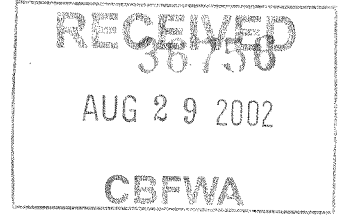




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August 16, 2002.

Mr. Bill Maslen,  
Bonneville Power Administration  
P.O. Box 3621  
Portland, Oregon 97208-3621

**RE: Innovative Project Proposal 34008: Use a Multi-Watershed Approach to Increase the Rate of Learning from Columbia Basin Watershed Restoration Projects**

Dear Mr. Maslen:

I am writing in response to the letter sent by Ms. Sarah McNary (Director for Fish and Wildlife at BPA) to Mr. Frank Cassidy of the Northwest Power Planning Council (NWPPC) on August 2, 2002 (your file KEW-4). This letter provided BPA's comments on the 8 Innovative Project Proposals recommended by the Council's Fish and Wildlife Committee (and approved this week by the Council). The purpose of this letter is to respond to the concerns outlined by BPA regarding the above proposal (#34008) submitted by ESSA Technologies Ltd. Mr. Doug Marker, the Director of Fish and Wildlife at the NWPPC, recommended that I write to you.

**What project #34008 proposes to do**

As described in the abstract of our project proposal, we propose a to develop a multiple watershed framework for assessing the effects of habitat restoration actions on anadromous and resident fish populations, and apply this framework on a pilot basis to selected regions. Our approach involves three phases:

1. Work with a Core Group of habitat experts and managers to scope out a set of testable habitat restoration hypotheses and candidate watersheds.
2. Identify pilot watersheds with good potential for testing these hypotheses. Gather relevant data for these watersheds at a workshop with 20-25 habitat experts and managers. Compile these data into a database.

3. Explore statistical approaches towards analyzing the effects of restoration 'treatments' at nested spatial scales across multiple watersheds. Identify existing constraints to testing hypotheses and opportunities to overcome these constraints through improved experimental designs, monitoring protocols and project selection strategies.

A key point is that the first two phases of this project are entirely **retrospective**, that is examining watersheds where restoration work has already been completed in the past. The third phase of the project will build on the lessons learned in the first two phases to recommend better experimental designs and monitoring approaches.

### **Other Reviews of Project Proposal 34008**

Reviews of project proposal 34008 have been very positive. The ISRP ranked this project first out of 37 submitted proposals (Attachment A). CBFWA rated this project "high priority". NMFS provided a favourable review of the project (Attachment B), and felt that the proposal could be strengthened by demonstrating how it will tie in the RPA 183. The NWPPC Fish and Wildlife Committee, and the Council itself, both recommended the project. This project was originally submitted to the Innovative Proposals fund in October 2000, and was revised substantially based on review comments at that time.

### **BPA's Concerns**

The August 2<sup>nd</sup> letter from BPA had the following comments:

"Likewise, we are not recommending proposal 34008 because of the lack of association with either planned or ongoing research, monitoring, and evaluation activities under the Biological Opinion, and does not include provisions for future integration into the developing RM&E framework. We believe that action on these proposals at this time would be premature until pending decisions are made on research, monitoring, and evaluation proposals currently being reviewed and, potentially, modified within the Mainstem/Systemwide Provincial Review process. We suggest that these proposal sponsors be encouraged to work within the developing Mainstem/Systemwide Review process to further develop their proposals to meet shared objectives for RM&E within the Biological Opinion Framework and the Council Program, and to ensure that any redundancies and/or unnecessary tasks are avoided."

### **Response to BPA Concerns**

The proposal makes it very clear that we are fully intending to integrate this project with ongoing work on RM&E by different groups in the Columbia Basin::

" In proposing this project, we seek to work very closely with individuals within various Columbia River entities who have been working to inventory, coordinate and standardize the monitoring of ecological components within ongoing tributary restoration projects. This includes federal agencies (USFWS, NMFS, BPA, USFS); state fish agencies (WA, OR, ID, MO); tribal fish agencies (CRITFC, the Upper Columbia River United Tribes, Snake River Tribes); coordinating and review agencies (NPPC, ISRP, CBFWA); and information centers (StreamNet, the Fish Passage Center)." (pg. 15, project proposal 34008)

In preparing this proposal, we worked closely with Columbia Basin scientists and managers who are involved in either testing habitat restoration hypotheses or managing restoration programs. We proposed a set of scientists and managers who agreed to be part of the Core Group directing this project (Table 2, pg. 18 of proposal). This included representatives of NMFS and the NWPPC, as well as BPA. (Mark Shaw of BPA, who is involved in managing watershed restoration projects, was very supportive and had some excellent suggestions for candidate watersheds for our retrospective analysis.) A larger group of scientists and managers will be included in the workshops planned in this project. We believe that with the participation of scientists involved in the NMFS-AA RME Implementation Plan Workgroup (e.g. Chris Jordan, NMFS; Jim Geiselman, BPA) the necessary future integration can be achieved. Dr. Jordan was not able to review project proposal 34008 prior to its submission, but has reviewed it since that time and sees no conflicts with work by the RME workgroup.

Work on the developing RM&E framework is proceeding rapidly. We have carefully reviewed recent products of the RME Workgroup<sup>1</sup>, published on BPA's website subsequent to our proposal's submission on April 3<sup>rd</sup> of this year, and see absolutely no difficulties in achieving the required integration. On the contrary, it would appear that project 34008 is perfectly complementary and supportive of the RME Workgroup plans, as well as RPA 183. This conclusion becomes clear when one considers the following:

- With respect to tributary habitat restoration, both the RME Workgroup plans and RPA 183 are focused on improving the experimental designs of future restoration projects, so as to provide offsite survival benefits. Example projects for RPA 183 are listed in Table 3.1 of the document "Research, Monitoring & Evaluation for the 2000 FCRPS Biological Opinion (7/22/02)" on the BPA web site. Proposed Project 34008 is perfectly complementary to this work, in that the first two phases of this project focus on a **retrospective** analysis of a pilot set of past projects, and learning from the weaknesses in their experimental designs and monitoring. Initiating this retrospective work as soon as possible is intended to help to strengthen work on the design of future projects. That is, the third phase of project 34008 can perfectly dovetail with work by the RME Workgroup on RPA 183, and should involve key members of the RME Workgroup. Since the two efforts are complementary (and not duplicative), they can both proceed at full speed, but close communication and co-ordination will be mutually beneficial.
- RPA 183 is focused on initiating three Tier 3 studies within each ESU. Over time, these studies will provide valuable information on the effectiveness of actions to restore tributary habitat. However it will take some time before the population and survival benefits of such actions are evident in monitored indicators. The retrospective reconnaissance work under the first two tasks of project 34008 will complement and expand the data sets available on the benefits of habitat restoration actions. The research under the third task of project 34008 will

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<sup>1</sup> These documents include Draft 2000 NMFS FCRPS BO RME IP Workgroup Scope (6/10/02 and 7/22/02); Research, Monitoring & Evaluation for the 2000 FCRPS Biological Opinion (7/22/02); Paulsen et al. 2002. Guidelines for action effectiveness research proposals for FCRPS offsite mitigation habitat measures. (3/27/02 and 6/22/02); the ISRP Review of Paulsen et al. 2002 (ISRP 2002-5; 4/19/02).

explore the statistical power of multi-watershed designs, helping to place the work under RPA 183 in a larger context, suggesting possible locations for future restoration projects, and multi-purpose control or reference sites. As stated above, we see work under the third task of project 34008 involving key members of the RME Workgroup.

- Pilot projects are explicitly encouraged on page 32 of the document “Research, Monitoring & Evaluation for the 2000 FCRPS Biological Opinion (7/22/02)”. Project 34008 is a pilot project which allows for the testing of development of experimental designs prior to full-scale implementation.

Finally, we have carefully followed the Mainstem/Systemwide Review Process, and reviewed all of the proposals submitted under this process. We recognize that it will take some time to completely resolve which projects are funded, and that some projects may be combined or modified. However, none of the submitted proposals in any way duplicate the work proposed under project proposal 34008. The proposed work is innovative and complementary to these projects; it is in no way redundant. We are committed to working together with various entities included the RME Workgroup, and have structured a Core Group and workshops to accomplish such integration.

Therefore there is no reason to delay the initiation of project 34008. In fact, with the recent concerns by NMFS over the lack of progress on RM & E<sup>2</sup> the need for project 34008 is more urgent than ever.

Thank you very much for your consideration of these comments. I would be happy to discuss them with you over the phone or in person. I look forward to working together with key members of the RME workgroup as this project moves forward.

Yours sincerely,



David Marmorek  
President  
ESSA Technologies Ltd.

c.c. Mr. Doug Marker, NWPPC  
ISRP, via Mr. Erik Merrill, NWPPC  
Mr. Jim Geiselman, BPA  
Mr. Mark Shaw, BPA  
Mr. Brian Brown, NMFS  
Mr. Chris Jordan, NMFS

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<sup>2</sup> Federal Caucus, Columbia River Basin Fish and Wildlife Recovery, Citizen Update, July 2002, Issue 9, page 3.

## **Attachment A - ISRP Review**

### **Rank 1**

#### **ProjectID: 34008**

Use a Multi-Watershed Approach to Increase the Rate of Learning from Columbia Basin Watershed Restoration Projects

**Sponsor:** ESSA Technologies Ltd.

**Province:** Systemwide

**FY02 Request:** \$199,764

**Short Description:** Compile and compare data from habitat restoration projects in multiple watersheds to enhance the rate of learning about effects of restoration actions on fish populations, optimize the design of future restoration programs and improve monitoring.

#### **ISRP Recommendation and Comments:**

This number one ranked proposal is innovative and needed. Excellent detail is provided in each section. The project has a high probability of contributing benefit to fish and wildlife. It proposes to use existing information to generate understanding of the relation between fish and habitat needed to guide salmonid restoration programs. It addresses statistical challenges explicitly. Even the first step, simple systematic gathering of background information, will be of value. Reviewers strongly support this proposal for much-needed work that will be of value basinwide.

Because project planning and implementation in the Basin has taken place at a local level, the benefits to fish may also be local. This project is an attempt to look at the problem at higher scales (watersheds or multiple watersheds), using available information, to assess the habitat needs at the scales relevant to fish populations or metapopulations. Specifically, the proponents propose to systematically look at current projects in multiple watersheds, take an inventory of actions taken and information collected, and explore the opportunities to make between-watershed comparisons to enhance learning and improve the design of current and future restoration actions. This is an innovative, viable alternative and more design based approach to evaluation of habitat improvement and watershed restoration techniques than is the expert system and model based approach in EDT. The ISRP recommends funding this cost-effective, innovative pilot project to provide an independent check on evaluation of watershed restoration procedures. We agree with the proponents that "...an exploration of multi-watershed approaches to testing tributary restoration hypotheses, using both actual data from existing projects and potential data from future projects, can act as a catalyst to improving Columbia Basin tributary restoration programs."

The proposal is improved from last year's submittal that ranked 13 out of 66. This version is on a more appropriate scale with more of a workshop approach than the previously submitted proposal. The PIs are well qualified, and clearly have a grasp of Fish and Wildlife Program issues and the contents of ISRP reports. The sponsor demonstrates understanding of the role of experimental design, randomization, sampling units, etc. that is required in order to compare alternatives in watershed restoration projects.

**Attachment B - NMFS Comments July 12, 2002**

Title	RPA Actions	ESU(s) Affected	Statement of Potential Biological Benefit	Already ESA Reg?	Biop?	Comments
Use Multi-Watershed Approach to Increase the Rate of Learning from Columbia Basin Watershed Restoration Projects	0	Multiple	Indirect Benefit. Analyze the effects of various restoration treatments on salmonids (specifically Chinook and Bull Trout) identifying both existing constraints and future opportunities for improving experimental designs, monitoring, and restoration programs.	No	No	This project will collect and organize data to identify what information is available to adequately test hypotheses and also to identify gaps in current knowledge to help prioritize future planning. There are two critically important regional goals that are served by this type of program – 1) maximizing the efficiency of information acquisition within specific monitoring project types, and 2) maximizing the efficiency of regional planning of future recovery actions and monitoring projects. This project closely relates to RPA 183 as defined in the BiOp. This proposal could be strengthened by more directly demonstrating how it will tie in with RPA 183.