

Willimantic River Habitat Enhancement Project

Location: Tolland, public property,
Cole Wilde Trout Management Area

Completed: September 2001

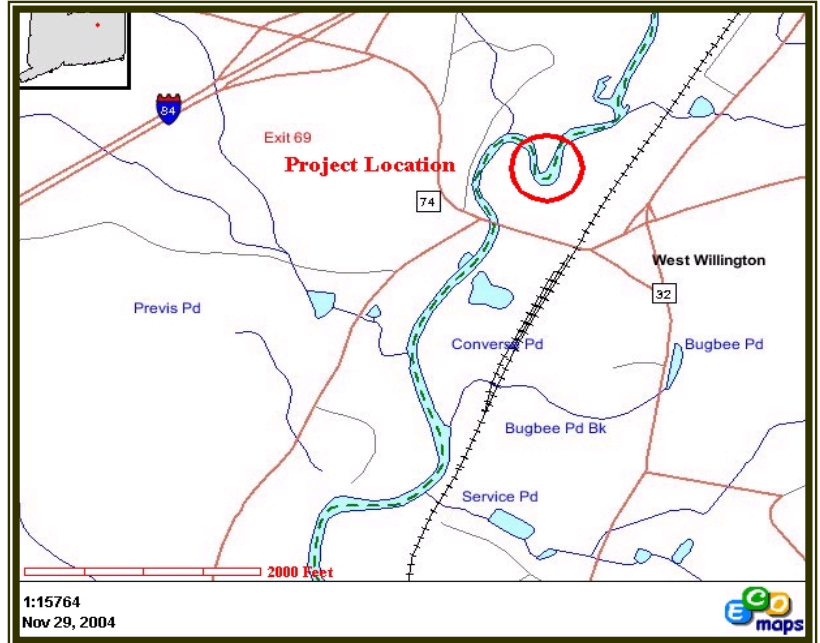
Partners:

Department of Environmental
Protection
 Inland Fisheries Division
 Wildlife Division (WHAMM)
Department of Transportation

Cost: \$10,900

Engineering and Design:

Inland Fisheries Division,
HCE Program



Project Manager/Contact Information:

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Problem/Need

An approximate 1,000 feet section of the Willimantic River within the Cole W. Wilde Trout Management Area was in need of fish habitat enhancement. The river channel in the project area is best characterized as low gradient with a highly sinuous geometry as it flows through scrub-shrub meadow wetlands. Instream mesohabitats are mostly comprised of a moderate to deep “pool” and dominant stream substrates are a mixture of silts, coarse sands and small gravels. Consequently, due to the lack of large, coarse substrates and lack of a forested riparian zone with mature vegetation (non-recruitment of large woody debris), there are minimal amounts of useable instream microhabitats for resident fishes, including hatchery-reared and native trout.

Restoration Actions

The primary project goal was to create more diverse and complex microhabitats for the resident fish community. Specifically, the design included installing a total of 10 tree and rootwad complexes along the Tolland (north) side of the riverbank. Trees were placed with one end anchored into the streambank and the rootwad end of the tree placed within the streambed and pointed downstream usually at a 30 to 45 degree angle to the bank. Boulders (2-3 feet in diameter) were used to help secure the tree and rootwad complex into the bank. Two separate boulder clusters comprised of 4 boulders each were also installed to provide for velocity refugia and feeding station habitats.



Excavated tree and rootwad being transported to the river's edge for installation.



Tree and rootwad installed into excavated trench.



Final placement view of tree and rootwad. Boulders help to secure rootwad in place.