



Fact Sheet

Flood Protection Projects

U.S. ARMY CORPS OF ENGINEERS

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Massachusetts

Charles River Dam Local Protection Project

The Charles River Dam Local Protection Project is located on the Charles River, between the Charlestown and North End sections of Boston.

The project provides flood protection to 2,440 acres of urban property along the banks of the Charles River. Much of this property is located in Boston, Brookline, Cambridge, and the Back Bay, and is valued in excess of \$500 million. The project also improves commercial and recreational navigation.

The state first constructed a dam on the Charles River in 1910 to prevent tidal flooding of lowlands, sewers, and drains along the lower reach of the Charles River and to create a pool, or basin, that would cover unsightly tidal flats. However, the growth of metropolitan Boston in the ensuing years resulted in the conversion of many open areas to development, increasing the amount of runoff into the Charles River Basin. Consequently, the dam became inadequate to meet flood control and navigation needs and could not be economically modified.

Preconstruction of the Charles River Dam Local Protection Project was initiated in November 1972 with the removal of the Warren Street Bridge. The major contract for construction of the dam was awarded in February 1974. The project was completed in May 1978 at a cost of \$61.3 million. Situated about 2,250 feet downstream of the old Charles River Dam, the new dam is operated and maintained by the Metropolitan District Commission.

The project consists of an earthfill and concrete dam with stone slope protection stretching between Boston and Charlestown. The dam is 400 feet long with an elevation of 12.5 feet above mean sea level. The connecting pumping station is 190 feet long and 122 feet high and contains six pumps. There are three navigation locks for commercial and recreational vessels. Two of the locks, for small recreational craft, each measure 200 feet long, 22 feet wide, and eight feet deep. The third lock, 40 feet wide, 300 feet long, and 17 feet deep, accommodates commercial vessels, large recreational boats, and the overflow of small craft during peak days.



The Charles River Dam Local Protection Project is located on the Charles River, between the Charlestown and North End sections of Boston, Mass. (Click photos for high-resolution version)



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Last Updated: July 1, 2012



The project also incorporates a boat facility for the Metropolitan District Commission Police, a small plaza park, a visitors center, and a fish ladder that helps restore fish migration to the river. The growth of metropolitan Boston and urban land use greatly decreased the amount of fish spawning in the upper reaches of the river. The ladder provides a passage for several species of fish, principally shad, alewife, smelt, and blue-back herring, to migrate up the Charles River and spawn in fresh water.

The Charles River Dam has been honored with several architectural awards, most notably a Presidential Award for Design Excellence.

