



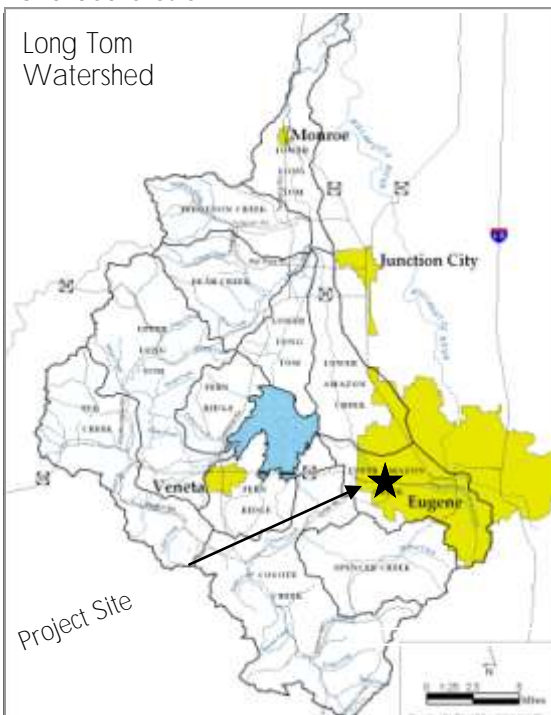
Amazon Creek Enhancement Project

Project Background

Amazon Creek flows through the City of Eugene and empties into Fern Ridge Reservoir and the Long Tom River. Like many urban streams, this creek looks and functions very differently than it did historically. Early settlers in the area described it as a vast marsh in the winter. Inevitably, the city grew up around the creek and residents became intolerant of the frequent flooding. In the 1950s the creek was deepened and straightened to reduce flooding. The water quality and habitat the creek once provided for plants, fish and wildlife have been greatly diminished. Water quality problems in Amazon Creek include high water temperature and low dissolved oxygen in summer and high *E. coli*, turbidity, and nutrient levels.

This project was implemented by the City of Eugene and took place on Amazon Creek between Oak Patch and Acorn Park Rd. The Watershed Council worked with the City to establish trees and shrubs in the riparian area. Goals of the project included improved water quality, floodplain, and riparian habitat and reduced bank and bed erosion.

Long Tom Watershed



Top: Pre-project (2001) looking south across Amazon Creek at the section to be restored. Middle: Excavators removed thousands of yards of soil in order to slope the banks back and create winter high flow channels. Also, the bike path was moved farther from the creek to make room for the new floodplain. Bottom (2006): Trees and shrubs have become well established in the riparian area.

Restoration Techniques

- Thousands of cubic yards of soil were excavated to create a new floodplain on the south side of the creek. Soil was hauled off-site.
- The floodplain contains several high flow channels to provide slower velocities for aquatic life during high flow events and reduce erosion of the existing stream bed and banks.
- The bike path was relocated farther from the creek.
- Banks were sloped back, amended with compost, and covered in jute mat. These steps reduced bank erosion and helped new trees and shrubs become established.
- Hundreds of native shrubs and trees were planted in the new riparian area. Willow stakes were planed along the new stream bank and are thriving in the new floodplain.



Volunteers planted hundreds of native shrubs and trees along the creek. Jute matting was placed to reduce soil erosion while plants became established.

Environmental & Economic Benefits

- Reduce stream bed and bank erosion which contributes sediment to the stream
- Improve instream habitat to benefit fish, amphibians, and macroinvertebrates
- Improve riparian habitat to increase shade and benefit local song birds, waterfowl, and wildlife,
- Interpretive overlooks enhance recreational and educational opportunities.
- Relocated pedestrian and bicycle transportation provides additional protection for riparian habitat, while still creating a visually appealing experience.

Project Funding & Partners

Project Cost: \$157,650

Funding:

OWEB Grant:	\$ 8,100
Local Match:	\$149,550

Partners:

Oregon Watershed Enhancement Board
City of Eugene
Rachel Carson High School



The Long Tom Watershed Council serves to improve water quality and watershed condition in the Long Tom River basin through education, coordination, consultation, and cooperation among all interests, using the collective wisdom and voluntary action of our community members.

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