# **Moosup River Habitat Enhancement Project**

**Location:** Plainfield, Moosup River Trout Management Area, private property

Completed: August 1996

#### Partners:

Department of Environmental Protection Inland Fisheries Division Inland Water Resources Division Planning & Standards Division Trout Unlimited, Thames Valley Chapter

**Cost:** \$16,700

## **Engineering and Design:**

Milone and MacBroom, Inc.

## **Project Manager/Contact Information:**

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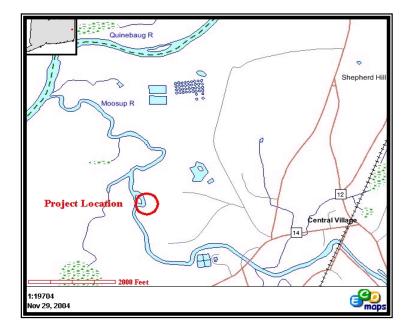
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#### Problem/Need

A section of the Moosup River in the Trout Management Area had progressively developed into several braided channels. A negative artifact of channel braiding is that stream flow is conveyed from one undivided channel into several braided, divided channels diminishing the amount of overall usable habitat for coldwater fish communities, especially during the summer.

#### **Restoration Actions**

Channel and habitat improvements consisted of installing a timber and rock filled structure at the upstream head of a single channel braid, called a channel block. Specific objectives of the project were to: (1) improve the quality and quantity of instream habitat through streamflow augmentation. By deploying a channel block, streamflow was redirected back into the main channel providing more usable habitat during the summer, (2) arrest local streambank erosion. Stabilization of streambanks corrected local streambank erosion problems and benefited surface water quality, and (3) decrease sediment loading into the Moosup River. Decreased sedimentation and input of coarse and fine materials helps mitigate braiding problems in downstream areas and protects the quality of instream habitat. Post restoration estimates indicated that approximately 40-45% of Moosup River average daily discharge has been blocked and redirected back into the main channel.





Installation of timber log core buried within channel block.



Installation of rock riprap over log core and across channel.



Head of channel prior to installation of channel block.



Completed channel block. The structure with its raised elevation redirects flow back to the main channel of the Moosup River.