working for clean rivers

Crystal Springs Creek Habitat Restoration Projects

Portland protects and restores habitat in the city's watersheds to support native fish and wildlife and aid the recovery of threatened salmon species. These efforts improve water quality and watershed health, help the city comply with federal regulations, and enhance livability. Salmon health is an important indicator of the health of our rivers and streams.

Crystal Springs is home to coho and Chinook salmon, steelhead trout, and many other birds and wildlife.

Crystal Springs Creek is a tributary of lower Johnson Creek in Southeast Portland. The creek originates from springs near Reed College and the Eastmoreland Golf Course, an area that was once primarily marshy wetlands. Before development, the wetlands retained excess water from flood events and provided important rearing and refuge habitat for salmon, and foraging and nesting sites for beavers, birds, turtles, frogs, and other wildlife.

MARCH

A pair of wild coho spamnin Crystal Springs Cross

Watch the video at www.portlandoregon.gov/ bes/66158

Reed Lake

REED COLLEGE

Crystal Springs is spring fed, which keeps water temperatures cool and stream flow uniform throughout the year. This adds cool water to Johnson Creek in the summer when stream flow can be low and warm. Fish and amphibians thrive in cool water. Crystal Springs is home to coho and Chinook salmon, and steelhead trout. All three species are listed as threatened under the federal **Endangered Species Act** (ESA), and Crystal Springs is designated as critical habitat.

Culverts as Barriers

Several culverts carry Crystal Springs Creek under roads, but some blocked fish from swimming upstream to reach spawning and rearing habitat (see map).

Environmental Services is working with many partners to replace nine culverts, improve water quality, and restore habitat

TOLMAN Eastmorela<mark>nd</mark> **Golf Course** SE BYBEE BLVD Westmoreland **Park** SE LAMBERT ST CRYSTAL SPRINGS BLVD SE NEHALEM ST Johnson Creek **■ SETACOMA ST** SE TENINO S' SE UMATILLA S CULVERT REPLACEMENTS SE SHERRETT ST Johnson Creek Park



to make nearly three miles of prime habitat accessible to salmon and steelhead.

Habitat Restoration

Crystal Springs has ideal conditions for endangered salmon and trout to find rest, food, and shelter during their journey to the Pacific Ocean and back.

Restoration along the length of the creek, including at Westmoreland Park, has added large logs, root wads, and boulders to slow water and create pools for fish. Native plants along the stream prevent erosion, keep the water cool, and become food for fish and other creatures.

Partnerships

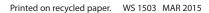
Many groups, agencies, and organizations are working to restore habitat in Crystal Springs Creek. Reed College began restoring Reed Canyon in 1999 by installing a fish ladder to connect the creek's lower spawning beds to the upper rearing pond.

Other groups including Metro, the
Johnson Creek Watershed Council, the
East Multnomah Soil & Water Conservation
District, TriMet, the Audubon Society of
Portland, and the Sellwood-Moreland
Improvement League have contributed
to Crystal Springs Creek restoration. More
recently, the Army Corps of Engineers
partnered with the city to complete large
restoration projects at Westmorland Park,
replace three culverts, and remove a culvert.

These projects and partnerships led to formation of the Crystal Springs Partnership, a group of community members, agency partners, and organizations working to make the Crystal Springs Watershed a vibrant, healthy place for people, fish, and wildlife. The partnership hosts work parties, walking tours, and educational opportunities focused on the creek. Get involved at www.crystalspringspdx.org.

FOR MORE INFORMATION

Environmental Services, 503-823-7740 www.portlandoregon.gov/bes/crystalsprings







Old culverts at Glenwood (left) and Tenino (right) streets restricted flow and created barriers to salmon.





Railroad culvert replacement—before and after





Restoration of the Westmoreland Park Duck Pond—before and after





Restoration work between Tenino and Umatilla streets—before and after





Culvert at SE Umatilla Street—before and after