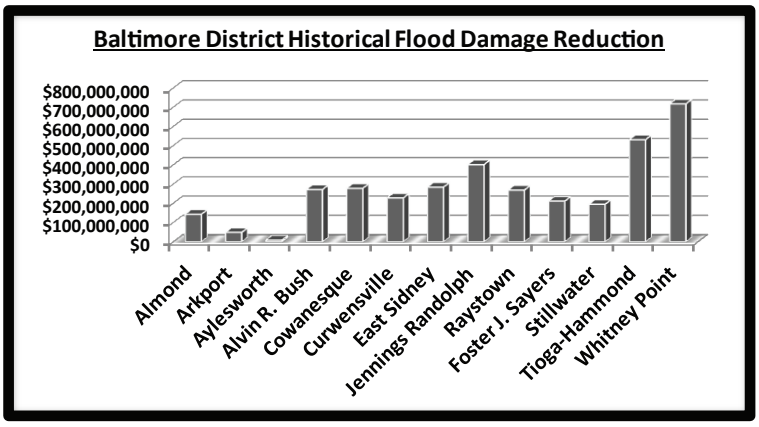
US Army Corps of Engineers®

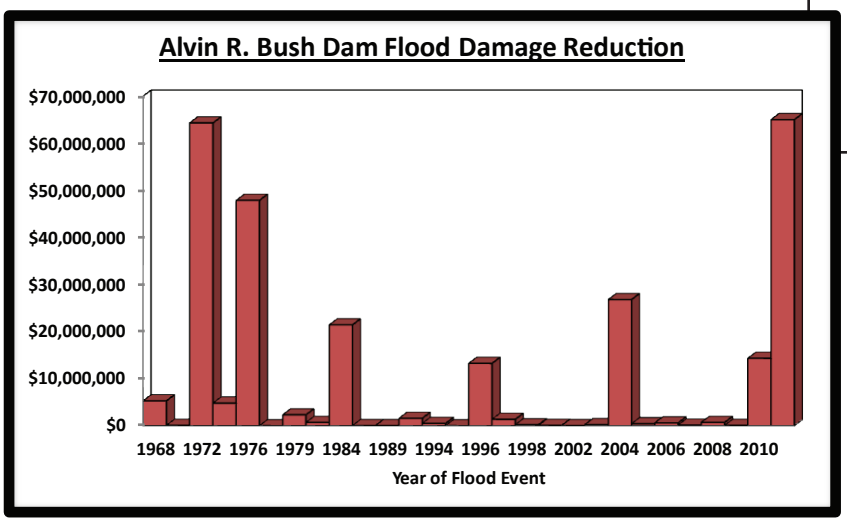
Flood Risk Management
Value to the Nation

Alvin R. Bush Dam

Every year floods sweep through communities across the United States taking lives, destroying property, shutting down businesses, harming the environment and causing millions of dollars in damages. Nearly 94 million acres of land in the United States are at risk for flooding. It is impossible to prevent all floods, but it is possible to prevent some and to limit the damage and risk from those that do occur. One of the primary missions of the U.S. Army Corps of Engineers is to support flood risk management activities of communities in both urban and rural areas throughout the United States. To carry out this mission, the Corps operates projects that reduce flood risk and conducts emergency management activities. At the direction of Congress, the Corps studies and implements flood risk management measures. Over the years the Corps has significantly reduced the impacts of floods by implementing measures such as dams, levees and floodplain management activities.

Some of the most valuable real estate in the nation is also located in high risk areas that are prone to flooding. Many industrial facilities are built near rivers and harbors for easy access to waterborne transportation. Coastal metropolitan zones are engines of growth for the economy. Coastal communities are highly desirable as residential locations and tourist destinations and offer many recreational activities but are vulnerable to coastal storm and flood damage. The Corps Flood Risk Management mission reduces the risk of flood damage to these facilities and homes as well as to vital infrastructure such as energy grids and transportation networks. Since 1936 the Corps has completed over 400 major lake and reservoir projects, emplaced over 8,500 miles of levees and dikes, and implemented hundreds of smaller local flood damage reduction projects. These projects have prevented an estimated $706 billion in river and coastal flood damage, most of that within the last 25 years.





Total Baltimore District Savings: $3,914,511,000

Total Alvin R. Bush Dam Savings: $272,160,000

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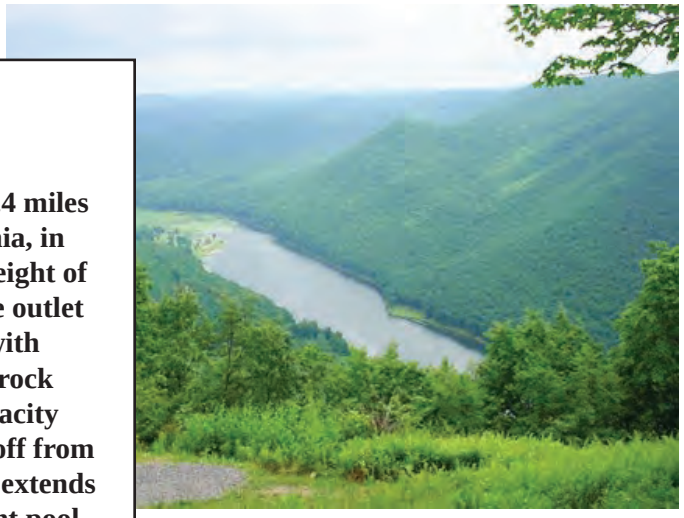

Background:

Alvin R. Bush Dam is located on Kettle Creek approximately 8.4 miles above the mouth and about 15 miles above Renovo, Pennsylvania, in Clinton County. The earth and rockfill dam has a maximum height of 165 feet above the streambed and a top length of 1,350 feet. The outlet works include a horseshoe-shaped tunnel, 13 feet in diameter, with three service gates. The spillway is uncontrolled and located in rock adjacent to the right abutment. The reservoir has a storage capacity of 75,000 acre-feet at spillway crest, equal to 6.22 inches of runoff from the drainage area above the dam, and the pool at this elevation extends upstream for a distance approximately 8.8 miles. The permanent pool covers 160 acres and extends for 2.2 miles. The project controls a drainage area of 226 square miles or about 92 percent of the Kettle reek watershed. The project reduces flood heights along Kettle Creek below the dam and along the West Branch Susquehanna River below the mouth of Kettle Creek. The Commonwealth of Pennsylvania furnished assurances that it would coordinate operation of its George B. Stevenson Dam with the operation of Curwensville Dam, Alvin R. Bush Dam, and Foster Joseph Sayers Dam to secure optimum flood control benefits through operation as a system.

Authorization:

The project is a unit of the comprehensive flood control plan for the protection of communities in the West Branch Susquehanna River basin and was authorized by the Flood Control Act approved September 3, 1954. It is described in House Document No. 29, 84 Congress, first session.

U.S. Army Corps of Engineers
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http://www.nab.usace.army.mil/Missions/DamsRecreation/AlvinRBush.aspx