



US Army Corps  
of Engineers  
Wilmington District

Roanoke River, Upper Basin, VA  
(Flood Risk Management)

- **Sponsor: City of Roanoke, VA**
- **Construction initiated in 1990**
- **Project is providing flood risk management reduction as witnessed by events in November 2009 and January 2013**
- **Environmental monitoring required through FY 2015**



CONGRESSIONAL DISTRICT: NC 6

Date: 6 March 2014

1. **AUTHORIZATION:** Water Resources Development Act of 1986, Energy and Water Development Appropriations Act of 1990, Water Resources Development Act of 1990 and Energy and Water Development Appropriations Act of 2004.

2. **LOCATION AND DESCRIPTION:** The project is located on the Roanoke River in the city of Roanoke, VA. The project includes about 6.2 miles of channel widening along the 10-mile project reach through the city of Roanoke, VA. Channel widening is being accomplished with the construction of a benched channel above the elevation of the average stream flow. Other flood risk management features include flood proofing at two locations, two training walls to prevent floodwater intrusion into low lying areas along the river and a flood warning system. Recreation facilities consist of a 9.5-mile recreation trail along the project reach and access and parking areas.

3. **COST ESTIMATE:**

Project First Cost:

|                  | <u>Federal</u> | <u>Non-Federal</u> | <u>Total</u>     |
|------------------|----------------|--------------------|------------------|
| Cash             | \$48,091,000   | \$12,841,000       | \$60,932,000     |
| Land and Damages | 0              | 6,206,000          | 6,206,000        |
| Relocations      | <u>0</u>       | <u>5,142,000</u>   | <u>5,142,000</u> |
| Total            | \$48,091,000   | \$24,189,000       | \$72,280,000     |

PROJECT INFORMATION - Roanoke River, Upper Basin, VA (Flood Risk Management) -  
Continued

4. **FEDERAL FUNDING ALLOCATION THRU FY 2013:** \$43,641,000
5. **FY 2014 FUNDING ALLOCATION:** \$91,000. These funds and carry-in funds are being used to continue monitoring of endangered species and associated project management tasks.
6. **FY 2015 BUDGET AMOUNT:** \$300,000. Funds would be used to complete monitoring of endangered species and associated project management tasks.
7. **KEY DATES:** The flood warning system was completed in 1990. Floodproofing of the regional sewage treatment plant was completed in 1993. Reimbursement for the floodproofing of the Roanoke Memorial Hospital was made in 1993. The flood risk management portion of the project was physically completed in FY 2012. The only remaining project features for construction would be two and half miles of trail from Bridge Street to the end of the project. This portion is un-programmed and not scheduled to be built. Environmental monitoring will be required through FY 2015.
8. **OTHER INFORMATION:** The need for this project was highlighted by severe flooding in the Roanoke-Salem area in November 1985, in which lives were lost and over \$100 million of property damaged. Since 2004, the construction of flood risk management features has reduced flood impacts, as seen most recently from the remnants of Hurricane Ida in November of 2009 and flooding in January 2013. The project was reauthorized at an estimated cost of \$29,000,000 (October 1988 price levels) in the Energy and Water Development Appropriations Act of 1990. Floodproofing of the Roanoke Hospital was accomplished by non-Federal interests (hospital). The Water Resources Development Act of 1990 contained congressionally added language for the Government to reimburse the sponsor for the flood risk management features at the hospital. A second project cost increase was authorized by the Energy and Water Development Appropriations Act of 2004.

The project provides flood risk management to industrial, commercial, and residential property worth over \$700M. Also, the project is estimated to reduce average annual flood damages from \$5.8M to \$2.7M.

The Corps is currently negotiating with the U.S. Fish and Wildlife Service to reduce the monitoring period of the endangered Roanoke Logperch which is currently scheduled for 20 years after project completion of all flood risk management measures. Minimal or insignificant impacts to this species have been observed during annual monitoring from FY 2004 to FY 2012.