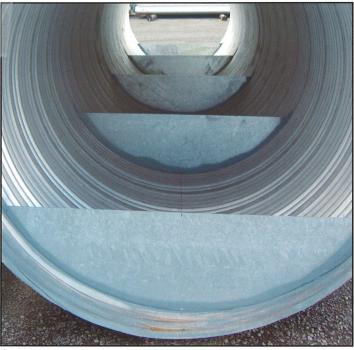


## FISH PASSAGE STRUCTURES

## PRODUCT BULLETIN





Straight weirs



Round Pipe with bolted log weirs



Factory-made half-round arch with 3"x 1" corrugations

Salmon and other aquatic species in the Pacific Northwest routinely migrate up and down streams to spawn and feed. For many years culverts were installed without proper regard for their potentially negative impact on the migratory patterns and reproduction cycles of these species. Today, engineers and designers carefully consider the long term effects of their designs on the movement of fish and other aquatic species in the culvert design process. In recent years, culvert replacement projects have helped to restore hundreds of miles of once productive spawning habitat to the benefit of our northwest fisheries. In some cases, these culvert replacements have been designed specifically to improve habitat accessibility for non-aquatic species.

Many new culvert designs and installation methods have been developed to more closely simulate natural streambed environments and promote aquatic species passage. Some of these include weirs or notched weirs welded in the pipe invert, bottomless half-round arches, oversize pipe and pipe-arches for installation with buried inverts, Alaska steep passes, rock retention baffles, bolted log weirs, and weir/baffle combinations. The suitability of each of these is determined by the specific site conditions and requirements.



Pipe-arch installation with notched weirs