

Pond...a water impoundment made by constructing a dam or an embankment or by excavating a pit or dugout



Pond, photo courtesy USDA - Natural Resources Conservation Service

Purpose

The purpose of this practice is to provide water for livestock, fish and wildlife, recreation, fire control, and other related uses, and to maintain or improve water quality.

Benefits

Ponds can provide owners with excellent recreational opportunities for fishing, swimming, and boating opportunities as well as potential water sources for livestock, irrigation, and fire fighting. In addition, many species of wildlife thrive in ponds and the surrounding areas.

Applications

The NRCS standard for this practice applies under the following conditions:

1. If a dam is constructed as part of this practice, failure will not result in loss of life, damage to homes, commercial buildings, main highways, railroads, or interruption of public utilities.
2. The product of the storage (acre feet) times the effective height of the dam is less than 3000.
3. The effective height of the dam is 35 ft. or less.

Design and Installation

There are two basic ways to construct ponds. An embankment pond is made by building an embankment or dam across a stream or watercourse where the stream valley is depressed enough to permit storage. The other type of design is an excavated pond which is made by digging a pit or dugout in a nearly level area.

Consider the type of pond to be built when making decisions on site location. The potential site should be evaluated to ensure that the topography, water resources, and soil are suitable for the desired type of pond. Also, consider threats of pollution from surrounding land uses when choosing pond location, and be sure to check for the presence of underground utility lines and pipes before initiating construction. In addition, check for any applicable local and state permit requirements.

When designing the pond, the site must be such that runoff from the design storm can pass safely through a natural or constructed spillway. In addition, the drainage area must be large enough so that surface runoff and groundwater flow will normally maintain an adequate supply of water in the pond.

Consider livestock fencing, protective vegetative cover on exposed surfaces, and the implementation of conservation practices on any agricultural land in the drainage area.

Maintenance

Routine maintenance for this practice includes regular inspection of the pond, dam, pipes, and other structures for leaks, debris, and damage. Remove debris that clogs pipes or interrupts flow, and repair any damage immediately.

Other maintenance measures can include mowing and fertilizing the vegetation on the dam and spillway, preventing trees and brush from growing on the dam and spillway, maintaining livestock fencing (where applicable), controlling erosion, and controlling burrowing animals that bore into the dam.

Relative Cost

Installation low ●●●●○ high

Maintenance low ●●●●○ high

For Additional Information...

Visit the Indiana NRCS office online at <http://www.in.nrcs.usda.gov/>, see the Indiana NRCS Field Office Technical Guide (FOTG) Standard (378) Pond, or contact your local USDA-NRCS office.

Local USDA-NRCS contact information