
Metro

River Island North Restoration

Barton, Oregon



The work rebuilds the floodplain and enhances and creates backwater, increase the complexity and roughness of the floodplain, and provides shelter for a long list of native and endangered fish, birds, amphibians, and mammals.

SERVICES

Ecological Restoration
Water Strategies

Located on the Clackamas River, this project was the second stage of a large-scale restoration of River Island, a 240-acre natural area that includes wetlands, oak savanna, and upland and riparian forests. Decades of gravel mining and a major flood changed the course of the river, causing it to bypass its confluence with Goose Creek and damaging habitat for multiple species.

Biohabitats began by leading the dewatering and fish rescue effort, primarily leveraging gravity flow to remove water and fish from the site. To enhance and create habitat for endangered Chinook (*Oncorhynchus tshawytscha*) and coho (*Oncorhynchus kisutch*) salmon, winter steelhead, and western painted turtles (*Chrysemys picta bellii*), the construction team, including K&E Excavating, installed 1,600 logs and moved 160,000 cubic yards of cobble and soil around the site. Vibratory pile drivers were used to pierce hundreds of 40-foot logs into the ground surface, and each pile was individually tested for its embedment strength. Logs with and without rootwads were then interwoven into the driven piles and each assembly was fortified with steel hardware connections. The structures were backfilled with cobble.

The restoration rebuilds the floodplain and enhances backwater habitat that young salmon rely on for refuge from fast-moving waters. The logjams increase the complexity and roughness of the floodplain, allowing it to slow floodwaters and capture nutrients and sediments. The log installations also provide shelter for fish, birds, amphibians, and mammals.