Engaging The Community To Sustain Our Watershed

Annual Report 2008-2009
The Tualatin River Watershed Council (Council) is a locally organized group of volunteers, established in 1996 by the Washington County Commissioners. The Council is composed of a diverse group of stakeholders from the Tualatin basin. The Council coordinator salary and office support is funded through a grant from the Oregon Watershed Enhancement Board (OWEB). The Council promotes and improves the watershed conditions by connecting volunteers, groups and landowners with the resources needed to restore and protect the watershed. By providing stewardship education and sharing information on watershed conditions while doing restoration projects, the Council is ensuring continued improvements in watershed health. The Council’s Strategic Plans focuses on four areas: education and outreach, restoration and enhancement, issues forum, and capacity building.

For more information on the Council and the Tualatin Watershed, visit [www.trwc.org](http://www.trwc.org).

The 712 square mile (454,000 acres) Tualatin River basin is located in the northwest corner of Oregon. The Tualatin River flows in a generally easterly direction from the Coast Range to its confluence with the Willamette River. The basin is almost entirely in Washington County. About 10% of the basin is in Yamhill, Multnomah, Clackamas, Columbia or Tillamook counties. The Tualatin River is 83 miles long and has a very flat gradient for most of its length. The five major tributaries to the Tualatin River are Scoggins Creek, Gales Creek, Dairy Creek (West Fork, East Fork, and McKay), Rock Creek, and Fanno Creek.

Over 500,000 people live in the Tualatin River basin now and the population is expected to grow to over one million people by 2040. The land uses in the basin are 50% forestry, 30% agriculture, and 20% urban.
Is your class, club or neighborhood group looking for a fun and educational way to improve the quality of the rivers and streams in your area? The Council offers many ways for you to help improve your watershed.

**Student Watershed Research Project**

The Council provides funding for Forest Grove High School students to participate in hands-on watershed educational activities. The students take water samples from Gales Creek and test for dissolved oxygen, temperature, and pH. They also document the riparian conditions along the creek to help them better understand the test results. The Council uses this data to monitor trends that develop as a result of its restoration work in the Gales Creek sub-basin.

The students share their data and observations with other students who participated in SWRP and environmental professionals at the SWRP Summit.

**Spawning Survey Training**

The Council and biologists from Oregon Department of Fish and Wildlife (ODFW) sponsored training sessions for community volunteers and landowners to perform spawning surveys. The participants walked portions of Gales Creek and its tributaries to count and identify Coho salmon, winter steelhead trout, and Pacific lamprey redds. The information gathered, as a result of this activity, will be used to measure the success of the Council’s upstream restoration projects.

**Children’s Clean Water Festival**

The Clean Water Festival is designed for 4th and 5th grade students to learn about water and how it relates to our world and explore water science and watershed ecology. Council members Tarri Christopher and Jan Miller worked with participating classes to build a watershed out of newspaper, soil and water.

Other Council members like Lena Johanson worked with two second-grade classes from St. Anthony’s School on the importance of water quality. The students sampled water from Fanno Creek using a World Wide Monitoring Day kit. They tested for temperature, pH, dissolved oxygen, and turbidity in Fanno Creek. Through this program they learned about the water quality of Fanno Creek.

Neil Schroeder and granddaughter Emily Marsh (pictured) sampled pond and creek waters in the Basin and learned about temperature, pH, and dissolved oxygen. Other Council members like Lena Johanson worked with two second-grade classes from St. Anthony’s School on the importance of water quality. The students sampled water from Fanno Creek using a World Wide Monitoring Day kit. They tested for temperature, pH, dissolved oxygen, and turbidity in Fanno Creek. Through this program they learned about the water quality of Fanno Creek.

The Worldwide Monitoring Day Activities program provides an opportunity for students to sample pond and creek waters in the Basin and learn about temperature, pH, and dissolved oxygen. Other Council members like Lena Johanson worked with two second-grade classes from St. Anthony’s School on the importance of water quality. The students sampled water from Fanno Creek using a World Wide Monitoring Day kit. They tested for temperature, pH, dissolved oxygen, and turbidity in Fanno Creek. Through this program they learned about the water quality of Fanno Creek.

Is your class, club or neighborhood group looking for a fun and educational way to improve the quality of the rivers and streams in your area? The Council offers many ways for you to help improve your watershed.
The Council connects landowners with resources such as plants, grant funds, community volunteers, and expertise. It also connects community volunteers or organizations with projects. Do you have an idea for a project and need help from the Council? Visit www.trwc.org.

Rippling Waters is a 19-acre site, where the Council is currently enhancing the riparian and upland areas along Gales Creek. Prior to the Council’s restoration work, this site was overrun with invasive plants and littered with garbage.

In 2004, the Council and community volunteers began the restoration work on the site by removing English ivy. Over the next two years crews were hired to treat for Japanese knotweed and garlic mustard. Council members and volunteers started planting native trees and shrubs and mulching the plants.

In December 2007, flood waters from Gales Creek deposited between two and eight inches of sediment on the site. The sediment brought native plant seeds such as blue elderberry and non-native seeds such as reed canary grass, Japanese knotweed, and garlic mustard.

Council members worked with Cub Scouts and their families, Pacific University and Forest Grove High School students, and other community members to plant 1800 native plant stakes, shrubs and trees. Through these efforts, 5-8 acres of the site have been restored with native plants.

During 2008-09, community volunteers worked on removing invasive English ivy and marking native plants so that contracted crews treating invasive Himalayan blackberry and reed canary grass could easily identify and protect the growing native vegetation.

The Oregon Watershed Enhancement Board small grant program funds a portion of restoration projects on public and private lands. The Council and other partners often supply native plants and community volunteers that match the funding. The small grant monies are often used to pay expenses such as treatment and removal of invasive weeds, weed cloth purchase, planting native plants (pictured above) and other restoration expenses.

Lower Gales Creek Habitat Enhancement Plan
This long-term plan focuses on connecting floodplains and improving in-stream habitat to help native fish and wildlife. By providing additional pools, scour for fish and improving riparian areas, the Council will improve a five-mile area along Gales Creek. During 2008-09, the Council obtained the needed permits and materials to implement the project. The Gales Creek project to be implemented in 2009-10 will add habitat structures in the floodplain creating a one-acre riparian area. These improvements would not be possible without the time and effort contributed by the local landowners.

Other Restoration Projects
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Council restoration projects start with the identification of a need, followed by an evaluation against criteria. If the criteria are met, a plan is developed. The project will need funding, designs and specifications, permits before construction can begin. After construction, the project will be monitored and maintained to ensure its continued success.

**Providing Resources For A Healthier Watershed**

The Murtaugh Creek Fish Passage Project replaced a fish ladder that was destroyed during the 1996 floods. The site included a seasonal flashboard dam. Downstream of the flashboard dam the channel had incised 3-feet creating a fish passage barrier under most flow conditions. The design consists of a series of five rock weirs to raise the bed downstream of the structure and provide fish passage under all flow conditions by creating a backwater condition at the dam.

The completed project provides native fish access to two additional miles of excellent spawning and rearing habitat in the East Fork Murtaugh Creek Fish Passage Project Dairy Creek watershed. Council members and community volunteers worked with Oregon Department of Fish and Wildlife to remove native fish and amphibians from the stream prior to start of the project. The contractor set up pumps to “de-water” the stream and then built the five weir-pool structures by excavating five stream sites and placing two layers of rock to build each weir-pool structure (pictured above left and above right). Council members and community volunteers replanted disturbed areas from the project in December 2008 (pictured left). The Council continues to monitor the project.

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**Habitat Enhancement Plan**

The Lower Gales Creek Habitat Enhancement Plan focuses on connecting floodplains and improving in-stream habitat to help native fish and wildlife. By providing additional pools, scour for fish and improving riparian areas, the Council will improve a five-mile area along Gales Creek. During 2008-09, the Council obtained the needed permits and materials to implement the project. The Gales Creek project to be implemented in 2009-10 will add habitat structures in the floodplain, create off-channel habitat areas, and restore a 2.5 acre riparian area. These improvements would not be possible without the time and effort contributed by the local landowners, and partners of the Council.
Engaging The Community

The Council provides a forum for groups to present projects that impact the citizens of the Tualatin Basin and obtain feedback from a diverse set of stakeholders.

Tualatin Basin Water Supply Project and Title Transfer
The Council serves as key stakeholder group for the technical aspects of these projects. The Water Supply Project is currently developing plans to meet the basins need for an additional 50,000 acre-feet of water by the year 2050. Dependable fresh water resources will ensure the long term economic health and livability of the Tualatin Watershed. The Title Transfer Project is examining the feasibility of transferring ownership from the U.S. Bureau of Reclamation to a local governing body.

Tualatin Basin Temperature TMDL (“total maximum daily load”) Presentations
The Council serves as a key stakeholder group to Oregon Department of Environmental Quality (ODEQ) as it revises the Tualatin Basin Temperature TMDL (total maximum daily load) presentation. Avis Newell, Tualatin Basin coordinator for ODEQ met and will continue to meet with the Council over the next several years to familiarize the Council with current standards, effects from past regulations and development of future standards.

A View of the Tualatin Basin from a fisheries perspective
Tom Murtagh, Oregon Department of Fish and Wildlife North Willamette Basin District Fisheries Biologist, provided an overview of fisheries population, habitat requirements and challenges in the Tualatin Basin.

Blue Heron Park HOA Restoration Presentation
Sandra Burtzos, a member of the Blue Heron Park HOA and council member Carla Staedter provided information on the restoration project the HOA performs on its 2.1 acre property in Tigard, OR. Other partners in the project included Clean Water Services, City of Tigard, Tualatin River Watershed Council and the Oregon Watershed Enhancement Board (OWEB) small grant program.

Update on Garlic Mustard in the Tualatin River Watershed
Peter Guillozet, Clean Water Services, provided an update on the spread of garlic mustard in the Tualatin Basin and the partnerships formed for treatment of this aggressive invasive plant.

Oregon Department of Agriculture Water Quality Work
Shelia Ault, Oregon Department of Agriculture (ODA), presented information on ODA water quality requirements. Shelia, with Lacey Townsend, Tualatin Soil and Water Conservation District, discussed how they assist landowners in the basin to comply with ODA regulations.

Washington County Urban and Rural Reserves Planning Process
Mike Dahlstrom, Washington County, presented information on the county’s urban and rural reserves planning process. Metro and the surrounding counties are utilizing a new approach to determine which areas will be reserved for rural use and where urban growth will be allowed.

Other Meeting Topics
Additional Council meeting topics included a presentation by a local middle school science team; Stimson Lumber Co.’s Gales Peak deflection berm work; updates on the Valley & Vineyard Scenic Tour Route; and the Native Plant Co-op Nursery work.
Council Capacity

During 2008-09, Council committees implement the Council Strategic Plan’s four focus areas: Education and outreach, restoration and enhancement, issues forum, and capacity building. Each focus area has strategies, activities, intermediate outcomes and goals.
Council Capacity

Funding Sources

<table>
<thead>
<tr>
<th>Operating</th>
<th>Council Projects - Volunteers &amp; Cash</th>
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<tbody>
<tr>
<td>Volunteer Hours</td>
<td>Volunteer Hours</td>
</tr>
<tr>
<td>Officers: 449</td>
<td>Council and Community: 750</td>
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<tr>
<td>Council Members: 1,142</td>
<td>Cash</td>
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<tr>
<td>Cash</td>
<td>-OWEB Small Grants</td>
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<td>-Oregon Watershed Enhancement Board (OWEB)</td>
<td>-OWEB Restoration Grant</td>
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<td>-Clean Water Services</td>
<td>-U.S. Bureau of Reclamation</td>
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<tr>
<td>-Tualatin Hills Park and Recreation District</td>
<td>-Oregon Department of Fish and Wildlife Landowner Incentive Program</td>
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<tr>
<td>-Tualatin Valley Water District</td>
<td>-Oregon Department of Fish and Wildlife Fish Screening and Passage Program</td>
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<tr>
<td>In-Kind</td>
<td>-Salmon Habitat Fund</td>
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<tr>
<td>-Washington County</td>
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<tr>
<td>-Tualatin Valley Water District</td>
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<tr>
<td>-Clean Water Services</td>
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Council Projects - In Kind

- Oregon Department of Fish and Wildlife
- Oregon Department of Transportation
- Pamm and Les Davis
- Washington County Parks & Facilities Management
- Washington County Transportation Division
- Tualatin Soil and Water Conservation District
- Native Plant Co-op Nursery
- Northwest Invasive Weed Partnership
- Four County Cooperative Weed Management Area
- Association of Northwest Steelheaders
- Tualatin Valley Chapter
- Pacific University students
- Delta Chi Delta fraternity members (Pacific University)
- Pi Kappa Rho sorority members (Pacific University)
- Patricia O’Brien
- Chris Wayland
- Portland State University, Student Watershed Research Project
- SOLV
- Oregon State University Extension Service

Special Thanks To Everyone Who Assisted The Council