Wastewater - Overview

The City of Washougal collects, conveys and treats wastewater before returning it to the Columbia River as highly treated effluent. Take the virtual tour as it guides you through from waste collection to treatment and ultimately being returned to the environment.



Users

When we use our toilets or shower the waste that is flushed or drained from our homes and businesses is collected in our collections system.



Wastewater Collection System

The City of Washougal's sewer collections system collects and conveys sanitary waste from a variety of users. Most of our customers are residential but there are some industrial and commercial users. Our collections system carries sanitary waste to our Publicly Owned Treatment Works (POTW) where it is treated and ultimately discharged to the Columbia River.



POTW

The City of Washougal treatment plant treats wastewater though a biological process. Sanitary waste enters the plant through a screen that removes larger hard to treat constituents of the waste stream, such as plastics. The waste then flows to a grit chamber where heavier inorganics like sand, grit and egg shells are removed. The waste is then pumped to the oxidation ditch where it is introduced to an army of micro organisms that consume and breakdown the waste. From the ditch the waste flows to our clarifiers where the heavier particles settle to the bottom and the clean water flows over weirs to our disinfection process. We use UV light disinfection to neutralize bacteria remaining in the waste stream and then pump the finished water to our outfall on the Columbia River.

Receiving Waters Outfall

Our treated "effluent" which boasts removal rates well over 95% and is cleaner than the receiving water of the Columbia River is discharged through a manifolded pipeline in the river.



Wastewater Lagoons

The majority of the solids that settle out in our clarifiers are returned to the oxidation ditch to keep the micro organism population healthy and robust but a certain amount is discharged to our solids handling lagoons where it is stabilized through a facultative process (oxygen rich environment and oxygen deficient environment) before being dredged and land applied for beneficial use as a soil amendment.

