

Keeping Dams Safe

Protecting People, Property and Natural Resources

Rush Creek Watershed A Pilot Rehabilitation Project

Ohio



The Rush Watershed Project Dam Number 7C is one of three flood control dams in Ohio to be included in national pilot rehabilitation projects. These aging dams have developed situations that could affect people, property and natural resources in the watershed.

Experience and information gained from these projects will be used as other dams across the nation are rehabilitated.



The dam protects a state highway and homes located 1300 feet downstream.



Rush Creek 7C dam is in good condition, but due to development downstream it no longer meets dam safety requirements.

Situation:

Dam 7C has been reclassified from a medium hazard dam to a high hazard by the Ohio Department of Natural Resources, because of the increasing development downstream. It no longer meets current dam safety standards.

Why Action is Needed:

There are three homes approximately 1300 feet downstream from the dam. Failure of the dam could possibly result in loss of life in two of these homes. If the dam failed it is also expected that water would overtop State Route 37, damage cropland, roads and other structures. This dam provides protection for these buildings and roads during heavy rainstorms and provides thousands of dollars in benefits.

Action:

The alternative selected by local sponsors includes the removal or relocation of two residences and the acquiring of flowage easements on approximately 425 acres in the breach inundation area of the dam. Controls on future development in the floodplain area would assure that no future development occurs. Work will be done on one residence along State Route 37 to flood proof the structure.

Project Funding:

- ◆ Rehabilitation Project Estimated Cost: \$575,000
- ◆ Funding: Sixty-five percent of the project cost and technical assistance will be provided by the USDA Natural Resources Conservation Service through the 2000 Agricultural Appropriation Act. This Act authorized and funded pilot rehabilitation projects in Wisconsin, New Mexico, Ohio and Mississippi. Local sponsors are responsible for 35 percent of the cost landrights and easements.

Watershed Project Sponsor:
Rush Creek Conservancy District.

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Rehabilitation Planning Process:

Several alternatives were considered including taking no action, dam removal and structural rehabilitation options. The non-structural alternative selected by local sponsors will ensure flood reduction benefits will continue for 75 more years.

A supplement to the watershed work plan was developed and an environmental assessment was conducted as part of the locally-led process of obtaining information and input from local people.



Looking downstream from back of dam. Homes are located in the flood plain below the dam.

Rush Creek Watershed Description

- ◆ Size: 237 square miles (151,462 acres)
- ◆ Number of Dams: 19
- ◆ Construction Started: 1967
- ◆ Construction Status: One dam yet to be built.
- ◆ Primary Purpose: Flood control, water supply, sediment reduction, fish and wildlife enhancement and recreation facility development.
- ◆ Population Served: 7,500 people in Bremen, New Lexington, Somerset, and Junction City; 120,000 in Fairfield County; 35,000 in Perry County. Over 1 million in the Columbus area have access to recreation facilities.
- ◆ The dams were built through the Watershed Protection and Flood Control Act of 1953 (Public Law 83-566) by the USDA Natural Resources Conservation Service, assisting the Rush Creek Conservancy District.

National Rehabilitation Needs

Since 1948 over 11,000 small flood control dams have been built in 2,000 watersheds in 47 states.



Locations of dams over 30 years old.

Many of these earlier constructed dams were designed for a 50-year life expectancy. Over one-half of the dams are over 30 years old.

Today many of these older dams need rehabilitation. Concrete and metal used in the principal spillways have deteriorated and in some situations public safety and health are at risk.

Over 400 watershed sponsors in 36 states indicated an interest in USDA funds and assistance in 2001 to rehabilitate over 1,400 dams.

Ohio Rehabilitation Needs

Ohio has 78 small flood control dams in 11 watersheds.

- ◆ Twenty dams (25%) are over 40 years old.
- ◆ Forty-nine dams (62%) are over 30 years old.
- ◆ There are 28 high hazard dams and 35 medium hazard dams.
- ◆ Over one-half of the dams need rehabilitation.

For additional information about this rehabilitation project contact the USDA Natural Resources Conservation Service office, 200 N. High Street, Room 522, Columbus, Ohio, 43215. (614) 255-2472.

Information about pilot rehabilitation projects in other states and about other issues related to aging watershed dams is available at the NRCS national web site (www.nrcs.usda.gov). Click on Aging Watersheds.

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