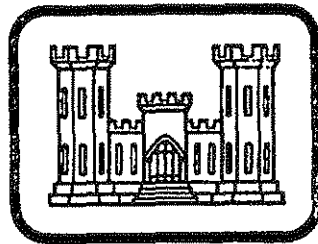


JAMES RIVER BASIN

Name Of Dam: COLLEGE LAKE
Location: CITY OF LYNCHBURG, VIRGINIA
Inventory Number: VA 68002

PHASE I INSPECTION REPORT NATIONAL DAM SAFETY PROGRAM



PREPARED BY
NORFOLK DISTRICT CORPS OF ENGINEERS
803 FRONT STREET
NORFOLK, VIRGINIA 23510

IN CONJUNCTION WITH
COMMONWEALTH OF VIRGINIA
STATE WATER CONTROL BOARD
NOVEMBER 1980

PHASE I REPORT
NATIONAL DAM SAFETY PROGRAM

BRIEF ASSESSMENT OF DAM

Name of Dam: College Lake Dam
State: Virginia
Location: City of Lynchburg
USGS Quad Sheet: Lynchburg
Stream: Blackwater Creek
Date of Inspection: 14 November 1980

The College Lake Dam is an earthen embankment about 300 feet long and 35.4 feet high. The dam is owned and maintained by the City of Lynchburg. The dam is classified as an intermediate size structure with a high hazard classification. The spillway is a deteriorated masonry weir across a rock cut located in the right abutment. This reservoir is used for recreation.

Based on criteria established by the Department of the Army, Office of the Chief of Engineers (OCE), the Spillway Design Flood (SDF) is the Probable Maximum Flood (PMF). The spillways will pass 10 percent of the PMF without overtopping the dam. Therefore the spillway is adjudged as inadequate but not seriously inadequate.

The visual inspection revealed no problems or remedial measures in need of immediate attention. There is no regular maintenance operation program or warning system, and it is recommended that a maintenance program and a warning system be established. The maintenance items listed in Section 7.2 should be accomplished as a part of the regular maintenance program within the next 12 months.

Submitted By:

Approved:

Original signed by
JAMES A. WALSH

Original signed by:
LTC Leonard C. Gregor

JAMES A. WALSH, P. E.
Chief, Design Branch

✓ DOUGLAS L. HALLER
Colonel Corps of Engineers
District Engineer

Recommended By

Date:

FEB 17 1981

Original signed by
JACK G. STARR

JACK G. STARR
Chief, Engineering Division

SECTION 1

PROJECT INFORMATION

1.1 GENERAL:

1.1.1 Authority: Public Law 92-367, 8 August 1972, authorized the Secretary of the Army, through the Corps of Engineers to initiate a national program of safety inspections of dams throughout the United States. The Norfolk District has been assigned the responsibility of supervising the inspection of dams in the Commonwealth of Virginia.

1.1.2 Purpose of Inspection: The purpose is to conduct a Phase I inspection according to the Recommended Guidelines for Safety Inspection of Dams (Reference 1, Appendix V). The main responsibility is to expeditiously identify those dams which may be a potential threat to human life or property.

1.2 Project Description:

1.2.1 Dam and Appurtenances: College Lake Dam is an earthfill embankment structure about 300 feet long and 35.4 feet high. The crest of the dam is 54 feet wide with a minimum crest elevation of 638.5 feet msl. U. S. Route 221 traverses the crest of the dam. The upstream slope of the dam is 2.25 horizontal to 1 vertical (2.25H:1V). Riprap is placed on the upstream face of the dam. The downstream slope is 1.25H:1V. Riprap is placed on the entire downstream face of the dam. The embankment has a clay core that is keyed into the foundation. Plan view and profiles are shown in Appendix I. It is not known if there is an internal foundation drain system.

The spillway is a deteriorated masonry wier across a rock cut through the right abutment with a width of 60 feet. A concrete arch bridge carrying Rt. 221 spans the spillway outlet channel.

1.2.2 Location: College Lake Dam is located on Blackwater Creek 0.1 miles northwest of Lynchburg College in the City of Lynchburg.

1.2.3 Size Classification: The dam is classified as an intermediate size structure because of impounding capacity.

1.2.4 Hazard Classification: The dam is located in an urban area with several occupied homes immediately downstream on Rt. 291; therefore, a high hazard classification is given for this structure according to guidelines contained in Section 2.1.2 of Reference 1, Appendix V. The hazard classification used to categorize a dam is a function of location only and has nothing to do with its stability or probability of failure.

1.2.5 Ownership: City of Lynchburg, Virginia. See Appendix IV, Pertinent Correspondence.