



US Army Corps
of Engineers®
New England District



Fact Sheet

FOX POINT HURRICANE BARRIER REPAIR PROJECT

PROVIDENCE, RHODE ISLAND

March 2002

696 Virginia Road, Concord, Massachusetts 01742-2751

1. LOCATION: The Fox Point Hurricane Barrier is located across the Providence River in Providence, Rhode Island. It was authorized by the Flood Control Act of 1958. Construction was completed by the Corps of Engineers during the period 1961 - 1966 at a total cost of \$15,000,000. The city of Providence, Rhode Island operates and maintains the project. The Fox Point Hurricane Barrier provides protection to downtown Providence. The project consists of a 700 foot long concrete structure, 25 feet high which contains a 214 foot long pumping station and three 40 foot by 40 foot tainter gates. The pumping station contains five 4,500 hp electric pumps capable of pumping 1,400 cfs each for a total pumping capacity of 7,000 cfs.



2. BACKGROUND: Past routine inspections of the project performed by engineers from the New England District noted some major items in the mechanical, electrical and structural components that require attention. Congress included funding in the amount of \$250,000 in the FY98 Energy and Water Development Appropriations Act (PL105-62) for the New England District to assess the Fox Point Hurricane Barrier project. A Condition Survey and Technical Assessment report was published in April 1998. The report found that despite being over 30 years old, the project has been operated infrequently during its lifetime and that the station equipment has low hours of operation, so that much of its original life remains. Little or

no equipment needs to be replaced. It was confirmed that equipment periodic maintenance has been lacking in recent years and that this practice, if allowed to continue, could negatively affect the operation of the project in the future. A major effort to catch up with maintenance that has been deferred should begin now and when completed, a system of normal periodic maintenance should be instituted. Short term and long term maintenance needs including costs were identified.

3. AUTHORITY: Section 352 of the 1999 Water Resources Development Act (WRDA) authorizes the Fox Point Hurricane Barrier Repair project. It modifies Section 203 of the Flood Control Act of 1958 (72 stat. 306) and directs the Secretary of the Army to undertake the necessary repairs to the barrier as identified in the Condition Survey and Technical Assessment dated April 1998 with Supplement dated August 1998. It specifies a total cost of \$3,000,000 with an estimated Federal cost of \$1,950,000 and an estimated non-Federal cost of \$1,050,000. Funds of \$1,950,000 were appropriated in the FY2001 Energy and Water Development Appropriation Act to provide assistance to the city of Providence for its project to repair the Fox Point Hurricane Barrier. The funds are Construction, General funds.

4. MAJOR FEATURES OF WORK:

Major accomplishments to date include:

- Overhaul Pump #2 and #4
- Repair Pump Dewatering Chamber
- Repair Allens Avenue Street Gate

Major work underway

- Repair/replace and Paint Emergency Stop Gates

Major work to be done

- Overhaul Pump #3 and #5
- Repair/replace Tainter Gate Chains
- Repair Guide Wheels on Cooling Water Canal Gates
- Upgrade Electrical Components of Pump Station
- Paint Tainter Gates
- Develop Maintenance management system

5. SCHEDULE: It is expected that the city will complete all work eligible for Federal participation by the end of 2003.