

1 – Watershed Overview

Overview

Water Environment Services (WES) is a department of Clackamas County that conducts and manages surface water management services in several districts including the Surface Water Management Agency of Clackamas County (SWMACC). The SWMACC District encompasses all unincorporated areas of the Tualatin River Basin that are within Clackamas County. **Figure 1** shows the four main areas of the District in relation to the County, Tualatin River Basin and the Portland Metropolitan area.

[Add paragraph describing WES' current role in the District \(include drywells\).](#)

WES is completing the SWMACC District Subwatershed Characterization to provide the baseline information needed to prioritize surface water management program activities and future investments for watershed management should District residents approve increased fees and an expanded role for WES.

Watershed Overview

The Tualatin River watershed (**Figure 1**) is 712 square miles in size. Most of this area is in Washington County. Approximately 16 square miles are within the SWMACC District. The District was created in 1992 due to Tualatin River TMDLs. It encompasses all areas of the Tualatin River basin that are within Clackamas County. The District is adjacent to West Linn, Lake Oswego, Tualatin, and Sherwood. It includes incorporated areas of Rivergrove and unincorporated suburban areas in Lake Grove as well as tracts of unincorporated agricultural and rural residential land south of Sherwood and Lake Oswego. I-205 cuts through the main SWMACC District area. It runs generally east-west and crosses the Tualatin River as well as a number of the 11 named and unnamed tributary streams in the District.

Because the District is comprised almost entirely of unincorporated land it is not highly developed. The District is not served by a public sanitary sewer system. Much of the SWMACC District was likely converted from forest to agriculture following settlement. District streams have been impacted by this as well as roads, and other rural development since the early 1900s. As the population in Oregon and the Portland metropolitan area has increased agricultural land in the District has gradually converted to rural residential and other suburban uses. This conversion is affected by the proximity of agricultural lands to incorporated cities and the inclusion of these areas within urban growth boundaries. In keeping with this, the Lake Grove and Rivergrove areas of the District are suburban in character while areas further to the south have a rural residential or agricultural character.

The steeply sloped topography of much of the District does not lend itself to large scale agricultural production. Agricultural uses are dominated by wood lots, pasture, and hobby farms with smaller numbers of livestock such as sheep, goats, cows, and horses. Pasture areas are located in flatters areas in the headwaters and along the Tualatin River and the lower reaches of tributary drainages.

Current zoning in the District and surrounding areas (**Figure 2**) show the transition from single- and multi-family development inside the urban growth boundary (UGB) to rural residential and agricultural and forestry outside the UGB. **Figure 2** also shows urban reserves that indicate areas where the urban growth boundary may be expanded. These areas will likely be developed to greater densities in the future.

When undeveloped land is covered with buildings and pavement, it causes more stormwater runoff to flow into creeks at faster rates. This may cause creek channel erosion, as well as flooding, and habitat

loss. In some cases it may result in property damage. These development-induced changes to the natural hydrological processes and runoff characteristics are called hydromodification.