

Request for Proposals Hood River Basin In-stream Flow Assessment Statement of Work

1. Introduction:

During 2008, Hood River County (HRC) created a water planning group (HRCWPG) as a way to bring together a group of stakeholders from a wide array of interests and backgrounds in order to create a comprehensive water planning document that all stakeholders could use as a common foundation from which to work. As water imbalance issues become more acute, this cooperative approach to watershed management will be of paramount importance. In order to continue down this path of watershed stewardship, a common foundation of the understanding of the issues and potential solutions will be primary concern. The HRCWPG is soliciting assistance for several information gaps that must be filled in order to craft a guiding plan that balances the needs of all water interests for the next fifty years. This Request for a Proposal (RFP) addresses one critical information gap, that of identifying stream flows necessary to maintain and enable recovery of key fish stocks in the Hood River Basin.

Our approach to laying the groundwork from which a guiding document can be developed is as follows. When the physical habitat simulation modeling (PHABSIM) studies are completed, fish habitat vs. flow curves will be available for fish in the surveyed reaches using these curves. Fisheries stakeholders, familiar with the Hood Basin, will then identify monthly flows necessary to restore and maintain target fish populations. When optimal monthly fish flows are determined, future natural flows (obtained from climate modeling) will be overlaid with consumptive actual and forecast uses. The water planning group will then have the necessary information to craft a long term water management plan for the Hood River basin.

2. Scope of Work and Consultant Responsibilities:

A PHABSIM will be used to evaluate stream flows at up to six (6) high priority stream reaches in the Hood River basin. Our goal is to establish one reach in each of the following streams: East Fork Hood River, West Fork Hood River, Neal Creek, Green Point Creek, Evans Creek and Odell Creek. Reach location and length will be determined by the Hood River County Water Planning group with assistance provided by the contractor. Each reach will have a minimum of four transects. One dimensional analysis will be completed for transects in each of the proposed reaches.

For planning purposes, it is assumed each stream reach will not exceed one (1) mile in length and transect measurements will focus on salmonid adult holding, adult spawning and juvenile rearing habitat types for spring Chinook salmon, winter/summer steelhead and Coho salmon.

Actual number of reaches and transects per reach will be contingent upon habitat complexity, number of transects required to capture the range of habitats and available funds.

3. Tasks

For this study one dimensional PHABSIM modeling will be used to assess in-stream flow needs for aquatic species. The contractor will perform the following steps:

1. Work with HRCWPG to clarify study objectives and indentify the survey reach within each stream. The selected consultant will coordinate, schedule and provide all materials for a meeting with HRCWPG or designated sub-committee to accomplish this task. Schedule and lead up to five meetings of HRCWPG and Fisheries Agencies to develop the in-stream flow assessment and present study results.
2. Perform a basic stream survey to identify and map habitat units in the study areas following the current version of ODFW's Aquatic Inventory Stream Habitat Survey Method.
3. Following habitat unit mapping, in-stream flow transect locations will be established in the field in the previously identified study reaches in consultation with Stakeholders. The selected consultant will coordinate, schedule and provide all materials for a meeting with stake holders to accomplish this task.
4. Hydraulic and habitat data will then be collected at each transect using standard techniques employed in stream flow studies.
5. The transect data will then be processed through hydraulic simulation sub-models within the PHABSIM model, thus generating simulations of depth and velocity distributions over a range of flows.
6. Literature-derived or site-specific habitat suitability criteria (HSC) will be applied in consultation with Stakeholders, to the predicted hydraulic parameters to produce functional relationships between flow and aquatic habitat expressed as weighted usable area (WUA).
7. A habitat time series analysis will be performed to integrate WUA results across spatial (reach-long) and temporal (hydrologic time period) scales.
8. Habitat optimization protocols and habitat time series (HTS) analysis will be completed to evaluate the effects of flow on habitat quantity/quality for each fish species and life stage. The HRCWPG will provide hydrologic data for the HTS analysis.

Schedule

Completion Date	Task
June 2012	Issue bid package (RFP) for in-stream flow study.
July 2012	Select in-stream flow study consultant and contracting.
Sept. 15, 2012	Complete habitat surveys in proposed reaches. Identify number and location of transects. Determine number of reaches and transects to be completed.
June 2013*	Complete transect flow measurements. Perform PHABSIM model calibration
Oct. 2013	Complete PHABSIM model calibration, modeling, and refinement of results and drafting of final assessment products.

***- Note: due to funding source requirements the majority of field measurements must be completed by June 30, 2013.**

4. Deliverables

The final report will document the overall study approach, the study objectives, the study area and the affected environmental variables. It will also address each of the following key elements of a standard, agency approved IFIM study including:

- A summary of project planning/scoping and agency consultation/participation, field methods, maps showing reach and transect locations, selection of target calibration flows, photographs of transects at all calibration flows, data and discharge of transect calibration flows, MS Access database of ODFW habitat survey data
- Hydraulic calibration report (detailed modeling procedures and model performance)
- Habitat modeling report (target species, HSC used and rational, and discussion of transect weighting rational)
- Graphic and tabular results of Weighted Useable Area vs. flow
- Habitat model runs and model interpretation
- Integration of discharge and habitat quantity with a focus on adult holding, juvenile rearing and spawning habitat for the focal species in each reach.
- Seasonal proposed in-stream flow recommendations for the surveyed river reaches
- Description of any deviations from the study plan.
- All PHABSIM digital data on CD formatted for input to PHABSIM, as appropriate
- Spreadsheet based interactive analytical tools, as necessary
- Written monthly progress reports, describing work completed to date, will be submitted to the HRCWPG.

5. Selection of Consultant:

Hood River County will solicit at least three proposals for obtaining professional consultant services to complete the in-stream flow assessment scope of work. Selection will be based on consultant's price, experience with anadromous fish and experience conducting flow studies in both clear water and glacial streams. Demonstrated ability to complete projects on-time and within budget is required. Prior experience working within basins similar to the Hood River is beneficial. Prior experience assessing Chinook and steelhead habitat issues and experience conducting all phases of in-stream flow studies is desirable.

6. Consultant Proposal Content:

- Description of firm and applicable experience focusing on prior work within the Hood River sub basins,(if any) experience with target species, and experience conducting IFIM studies(required)
- Approach to project management and implementation. Include a description of how transect measurements will be completed in non-wadable conditions.
- Identification and a statement of qualifications for all firms or organizations partnering on the project, if any, including relevant work experience.
- Three applicable project references listing scope of services rendered, project time period, total cost and statement of whether the project was completed on-time and within-budget and any clarification for projects that were not completed on-time and within the original budget, client project manager, phone number and email address
- The Proposal will clearly identify one primary contact person and provide that person's phone number and email address as well as an anticipated project schedule.
- A detailed project budget with cost for each task, listing specific staff assigned, staff rates, staff hours, and expenses (equipment, travel, etc.)

- Statement that total cost will not be exceeded unless un-anticipated out-of-scope tasks are required, in such a case, a task change order must be submitted to and approved by Hood River County.
- Statement that consultant commits to using the assigned staff unless approved by Hood River County.
- Respondents to this RFP must include one (1) original and seven (7) copies of the proposal, not to exceed 15 typed single-spaced pages.

7. Disclosures, Disclaimers and Reservations

A. Hood River County will not be responsible for any costs or expenses incurred by consultants responding to this RFP.

B. The consultant whose proposal offers the best value to the County will be selected for the project. This determination may include consideration of the proposed budget, the anticipated schedule for project completion and other factors as determined by HRCWPG.

C. Hood River County reserves the right to reject any or all of the proposals for completing this work based on consultant technical or cost deficiencies. If none of the specific proposals received meets the County's needs, Hood River County may reject all proposals and solicit additional proposals in order to locate the best value.

D. Hood River County also reserves the right to eliminate the need for the selected consultant to complete one or more tasks, pending the outcome of preceding related tasks or issues.

E. A consultant's contract may be terminated at any time if the quality of the work is unacceptable to the HRCWPG or if Hood River County determines that maintaining the consultant on contract is not in the best interests of the County. Such a determination will be made on the basis of the consistency of the consultant's work product (s) with the basic specifications, the quality of consultant's work product (s), and the consultant's responsiveness to the mission of HRCWPG.

Proposals shall be addressed to:

**Director, Hood River County Community Development Department
601 State Street
Hood River, OR 97031
541-387-6840**

All questions shall be addressed to: mike.benedict@co.hood-river.or.us

Proposals are due in the Hood River County Community Development Department by 3:30 pm Friday June 29, 2012.