



**SPR Quarterly Progress Report**  
January 1, 2008 through March 31, 2008

Date March 26, 2008

**TO:** Technical Advisory Committee Members:

Miguel Estrada, ODOT  
Michele Eraut, FHWA  
William Fletcher, ODOT, Research Proposer  
Charlotte Kucera, ODOT  
Devin Simmons, NMFS

**FROM:** Matthew Mabey, Research Coordinator (ph: (503) 986-2847)

**1. Project**

Copper Toxicity and ESA Listed Salmon  
SPR # 663

**2. Key Dates**

Start Date for ODOT: September 10, 2007  
Completion Date for ODOT: October 31, 2009

**3. Principal Investigator**

Jeffrey A. Nason  
Department of Chemical, Biological and Environmental Engineering  
Oregon State University  
102 Gleeson Hall  
Corvallis OR 97331

**4. Progress**

- The literature review and draft sampling plans were completed and submitted to the TAC for review.
- The voltammetry instrument that was purchased last quarter has been installed in our lab. Graduate students have been trained and are currently working on implementation of the selected analytical method (competitive ligand exchange – adsorptive cathodic stripping voltammetry CLE-ACSV) for measurement of copper speciation in stormwater. Progress in this area is ongoing.

- Preliminary samples have been collected from local stormwater and freshwater sites (Oak Creek) for testing of all analytical methods. Work in this area is in progress.
- In coordination with the City of Corvallis, local sampling sites on Highway 20 in downtown Corvallis have been identified for continued preliminary sampling for the purpose of finalizing sampling handling and analytical procedures.
- We have been in contact with Herrera to coordinate sampling from the Portland I-5 site. Graduate students went on a site visit to get familiar with the sampling equipment and layout of the site.

**5. Problems**

- We are still running slightly behind schedule. I believe this is largely due to the steep learning curve for the graduate students working on the project. Both students are making good, steady progress on the analytical methods, but progress has been slower than expected. In addition, personal commitments (the birth of my son) necessitated the postponement of our first meeting with the TAC and slowed our progress some.

**6. Work Planned for Next Quarter**

- Meet with the TAC for input on the literature review and field sampling plan.
- Selection of field sites and finalization of field sampling plan with input from the TAC.
- Finalization of sampling procedures and analytical methods
- Coordination of sampling at continuous sites being monitored by Herrera.

**7. Finances**

**SPR Project Summary**

VENDOR	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	\$ 120,000	\$ 240,000	\$ 28,000		\$ 388,000
REVISED BUDGET	\$ 132,555	\$ 180,846	\$ 74,803		\$ 388,204
EXPENDITURES - VENDOR	\$ 21,701	\$ -	\$ -	\$ -	\$ 21,701
BALANCE	\$ 110,854	\$ 180,846	\$ 74,803	\$ -	\$ 366,503

ODOT	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	\$ 4,000	\$ 5,000	\$ 3,000		\$ 12,000
REVISED BUDGET	\$ 4,000	\$ 5,000	\$ 3,000		\$ 12,000
EXPENDITURES - ODOT	\$ 3,517	\$ -	\$ -	\$ -	\$ 3,517
BALANCE	\$ 483	\$ 5,000	\$ 3,000	\$ -	\$ 8,483

PROJECT	FY'08	FY'09	FY'10	FY11	TOTALS
ORIGINAL BUDGET	\$ 124,000	\$ 245,000	\$ 31,000	\$ -	\$ 400,000
REVISED BUDGET	\$ 136,555	\$ 185,846	\$ 77,803	\$ -	\$ 400,204
EXPENDITURES - PROJECT	\$ 25,218	\$ -	\$ -		\$ 25,218
BALANCE	\$ 111,337	\$ 185,846	\$ 77,803	\$ -	\$ 374,986