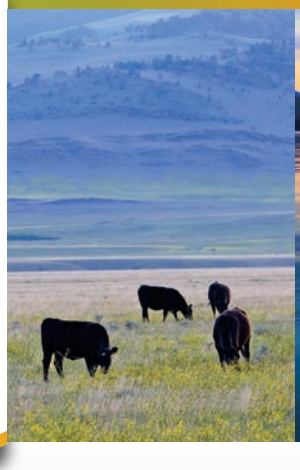
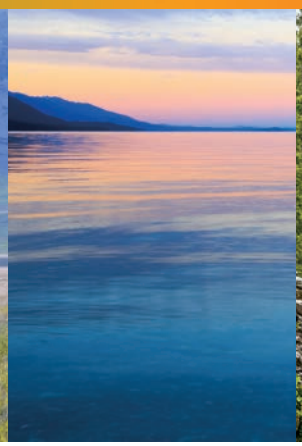
2019

REPORT TO THE MONTANA LEGISLATURE

MONTANA DNRC

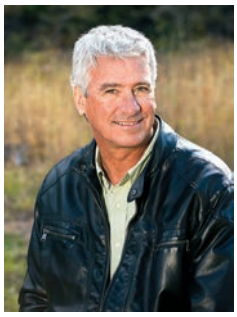
MT DEPARTMENT OF NATURAL RESOURCES & CONSERVATION





FROM THE DIRECTOR

Montana is a state of diverse natural beauty, resilient working landscapes, and vibrant communities. Through its resource management and regulatory programs, the Montana Department of Natural Resources and Conservation provides technical and financial assistance to citizens managing land and water, communities providing essential services, and tribal governments promoting shared stewardship.



As director, I'm proud to guide the Department's five major programs and many attached commissions, boards, and associations as we work to support sustainable land and water management—across our forests, farm and ranch lands, and on main street.

In preparing this Department report, I asked staff in each division to submit brief stories that capture our resource protection mission, whether it be forest management, stream rehabilitation, infrastructure loans, invasive species management, or strengthening Montana's state Trust Lands portfolio.

Taken as a whole, I believe you'll come away impressed by DNRC's capacity to deliver essential public services such as wildfire protection and dam safety, as well as our leadership role in implementing cross-boundary forest management, building a sage-grouse conservation program, and support for watershed groups and drought preparedness.

While there is no limit of challenges ahead for resource conservation, I've seen time and again that Montanans have the vision and self-reliance to meet them; and we have the ability to set aside our differences and find common ground on the most important issues. DNRC will continue to work to support communities and stakeholders with the services and assistance they need to maintain our irreplaceable natural resources for present and future generations.

Sincerely,

John E. Tubbs, *Director*

DNRC TRUST LANDS MANAGEMENT DIVISION

THROUGH THE ENABLING ACT

and subsequent legislation, Montana received acreage in every county to support endowments for educational and public institutions across the state. The mission of the Trust Lands Management Division (TLMD) is to manage the resources of these state trust lands to produce revenues for trust beneficiaries while considering environmental factors and protecting the future income-generating capacity of the land. With holdings of now more than 5.2 million acres, TLMD has become a vital partner in Montana's economy, environment, and culture.

Balancing both production and conservation requires creative collaboration across the division's four bureaus – Agriculture & Grazing Management, Minerals Management, Forest Management, & Real Estate Management – and six regional offices.

Agriculture & Grazing Management Bureau (AGMB) oversees the management of 4.76 million acres of state trust land through more than 8,900 agricultural and grazing leases. Most of this acreage is used for grazing or dry land hay and small grains production, which provides a steady stream of revenue for our beneficiaries through grazing and cash or crop-share agricultural leases. Leasing also

MONTANA STATE TRUST LANDS BY THE NUMBERS:

5.2 Million
Total surface acres

8,935
Agriculture & Grazing leases

1,486
Oil & Gas leases

137
Commercial Real Estate leases

In Fiscal Year 2018:

61.2 Million
Board-feet of timber harvested

440
Rights-of-Way processed

470,452
Conservation Licenses sold

$87.4 million
Gross revenues from all activities

$41.9 million
Distributable revenue for K-12 schools

HUNT, FISH, EXPLORE

Montana's State Trust Lands provide public access and outdoor recreation opportunities across the state. A valid conservation or recreational use license provides entry to millions of acres of rolling plains, forested mountains and tranquil waters for hiking, hunting, fishing, and other pursuits. Helping Montanans access Trust Lands is a priority for DNRC. A full-time public access specialist works with state and federal agencies, lessees, local stakeholders and private landowners to find creative public access solutions for the public, including those with special needs. DNRC is currently developing an interactive GIS application that will identify Trust Lands accessible to the public.

COMMERCIAL DEVELOPMENT LEASING

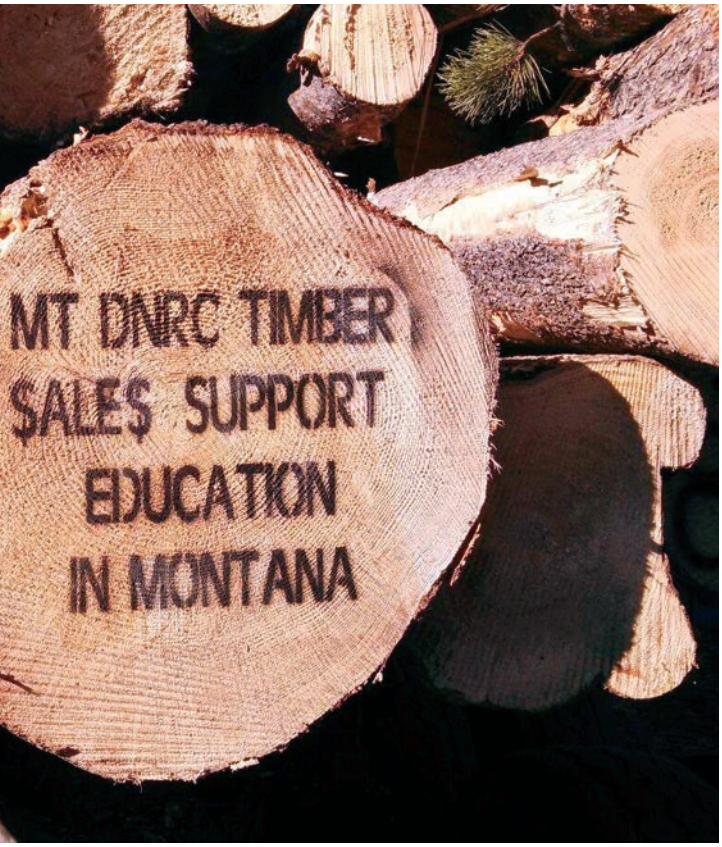
Many trust land parcels are located near or within the city limits of Montana's major cities. These parcels present excellent opportunities for the DNRC to participate in the changing landscape of a growing community through commercial development leasing and infrastructure easements. Commercial development on Trust Lands can be seen across the state. A full section (640 acres) in Kalispell features ongoing development, including major box stores like Costco, Lowes, and Cabela's. The Lewis and Clark Subdivision in Bozeman includes a Springhill Suites, Fuel Fitness, retail outlets, and a Goodwill store. DNRC is engaged in proactive planning with local governments and communities across the state for potential commercial development on Trust Lands. Commercial leasing maximizes revenue for trust beneficiaries by capturing long-term rent as a percentage of these high-value lands.

offers producers the opportunity to cultivate a wide variety of specialty or smaller-scale crops including everything from sugar beets and seed potatoes to safflower, lentils, and chickpeas. With variable sizes and costs, state trust land leases provide crucial opportunities for young producers just beginning or gradually scaling their operations that would be unable to purchase land outright. Many Ag and Grazing leases have been part of Montana family farm and ranch operations for generations. Through leases and related inspections, AGMB reaches beyond the division with support of national and statewide conservation initiatives including the Conservation Reserve Program and the Montana Sage Grouse Habitat Conservation Program.

For the Forest Management Bureau (FMB), collaboration and conservation are key to gathering dependable, long-term revenue from state trust lands. Montana forests and

their inhabitants span vast regions of the state without regard for political or private boundaries. FMB engages partners across these boundaries to collaboratively and responsibly manage forests for our trust beneficiaries and support the state's timber industry while protecting important ecosystems for future generations. Though only four percent of Montana's forests fall on state Trust Lands, activity on this acreage accounted for nearly 25 percent of the state's total timber volume sold in 2017.

This coordination further extends to the Real Estate Management Bureau (REMB). Each year, REMB generates around $10 million for trust beneficiaries through residential and commercial leases, rights of way and easements, and land banking. Staff work carefully to evaluate and realize opportunities with municipalities, counties, and private sector partners in Montana's fast-growing cities. REMB



A DREAM REALIZED

Glen and Carol Richards love talking about the summer they built a cabin on their state lease. "All our neighbors and folks we'd never even met, everyone took a rope or a beam and helped us raise the walls of our cabin," Glen remembers. "I've never felt so blessed."

Now Glen and Carol are going through DNRC's Cabin & Home Site Sale Program with many of those same neighbors that helped them years ago. Since its initiation by SB369 in 2013, DNRC has sold more than 60 sites through the program, which enables lessees to purchase the leased land beneath their family homes.

While there are still uncertainties in the process for lessees, program staff are finding that neighbors themselves are making concerns more manageable. Program lead Renee Kelley explains, "Folks who went through the program early are now sharing what they learned and helping their neighbors ask really good questions. Our lessees know we have hoops to jump through, but they seem more and more confident in the program because they're working with friends who have been through it."

Like the Richards' cabin, the Cabin and Home Site Sales Program is a heavy lift made easier with a little help from friends.

OIL ACTIVITY LOOKING UP

Higher oil prices have contributed to an uptick in drilling and activity in Montana. As a result, the Trust Lands Management Division has seen oil and gas leasing stabilize from a decline over the past two years, to rebound and start increasing this year. New wells are being drilled into some of the most productive areas of the Bakken, showing promise to add significant revenue to the School Trust. In southeastern Montana, old oil and gas fields in the Cedar Creek Anticline are being revitalized through secondary recovery methods and plans are currently being laid out for tertiary recovery, allowing companies to achieve up to double or triple the lifetime oil production from those fields. These enhanced recovery methods will add millions of dollars to the School Trust and to the state and local economy for decades to come.

FEELING THE PULSE

Pulse crops, which include peas, lentils, dried beans and chickpeas, have found a home in Montana. In 2004, farmers leasing State Trust Lands planted 2,495 acres to lentils; by 2010, that figure had grown to 6,162 acres, and in 2013 it was 9,524. In 2017, lessees planted 27,902 acres. Montana farmers have found lentils and other pulse crops valuable for breaking disease and pest cycles that develop in wheat and barley, allowing continuous cropping; fields returned to wheat or barley the year after a pulse crop often see improved yield and quality. Pulse crops are legumes and utilize moisture efficiently; they require little or no nitrogen fertilizer as they fix nitrogen from the air into the soil. And they offer diversity. A farmer who plants both pulse crops and wheat is better positioned to survive a drop in the grain market. High in nutrition and popular on dinner tables worldwide, markets for pulse crops have remained strong. Since 2011, Montana has led the nation in total acreage planted.

also reaches across the division, engaging other bureaus to identify lands with multi-faceted potential, like this year's Angela Farm and Stillwater Lazy-Swift acquisitions.

Keeping with Montana's mining heritage, the Minerals Management Bureau (MMB) is responsible for the management of more than 6.2 million subsurface acres. Despite the slow recovery of Bakken activity in the east, the bureau still generated $20.25 million in royalties and rental revenue. These revenues are primarily from oil, gas and coal exploration and production. Mineral activities continue be coordinated closely with the Montana Sage Grouse Oversight Team (MSGOT), the bureau stays abreast of guidelines and anticipated updates in the conservation program. MMB has spent this year increasing efficiency in cooperation with the department's Office of Information and Technology. After extensive testing, MMB staff launched a special module for 2018 well inspections and are now finalizing a mobile application for gravel mine permitting.

In a state that prizes public lands and access, state trust lands play a vital role in outdoor recreation. This year DNRC closed on its second-largest purchase to date, opening the 16,900-acre Angela Farm in Rosebud County to new state lessees and the public. At $11.3 million, the purchase would have been prohibitive for most established operators in the area. But REMB worked with Agriculture & Grazing staff to portion the property into smaller agricultural blocks, enabling farmers and ranchers of every walk to benefit as lessees. With wide vistas, accessibility by county road, and numerous upland bird and big game species, the site is fast becoming a destination for hunting, birding, and other outdoor recreation as well.

Montanans will also have permanent access to new corners of the Stillwater State Forest thanks to DNRC's Stillwater Lazy-Swift acquisition. While originally granted to the state, this block of 13,000 acres of highly-productive forest land had since transferred into private ownership and future public access was uncertain. Through a 3-part negotiated acquisition lasting 2 years, TLMD facilitated this block's return to the state from Weyerhaeuser with the assistance of the Bonneville Power Administration, the Montana Department of Fish, Wildlife, and Parks, and The Trust for Public Lands. The result: the Stillwater Forest is once again contiguous, publicly-accessible, and ready to benefit Montana's educational trusts.

Since statehood, state trust lands have expanded into a diverse portfolio of agricultural, forest, real estate, and mineral holdings. It is the Trust Lands Management Division's duty to manage this portfolio with profitability and protection in mind to ensure its resources last for generations. With this balance and an openness to collaboration and innovation, TLMD unlocks countless new opportunities for Montanans on state trust lands.

STRENGTHENING THE TRUST LANDS PORTFOLIO

In February of 2018, The Montana State Board of Land Commissioners gave final approval for DRNC to acquire the 17,000-acre Angela Farm in the Miles City area for the appraised value of $11,300,000. The purchase was made possible through DNRC's Land Banking program, which enables the department to sell small, isolated Trust Land parcels which do not have legal public access and generate low rates of return. Purchased with funds accrued from 65 sales, the Angela Farm acquisition provided new farming opportunities to a dozen younger families in the area, and the leases generated more than $400,000 in the first year for the Common School Trust while providing excellent public access for recreation and quality hunting. DNRC is committed to improving public access and increasing revenue streams from Montana's five million acres of Trust Lands, which generated a combined $41.9 million in distributable revenues for K-12 schools in 2018.

DNRC WATER RESOURCES DIVISION

MONTANA'S WATER

is a critical shared resource that is owned by the State and to be used by its people. The Water Resources Division (WRD) promotes and coordinates the beneficial use, conservation, protection, and development of Montana's water resources, focusing on water quantity. The Division has five bureaus, State Water Projects, Water Management, Water Operations, Water Rights, and Water Adjudication and eight regional offices.

Regional offices administer programs for the WRD and are located in Glasgow, Billings, Havre, Lewistown, Bozeman, Helena, Kalispell, and Missoula. At least fifty percent of regional staff time is used assisting the public with water rights records research, water rights issues, and water right permit and change applications. In addition, regional staff routinely take water measurements at stream gages to ensure ongoing accuracy, conduct monthly dam monitoring, and other technical responsibilities.

The Water Management Bureau

WMB continues implement the recommendations of the 2015 State Water Plan, conducts watershed resource studies throughout Montana when requested at the local level, supports development of water resource planning studies, and supports the implementation of federal and tribal water compacts.

The WMB coordinates and plans the Governor's Drought and Water Supply Committee that holds regular meetings to address Montana's water supply including: snow pack levels, flood and drought potential, fire-danger

BY THE NUMBERS:

Water Rights Bureau and regional offices

3,630

Received approximately 3,630 water rights applications.

3,318

Including 3,318 Notices of Completion of Groundwater Development for small groundwater uses that are up to 35 gallons per minute and up to 10 acre-feet per year.

75

75 applications for Beneficial Water Use Permits

54

54 Changes of Appropriation.

68

Met and worked with applicants in 68 pre-application meetings which were held in regional offices across Montana for Beneficial Water Use Permit applications and Changes of Appropriation applications.

1,046,074

Scanned 1,046,074 pages of water rights information that is available to the public.

361,000

Maintained the complete water right records for all water rights in Montana. Currently, there are approximately 361,000 active water rights.

Regional office staff and the public participating in a pre-application meeting. Sixty-eight pre-applications meetings were held in regional offices across the state in FY 18 for Beneficial Water Use Permit applications and Changes of Appropriation Applications.

WATER ADJUDICATION BUREAU

The Adjudication Bureau helps people understand their individual water rights and the adjudication process. The bureau continues to contact owners about existing water rights and potential changes as second Water Court Decrees are issued in 43 basins across the state which involve 90,000 claims. Below, the letters and water right abstracts being prepped for mailing in one (of the 85) adjudication basin.

The Adjudication Bureau contacted over 350,000 property owners in the state of Montana about the opportunity to file exempt rights put to use prior to July 1, 1973. Results thus far have been over 2,700 new filings with many more expected, thousa nds of owner phone and in person contacts with the regional office staff about existing water rights, the need to file, and other corrections.

and current weather conditions and predictions. These meetings, streamed to the public, typically include the Lt. Governor, multiple state agency directors, and local, state, and federal officials.

Recently, WMB staff worked in collaboration with Teton River water commissioners, water users, and other hydrologists to overcome water distribution challenges in that area by completing a watershed study. Part of the solution includes use of a new water planning tool that provides greater flexibility in water delivery, installing three additional real-time stream gages, and providing specific training to the water commissioners. The successful result is a water distribution project that is rooted in law but uses science and data to help manage water resources as efficiently as possible.

The Water Operations Bureau

WOB administers floodplain management, dam safety, and the Board of Water Well Contractors. 2018 was predicted to be a large flood year. In preparation for this, WOB and Lieutenant Governor Mike Cooney produced a Spring Flood Awareness public service announcement that aired on all seven major media markets showing over 350 times. The spot gave essential information about the coming floods, and where to find more resources and information.

During 2018, the Floodplain Community Assistance Program (CAP) conducted 20 workshops with topics including: recovery inspections and evaluations, Floodplain 101, community resiliency after a flood, and flood insurance. CAP annually provides technical assistance and training before, during, and after flood events to people in Montana.

Chief Earl Old Person of the Blackfeet Nation delivers the opening address

FIRST MONTANA WATER SUMMIT SPARKS CONVERSATION

In March 2018, DNRC convened more than 300 diverse Montanans at the state's inaugural Water Summit. Participants discussed how climate change, urban development and population growth influence Montana's water quantity and quality now and into the future.

Watershed practitioners, legislators, tribal members, agricultural producers, fishing guides, scientists, economists and others sat together to discuss collaborative, adaptive solutions which meet the state's water challenges. One common conversation theme? The critical importance of reliable water data delivered by stream gages, SnoTel sites and soil moisture stations.

The dynamic short video, "Montana's Water Future," recaps the Montana Water Summit for the broader public. The main message: There's no time like the present to prepare for our water future.

Above: Sarah Bates from the Montana Wildlife Federation connects over conversation at the Montana Water Summit.

Below: The diverse audience included scientists, landowners, legislators, managers, business owners and more.

TRAINING

During the spring of 2018, DNRC held four water commissioner trainings around the state. The trainings provide District Court-appointed water commissioners and other interested parties with a background in water rights, water law, statutory requirements of water commissioners, and on-the-ground water measurement. Accurate measurement and distribution of water rights through Montana Water Court and District Court decrees is critical to the proper administration of water and water use in Montana and provides water users documentation of use and protection from the illegal use of water. This year's trainings were held in Dillon, Hamilton, and Helena (2) with 140 individuals attending.

REAL TIME, REAL NEED

Stream gages are an essential tool for managing water during times of drought; for warning communities during times of flooding; and for tracking long-term trends in stream flows and water use. The DNRC Stream gage program operates 42 real-time stream gages with an additional 114 seasonal and discontinued gages available for public consumption. The Montana State Water Plan recommended DNRC install and operate 100 real-time gages statewide. The USGS operates approximately 220 real-time stream gages in Montana. DNRC partners with USGS to provide co-op funding for 38 stream gages; however, budget constraints have stalled progress with the DNRC Stream Gage Program and has also led to the decommissioning of 7 USGS gages due to reduced co-op funds in 2018.

The Montana Board of Water Well Contractors oversees 127 licensed water well contractors, 32 licensed water well drillers and 56 licensed monitoring well constructors. The Board's program is funded through drilling license fees and permit fees. Overseeing these professionals helps reduce and minimize the waste and contamination of Montana's groundwater resources.

State Water Projects Bureau

SWPB administers the operation, maintenance, management, and rehabilitation of state-owned water projects including: 19 Water Storage Projects; 23 dams; approximately 250 miles of irrigation canals; 1 Hydropower facility; and provides assistance for 9 Montana Fish, Wildlife & Parks dams.

These all provide valuable water for agriculture, municipalities, fish, wildlife, and recreation purposes. Keeping these aged structures safe and operating these dams in an environmentally sound manner, while also providing critical water for agriculture is a daunting challenge. Water from state-owned facilities is marketed to local Water Users Associations, primarily for irrigation use. Water User Associations are responsible for the daily operation and maintenance of the projects, with SWPB oversight. In 2017, SWPB administered 1,880 Water Marketing

Contracts with 17 Water User Associations for a total combined marketed volume of 322,500 acre-feet.

Water Rights Bureau

WRB administers the establishment of new water rights or changes to existing water rights, water right hearings, and water right records.

Water Adjudication Bureau

WAB assists the Montana Water Court in the adjudication of all claims to pre-July 1, 1973, water rights. Staff help people understand their individual water rights and the adjudication process. The bureau continues to contact owners about existing water rights and potential changes as second Water Court Decrees are issued in 43 basins across the state, which involve 90,000 claims.

Coordination of the development and utilization of the state's waters allows the Division to protect existing uses and to promote adequate future supplies for domestic, industrial, agricultural, recreation, the conservation of water for wildlife, aquatic life and other beneficial uses.

Additional information about Montana water resources and the division can be found on the division's website at:
dnrc.mt.gov/divisions/wrd

DAM INSPECTIONS MAKE THE DIFFERENCE

Montana's dams are immensely safer than there were 30 years ago. A key component of the 1985 Dam Safety Act is required dam inspections for dams with potential for loss of life downstream. Inspections identify a developing problem long before they lead to an incident or failure. Inspections identify maintenance needs and operational problems and provide dam owners guidance on how to address. Inspections help the dam owner and engineer become familiar with the dam and subsequently more aware of an unusual seep, slump or crack. It is exceedingly rare for properly inspected and maintained dams to fail.

What about the other dams without potential for loss of life downstream? The Montana dam safety program uses education and outreach to train all dam owners on the importance of inspection, operation and maintenance. For example, to address the many smaller dams with deteriorating outlets, the dam safety program has developed an educational tool (damoutletworks.org) that provides much needed guidance to dam owners.

BEYOND THE DAMS—REHABILITATING IRRIGATION INFRASTRUCTURE

The Cottonwood Canal Flume is part of a 4.1-mile open-channel conveyance system that transports irrigation water from Hyalite Reservoir (Middle Creek Project) to members of the Middle Creek Water Users Association (MCWUA) in Gallatin County. The 1,000-foot flume, consisting of two segments, is built on steep terrain in Hyalite Canyon. In 2014, 200 feet of the flume structure failed, leaving the canal system non-operational. Temporary repairs were implemented for the 2015 irrigation season. Further inspection of the timber support system determined the need for a complete replacement. Finishing in 2017, both flume sections have been upgraded with new steel structural members providing reliable water deliveries. MCWUA funded the project with $72,000, an $800,000 RRGL loan from the 2015 legislative session, and In-Kind services provided by DNRC.

Cottonwood Canal Flume, Middle Creek Project Gallatin County

DNRC **CONSERVATION AND RESOURCE DEVELOPMENT** DIVISION

MONTANANS ARE VERY PLACE-BASED

and independent. We identify with our natural surroundings as a means of life, economy, and recreation. Where better to focus the state's financial and technical resources than toward the local level? The Conservation and Resource Development Division (CARDD) provides this support so that local entities may improve the natural fabric that makes a community a place to call home.

CARDD assists local entities as they manage the state's vast natural resources. Whether assisting a Conservation District with the Natural Streambed and Land Preservation Act, making grants and low-interest loans to communities to improve their water and wastewater infrastructure, or organizing local leaders to prevent the spread of invasive species, CARDD maintains a broad influence on the past, present and future of Montana as a natural resource-driven state.

The 31-person division is organized into three bureaus and hosts five administratively-attached agencies.

The Financial Development Bureau administers CARDD's loan programs with nearly $1 billion dollars of low-interest loans to Montana's communities and private citizens. These

CONSERVATION DISTRICTS BY THE NUMBERS:

General CD Law Administration of 1939 MCA, 76-15-101 through 1014

472

Number of non-paid officials serving Montana's 58 CDs

- **292** Are elected in General Election
- **102** Are appointed by cities or towns
- **78** Are associate supervisors appointed by local boards

84,960

Hours per year donated by CD supervisors

$4,248,000

Value of donated supervisor time for administering CD laws

$2,500,000

Approximate total local mill levies for conservation—varies widely in each district

- **$2,300** Smallest district
- **$350,000** Largest district
- **$21,000 or less** 32 Conservation Districts

Natural Streambed and Land Preservation Act of 1975 (310 Law) Administration

37,740

Numbers of 310 applications processed by Conservation Districts since 1992

1,315

Ten year average of 310 permit applications administered by Conservation Districts

19,175

Approximate hours donated each year *

$958,750

Approximate Donated Value for the State's Streambed and Land Preservation Act

* Does not include 310 emergency, complaint, or violation processing

DEMYSTIFYING E-DNA

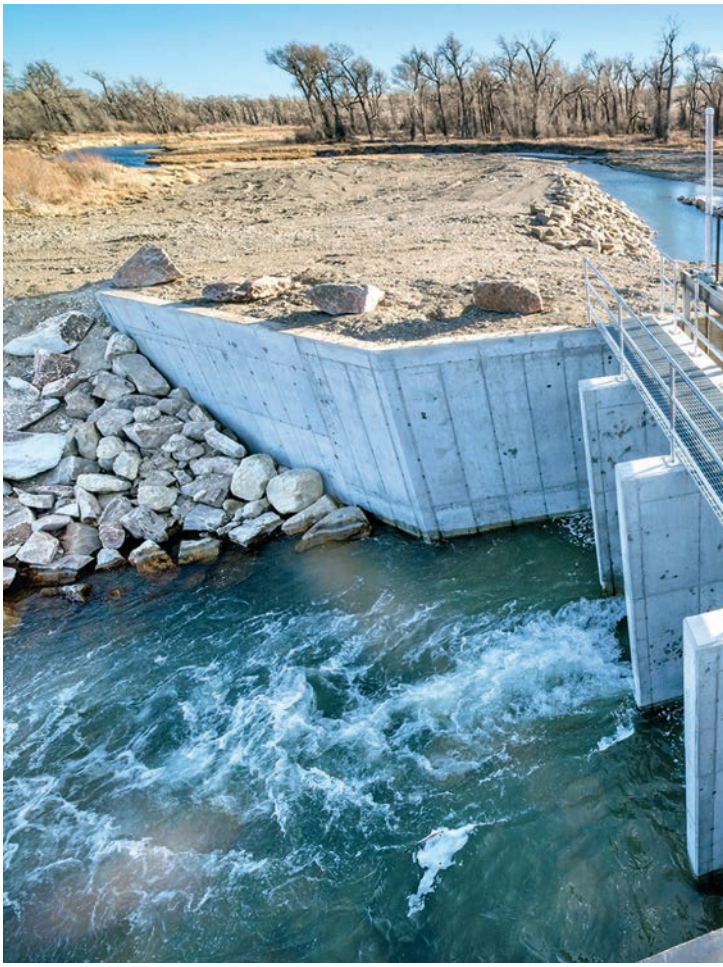
In April of 2018, the Montana Invasive Species Council (MISC) assembled a panel of nationally-recognized experts in the field of Environmental DNA (known as e-DNA) testing to develop policy and protocols for the use of this emerging technology in the detection of invasive mussels. E-DNA sampling of Montana lakes and streams holds great promise, but the lack of standardized procedures for analyzing and reporting test results has led resource managers in the West to rely on more traditional methods. Following an intensive two-day workshop with the panelists, MISC staff developed guidelines for field collection, lab analysis, and communication of e-DNA sampling and results. MISC is now working with Governor Steve Bullock to share its findings and recommendations with other Western states, putting Montana on the leading edge of mussel management.

SUPPORTING COMMUNITY CONSERVATION

The Resource Development Bureau funded projects that benefited or sustainably developed natural resources. Communities often leverage these DNRC grants to secure additional funding from private and federal programs. A $44,500 emergency grant enabled the City of Thompson Falls to quickly repair a wastewater lift station located within 15 feet of the Clark Fork River, preventing the release of raw sewage to the river. The Town of Medicine Lake in Sheridan County received a $125,000 DNRC renewable resource grant to rehabilitate their wastewater treatment lagoon system. Upgrades to this system will reduce the risk of discharging untreated wastewater to the Medicine Lake Wildlife Refuge. The system update also includes using treated wastewater to sprinkler-irrigate local crops.

loans fund natural resource related infrastructure such as water and wastewater treatment plants, irrigation infrastructure, and on-farm efficiency improvements. In addition, the financial bureau administers the Treasure State Endowment Program Rural Water System funds for the administration and development of Dry Prairie Rural Water, North Central Rural Water, Musselshell-Judith Rural Water, and Dry-Redwater Rural Water systems.

The Resource Development Bureau is the granting arm of CARDD. It administers two major grant programs, the Reclamation Development Grant Program and the Renewable Resources Grant Program. The Reclamation Development Grant Program is designed to provide funding for projects addressing environmental damages that remain from non-re-



newable resource extraction. The Renewable Resource Grant Program funds renewable resource projects that promote development and conservation of the state's renewable resources. Both grant systems are structured to provide seed funding for project planning to assure project proposal applications have a high rate of success. The RDB also has smaller grants within the Renewable Resource Grant program to improve irrigation system efficiencies, watershed management, private grants to homeowners connecting to municipal systems, and renewable resource-related emergencies.

The Conservation District Bureau provides financial and technical support to the 58 Conservation Districts in Montana. Conservation Districts are local divisions of state government with up to seven non-paid elected offi-

THE BUZZ ABOUT POLLINATORS

Through its partnership with the Montana Association of Conservation Districts, DNRC continues to support pollinator conservation. In 2017 DNRC awarded a District Development Grant to the Lake County Conservation District to promote and enhance pollinator habitat in Lake County. The District used the funds to hire a Big Sky Watershed Corp member to manage the project. The Natural Resource Conservation Service (NRCS) offered a pollinator-friendly seed mix at no cost to Lake County residents and provided technical assistance when needed. At least 100 pollinator gardens have been planted since 2017. This project has been successful because of the partnership between the Lake County Conservation District, DNRC, and NRCS.

IMPROVING COMMUNITY INFRASTRUCTURE

CARDD's State Revolving Fund (SRF) loan program, administered in partnership with the Montana Dept. of Environmental Quality, made 35 loans worth $135 million to communities across Montana in 2018. SRF loans enable cities, towns, and rural water districts to repair or modernize wastewater and drinking water systems at the lowest possible cost. These critical projects protect soil, groundwater, and surface water from the impacts of degraded or obsolete wastewater treatment systems and ensure healthy drinking water for citizens. Communities with up-to-date water infrastructure are well positioned to attract businesses and other economic development, and the construction projects offer good-paying jobs.

RESTORING POINDEXTER SLOUGH

DNRC was the primary funding source for the restoration of Poindexter Slough, a unique spring creek fishery located three miles south of Dillon.The project was sponsored by the Beaverhead Conservation District in partnership with private landowners, Montana Fish, Wildlife & Parks (FWP), the Dillon Canal Company and several other partners. In the past 12 years, the number of adult brown trout in Poindexter Slough had declined from about 2,400 to 500 fish per mile. The loss of this once-popular fishing spot was the result of increasing fine sediment loads in the waterway. To better mobilize and transport sediment and restore fish habitat, project partners narrowed the stream bed to increase flows and revegetated banks; local irrigators also agreed to allow an annual high-volume flushing flow. The restoration effort succeeded due to the persistence of the Beaverhead Conservation District, the technical guidance and leadership of FWP, and the cooperation of local irrigators. The final phase of the project was completed in the summer of 2018 and includes irrigation infrastructure improvements, stream restoration, and fish habitat enhancement throughout the length of Poindexter Slough to its confluence with the Beaverhead River.

cials (Supervisors) who are responsible for administering the Natural Streambed and Land Preservation Act (310 law), local land use ordinances, and improving local soil and water conservation practices.

CARDD hosts and provides staff for five administrative attachments.

- The **Sage Grouse Habitat Conservation Program** is the operational arm of the Montana Sage Grouse Oversight Team (MSGOT). MSGOT, through the program, implements the Greater Sage-Grouse Habitat Conservation Act and Governor's Executive Order 12-2015 that are designed to prevent the listing of Sage Grouse under the Endangered Species Act (ESA). An ESA listing of Sage Grouse by the US Fish and Wildlife Service would have grave implications for Montana's economy and activities on state and private lands that provide habitat for Sage Grouse.
- The **Rangeland Resources Committee** promotes wise stewardship of the state's vast working rangelands that make Montana a uniquely productive and scenic state.

- The **Montana Invasive Species Council** (MISC) works to coordinate the efforts of multiple agencies, tribal governments, local governments, and private interests in the fight against the introduction and spread of invasive species ranging from pests and insects to aquatic and terrestrial invaders.
- The **Flathead Basin Commission** is a regional commission charged with coordinating natural resource agency efforts within the Flathead Basin. Its mission is generally natural resource based, with emphasis on sustainable economic development while monitoring and protecting water quality, quantity.
- The **Upper Columbia Conservation Commission** is charged with coordinating aquatic invasive species (AIS) issues with the state and tribal agency programs of Montana, Idaho, Washington, and the province of British Columbia.

Through the hard work and dedication of CARDD's 31 professional staff, the prospect of Montana retaining its unique character, economy, and beauty are in good hands.

MONTANA DNRC

CONTINUED PROGRESS FOR MONTANA'S RURAL WATER SYSTEMS

Montana is home to four regional water systems. Two of these systems, Fort Peck-Dry Prairie and Rocky Boy's-North Central, have been authorized by Congress under the Rural Water Supply Act. The Musselshell-Judith regional system is in the final stages of authorization, pending further action by the U.S. Senate and House in 2019. This federal legislation would also direct the federal Bureau of Reclamation to work with Montana's newest system, the Dry-Redwater Regional Water, as it completes its federally-mandated feasibility study.

In recent major activities, the Fort Peck-Dry Prairie system received re-authorization from Congress, extending the completion date to 2026. This system currently supplies clean drinking water from the water treatment plant near Wolf Point to thousands of northeastern Montana residents. Upon completion the system will serve an estimated 20,000 residents.

The Rocky Boy's-North Central system also received re-authorization from Congress. Construction continues on its water treatment plant and communities are being connected using interim sources of supply water to serve ~5,000 people. At full system build-out it will serve roughly 30,000 Montanans.

The first phase of the Musselshell-Judith regional system would add a second well to the wellfield northwest of Judith Gap, supplying Madison Formation groundwater to the town of Harlowton. At full buildout the system will supply ~xx,xxx Montanans

Construction on Dry-Redwater's system south of the City of Sidney has been ongoing since 2014. Work completed has assisted several community systems facing DEQ enforcement actions by providing water from an approved source.

DNRC
FORESTRY
DIVISION

THE FORESTRY DIVISION, headquartered in Missoula, is responsible for planning and implementing forestry and fire management programs through an extensive network of staff located in field offices across the state. The Forestry Division has four major functions: fire protection, forestry assistance, business management, and forest policy and planning.

Fire and Aviation Vision 2025

The Fire Protection Bureau recently completed a strategic planning effort that will guide the DNRC Fire Protection Program through 2025 and set the stage for organizational success well into the future. When implemented, the resulting strategy will achieve a three-part purpose. First, we will position ourselves for long-term success in an operating environment undergoing constant, fundamental change by adapting our organization and program delivery to both the changing physical environment in which we work as well as the changing needs of the people we serve and our strategic partners. Second, the DNRC Fire Program strategy enables us to continue producing the responsive and effective results we are known for as we pursue our new strategic direction. Finally, the emerging strategy sets the DNRC Fire Protection Program on an

BY THE NUMBERS:

DNRC Forestry Division

4,000
Number of fire personnel trained by DNRC each year

5,600
Private landowners contacted annually by the Forest Stewardship Program and partners

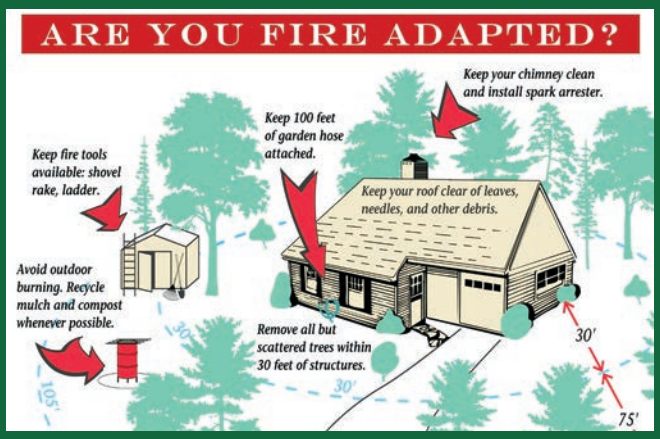
5,000
Projected acres to be treated by Good Neighbor Authority forest management projects in 2019

15 Million
projected board-feet of timber generated from GNA projects

98%
Compliance rate for Forestry Best Management Practices field reviews

130
Private landowners and resource professionals trained by Forest Pest Management Program

1
Web tool for Montana landowners to determine wildfire risk to their homes



FIRE-ADAPTED COMMUNITIES

The Forestry Division is working strategically to incorporate fire-adapted community concepts into its program of work, and expanding its existing fire education and prevention activities to address the larger goal of fostering fire-resilient Montana communities. These efforts align with the National Cohesive Wildland Fire Management Strategy of providing a more robust fire protection program. Attributes of the DNRC's fire-adapted community concepts include educating homeowners about the home ignition zone; fostering effective codes and ordnances; planning evacuation routes; creating community wildfire protection plans; reducing hazardous forest fuels; and building local capacity. The DNRC effort includes Fire Adapted Montana, a learning network that connects, supports, and provides resources to community-based practitioners across Montana and Determining Your Wildfire Risk, a parcel-based wildfire hazard risk rating tool that engages landowners in determining their home's vulnerability to wildfire.

KOOTENAI FORESTS TO RIVERS INITIATIVE

The Kootenai Forests to Rivers Initiative (KFRI) is a targeted outreach campaign designed to increase active management on family forest lands in Lincoln County. KFRI is a partnership between the DNRC and the American Forest Foundation. Between July and October 2018, the KFRI reached out to 1,400 landowners using social media and direct mail, offering landowners either a free visit with a consulting forester or a visit with a fellow local forest owner. The initial outreach effort produced connections with more than 100 landowners, more than double the response anticipated. By late spring of 2019 those forest landowners will receive a forester or forestry mentor visit and will become eligible to receive stewardship cost-share funding, a Firewise home assessment, networking opportunities with other forest landowners, and to participate in educational workshops.

action-oriented course focused on achieving a desired future for the Program.

Our intent in crafting the Fire Protection Program strategy was to:

- Make sure the changes in our operating environment are not getting ahead of us and insure our program's long-term relevance.
- Set a course and provide clear direction so that we make the most of our resources and maximize both efficiency and our organizational effectiveness.
- Foster a shared vision for the program, both internally and with our strategic partners.
- Provide a consistent, central focus around which we will manage.

The Chief of the Fire Protection Bureau organized and led the overall strategic planning effort using a strategic planning approach that was short, intense and focused employing a small core team to both manage the planning process and do the heavy lifting in that process. The Core Team undertook a stakeholder approach seeking out diverse participation and making effort to involve the persons responsible for executing our strategy and carrying out the Department's fire protection mission.

Forests in Focus 2.0

In September, Governor Steve Bullock unveiled *Forests in Focus 2.0: A Cross-Boundary Collaborative Approach* to strategically address Montana's pressing forest management needs by working across ownership boundaries.

According to Governor Bullock, "Montana is uniquely positioned to continue to lead on addressing forest and rangeland management needs by expanding upon our proven strategies for results." The Governor added that "This new partnership will emphasize better planning, scaling partnerships down to the local level, and targeting our investments on state, federal, tribal and private lands that bring capacity where we most need it, benefitting Montana's forested communities across the state."

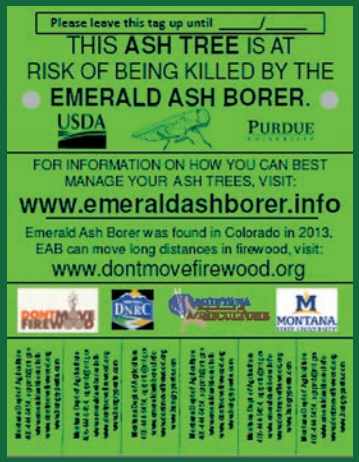
Forests in Focus 2.0 charts a course for key stakeholders to collaboratively address our most pressing needs for forest health and wildfire risk across Montana under one authoritative plan. It builds on the accomplishments and partnerships of the original, 2014 Forests in Focus effort. The DNRC will measure success both in terms of acres treated, communities and watersheds protected, wildlife habitat benefited, jobs created, and the endurance of partnerships.

GOOD NEIGHBOR AUTHORITY

As part of DNRC's growing partnership with Montana's National Forests, the DNRC sold its first two Good Neighbor Authority timber sales in the Fall of 2018. Sun Mountain Lumber of Deerlodge, Montana purchased the Boulder Lowlands timber sale on the Beaverhead-Deerlodge National Forest for $18.87 per ton; an approximate bid value Of $435,000. The sale is 375 acres in size and includes the harvest of 2.25 million Board Feet of timber plus other forest products. Idaho Forest Group of St. Regis, Montana purchased the Elk Gem timber sale on the Kootenai National Forest for $22.14 per ton; an approximate bid value of $364,602. The sale is 185 acres in size and includes the harvest of 2.7 million Board Feet of timber. Together, these timber sales generate more than $400,000.00 in program income, which the DNRC will use to accomplish more restoration work on National Forests using Good Neighbor Authority.

MANAGING MONTANA'S URBAN FORESTS

To better understand Montana's community forests, DNRC compiled the first statewide public tree inventory. This inventory, from 61 communities, includes 138,420 trees located within street rights-of-way and in city parks. Tree inventory data includes valuable information such as overall species composition and general condition. As part of the inventory effort, the DNRC calculated benefits of community forests including air and water quality; and the trees inventoried provide $17.2 million in total benefits. The collected data will help community managers and residents make informed decisions about their trees, inform communities about insects and disease such as the Emerald Ash Borer, and help set future community forest management goals and plans.



DNRC AVIATION

The DNRC Aviation Section provides professional aviation support for all department functions, with firefighting the primary mission. DNRC pilots are highly trained and skilled at aerial delivery of water to fire lines in support of ground crews, frequently operating in hazardous turbulence and low-visibility conditions. Their work includes dropping water with a 324-gallon Bambi bucket, and long-line delivery of supplies using a 150-foot line and remote aerial hook. DNRC pilots have logged 6,776 flight hours, with 34 years of experience per pilot. The Department's aviation maintenance technicians, who keep the fleet airworthy, have an average of 32 years of experience per technician.

Forests in Focus 2.0: A Cross-Boundary Collaborative Approach will concentrate on:

- Convening key stakeholders to help revise Montana's Forest Action Plan by reassessing statewide forest conditions, identifying priority areas for treatment, and planning to accomplish forest restoration in targeted areas over a defined period.
- Grow our use of Good Neighbor Authority (GNA) to increase the pace and scale of forest restoration and management on federal lands by working across ownership boundaries.
- Investing in innovative targeted marketing strategies to increase stewardship activities on non-industrial private forest lands.

- Expanding investment in local government capacity to foster fire-adapted communities, realize the goals and objectives of Community Wildfire Protection Plans, and engage forest land managers in relevant planning and project efforts.
- Better serving Indian Country by engaging with all 12 Montana tribes to identify programs of work that address forest health and wildfire risk issues in and around tribal communities.
- Creating an industry liaison position to better align DNRC's capabilities to overcome challenges with forest industry stability, growth, and retention.
- Investing annually in watershed and collaborative groups to leverage their leadership in resolving intractable land management policy issues.

WHITEBARK PINE CONSERVATION

In June of 2018, foresters from DNRC and the Flathead National Forest collaborated on a project to restore whitebark pine across jurisdictional forest boundaries impacted by the 2015 Squeezer Fire. Whitebark pine is a major trees species of the Northern Rockies, providing habitat structure and a key source of nutrition for more than 100 species of wildlife, including grizzly bears. Whitebark pines also promote watershed health by stabilizing soil and rock on harsh, exposed sites, and by collecting and maintaining snowpack. Whitebark pine has been declining across much of its range due to the combined effects of mountain pine beetle, climate change, and white pine blister rust, a non-native fungus; across Montana's Swan Range and adjoining lands, whitebark pine mortality is considered the highest in the nation. Crews from DNRC and the Flathead National Forest hand-planted 13,250 whitebark pine seedlings from stock with higher levels of resistance to blister rust.

2019

REPORT TO THE MONTANA LEGISLATURE

Montana Department of Natural Resources and Conservation

DNRC Headquarters
1539 11th Avenue
P.O. Box 201601
Helena, MT 59620-1601

Phone: (406) 444-2074
Fax: (406) 444-2684

E-mail: dnrc_publicinfo@mt.gov
Website: dnrc.mt.gov

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