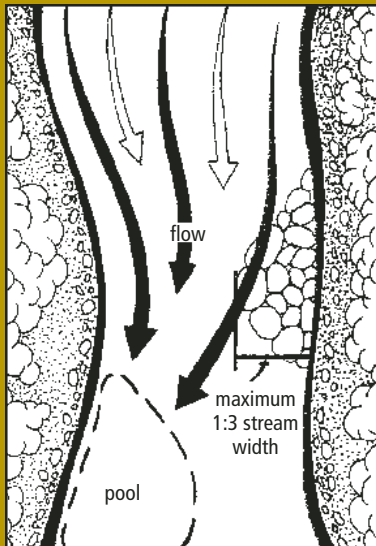


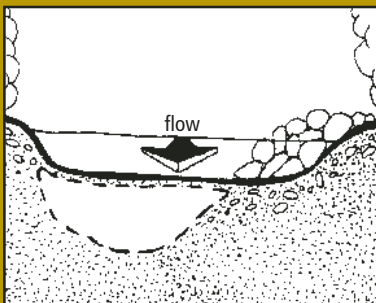
Deflectors



AERIAL VIEW



CROSS SECTION



Large photo: Large log and rock deflector with Christmas trees in the Mushamush River below Hwy. 103. **Inset:** Logs reinforcing the upstream edge of a rock deflector in the Mushamush River.

Diagrams courtesy of the St. Mary's River Forestry Wildlife Project. To contact BCAAF, call 902.624.9888 or visit coastalaction.org.

What is a deflector?

A deflector is a habitat improvement structure made from a variety of materials such as logs and rocks. It is used to create fish and aquatic macro-invertebrate habitat. These structures are built outward into the river channel from either one or both banks in order to direct water flow away from the banks, preventing bank erosion.

The purpose of a rock deflector is to narrow and deepen the stream channel which provides deeper, cooler water.

Deflectors are especially effective in wide, shallow, low gradient streams because they also provide desirable scouring and sorting of channel materials while creating pools and cover. Because deflectors direct the flow of water, the natural meander pattern of the stream is also restored.

Deflectors can be built exclusively of rock or may contain a combination of log frame and rock fill depending on the water levels and size of the river or stream. Christmas trees may be piled on top and secured to the base to slow water and ice during high flows, prevent washout and encouraging sediment deposition directly downstream.

How is it built?

A triangle of rocks that occupies no more than one third of the channel width is formed. Rocks are taken from within the stream as much as possible with the largest boulders being placed around the outer edges, especially on the upstream side. The rocks along the bank should be piled to bank height, while the sides should taper down into the water.

