

CASE STUDY

Derry Dell Creek



Gray and Green Infrastructure Improvements Benefit Residents—Human and Wildlife

THE DERRY DELL STREAM AND SEWER ENHANCEMENT PROJECT, a partnership between Clean Water Services and the City of Tigard, presents a sterling example of how to integrate grey and green infrastructure planning for the benefit of residents, ratepayers, cities and utilities alike.

In a single year of construction, Tree for All partners upgraded critical sanitary sewer and water lines, restored the confluence of Derry Dell Creek and Fanno Creek, increased flood plain storage and improved fish passage and connected neighborhoods by creating a new segment of multimodal path, providing safe pedestrian access to nearby schools.



Tree for All engages communities large and small in conservation projects throughout the Tualatin River Watershed in Oregon.

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The Site

SIZE 6.5 acres

FIRST PLANTING 2015

STREAM LENGTH 944 ft.

PLANT COMMUNITIES Forested Wetland, Riparian Forest, Scrub Shrub, Emergent Wetlands



Habitat Connectivity



Keystone Species



Recreation & Human Health



Community Involvement



Urban Partnership



Protects Water Quality



Floodplain Access

The Challenge

By 2010, Derry Dell Creek had begun to encroach on adjacent private properties and critical sanitary sewer mains near its confluence with Fanno Creek. Eroding banks along the western edge of the channel needed attention.



Multiple homeowners had experienced bank failure in their backyards, but options to reroute the creek were limited by available space. Additionally, an investigation of exposed sanitary sewer lines in the vicinity revealed significant problems—aging infrastructure (water, sewer and storm) needed replacement and, in some cases, expansion and enhancement. Two culverts were failing. An undersized and perched culvert at Walnut Street prevented fish passage, and the stream corridor itself was fragmented, curtailing wildlife connectivity. Pedestrian access from surrounding neighborhoods remained limited.



The Transformation

In 2012, the City of Tigard purchased the 5.5-acre property through the Parks and Open Spaces Bond, clearing the path for Clean Water Services (CWS) to redirect Derry Dell Creek away from nearby homes and to reconnect it with the floodplain.

CWS replaced twelve hundred linear feet of sanitary sewer and water lines. The exposed sanitary crossings were removed, and a box culvert was installed at Walnut Street, restoring passage to previously enhanced habitat upstream for native cutthroat trout, brook lamprey, coho and winter steelhead. Floodplain storage increased for both Fanno and Derry Dell Creeks.

The adjacent floodplain and wetland areas have been revegetated and enhanced with native species. A mix of forested and emergent habitat types provide wildlife passage by connecting upstream and downstream restoration sites.

These days, raptors can be spotted nesting in cottonwoods, and a wealth of flowers bloom each spring. A new boardwalk and extension of the Pathfinder-Genesis Trail connects surrounding communities to the Fanno Creek Regional Trail and provides safe pedestrian access to neighborhood schools.



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By integrating grey and green infrastructure efforts, Tree for All partners delivered a highly functional, cost-effective solution with construction limited to a single season, minimizing the impact on local residents—human and wildlife, alike.



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Learn more about TFA partners at jointreeforall.org/partners

Key Partners

