# EVERY HIGH-RISK 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 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 Georgia 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, the Georgia Safe Dams Program, and initiatives to increase the number of EAPs on HHP dams. Websites of the Federal Emergency Management Agency (FEMA) and the Association of State Dam Safety Officials (ASDSO) have information on EAPs.

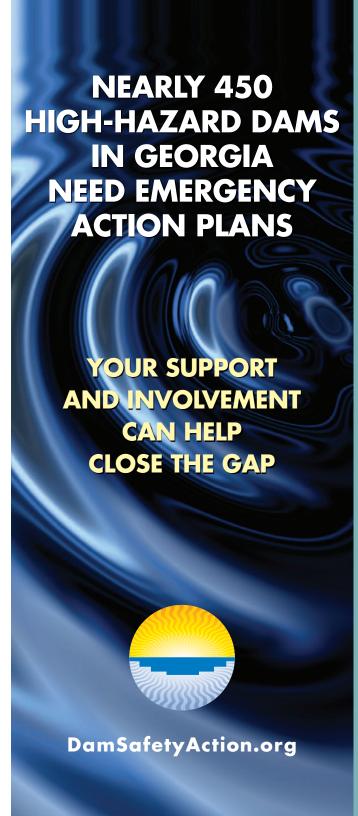
The website www.damsafetyaction.org contains extensive EAP information and examples, plus links to other sources of EAP documents. This website is part of an outreach and communications program produced as an information and educational resource for dam owners, emergency managers, and the public. Supported by FEMA, this program will assist Georgia 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



# WHAT IS AN EMERGENCY ACTION PLAN?

An EAP is a plan of action to reduce loss of lives and property damage 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 Buford Dam at Lake Lanier has an Emergency Action Plan.



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

The Georgia Department of Natural Resources (DNR) Safe Dams Program has recently begun to require EAPs for HHP dams, but nearly 450 are needed. The sooner, the better – for the safety of all Georgians. Previously DNR has lacked the authority to compel dam owners to create EAPs unless the dam is new construction. This initiative to increase the number of EAPs for state-regulated dams over the next few years requires community and emergency management support. DNR engineers are providing guidance on EAP forms and plan workshops that 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 Georgians

## 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. Georgia Safe Dams Program 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.

Guidelines and documents for emergency action planning may be acquired by contacting the Safe Dams Program office in Atlanta by phone at (404) 651-8488 or Email: tom.woosley@dnr.state.ga.us. Dam safety laws and regulations, forms, and other helpful information also are available at www.damsafetyaction.org.

## **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 Georgia, dams are regulated by the state if they are 25 feet or more in height or impound 100 acre-feet or more. Exceptions include some federal dams, and those less than 6 feet in height regardless of storage capacity or which have storage capacity of less than 15 acre-feet regardless of height. Dams are assigned one of two classes based on the nature of their hazard potential:

category I dams are those for which improper operation or dam failure would result in probable loss of human life. Situations constituting "probable loss of life" are those involving frequently occupied structures or facilities, including but not limited to, residences, commercial and manufacturing facilities, schools, and churches.

# All Category I dams are sub-classified as follows:

- Small dams those with a storage capacity not exceeding 500 acre-feet and a height not exceeding 25 feet.
- Medium dams those with a storage capacity exceeding 500 acre-feet but not exceeding 1,000 acre-feet or a height exceeding 25 feet but not exceeding 35 feet.



- Large dams those with a storage capacity exceeding 1,000 acre-feet but not exceeding 50,000 acre-feet or a height exceeding 35 feet but not exceeding 100 feet.
- Very large dams those with a storage capacity exceeding 50,000 acre-feet or a height exceeding 100 feet.

**CATEGORY II** dams are those for which improper operation or dam failure would not be expected to result in probable loss of human life.

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 Georgia, but tend to cluster near population centers. A list of dams in Georgia and their county can be found at the website www.Lat-Long.com. Select Georgia 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 Georgia Flood Map website http://georgiadfirm.com/panelLookup/panelLookup.html.

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:

Tom Woosley, Program Manager GA Department of Natural Resources Safe Dams Program 200 Piedmont Ave., S.W., Suite 418 Atlanta, GA 30334 Tel: (404) 651-8488 Email: tom.woosley@dnr.state.ga.us

Another helpful 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 Safe Dams Program 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.