

Position Statement - Responsibility for Dam and Levee Safety in the US

USSD Position

Dams and levees are a critical component of our nation's infrastructure and provide great societal benefits. These structures also create significant risks to downstream communities, vital infrastructure, and the environment. Dam and levee owners and safety professionals must manage these risks such that the benefits of dams and levees outweigh their potential risks.

Dam and levee safety is a shared responsibility of owners, operators, engineering consultants, contractors, federal and state regulators, emergency managers, and governmental and non-governmental organizations. Among these stakeholders there is a range of statutory, legal and moral responsibilities and liabilities.

Although state statutes vary, the legal liability for dam and levee safety generally rests with the owner. Liability includes not only the overall safety of the structure but also the safe operation of its spillways, outlet works and related facilities. Compliance with government or professional standards may not absolve an owner from liability.

USSD strongly encourages dam and levee owners and stakeholders to exercise diligence in the execution of their responsibilities for dam and levee safety. Owners should seek out the expert advice of the stakeholders and proactively implement necessary safety measures.

Background on Issue

- Despite the concerted efforts of Federal and State agencies, non-governmental organizations (NGOs), dam owners, consultants, and contractors across the US and around the world, significant dam and levee related incidents and failures continue to occur as a result of aging infrastructure, inadequate design/construction, or inadequate risk management processes.
- Past failures have had extensive litigation which should also be expected in future incidents.
- On June 25, 1979, the Ad Hoc Interagency of Dam Safety, Federal Coordinating Council for Science Engineering and Technology (now the Interagency Committee on Dam Safety (ICODS)) issued the first Federal guidelines for dam safety. The Federal Guidelines for Dam Safety encourage safety standards in the practices and procedures employed by federal agencies or required of dam owners regulated by the federal agencies. The Guidelines address management practices and procedures. Since that time, additional Federal Guidelines have been established to address a range of related topics, including technical standards and best practices.

- There are many stakeholders within dam and levee safety including elected officials, emergency
 management officials, the general public, non-governmental organizations, companies, and
 individuals. These stakeholders may be involved with the planning, design, construction, or
 operation of the structure, or receive benefits from the structure, or be at risk in the event of an
 incident.
- Communications regarding project benefits and risks should be open and transparent across all affected stakeholders.

Rationale Supporting USSD Position

- Failures such as those listed below have had a large cost to downstream communities and the owner of the structure.
 - o South Park Dam, Johnstown, PA, May 31, 1889
 - o St. Francis Dam, CA, March 12, 1928
 - o Baldwin Hills Reservoir Failure, CA, December 14, 1963
 - Coal Slurry Impoundment Dam #3, Buffalo Creek Flood, WV, February 26, 1972
 - o Teton Dam, ID, June 5, 1976
 - Kelly Barnes Dam, GA, November 6, 1977
 - New Orleans Levee Failures during Hurricane Katrina, August 29, 2005
 - o Taum Sauk Dam, MO, December 14, 2005
 - o Ka Loko Dam, HI, March 6, 2006
 - o Spencer Dam, NE, March 12, 2019

References:

- Binder, D., Legal Liability for Dam Failures, White Paper prepared for the Association of State
 Dam Safety Officials, 1992, 2004.
- Ferguson, K.A., USSD A Review of Key Historical Milestones, Paper and Keynote Address to the
 United States Society on Dams national conference, Chicago, IL, April, 2019
- National Research Council, Safety of Existing Dams, Evaluation and Improvement, The National Academies Press, Washington, D.C., 1983.

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