RIDOLFI
Environmental

PROJECT PROFILE

Sha Dadx Site Off-Channel Habitat Restoration, National Oceanic Atmospheric Administrative, Fife, Washington

Ridolfi provided baseline environmental and biological monitoring, engineering design services, construction documents, and construction administration support for restoration of the Sha Dadx site on the Puyallup River. The primary challenge was to reconnect an abandoned former channel meander bend that was isolated from the mainstem when the river was diked in the early 1900s.

Ridolfi succeeded in creating new off-channel habitat for native salmonids. Project challenges included establishing a fish-friendly connection between the Puyallup River and the newly restored area without compromising the existing flood control infrastructure maintained along the banks.

Ridolfi developed a restoration alternative that incorporated a setback levee and utilized a flood gate at the project's hydraulic connection to the river to meet flood control requirements. We maximized the habitat diversity in the restored area with placement of multiple in-water large woody debris structures that utilized on-site materials salvaged during setback levee foundation preparation.

Ridolfi conducted a site investigation, collected groundwater field data, characterized soil and hydrological conditions, assessed existing biological conditions, and prepared engineering plans and specifications for construction. Ridolfi's services included preparation of a biological assessment report, an environmental assessment report, and a Joint Aquatic Resource Permit Application.

Ridolfi provided oversight and inspection services during project construction. Environmental compliance during construction was monitored by Ridolfi under permits granted by the Puyallup Tribe, the Army Corps of Engineers, the Fish and Wildlife Service, and the National Marine Fisheries Service.

FROM TOP: Looking south at the newly constructed channel and islands with recently planted native species; one of the first fish to return to the site to forage.