



# KINGSTON FLOOD DAMAGE REDUCTION PROJECT



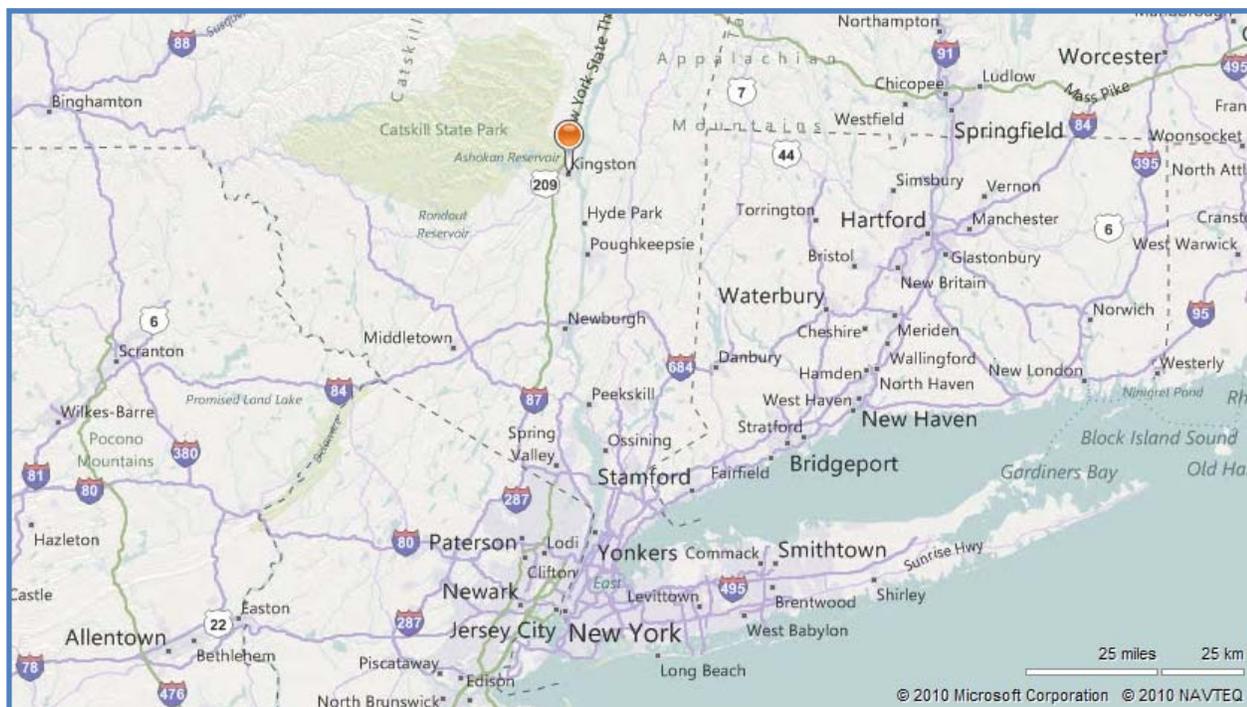
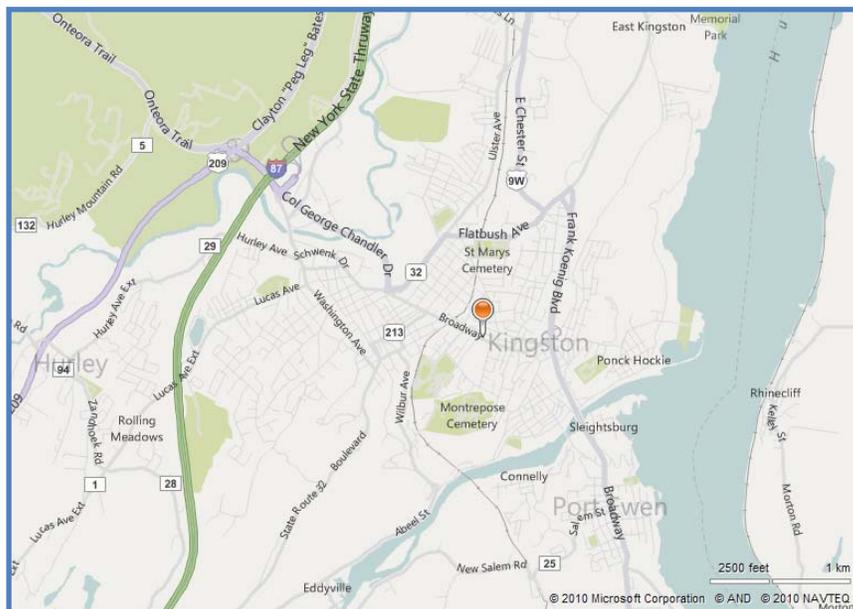
*Department of  
Environmental Conservation*

*Operated and Maintained by: The City of Kingston*

*Region 3 Counties: Dutchess,  
Orange, Putnam, Rockland,  
Sullivan, Ulster, Westchester*

## PROJECT LOCATION

The project area is located along Esopus Creek in the city of Kingston in Ulster County in the south-eastern portion of New York State. The improvement works extend downstream 2,540 feet along the right bank between Rt. 28 and Rt. 587.



## PROJECT DESCRIPTION

The flood protection works at Kingston, New York were constructed along the right bank of Esopus Creek. The project consists of about 1,570 feet of levees, 938 feet of concrete flood walls, retaining walls and numerous interior drainage facilities including gated gravity conduits, continuous swales and ditches, drop inlets, catch basins, control manholes, a ponding area, and a small pumping station. The following table of hydrologic and hydraulic pertinent data summarizes the essential data pertaining to the project design.

<u>HYDROLOGIC AND HYDRAULIC PERTINENT DATA</u>	
<u>Drainage Area (Sq. Mi.) Esopus Creek</u>	
At mouth	425
At upstream end of project (Rt. 28)	319
<u>Size of Basin (Mi.)</u>	
Length	28
Width	15
Average Slope (ft./mi. (below Ashokan Reservoir))	12
<u>Estimated Largest Flood</u>	
Date	Mar-51
Discharge (c.f.s.)	34,000
<u>Standard Project Flood (c.f.s.)</u>	63,000
<u>Design Flood (c.f.s.)</u>	37,400
<u>IMPROVEMENTS</u>	
<u>Levee</u>	
Length (feet)	1,573
Average height (feet)	8
Top Elevation (about m.s.l.)	159
Top width (feet)	8
Side Slopes (vertical on horizontal)	1 on 2 1/2
<u>Concrete Walls</u>	
Length (feet)	938
Type	"I & T"
Average height (feet)	10
Average top of wall elevation (about m.s.l.)	158.7
<u>Major Drainage Facilities</u>	
Number of drainage structures	7
Drainage ditch and swale (feet)	3490

## **AUTHORIZATION**

The Flood Protection Works in the Esopus Creek Basin at Kingston, New York were authorized by Congress in the Flood Control Act of 1948, section 205, and endorsed by the New York State Department of Environmental Conservation May 12<sup>th</sup> 1971.

## **PROTECTION PROVIDED**

The authorized project on Esopus Creek was designed to provide protection to the Kingston area against a stream discharge of 37,400 cubic feet per second which was considered to be 10 percent greater than the flood of March 1951, the estimated largest known flood. The design discharge is also 50 percent of the Standard Project Flood and has a frequency of occurrence of approximately once in 100 years.

## **CONSTRUCTION**

Construction plans and specifications for the project were issued on August 20<sup>th</sup>, 1976. Bids were received on September 21<sup>st</sup>, 1976 and the contract was awarded to Servidone Construction Corporation, of Castleton, New York. Construction began in early spring of 1977 and was 99 percent completed as of February 1<sup>st</sup>, 1978 when the project was transferred to local interests.



## KINGSTON – BIRD’S EYE VIEW



