A photograph of a house partially submerged in floodwater, with lightning bolts striking the sky in the background. The house is a two-story structure with a porch, and the water is murky and turbulent. The scene is set at night or in low light, with the lightning providing a stark contrast to the dark sky.

Preparing *for* Floods

The Town of Westport is a coastal community located along the shores of Western Long Island Sound. Westport has a population of 24,410. Twenty-six percent of the residents live within the 100-year floodplain.

Case Studies

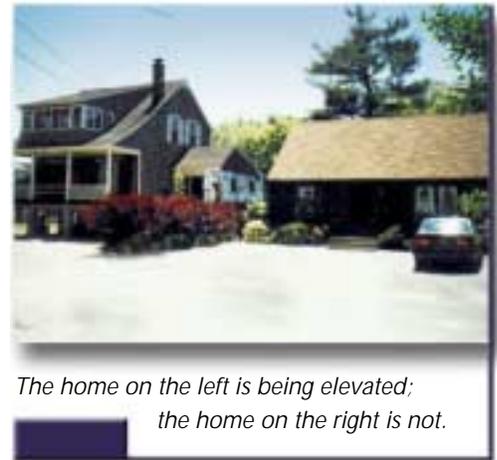
WESTPORT, CONNECTICUT

On December 11, 1992, a powerful winter storm, called a "Nor'easter," struck Connecticut. Very strong easterly gales of 55 mph created by the storm caused severe coastal flooding in Westport and several other communities.

The Compo Beach and Saugatuck Shores areas of Westport were especially hard hit –

virtually every building was inundated. Along the Connecticut coastline, a total of 1,345 homes were destroyed or suffered major damage. The flooding caused by the Nor'easter was the highest on record since the Hurricane of 1938. Public assistance damage was over \$4 million, and private insured damage totaled more than \$20 million.

In February 1993, the Town of Westport made an application to the Connecticut Department of Environmental Protection for a \$168,000 grant to elevate seven coastal homes under the Hazard Mitigation Grant Program (HMGP). The seven homes were successfully elevated during 1994 and 1995 at a total cost of \$336,000. Other measures taken by the Town of Westport included installing 16 combination staff gauges evacuation signs, and the printing of a disaster preparedness brochure (privately funded by one of the elevated homeowners) for its residents. The acquisition of homes for open space and the construction of a berm around the Compo Beach development were also considered, but were determined to be too costly to implement.



The home on the left is being elevated; the home on the right is not.



This completed house was elevated 4 feet.



The completed house above was elevated 3 1/2 feet.
Below, a house elevation in progress.



Project Costs

Home Elevation Project

(7 Homes: 1994-95) \$336,000.00
(50% HMGP / 50% Local)

Evacuation Sign Project (1995)

(100% State Funded) \$3,570.00

Home Elevation Project

(15 Homes: 1996 - 99) \$990,803.00
(75% FMA/HMGP / 25% Local)

Total Mitigation Cost: 1.33 Million

Total Mitigation Benefits: 4.78 Million*

Benefit to Cost Ratio: 3.58**

* Over the 30 year life of the project.

** Based on the Coastal A-Zone Benefit to Cost Model provided by FEMA .

In 1998 Westport was nominated as Connecticut's first Project Impact Community. Westport is also the first community in Connecticut to have an approved Hazard Mitigation Plan. This plan has served as a model for the communities of Milford and East Haven, which have also been nominated for Project Impact.

Benefits

During another flooding event, which occurred on October 20, 1996, damage to the seven elevated homes was completely prevented. Unfortunately, several dozen other homes in the Compo Beach area, that were not elevated, were flooded again. This project has set an excellent example for the coastal residents of Westport. Since 1996 a total of 15 additional homeowners have received grants under the HMGP and the Flood Mitigation Assistance (FMA) Program to elevate their homes in Westport.

Westport has also amended its National Flood Insurance Program (NFIP) regulations to include a tough new provision. Homeowners or businesses that construct additions or renovations to their buildings that exceed 50 percent of the fair market value in any five-year period, must elevate the structure to one foot above the Base Flood Elevation. This stricter provision has resulted in the elevation of several additional buildings using private funds.



Elevation project still in progress at the time this photograph was taken in 1994.