

Project Rank: 11

ID: CIP 303

Name: Hunter’s Glen Pond Rehabilitation

Study Area: Bull Mountain

Location: East of SW 116th Ave Between SW Elton Ct and SW 114th Terrace

**Problem Summary**

An un-named tributary of Summer Creek flows north through the Hunter’s Glen Greenway toward Fowler Middle School.

The surrounding residential neighborhoods were built in the late 1990’s through the 2000’s when water quality treatment was commonly required with development. A water quality swale and stormwater pond were constructed in the greenway to meet these requirements.

The swale and pond have failed, likely from being filled with silt. The pond is full of algae, and water bypasses its outlet. Erosion is occurring downstream of the pond.

City staff have difficulty accessing the swale and pond for maintenance.

**Project Description**

The project will rehabilitate and enlarge the stormwater pond to improve water quality in the stream.

A large underground pre-settling vault will be constructed upstream of the pond to catch silt before it enters the pond. The pond will be dredged of silt and expanded to increase its water quality benefit and detention capacity.

A new flow control structure will replace the current malfunctioning outlet pipe, improving the detention function of the pond. Detention in this upstream reach should reduce erosion downstream.

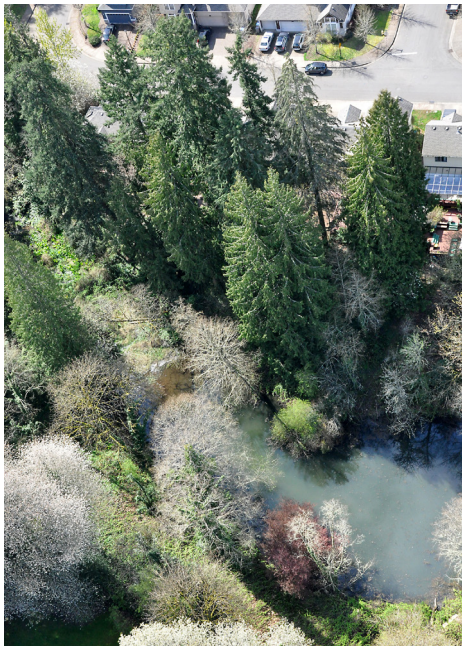
Maintenance access will be provided to both the pre-settling vault and the flow control structure.

The project will add scour protection at the outlet of the flow control structure to reduce erosion in the stream.

There may be an opportunity to partner with Clean Water Services and private property owners to restore native vegetation in the greenway.

Benefits of this project include:

- Improve water quality
- Reduce downstream erosion
- Improve maintenance access



## Cost Estimate

### Design & Permitting

Design (@ 20% of Construction)	\$170,000
Permitting, Basic + Enhanced	\$45,000
Project Administration (@ 12% Construction)	\$100,000
<b>Total Design &amp; Permitting</b>	<b>\$315,000</b>

### Construction

Tool Kit	Qty	Unit	Unit Price	Amount
Aboveground Storage	106,756	CF	\$3.50	\$374,000
Modify Flow Control, Manhole	1	EA	\$20,500	\$21,000
Outfall Scour Protection, Small Pipe	1	EA	\$5,100	\$6,000
Pre-settling Basin, Large Vault	1	EA	\$60,000	\$60,000
<b>Subtotal</b>				<b>\$461,000</b>

### Construction Administration

Mobilization (@ 10% of Construction)	\$85,000
Erosion & Sediment Control (@ 2% of Construction)	\$17,000
Temporary Water Management, Medium	\$25,000
Construction Contingency (@ 30% of Construction)	\$255,000
<b>Subtotal</b>	<b>\$382,000</b>

**Total Construction \$843,000**

### Other Implementation

Easement or Property Acquisition	\$5,000
Environmental Mitigation	\$50,000
<b>Total Other Implementation</b>	<b>\$55,000</b>

**Total Project Cost (Rounded) \$1,225,000**

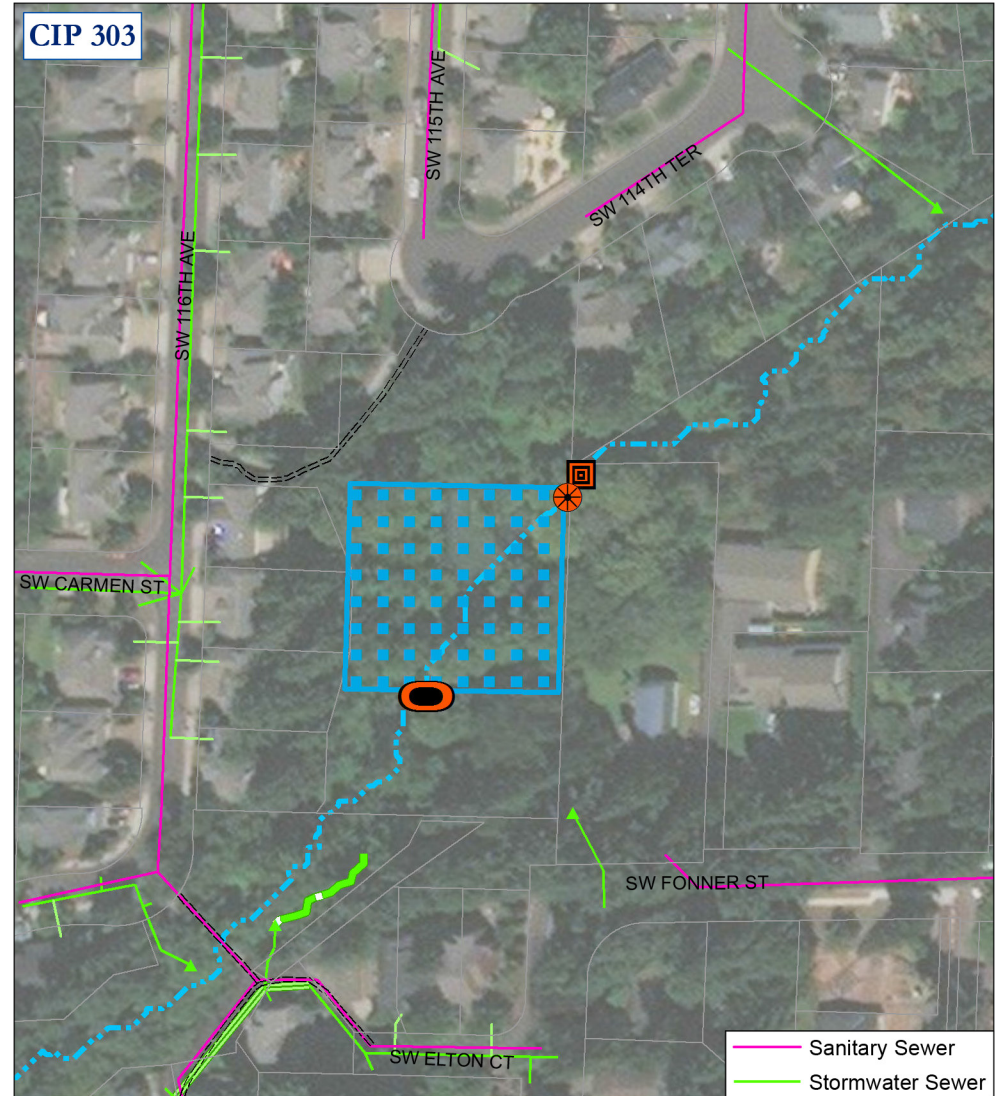
### Funding Source





Stormwater Fund

Costs of riparian restoration for shade are not estimated; these costs are included in the proposed Greenway Restoration, Establishment & Maintenance Program.

### Annual Operation & Maintenance

Operation and maintenance will be budgeted within the ongoing routine stormwater facility maintenance program.



-  1, Above Ground Storage
-  6, Modify Flow Control
-  8, Outfall Scour Protection
-  12, Settling Basin

