

REGIONAL SAUGUS RIVER FLOODGATE PROJECT

TIME TO RECONSIDER

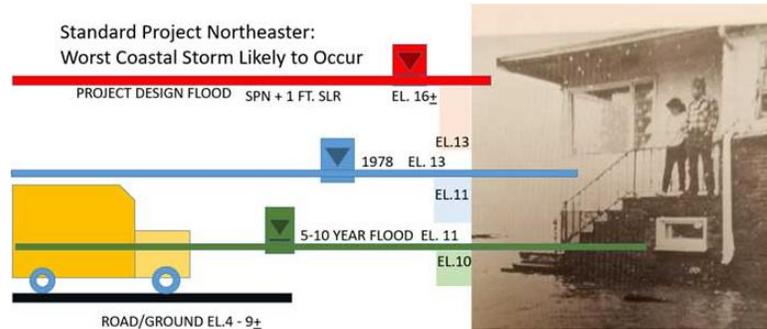
September 14, 2020

On February 6 and 7, 1978, a major northeaster hit the New England coast. The Blizzard of '78, as it came to be called, caused widespread damage to coastal communities and residents. The Saugus River Watershed was



particularly hard-hit, with extensive damage in Lynn, Malden, Revere, Everett, and Saugus. Flooding over much of the lower watershed was 4 to 6 feet deep as a result of normal high tide, storm surge, and storm-driven waves. These flood waters damaged over 3,100 buildings, affected 10,000 residents and 20,000 employees, and cut off transportation for 400,000 commuters. Damages were estimated at about \$72 million in 1978 dollars, equivalent to \$288 million in 2020 dollars.

Since then, things only have gotten worse. The Standard Project Northeaster (or SPN) would add at least two feet to the '78 tide level, and sea level rise since 1978 adds another foot, plus about 3 feet piled up from the force of waves for a potential flooding depth of up to 10-12 feet over much of the low-lying area of the five communities. This would damage about 5,100 structures, with commensurate effects on residents, employees, and commuters. Tidal surges over the shorefronts and into the communities could last several days. Current damages from the SPN would be about \$1.25 billion in 2020 dollars. And sea level rise will continue, adding as much as another two feet over the next fifty years, increasing damages and evacuations. More details on problems, solutions, and the environment are available on the web site: www.saugusriverfloodgates.com.

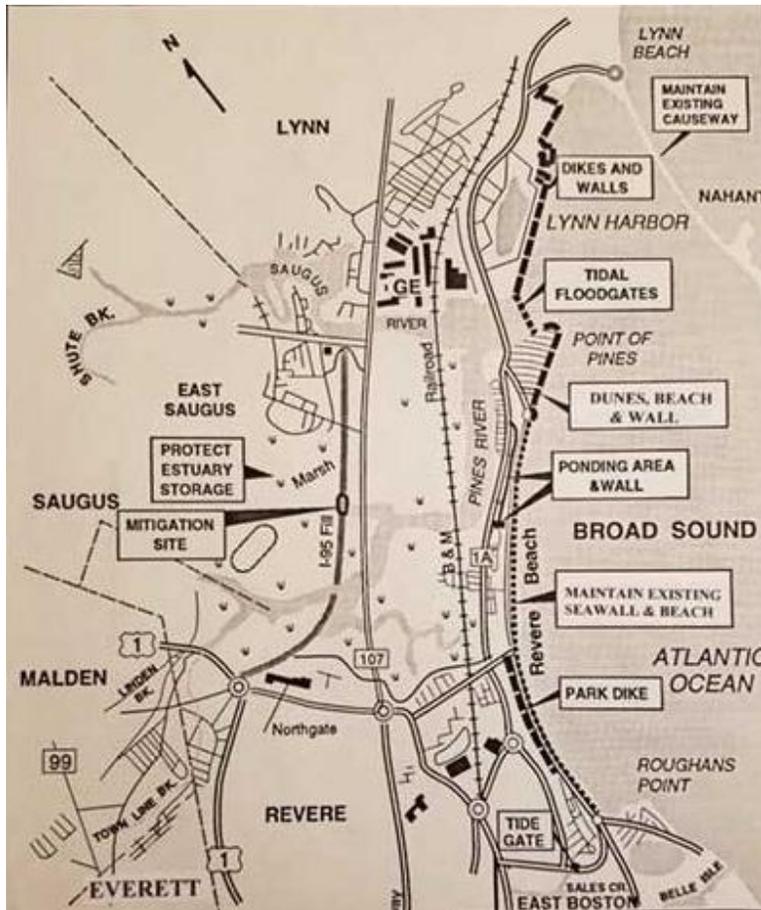


A Frequently Flooded Residence, Showing Higher Flood Elevations (EL.)

Driven by the affected municipalities, the Commonwealth and the Federal government began seeking methods to reduce these potential damages. The Regional Saugus River Floodgate Project was planned and designed over eight (8) years (1985-1993) at a cost of \$8.6 million by the Army Corps of Engineers with the help of Citizen Steering Committees from Lynn, Malden, Revere & Saugus and a Technical Group of environmental and other interests to reduce coastal flood damages from storms such as the Blizzard of '78 and subsequent, larger storms. Three major alternatives were considered: Local Protection Plans, Non-Structural Measures, and the Regional Project.

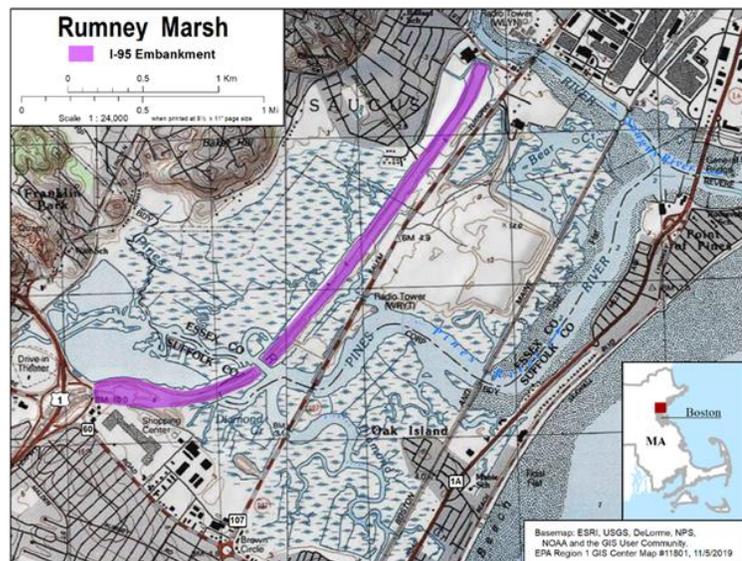
Local Protection Plans relied on almost 10 miles of walls up to 12 feet high surrounding flood-prone areas. Its cost was estimated at \$190 million (in 2020 dollars) to partially protect about 86% of the 5,100 vulnerable structures. This plan, while economically feasible, offered no opportunity to improve conditions in Rumney Marsh and blocked views for many residences.

Non-Structural Measures examined raising or flood proofing individual structures. Only 240 homes and businesses (7%) were found suitable for this approach at a cost of \$20 million (in 2020 dollars) and no protection could be provided for transportation and other infrastructure. This plan was unacceptable to all participating communities.



The Regional Project proposed a series of new walls, dikes with walkway, sand dunes & beach, and raised parkland along 3.1 miles of waterfront, with a major floodgate structure at the mouth of the Saugus River with 9 gated openings (50 & 100 feet wide). The Regional Project would provide protection against the SPN + sea level rise for all 5,100 at-risk structures and for critical transportation and other infrastructure. The total cost would be \$231 million (in 2020 dollars), including purchasing the 1,650 acre estuary for flood water storage and the added cost of restoration of Rumney Marsh. The Regional Project is economically justified with 64% Federal cost sharing as authorized by Congress in 1992.

The restoration of Rumney Marsh includes breaching or removal of the abandoned I-95 embankment and reconnection and enhancement of up to 500 acres of salt marsh. Restoration would return natural flushing and tide levels to the marsh; enhance the habitat for fish, wildlife, and birds; stop deterioration of wetlands; and nearly eliminate phragmites reeds, marsh mosquitos, and frequent fires. This restoration could be an added environmental benefit if authorized with the Regional Project.



The Regional Project was extensively reviewed under the National Environmental Policy Act (NEPA) and the Massachusetts Environmental Policy Act (MEPA), and achieved approval and favorable comment under both in 1990. Even so, a new Secretary of Environmental Affairs called a halt to the project in 1993 to allow further examination of non-structural measures by the Commonwealth. These analyses never have been carried out.

With sea level rise continuing and greater risks from climate-change enhanced storms, the time has come to move forward with the Regional Saugus River Floodgate Project. After extensive local discussions the project enjoys broad community support. The cities of Revere, Malden, Lynn, and Everett and the town of Saugus all have asked the US Army Corps of Engineers to begin the process to review, design, and implement the project—the New Study Start.



Saugus River Floodgates Viewed From Lynn

The Corps supports the New Study Start, since the project was de-authorized by Congress in 2009. To overcome this hurdle, the project Sponsors intend to request the Congressional Delegation to sponsor a resolution to re-authorize the project, if possible. At the same time, the Sponsors intend to approach the Governor and the Secretary of Energy and Environmental Affairs to support re-examination of the project under the Massachusetts Environmental Policy Act (MEPA). Re-Authorization and re-examination could save about 9 years and \$6 million in repeated and prolonged studies before starting construction.

The Sponsors ask your support of a streamlined approach to re-authorizing, re-examining, and moving forward with the Regional Saugus River Floodgate Project.

For community coordination, administrative issues, or arranging zoom meetings call Elle Baker, Revere Project Planner, at ebaker@revere.org or 781-286-8188. For detailed questions on the project contact Bob Hunt, former Project Manager at bobandbjhunt@hotmail.com or 617-633-3974.