

Progress Report

OWEB Research Grant, 208-8006 (joint with Stan Gregory at OSU)

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University of Oregon

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Summary of Scope of Work

There are two over-arching parts for the UO component of this grant, both of which are highly collaborative with our OSU colleagues Stan Gregory and Randy Wildman:

Part A) Expand on the existing spatial framework of information to add new data on cold-water locations and fish usage of them to the geographic data on the Willamette historic floodplain; and

Part B) Organize and conduct a series of 'Willamette floodplain restoration lessons learned' mini-conferences in the south valley, mid-valley and north valley.

Requested information

- 1) Comparison of the actual accomplishments to the tasks and timeline established in the Statement of Work
 - a) This portion of the work focuses on developing a tool for evaluating potential projects intended to achieve restoration of one or more ecological functions in and near streams in the Willamette River Basin of western Oregon. Cold water refuges and native fish richness are two of five key ecosystem services that are being mapped for the southern floodplain. Area of floodplain forest, volume of flood storage capacity, channel wetted area, and channel length relative to floodplain axis length are others that may be added as project resources allow. Since restoration projects under consideration depend on the physical and biological conditions of specific locations, the work relies on spatially explicit data and analyses to quantify the amount of each service at discrete locations in the floodplain. In order to carry out the analysis at a spatial grain sufficiently fine to serve the decision making and monitoring objectives of intended users, we created a standard spatial reporting unit for a reach of the Willamette River from Eugene downstream to Corvallis. At present we have created the 100m spatial reporting units and have populated it with quantities of the floodplain forest area, channel wetted area, and channel length for conditions, ca. 2000. Next, we will create the same data using the Conservation scenario of the Pacific Northwest Ecosystem Research Consortium for the year 2050 as a comparative example of how much of each key ecosystem service would exist at each location under a restored condition. This will allow empirically-based comparisons of existing vs. restored conditions for factors shown by science to be critical to a healthy river.

- b) On March 20 and May 30, 2008 two Willamette Valley Floodplain Restoration Lessons Learned Conferences were held, the first in Eugene, the second in Aurora. The first focused on recent floodplain restoration efforts in the south part of the Willamette Valley, the second on the north. Over thirty participants spent the morning of each day hearing from experienced restoration practitioners regarding lessons learned from work completed in the past 5 - 10 years, and the afternoon traveling to see/hear first hand one of the projects presented in the morning sessions.

2) Adjustment to the objectives

- a) None to Part A of the project
- b) After consultation up and down the valley, the decision was made to hold two conferences, rather than three, to make more efficient use of project resources and attendee's time.

3) Preliminary findings

- a) While the work is incomplete, it is already clear that certain portions of the floodplain are much better equipped for restoration of only some of the 5 key ecosystem services, while other locations may offer the prospects of restoring significant amounts of all 5 services.
- b) Briefly, lessons from the 2008 conferences indicate that the past decade of floodplain restoration projects in the Willamette floodplain have been primarily opportunistic, with short-term stakeholder-oriented definitions of success and a focus on gaining land control with partnered agency funding. Private non-profit organizations have played a leadership role in the south valley while ratepayer utilities and metropolitan agencies have been instrumental in the north. The next decade offers the potential to move from an era of opportunism to one of strategy once new prioritization and assessment tools and information become widely available.

4) Expenditure reports through January 31, 2009

Salary:	\$49,666
Benefits:	\$25,153
Services and Supplies:	\$ 4563
Travel:	\$ 391
F&A ind. Cost:	<u>\$ 7977</u>

Total to date:

\$87,750