

LOCKS AND DAM NO. 4, MONONGAHELA RIVER
SUMMARY OF PERTINENT DATA
30 SEPTEMBER 1990

AUTHORIZATION. Dam authorized under Rivers and Harbors Act dated 3 March 1909. Authorized for reconstruction at present site under Rivers and Harbors Act dated 3 July 1930.

PROGRESS. Locks and Dam, as originally reconstructed, were built 1931-1932, and placed into operation 14 August 1932. Reconstruction of the dam to provide a gated crest and to raise Pool 4 by six feet was completed 6 June 1967. Related alteration to Locks completed 22 April 1964.

STRUCTURE DATA.

Clear Dimensions of River Chamber: Width.....56 feet; Length.....360 feet.
Clear Dimensions of Land Chamber: Width.....56 feet; Length.....720 feet.
Lift.....16.6 feet, from lower pool el. 726.9 to upper pool el. 743.5.
Elevation, Top of Lock Walls.....749.0.
Clear Elevation of Foot Bridge (New) crossing over both lock chambers.....801.75.
Elevation of Guard Sills: Lower.....716.2; Upper.....723.5.
Elevation, Zero of Gages: Lower.....717.9; Upper.....734.5.
Overall Length of Dam.....535 feet. Uncontrolled spillway is a fixed weir section 43 feet long, crest el. 742.5. Controlled spillway comprised of five gated sections, each 84 feet length; fixed sill at el. 724.0.
Character of Foundations: Gate Sills.....Steel bearing piles; Piers.....Rock;
Locks.....Timber bearing piles.

GAGES. 1 November 1967-Zeros of Upper and Lower Gages changed to reflect 9.0 at normal pool. Navigation suspended-Upper Gage 13.0, Lower Gage 29.0. Pool raised to 743.5 at on 3 July 1967.

COST OF CONSTRUCTION. \$17,254,071, including \$2,173,767 for original reconstruction, 1931-1932, and \$15,080,304 for reconstruction of dam and related alteration of locks (1963-1967).

SURVEY DATA.

Locks and Dam Project Topography

Topography was compiled from aerial photographs exposed April-May 1962 and consists of Map Sheets 037-I4-AA16/1 thru 52, scale 1:1,200. Control based on N.A.D. 1927 and N.G.V.D. 1929. Mile 41 to 61.

CONGRESSIONAL DISTRICTS. Lock, Dam, Pool and Abutment: 20th District of Pennsylvania.