Dike (356)

A dike is a barrier that is constructed of earth or manufactured material to protect land against flooding or to regulate water.

Practice Information

Dikes are used where control of the water level is desired. They are used to prevent or reduce flood damage to human life and property; for flow control in conjunction with floodways; to impound or regulate water for fish and wildlife management; to manage water for production of seasonally flooded crops such as rice or cranberries; or for wetland maintenance, improvement, restoration, or construction.

The design criteria for a dike depends on its hazard class. The hazard class is based on the value of the property or crop to be protected and the threat to loss of life. The allowable dike height, design storm, construction material, freeboard, top width, and side slopes are different for each of the three hazard classes.

When planning a dike, it is important to consider the potential effects on the groundwater and surface water patterns. It is also important to consider the potential effects on the adjacent properties because of the possibility of inducing damages off-site. Other factors to evaluate include exposure to open water and buried utilities; compatibility of the site with outlet structures; and cultural resources. Wetlands, natural areas, and fish and wildlife habitat may also be affected.

This practice will require maintenance over the expected life of the practice. Maintenance requirements include regular inspections, removal of burrowing animals, repair and revegetation of eroded areas, and grading the dike to maintain the planned elevation.

Common Associated Practices

Dike (356) is commonly applied with practices such as Structure for Water Control (587), Irrigation Water Management (449), Wetland Wildlife Habitat Management (644), and Wetland Creation (658).

For further information, contact your local NRCS field office.