

Naugatuck River Habitat Restoration Project

Location: Torrington
Public property

Implemented: September 2000

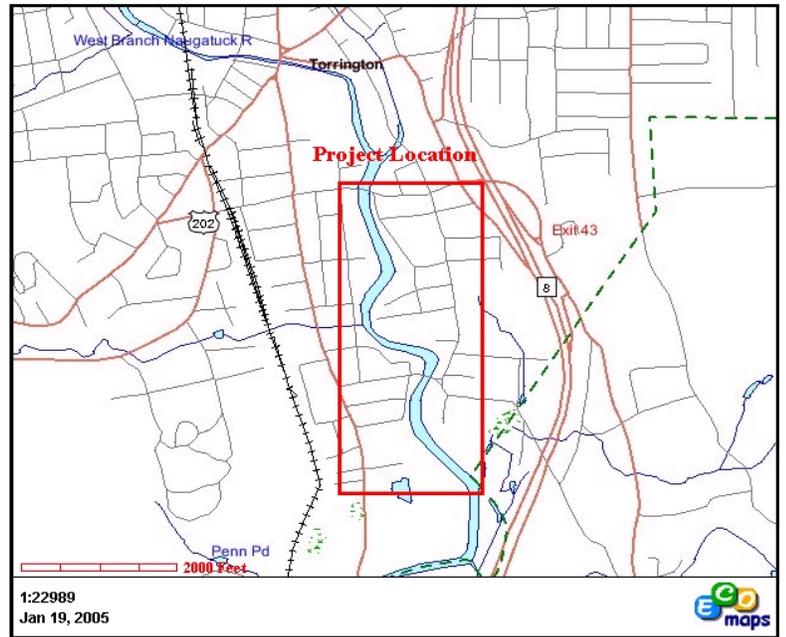
Partners:
City of Torrington
U.S. Army Corps of Engineers
CT DEP Inland Fisheries Division

Cost: \$240,000

Engineering and Design:
Milone & MacBroom, Inc.
U.S. Army Corps of Engineers

Project Manager/Contact Information:

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Problem/Need

In mid-August 1955, hurricane-generated flooding of the Naugatuck River and its East and West Branches destroyed a significant area of the central section of Torrington. Following the flood, Connecticut's congressional and senatorial delegation requested the assistance of the U.S. Army Corps of Engineers to design and implement flood control measures to protect Torrington from similar episodes in the future. One flood control measure involved dramatic modifications to the Naugatuck River within the city limits. Nearly 1 mile of river was channelized (widened, deepened, and realigned) and high berms of rip-rap were constructed along both river banks. These activities completely eliminated all instream and riparian habitat. The project goal was to replace large instream structure habitats removed from the river during the process of channelization with boulders. Boulders provide overhead and lateral cover for fish; cause the breakup of a uniform current and therefore dislodge and relocate fine sediments; and increase feeding lies for fish by creating resting stations in locations of abundant food drift.

Restoration Actions

The installation of large boulders, averaging four feet in diameter, was selected as the instream habitat restoration technique as they would remain stable during floods, have permanence over time, and are a natural habitat component of riverine systems. The project bounds were from the East Albert Street Bridge downstream to the John Toro Sports Complex immediately south of the Palmer Bridge Street Bridge a distance of approximately $\frac{3}{4}$ mile. A total of 450 boulders were placed within the Naugatuck River channel. The boulders were placed in a random fashion either singly or in groups of two or three.



Boulders were delivered to top of bank then installed in the river with an excavator.

Boulders were placed in a random fashion either singly or in clusters of two or three.





Naugatuck River at the East Albert Street bridge. Pre-construction.



One year post-construction.



Two years post construction.