



Copper River, Prince William Sound Regional Marketing Association (CRPWSMA)

Project Proposal Application Form

See <http://www.copperrivermarketing.org/project-proposals> for more information.

Project Proposal Project Concept

Title: Testing the feasibility of counting Copper River salmon at the 36 mile bridge

Submitted by Name: Rob Campbell

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I have reviewed the CRPWSMA By-Laws Yes No (Yes response required for a complete application)

This Project Proposal will further the CRPWSMA Purpose (Article 1.2 of By-Laws) by meeting one or more of the following objectives. Check all boxes that apply.

- Develop regional seafood brands.
- Develop a marketing plan for the regional brands.
- Secure funds and to implement the marketing plan.
- Facilitate members' marketing programs through development of informational documents, market research & promotions.
- Promote, foster and encourage quality assurance standards to attain the highest industry standards.
- Promote improvements to the commercial fishing industry infrastructure in the region.

Proposed Project Start Date: 5/1/15 Proposed Project Completion Date: 7/31/15

Project Description:

The primary channel in the Copper River delta is currently in the vicinity of Bridge 339 (36 mile), and USGS hydrologists have determined almost all the flow in the delta passes through that point during times of low flows (i.e. winter/spring). 36 mile is therefore a potentially useful choke point where fish may be counted in the early season, to augment the ADF&G acoustic weir at the MDB and provide an idea of the movements of salmon in the middle part of the delta. Acoustic lens systems (the DIDSON sonar used by ADF&G) are very expensive (~\$80K) and have extremely limited range. However, there have recently been many advances in smaller, lower cost, lower frequency imaging sonars that may be used in the same way as the ADF&G DIDSON: essentially creating an acoustic "video", where fish may be seen moving up and down the river. I propose to borrow two or three loaner systems from the sonar developers, and to test their ability to image salmon during the 2015 run. If the systems prove useful, I would then work with CRPWSMA to produce a plan to produce operational counts that could be made available to all (commercial fishermen and the ADF&G managers) in an open format. I propose this project as a useful add-on to in-season management of the Copper River fishery, given the multiday lags between fish being available to the fishery and their being counted at the Million Dollar Bridge sonar weir (MDB), and the problems that may occur as a result (e.g. the delay of the start of the 2013 fishery).

Project Description (continued):

[Empty box for Project Description]

Budget Requirement Summary (including description of other funding sources available):

Note: Budget information is only required for Project Proposals. Project Concepts may submit budget information if available.

I estimate this project would take about 8 weeks in total, with about six weeks of investigator time (Campbell) and 8 weeks of technician time, which would cost \$22611. Duties of the two investigators includes fabrication of a mounting system for the sonar transducers, collection of sonar traces during the early migration (May – June) from various positions (e.g. testing bridge-mounted vs shore-mounted transducers), post processing of the data collected, and reporting the results to PWSCRMA. It is expected that there will be considerable post-processing required, to examine signal-to-noise and effectiveness of the sonar. The goal of this effort would be to assess the ability of the different sonar systems to produce an automatic or semi-automatic system that could be used to produce an operational index of fish passage in near real time, so that it could be provided to the managers quickly enough to be of use in their decision making process. Beyond investigator time, I estimate shipping costs for the sonar systems to/from Cordova to be \$5000, setup, fabrication and sampling supplies to cost another \$5000, and have also budgeted \$2500 for fuel, mileage, and camp supplies during the weeks of testing on the delta. The PWSSC levies a 30% overhead on direct costs. PWSSC is a private nonprofit, and is entirely funded from external sources; it does not have internal funds to provide as match. If this pilot effort is successful, the data would be used to leverage funding from other sources (state, federal, foundations) for longer-term efforts.

Total Funds Required	\$	<u>45,643.00</u>
Amount Requested from CRPWSMA:	\$	<u>45,643.00</u>
Amount Available from Other Funding Sources	\$	<u>0.00</u>

Signature of Applicant:  Date Submitted: 3/30/15

CRPWSMA Board Use Only:

Proposal provided to Board for review (date): _____

Board Meeting to vote on Proposal (date): _____

Approved Disapproved*

Board President Signature: _____

Letter Sent to Applicant with Decision (date): _____

(*An explanation will be provided in the letter for any proposals that are disapproved.)