

EVERY HIGH-HAZARD POTENTIAL DAM NEEDS AN EAP



ARE YOU AT RISK?

Dam safety officials categorize dams according to the potential hazard risk to lives and property should the dam fail. A High-Hazard Potential (HHP) dam is one whose failure likely would take lives as well as property. An EAP may save lives and property damage through timely evacuations of those who live, work, or enjoy recreation near a HHP dam.

DO YOU HAVE A STAKE IN DAM SAFETY?

Stakeholders are citizens, business owners, and recreationists in harm's way at times, often without realizing it. Do you like to hunt game in areas below or near a dam? Like to RV or camp out along the shores of a lake or stream? Enjoy swimming or fishing in a Kentucky lake or canoeing one of its rivers? Do you farm land or raise livestock in a floodplain? Do you manage a nursing home, hospital or school in a community near a dam? Are you an emergency responder? Do you volunteer for the Red Cross or Salvation Army? Do you regularly need to travel across or have access to an area below a dam? **If so, you have a stake in whether a HHP dam has an EAP.**



DamSafetyAction.org

LEARN MORE ABOUT EMERGENCY ACTION PLANS

You can find out more about EAPs, dam safety programs in Kentucky, and initiatives to increase the number of EAPs on HHP dams. Websites of the DEP Division of Water's Dam Safety Program, the Federal Emergency Management Agency (FEMA), and the Association of State Dam Safety Officials (ASDSO) have information on EAPs.

The website www.damsafetyaction.org contains extensive EAP information and examples, plus links to other sources of EAP documents. This website is part of an outreach and communications program produced as an information and educational resource for dam owners, emergency managers, and the public. Supported by FEMA, this program will assist DEP dam safety officials in reaching a goal of 100 percent completion of EAPs on HHP dams.



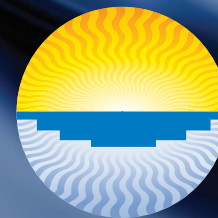
**Lives depend on Emergency Action Plans.
Be an involved citizen.**

QUESTIONS OR COMMENTS

Phone toll-free 877-410-3551
Email: info@damsafetyaction.org

TOO MANY OF THE HIGH-HAZARD DAMS IN KENTUCKY NEED EMERGENCY ACTION PLANS

**YOUR SUPPORT
AND INVOLVEMENT
CAN HELP
GET EAPs DONE**



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WHAT IS AN EMERGENCY ACTION PLAN?

An EAP is a plan of action to reduce potential property damage and loss of lives in an area affected by a dam failure. A complete EAP includes a map of the potential inundation areas, procedures and information for warning downstream emergency management authorities, and other crucial information. At their discretion, emergency managers may add directions to the dam, evacuation routes, and the locations of shelters, emergency resources, businesses, schools, hospitals, nursing homes, residences, and highways at risk.



Federally regulated Wolf Creek Dam has an Emergency Action Plan.



Kentucky has hundreds of smaller state-regulated High-Hazard Potential dams that need EAPs. Many are in suburban areas.

The Kentucky Department of Environmental Protection (DEP) lacks the authority to compel dam owners to create EAPs. DEP does have an initiative underway to increase the number of EAPs for state-regulated dams over the next few years. Community and emergency management support will help accelerate the EAP program. DEP Division of Water dam safety engineers are providing guidance on EAP forms and will help dam owners complete an EAP. Local Emergency Management Directors also have an essential role in helping dam owners compile lists of those who must be notified if a dam is failing.

AN EAP IS A GUIDELINE AND A LIFELINE

Emergency Action Plans are a Public Health and Safety Benefit for all Kentuckians

WHY AN EAP?

- **EAPs save lives.** They provide crucial written warning procedures that can help emergency managers evacuate schools, hospitals, nursing homes, and summer camps as needed.
- **EAPs are good for business.** They may provide warning time for orderly shutdown and perhaps even to remove or secure some assets, data, and equipment.
- **EAPs are required for dam safety.** Without an EAP all those in the inundation zone may not receive warning. Evacuation and response may be needlessly complicated or even compromised. Transportation, sheltering, food, water and other supplies may be delayed.
- **An EAP can protect you, your family, your job, your business, your peace of mind.** Any time you're downstream of a dam you're at risk. Even when hiking, fishing, hunting, camping or motoring, an EAP can help get you to safety.

AN EAP IS THOROUGH, UPDATED, AND TESTED

EAPs contain an extensive amount of technical and emergency response information. Kentucky DEP dam safety engineers and local emergency managers develop most of the information in partnership with the dam owner. EAPs should be reviewed and updated annually, then tested periodically with workshops and drills involving those who will need to respond to an emergency situation.

Kentucky guidelines and documents for emergency planning may be found at the DEP Dam Safety website: <http://water.ky.gov/damsafety/Pages/default.aspx>. These documents include dam safety laws and regulations, forms, and other helpful information.

HIGH-HAZARD POTENTIAL

Each state has a system to determine a dam's Hazard Potential – a situation which creates the potential for consequences such as loss of life, property damage, or other adverse impacts. These adverse impacts may occur in a defined area downstream of a dam or upstream of the dam if there is backwater flooding or a landslide around the reservoir perimeter.

Classification of a dam as High-Hazard Potential (HHP) does not reflect in any way the current condition of the dam (i.e., safety, structural integrity). HHP dams receive more frequent safety inspections.

In Kentucky, dams are regulated by the state if they are 25 feet or more in height and/or impound 50 acre-feet or more. Structures that fail to meet these criteria but have the potential to cause significant property damage or pose a threat to life in the downstream area are regulated in the same manner as dams. Dams are assigned one of three classes based on the nature of their hazard potential:

High hazard (C) Structures located such that failure may cause loss of life or serious damage to houses, industrial or commercial buildings, important public utilities, main highways or major railroads

Moderate Hazard (B) Structures located such that failure may cause significant damage to property and project operation, but loss of human life is not envisioned.

Low hazard (A) Structures located such that failure would cause loss of the structure itself but little or no additional damage to other property.

The classification of dams can be changed if the hazard potential has changed. When the failure of an upper dam would likely cause failure of a lower dam ("cascading"), the consequence of the lower dam's failure determines the upper dam's hazard classification.



IDENTIFY HHP DAMS NEAR YOU

HHP dams are scattered across Kentucky, but tend to cluster around population centers. A list of many dams in Kentucky and their county can be found at the website www.Lat-Long.com. Select Kentucky and the feature Dams, or narrow the list by selecting the county. Selecting a dam provides a map and satellite view of the dam. Using the map to zoom in on the impoundment and then the satellite image can provide more visual understanding of the terrain.

When you know the county where a dam is located and a nearby town, using Geographic Information Systems (GIS) software such as Google Earth can often provide a "bird's eye view" of the area terrain. Another helpful tool for determining whether an area is at risk is the Kentucky Flood Maps website: water.ky.gov/floodplain/Pages/MapModernization.aspx.

Knowing where a HHP dam is located that may impact your home, business, or favorite recreational area is important. But knowing the boundaries of the "hazard area" also is important. This information may not be clearly defined unless there is an EAP for that dam. A thorough EAP will include an "inundation map" that shows the hazard area.

MAKE CONTACT

Once you have identified the HHP dam of interest, you can determine the EAP status for that dam by contacting:

Brian Shane Cook
Kentucky Dept. of Environmental Protection
Division of Water
200 Fair Oaks Lane, Fourth Floor
Frankfort, KY 40601
Phone: (502) 564-3410
Email: shane.cook@ky.gov

Another contact is the Emergency Management Director (EMD) of the county or city where the dam is situated. A call to the county courthouse should result in the name and phone number of the EMD. When EAPs are in process or have been completed, the EMD will be involved or have the EAP on file.

If the dam owner is known, you may contact that person or office directly. Phone numbers and addresses of dam owners should be available through the DEP Division of Water or the EMD's office. Most dam owners are anxious to complete an EAP when they realize the importance for public safety and their own liability. You or an organization you know may even be able to help an owner with some of the detail work on an EAP.



An "incident" can quickly become an emergency requiring an EAP.