

Appendix C—Construction Cost  
Estimates

Baseline Water Quality Study for Belfair UGA - Project Cost Estimate  
 Prepared June 2007

Baseline Water Quality Monitoring Program

This estimate is based on the following assumptions.

	Hours	Rate	Cost
Monitoring locations will be selected with help from a consultant	20	\$ 100	\$ 2,000
Samples will be collected 6 times per year, for 1 year, at 12 monitoring sites	0	\$ -	\$ -
Consultant will train County Staff to collect samples	20	\$ 100	\$ 2,000
Grab samples will be collected by County Staff (following training by consultant)	0	\$ -	\$ -
Samples will be outsourced to a lab for testing (60hrs, 6 times)	360	\$ 80	\$ 28,800
Results will be outsourced to a consultant for analysis (40hrs, 6 times)	240	\$ 100	\$ 24,000
Documentation of results will be prepared by a consultant (30hrs, 6 times)	180	\$ 100	\$ 18,000
			<b>\$ 74,800.00</b>

The following elements will be monitored:

Fecal coliform, temperature, dissolved oxygen, total suspended solids, nutrient loadings, Metals (such as copper and zinc), oil, and grease.

12 monitoring sites allows for 2 monitoring sites on each of 6 creeks (Viola, Irene, Belfair, Mindy, Sweetwater, and Alder Creeks)

Baseline Habitat Study for Belfair UGA - Project Cost Estimate  
 Prepared June 2007

Baseline Stream and Habitat Assessment and Mapping Program

This estimate is based on the following assumptions.

	Hours	Rate	Cost
Two biologist spend 1.8 hour day per each of 5 streams and cover approximately 1 mile of stream length.	120	\$ 100	\$ 12,000
Documentation of results will be prepared by a consultant	40	\$ 100	\$ 4,000
Preparation of GIS database and maps by GIS specialist	40	\$ 100	\$ 4,000
			<b>\$ 20,000.00</b>

The following elements will be observed/mapped/documentated:

Actual stream location, fish presence/absence, wetlands, culverts, and qualitative habitat assessment such as locations of pools/riffles, and large woody debris, etc.

Belfair Creek Fish Passage Improvement - Project Cost Estimate  
 Prepared June 2007

Property Acquisition

1, 0.9 ac parcel, tax assessor value \$88,000			\$ 100,000	<u>Data Source</u>
Easements	12,300 SF	\$ 3.00 per SF	\$ 36,900	(www.zillow.com)
	3,500 SF	\$ 3.00 per SF	\$ 10,500	(\$3/SF estimated by LR)
Property acquisition subtotal			\$ 147,400	

Fish Passage Culvert

50 LF	\$ 1,000.00 per LF	\$ 50,000	(Olympic Region WSDOT Bid History Data)
200 LF	\$ 1,000.00 per LF	\$ 200,000	
100 LF	\$ 1,000.00 per LF	\$ 100,000	
Culvert subtotal			\$ 350,000

Site Prep and Restoration

Site Clearing	1.3 Acre at	\$ 5,000 per acre	\$ 6,500	(Olympic Region WSDOT Bid History Data)
Roadway/Ditch Ex	1860 CY	\$ 25.00 per LF	\$ 46,500	(Olympic Region WSDOT Bid History Data, 10'wx5'd)
Streambed Gravel	390 CY	\$ 100.00 per LF	\$ 39,000	(Olympic Region WSDOT Bid History Data, 7'wx1.5'd)
Restoration/Planting	1.3 Acre at	\$ 15,000 per acre	\$ 19,500	(Planting cost for a similar project in Kirkland, WA)
Site work subtotal			\$ 111,500	

SUBTOTAL \$ 608,900

EROSION & SEDIMENT CONTROL	5%	\$30,445
TRAFFIC CONTROL	8%	\$48,712
CONTINGENCY	30%	\$182,670
CONSTRUCTION SUBTOTAL		

MOBILIZATION 10% \$87,073  
**CONSTRUCTION SUBTOTAL (Rounded) \$957,800**

STATE SALES TAX	8.3%	\$79,497
ENGINEERING/LEGAL/ADMIN	25%	\$239,450
CONSTRUCTION MANAGEMENT	20%	\$191,560
PERMITTING	5%	\$47,890
<b>PROJECT SUBTOTAL (Rounded) \$1,516,200</b>		