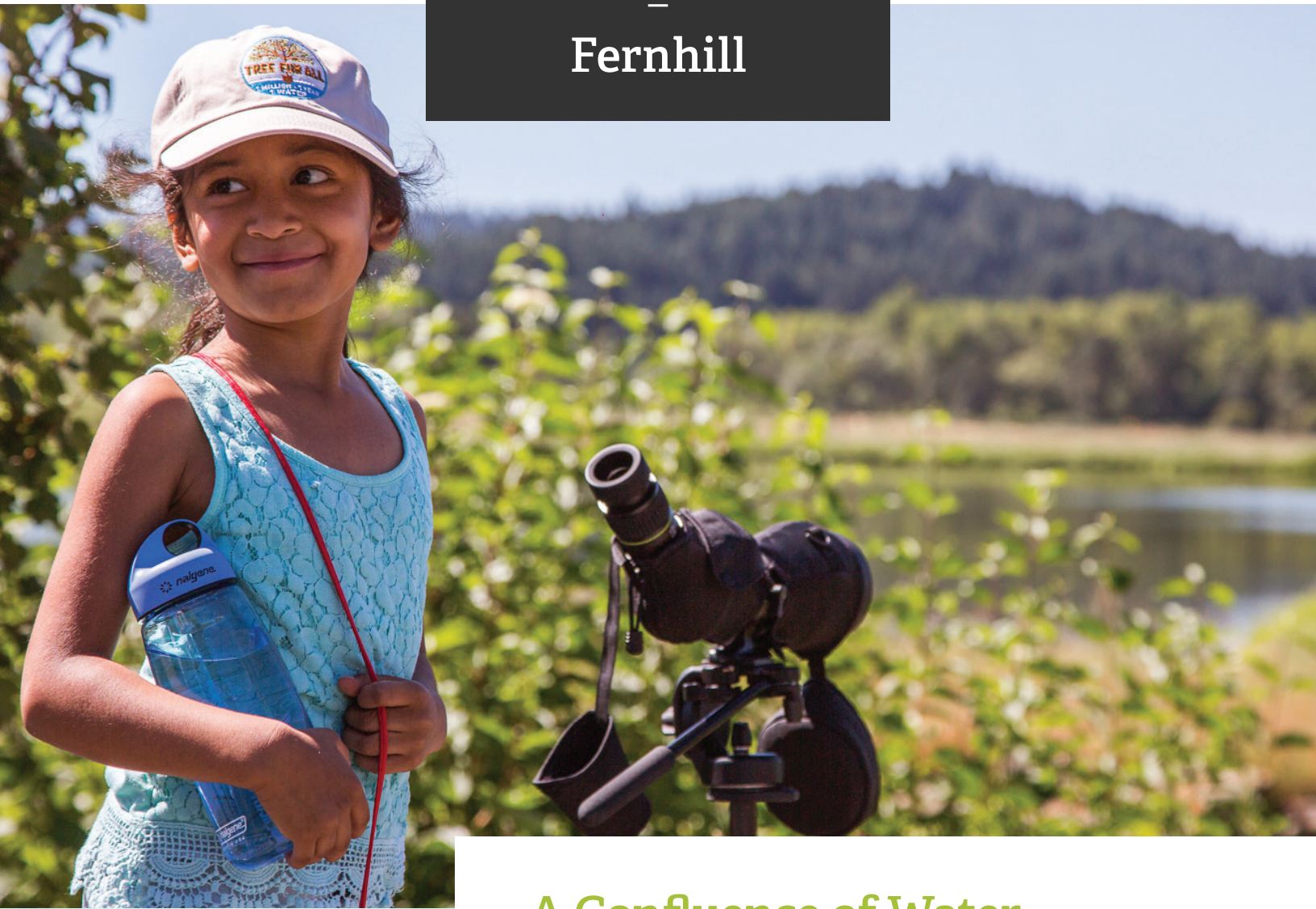


CASE STUDY

Fernhill



A Confluence of Water, Habitat and Healing

TWENTY-FIVE miles west of Portland, along the southern edge of Forest Grove, a remarkable site known as Fernhill sits between the Tualatin River, Gales Creek, and the water treatment plant. Fernhill includes more than 750 acres of wetlands, uplands, forests and productive farmlands, as well as a cutting-edge natural treatment system that serves as a bridge from the water treatment plant to the Tualatin River. A big draw for nature enthusiasts for decades, the site is now in the midst of a major transformation, made possible by Tree for All partners.



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

JOINTREEFORALL.ORG



The Site

SIZE 292 acres

FIRST PLANTING 2006

STREAM LENGTH 15,985 feet

TOTAL TO DATE 1,361,131 plants

PLANT COMMUNITIES

Emergent Marsh, Forested Wetland, Riparian Forest, Scrub Shrub

The Challenge

The complexity of the challenge—and the richness of the opportunity—is the site's longtime role in water resources management for the entire Tualatin Watershed.

Fernhill began as the wastewater treatment lagoons of the adjacent Forest Grove water treatment plant, managed since the 1970s by Clean Water Services. Since then, Washington County has enjoyed decades of vibrant growth. Technology, health and other business sectors continue to prosper. As people move to the area for jobs and the high quality of life, the region's water treatment capacity needs also increase.

The community had to figure out how to significantly increase treatment capacity while keeping costs down and amplifying the investments made in water treatment for broader ecological gain. In the late 1990s, Clean Water Services began convening community members and major stakeholders—including the City of Forest Grove, Fernhill Wetlands Council, Audubon Society of Portland and Pacific University—toward a cooperative management approach at Fernhill. Ambitious and innovative partnerships like these are only way to serve a site as diverse and special as Fernhill.



Already a premier destination for outdoor and nature enthusiasts, Fernhill is a model for collaboration with amazing results for people and wildlife.





Visit fernhillnts.org for videos, photos, news and events.



The Transformation

Through a collaborative process, Clean Water Services, the City of Forest Grove and many community stakeholders found a way to serve both people and wildlife with a positive outcome for watershed health.

Areas surrounding the natural treatment system are being enhanced with native trees, shrubs, and understory herbaceous species to enhance water quality, along with habitat diversity and function. Adjoining agricultural lands have been leased to local farmers and irrigated with recycled water.

The former treatment lagoons have been transformed from rip-rapped ponds into an aesthetically beautiful, dynamic Natural Treatment System that filters water through 90 acres of native wetland plants, cooling and cleansing the water, while also providing valuable habitat for wildlife. The wetlands were designed with habitat features that maximize treatment capability while bringing

greater bird and wildlife diversity to the wetland complex.

Working with the local birding community, the Audubon Society of Portland has led a community science effort at this site over the past several years to monitor bird response to the recent restoration. Preliminary findings indicate that the abundance of some wetland-dependent species like Virginia Rail and Sora has increased dramatically.

Fernhill now provides research and study opportunities for innovations in water recovery and renewal, environmental education for local schools and underserved populations, and the chance for ongoing development of programs of interest to the community.

The facilities are available year-round for recreation, relaxation and peaceful respite. On any given day, you might see a group of schoolchildren chattering excitedly about native frogs, birdwatchers studying a vibrant flock of shorebirds, or a family taking in the view from the graceful bridges of the Water Garden. Designed by Hoichi Kurisu, a world-renowned creator of healing gardens, the Water Garden provides a lush and tranquil setting for people to reconnect with nature.

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Fernhill Statistics

The Fernhill profile covers a series of interconnected projects. Here are project-by-project statistics:

Gales Creek - Tualatin River to Hwy 47

Riparian Forest, Forested Wetland, Scrub Shrub

First planting: 2006

First monitoring: 2006

54 native plant species

Plant cover change:*

- Native shrub/tree: +116%
- Native herbaceous: insufficient data
- Invasive: +11%

Eagle Woods at Fern Hill

Riparian Forest, Forested Wetland

First planting: 2006

First monitoring: 2011

40 native plant species

Plant cover change:*

- Native shrub/tree: +38%
- Native herbaceous: -49%
- Invasive: -2%

Gales Creek to Fernhill Road

Riparian Forest

First planting: 2007

First monitoring: 2007

32 native plant species

Plant cover change:*

- Native shrub/tree: +10%
- Native herbaceous: insufficient data
- Invasive: +6%

Dabblers Marsh

Riparian Forest

First planting: 2008

Shorebird Swale - Non-mitigation

Forested Wetland

First planting: 2012

First monitoring: 2015

35 native plant species

Shorebird Swale - Mitigation

Emergent Marsh, Forested Wetland

First planting: 2012

First monitoring: 2012

33 native plant species

Plant cover change:*

- Native shrub/tree: +32%

- Native herbaceous: -14%

- Invasive: -3%

South Wetlands

Emergent Marsh, Scrub Shrub

First planting: 2014

First monitoring: 2015

* Includes statistics for all the portions of the project for which data is currently available. Figures measure increase/decrease since monitoring began. Shrub/tree and herbaceous cover are measured only in plant communities appropriate to those species.

Key Partners

