



# FEMA National Dam Safety Program Fact Sheet

*FEMA P-1069*

*December 2015*



FEMA

# What is the National Dam Safety Program?

## The NDSP Partnership

For 30 years, the Federal Government has been working to protect Americans from dam failure through the National Dam Safety Program (NDSP). The NDSP educates the public and assists decision makers through the use of multiple databases, tools and other materials. The NDSP, which is led by FEMA, is an investment in preventing dam failures and reducing the impacts on lives and property that may be at risk from a dam failure.

For more information, please visit:

<https://www.fema.gov/dam-safety-0>

## Components of the NDSP

FEMA works with its Federal and private sector partners to develop technologies to help provide for improved dam safety. FEMA also provides financial assistance to State dam safety programs under the Water Resources Reform and Development Act (WRRDA) of 2014. The NDSP supports states through:

- State Assistance Grants
  - Supports State dam safety programs in implementing dam safety activities.
- Training
  - Promotes training for dam owners and professionals through Federal, State and local programs.
- Research
  - Addresses a cross-section of issues and needs, all in support of ultimately making dams in the United States safer.
- Public Safety and Awareness
  - Assists in preparing for, mitigating against, responding to and recovering from incidents.

More information can be found at: <http://www.damsafety.org/>.

## National Inventory of Dams (NID)

- Maintained by the U.S. Army Corps of Engineers;
- Used for risk and emergency management, general planning, inventorying and other purposes;
- Contains information on over 90,000 dams nationwide;
- The average age of dams in the NID is 56 years;
- 70 percent of the dams in the NID are state-regulated.



## Resource Allocations



# Dam Safety Awareness

To encourage and promote dam safety nationally, FEMA coordinates with Federal, State and private sector partners through two advisory committees, the National Dam Safety Review Board (NDSRB) and the Interagency Committee on Dam Safety (ICODS).

*The National Dam Safety Review Board (NDSRB), comprised of Federal, State and private sector partners, advises FEMA's Administrator in setting National dam safety priorities and considers the effects of National policy issues affecting dam safety. The NDSRB also helps monitor performance of state dam safety programs.*

*The Interagency Committee on Dam Safety (ICODS), comprised of Federal agencies having an involvement with dams, was founded in 1980 to encourage the establishment and maintenance of effective Federal programs, guidelines and policies to enhance dam safety and security. ICODS serves as the permanent forum for the coordination of Federal activities in dam safety and security.*

## National Dam Safety Awareness Day

FEMA encourages communities, states and private sector dam owners across the country to help promote dam safety and the benefits of dams either on or around May 31<sup>st</sup> each year. Here are some activities you can do to get involved and take action:

- Contact your State Dam Safety Programs;
- Seek information about dams in your area and their emergency action plans;
- Learn about local government evacuation plans and organize an evacuation drill;
- Work with your local school systems to set up a field trip to a local dam;
- Start an outreach campaign to raise dam safety awareness;
- Host a Dam Safety Awareness Day community event; or
- Visit FEMA, ASDSO and other dam safety-related websites to learn more about dams.

**For more information on how you can participate, visit the National Dam Safety Awareness Day page:**  
<http://engineeringstrongersafer.net/national-dam-safety-awareness-day/>.

# Facts About Dams

## Purpose

The purpose of a dam is to store water or other liquid-borne materials for any of several reasons, to include human water supply, irrigation, livestock water supply, energy generation, containment of mine tailings, recreation, pollution or flood control. Many dams fulfill a combination of the above functions.

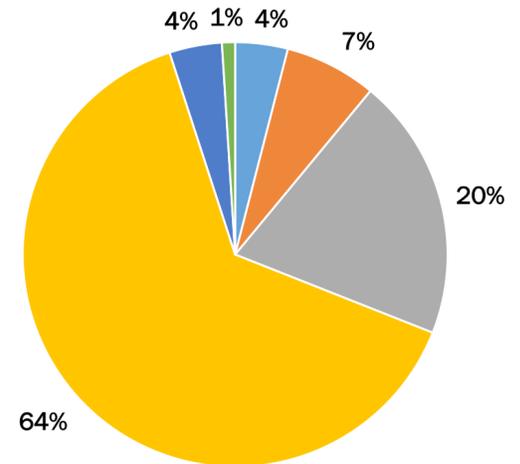
## Ownership

Dams are unique components of the U.S. infrastructure in that most dams (64 percent) are privately owned. Dam owners are solely responsible for keeping their dams safe and financing expensive maintenance, repairs and upgrades. Maintaining dams can be a heavy burden on dam owners.

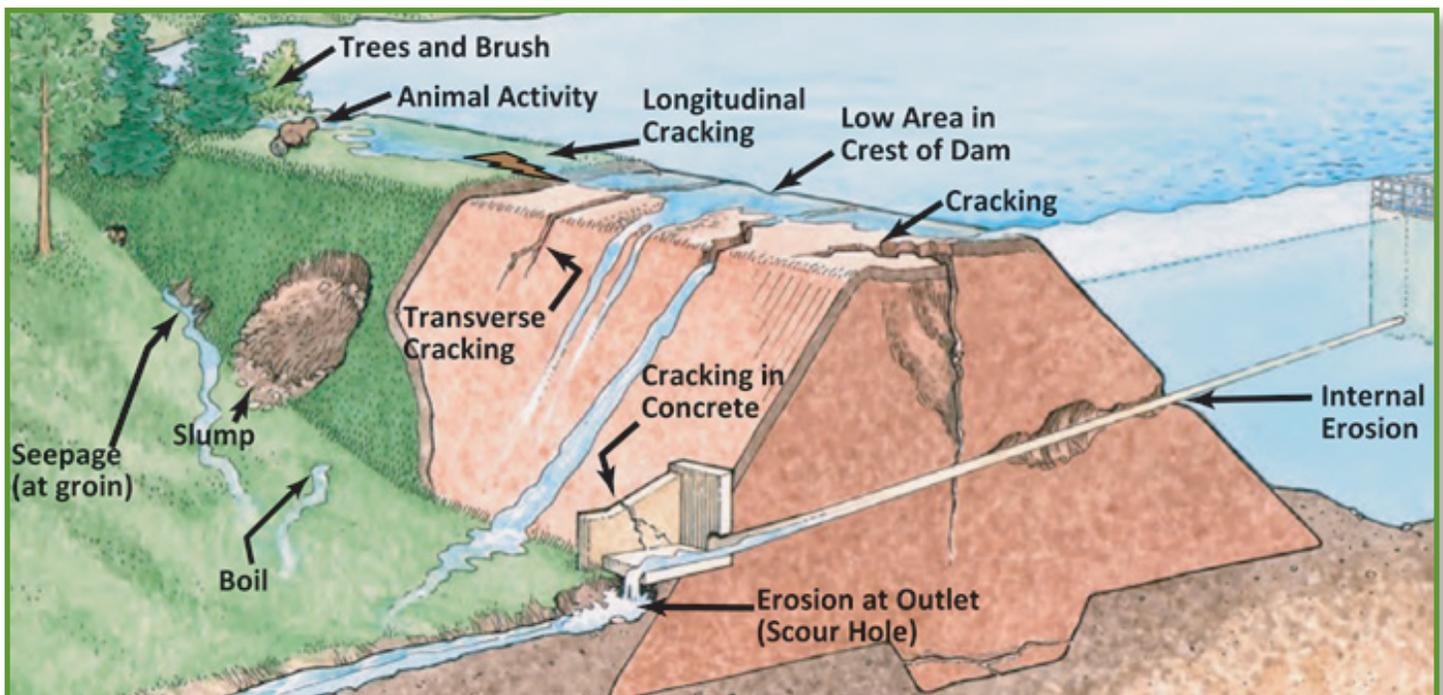
## Regulation

States regulate the vast majority of dams in the U.S. (about 70 percent), with the Federal Government regulating the remaining dams.

## Dams by Owner Type



***As dams age, repair and maintenance costs rise.  
Some common problems of older embankment dams include:***



*Dam safety is a shared responsibility. You are encouraged to know your risk, know your role, know the benefits of dams and take action.*

## **Dam Failure Inundation Zones**

The area downstream of a dam that would be impacted in the event of a failure or uncontrolled release of water is called the dam failure inundation zone. Before buying a home or business, it is the buyer's responsibility to determine whether it is in an inundation zone.

*To learn more about dam failure inundation zones, visit:*

<http://www.livingneardams.org/brochure/#/14/>.

## **Challenges**

There are now approximately 28,000 dams in the U.S. whose failure could cause property damage or a potential loss of life.

More than 15,000 of these are considered high-hazard potential, meaning their failure would result in probable loss of life.

According to the Association of State Dam Safety Officials, (ASDSO), as of 2015, about 77 percent of these dams have an Emergency Action Plan to reduce the probability of loss of life and property damage that can result from a dam failure.

## **Educate Yourself**

If you determine that your property is in an inundation zone, contact your county emergency management coordinator or state dam safety program office to find out who owns the dam and which agencies regulate it. Some questions to ask about the dam include:

- What is the dam's hazard potential classification?*
- When was it last inspected?*
- What is its condition?*
- Where are community emergency shelters located?*
- Is there an updated Emergency Action Plan for the dam?*
- What types of warning systems are in place to warn residents of a dam incident?*

# Reducing Risk

## Reducing Risk from Dam Failures

To reduce the chances of a dam failing from an extreme rainfall event as a dam owner:

- design to industry, state, and Federal guidelines;
- practice situational awareness and preparedness;
- have your dam inspected routinely;
- ensure proper design, construction, maintenance, and operation;
- adhere to regulations, no short cuts or random exemptions;
- invest in repair and routine maintenance;
- be in contact with your state dam safety office; and
- have an up-to-date emergency action plan and inundation maps.

## Prepare Your Home and Your Family

- Inform your family of dam failure flood risks, and make sure each family member knows what to do in the event of an emergency.
- Elevate your furnace, water heater and electrical panel if they are susceptible to flooding.
- Install “check valves” in sewer traps to prevent floodwater from backing up into drains.
- Seal basement walls with waterproofing compounds to avoid seepage.
- Keep valued possessions and important papers on an upper level of your home or in a safety deposit box.
- Prepare an emergency kit.

## If You Have to Leave Your Home

- Do not walk through moving water. Six inches of moving water can make you fall. If you must walk in water, walk where the water is not moving.
- Do not drive into flooded areas. If floodwaters rise around your car, abandon it and move to higher ground if you can do so safely. You and the vehicle can be quickly swept away.

For more information on how to reduce your risks, visit <http://www.livingneardams.org/brochure2/#>.

# Resources and References

## Association of State Dam Safety Officials

<https://goo.gl/A0649w>

## Dam Safety History

<https://goo.gl/STTvcv>

## Dam Safety in the U.S. A Progress Report

<https://goo.gl/H81g1L>

## Dam Safety Resources and Publications

<https://goo.gl/kVtUY7>

## Emergency Action Planning for Dams

<https://goo.gl/VSKeqp>

## FEMA: Dam Safety

<https://goo.gl/xAkOKk>

## FEMA Library

[FEMA-Publications-  
Warehouse@dhs.gov](mailto:FEMA-Publications-Warehouse@dhs.gov)

1-800-480-2520

## FEMA National Dam Safety Program

<https://goo.gl/rg1CpV>

## FEMA Risk MAP

<https://goo.gl/3XqEAW>

## FEMA: Why Dams Fail

<https://goo.gl/wjyxAd>

## NDSP: 25 Years of Excellence

<https://goo.gl/DtwBql>

## Strategic Plan for the NDSP FY12–16

<https://goo.gl/vd6Rud>



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FEMA P-1069  
Catalog No. 15235-3