



The Montana Department of  
**Natural Resources  
& Conservation**



*Painted Rocks Dam, Ravalli County*

**April  
2021**

# Introduction to the Montana Dam Safety Program



*Tongue River Dam,  
Big Horn County*

## Dear Montana Residents,

**THE PURPOSE** of this brochure is to provide you an overview of the Montana Dam Safety Program. Outlined in the following pages are the purpose and goals of the program, and the regulations under which we operate.

**THE MONTANA DAM SAFETY PROGRAM** is a unique regulatory program. The program is founded on the concept of dam owner responsibility and partnership. Dam owners and the Dam Safety Program work together to achieve safe dams. This partnership includes:

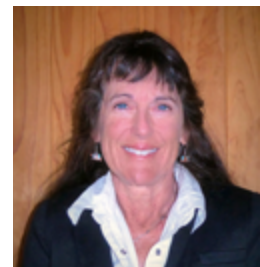
- Inspecting dams to identify problems before they become threats
- Attention to regular maintenance
- Help with monitoring of reservoir levels and instrumentation
- Assistance with pursuing funding opportunities
- Help with emergency planning
- Education and information on responsible dam ownership

**A DEDICATED TEAM OF DNRC REGIONAL ENGINEERS** are located throughout the state and are a valuable local resource for dam owners.

**THE SUCCESS OF THE PROGRAM** is based on this relationship between DNRC Engineers and the dam owners. Read on to learn more.

SINCERELY,

Dam Safety Program Manager



**Michele Lemieux**



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*Swift Dam,  
Pondera County*



# Why Dam Safety Regulation?

*Ruby Dam, Madison County*



Dams are essential infrastructures to Montana, providing recreation, irrigation, flood control, wildlife habitat, water supply and hydropower.

*Eureka Wastewater Pond Dam, Lincoln County*



Dams are often high-risk structures. When dams fail, the potential for loss of life is high and property damage can be in the millions.

*1964 Swift Dam failure, Pondera County*



Swift Dam failed in 1964, as a result of a historic meteorologic event on the front range. Many lost their lives and property damage was extensive.

*Petroleum County dam in distress*



**Dams don't need to catastrophically fail to be a total loss, as was the case for this Petroleum County dam.**

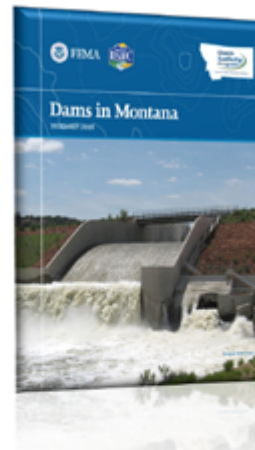
Several more dams have failed since the Swift Dam failure. Fortunately, no lives have been lost. However, the loss of a dam, and irrigation water, can be financially devastating for the owner.



### Dam Safety Regulatory Programs Serve Many Purposes:

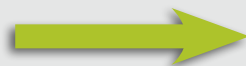
- Educate dam owners about responsible dam stewardship.
- Provide engineering design standards that ensure dams are stable and unlikely to fail, even when stressed by an earthquake or an extreme flood.
- Help local governments with emergency planning.
- Protect the life and property of those living downstream of dams.
- Prevent the loss of valuable resources that are expensive to replace.

To learn more about Montana dams, including ownership, regulation, types of dams and other fascinating information, please refer to the DNRC publication [Dams in Montana](#).  
[dnrc.mt.gov/divisions/water/operations/dam-safety/publications](http://dnrc.mt.gov/divisions/water/operations/dam-safety/publications)



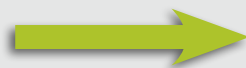
## Fundamentals of the Dam Safety Regulatory Program...And Why

Inspections are Required



Regularly inspected dams are unlikely to fail.

Licensed Engineer Involvement



Licensed engineers have the knowledge and skills needed to assess problems and suggest solutions. They are required by law to put public health and safety foremost.

Construction Oversight



Reconstructing/repairing a dam is complicated and must be done correctly to ensure the dam will not fail when it stores water.

Emergency Action Planning



A plan for getting people out of harm's way is essential to prevent fatalities.

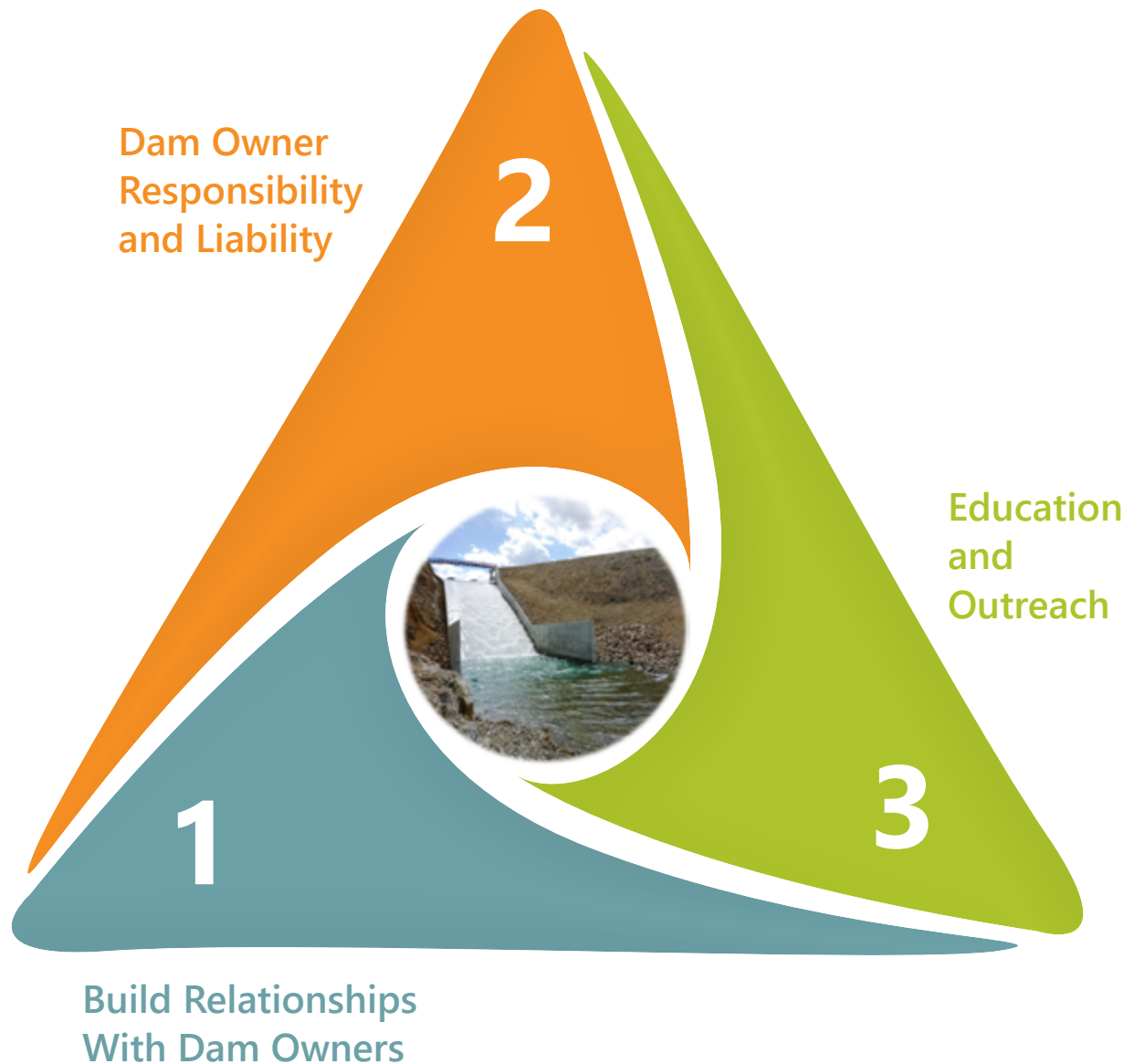
Enforcement if Needed to Protect Life and Property



Although rare, some dam owners may not understand the responsibility to the public that accompanies ownership.

# Dam Safety Program Approach to Regulatory Compliance

## Cornerstones to Regulatory Compliance



The Montana Dam Safety Program uses a three point approach to help dam owners stay in compliance with Montana dam safety laws and rules. *Read on to learn more about each point.*

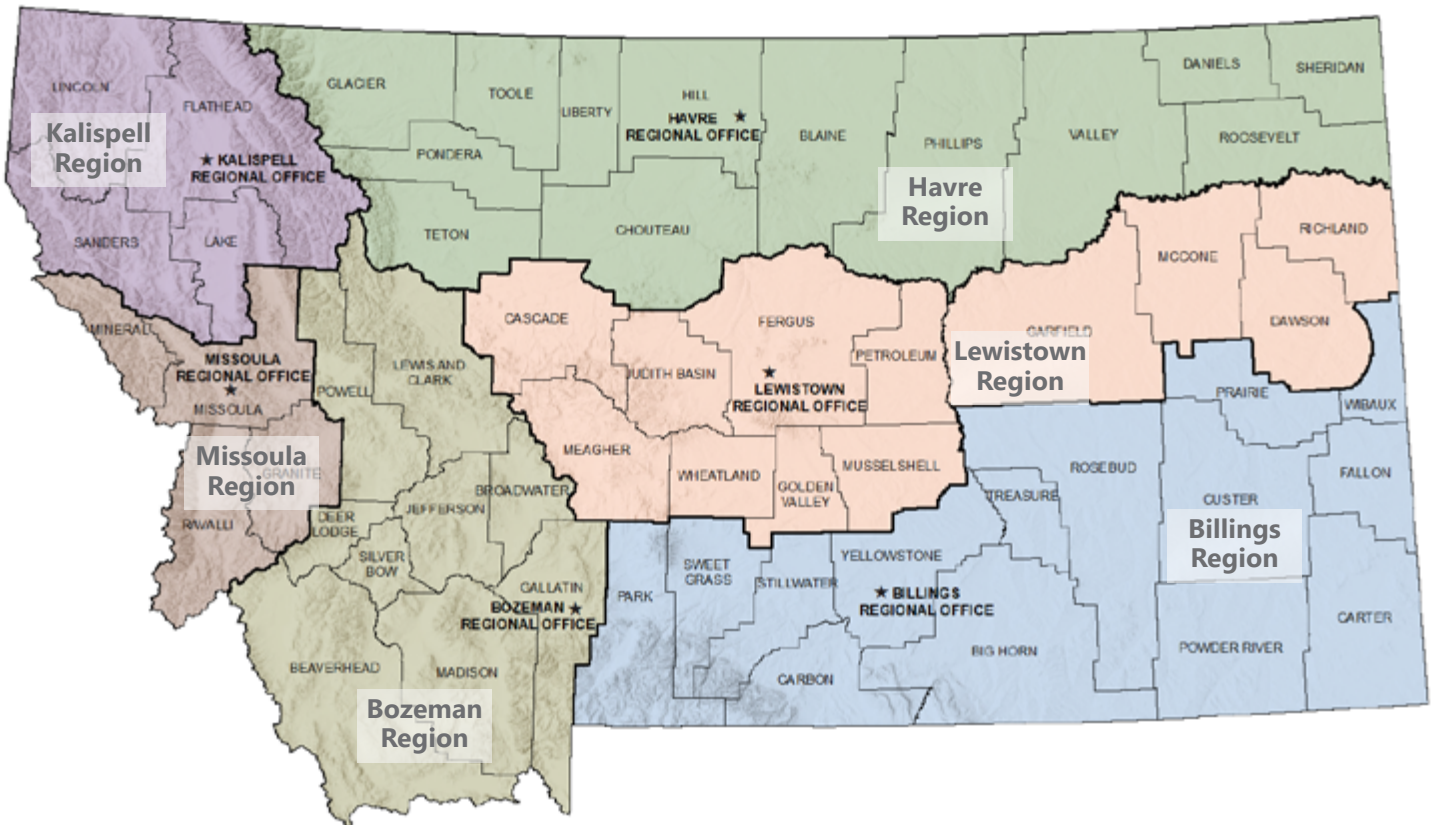
# 1

## Build Relationships with Dam Owners

The Dam Safety Program utilizes six regional engineers that work with dam owners in their assigned counties. The regional Engineer's responsibilities include:

- Assist dam owners with their annual inspections
- Provide training and advice
- Work with the dam owners to identify developing problems
- Conduct site visits during construction and repairs
- Aid with emergency response
- Help dam owners navigate the permitting process
- Respond to complaints
- Provide guidance on responsible dam ownership
- Discussing appropriate standards of care

## Dam Safety Program Regional Engineering Boundaries

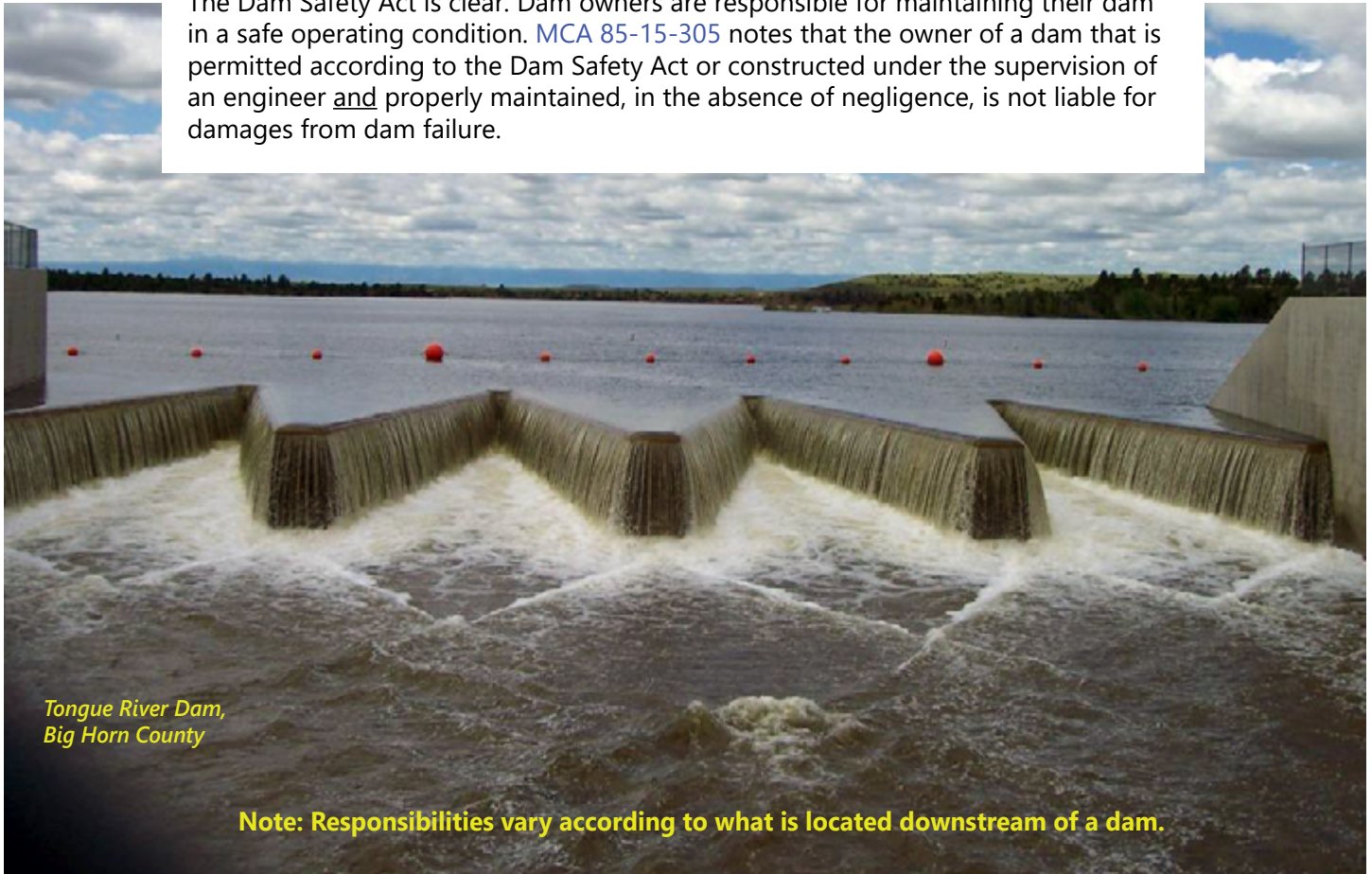


2

## Dam Owner Responsibility and Liability

It is in a dam owner's best interest to comply with the Dam Safety Act and properly maintain their dam. Montana dam owners understand the importance of responsible dam ownership.

The Dam Safety Act is clear. Dam owners are responsible for maintaining their dam in a safe operating condition. [MCA 85-15-305](#) notes that the owner of a dam that is permitted according to the Dam Safety Act or constructed under the supervision of an engineer and properly maintained, in the absence of negligence, is not liable for damages from dam failure.



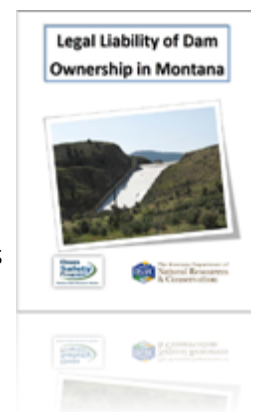
*Tongue River Dam,  
Big Horn County*

**Note: Responsibilities vary according to what is located downstream of a dam.**

### Dam Owner Responsibilities Include:

- Regular maintenance
- Operating the dam in accordance with design
- Conducting frequent inspections
- Maintaining an Emergency Action Plan
- Consulting with a licensed Engineer to perform the obligatory inspections, and provide other professional guidance when required.

For more information on liability, please refer to DNRC publication [Legal Liability of Dam Ownership in Montana](#)  
[dnrc.mt.gov/divisions/water/operations/dam-safety/publications](http://dnrc.mt.gov/divisions/water/operations/dam-safety/publications)





# 3

## Education and Outreach to Dam Owners and Engineers

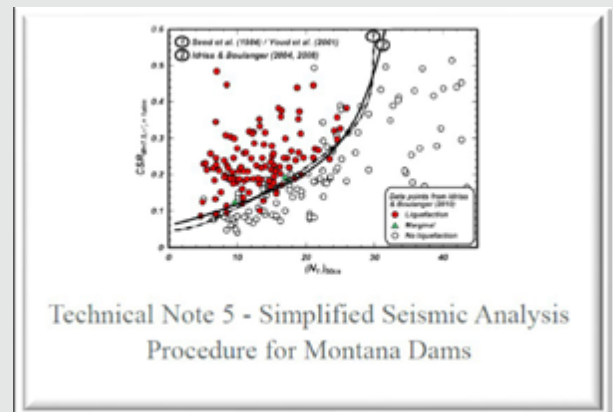
Dam Safety Program Education for Dam Owners Includes:

- Support to the Montana Association of Dam and Canal Systems (presentations and assistance)
- Dam owner training workshops
- Training on how to conduct annual owner Inspections
- Tools and training for emergencies
- Information and lessons learned from other owners and engineers.



DNRC Education Efforts for Engineers Includes:

- Technical guidance
- Engineering tools to assist with common calculations
- Engineering newsletters



# Montana Dam Safety Act (MCA 85-15)

## Summary

### Six Key Principles of the Montana Dam Safety Act

1. Acknowledges that dams are important to Montana and the state has a compelling interest in encouraging the construction of dams.
2. Acknowledges that certain dams pose inherent risks to public safety, as well as liability concerns for dam owners. However, owner compliance with the Dam Safety Act reduces risks to an acceptable level and provides protections for owners.
3. Requires that all dams be substantially built so that they can safely and securely impound water.
4. Requires owners of dams with potential loss of life downstream to obtain an operation permit and to utilize services of a licensed professional engineer. Requires that dams be constructed, repaired, inspected, operated and maintained to minimize the risk of failure.
5. Dam owners are responsible:
  - To hire an engineer for required inspections
  - Pay emergency response expenses
6. Liability: Dams that are permitted, constructed, operated and maintained in accordance with Dam Safety Act have liability protection. All dams that are constructed under an engineer's supervision, and are properly maintained, have a level of liability protection.

### Reference

- [MCA 85-15-115](#)
- [MCA 85-15-115](#)
- [MCA 85-15-207, 85-15-208](#)
- [MCA 85-15 Part 2](#)
- [MCA 85-15-213 \(3\)](#)  
[MCA 85-15-215](#)
- [MCA 85-15-305](#)

### The Montana Dam Safety Act's Approach to Meeting Key Principles

Sets forth requirements for identifying *High Hazard Dams* (See definition on page 10).

Sets forth rigorous requirements for High Hazard Dams, including:

- Construction permitting
- Operation permitting
- Inspections

- [MCA 85-15-209](#)
- [MCA 85-15-210, 85-15-211](#)  
[MCA 85-15-212](#)  
[MCA 85-15-207-208, 85-15-213](#)

### Enforcement

- Provides DNRC authority to utilize the Attorney General or county attorneys for legal services.
- Provides DNRC authority to cancel operating permits.
- Provides DNRC authority to set conditions on operating permits, to ensure the safe operation of dams.
- Provides DNRC authority to issue a \$1000/day civil penalty for violations for dams with normal capacity greater than 50-acre feet.
- Provides DNRC authority to respond to problems and emergencies on all dams, regardless of size.

- [MCA 85-15-109](#)
- [MCA 85-15-216](#)  
[MCA 85-15-212](#)
- [MCA 85-15-503](#)
- [MCA 85-15-214, 85-15-215](#)

## Exemptions

Some dams are exempt from general provisions, permitting and inspection requirements, liability statement, and penalties (MCA 85-15-107 (a) thru (d) and (2)).

Golden Sunlight tailings impoundment,  
Jefferson County



Dams with an active hard rock mining permit from the Department of Environmental Quality



Federally owned dams

Toston Dam, Broadwater County



Dams licensed by the Federal Energy Regulatory Commission (Hydropower dams)

Noble Lake Dam, Madison County



Non-federal dams on federal property with federal agency oversight (Forest Service and Bureau of Land Management)

Castle Rock Reservoir Dam,  
Rosebud County



Dams with Major Facilities siting Act Certificate MCA 75-20-201 (Colstrip dams)

Kootenai Development  
Impoundment Dam, Lincoln County



Dams located on Superfund sites are a special case and are exempt from liability statements in MCA 85-15-305, MCA 85-15-107 (3)

## There Are No Exemptions to the Safe Dam Requirement in Montana

**All dams, regardless of ownership, regulatory agency or size must be substantially constructed in a secure and safe manner.**

MCA-85-15-207 "No person may fill or procure to be filled with water any dam or reservoir that is not so thoroughly and substaitllay constructed as to safely hold any water that may be turned therein."

MCA 85-15-208 "No person may construct or cause to be constructed a dam or reservoir for the purpose of accumulating, storing, appropriating or diverting any of the waters of this state, except in a thorough, secure and substantial manner."

# History

<1975

**Dam Safety Enforcement  
Responsibility of County Attorneys**

1975

**The Failure of Teton Dam (Idaho)**

The newly constructed Teton Dam failed within hours of first filling.



1979-1982

**Corp of Civil Engineers Inspects  
and Inventories Montana Dams**

The failure of Teton dam was a call to action. The President ordered the Corp of Engineers to inspect and inventory the nation's dams. Many Montana dams were found to have deficiencies.

1985

**Montana Dam Safety Act Passed**

The Montana Water Resource Association with support from Montana's engineering community proposed the Montana Dam Safety Act to the 1985 legislature.

1993

**Dam Safety Act Modified**

The original act measured reservoir capacity to the top of the dam. Reservoirs don't operate full to the top of the dam. The act was modified to measure capacity to normal reservoir level instead.

The original act only applied to dams with capacities over 50 acre-feet, which left out most Montana dams. These smaller dams still need to be constructed and operated in a safe and secure manner and actions taken to prevent dam failures when necessary. The act was modified to apply to all dams in the state.

The original act included privately owned dams on federal property, which are often also regulated by the federal agency that owns the property under the dam. The act was modified to removed overlapping jurisdiction with federal agencies, when the federal agency provides dam safety oversight.

# Key Definitions for Understanding the Montana Dam Safety Program

## High Hazard Dam

A regulatory definition requiring permits from the Montana Dam Safety Program where:

- There is potential for loss of life downstream, should the dam fail during normal operating conditions.
- A reservoir's normal operating pool contains 50 acre-feet, or more.

*Note: Other state and federal agencies may have different definitions for high hazard dams.*

## Not High Hazard Dam

A regulatory determination whereas permits are not required from the Montana Dam Safety Program where:

- There is unlikely potential for loss life downstream from failure during normal operating conditions.
- A reservoir's normal operating pool contains 50 acre-feet or more.

*Note: Dams with a capacity less than 50 acre-feet do not have a hazard assignment.*

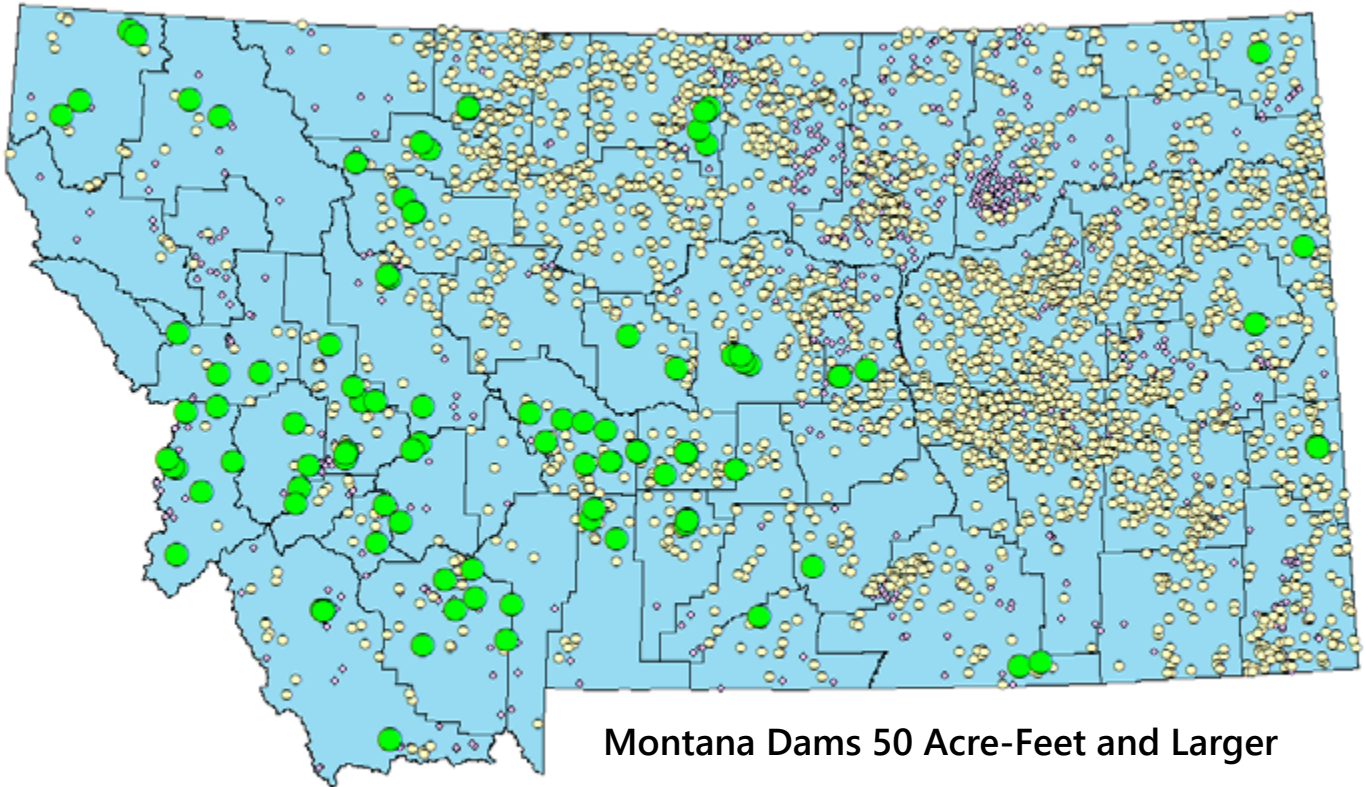
## Normal Operating Pool

The reservoir storage used for defining the capacity of a reservoir, as measured to the maximum normal reservoir level; during non-flooding conditions. The level depends on the dam type:

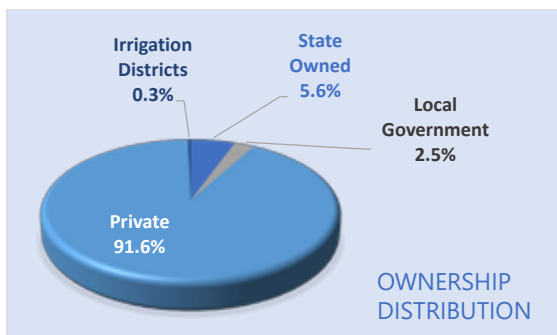
- For on stream reservoirs – lowest uncontrolled spillway.
- For flood control structures – elevation of the auxiliary (emergency) spillway.
- For off stream reservoirs – according to reservoir operation.



# Dams and the Montana Dam Safety Act



**Montana Dams 50 Acre-Feet and Larger**



- High Hazard Dams - DNRC Regulated (103)
- Not High Hazard Dams - DNRC Regulated (2794)
- Dams Regulated by Other Agencies

*Important Note:* This map does not show the many smaller dams that are subject to the safe dam requirements in MCA 85-15-207, 208, 214 & 215 but do not have a hazard assignment since they impound less than 50 acre-feet.

## Interested in Knowing More About Montana’s Dams?

Regulation of dams in Montana is explained in a clear, straightforward manner, along with other pertinent information in the DNRC publication [Dams in Montana](#).



Additional information on Montana’s High Hazard Dams can be found on the [map](#).



Both documents are available from [dnrc.mt.gov/divisions/water/operations/dam-safety/publications](http://dnrc.mt.gov/divisions/water/operations/dam-safety/publications)

# Program Components

## Downstream Hazard Classification

### Montana Dam Safety Act

MCA 85-15-209 dictates that a person proposing to construct a dam or reservoir with 50 acre-feet capacity must apply to the department for a hazard determination.

### Montana Dam Safety Rules

ARM 36.14.2 provides specifics:

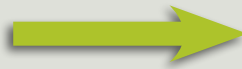
- Application processing procedures
- Fee for application (\$125)
- Criteria for determination
- Special circumstances

### Montana Dam Safety Guidance

Technical Note 6 - Downstream Hazard Classification Procedures for Montana Dams provides step by step instructions for engineers conducting hazard determinations for dams. The document also provides guidance for special situations.

## Regulatory Requirements

High Hazard Dams



Construction Permit with Engineer Oversight  
Operation Permit  
Emergency Action Plan  
Operation and Maintenance Plan  
Engineer Inspections

Not High Hazard Dams



No permits required

The Act still requires the dam owner to maintain the dam in a safe and secure condition.

Reclassification of not high hazard dams is necessary for substantial repairs and modifications, and when new hazards are introduced downstream.

## Hazard Classification Steps

- 1** DNRC regional engineers meet with the dam owner to take specific measurements of the dam, reservoir, downstream topography and potential hazards.
- 2** The measurements are entered into a computer program that simulates failure of the dam during normal operating conditions (no influence from storms).
- 3** The flood simulation is followed downstream until it matches the 100-year floodplain.
- 4** If an occupied dwelling, building, paved road, or campground is in the dam failure inundation area, the dam is classified as *high hazard*.

*Note: The DNRC's evaluation is conservative and based on limited survey data. The dam owner has the right to hire their own engineer and collect high quality survey data and complete their own evaluation of the downstream hazard. The DNRC will take this analysis into consideration when classifying a dam.*

Hazard Classification Applications are not required for the following:

- Diversion dams
- Naturally occurring reservoirs
- Wastewater pond dams that are regulated by the Department of Environmental Quality
- Levees or canals





# High Hazard Dam Requirements: Construction Permits

## Montana Dam Safety Act

[MCA 85-15-210](#) dictates that a person planning to construct a high hazard dam must first obtain a construction permit from the DNRC. The application must contain construction plans and specifications, prepared by or under the supervision of a licensed engineer, who is experienced with dam design and construction.

The DNRC must issue the permit or deny the application within 60 calendar days of receiving a complete application.

## Montana Dam Safety Rules

[ARM 36.14.3](#) provides specifics:

- Application processing procedures
- Requirements for engineering design report that provides technical details of proposed construction
- Requirements for construction plans and specifications that are used by a contractor to do the work
- Non-compliance actions that can be taken by the DNRC
- Special circumstances

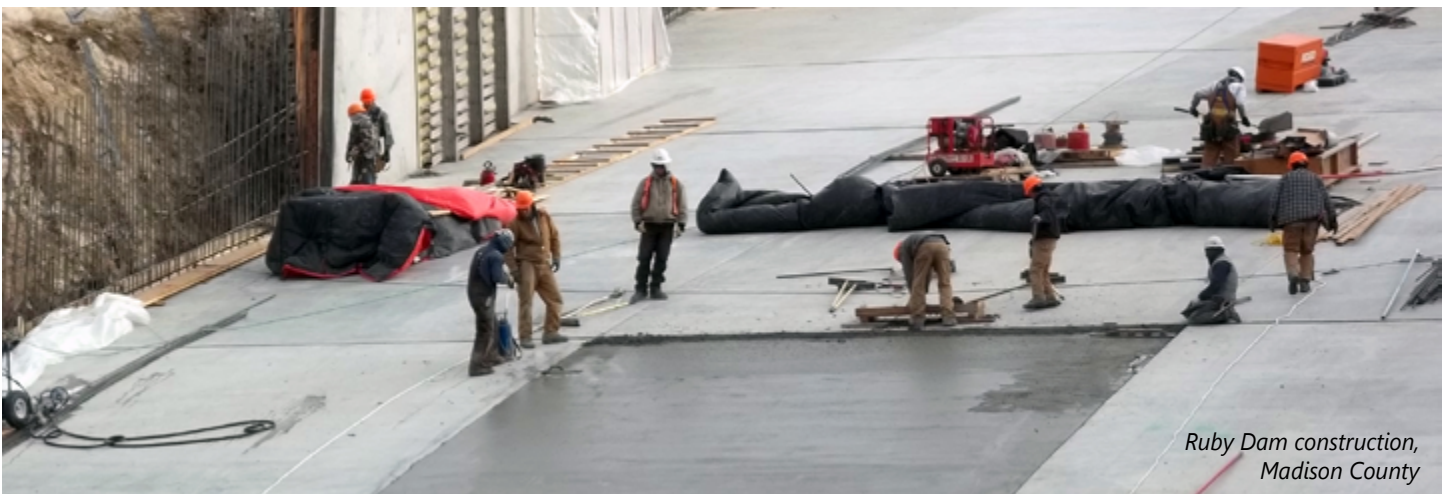
## Montana Dam Safety Guidance

Design Guidance for Engineers:

- [Technical Note 8 - Specifications Requirements for Dams](#)
- [Technical Note 1 - Analysis of Spillway Capacity in Montana](#)
- [Technical Note 2 - Loss of Life Determination for Spillway Capacity Analysis](#)
- [Technical Note 5 - Simplified Seismic Analysis Procedures](#)
- [Technical Note 9 - Design Review Process Manual for Dam Projects](#)

See [dnrc.mt.gov/divisions/water/operations/dam-safety/technical-notes](http://dnrc.mt.gov/divisions/water/operations/dam-safety/technical-notes)

Construction projects that keep the DNRC involved throughout all stages of the project are more successful. DNRC's experienced engineers work hand and hand with the dam owner's engineer to assure designs are adequate and comply with standards and current industry practice.



*Ruby Dam construction,  
Madison County*

**Construction Permits are Required For:**

- New construction of high hazard dams
- Rehabilitation and repairs to high hazard dams
- Removal and/or decommission of a high hazard dam

**Construction Permits are NOT Required For:**

- Maintenance and routine repairs that do not impact dam safety

Examples of ordinary repairs/maintenance include vegetation control, gate lubrication, addition of rip rap on upstream face of dam, and re-grading the dam crest to remove potholes. However, sometimes these activities can be harmful to the dam, depending on the situation. The Montana Dam Safety Program works to build relationships with the owners of high hazard dams so that they know to contact a regional engineer for advice before starting a maintenance project.



Ruby Dam spillway under construction, Madison County

**A Special Note About Dam Safety Design Standards**

Nationwide, there are two approaches to standards: *Prescriptive and Industry Practice*.

*Prescriptive* standards are generally strict requirements that are contained in administrative rules or the law.

*Industry Practice* standards depend on the current state of practice in the industry and allow the engineer to use a variety of federally published standards that best fit the situation.

In general, the Montana Dam Safety Administrative Rules follow industry practice standards, recommending Natural Resources Conservation Service (NRCS) standards for smaller dams and U.S. Bureau of Reclamation standards for larger dams.

Spillway standards are an exception; a prescriptive spillway standard is in the Montana rules.

Most state and federal agencies require dams to pass the Probable Maximum Flood (PMF), the most extreme flood event possible for the dam. However, soon after passage of the Dam Safety Act, it became clear that this standard was an impediment to the rehabilitation of Montana dams, due to the high cost to meet this standard. The legislature approved funding for the DNRC to research extreme storms in Montana and develop a spillway standard that is based on the estimated loss of life downstream. ([ARM 36.14.502](#)).

# High Hazard Dam Requirements: Operation Permits

## Montana Dam Safety Act

[MCA 85-15-212](#) dictates that a high hazard dam owner must develop an operation plan for approval by the DNRC. The operation plan must contain reservoir operation procedures, maintenance procedures and an emergency action plan. The DNRC will then issue a permit to operate the dam, *containing conditions if necessary*.

[MCA 85-15-213](#) dictates that a high hazard dam, whether or not previously permitted by the DNRC, must be inspected by a qualified engineer at least once every five years. Upon receipt of a report of this inspection, the DNRC shall issue or renew a permit to continue operating the high hazard dam, *containing conditions as necessary*.

## Montana Dam Safety Rules

[ARM 36.14.4](#) provides specifics:

- Permit requirements and application processing procedures
- Contents of the operation plan
- Special circumstances
- Approval or denial of permit within 90 days of receipt of a *complete application*

[ARM 36.14.6](#) provides specifics on the engineer's inspection:

- General requirements of inspection
- Contents of inspection report

## Montana Dam Safety Guidance

[Technical Note 3 - Simplified Evacuation Mapping](#)  
[Operation Permit Resources](#)

- Operation and maintenance manual templates
- Emergency action plan templates
- Engineer's inspection to do list
- Engineer's inspection checklist

Dam owners have several responsibilities, including an annual update of their emergency action plan and an annual owner's inspection of the dam.

[Dam Owner Tools and Information](#)  
[dnrc.mt.gov/divisions/water/operations/dam-safety/dam-owners](http://dnrc.mt.gov/divisions/water/operations/dam-safety/dam-owners)



Tongue River Dam, Big Horn County

***Important Note:** When the DNRC issues an operation permit, it is an assurance to the public that the dam poses an acceptable level of risk. All dams pose some risk, even empty ones! However, dams that are regularly inspected, have adequate maintenance and meet current industry standards are unlikely to fail. This is a fundamental concept of the Dam Safety Act.*



Eureka Dam,  
Teton County

## Frequently Asked Questions About Operation Permits

**What if a dam has some problems that the owner is working to fix, does the DNRC revoke the operation permit and therefore the reservoir must be drained?**

No, unless the dam poses an immediate threat of failure, the DNRC works with the owner and the owner's engineer to develop a plan for repairs while continuing to operate safely.

Sometimes the reservoir level must be restricted; sometimes increased monitoring may be required. There rarely is a need to completely drain the reservoir. Temporarily lowering the reservoir usually affords an acceptable risk until the problem is remedied.

**What are typical DNRC enforcement actions that could be taken against dam owners that do not conform to operation permit requirements?**

There are no typical enforcement actions as the vast majority of dam owners are responsible and the DNRC rarely needs to take enforcement.

If needed, enforcement can include a mandatory reservoir level restriction, notifying the downstream public and county officials and in the worst case situation, a civil penalty.

**What are operation permit conditions?**

The DNRC may issue an operation permit with conditions, which is the understanding that a dam owner will take certain actions in a specified period of time.

A permit condition has to do with the safety of the dam, and failure to meet a condition is believed to put the dam at risk to the point that the DNRC may not be able to provide an assurance to the downstream public. Common permit conditions include repairing a failed spillway, adding a toe berm, investigating the seepage through a dam, or evaluating a dam for compliance with program standards.

## Types of Dam Safety Inspections

### Engineer’s Inspection

- Conducted by owner’s qualified licensed engineer, at least once every five years
- Thorough physical inspection of the dam, including hard to access components (like outlet conduit)
- Includes an analysis of dam and compliance with current standards
- Recommend a safe operating level
- Recommendations for repair, monitoring, and/or investigation
- Review of past inspections and analysis
- Comprehensive report required
- Can be costly - \$5000 to \$10,000 (average)

### Owner’s Inspection

- Conducted by dam owner annually
- Engineer not required (although some owners use an engineer)
- Visual inspection of dam
- Review of seepage monitoring records collected over past year
- Special attention to items noted in past engineer’s inspection
- A checklist is adequate for reporting

### DNRC Site Visit

- Visit to dam by DNRC engineers
- Assist/train dam owners on how to do owner’s inspection
- Evaluate problems identified in engineer’s report
- Confirm dam is functioning safely

DNRC engineers do not conduct “inspections”. Per [MCA 85-15-213](#), inspections are the responsibility of the dam owner.



*Ruby Dam,  
Madison County*

## Emergency Action Plan

All high hazard dams are required to have an Emergency Action Plan; written instructions and information that are readily available for emergencies. The Emergency Action Plan must contain a map of the area that could be flooded during a dam failure,

contact information for local emergency managers and instruction on how to respond to a developing emergency. The Emergency Action Plan must be reviewed and updated annually, with copies provided to emergency responders.

# Complaints and Emergencies

## Montana Dam Safety Act

[MCA 85-15-214](#) provides the DNRC authority to respond to complaints from people that claim in writing that they or their properties are endangered by any dam (not just high hazard dams). The DNRC can order an inspection of the dam, order the draining of the reservoir or any other steps that the DNRC determines to be necessary to eliminate the hazard.

[MCA 85-15-215](#) provides the DNRC authority to order an emergency repair or breach of a dam, if necessary, to safeguard life and property. If the owner fails to act, the DNRC can take action to eliminate the hazard and charge the owner for expenses incurred by the DNRC.

## Montana Dam Safety Rules

[ARM 36.14.8](#) provides details on how the DNRC responds to complaints:

- Complaint processing procedures
- Procedures for investigating if a complaint has merit
- Actions that can be taken by the DNRC

[ARM 36.14.7](#) provides more details on emergency response actions:

- What constitutes an emergency condition
- Actions that must be taken by a dam owner
- Actions that shall and may be taken by the DNRC



*Chouteau County dam that failed in 2011*

## Montana Dam Safety Guidance

[Complaint forms and information](#) to help the public navigate the complaint process.

A dam safety complaint is a legal process. Complaints are a written and signed request for the DNRC to take enforcement action. A complainant must be impacted by the failure of the dam. Anonymous complaints are not allowed.

DNRC engineers work with potential complainants and dam owners to resolve concerns without going into the formal complaint process.

# Dams Safety Program Operation and Funding

## Where, How and Who

### Where



The Montana Department of  
**Natural Resources  
& Conservation**  
Water Resources Division  
Water Operations Bureau



### How

#### FEMA Funds – Operation

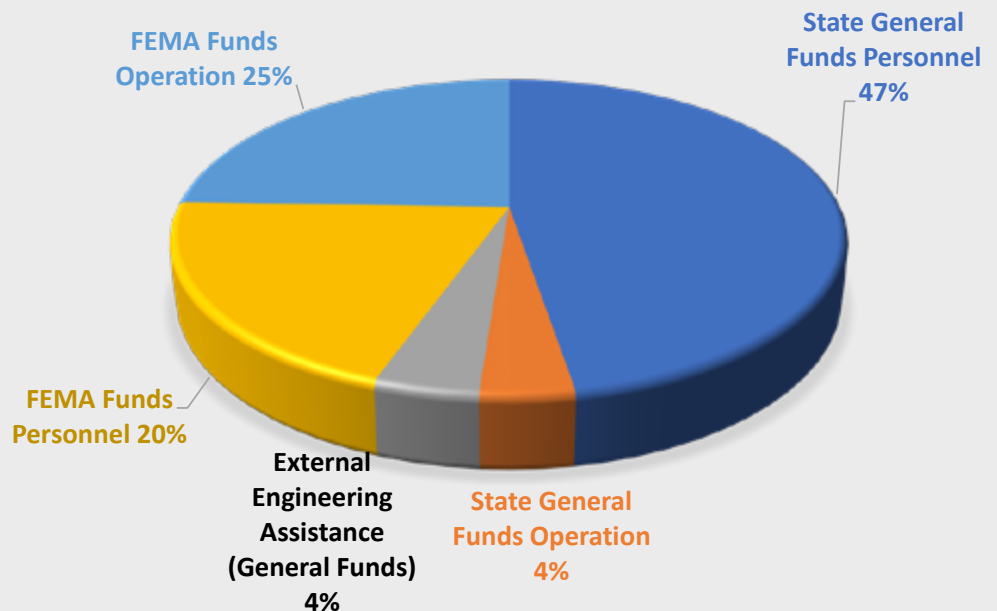
The National Dam Safety Act provides financial assistance to enhance Montana’s Dam Safety Program. The funding is used to assist dam owners with emergency action planning, developing engineering design manuals and tools, and conducting instructional workshops.

#### FEMA Funds – Personnel

The National Dam Safety Act pays for one staff engineer in the Helena central office. This engineer is responsible for maintaining databases and assisting dam owners with monitoring and outlet inspections.

#### State General Funds – External Engineering Assistance

The state often needs to consult with experts in the review of complicated construction projects and rehabilitation designs.



#### State General Funds – Operation

State general funds pay for the Helena central office’s operation expenses.

#### State General Funds – Personnel

State general funds pay the program manager’s salary and the salary of six regional engineers (25% of their time dedicated to dam safety).

*Regional Office operating expenses and state-owned dam inspector expenses also contribute to DNRC’s safety of dams programs. These expenses are not included in the pie chart.*

# Who



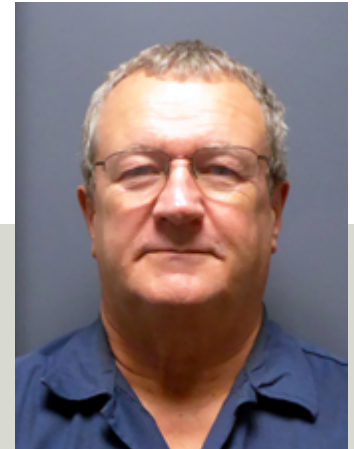
**Sam Johnson, PE**  
Billings Area  
Engineer  
25% Dam Safety



**Brent Zundel, EI**  
Bozeman Area  
Engineer  
25% Dam Safety



**Larry Schock**  
Missoula Area  
Engineer  
25% Dam Safety



**Sterling Sundheim**  
Lewistown Area  
Engineer  
25% Dam Safety



**Marc Pitman, PE**  
Kalispell Area  
Engineer  
25% Dam Safety



**Anthony Moritz, EI**  
Havre Area  
Engineer  
25% Dam Safety



**Chad Hill**  
Program Engineer  
100% Dam Safety



**Michele Lemieux PE**  
Program Manager  
100% Dam Safety







*Storm Lake Dam, Deer Lodge County*



The Montana Department of  
**Natural Resources  
& Conservation**



For additional information on the Dam Safety Program or to contact a Dam Safety Program engineer, please refer to :

[DNRC.MT.GOV/DIVISIONS/WATER/OPERATIONS/DAM-SAFETY](https://dnrc.mt.gov/divisions/water/operations/dam-safety)

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