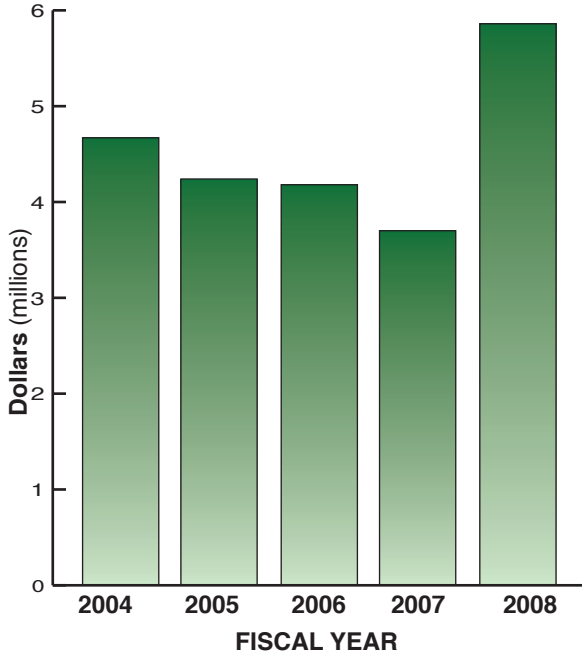


Figure 25
Coal Royalties



coal royalties is shown in Figure 25. Royalties and rentals are also collected for minerals such as bentonite, clay, gold and associated minerals, peat, and shale.

Royalty Auditing and Accounting

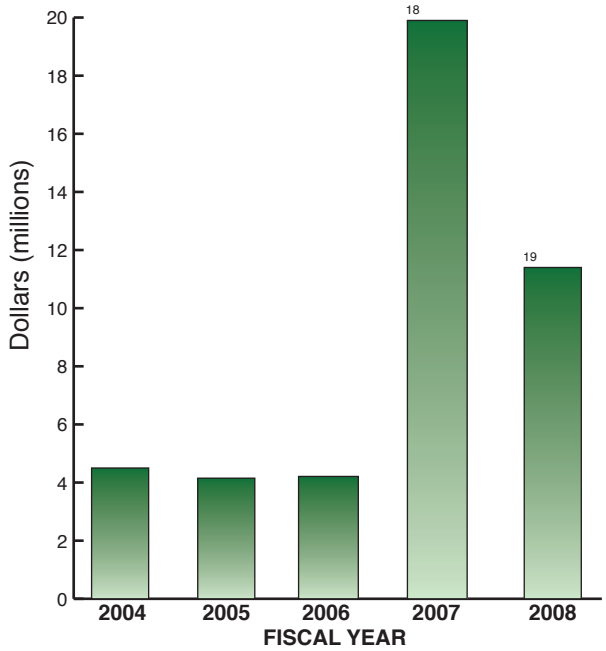
The Royalty Audit Program provides additional revenue to the school trusts through programmatic audits. The program identifies royalty under- and over-reporting, rectifies discrepancies, and raises the level of voluntary compliance. Most audits have a single payor and involve multiple leases.

In FY 2008, the audit program closed six audits and collected $108,085 in additional royalties and interest. Audit collection amounts ranged from $4,917 to $39,234. Four audits are currently pending from FY 2008, with preliminary assessments of amounts due totaling more than $1.3 million and with assessment amounts due ranging from $30,427 to $640,293. However, final assessments are frequently adjusted as additional information is obtained.

Riverbed Leasing

The Minerals Management Bureau continues its efforts to clarify title to the beds and islands of navigable rivers. Pursuant to statute, the state owns those lands below the low-water mark; islands and their accretions formed in the riverbeds after statehood; and abandoned channels formed

Figure 26
Real Estate Management Revenues



[18] Includes $10.9 million in Land Banking sales and a $5.7 million one-time easement to the Montana Department of Transportation.

[19] Includes $2.8 million in Land Banking sales and a $1.4 million one-time easement to the Montana Department of Transportation.

by avulsion. Because two navigable rivers in Montana flow through areas with major oil and gas resources, the department has conducted numerous riverbed studies to determine and document state ownership of land. This process allows the state to take a progressive position on issues involving substantial royalties.

In FY 2008, the program managed 29,196 acres of leased riverbed and island tracts. These tracts provided the state with $946,493 in oil and gas revenues while generating an additional $4,279 from other mineral leasing activity. This same ownership review process is also becoming increasingly important in areas where surface development and/or use encounters beds, islands, and abandoned channels of navigable rivers. The department continues to work with state, federal, and private entities whenever ownership issues arise.

Table 31
FY 2008 Lease and License Revenues

Agreement Type	2008 Lease Revenue	2008 License Revenue	2008 Total Revenue
Community facility	$ 22,017	$ 3,192	$ 25,209
Commercial	361,173	12,821	373,994
Communication sites	30,850	34,590	65,440
Conservation	99,547	1,487	101,034
Developed recreation	140,973	31,259	172,232
Industrial	61,651	2,162	63,813
Institutional	8,321	150	8,471
Navigable rivers	4,000,000	300	4,000,300
Residential	1,439,506	350	1,439,856
Residential accessory	5,537	16,090	21,627
Rural commercial	5,368	16,399	21,767
Rural industrial	86,185	136,442	222,627
Other lease	13,102	14,329	27,431
Total	**$ 6,274,230**	**$ 269,571**	**$ 6,543,801**

Otter Creek Tracts

The department entered into a professional services agreement with Norwest Corporation in FY 2008 for the preparation of a leasing appraisal covering the state's coal ownership in the Otter Creek project area. Completion is expected in the fourth quarter of calendar year 2008. The Land Board will evaluate the appraisal and consider offering the state tracts for lease in FY 2009.

Real Estate Management

The Real Estate Management Bureau (REMB) administers activities on lands classified as "other" and all secondary activities on lands classified as grazing, agriculture, or timber. The sources of FY 2008 real estate management revenues are summarized in Table 28. Income over the last five years is illustrated in Figure 26.

For more information on the REMB, please visit our web site at www.dnrc.mt.gov/trust/remb.

Leasing/Licensing

Lease and license revenue for FY 2008 was $6,274,230 and $269,571, respectively, as shown in Table 31. Residential leasing makes up the largest portion of lease income with approximately 800 residential leases generating $1.4 million in FY 2008.

Land Sales

In FY 2008, the Land Banking Program sold 5,095 acres for a total of $2,782,630. Table 32 shows the acres sold in FY 2008 by county, grant, classification, income, and rate of return.

Table 33 shows the Trust Land Acreage in each of the 56 counties by trust.

Table 32
Land Sold by County and Grant FY 2008

County	Acres	Value	Land Class	Annual Income	Grant	Return
Carbon	295	$ 1,342,250	Grazing	$ 490	Common Schools	0.04%
Chouteau	960	204,480	Grazing	1,147	Common Schools	0.56%
Garfield	3,200	435,900	Grazing	4,303	Common Schools	1.13%
Powell	640	800,000	Grazing	1,047	Common Schools	0.13%
Total	**5,095**	**$ 2,782,630**		**$ 6,987**	**Overall weighted average**	**0.83**

Table 33
Trust Land Surface Acreage By County and Trust, FY 2008

Counties	Common Schools	MSU Morrill	MSU Second	Deaf and Blind	Capitol Building	Montana Tech	State Normal School	Pine Hills School	Univ. of Montana	Veterans Home	Sir Trust	Totals
Beaverhead	259,528.42	11,128.56		6,300.23	24,556.47	5,439.03	15,266.86	12,258.68	-	-	-	334,478.25
Big Horn	60,398.31	-	-	-	-	-	-	-	-	-	-	60,398.31
Blaine	181,692.89	786.06	-	-	-	1,000.49	1,031.47	40.00	-	-	-	184,550.91
Broadwater	17,540.95	-	-	-	6,263.94	-	-	-	-	-	-	23,804.89
Carbon	34,098.62	3,577.93	-	-	-	-	-	3,248.81	-	-	-	40,925.36
Carter	143,401.62	-	-	-	440.00	228.37	27.75	141.06	-	-	-	144,238.80
Cascade	68,431.57	760.00	1000.40	160.00	400.00	5,536.41	402.36	1,954.47	241.54	-	-	78,886.75
Chouteau	216,573.48	13,299.94	-	-	2,349.16	14,315.08	10,012.20	8,747.94	-	-	-	265,297.80
Custer	155,215.41	-	-	-	-	-	-	60.00	480.00	-	-	155,755.41
Daniels	216,423.49	-	-	-	-	-	3,897.40	-	-	-	-	220,320.89
Dawson	87,573.13	-	-	-	480.00	-	-	-	-	-	-	88,053.13
Deer Lodge	7,553.06	-	-	-	-	-	-	-	-	-	-	7,553.06
Fallon	70,752.64	-	-	-	-	-	-	-	-	-	-	70,752.64
Fergus	156,632.37	-	-	-	-	-	-	-	2,240.00	1,275.61	-	160,147.98
Flathead	72,435.09	3,385.25	11,941.39	5,336.88	17,061.16	9,224.04	9,205.01	1,308.65	-	141.91	-	130,039.38
Gallatin	28,565.36	-	455.47	2,577.44	7,828.87	5,879.98	2,097.22	642.32	1,918.91	-	-	49,965.57
Garfield	157,511.61	-	-	-	-	-	-	-	-	-	-	157,511.61
Glacier	8,338.91	-	-	-	-	-	-	-	-	-	-	8,338.91
Golden Valley	44,607.52	-	-	-	-	-	-	-	3,994.63	-	-	48,602.15
Granite	20,422.77	-	-	-	-	-	-	-	-	-	-	20,422.77
Hill	143,227.58	-	-	-	10,346.23	-	353.50	40.00	-	-	-	153,967.31
Jefferson	26,046.15	-	3,360.00	1,678.20	-	-	-	745.50	320.00	-	-	32,149.85
Judith Basin	94,057.18	480.00	-	-	-	3,268.93	160.00	-	640.00	-	-	98,606.11
Lake	50,643.64	40.00	320.00	1,131.70	160.00	1,535.56	960.07	-	247.54	-	-	55,038.51
Lewis and Clark	86,196.13	7928.42	1,840.00	2,360.00	12,020.43	4,592.78	2,213.14	17,529.29	-	-	-	134,680.19
Liberty	86,421.78	-	-	-	156.14	-	-	-	-	-	-	86,577.92
Lincoln	54,321.19	-	-	-	10,562.07	480.00	-	-	-	-	-	65,363.26
McCone	94,559.19	-	-	-	-	-	-	-	-	-	-	94,559.19
Madison	99,758.90	635.95	3,881.60	2,920.28	9,659.19	1,993.92	7,512.63	6,438.90	320.00	-	-	133,121.37

Table 33 (cont'd)
Trust Land Surface Acreage By County and Trust, FY 2008

Counties	Common Schools	MSU Morrill	MSU Second	Deaf & Blind	Capitol Building	Montana Tech	State Normal School	Pine Hills School	Univ. of Montana	Veterans Home	Sir Trust	Totals
Meagher	59,981.77	14,728.73	-	7,662.07	-	-	-	7,547.42	-	-	-	89,919.99
Mineral	7,461.22	-	2,478.33	-	8,038.28	-	3,955.78	-	-	-	-	21,933.61
Missoula	45,195.57	2,137.15	6,146.83	315.49	10,278.15	-	-	3,909.17	1,280.00	-	-	69,262.36
Musselshell	76,283.65	-	-	-	-	-	-	-	-	-	-	76,283.65
Park	32,567.12	-	-	-	-	-	-	-	880.00	-	-	33,447.12
Petroleum	62,190.29	-	-	-	-	-	-	-	1280.00	-	-	63,470.29
Phillips	189,712.36	360.00	-	-	-	-	-	-	-	-	-	190,072.36
Pondera	57,026.51	200.00	-	-	120.00	-	-	-	-	-	-	57,346.51
Powder River	141,638.67	480.00	-	-	-	-	695.10	-	-	-	-	142,813.77
Powell	57,057.74	157.69	-	-	2,997.58	-	-	356.00	156.67	-	-	60,725.68
Prairie	76,698.56	-	-	-	-	-	-	-	-	-	2,599.88	79,298.44
Ravalli	20,009.04	1,200.00	-	-	5,536.52	3,278.02	40.00	-	-	-	-	30,063.58
Richland	81,772.72	-	-	-	604.39	-	-	-	-	-	-	82,377.11
Roosevelt	18,878.25	-	-	-	1,431.02	-	-	-	-	-	-	20,309.27
Rosebud	175,888.17	-	-	-	-	-	-	-	2,213.74	-	-	178,101.91
Sanders	51,055.26	-	-	2,158.58	12,913.41	-	40.00	-	-	-	-	66,167.25
Sheridan	45,146.80	-	-	-	-	-	-	-	-	-	-	45,146.80
Silver Bow	13,234.07	-	-	-	-	-	-	-	-	-	-	13,234.07
Stillwater	46,072.97	-	-	-	-	-	-	-	-	-	-	46,072.97
Sweet Grass	47,884.26	-	-	-	-	-	-	-	-	-	-	47,884.26
Teton	73,445.18	2,170.24	-	-	21,956.37	2,627.46	3,498.40	240.00	-	-	-	103,937.65
Toole	79,146.59	-	-	-	20,831.90	40.00	-	-	-	-	-	100,018.49
Treasure	35,314.78	-	-	-	-	-	-	-	480.00	-	-	35,794.78
Valley	217,323.80	-	-	-	-	-	1,033.92	-	-	-	-	218,357.72
Wheatland	64,847.24	-	-	3,859.96	-	-	1,120.00	2,326.48	1,280.00	-	-	73,433.68
Wibaux	33,801.43	-	-	-	-	-	-	-	-	-	-	33,801.43
Yellowstone	74,075.94	-	-	-	-	-	-	-	-	-	-	74,075.94
Totals	4,628,638.92	63,455.92	31,424.02	36,460.83	186,991.28	59,440.07	63,522.81	67,534.69	17,973.03	1,417.52	2,599.88	5,157,458.96
Original Acres	5,188,000	90,000	50,000	50,000	182,000	100,000	100,000	50,000	46,080	1,275.61	0.00	5,857,355.61

Land Acquisition

Four parcels were nominated for acquisition in the Land Banking Program, but no purchases were made in FY 2008.

Exchanges

Two land exchanges were completed during FY 2008:

- CB Ranch–acquired 1,280 acres in exchange for 640 acres in Ravalli County.
- Tarkio (Five Valleys)–acquired 519.4 acres in exchange for 442.252 acres in Mineral County.

Five land exchanges (Rocky Boy, Goguen, Lolo, Coffee Creek, Lyman Creek) are in various stages of completion:

- Rocky Boy–potential to acquire 320 acres in exchange for 1,440 acres in Hill County.
- Goguen–potential to acquire 600 acres in exchange for 435 acres in Flathead County.
- Lolo–potential to acquire 11,336 acres of National Forest Land for the same amount of trust land acreage in Granite, Powell, Missoula, Mineral, and Sanders counties.
- Coffee Creek–potential to acquire 80 acres of agriculture and grazing land for the same amount of trust land in Fergus County.
- Lyman Creek–potential to acquire 368 acres from Fish, Wildlife, & Parks in the Sula State Forest for 240 acres in the Calf Creek and Threemile Wildlife Management Areas in Ravalli County.

DNRC has also received an application for a land exchange from the Confederated Salish-Kootenai Tribe.

Non-Trust Land Activity

The department facilitated the following transactions involving other state agency lands:

Department of Military Affairs

- Missoula Armory auction in Missoula County.
- Acquisition of the site for the new Missoula Armory in Missoula County.
- Access easement to city of Hamilton on Hamilton Armory property, planned for 2009 in Ravalli County.

Department of Commerce

- Completion of a land exchange in Virginia City between Montana Heritage Commission (MHC) and private party in Madison County.
- Easement to Virginia City for recreation trail on MHC property in Madison County.
- Preparation for land exchange between MHC and Central City, LLC, in Madison County.
- Preparations for transfer of Malta Dinosaur Museum, planned for 2009 in Phillips County.

Department of Corrections

- Completed transfer of Pine Hills "Old Campus" to Custer County.
- Gas pipeline easement across prison lands in Deer Lodge in Powell County.
- Access easement to Bonneville Power on prison lands in Deer Lodge in Powell County.
- Preparations for transfer of Pine Hills agricultural lands to Dept. of Administration for Eastern Montana Data Center site, planned for 2009 in Custer County.
- Preparations for acquisition of land adjacent to Women's Prison in Billings, planned for 2009 in Yellowstone County.

Department of Labor and Industry

- Preparation for auction of Billings lot, July 16 in Yellowstone County.

Montana State University-Northern

- Auction of vacant campus land in Hill County.

Spring Prairie Center

Activity involving the Spring Prairie Center in Kalispell included:

- Glacier High School opened in August 2007 for the 2007-08 school year. Beginning in August 2008, Glacier High was expected to be in its second year of operation and its first year with full 9th-grade through 12th-grade classes.
- Reserve Loop Drive, which traverses northwest to southeast through the north half of the Spring Prairie section, opened to traffic in August 2007.
- The DNRC finalized and received payment for a 20.58-acre easement with the Department of Transportation for West Reserve Loop.
- The Holiday Inn Express was open for business during FY 2008. Employees of the USFS moved into their new building on the west side of Spring Prairie in late fall of 2007.
- Construction of Phase 3 of the Spring Prairie Center in the far northeastern corner of the section is expected to begin in spring 2009, with Kohl's as the anchor and PetSmart as sub-anchor.
- Pad development in Phases 1 and 2 along Highway 93 continue; the latest tenant, Mednorth Urgent Care, is under construction.

- Construction is under way on the new DNRC office building along Stillwater Road on the west side of the section, directly south of the existing USFS building. Based on the construction contract, occupancy is scheduled for November 2009.
- Frontage along Highway 93 south of Phase 2, currently occupied by the old DNRC Northwest Land Office, will be marketed for commercial leasing in FY 2009 with the anticipation that a tenant will be secured early in FY 2010.
- The joint City/County 911 Center will purchase an easement for a new facility by December 15, 2008. If the bond issue in November 2008 is successful, the center would begin construction on a new facility in spring 2009.

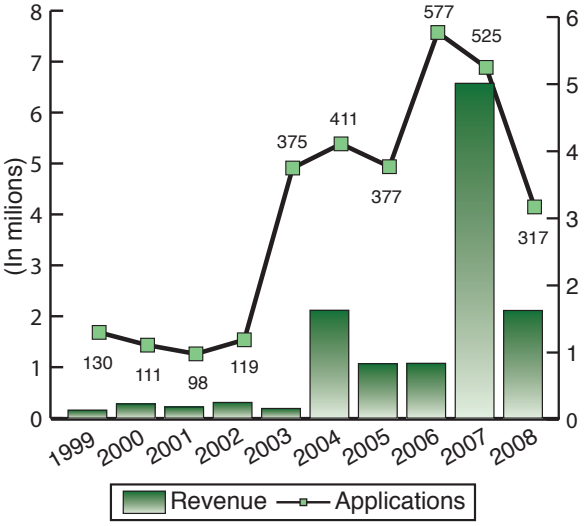
Whitefish Area Trust Land Neighborhood Plan

- A Land Use License (LUL) was issued for the "Trail Runs Through It" trail system. Initial stages of the trail system are designed, with construction expected in spring 2009.
- The Goguen land exchange is moving forward with the goal of receiving Land Board approval in FY 2009.
- Final details are being worked out on the Britell's Point of Pines Access and Sanitation Easement project with the expectation that this project will be completed during FY 2009.

Wind Energy

- Montana's first large-scale wind farm, the 135 mw, 90-turbine Judith Gap Wind Farm, has been operational since December 2005. The average annual income is approximately $60,000. Thirteen of the 90 towers at the wind farm are on Common Schools trust land (640 acres).
- Horizon Wind Energy continues to move forward as it prepares to build an approximately 72 mw wind farm just north of Martinsdale. The environmental impact study progressed through FY 2008 and will be completed in FY 2009. Construction may begin as early as the spring 2009.
- The Springdale Wind Farm near Springdale is working with the environmental requirements necessary to reach Phase 3 of its Request for Proposal (RFP) response and develop an environmental assessment for the project. Once built, this public/private wind farm, is expected to be 67.5 mw in size with seven 1.5 mw turbines on a section of state trust land.
- The Norris Wind Farm is working toward completion of Phase 2 of its RFP response. This development is proposed to encompass approximately 15,000 acres of combined private and school trust lands with nearly 150 mw of turbines.

Figure 27
Rights-of-Way Revenue



Rights-of-Way/Easements

Applications for 317 rights-of-way were presented to the Land Board for approval in FY 2008. Of these, 248 were historic easement applications submitted under 77-1-130, MCA. Revenue increased significantly during the fiscal year due to issuance of an easement for $1.4 million to the Department of Transportation for the West Reserve Loop within the Spring Prairie development at Kalispell. Rights-of-way revenue from FY 1999 to FY 2008 is shown in Figure 27.

Other large easements issued included a transmission line to the Bull Mountain coal properties for $88,000, a Department of Transportation maintenance facility site for $78,000, and an easement to Yellowstone County for the Laurel Veterans Cemetery for $75,000.

Real Estate Management Programmatic Plan

In February 2008, the REMB formed a six-member working group to draft new Administrative Rules to implement provisions of the Record of Decision. A draft of the Administrative Rules was presented to the Land Board at the August 2008 meeting. The Land Board gave preliminary approval for rule making to move forward. The REMB anticipates the new rules will be final in December 2008.

McDonald Mine site roadway before reclamation. Photo by Teresa Kinley.

McDonald Mine site roadway after reclamation. Photo by Teresa Kinley.

Restoration Activities on Trust Land in FY 2008

Forest Management Activities

- Assisted with Jocko Lake Fire Rehabilitation and coordinated stream restoration activities.
- Completed Deer Creek Stream Restoration on Southern Land Office.
- Coordinated Sula South Stream and Fisheries Restoration Project. Completed two fish passage culvert installations and one riparian fencing project.
- Completed maintenance of Blanchard Creek Stream Restoration Project, Clearwater Unit.
- Coordinated fire rehabilitation activities on Woodchuck Fire for Missoula Unit.
- Designed and assisted Plains Unit with Mudd Creek Fish Passage Culvert Project.
- Designed fish passage culvert replacement for Unnamed Tributary to Spotted Dog Creek, Anaconda Unit.
- Designed fish passage culvert replacement for Unnamed Tributary to Soup Creek, Swan Unit.
- Designed fish passage culvert replacement for Unnamed Tributary to Dog Creek, Stillwater Unit.

Minerals Management Activities

- Newmont North American Exploration, Ltd., implemented a reclamation project at the McDonald Mine site, east of Lincoln. The company re-contoured and seeded approximately 46,000 feet of drill roads and 11 acres of drill pads and related sumps. Other activities included removal of high-density poly ethylene HDPE pipe, removal of exposed drill hole casings, and noxious weed control.

Agriculture and Grazing Management Activities

- Restoration of the West Fork of the Stillwater River on trust land near Nye.

Montana Universities–Trust Lands

By the Enabling Act of 1889, the U.S. Congress granted acreage to the state of Montana for support of Common Schools (K-12 public schools) and other educational and state institutions, including the Montana University System.

The State of Montana has five university trust beneficiaries as follows:

- The University of Montana
- Montana State University–Morrill Grant
- Montana State University–Second Grant
- Montana Tech of The University of Montana
- State Normal School (Montana State University–Billings and The University of Montana–Western at Dillon)

Authority for establishing these trusts is included in sections 14, 16, and 17 of the Enabling Act of 1889 and in the Morrill Act of 1862 and 1890, for the Montana State University Morrill Lands. The following excerpt is taken from the Second Annual Report of the State Board of Land Commissioners, 1892:

"The grants of land made by the Congress of the United States to the State of Montana as provided in the Act of February 22, 1889, entitled, 'An Act to provide for the division of Dakota into two states, and to enable the people of North Dakota, South Dakota, Montana and Washington to form constitutions and state governments and to be admitted into the Union on an equal footing with the original states, and to make donations of public lands to such states'" are shown in Table 34.

Section 14: "That the lands granted to the territories of Dakota and Montana by the act of February eighteenth, eighteen hundred and eighty-one, entitled 'An act to grant lands to Dakota, Montana, Arizona, Idaho and Wyoming for university purposes,' are hereby vested in the states of South Dakota, North Dakota, and Montana, respectively, if such states are admitted into the union, as provided in this act, to the extent of the full quantity of seventy-two sections to each of said states…"

Section 16: "That ninety thousand acres of land, to be selected and located as provided in section ten of this act, are hereby granted to each of said states… for the use and support of agricultural colleges in said states, as provided in the acts of congress making donations of lands for such purpose."

Section 17: "To the state of Montana: For the establishment and maintenance of a school of mines, one hundred thousand acres; for state normal schools, one hundred thousand acres; for agricultural colleges, in addition to the grant herein before made for that purpose, fifty thousand acres."

These lands are managed under direction of the Board of Land Commissioners by the TLMD of the DNRC.

Table 34
University System Original Grant Acreage

Institution	Original Grant Acres[20]
Montana Tech (School of Mines)	100,000
State Normal School	100,000
Agricultural College	
MSU–Morrill Grant	90,000
MSU–Second Grant	50,000
The University of Montana	46,080

[20] Figure 28 displays current acreage by institution

Table 35
University System Permanent Fund Balances FY 2004–FY 2008

Trust	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
The University of Montana	$ 1,497,887	$ 1,499,962	$ 1,500,943	$ 1,503,459	$ 1,522,270
MSU–Morrill Grant	3,541,515	3,586,237	3,646,386	3,699,000	3,949,873
MSU–Second Grant	8,474,082	8,472,888	8,475,519	8,774,218	8,775,215
Montana Tech	4,545,212	4,545,537	5,044,678	5,060,421	5,098,100
State Normal School	5,982,974	6,003,215	6,061,334	6,072,051	6,084,590
Total	**$ 24,041,670**	**$ 24,107,839**	**$ 24,728,860**	**$ 25,109,149**	**$ 25,430,048**

Table 36
Gross Revenue Generated by Activity for the University System FY 2006–2008

Activity	FY 2006	FY 2007	FY 2008
Agriculture & Grazing Management			
Grazing Leases	$ 306,865	$ 345,962	$ 321,074
Agriculture Leases	292,439	301,953	356,786
Totals	**$ 599,304**	**$ 647,915**	**$ 677,860**
Recreational Use			
General Licenses	$ 5,374	$ 6,995	$ 3,931
Conservation Licenses	40,911	39,004	41,335
Special Recreation Use Licenses	12,240	988	0
Totals	**$ 58,525**	**$ 46,987**	**$ 45,266**
Forest Management			
Timber Sales	$ 1,021,531	$ 723,904	$ 865,671
Forest Improvement Fees	509,011	62,028	119,981
Totals	**$ 1,530,542**	**$ 785,932**	**$ 985,652**
Minerals Management			
Oil & Gas Revenues			
Rentals/Bonuses/Penalties	$ 186,386	$ 106,779	$ 153,763
Royalties	66,339	48,756	60,348
Aggregate Minerals			
Rentals	480	0	0
Royalties	250	0	0
Other Minerals			
Rentals/Penalties	30,673	9,655	$ 15,201
Other	2,010	1,260	730
Totals	**$ 286,138**	**$ 166,450**	**$ 230,042**
Real Estate Management			
Rights-of-way/Easements	$ 582,877	$ 369,163	$ 140,268
Residential Leases/Licenses	695,538	800,957	903,933
Other Leases/Licenses	102,888	177,704	160,587
Totals	**$ 1,381,303**	**$ 1,347,824**	**$ 1,204,788**
Other			
Trust and Legacy Interest	$1,421,503	$ 1,536,004	$ 1,459,243
Other	0	1,725	1,800
Totals	**$ 1,421,503**	**$ 1,537,729**	**$ 1,461,043**
TOTALS	**$ 5,277,315**	**$ 4,532,837**	**$ 4,504,651**

University System Trust Land Acreage

The total acreage for all trusts has fluctuated through the years due to land sales and acquisitions. The acreage for each university is shown in Table 33 and Figure 28. Surface acreage at the end of FY 2008 for the five trusts totaled 235,816 (or 4.6% of the total acreage) and 327,955 mineral acres (5.2%). Mineral acreage exceeds surface acreage because the mineral estate has been retained when lands were sold.

The Permanent Fund

Table 35 shows the University System Permanent Fund Balances from FY 2004 to FY 2008 by trust. The balance at the end of FY 2008 was $25,430,048.

Revenues

Total gross revenues generated by the TLMD over the last three years are listed by activity in Table 36. This table contains not only trust revenues, but Forest Improvement Fees and revenues generated to fund appropriations. During FY 2008, more than $4.5 million was generated in gross revenues from land management activities and investment interest.

Figure 29 illustrates the flow of funds from land management activities and interest into appropriation accounts and the Permanent Fund.

Distribution of Revenues

Table 37 shows the distributable and nondistributable interest and income for each of the University System trust beneficiaries. In FY 2008, the division used a portion of trust land revenues to fund administrative appropriations. From the distributable receipts, a small percentage is used to fund the Resource Development Account, the Timber Sale Account, the Recreational Use Account, and the Commercial Leasing Account. The exception is the Montana State University Trust

Figure 28
University System Acres by Trust FY 2008

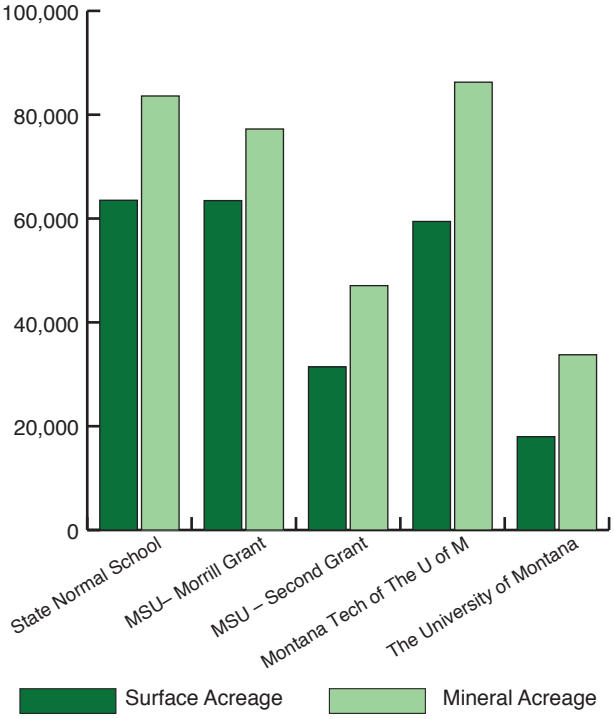


Figure 29
Distribution of Revenues from University System Trust

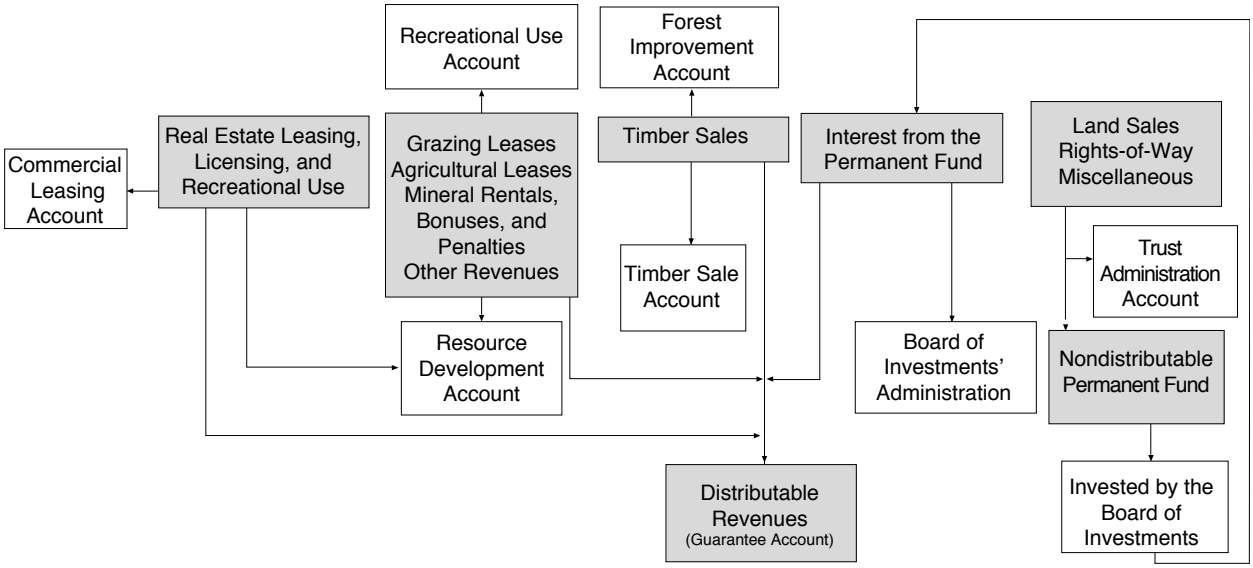


Table 37
University System Revenues by Trust FY 2008

Distributable Revenues Trust	Gross Distributable Revenues	Resource Development	Timber Sale Account	Trust Admin. Account	Recreational Use Account	Commercial Leasing Account	Net Distributable Revenues
University of Montana	$ 268,915	$ 5,344	$ 21	$ 0	$ 346	$ 333	$ 262,871
MSU–Morrill Grant[21]	618,691	0	73,612		1,193	0	618,691
MSU–Second Grant	1,701,472	15,138	287,971	0	587	989	1,396,787
Montana Tech	1,091,974	22,021	2,875	0	1,106	5,713	1,060,259
State Normal School	590,185	6,189	4,323	0	1,192	2,210	576,271
Total	**$ 4,271,237**	**$ 48,692**	**$ 368,802**	**$ 0**	**$ 4,424**	**$ 9,245**	**$ 3,914,879**

Nondistributable Revenues Trust	Gross Nondistributable Revenues	Trust Admin. Account	Net Nondistributable Revenues	Permanent Fund Balance[22]
University of Montana	$ 21,366	$ 2,555	$ 18,811	$ 1,522,270
MSU–Morrill Grant[21]	172,657	6,880	172,657	3,949,873
MSU–Second Grant	79,332	9,487	69,845	8,775,215
Montana Tech	42,798	5,118	37,680	5,098,100
State Normal School	15,037	1,798	13,239	6,084,590
Total	**$ 331,190**	**$ 25,838**	**$ 312,232**	**$ 25,430,048**
Total Revenues	**$ 4,602,427**	**$ 25,838**	**$ 4,227,111**	**$ 25,430,048**

[21] MSU-Morrill Grant administrative costs were transferred to the appropriation from fund 02297 per HB 19.

[22] Trust balances reflect deposit activity by DNRC only, and do not include valuation adjustments from investment activities by the Board of Investments.

for the Morrill Grant, which does not fund administrative cost accounts. These costs are paid by the General Fund. Net distributable revenues for FY 2008 totaled $3.9 million and net nondistributable revenues of $312,232 were deposited in the various permanent trusts.

Agriculture and Grazing Management

The Agriculture and Grazing Management Bureau supervises the management and leasing of agreements for crop and range land uses on University System trust lands across the state. Total gross revenues by trust for FY 2008 are shown in Table 38.

Agricultural and Grazing Lands

Crops raised on trust lands are primarily dry land hay and small grains, but also include irrigated grain crops, corn, sugar beets, potatoes, peas, lentils, garbanzo beans, canola, safflower, alfalfa seed, and native grass seed. Agricultural gross revenues of $356,786 were generated in FY 2008 on University System lands (see Table 39).

Agricultural trust lands are typically leased on a crop-share basis, with the minimum share of 25% set by statute. Table 39 shows production totals for wheat, barley, and hay produced on university trust lands in FY 2008. Acreages enrolled in the CRP are also listed. This program pays landowners to remove erodible cropland from production and plant the land in permanent cover. Contracts are normally for 10 years. Table 39 also shows the carrying capacity of university grazing lands in terms of AUMs. An AUM is the amount of forage necessary to support one animal unit (typically a cow/calf pair) for one month. The rental charged per AUM is set by a formula using prices received for beef cattle in Montana. Grazing lands generated $321,074 for universities in FY 2008 (see Table 39).

Table 38
Agriculture and Grazing Revenues

Trust	FY 2006	FY 2007	FY 2008
University of Montana	$ 82,442	$ 85,948	$ 86,197
MSU–Morrill Grant	130,071	164,117	141,630
MSU–Second Grant	20,718	22,303	20,480
Montana Tech	224,306	215,202	278,000
State Normal School	141,767	160,345	151,553
Total	**$ 599,304**	**$ 647,915**	**$ 677,860**

Table 39
University System FY 2008 Revenues and Production

Grant	Grazing Revenue	Ag Revenue	Total Revenue	Wheat Bushels	Barley Bushels	Hay Tons	CRP AUMs	Acres
University of Montana	$ 28,910	$ 57,287	$ 86,197	27,501	235	959	3,592	124.6
MSU–Morrill Grant	111,934	29,696	141,630	9,921	0	163	15,444	155.5
MSU–Second Grant	18,753	1,727	20,480	377	0	18	2,591	0
Montana Tech	73,131	204,869	278,000	95,080	3,882	517	10,163	348.6
State Normal School	88,346	63,207	151,553	17,445	9,766	281	12,919	529.8
TOTAL	**$ 321,074**	**$ 356,786**	**$ 677,860**	**150,324**	**13,883**	**1,938**	**44,709**	**1,158.5**

Forest Management

Forest management activities are managed in four sections; forest product sales, forest inventory, forest improvement, and resource management. General background information on bureau activities is available on the department's web site: www.dnrc.mt.gov/trust/fmb.

Forest Product Sales

During FY 2008, a total of $865,671 in revenue was generated from timber permits and sales (see Table 40) and 6,005 thousand board feet was harvested from university trust lands (see Table 41).

Forest Improvement

In FY 2008, the department collected $119,981 in Forest Improvement fees from the university lands. Table 42 shows the amount collected between FY 2005 and FY 2008 by trust.

Table 40
Timber Revenues

Trust	FY 2005	FY 2006	FY 2007	FY 2008
University of Montana	$ 20	$ 110	$ 620	$ 50
MSU–Morrill Grant	118,561	1,327	104,649	172,785
MSU–Second Grant	1,050,918	658,738	560,577	675,941
Montana Tech	101,932	56,358	13,544	6,748
State Normal School	728,568	304,998	44,514	10,147
Total	**$ 1,999,999**	**$ 1,021,531**	**$ 723,904**	**$ 865,671**

Table 41
Timber Volume Harvested by Trust in Thousand Board Feet (MBF)

Trust	FY 2006	FY 2007	FY 2008
University of Montana	0	0	0
MSU–Morrill Grant	5	532	805
MSU–Second Grant	1,977	2,206	5,050
Montana Tech	383	68	37
State Normal School	2,126	220	113
Total	**4,491**	**3,026**	**6,005**

Table 42
Forest Improvement Fee Collections

Trust	FY 2005	FY 2006	FY 2007	FY 2008
University of Montana	$ 0	$ 0	$ 0	$ 0
MSU–Morrill Grant	0	0	0	0
MSU–Second Grant	205,208	99,407	56,500	119,208
Montana Tech	20,701	89,248	1,249	50
State Normal School	109,046	320,356	4,279	723
Total	**$ 334,955**	**$ 509,011**	**$ 62,028**	**$ 119,981**

Minerals Management

The Minerals Management Bureau is responsible for leasing, permitting, and managing oil and gas, metalliferous and nonmetalliferous, coal, and sand and gravel agreements. Table 43 shows gross mineral revenues from FY 2005 to FY 2008.

Mineral Leasing

The program is responsible for reviewing and processing all mineral lease and permit applications; advertising, competitively bidding, and issuing new leases; reviewing and approving lease assignments; and collecting, verifying, and posting lease rentals and production royalties. Revenues by trust and activity are shown in Table 44.

Table 43
Mineral Revenue FY 2005–FY 2008

Trust	FY 2005	FY 2006	FY 2007	FY 2008
University of Montana	$ 33,416	$ 6,790	$ 11,522	$ 64,013
MSU–Morrill Grant	67,879	204,109	95,618	98,430
MSU–Second Grant	3,264	2,873	1,830	1,132
Montana Tech	16,959	48,064	38,557	47,627
State Normal School	23,694	24,303	18,923	18,840
Total	**$ 145,212**	**$ 286,139**	**$ 166,450**	**$ 230,042**

Table 44
Mineral Revenues by Trust and Activity for FY 2008

Revenue	MSU Second	MSU Morrill	State Normal	Montana Tech	Univ. of Montana	Total
Oil & Gas Leases		$ 20,959	$ 7,722	$ 14,629	$ 15,264	$ 58,574
Non-drilling Penalties		23,341	4,900	19,759	2,291	50,291
Mineral LULs					480	480
Gas Royalties		54,130	6,218			60,348
Sand & Gravel Royalties	$ 1,132			13,239	830	15,201
Oil & Gas Bonus Payments					44,898	44,898
In Lieu of Exploration					250	250
Total	**$ 1,132**	**$ 98,430**	**$ 18,840**	**$ 47,627**	**$ 64,013**	**$ 230,042**

Real Estate Management

The REMB administers activities on lands classified as "other" and all secondary activities on lands classified as grazing, agriculture, or timber. In FY 2008, the University System trust land generated gross revenues of $140,268 from one-time easement income, and $1,064,520 from annual lease/license revenue for a total of $1,204,788 (See Tables 45 and 46).

Easement income is derived from one-time payments assessed at the "fee" price, the appraised price as if the property were purchased outright. Lease and license income is calculated by multiplying a percentage of the appraised land value to determine an annual payment. MSU Second Grant generated the highest lease/license income in FY 2008, due to the large number of leases and licenses associated with this beneficiary. More than 80% of these leases are residential leases in the Southwestern Land Office, including Placid Lake, Seeley Lake, and Morrell Flats near Seeley Lake.

Table 45
Real Estate Management Revenue by Trust

Trust	FY 2006	FY 2007	FY 2008
University of Montana	$ 9,628	$ 34,825	$ 45,116
MSU–Morrill Grant	22,953	36,909	28,113
MSU–Second Grant	397,807	792,231	572,247
Montana Tech	853,243	432,131	498,577
State Normal School	97,672	51,728	60,735
Total	**$ 1,381,303**	**$ 1,347,824**	**$ 1,204,788**

Table 46
Real Estate Management Revenue by Trust FY 2008

Trust	Leases/Licenses	Easements	Total
University of Montana	$ 24,830	$ 20,286	$ 45,116
MSU–Morrill Grant	24,709	3,404	28,113
MSU–Second Grant	494,047	78,200	572,247
Montana Tech	469,018	29,559	498,577
State Normal School	51,916	8,819	60,735
Total	**$ 1,064,520**	**$ 140,268**	**$ 1,204,788**

Web sites featured in this section:

www.dnrc.mt.gov/trust
www.dnrc.mt.gov/trust/mmb
www.dnrc.mt.gov/trust/remb
www.dnrc.mt.gov/fmb
www.montana.edu/
www.msubillings.edu
www.mtech.edu
www.umt.edu
www.umwestern.edu

Water Resources Division

Water Resources Division

Providing the most benefit, through the best use, of the state's water resources for the people of Montana.

The Montana Constitution affirms that the state's water resources are owned by the State of Montana and are to be used by its people. The DNRC has statutory responsibility to ensure that the state's water resources are managed to meet existing and future needs of its citizens.

The Water Resources Division (WRD) is comprised of five bureaus–the State Water Projects, Water Management, Water Operations, Water Rights, and Water Adjudication bureaus–and eight regional offices. The division has approximately 164 employees, with staff in the Helena central office and regional offices in Billings, Bozeman, Glasgow, Havre, Helena, Kalispell, Lewistown, and Missoula.

St. Mary Canal. Photo by DNRC staff.

Further information about the division and Montana water resources can be found on the division's web site at www.dnrc.mt.gov/wrd.

State Water Projects Bureau

The State Water Projects Bureau (SWPB) administers the operation, management, and rehabilitation of state-owned dams, canals, and hydropower projects under the purview of the DNRC WRD. A complete list of the projects, along with additional information, can be viewed on the DNRC WRD web site at www.dnrc.mt.gov/wrd/water_proj/. DNRC also provides professional engineering and rehabilitation assistance on 10 additional water projects owned by the DFWP. The SWPB markets water from the state-owned facilities primarily for irrigation and administers approximately 1,965 water-marketing contracts through local water user associations. The total combined volume of water marketed by the SWPB per year is 293,609 acre-feet. Revenue from the water purchase contracts, leasing of lands associated with the projects, and net revenue from hydropower generation supplements funds for state water project rehabilitation costs (see Tables 47 and 48). Debt repayment funds come from repayment contracts with water users. The SWPB ensures that projects are operated and maintained in a safe, efficient manner, are kept to current dam safety standards, and repayment contracts are properly administered.

Project Rehabilitation

The Project Rehabilitation Program identifies and corrects safety and operational deficiencies on state-owned water projects. An abutment stabilization project on Martinsdale Dam near White Sulphur Springs was completed during FY 2008. The project included removal of accumulated sediments from the inlet, placement of additional rock riprap, and replacement of the trashrack grates. The outlet terminal structure was replaced at Nilan North Dam, west of Augusta. This project included addition of a diaphragm filter for the outlet conduit. Feasibility studies were completed for Painted Rocks Dam and for an early warning system at Middle Creek Dam. The operating gate at Painted Rocks dam was removed, refurbished, and replaced. Final design for rehabilitation of Ackley Lake Dam was completed in FY 2008, with construction scheduled to begin in fall 2008. The feasibility study for rehabilitation of Ruby River Dam was also completed. Ongoing projects include feasibility studies for Frenchman and Cataract dams, installing automated

Table 47
Leases Associated with DNRC-Owned Water Projects

Lease Type	Number of Leases	Annual Revenues
Cabin site	26	$ 26,522
Grazing	5	4,958
Totals	**31**	**$ 31,480**

Martinsdale Dam. Photo by Brian Grant.

instrumentation at Middle Creek Dam, and final design at Deadman's Basin Dam for replacement of the outlet terminal structure and seepage control measures. SWPB staff also prepared Renewable Resource Grant and Loan applications for three projects: (1) rehabilitation of Ruby River Dam in Madison County; (2) installation of new drains at Martinsdale Dam in Wheatland County; and (3) replacement of the outlet terminal structure at Deadman's Basin Dam in Wheatland County.

Seepage Monitoring

Seepage monitoring is required as a condition of the operating permits for all dams regulated by the Montana Dam Safety Program. Twenty-one DNRC dams are regulated under the program (see www.dnrc.mt.gov/wrd/water_proj) and have monitoring wells installed. The SWPB is upgrading seepage monitoring data collection systems on DNRC's projects. In FY 2008 the following changes were made to seepage monitoring systems:

- Tongue River Dam has been upgraded to include automated monitoring of the drain seepage in the flume vault building. Several repairs and upgrades to existing equipment at Tongue River Dam were made to improve remote communication and repair faulty sensors.
- East Fork of Rock Creek Dam was upgraded to include new vibrating wire sensors to replace old malfunctioning pressure transducers.
- Electronically collected data from the East Fork of Rock Creek and Tongue River dams have been made available to SWPB engineers. This near-real-time graphical format allows SWPB engineers to see the most recent values collected.
- Planning is under way to implement an automated seepage data collection system at Middle Creek Dam.

Repairs made to existing electronic monitoring systems have increased the reliability of the daily automated measurements for reservoir storage at the East Fork of Rock Creek and Tongue River dams. These values can be seen at www.dnrc.mt.gov/wrd/water_proj/dam_pages.

At locations where these systems are not in place, measurements are taken by hand. The data are collected monthly, reviewed, and compared to historical trends.

Project Management

The Project Management Program administers operation of state-owned dams and canals and oversees repayment contracts with water user associations. Additionally, the program protects water rights for the projects and oversees disposal of projects no longer appropriate for state ownership.

Property Management

Several years ago, the state of Montana constructed numerous water conservation projects because the government needed to create employment opportunities and stabilize the agricultural economy. Governmental involvement in some of these projects no longer provides public benefits, so these projects are being transferred to local water user associations, water districts, or private ownership. This program also administers the property assets of active water projects.

Canal Operations

The Canal Operations Program is responsible for identifying and correcting operational deficiencies on 250 miles of state-owned canals. Major activities accomplished in FY 2008 include:

Table 48
FY 2007 Broadwater-Missouri Power Project

Operating availability	99%
Gross energy generation (kilowatt-hrs.)	3,503,190
Gross revenue from sales	$ 48,908,739
Investment income	$ 174,264
Operating costs	($ 455,902)
Bond payments	($ 1,849,750)
Net Revenue	**$ 1,371,802**

- The East Fork Siphon Replacement Project, which rehabilitates a major component of the main canal of the Flint Creek Water Project, was let to bid. Construction will be completed by December 2008.
- An unstable and constricted reach of the Deadman's Supply Canal was enlarged and lined with an ethylene propylene diene monomer (rubber) membrane.
- A survey was undertaken and design prepared to restore the capacity of the Smith Creek Canal, a supply canal for Nilan Reservoir.
- The west wall of the concrete spillway for Martinsdale Drop Structure #2 was replaced, and 300 feet of the Martinsdale Outlet Canal was lined with an EPDM membrane.
- A failing retaining wall was replaced at the Missouri River Pipe Span near Toston, which is part of the Broadwater-Missouri Water Project. A canal drain was also installed on the Main Canal.
- Staff prepared Renewable Resource Grant and Loan applications for two canal projects: (1) the Twodot Canal Rehabilitation Project, which proposes to stabilize a section of canal above U.S. Highway 12 near Twodot; and (2) the Nevada Creek delivery canals, which will improve structural defects in two canals near Helmville.

Water Measurement and Water Right Activities

The SWPB is responsible for all water measurement and water right activities associated with state-owned water projects, including tabulation of annual discharge summaries for SWPB gauging stations for the water year (October 1 through September 30). In FY 2008, the bureau collected and recorded bimonthly reservoir storage data for 18 state-owned reservoir projects; presented monthly data to the Governor's Drought Advisory Committee; operated and maintained 32 permanent and two temporary stream- and canal-gauging stations associated with state projects; and upgraded two permanent gauging stations with electronic data-recording equipment. The staff also measured streamflows and maintained rating tables for staff gauges on the four major tributaries immediately above Painted Rocks Reservoir. Bureau staff also continued consolidating and correcting water rights associated with state-owned water projects.

Hydropower

The Hydropower Program administers development and operation of hydropower facilities on state-owned water projects. To date, one hydropower facility, the

Broadwater-Missouri Power Project. Photo by Morrison- Maierle, Inc.

Broadwater-Missouri Power Project near Toston, has been built. With a maximum capacity of 10 megawatts, the project began generating power in June 1989. DNRC owns and operates the facility and contracts with NorthWestern Energy to sell the energy. Earned revenues help finance the rehabilitation of other SWPB water projects. In an average year (assuming mean runoff), the facility is capable of generating roughly 56 million kilowatt-hours of electricity and earns approximately $3.5 million in revenue from energy and capacity sales. After debt payments and operating expenses, approximately $1.3 million is available to rehabilitate state-owned dams.

Most of the water storage projects managed by the SWPB were completed in the late 1930s and early 1940s and have significant needs, either spillway capacity or structural deterioration. The earned revenue from Broadwater is critical for maintaining and repairing these structures so they meet current safety standards and codes. Table 48 shows statistics concerning the Broadwater-Missouri Power Project during FY 2007. Note: FY 2008 data are not available at the time of the annual report publication.

Drought has reduced power generation below anticipated average output for a number of years, including 2007. Replacement of the pedestrian/maintenance bridge across the dam was completed in late fall 2006. The operation and maintenance staff is anticipating significant annual maintenance work in late summer 2008.

Water Management Bureau

The Water Management Bureau (WMB) provides technical, planning, and educational support for: (1) solving statewide water resource issues, (2) addressing

water policy concerns, and (3) protecting Montana's interests in regional and international river basins.

Watersheds

During FY 2008, the WMB assisted watershed groups by providing scientific hydrologic support, guidance, and assistance in planning and process. Table 49 briefly summarizes the assistance provided for each watershed.

Protection of Montana's Water

DNRC has statutory responsibility to protect Montana's water resources in interstate and international water allocation and management proceedings. A description of WMB activities during FY 2008 is shown in Table 49.

Columbia River

WMB continued to provide technical information and advice on issues associated with operation of the Columbia River system and the effects of federal decisions on reservoir levels and flows in Montana.

Lower Missouri River

The WMB represented Montana on the Missouri River technical committee that reviews and recommends options for the annual operation of the Missouri River mainstem system. The WMB also represented Montana on another interstate committee charged with coordinating habitat restoration efforts with system operations.

Milk-St. Mary Rivers

The International Joint Commission established a task force to determine whether current administrative procedures can be modified to allow the United States and Canada to receive a greater share of their apportioned flows in these rivers. The WMB asked to lengthen the flow-balancing period from bimonthly to annual. This option was identified in the task force report as one that would allow each country to use more of its apportioned share. WMB is participating on a task force developing a terms of reference as a follow-up with Alberta on cost-sharing the St. Mary Rehabilitation Project and for Montana to receive an additional 40,000 acre-feet per year of St. Mary River water.

North Fork of the Flathead River

WMB coordinated a team of state and federal professionals to participate in the British Columbia regulatory process in review of the proposed Cline coal mine. The Cline mine would be just north of the international border within the North Fork of the Flathead drainage of British Columbia (BC Flathead). WMB spent considerable time addressing the potential of coalbed methane (CBM) development by British Petroleum of Canada in the BC Flathead. WMB also participated with the governor's office on an agreement between British Columbia and Montana to address transboundary issues. WMB is also assisting in the oversight of a large federal appropriation to conduct baseline assessment within the BC Flathead.

Larry Dolan installing a gauging station on the West Fork of the Boulder River. Photo by Rich Moy.

Poplar River

WMB continued to coordinate with Saskatchewan and the U.S. Geological Survey (USGS) to ensure that Montana receives its share of the flow of the East Poplar River in accordance with the International Joint Commission's recommended apportionment.

Yellowstone River

WMB has implemented studies in preparation for litigation against Wyoming over the Yellowstone River Compact. Montana desires to protect its water users on the four interstate tributaries of the Yellowstone shared with Wyoming. During the summers of 2007 and 2008, Montana began to develop the information to better understand how water is used in both states.

Table 49
Assistance Provided to Watershed Groups in Montana FY 2008

Watershed Group	Assistance Provided
Big Hole Watershed Council	Streamflow monitoring, drought planning, endangered species issues (arctic grayling/Candidate Conservation Agreements with Assurances)
Blackfoot Challenge	Streamflow and drought monitoring, water supply forecasting, and habitat restoration
Boulder River Watershed Association	Irrigation efficiency and streamflow study (completed)
Clark Fork River Basin Task Force	Technical and administrative support and development of a water right management plan
Upper Clark Fork Steering Committee	General technical support, dewatering, and drought mitigation
Dearborn River Water Users	Streamflow and temperature assessment
Flathead Basin Commission	Water quality monitoring, research, and mitigation
Granite Headwaters (Flint Creek)	Georgetown Lake operations and Flint Creek flows and seepage losses technical assistance
Milk River Watershed Alliance	Water management assistance and water conservation plans; administrative, facilitative, financial, and technical support; canal rehabilitation effort coordination
Mill Creek Subcommittee of the Upper Yellowstone Watershed Basin	Technical and grant funding support
Pryor Creek (for the Yellowstone River Conservation District Council)	Streamflow and water quality monitoring
Ruby River Reservoir Task Force	Streamflow monitoring, assistance with river and reservoir operations
Upper Milk River Watershed	Water supply and irrigation water use investigations for international apportionment computations
Sun River Watershed Group	Water planning and management, streamflow monitoring
Sweet Grass Water Users	Stream gauging and other technical assistance for water supply and conservation study
Upper Tenmile Watershed Steering Group	Facilitation on issues related to streamflow, water quality, habitat restoration, and Superfund cleanup
Teton River Watershed Group	Streamflow and groundwater assessment in cooperation with DEQ
Yellowstone River Conservation District Council	Technical and grant funding support pertaining to floodplain mapping, hydrology, geomorphology, and GIS development

Protection and Use of Montana's Groundwater

WMB reviewed applications for beneficial use; petitioned for controlled groundwater areas; and provided technical oversight of controlled groundwater areas, water reservations, and special projects. In addition, WMB designed, conducted, and reported on field investigations and modeling studies to evaluate water availability and impacts of new or changed water uses on existing groundwater and surface water users. Groundwater hydrologists spent more and more time addressing conjunctive use of surface and groundwater and potential adverse impacts.

WMB provided objective scientific opinions on groundwater issues that involved multimillion dollar subdivisions, irrigation, and energy development projects. WMB chaired the Technical Advisory Committee for the Powder River Basin Controlled Groundwater Area and advised the Montana Board of Oil and Gas Conservation on water monitoring to detect effects of coalbed methane production on groundwater resources. In addition, WMB served on technical committees overseeing implementation of the Yellowstone Controlled Groundwater Area that was established to protect geothermal resources within Yellowstone National Park, the Sheridan County Conservation District Water Reservation, the Bozeman Solvent Site Controlled Groundwater Area, the Montana Bureau of Mines and Geology (MBMG) Groundwater Assessment Program, and the Gallatin County Water Resource Task Force.

Water Resource Education

Through the Montana Watercourse Program, WMB leveraged almost $500,000 of grant funding to organize or participate in over 150 watershed events reaching over 3,000 Montanans. Watercourse education included: volunteer water quality monitoring program, wetlands stewardship, community outreach, K-12 education through Water Education for Teachers (Project WET), and assistance to the Montana Watershed Coordination Council (MWCC). The Watercourse director is co-chair of the MWCC and active in its committees. The Watercourse and MWCC provided citizens with the tools and knowledge to solve watershed and water resource problems. WMB staff at the Montana Watercourse supervised activities of three full-time water education specialists at Montana State University: the Project WET Montana coordinator, the Montana volunteer water monitoring coordinator, and the Montana wetlands education coordinator. See more details at www.mtwatercourse.org.

Drought Mitigation

Record-breaking temperatures accompanied by windy conditions in many parts of western Montana caused most of these counties to be classified under the USDA Natural Disaster Determination for drought. WMB supported and coordinated activities of the Governor's Drought Advisory Committee. The committee updates and implements the Montana Drought Plan. WMB staff helped local water users and groups mitigate drought impacts with $183,000 in federal grants. For more information, please go to www.drought.mt.gov.

Water Commissioner Training

Staff conducted water commissioner training in Helena for 30 commissioners, periodically helped individual water commissioners, and updated the Water Commissioners Training Manual.

Water Commissioner training. Photo by DNRC staff.

St. Mary Canal Rehabilitation

The WMB continued to work to move rehabilitation of the St. Mary Canal forward. WMB staff coordinated canal rehabilitation planning efforts for the state, and helped obtain congressional authorization of $153 million to fund the rehabilitation. As part of the rehabilitation, WMB is developing a water system operation and accounting model for the Milk and St. Mary rivers.

Other Water Management Activities

WMB continued to assess effects of deregulation and NorthWestern Energy's bankruptcy on the Toston hydropower facility's Power Purchase Agreement with NorthWestern Energy. Staff reviewed the feasibility of hydropower development at state-owned storage projects.

WMB staff continued publishing the Milk River Watershed newsletter, flyers, and other division documents, as well as updating the web page for the Water Resources Division.

Water Operations Bureau

The Water Operations Bureau administers the Dam Safety, Floodplain Management, and Water Measurement programs and provides staff support for the Board of Water Well Contractors.

Dam Safety Program

The primary purpose of the Dam Safety Program is to ensure that dams with the potential to cause loss of life downstream are properly constructed, maintained, and operated. An operation permit is issued for dams that meet the state dam safety standards. Currently, 89 dams in the state are permitted. The Dam Safety Program regulates an additional 2,783 dams where a permit is not required, but action is required if danger to life or property exists. To obtain or renew an operation permit, the high hazard dam owner must review and update the dam's emergency action, operation, and maintenance procedures and a professional engineer must conduct an inspection. The Dam Safety Program issued 24 operation permits in FYs 2007 and 2008.

On a permitted dam, construction that could potentially threaten the dam's integrity requires a construction permit. The following dams had active construction permits for FYs 2007 and 2008: Bootjack Lake (Missoula County), Upper Taylor (Powell County), Ackley Lake (Judith Basin County), Lower Baker (Fallon County), Lake Frances East (Pondera County), Nilan North (Lewis and Clark County), North Fork of Smith River (Meagher County), and Beaver Creek (Hill County).

When a new dam is constructed or an existing dam repaired, the owner must apply for a hazard classification. A hazard classification is a determination of the potential for loss of life downstream due to dam failure. Fifteen hazard analyses were completed in FYs 2007 and 2008.

Education and public awareness were also priorities for the Dam Safety Program. Staff assisted with two-day educational workshops for dam owners in September 2006 and October 2007 through the Montana Association of Dam and Canal Systems. The Dam Safety Program continued to assist dam owners and local county officials with updating and testing emergency action plans.

Flooding East Gallatin, Bozeman; May 24, 2008. Photo by Laurence Siroky.

Floodplain Management Program

The Floodplain Management Program provides technical and administrative support to 127 locally administered floodplain management programs throughout Montana. Reducing loss of life and damage to structural property in the event of flooding is the primary goal of the program. The program staff provide general technical and engineering assistance to local and state governments, private property owners, and engineering consulting firms through written and e-mail responses, as well as on-site community visits. Approximately 1,000 phone contacts were made. Floodplain information was provided through an up-to-date web site: www.mtfloodplain.mt.gov.

Within the Floodplain Management Program, the state maintained the FEMA Flood Mitigation Program by informing communities of available funding for the costs of removing or elevating structures where multiple flood insurance claims have been filed.

The state entered into a contract with FEMA for the Map Modernization Program, funded through a Map Modernization Management Support Grant. This program worked with local communities within Montana to digitize current floodplain maps and incorporate new or existing studies on a countywide or partial county basis. Eight communities with preliminary maps are going through the map adoption process and maps for five counties (Flathead, Missoula, Gallatin, Park, and Carbon) are in production. Additional counties have been slated to begin map modernization over the next two federal fiscal years. Those counties include Ravalli, Cascade, Lewis and Clark, Yellowstone, Fergus, and Silver Bow.

To see these digitized maps or view the production status, go to www.montanadfirm.com.

Water Measurement Program

The Water Measurement Program provided technical assistance in measurement of streams and surface water diversions, focusing on streams with significant user conflicts or impacted resources. In the last year, the program consulted on measuring devices on Mill Creek, Burnt Fork (Bitterroot), and the Big Hole River. The program also interpreted water supply, snow pack, and climate forecasts for organized groups, such as the Big Hole River Watershed Committee and the Flint Creek Dam Advisory Committee. The program consulted with and assisted efforts by the WMB, DFWP, and Lewis and Clark County Water Quality Protection District.

Georgetown Lake

Modeling dam operation scenarios continued, based on water availability forecasts. The program operated and maintained streamflow stations and monitored snow pack.

The program operated and maintained streamflow stations assisting the Lower Tenmile and Blue Water Task Force Watershed groups, respectively.

The program installed, and now operates and maintains, stream gauging stations in the lower Big Hole Basin. Program staff processed grant applications for water measurement and control devices below Melrose, consulted on an infrastructure assessment, and are collecting flow data and river measurements from Divide Bridge downstream to Pennington Bridge.

Board of Water Well Contractors

The Board of Water Well Contractors is responsible for licensing water well drillers and water well contractors, and monitoring well constructors. The board also establishes and enforces minimum water well and monitoring well construction standards. Comprised of five members, the board includes one technical advisor/hydrogeologist appointed by MBMG, two licensed Montana water well contractors appointed by the Governor, one member appointed by the DNRC director, and one member appointed by the DEQ director. Each member serves a three-year term.

Licensing

During FY 2008, 278 people were licensed in three categories: 151 water well contractors, 62 monitoring well constructors, 49 water well drillers, and 16 inactive status. Seventeen new licenses were issued: six water well contractors, six water well drillers, and five monitoring well constructors. Fourteen licenses were revoked or not renewed.

Complaints and Investigations

During FY 2008, 42 complaint calls were received, of which 10 were filed formally in written form. Of those 10 formal complaints, three decisions of the board favored the complainant, five decisions favored the driller, and two were "no decision by the board" due to the nonconstruction content of the complaint. Two complaint investigations are currently open.

Public Awareness/Education

Two driller education classes were conducted by the board in FY 2007: "Geology and Hydrology for Drillers," and "Last Chance for Continuing Education," which included Global Positioning System fundamentals and using the Internet to submit well logs. The board also visited drillers at projects throughout Montana. A newsletter, *Well Developments*, is also published and distributed to license holders and others interested. Information for property owners about wells and water well drilling regulations is maintained on the board's web site and distributed through county health offices and DNRC regional offices. New to the Groundwater Right application form number 602 is the requirement that well owners will enter the well driller's name. This will allow easier cross reference of the water right and the well log. The board also responded to hundreds of telephone requests by the public for information on water well and groundwater issues.

Water Rights Bureau

The mission of the Water Rights Bureau is to ensure the orderly appropriation and beneficial use of Montana's waters. The Water Resources Division was reorganized in 2007. The Adjudication Program was separated from the Water Rights Bureau and a Water Adjudication Bureau was formed. The Water Rights Bureau handles new appropriations, which involve administration and regulation of Montana's new water uses and changes to existing water rights that began after June 30, 1973. In addition, the Water Rights Bureau carries out the Montana Constitutional directive to maintain a centralized water right record system, including the GIS and IT programs for the bureau and Water Resources Division.

Water Right Records

The main methods of accessing water right records by the public are through microfiche and electronic formats. With the water right database information on the Internet at http://nris.mt.gov/dnrc/waterrights, electronic records are

becoming the most popular form of access. Efforts continue to enhance the wide variety of water right information, forms, and data now available on the Internet at: www.dnrc.mt.gov/wrd.

Conversion of permanent records to scanned images served via the Web will greatly enhance usefulness and accessibility. Conversion began in FY 2006. Of the 350,000 water right files, approximately 25% have been converted to scanned images. Both water right record images and geographic representation of water right data are viewable at the Natural Resource Information System site: http://nris.mt.gov/dnrc/waterrights.

Geographic and Information Technology

A service agreement was signed with the Department of Administration Information Technology Services Division to provide database storage and management of water right spatial data. Enhancements to the Oracle water right database continue to improve flexibility in information gathering and report generation, increase mapping capabilities, and improve customer access and service. An Enterprise GIS environment was created to merge GIS data with the water right database. Other database enhancements include a new job tracking system, a centralized mapping application for water right adjudication examination, integration of Department of Revenue (DOR) geocode information, and improved public access to water right information.

New Appropriations

Applications for various types of water rights are received each year. Table 50 lists applications received during FY 2008. These water right applications vary in complexity depending on each region's water supply, area-specific competition for water, closed basins, and the specific project request. Staff in the division's eight regional offices process these applications.

House Bill 39 (2007) automated the process for updating water right ownership. It provided funding for developing a system to use the DOR's property tax database for updating water right ownership. Geocodes for property parcels in the DOR database were matched to water right places of use. The matching geocodes have been entered into the water right database. Effective July 1, 2008, the DOR bi-weekly electronically transfers geocodes of properties that have sold; new owners are uploaded into the appropriate water right record that matches the geocode. The Water Rights Bureau and regional office staff have conducted outreach and numerous presentations to title companies, real estate companies, clerks and recorders, and attorneys about HB 39 requirements.

As a result of District Court decisions, the level of scrutiny given to permit and change applications has increased. In addition, because of the HB 831 (Water Use in Closed Basins [2007]) and administrative rules governing groundwater development in closed basins and continued public concern for environmental review, groundwater-surface water connectivity, drought, the complexity of dealing with limits to water availability, and the need to avoid adverse effects to existing water rights, review has become increasingly more complex and time consuming. However, all regional offices are able to make an initial review to determine if an application is correct and complete within 180 days.

Several new and changed administrative rules were adopted for water right fees, forms, objections, definitions, and appropriations in closed basins.

When applicants and objectors are unable to settle their differences, the application moves into the hearing process. During FY 2008, 28 applications were scheduled for hearings. Of those, four were remanded to the regional office for a decision because the objectors withdrew. Four applications were withdrawn, and the hearing vacated. The remaining applications have or are awaiting final decisions.

Table 50
Water Right Applications in FY 2008

	Received	Processed[23]
Permits	118	148
Changes	54	112
Groundwater certificates	2,937	3,684
Replacement wells	44	70
Basin closure petitions	0	0
Exempt water rights	133	315
Stock water permits	126	145
Redundant wells	4	1
Water right ownership updates	5,099	5,080
Extension of time	39	61
Project completion certifications	86	0
Petition for groundwater closure	0	1

[23] Forms processed in FY 2008 include prior year forms.

In general, permit and change applications continue to be more complex and contentious, particularly in closed basins. Action was taken on four petitions for Controlled Groundwater Areas (CGAs). The North Hills Temporary CGA was reduced in size and extended for two years; the Horse Creek Temporary CGA was extended an additional two years; the Sypes Canyon CGA petition for permanent CGA was denied after public hearing; and the Green Meadow CGA petition was granted a temporary CGA for further study and data collection for two years.

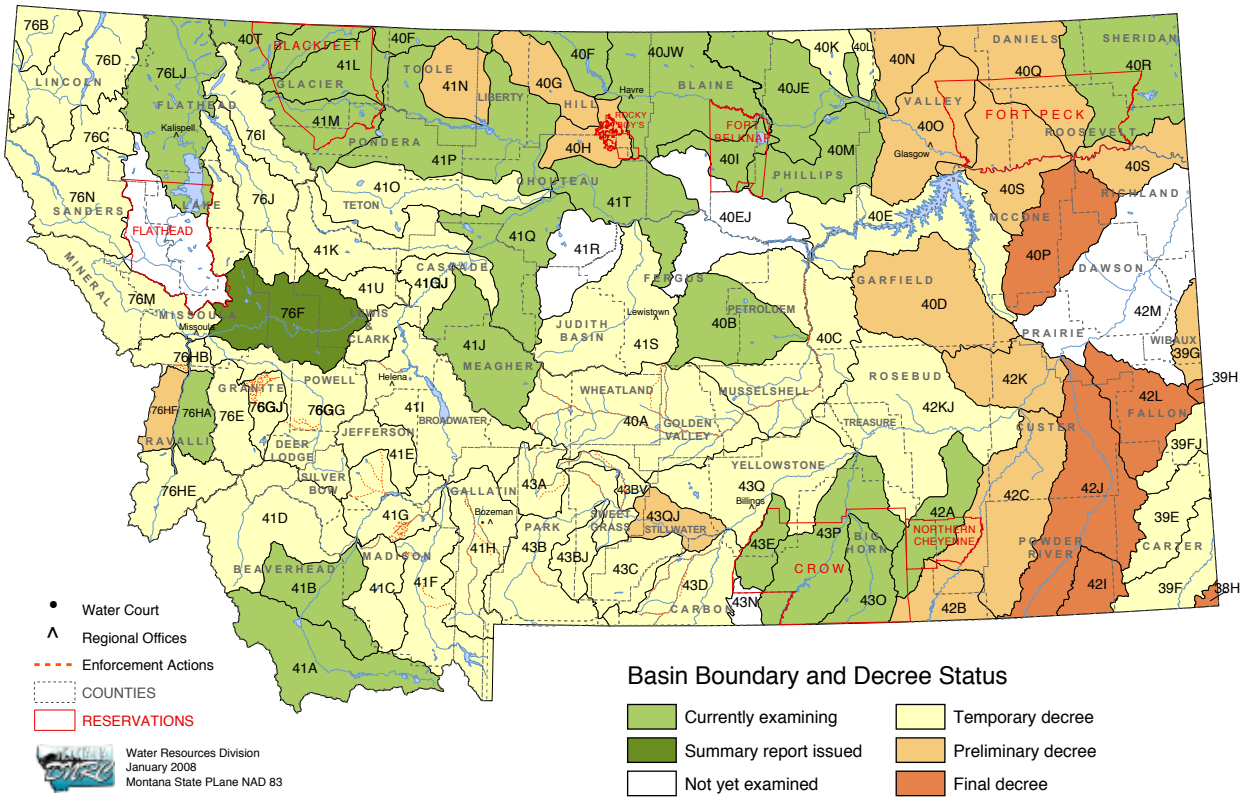
Water Adjudication Bureau

Adjudication staff continued to work under HB 22 to expedite DNRC claim examination and issuance of Water Court decrees in the statewide adjudication process. During FY 2008, 7,227 claims were examined; the total examined to date is 26,618 claims. The second benchmark for claim examination is 19,000 claims by December 31, 2008. Staff also provided post-decree assistance to the Water Court. Regional office staff joined the court in working with hundreds of citizens to resolve issues and disputes on pre-1973 water use claims. DNRC examined claims in the following basins: Tongue River, Red Rock River, Big Muddy Creek, Two Medicine River, Marias River, Big Hole River, Beaverhead River, Flatwillow Creek, east side of the Bitterroot River, Smith River, Blackfoot River, Missouri River from Sun River to the Marias, and the Flathead River.

In addition, WRD staff, the Water Court, and various District Courts worked together to enforce the Water Court's Temporary Preliminary Decrees for the following surface water sources:

- Baker Creek (Basin 41H)
- Bear Creek (Basin 41F)
- Big Timber Creek (Basin 43B)
- Birch Creek (Basin 41F)
- Careless Creek (Basin 40A)
- Carlton Creek (Basin 76H)
- Clear Creek (Basin 43D)
- Cottonwood Creek (Basin 43A)
- Cottonwood Creek (Basin 76G)
- Dempsey Creek (Basin 76G)
- Hyalite and South Cottonwood creeks (Basin 41H)
- Indian Creek (Basin 41F)

Figure 30
Basin Location and Adjudication Status
March 14, 2008



- Lower Willow Creek and tributaries (Basin 76GJ)
- Musselshell River (Basin 40A, 40C)
- One Horse Creek (Basin 76H)
- Pipestone, Little Pipestone, and tributaries (Basin 41G)
- Racetrack Creek (Basin 76G)
- Red Lodge Creek (Basin 43D)
- Rock Creek (Basin 43A)
- Rock Creek (Basin 43D)
- Sheafman Creek (Basin 76H)
- Silver Creek (Basin 41I)
- Sourdough Creek (Basin 41H)
- South Meadow Creek (Basin 41F)
- Sweet Grass and Cayuse creeks (Basin 43BV)
- Swimming Woman Creek (Basin 40A)
- Upper Shields River (Basin 43A)
- West Gallatin River (Basin 41H)
- Whitetail and Little Whitetail creeks (Basin 41G)
- Willow Creek and tributaries (Basin 41G)
- Wisconsin Creek (Basin 41C)

Regional Offices

Billings

The Billings Regional Office (BRO) continued to provide support for WRD programs and services for citizens in southeastern and southcentral Montana. Adjudication staff worked with claimants and the Montana Water Court to mitigate objections to water right claims on the Yellowstone River (Basin 42KJ) and began assisting claimants with objections in the Tongue River Water Court Decree (Basins 42C and 42B). The temporary CGA near Horse Creek was extended for an additional two years with staff monitoring surface and groundwater levels. The BRO has expanded its role with the Dam Safety and Floodplain Management programs since more technical involvement is required for application review and hazard determination. The BRO engineer performs annual inspections of local state projects (Tongue River Reservoir, Cooney Reservoir, and Glacier Lake) and reviews floodplain permits.

Bozeman

Groundwater development continued to be a very hot topic in the Gallatin Valley. Work continued with the District Court and water commissioner on administration of decreed water rights on the West Gallatin River via water measurement and staff gauge installations. Adjudication staff worked with the Water Court on certification cases as well as claims examination in the Red Rock River Basin. The change in the transfer process and the addition of geocodes to water right records has led to training workshops presented to the public and additional research projects. With retirement of two 30-year DNRC employees, the office is undergoing personnel changes, as well as becoming a unit office under the Helena Regional Office.

Glasgow

Glasgow Regional Office staff (GRO) continued to play a key role in basin coordination and assistance to the Milk River Rehabilitation Working Group in developing a long-term solution to water shortages, a failing infrastructure, and Milk River Project re-authorization legislation and funding. Under a U.S. Bureau of Reclamation (BOR) and DNRC cooperative agreement, Glasgow staff assisted the Milk River Project Irrigation districts and the Joint Board of Control with water conservation planning as part of a joint cooperative effort.

Staff also continued to serve eastern Montana conservation districts by:

- maintaining their water reservation database records;
- providing technical assistance in facilitating the mandated two-year and 10-year reservation development reports;
- providing water reservation process training to Conservation District administrators and processing assistance to changes to their reserved water rights; and
- assisting with water appropriations planning for multicounty rural water projects.

In addition to public assistance, records research, and water use application processing, GRO staff facilitated the orderly development of new appropriations of water within a 10-county area, responded to violations of the 1973 Water Use Act, and provided technical assistance to water users, the Water Court, and the following working groups:

- Milk River Technical Working Group;
- St. Mary Rehabilitation Working Group;
- Milk River Joint Board of Control;
- Missouri River Conservation Districts Council;
- Reserved Water Rights Compact Commission;
- Bowdoin National Wildlife Refuge Conservation Planning Committee;
- Milk River Watershed Alliance; and
- St. Mary Emergency Response Planning Group.

This past year the GRO has facilitated expedition of the adjudication of Montana's water by:

- completing the summary report in preparation for a Water Court decree in Beaver Creek (Basin 40M);
- examining the majority of the water use claims in Big Muddy Creek (Basin 40R); and
- assisting the Water Court in resolution of objections to hundreds of water right claims within basins 40Q and 40S.

Havre

Havre Regional Office staff, in cooperation with county commissioners, conservation districts, BOR, the USGS, Saskatchewan Water Authority, the Prairie Farm Rehabilitation Administration, Water Survey Canada, and water users on both sides of the Canadian border, worked effectively to reduce waste and provide equitable water delivery to mitigate the negative effects of water shortages and the Administrative Rule limitations of the United States/Canada 1921 Compact.

In addition to public assistance, records research, and water application processing, Havre staff facilitated the orderly development of new appropriations of water over an eight-county area, responded to violations of the 1973 Water Use Act, and provided technical assistance to water users, the Water Court, and the following working associations and groups:

- Montana Association of Dam and Canal Owners;
- Association of Montana Floodplain Managers;
- Eastern Tributaries Working Group;
- Milk River Watershed Alliance;
- Reserved Water Rights Compact Commission;
- Teton River Water Users Association;
- Frenchman Water Users Association;
- Little Dry Water Users Association, and
- Big Sandy Creek Bonneau Release Committee.

Havre staff worked with county floodplain coordinators to improve compliance and consistency in the implementation of floodplain regulations and the accuracy of floodplain maps. Havre staff also worked with multiple dam owners on dam safety concerns, emergency action plans, annual operation and maintenance plans, and the safety and evaluation of existing dams.

The Havre Regional Office facilitated adjudication of Montana's waters by:

- completing a large portion of the summary report indexes in preparation for a Water Court decree in the Middle Milk River (Basin 40J), which encompasses nearly 13,000 pre-1973 water right claims;
- examining a large portion of the water use claims in the Marias River (Basin 41P), and
- assisting the Water Court in resolution of objections to water right claims within Big Sandy Creek (Basin 40H) and the Teton River (Basin 41O).

Helena

The Helena Regional Office saw a continued increase in construction of groundwater wells in the region as growth spurred development. The office processed water right permit and change applications, notice of completion of groundwater developments, and ownership updates for a seven-county region in southwestern Montana. Staff provided information and guidelines to applicants who have to meet the criteria in 85-2-311, MCA, as well as assisting the public with water right inquiries and research.

The adjudication staff continued to assist the Water Court and the public with post-decree work in the area's basins. Temporary Preliminary decrees were issued in Basins 41D (April 6, 2007) and 41QJ (February 6, 2008).

Staff also assisted in implementation of other Water Resources Division programs including work on area state water projects, assistance with floodplain management, and dam safety programs.

Kalispell

The Kalispell Regional Office concentrated on water right and administrative duties in the last fiscal year. The regional manager retired and was replaced in August 2007. Also, a water resource specialist retired in October. The current compliance tech replaced the water resource specialist and a new compliance tech was hired in February. The office has also hired a new HB 22 adjudication specialist to assist in completing claim examination. This has been a year of training. HB 22 occupied a full-time person, while remaining staff dealt with the backlog of applications, new applications, change applications, and exempt wells. The Water Adjudication staff has begun claim examination on the Flathead River Basin. Water right complaints and administrative duties have occupied the rest of the office time in the last two years and will most likely be the focus in the upcoming biennium. In the next biennium, the CSKT verification project will demand attention, continued area growth will result in more demands for water, and more public education and staff training will be needed.

Lewistown

The Lewistown Regional Office (LRO) provided support to division programs, with emphasis on water rights, state-owned irrigation projects, and floodplain program assistance. Staff completed water right adjudication claims examination in Flatwillow Creek (Basin 40B) and began examination of Arrow Creek (Basin 41R). The LRO assisted the Helena hearings unit by performing hearing examiner duties for water right contested cases and the North Hills CGA hearing. Water right enforcement assistance to District Court-appointed water commissioners in the Musselshell and Smith River basins continued to be a priority. Staff provided engineering functions for the State Water Projects and Water Operations bureaus, including construction inspection services for a major bank stabilization project for Martinsdale Reservoir and the Jordan-Big Dry Creek floodplain survey/project. Water management activities included participation in various watershed committees and working groups.

Missoula

The Missoula Regional Office (MRO) staff supported the water right compact negotiation between the State and the CSKT through the following tasks: completed water right claim examination on the Jocko River Sub-Basin and the Mission Division of the Flathead Indian Irrigation Project; provided technical hydrologic assistance to the Joint Technical Team; and provided administrative implementation oversight for department staff. Staff also worked on implementation of the water right compact between the U.S. Forest Service and the State, which was approved last legislative session.

MRO staff participated in the water right claim adjudication effort in the Bitterroot through examining claims in Sub-Basin 76HA and providing Water Court assistance. Staff provided multiple training sessions to realtors, title companies, and the general public to inform them about the changes to ownership update procedures and to improve compliance with water right requirements. MRO staff worked on new water right applications to avoid a backlog and meet statutory deadlines. Substantial work was also completed to match geocodes with water rights to facilitate the transition to the revised water right ownership update procedures. Missoula staff worked with the SWPB on the Painted Rocks Dam Project, assisting with contract administration for rehabilitating the operator gate and roller chains. Staff also worked with county floodplain coordinators to improve consistency in implementation of floodplain regulations and the accuracy of floodplain maps.

Web sites featured in this section:

www.dnrc.mt.gov/wrd
www.dnrc.mt.gov/wrd/water_proj
www.dnrc.mt.gov/wrd/water_proj/dam_pages
www.drought.mt.gov
www.mtfloodplain.mt.gov
www.montanadfirm.com
www.mtwatercourse.org
http://nris.mt.gov/dnrc/waterrights

Appendix A

Appendix A

Funding Information Concerning the Resource Indemnity Tax and the Coal Severance Tax

Resource Indemnity Tax

1. The **Resource Indemnity Groundwater Assessment Tax** (RIGWA) is a 0.5% tax of the gross value of the product of certain mineral mining (see Figure 31). The tax was originally created in 1973. Mineral production, including coal, small metal mine production, talc, vermiculite, limestone, and other *"nonrenewable merchantable products extracted from the surface or subsurface of the state of Montana"* (15-38-103, MCA), is taxed. In addition to RIGWA proceeds, an 8.6% share of the **Oil and Gas Production Tax** is distributed to the **Resource Indemnity Tax Trust** (RIT Trust) and its associated accounts (15-36-324, MCA).

2. The **Resource Indemnity Tax Trust** was created in 1973. No funds deposited into the trust can be spent until total deposits exceed $100 million. This protection is provided in Article IX, Section 2, of the Montana Constitution. Trust fund proceeds are invested, and the interest earnings are distributed to several natural resource programs.

Renewable Resource Grant and Loan Program receives RIT Trust interest earnings for the biennium (85-1-604, MCA). The Renewable Resource Grant and Loan Program was created in 1993 by combining the Renewable Resource Development Program and the Water Development Program. The purpose of the grant program is to fund projects that conserve, develop, manage, and preserve water and other renewable resources. Projects include construction and rehabilitation of existing water supply systems and wastewater systems, educational efforts, feasibility studies, development of water storage, enhancement of renewable resources including recreation, reduction and advancement of agricultural chemical use, and improvement of water use efficiency (85-1-602, MCA).

The **Reclamation and Development Grants Program** was established in 1987. The program receives RIT Trust interest earnings each biennium. Purposes of the program are: (1) to repair, reclaim, and mitigate environmental damage to public resources from nonrenewable resource extraction; and (2) to develop and ensure the quality of public resources for the benefit of all Montanans (90-2-1101, MCA). Projects have included plugging abandoned oil and gas wells, reclaiming mine sites, controlling nonpoint source pollution, researching new technologies for mine waste cleanup, conducting groundwater studies to determine the extent of contamination, and cleaning up pesticide contamination.

A. The **Groundwater Assessment Account** was created in 1991 (85-2-901 et seq., MCA). The purpose of the account is to fund a statewide Groundwater Assessment Program that will monitor the quantity and quality of the state's groundwater. The program is staffed by the MBMG in Butte. An oversight committee reviews all expenditures, approves monitoring sites, prioritizes areas, coordinates information, and evaluates reports.

B. The **Environmental Contingency Account** was created in 1985 (75-1-1101 et seq., MCA). The Governor has the authority to approve expenditures from this account to meet unanticipated public needs. Specifically, the statute limits projects to the following objectives: (1) to support renewable resource development projects in communities that face an emergency or imminent need for the services or to prevent the failure of a project; (2) to preserve vegetation, water, soil, fish, wildlife, or other renewable resources from an imminent physical threat or during an emergency, not including natural disasters or fire; (3) to respond to an emergency or imminent threat to persons, property, or the environment caused by mineral development; and (4) to fund the Environmental Quality Protection Fund. Each biennium, $175,000 of the RIT Trust interest earnings is allocated to this account. The balance in this account cannot exceed $750,000.

C. The **Oil and Gas Production Damage Mitigation Account** was created in 1989 (85-2-161, MCA). The Board of Oil and Gas Conservation may authorize payment for the cost of properly plugging a well and reclaiming and/or restoring a drill site or other drilling or producing area damaged by oil and gas operations. The site must be abandoned, and the responsible person either cannot be identified or refuses to correct the problem. Each biennium, $50,000 of the RIT Trust interest earnings is allocated to this account. The balance in this account cannot exceed $200,000.

D. The **Water Storage Account** was established in 1991 (85-1-701 et seq., MCA). The purpose of the account is to provide funding for projects that rehabilitate existing water storage facilities or develop new ones. Priority is given to high hazard, unsafe dams. Each biennium, $500,000 of RIT Trust interest earnings is deposited into this account.

E. The **Natural Resources Projects State Special Revenue Account** receives interest earnings from the RIT Trust (85-1-601, MCA). This special revenue account also receives other revenue. The revenues are used to fund natural resource agency projects, the Renewable

Resource Grant and Loan Program and the Reclamation and Development Grants Program.

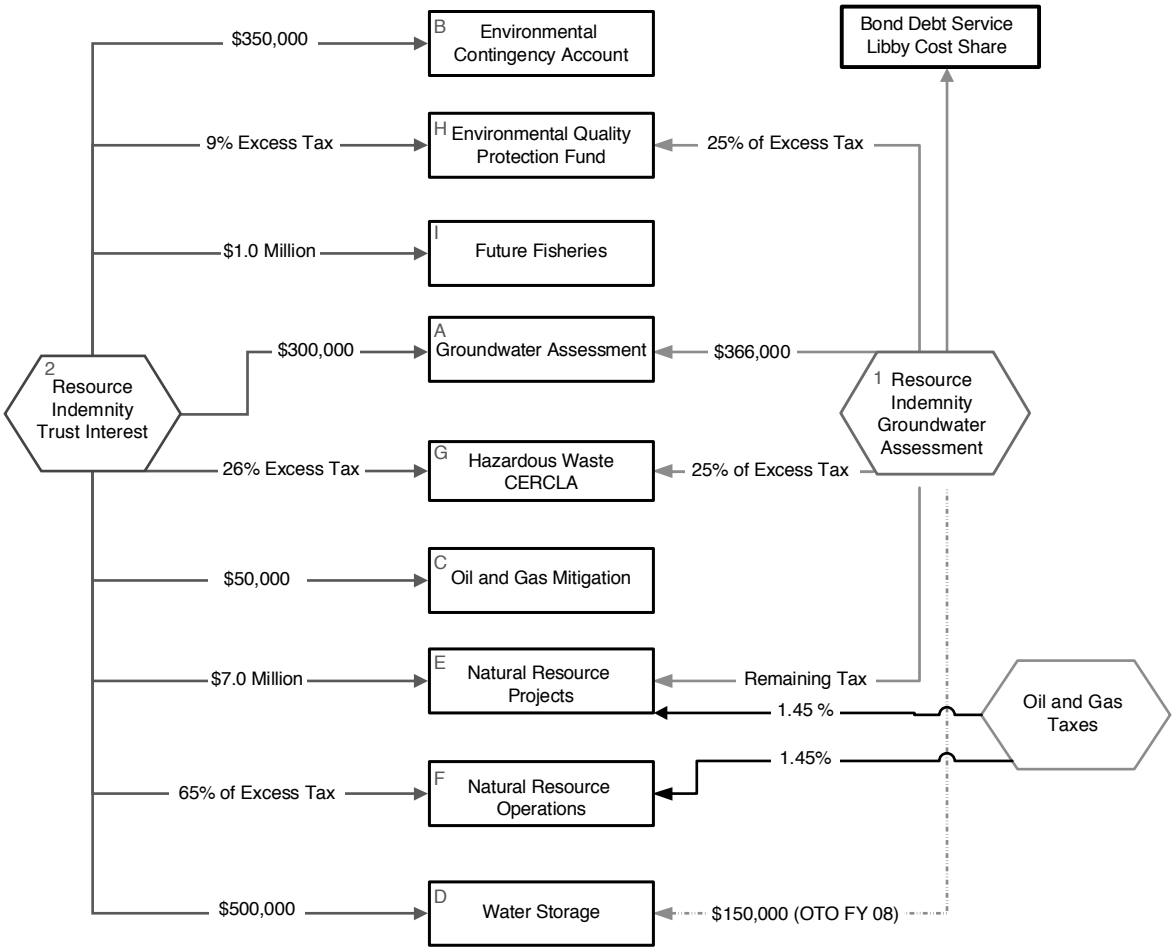
F. The **Natural Resources Operations State Special Revenue Account** receives RIT Trust interest earnings, and Oil and Gas Tax proceeds (90-2-1104, MCA). The revenues are used to fund administration of natural resource agencies, including the administration of the Reclamation and Development Grants Program, and state agency costs.

G. The **Hazardous Waste CERCLA Account** is administered by the Department of Environmental Quality (75-10-601 et seq., MCA). CERCLA stands for the federal Comprehensive Environmental Response, Compensation, and Liability Act. This account receives 26% of the remaining RIT Trust interest earnings. The account was established in 1983 and is to be used to make payments on CERCLA bonds, implement the Montana Hazardous Waste Act, and provide assistance in remedial actions under CERCLA.

H. The **Environmental Quality Protection Fund** was established in 1985 and is administered by the DEQ (75-10-704 et seq., MCA). This account receives 9% of the remaining RIT Trust interest earnings. The purpose of this account is to provide funding for remedial actions taken by the DEQ in response to a release of hazardous or deleterious substances.

I. The **Future Fisheries Improvement Program** was created by the 1995 Legislature to restore essential habitats for the growth and propagation of wild fish populations in lakes, rivers, and streams. In 1999, the Legislature expanded the program by adding funding from the Resource Indemnity Trust fund and directing a portion of the funding to projects that specifically enhance bull trout and cutthroat trout, with emphasis on mineral reclamation projects.

Figure 31
Resource Indemnity Trust Interest and the Resource Indemnity Groundwater Assessment 2009 Biennium



Coal Severance Tax

Within 30 days of the end of each calendar quarter, coal severance taxes are paid to the state, and 50% of these are deposited into the **Coal Severance Tax Trust Fund** by the DOR (see Figure 32 and Table 51). Six accounts are established within the Trust: (1) the **Coal Severance Tax Bond Fund**, (2) the **Treasure State Endowment Regional Water System Fund**, (3) the **Big Sky Economic Development Fund**, (4) the **Treasure State Endowment Fund**, (5) the **Coal Severance Tax Permanent Fund**, and (6) the **Coal Severance Tax Income Fund** (see Figure 33).

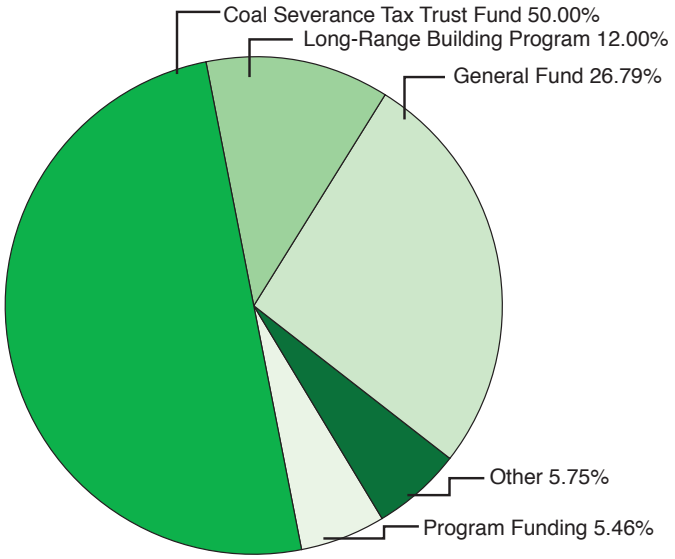
1. Coal tax revenues that flow into the trust are initially deposited into the **Coal Severance Tax Bond Fund** (Bond Fund) and made available for payment of debt service on Coal Severance Tax Bonds (see Figure 32). The DNRC informs the DOR, during the first quarter of each state fiscal year, of the amount necessary to meet all principal and interest payments on bonds payable from the Bond Fund for the next year (two semiannual payments). The DOR retains that amount in the Bond Fund.

2. The **Treasure State Endowment Regional Water System Fund** was established to provide state funding for regional water systems. Initially, the North Central Rocky Boy's Regional Water System and the Dry Prairie-Fort Peck Regional Water System were authorized. Two additional regional systems are being formed. During the first quarter of each state fiscal year, 25% of the amount in excess of what is retained in the Bond Fund is deposited into the Regional Water System Fund.

3. The 2005 Legislature created the **Big Sky Economic Development Fund Program**. This fund provides interest earnings for grants and loans used for economic development projects working with local governments and certified regional development corporations. The program is administered by the Department of Commerce.

4. The **Treasure State Endowment Fund** (Endowment Fund) was established when voters approved the ballot measure on June 2, 1992. During the first quarter of each state fiscal year, 75% of the amount in excess of what is retained in the Bond Fund is deposited into the Endowment Fund. The Department of Commerce notifies the DOR when interest earnings are needed to fund local infrastructure projects. The DOR then transfers the interest earnings from the Endowment Fund into the **Treasure State Endowment Special Revenue Account** (Revenue Account). The Department of Commerce then approves disbursement of funds to authorized local governments. Interest earnings not transferred to the Revenue Account for projects are retained in the Endowment Fund.

Figure 32
Allocation of Coal Severance Tax



5. The Coal Severance Tax Permanent Fund (Permanent Fund) receives no new tax proceeds. The fund balance within the trust is invested by the Board of Investments. The earnings from the Permanent Fund are deposited into the General Fund. State law states that up to 25% of the Permanent Fund can be invested in the Montana economy.

6. Investment income on the deposits in the Bond Fund, the Contingency Loan Fund, and the Permanent Fund is periodically transferred into the Coal Severance Tax Income Fund. The entire balance in the Income Fund is transferred into the General Fund on a monthly basis.

7. Under the Coal Severance Tax Loan Program, the state sells coal severance tax bonds and loans the proceeds to local governments for various infrastructure projects. The borrowers make semiannual or annual loan payments, which upon receipt are credited to a **Debt Service Account**. The terms of the loans vary, but generally involve an interest rate subsidy for the first five years of the loan followed by a direct pass-through of the interest rate on the state bonds for the remaining life of the loan. The loan program and debt service accounts are administered by DNRC.

8. Debt service payments on the bonds are due each June 1 and December 1. To the extent that funds on hand in the Debt Service Account are insufficient to pay principal and interest on the bonds when due, funds are

transferred into the Debt Service Account from the Bond Fund. On January 1 of each year, funds are transferred into the Debt Service Account from the Bond Fund to the extent necessary to cause the balance in the Debt Service Account to equal one-twelfth of the next two ensuing semiannual debt service payments. DNRC provides written notice to the DOR if funds are needed to pay debt service or to make the required transfer on January 1. On January 1 of each year, DNRC also sweeps the Debt Service Account of funds in excess of one-twelfth of the next two ensuing semiannual debt service payments. The excess is returned to the Bond Fund in repayment of borrowed money, if necessary, or deposited into the Renewable Resource Grant and Loan Program State Special Revenue Account.

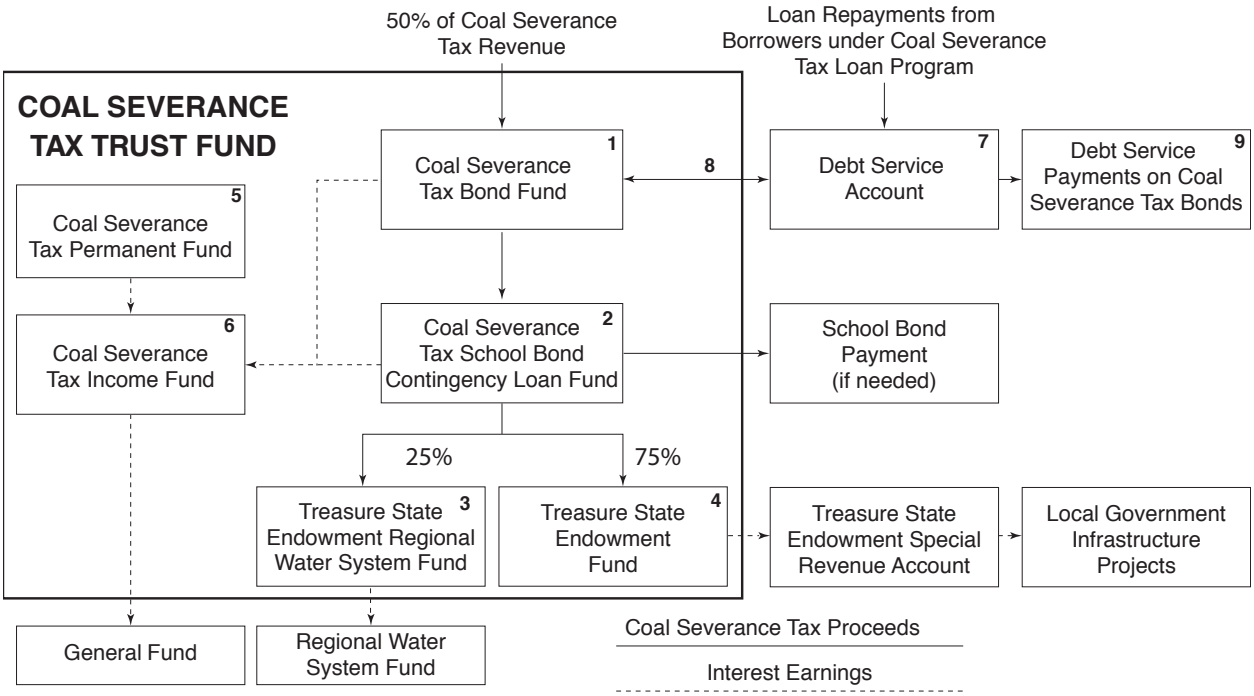
9. On each June 1 and December 1, the state pays debt service on the bonds from amounts on hand in the Debt Service Account. Payments are made by DNRC.

Table 51
Allocation of Coal Severance Tax

	Tax Allocation	FY 2007 ($1,000)[24]	FY 2008 ($1,000)[25]
Coal Severance Tax Collections	100%	$ 40,759	$ 41,000
Coal Severance Tax Trust Fund	50.00%	20,379	20,500
General Fund	26.79%	10,919	10,983
Long-Range Building Program	12.00%	4,891	4,920
Program Funding	5.46%	2,225	2,239
Other			
Oil, Gas and Coal Natural Resources	2.90%	1,182	1,189
Parks Acquisition and Management Trust	1.27%	518	521
Renewable Resource Loan Debt Service	0.95%	387	389
Cultural and Aesthetic Trust and Capitol Art	0.63%	258	259

[24] Actual
[25] Estimated

Figure 33
Coal Severance Tax Trust Fund Flow of Funds Summary



Acronyms

ACE..... Army Corps of Engineers
AUMs..... animal-unit-months
BC Flathead ..... North Fork of the Flathead River Drainage British Columbia
BIA..... Bureau of Indian Affairs
BLM..... Bureau of Land Management
BMP ..... Best Management Practice
BOGC ..... Board of Oil and Gas Conservation
BOR ..... U.S. Bureau of Reclamation
BRO ..... Billings Regional Office
CARDD..... Conservation and Resource Development Division
CBM..... coalbed methane
CD ..... Conservation District
CDB ..... Conservation Districts Bureau
CERCLA..... Comprehensive Environmental Response, Compensation, and Liability Act
CGA ..... Controlled Groundwater Area
CRP ..... Conservation Reserve Program
CSD..... Centralized Services Division
CSKT ..... Confederated Salish and Kootenai Tribes
CWPP..... Community Wildfire Protection Plan
DEQ ..... Montana Department of Environmental Quality
DFWP..... Montana Department of Fish, Wildlife & Parks
DNRC ..... Montana Department of Natural Resources and Conservation
DOR ..... Montana Department of Revenue
DWSRF..... Drinking Water State Revolving Fund
EPA..... U.S. Environmental Protection Agency
FA..... Forestry Assistance
FEMA..... Federal Emergency Management Agency
FFS&B ..... Fuels for Schools and Beyond
FHRA ..... Fire Hazard Reduction Agreement
FWS ..... U.S. Fish and Wildlife Service
FY..... Fiscal Year
F&AMB ..... Fire and Aviation Management Bureau
GIS ..... Geographic Information System
GPS ..... Global Positioning System
GRO ..... Glasgow Regional Office
HCP..... Habitat Conservation Plan
IT..... Information Technology
KMG ..... Keep Montana Green
LRO..... Lewistown Regional Office
LUL..... Land Use License
MACD..... Montana Association of Conservation Districts
MBMG ..... Montana Bureau of Mines and Geology
MCA..... Montana Code Annotated
MCF ..... thousand cubic feet
MEPA ..... Montana Environmental Policy Act
MHC ..... Montana Heritage Commission
MRCDC ..... Missouri River Conservation District Council
MRO ..... Missoula Regional Office
MSCA ..... Montana Salinity Control Association
MSU ..... Montana State University
MWCC ..... Montana Watershed Coordination Council
NRCS ..... National Resources Conservation Service
PCB ..... Purchasing and Contracting Bureau
Project WET..... Water Education for Teachers
RC&D ..... Resource Conservation and Development Areas
RDB ..... Resource Development Bureau
RDGP..... Reclamation and Development Grants Program
REMB ..... Real Estate Management Bureau
RFP..... Request for Proposals
RIGWA..... Resource Indemnity Groundwater Assessment
RIT ..... Resource Indemnity Tax
RMS ..... Resource Management Section
RRGL..... Renewable Resource Grant and Loan
RWRCC ..... Reserved Water Rights Compact Commission
SFLMP..... State Forest Land Management Plan
SMZ ..... Streamside Management Zone
SRF ..... State Revolving Fund
SWPB..... State Water Projects Bureau
TLMD ..... Trust Land Management Division
UCF..... Urban and Community Forestry
UIC..... Underground Injection Control
USDA..... U.S. Department of Agriculture
USFS ..... U.S. Forest Service
USGS ..... U.S. Geological Survey
VFA/RFA ..... Volunteer and Rural Fire Assistance
WMB..... Water Management Bureau
WPCSRF..... Water Pollution Control State Revolving Fund
WRD ..... Water Resources Division
WTP ..... Water Treatment Plant
YRCDC..... Yellowstone River Conservation District Council

On The Cover

Industrial activities during the early 1900s left their mark on Brewery Flats and the floodplain of Big Spring Creek in Lewistown. Materials used to construct the railroad grade increased lead levels in some areas. Maintenance and repair work on trains left other sites contaminated with petroleum products.

A coordinated effort to restore Brewery Flats has been ongoing since the mid-1990s.The old railroad roundhouse was demolished, debris was removed, and the contaminated sites were remediated. Cleanup was complete in 2005. Partners in the project included the Big Spring Creek Watershed Partnership, city of Lewistown, Department of Environmental Quality, and the Department of Natural Resources and Conservation.

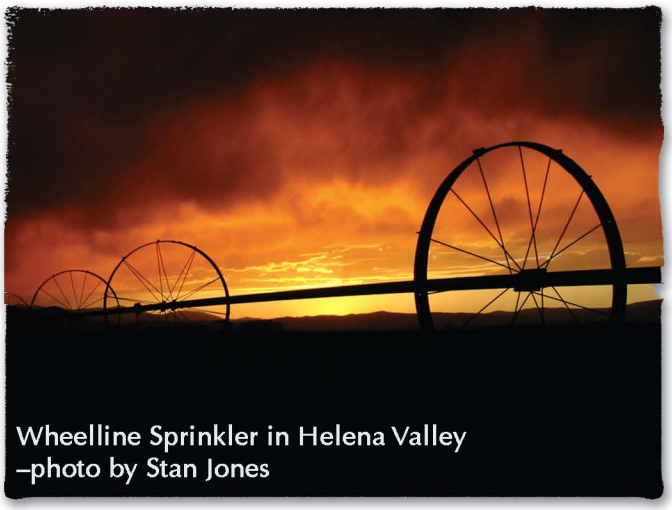
Top: View of straightened channel on Big Spring Creek, circa 1910.

Bottom: Channel returned to previous location, 2005.

Pump Station Fire, Divide
–photo by Jack Favero

McDonald Lake Dam, Flathead Indian Reservation
–photo by Ethan Mace

Tree City USA, Whitehall



Wheelline Sprinkler in Helena Valley
–photo by Stan Jones

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