

# LANDOWNERS

What Living Near a Flood Prevention Site Means to You



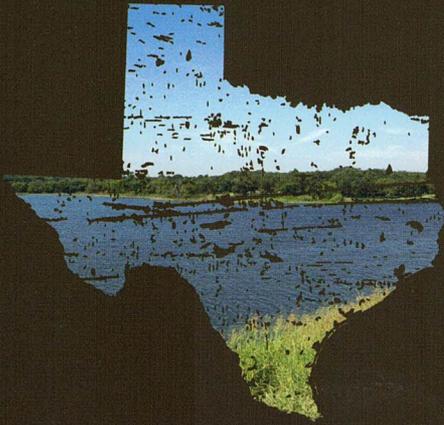
If you own property or are considering purchasing property near a small lake in Texas, there is a chance that lake is providing flood prevention benefits in addition to scenic beauty. In Texas, there are nearly 2,000 floodwater retarding structures in 145 watershed projects across the state. These structures are often earthen dams that create lakes for sediment and floodwater storage. This brochure explains your responsibilities as a landowner near a floodwater retarding structure and the history of the program that created them.



## History of the USDA-NRCS Watershed Program

In the mid-1930s, Congress began looking at ways to complement the downstream flood control program of the U.S. Army Corps of Engineers. It passed flood control acts in 1936, 1944, and 1954 and assigned responsibility of the Watershed Protection and Flood Prevention Program to the USDA Soil Conservation Service, now the Natural Resources Conservation Service (NRCS).

Since that time, NRCS has assisted watershed sponsors in construction of nearly 2,000 floodwater retarding structures in 145 watershed projects across Texas. In addition, NRCS has assisted watershed sponsors in installation of land treatment practices, channel improvements, and dikes for watershed protection. Watershed projects address several issues, including flooding, water quality and supply, wildlife habitat, and recreation.



**Texas watershed projects provide more than \$118 million in annual benefits, which include flood prevention, sediment retention, wetland creation or enhancement, and other social benefits.**

### Watershed Projects Reduce Flooding

The concept of small watershed projects is simple – small earthen flood control dams constructed on upstream tributaries flowing into larger water sources. The dams temporarily store floodwater after heavy rainstorms; slowly releasing it over several days through a pipe in the dam into a plunge pool or impact basin. This retards the amount of water that reaches the main water course after rainfall and reduces flooding.

Watershed projects are planned and carried out jointly by local, state and federal agencies with support of community landowners and sponsors within the watershed area. NRCS provides technical and financial assistance to local project sponsors, including local units of governments, usually soil and water conservation districts, special purpose districts, and city or county governments. The annual operation and maintenance of dams and their components are major responsibilities for project sponsors.

Sponsors hold permanent easements allowing construction of the dam, the storage of water in the area that will be inundated during heavy rainfall, along with ingress and egress rights. Maps showing the area that will temporarily be flooded are available from the local sponsor or NRCS office.



## Principal Spillway

A principal spillway is the primary outlet device for a floodwater retarding structure. The spillway usually consists of a riser structure in combination with an outlet conduit, which extends through the embankment. The principal spillway is the primary outlet for storm flows, usually controlling a 25- to 100- year frequency storm event. As shown in the “typical section” below, the area designated for flood storage may be large. The principal spillway is designed and sized to regulate the allowable discharge from the floodwater retarding structure.

The most common type of riser structure is a drop inlet spillway. A drop inlet spillway usually consists of a rectangular or other shaped riser structure, which contains one or several openings sized to control various discharge rates.

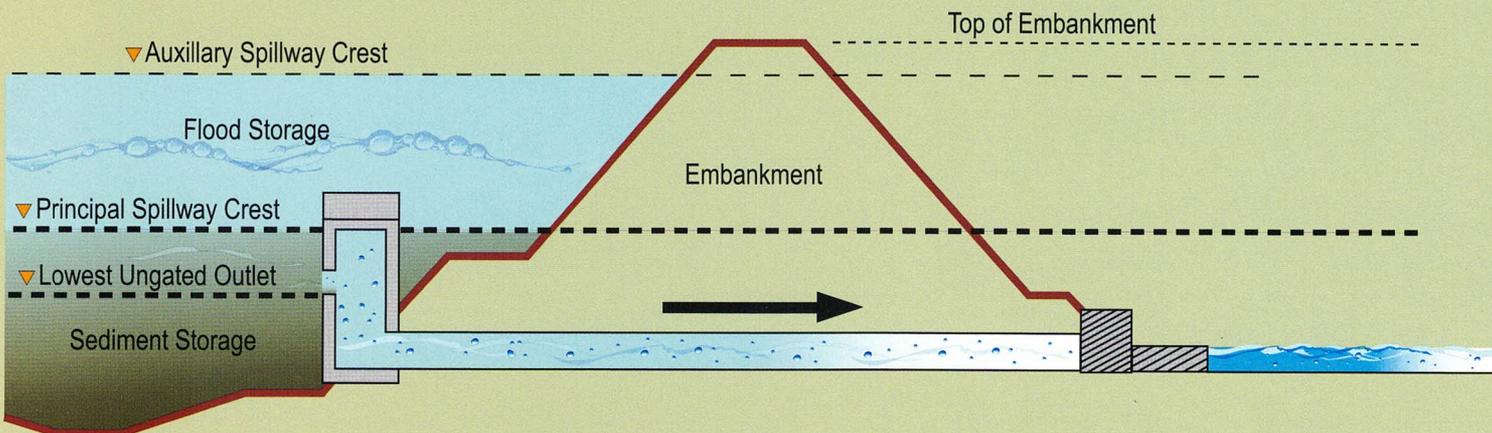
The planning and design of floodwater retarding structures includes an allowance for the anticipated sediment accumulation over the life of the structure (usually 50 or 100 years). The NRCS is sensitive to the needs of the State’s water resources. Therefore, if the sediment storage exceeds 200 acre-feet of water, the riser will have additional low ports. These ports will drawdown excess storage at a slower rate than the principal spillway.

The impact basin or plunge basin is used to dissipate the energy of the water flowing through the principal spillway conduit. An impact basin is generally constructed of concrete and may utilize baffles to dissipate the velocity of flowing water, while a plunge basin is typically an earthen pit or pond. It may be rock lined as well to prevent scouring or erosion.

## Auxiliary Spillway

In addition to principal spillway, a secondary outlet called an auxiliary spillway (or emergency spillway) is also constructed and used. This spillway is designed to carry runoff in excess of that carried by the principal spillway. This secondary spillway is designed to operate only during exceptionally large flood events and is typically a grass-lined earthen channel. The auxiliary spillway should be protected from any activities which would potentially cause trailing, including grazing and recreational vehicle usages. A solid vegetative cover should be maintained at all times.

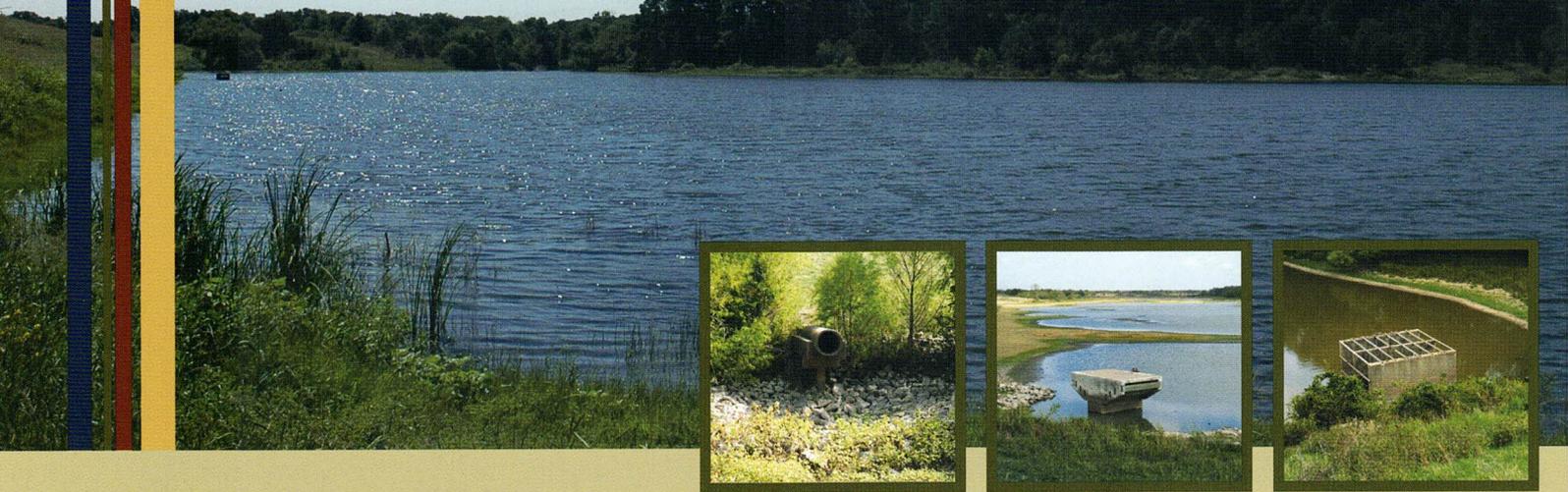
## Section of a Typical Floodwater Retarding Structure



## Landowner Responsibilities While Buying or Selling Land

All existing easements should be recorded in the appropriate county. If you’re the potential buyer of property containing or surrounding a floodwater retarding structure, your land may be covered by an easement. Often real estate agents are not aware of these easements, therefore, it is recommended that you contact your local soil and water conservation district or NRCS office when buying land that a floodwater retarding structure is located upon or nearby. Areas downstream of structures may be covered by flowage easements as well.

If the seller is aware of such any easement, as a courtesy he/she should supply a copy of any existing construction and impoundment easement documentation to the real estate agent or potential buyer. If you’re the potential buyer, you should review any existing construction or impoundment easements on the property in question prior to the purchase. You will want to check with your title company for any additional easement information as well.



## Easement Guidelines for Landowners

As a landowner, you and the sponsor(s) have responsibilities associated with the easements.

The sponsor(s) has the following easement rights: 1) right of ingress and egress at any time over the land of the grantor or landowner for the purpose of construction, operation, maintenance, repair, or inspection, 2) right to control the water levels, make changes to the fences surrounding the floodwater retarding structure, and protect and provide vegetative cover for erosion control, 3) right to store floodwaters in the designated floodwater detention pool area, and 4) responsibility for operating and maintaining the floodwater retarding structure.

The landowner maintains the right and privilege to use the easement property at any time, in any manner and for any purpose subject to the following limitations: The landowner (or his heirs and assigns) may not use the easement property for any purpose which would interfere with or hinder the operation, function or purpose of the floodwater retarding structure, or be inconsistent with the rights and privileges granted to the Sponsor in the easement. This includes any modifications affecting the available storage in the reservoir area, and the functioning of the spillways.

Before making any changes, modifications, or alterations to the easement area or structure itself, the landowner is responsible for getting formal concurrence from the sponsor(s) prior to any construction.