

# Discovery Clean Water Alliance

## CAPITAL PROJECT PROFILE

**Project Name:** SCTP Programmable Logic Controller Replacement    **Project Type:** Existing Asset– Repair

**Project Number:** RA07-16-1    Existing Asset – Replacement

**Form Prepared/Updated:** April 2014    New Asset – Capacity

New Asset – Regulatory

New Asset – Level of Service

**Project Definition:**

Objective. Programmable Logic Controllers (PLCs) are the primary computerized control system hardware responsible for the Salmon Creek Treatment Plant operations and control. The project will replace a portion of the plant PLCs to ensure system reliability. The PLCs being replaced are approaching 20 years old and represent a product line that was discontinued in 2013 and will no longer be supported after 2020.

Scope of Work. The project will replace seven of the facility’s PLCs originally procured in 1996 as part of the Phase 3 Expansion, as these systems are no longer available and support from the manufacturer is scheduled to end in 2020. A significant portion of the total project costs are for programming the new PLCs, as the current programs are not transferrable to the new platform due to age. Additional work to design the new system and provide implementation, testing and startup support is also included in the total project cost.

Cost Allocation. The project costs are apportioned to Battle Ground and the District according to treatment plant allocated capacity: 3.47 mgd (23.2%) for Battle Ground, and 11.48 mgd (76.8%) for the District. For additional information related to this project, see the *Control System PLC and Ethernet Network Evaluation TM*, CH2M HILL, November 2011.

**Photos (if available):**



*Existing PLC Installation*



*Salmon Creek Treatment Plant*



*Allen Bradley PLC-5*

**Budget Information:**

<u>Project Cost Estimate</u>		
Total Project Cost:	\$1,300,000	
Construction Cost:	\$500,000	
Basis of Estimate -		
Year Completed:	2014	
Project Definition:	5% design	(Class 4)

<u>Project Cost Allocation</u>		
Battle Ground:	23.2%	\$302,000
Clark County:	0%	\$0
District:	76.8%	\$998,000
Ridgefield:	0%	\$0
Total:	100%	\$1,300,000

**Schedule Information:**

<u>Activity</u>	<u>Year</u>
Planning	2015
Permitting	N/A
Real Property/ROW	N/A
Design	2015
Bid	2016
Construction	2016-2017