

DAM FAILURE

WHAT IT IS

Dam failures or levee breaches can occur with little warning, sometimes within hours – or less – of the first signs of structural concerns. Dams can fail for one or a combination of the following reasons:

- Overtopping caused by floods that exceed the capacity of the dam
- Structural failure of materials used in construction
- Movement and/or failure of the foundation
- Settlement and cracking of concrete or embankment
- Piping and internal erosion of soil in embankment dams
- Inadequate maintenance and upkeep
- Deliberate acts of sabotage

WHAT TO DO

Before (Preparedness/ Mitigation)

- Sign up for Fairfax Alerts and have a battery or crank powered radio available.
- Decide early whether you will evacuate, and where you will go if ordered to leave.
- Disconnect electrical appliances.
- Know if your residence or business is in a floodplain or an “excluded area” that is protected by a dam or levee but would otherwise be within the Special Flood Hazard Area.
- Apply for flood insurance, even if you may be in an “excluded area” or otherwise not be required to do so.
- Learn First Aid.
- Refer to “Power Outage/ Blackout” and “Medical Emergency,” below.

During (Response)

- If you encounter rising water, move to higher ground immediately.
- Always stay clear from floodwaters.
- Do not drive through flooded roads – “turn around, don’t drown.”

KEY TERMS

- ▶ A **Flood Watch** means there is a possibility of flooding or a flash flood in your area.
- ▶ A **Flash Flood Watch** means flash flooding is possible. Be prepared to move to higher ground. A flash flood can occur without any warning.
- ▶ A **Flood Warning** means a flood is occurring or will likely occur soon. If you are advised to evacuate do so immediately.
- ▶ A **Flash Flood Warning** means a flash flood is occurring. Seek higher ground immediately; do not wait for instructions.
- ▶ An **Excluded Area (Zone X)** on a FEMA flood map is an area that is protected by a dam or levee that would otherwise be in the Special Flood Hazard Area, or “100-year floodplain”; properties in excluded zones are not required to carry flood insurance to get a mortgage, but owners should strongly consider it regardless.
- ▶ An **Emergency Action Plan (EAP)** is a formal document that identifies potential emergency conditions at a dam and specifies actions to be followed to minimize loss of life and property damage.

- Stay away from downed power lines to avoid the risk of shock or electrocution.
- Do not touch electrical equipment if you are wet or standing in water.

After (Recovery)

- Return home when local officials say it is safe.
- Avoid walking or driving through floodwaters.
- Do not eat any food that may have come into contact with flood water. If in doubt, throw it out.
- Remove all porous items that have been wet for more than 48 hours and that cannot be thoroughly cleaned and dried. These items can remain a source of mold growth and should be removed from the home.
- Check in with family and friends by texting or using social media.