

Report to the Oregon Watershed Enhancement Board

For work titled:

*Development of physiological health criteria to assess habitat quality in degraded and recovering/restored stream systems*

Covering the period from July 1, 2008 through December 31, 2008

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In terms of content, we ask that grantees document progress that has been made toward accomplishing project objectives and completing project deliverables described in the project work plan. Specifically the reports must include brief information about:

- *Summary of progress to date:*  
First of all, I apologize for the lateness of this report. During this period (July 1-Dec 31, 2008) of the OWEB grant "*Development of physiological health criteria to assess habitat quality in degraded and recovering/restored stream systems*", we accomplished all field-related components of this work. We conducted summer physiological sampling of redband trout in three different river basins (John Day, Crooked River, Bridge Creek) during the peak heat period (late August) and after system cool-down in August-September. All samples for laboratory analysis are now stored. Furthermore, I have now hired a research technician to conduct the laboratory analyses and field work over the next two field seasons.

I would also like to note that through this OWEB-funded effort we have developed an excellent collaboration with both U.S. Geological Survey and National Marine Fisheries biologists working in the John Day basin. As was mentioned in the original proposal, The John Day system is unique in that it is (1) managed exclusively for natural production and (2) is an *Intensively Monitored Watershed* (IMW). As such there are a large number of research efforts ongoing in the area. Working with USGS and NMFS scientists, this summer we were able to share samples (thereby getting the greatest value out of each fish collected) as well as other environmental data. Furthermore, the intellectual exchanges between scientists, particularly surrounding the ecological health of the basin and potential for restoration action will lead to stronger final products from all parties involved.

- *A comparison of the actual accomplishments to the tasks and timeline established in the Statement of Work*  
As established in the statement of work, field sampling was to happen during June (previous report period), July-August, and September-October. This work has been completed. Laboratory analyses of field-collected

sampling should be proceeding at this time, with the intent that laboratory analyses are to be completed by the beginning of the subsequent field season. While all samples are on-hand for the laboratory work, these analyses have not yet begun.

- *Reasons for slippages if anticipated progress was not made*  
The primary reason for reduced progress during this budget period has been previously discussed with OWEB managers, and relates to the difficulty in obtaining a field/laboratory technician for this work. The grant officially started in April and the field season started in June. In that time period I was unable to identify a viable candidate for this position. I have now identified and made a position offer (accepted) to a more than capable candidate. She will be on staff here at Oregon State University in the spring. This means that she will start work prior to the 2009 field season, and will also start in on laboratory analyses upon her arrival. Based on the nature of the candidate (post-doctoral researcher instead of graduate student), I anticipate that work will proceed more rapidly than could be expected from a graduate student, and we will be largely caught up on our timeline/milestones by the end of the 2009 calendar year.
- *Adjustment to the objectives, if any*  
We have not made any adjustments to the original objectives at this time; we anticipate that as laboratory results become available we may refine methodologies used to achieve our objectives but do not anticipate changes to the objectives themselves.
- *Preliminary findings (or a definitive statement of when these are anticipated)*  
While all necessary samples have been collected on time, laboratory analyses have lagged behind (as noted above). This precludes us from reaching any early conclusions, but preliminary findings for the 2008 and 2009 field seasons should be ready by the end of the 2009 calendar year.
- *Expenditure reports documenting use of project funds*  
Expenditures and other accounting are officially to be provided directly by the Oregon State University Research Office (Sponsored Programs)
- *Progress toward meeting matching funds requirements*  
Expenditures and other accounting (including meeting matching fund requirements) are officially to be provided directly by the Oregon State University Research Office (Sponsored Programs).

We hope to provide the OWEB Board members with an update about your research grant at next week's Board meeting here in Salem. Feel free to contact me with any questions. Best - Renee