Centennial School District

Centennial Pond Restoration on Mitchell Creek

Portland, Oregon

Re-creating a dammed and degraded stream channel restores fish passage, enhances habitat for salmonids and other wildlife species, and improves water quality within a biodiverse but urban watershed.

SERVICES
Ecological Restoration

Portland, Oregon's Johnson Creek and its tributaries were once rich with runs of Chinook and coho salmon. As the area developed, however, populations of both fish declined so rapidly and drastically that only a handful of each can be found in the system today. The Johnson Creek Watershed Council (JCWC) is actively engaged in restoring fish passage and habitat throughout the watershed, and when they recognized the need to restore a 900-foot section of a dammed and degraded creek on land owned by the local school district, they turned to Biohabitats for help.

Mitchell Creek, which ultimately flows to Johnson Creek, had been dammed by a previous landowner to support a track for racing horses and ATVs. Monitoring of the pond created by the dam showed that it was increasing temperatures in Johnson Creek by 14 degrees Celsius. To make matters worse, two track crossings over the creek were blocking fish passage, and that culverts beneath the crossings were undersized and contributing to downstream erosion.

To help the JCWC restore fish passage and habitat to the site, Biohabitats re-created the channel within the pond's footprint with the geometry of a sustainable stream. This involved the removal of the culvert crossings, construction of two engineered pool/riffle structures, and placement of log structures. The project not only restored Mitchell Creek, but 1.5 acres of its associated wetlands.