



**Rivers and Smith Salmon Ecosystems Planning Society**

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## **Request for Proposal**

**WANNOCK RIVER  
HYDRO- ACOUSTIC ENUMERATION  
PROJECT PLAN**

**For**

**Rivers Smith Salmon Ecosystems Planning Society**

Contact David Stevenson  
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## **1.0 Introduction:**

The Rivers and Smith Inlet Salmon Ecosystem Planning Society recognize the need for an improved escapement enumeration and estimation methodology for the Owikeno Lake Basin in Rivers Inlet to aid in sockeye recovery planning and monitoring. To this end they have supported, through joint funding from PSEF and DFO, a 3 year pilot project to investigate the use of a split-beam hydro-acoustic system on the Wannock River at the outlet of Owikeno Lake.

The Society has been given access to side scanning sonar equipment by DFO for a three year period. The first two years of the pilot have been successfully completed and it is felt that the 3<sup>rd</sup> year would be an operational test.

Before embarking on the operational test and consideration of equipment purchase for a longer term commitment, the Society needs a more detailed planning document.

## **1.2 Goals of the Hydro Acoustic Project:**

To guide in the development of the planning document it should be noted that the goal of the hydro-acoustic system (or any enumeration system) would be to:

- Develop an improved operational abundance estimator for Owikeno Lake sockeye (the current clear stream estimates are not a reliable indicator of total abundance including glacial systems)
- Allow for in-season estimates of abundance to provide an early trigger for need of conservation enhancement
- To explore use of this system in combination with inlet sounding program for developing a more useful in-season management tool
- Allow for more involvement of local community in stock assessment activities and fisheries management processes
- To aim for a reduction in costs for enumeration over the long term (would be able to reduce the scope of the current traditional fall survey project).

## **2.0 Planning Document Outline:**

The contractor would review information and contact professional experts within and outside of DFO on the work that has been done in Rivers Inlet and elsewhere to develop a planning document that would look at the technology, application and cost.

### Components of the Planning Document

2.1 Equipment – looking at the equipment used in the first two years of the pilot and comparing it to other electronic enumeration systems available with respect to:

- Relevancy (how is technology changing and how long will the current system, or any system, be appropriate)
- Reliability of system(s) for salmon enumeration in the Wannock River
- Reliability of equipment and ease of operation and maintenance

- Cost and availability
- Technical and scientific support availability
- Ease of transfer of technical skills

2.2 Project Description – once a recommendation is made on equipment – a detailed description of the project would be made, outlining technology, daily operation and data requirements and an estimated detailed budget for annual operation. Notes would be made on how costs might improve over time.

2.3 Personnel and training – the planning document would outline how many people are needed for the project and ancillary activities such as beach seining below scanning site to determine species composition and “milling” time. Descriptions would be given of the skills required for the equipment operators/technicians and an estimate made of how much experience and training would be needed for the project to operate independently. The plan would also outline options re: the number of people to train and composition of trained people (i.e. community, consultant etc) so that the project would not be compromised due to the loss of a technician.

2.4 Project Support – scientific and technical support requirements. This would identify what has happened in the pilot years and what would be needed for the operational test and estimate what level of support would be needed in the following years or on an ongoing basis. An estimate would be made on what the availability and cost of this support could be.

2.5 Data Analysis and Software Support – where would this come from, how available is it and how often can it be done (eg. For weekly or more frequent estimates) If it becomes necessary to update the technology, to what degree would data already collected be compatible with new data, and is there anything we can do to ensure that compatibility?

2.6 Implementation Schedule - develop a rational time frame for the implementation of the project - purchasing of equipment, training, setup and reporting.

### **3.0 Proposal Requirements:**

The proposal will contain:

- a detailed description of the activities proposed to produce the plan
- a timeline
- resume(s) of proponent(s)
- a budget showing consultant time estimates, fee rates cost and expense estimates and Total Bid Price
- Proposals will be ranked on a combination of qualifications, experience, content of components, work plan, and budget.

**4.0 Deliverables:**

The consultant will produce a final plan by December 30,2004. The consultant will provide the RSSEPS with one hard copy and an electronic version.

**5.0 Time Frame:**

The RSSEPS will accept proposals from consultant(s) until 3p.m. on August 13, 2004. The RSSEPS will inform the successful bidder by August 20, 2004.

**6.0 Bid Submission:**

6.1 One copy of the Bid Proposal should be sent to  
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6.2 For further information or clarification please contact David Stevenson