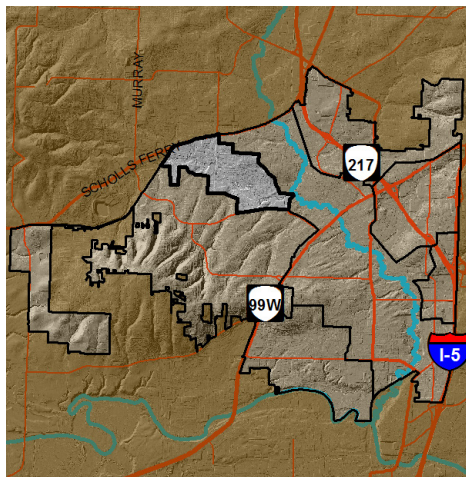




Summer Creek Study Area



Existing Conditions

Summer Creek enters Tigard under Barrows Road from Beaverton and meets Fanno Creek near Thomas R. Fowler Middle School. The study area is only 0.75 sq. mi., but the creek drains a large urban basin upstream of Tigard.

In Summerlake Park an historic dam across the creek creates a lake. The open expanse of slow-moving water has produced significant water temperature increases during summer.

Most of the Bull Mountain study area creeks are tributaries to Summer Creek. Unlike the fast-moving streams tumbling down Bull Mountain, Summer Creek is nearly flat and meanders through its greenways. Summer Creek falls only 50 feet in two miles.

Much of Summer Creek's floodplain in Tigard is wide with good riparian vegetation. However, historic incision has disconnected the creek from its

floodplain in a number of areas. In a few neighborhoods that were developed prior to stream setbacks regulations, homes are located in the floodplain.

Several sanitary sewer lines cross perpendicular to creek flows. Although Clean Water Services has been pursuing options to abandon these crossings, the pipes remain a spill risk in the meantime.

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Issues and Risks

The Stormwater Master Plan assessed the risk of erosion in Tigard's streams. The assessment analyzed the likelihood of erosion based on stream geology and the consequence of erosion based on the stream's proximity to important features such as roads, sewer lines, and buildings.

The first mile of the Summer Creek study area in Tigard is classed in the lowest overall risk category for erosion. Wide greenways and parks flanking the creek have kept development away from the channel through these reaches, and flat grades reduce the likelihood of erosion.

The second mile is characterized by somewhat narrower greenways, more frequent sewer crossings, and some areas of development in the floodplain. Overall risk of erosion in these reaches

is classified as moderate to moderately high.

Only one small stretch of Summer Creek is classified with high overall erosion risk.

Bacteria is a concern in Summer Creek. The beneficial use of primary contact recreation is protected under the Clean Water Act (CWA) through a Total Maximum Daily Load (TMDL) for bacteria.

The beneficial use of salmonid fish rearing, which requires cold water, is also protected under the CWA through a TMDL for temperature. Summer stream temperatures at Fowler Middle School have reached higher than 70° F, a temperature which can stress or harm native salmon and steelhead.

Proposed Strategies and Solutions

The primary strategies proposed for the Summer Creek study area are water quality enhancement and temperature reduction. A multi-pronged effort is proposed in the Summer Lake Water Quality Enhancement Program. The program includes shading and habitat enhancements on islands and selected shorelines in Summerlake Park, floating treatment islands, rain gardens in adjacent neighborhoods, continued outreach on bacteria reduction, and other actions.

In addition, upstream tributaries to Summer Creek in the Bull Mountain study area have been prioritized in the Stormwater Master Plan. Three capital improvement projects (CIPs) proposed on Kruger Creek could positively impact water quality in Summer Creek by

reducing transport of sediment from Kruger Creek into Summer Creek.

One priority CIP in the study area is downstream of Summerlake Park and will remove a structure from the floodplain.

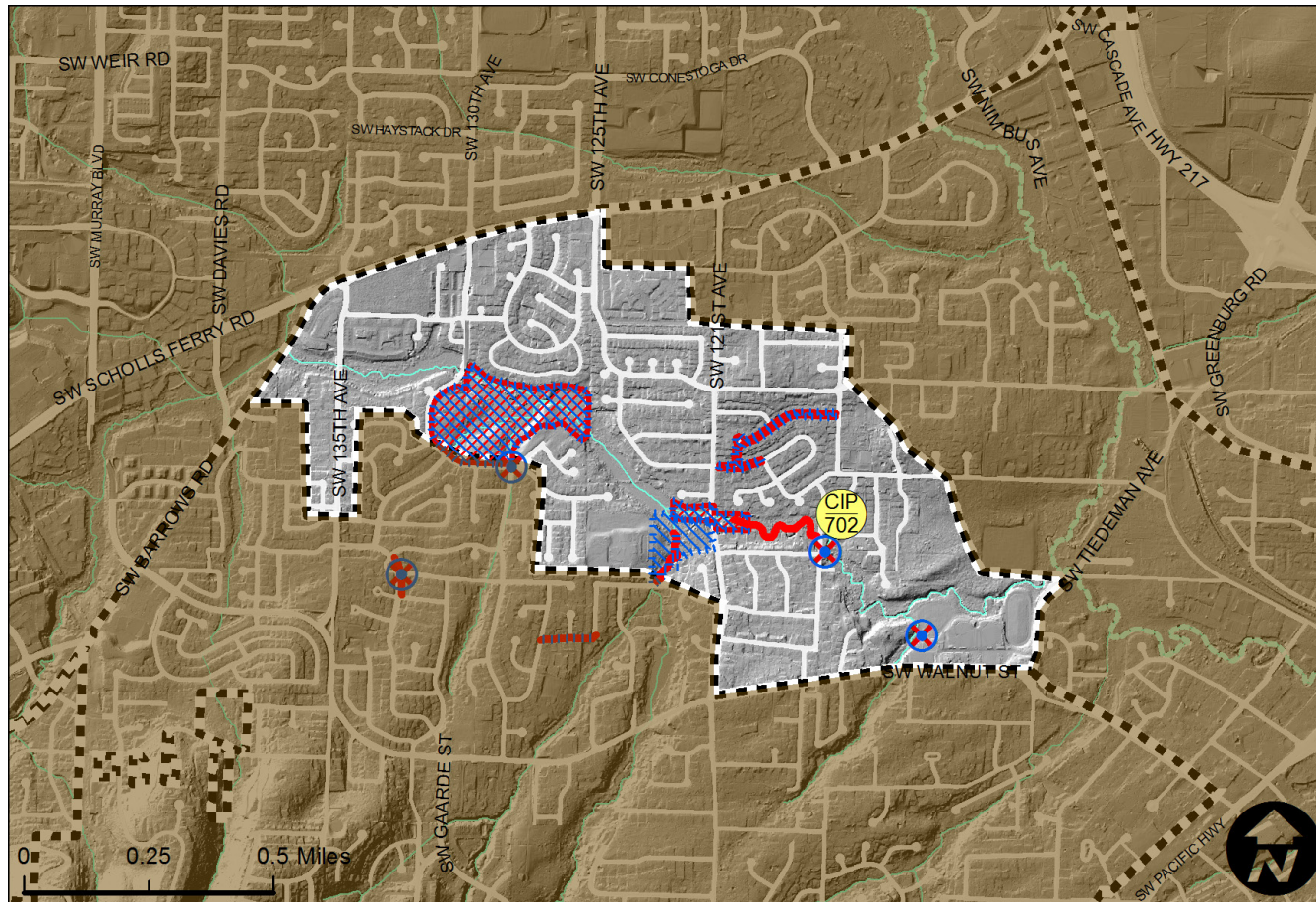
Proposed CIPs

[SW 116th Avenue Property Acquisition & Floodplain Storage](#)

Rank: 4	CIP 702
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Total Cost: \$1.2 million

Summer Creek Study Area



Legend

Known Issues		Potential Projects
✗ Point	⊙ Point	⊙ CIP no. Capital Improvement Project
— Line	— Line	▣ Study Area
▨ Area	▨ Area	

Through most of its length in Tigard, Summer Creek flows through established greenways and City parks. With public land flanking much of Summer Creek, riparian restoration efforts have been ongoing for nearly ten years. Clean Water Services recently took over restoration and maintenance activities.

Much of the Summer Creek study area is in relatively good condition. Many of the water quality concerns in the study area can be attributed to Summer Lake.

High bacteria levels have been measured downstream of Summerlake Park. Bacterial levels fell after a successful effort to reduce sources of bacteria. Between 2005 and 2007, the city installed vegetative filter strips at the dog park, worked with a private property owner to dismantle a waterfowl feeding station, and began removing nutria from the lake. A dog waste pick-up outreach campaign ran in 2007.

Despite these improvements, Summer Lake continues to have high bacteria and high temperatures.

Summer Creek benefits from strong community interest and various ongoing education and stewardship opportunities offered by Tualatin Riverkeepers, Clean Water Services, and the Tigard Tualatin School District.

