Dam Safety



he OWRB coordinates the Oklahoma Dam Safety Program to ensure the safety of more than 4,700 of our dams in the state, especially those that could impact downstream life and property. The most common requirements of the Dam Safety Program are:

- "High-hazard" dam inspections every year (likely to cause loss of human life)
- "Significant-hazard" dam inspections every three years (likely to cause high economic loss)
- "Low-hazard" dam inspections every five years (likely to cause minimal economic loss)
- Application to construct a new dam
- Approval of plans for modification of an existing dam
- Emergency Action Plan for high-hazard dams

Training The Dam Safety Program coordinates periodic training sessions and workshops on dam safety issues and regulations for dam owners and engineers. The OWRB strongly encourages such persons to check our website for upcoming course schedules so they may attend these valuable sessions.

Liability It is important to be aware that any person or company that owns, operates, or maintains a dam is liable for some or all damages due to a failure of that dam even if an unsafe condition existed prior to a new dam owner's term of ownership. Thus, the potential owner must carefully inspect the structural integrity of any dam prior to purchase and inspect, maintain, and repair it thereafter.

Small Dams An OWRB construction application may not be necessary if the dam will be less than 25 feet in height above the stream bed or if the lake

impounded by the dam will hold less than 50 acre-feet of water, except when there are houses or habitable structures located below the dam. Regardless of the size of the dam, a floodplain permit from the local floodplain administrator and a Discharge of Dredged or Fill Materials (404) permit from the U.S. Army Corps of Engineers may be required for construction in the floodplain area or within the "Waters of the United States" as defined under the Clean Water Act.

If you plan to construct a dam always check with a professional engineer, the NRCS, or an OWRB Dam Safety engineer before you begin construction to determine if you need to file an application with the State.

Emergency Action Plans

It is the responsibility of each high-hazard dam owner to develop an Emergency Action Plan (EAP) tailored specifically to that dam. The EAP assigns critical roles including surveillance, notification, and identification of the dam break flood zone as well as defines a critical contact list in order to protect downstream lives and property. A written EAP must be submitted to and approved by the OWRB and subsequently filed with the local Civil Defense authorities.

The OWRB publication, "Emergency Action Plan Guidelines for High Hazard–Potential Dams" and a fillable EAP form are available for dam owners on our website.

Dam Safety Inspections

The regular inspection of a dam is the heart of a proactive care and maintenance program. Early detection and remedy are essential for preserving the integrity of the dam. Technical inspections must be performed by professional engineers familiar with the



NRCS Sugar Creek Dam Site #44 in Caddo County after washing out from heavy rains.

design and construction of dams and should include assessments of structural safety.

Maintenance inspections are performed more frequently than technical inspections in order to detect, at an early stage, any developments that may be detrimental to the dam.

Downstream hazard verification inspections must also be performed to determine if there has been any construction downstream of the dam which could raise the dam's hazard-potential classification. This has important implications for the dam owner as it could result in a change of how often the dam must be inspected and require structural modifications to the dam

For further information, OWRB Dam Safety publications, and online forms visit our website at:

www.owrb.ok.gov/damsafety

