

**THREATENED SPECIES AND  
UPLAND HABITAT ENHANCEMENT**  
(Taken from Appendix F of the Tualatin Soil and Water  
Conservation District's Long Range Business Plan for 2011-2015)

**Description of Resource Concern**

Healthy fish and wildlife populations require adequate habitat, which is provided in natural systems and, for many species, in landscapes managed for forestry, agriculture, range, and urban uses. Unfortunately, many species, which were historically abundant in the Tualatin River Watershed, are declining due to population growth, land-use conversion, and pollution.

The Endangered Species Act of 1973 provided for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend. In Oregon, the Fish and Wildlife Commission, through the Oregon Department of Fish and Wildlife maintains the state threatened and endangered species list of native wildlife species. Plant species lists are handled through the Oregon Department of Agriculture, while invertebrates are handled through the Oregon Natural Heritage Program.

An "endangered" species is threatened with extinction within all or a significant portion of its range. A "threatened" species could become endangered within the foreseeable future within all or a portion of its range. As species are placed on the Endangered Species List, regulatory costs for both public and private development projects increase. Restoring populations of strategy species helps avoid these costs while also providing better recreation opportunities for the growing number of birdwatchers and others who enjoy nature.

Our goals are to maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats, preventing declines of at-risk species, and reversing declines in these resources where possible. In the Tualatin River Watershed, species that are high priority for restoration include steelhead trout, Nelson's checker-mallow, northern red-legged frog, Fender's blue butterfly, acorn woodpecker, western meadowlark, yellow-breasted chat, and willow flycatcher<sup>1</sup>.

While all listed species are important to consider for restoration, salmonids in particular are a defining symbol of the Pacific Northwest. Because salmonid species are such good indicators of a healthy ecosystem, it is important that we protect them. Specifically, the Upper Willamette River Steelhead, listed as threatened in Oregon, is one of the top priorities for restoration. The steelhead has been on the threatened species list since 2006. Figure 16 shows the fish's distribution in the Tualatin River Watershed. Gales Creek, one of the District's target areas for restoration, is the only remaining critical habitat for the steelhead in the Tualatin River Watershed (Figure 17).

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<sup>1</sup> ODFW, 2006. Oregon Conservation Strategy (Willamette Valley Ecoregion). Available online at [http://www.dfw.state.or.us/conservationstrategy/document\\_pdf/b-eco\\_wv.pdf](http://www.dfw.state.or.us/conservationstrategy/document_pdf/b-eco_wv.pdf) (Verified 30 December 2010).

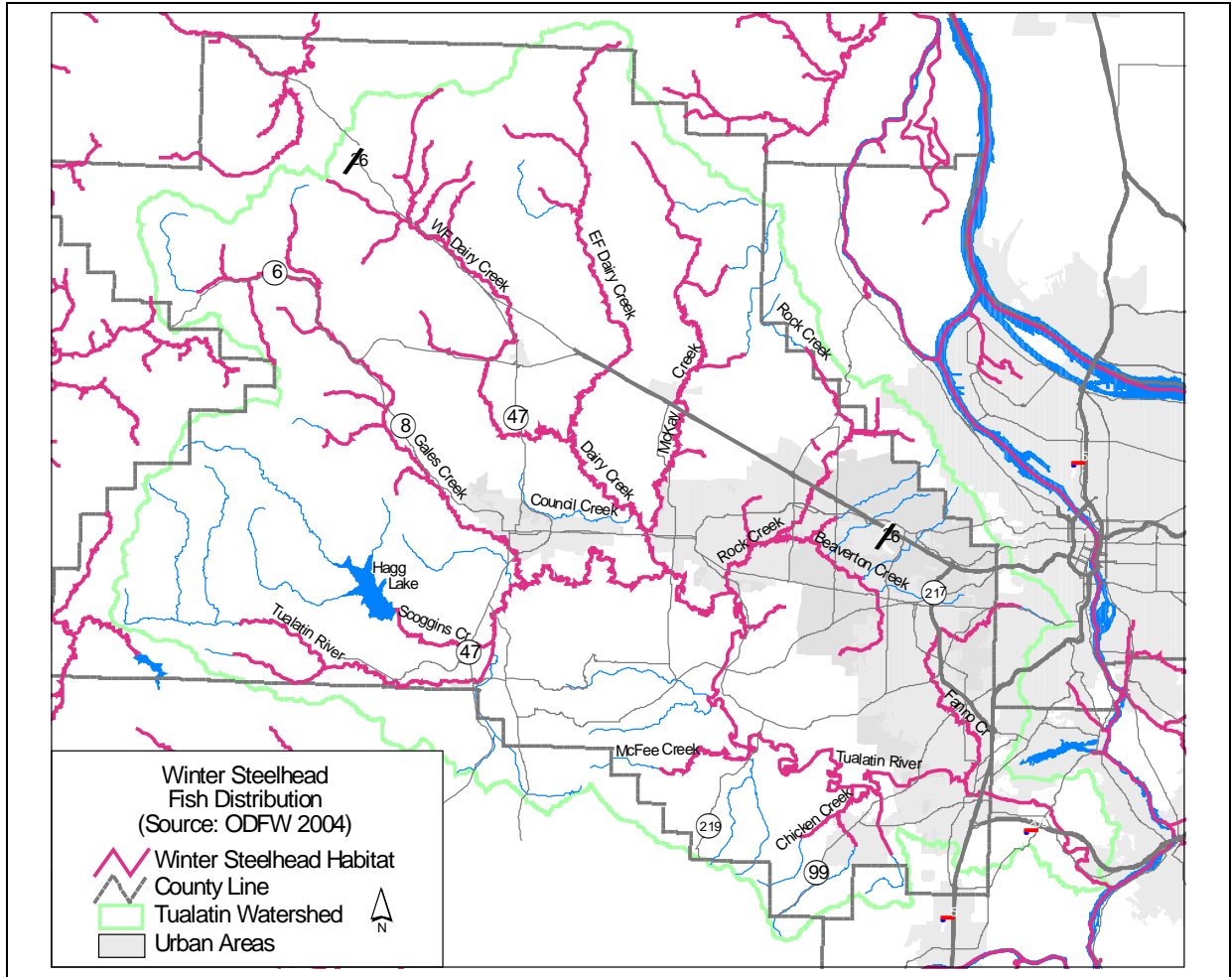
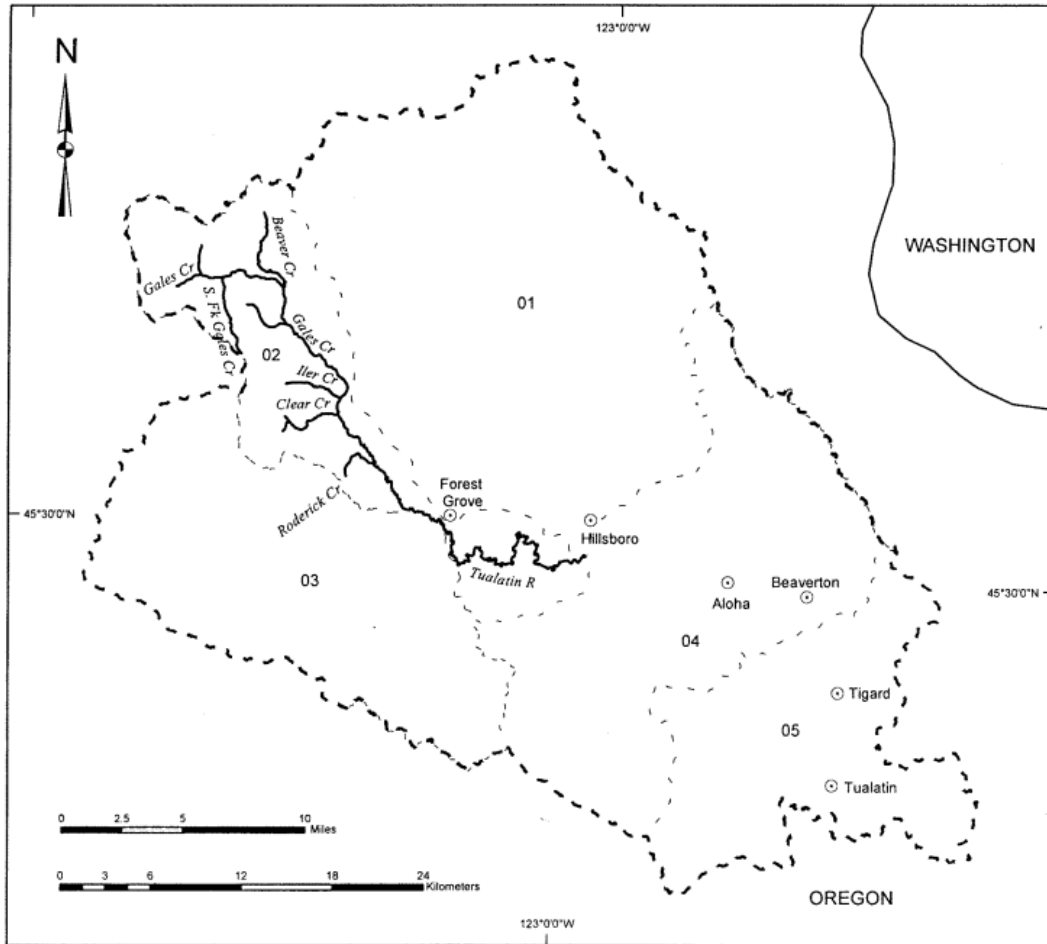


Figure 1. Winter Steelhead Distribution in the Tualatin River Watershed.

**Final Critical Habitat for the  
Upper Willamette River Steelhead ESU**

**TUALATIN SUBBASIN  
17090010**



**Legend**

- Cities / Towns
- State Boundary
- ~ Critical Habitat
- - - Subbasin Boundary
- Watershed Boundaries

01 - 05 = Watershed code - last 2 digits of 17090010xx



Figure 2. Critical Habitat for Upper Willamette River Steelhead in the Tualatin Subbasin<sup>2</sup>. Note: Gales Creek, a major tributary to the Tualatin River, is the only critical habitat for steelhead remaining in the basin.

<sup>2</sup> Federal Register. 2 September 2005. Upper Willamette River Steelhead ESU. 70FR52630 – 52858. Vol. 70, No. 170. Rules and Regulations.

**Pollinators** are a necessary part of addressing healthy wildlife populations. They are critical to our environment and are necessary to life as we know it. Did you know that 75% of all flowering plants rely on pollination? In the U.S., pollination by honey bees and other insects produces almost \$20 billion of products annually. Over 1,000 plants grown for food, beverages, fiber, spices, and medicines rely on pollination to produce resources on which we depend.

In recent years, populations of pollinators have declined significantly. The number of managed honey bee colonies has dropped from 5 million in the 1940s to 2.5 million today. This is a serious problem. However, steps can be taken to increase habitat for and attract pollinators. Examples include planting flowers to attract pollinators, protecting nest sites, and minimizing pesticide use.

## Highlights of Accomplishments

All conservation plans the District has written include conservation practices aimed at protecting threatened and endangered species. For example, riparian forest buffers are planted along streams, providing shade to improve water quality for steelhead trout; bird houses are installed to attract sensitive species; perches are installed to attract raptors; wetlands are restored to restore populations of Nelson’s checker mallow; and flowering plants are added to the landscape to attract pollinators.

## Desired Conditions

- Habitat is healthy to attract threatened species.
- No new species are listed.
- Delisting of species in the Tualatin River Watershed.
- Pollination is adequate for plants relying on it for production.

## Goals

By the end of 2015, have a demonstrated increase in:

- the acres of restored habitat
- spawning or population counts for threatened species
- pollinator habitat

## Strategies and Actions

**Table 1. Timeline of Desired Conditions and Actions for Threatened Species and Upland Habitat Enhancement**

Benchmark	Timeline	Actions
Maintain or increase populations	Ongoing	<ul style="list-style-type: none"> <li>▪ Work in-house or with partner agencies to complete population surveys for strategy species.</li> <li>▪ Include surveys as part of conservation plan development.</li> <li>▪ Train employees to identify threatened and endangered species and to understand the resource management techniques critical for species survival.</li> <li>▪ Develop a list of conservation practices to implement to improve habitat for the strategy species.</li> </ul>

Maintain or increase restored habitat	Ongoing	<ul style="list-style-type: none"> <li>▪ Partner with other agencies to implement conservation projects.</li> <li>▪ Assist landowners to find out about available incentive programs (e.g. USDA's Wildlife Habitat Incentive Program and ODFW's Riparian Lands Tax Incentive).</li> <li>▪ Support the development of ecosystem markets related to wildlife habitat in the Tualatin River Watershed.</li> <li>▪ Include habitat improvements in individual plans.</li> </ul>
Work to reintroduce native and/or beneficial plants or animals	Ongoing	<ul style="list-style-type: none"> <li>▪ Identify which species should be reintroduced and areas appropriate for reintroduction.</li> <li>▪ Work with interested landowners to reintroduce these plants or animals through conservation planning</li> </ul>

**Key partners necessary to achieve the desired conditions include:**

- Private landowners
- Natural Resources Conservation Service
- Oregon Department of Fish and Wildlife
- Tualatin River Watershed Council
- Oregon Department of Forestry
- Willamette Partnership
- Xerces Society

**Measurements**

- Acres of maintained or restored habitat
- Number of spawning surveys completed
- Acres of threatened species identified in surveys
- Percent of conservation plans including practices addressing threatened species