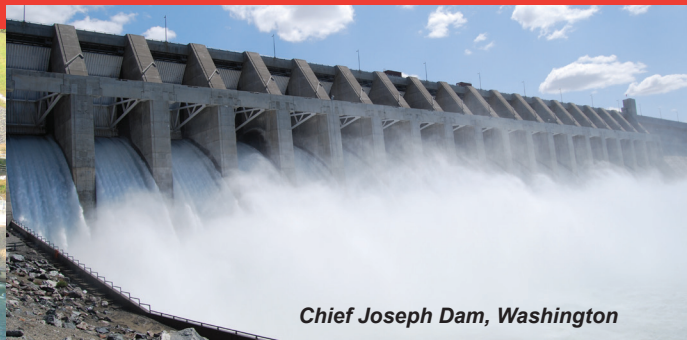




Beaver Dam, Arkansas



Chief Joseph Dam, Washington

The USACE Dam Safety Program

Dams are integral to communities' flood risk management across the nation. The U.S. Army Corps of Engineers (USACE) operates and maintains more than 700 dams that provide significant benefits and reduce the impact of flooding on people, businesses, critical infrastructure and the environment.

Our Dam Safety Program exists to assess a dam's condition, communicate what we know and help manage any risks associated with the dam. Reducing risk to life is top priority and the core of the program.

Flooding will happen; dams do not eliminate flood risk; their condition can change; and taking action before a flood happens will save lives and property.

Approximately 95% of USACE dams are more than 30 years old and more than half are more than 50 years old.

Dam Safety Risks

Risk is the likelihood an event such as large rainfall or earthquake will occur, how the dam performs, and the consequences of failure, with loss of life the paramount concern. We cannot completely eliminate risk, but we can reduce and manage risk.

The USACE Dam Safety Program

USACE takes seriously its role in prioritizing safety activities, rehabilitating its dams, and working with local emergency managers and communities to make sure its dams provide their intended benefits while minimizing risk.

Living with dams requires shared responsibility among federal, state, local, tribal and private agencies to come up with innovative solutions to minimize flood risk. USACE believes informed and engaged communities who know their risk, their role and options can take appropriate action to reduce their flood risk.



**US Army Corps
of Engineers®**
Dam Safety Program

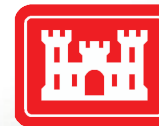
For more information about the USACE dam safety program, please visit:
<http://www.usace.army.mil/Missions/CivilWorks/DamSafetyProgram>

Contact Information

hq-publicaffairs@usace.army.mil or
hq-damsafety@usace.army.mil

On the cover:

(top) Herbert Hoover Dike, Florida
(bottom) Richard B. Russell Dam, South Carolina



**US Army Corps
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Terminus Dam, California



East Branch Dam, Pennsylvania



Franklin Falls Dam, New Hampshire

Dam Safety Activities

USACE uses routine and non-routine activities to inform risk management decisions.

Routine: Routine activities include instrumentation, inspections and assessments, which monitor critical components of the dam. Additionally, engineers regularly inspect and assess projects for structural and operational integrity and identify potential problems and issues.

Non-Routine: An incident or special event at a dam or a safety concern identified during routine activities triggers non-routine activities. This may also include an issue evaluation study to determine the extent of a dam safety issue. Concurrently, interim risk reduction measures (IRRM) to lower risk are used until permanent measures can be put in place and may include lowering reservoir pools, stockpiling emergency material, updating emergency action plans and inundation maps, and increasing instrumentation and monitoring. If permanent action is needed, a modification study determines the best rehabilitation and construction requirements.

USACE dams deliver enormous benefits to the nation, including flood risk management, navigation, hydropower, water supply, fish and wildlife conservation, and recreation.

Assessing Risk

USACE uses a comprehensive suite of tools and support services to analyze and evaluate risks for dams. USACE assesses risk by evaluating the likelihood of events that could lead to flooding a downstream or leveed area and the magnitude of the consequences that would occur if that area was flooded.

Communicating Risk

While dams can reduce the impact of flooding, it is important that local communities understand the condition of the dam and what would happen if the dam is breached, overtopped or does not perform as intended. Even the best-performing dam can be overwhelmed by a large enough flood or storm. Local community officials are key to helping communicate risk to their communities, which can help the community and individuals take steps to prepare for any potential flooding.

Managing Risk

Once USACE identifies the risk, it considers options to manage it; makes a decision; prioritizes activities; takes action and continuously monitors and evaluates the decision to inform future action. This allows USACE to make the best use of its resources to efficiently and effectively manage and reduce risk. USACE uses this strategy for routine and non-routine dam safety activities.

USACE Dam Safety Organization

USACE has Dam Safety Officers and Dam Safety Program Managers at all levels of the organization. District staff execute the program with corporately centralized prioritization, management and oversight by the senior officers at Division and HQUSACE levels. USACE laboratories and specialized field operating agencies provide technical support. Key support functions are provided by the Risk Management Center (RMC), the Dam Safety Production Centers (DSPC), and the Modeling, Mapping, and Consequence Center (MMCC).

The RMC provides expertise in risk assessment methodologies and tools, which greatly assists in dam safety program management and execution at all levels. The Modeling, Mapping, and Consequence Center (MMC) provides support functions through efficient, consistent, and state-of-the-practice hydraulic modeling and consequence estimates. The DSPCs, led by the Huntington DSMMCX, provide design, cost estimating, specification, and construction services throughout USACE.

USACE dams contributed to \$485 Billion in damages prevented by Corps facilities from 2004-2013.

