

A (way) Before and After Inventory of Salmonid Habitat on the Dunstan Preserve, John Day Basin, OR.

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Abstract:

In 1992, ODFW conducted a longitudinal habitat survey of the Middle Fork John Day River (MFJD) as part of the Aquatic Inventories (AQI) program including the section of the MFJD that flows through the Dunstan Preserve. Throughout the late 2000's and into the 2010's, several habitat restoration projects have been implemented throughout this reach to improve spawning and rearing habitat, increase floodplain connectivity, and create off-channel rearing habitat. These projects included the addition of large-wood structures, removal of rock barbs and bank armoring, excavation and reconnection of historic side channels, and habitat boulder additions. In 2017, ODFW performed a second longitudinal survey of this same reach following the AQI protocol. A comparison of the data collected during the two surveys show increases in favorable juvenile rearing and adult holding habitat for salmonids including increased pool area, decreased width to depth ratios, increase in number of habitat units, large woody debris, and side channel habitat area as a result of the restoration actions. Future fish surveys will be conducted to document the usage of this habitat by fish of various species and life stages.