

Southern Boundary
Restoration & Enhancement Fund

Call for Project Concepts for the 2021 Project Year

The Southern Fund Committee is issuing this 2021 Call for Proposals for project concepts that support the implementation of the Pacific Salmon Treaty. Private, non-profit, and public sector applicants are encouraged to apply.

The Southern Fund Committee (SFC) has reviewed investment performance and has determined that approximately U.S. \$3 million may be available for project funding in 2021. The final amount will depend on the status of investments and will be set in early 2021.

The SFC is seeking proposals which are consistent with the Strategic Goals and Objectives of the Southern Fund as identified in the Southern Boundary Restoration and Enhancement Fund Strategic Plan¹. The SFC has also identified specific priorities for the 2021 funding cycle and particularly encourages applications which are responsive to these priorities.

The Southern Fund's geographic area of interest encompasses southern British Columbia, the States of Washington and Oregon, and the Snake River Basin in Idaho. It is unlikely that funding will be provided to projects that propose activities located outside the Southern Fund's geographic area or that concern stocks which do not contribute significantly to fisheries within the Southern Fund's geographic area of interest. It is also unlikely that projects that address purposes outside the goals identified in the Strategic Plan or the stated priorities will be funded. The SFC is also not inclined to support routine / ongoing monitoring activities unless the project is designed to address gaps in the understanding of key mechanisms or management approaches.

If your proposed project spans multiple years, it is necessary to re-apply for funding each year. If you wish to apply for funds to continue an existing project, then you must submit a project concept form by the deadline. This ensures that the SFC will have an overview of every project seeking funding in 2021 and that project concepts are approved to the second round of proposals in a manner which is responsive to the priorities set out below.

¹ The Strategic Plan has been published alongside this Call for Proposals on the PSC website.

Project priority areas for 2021

The SFC has identified habitat restoration as a priority for 2021. The SFC has also taken advice from the Fraser River Panel and the Southern Panel of the Pacific Salmon Commission, which is summarised below.

Habitat Restoration

The SFC encourages project concepts for on-the-ground projects designed to benefit wild stocks of salmon by improving the quality or quantity of their habitat, as described in the Strategic Plan. Projects will seek to:

- Implement modifications of in-stream habitat to improve productivity, e.g., large woody debris structures, spawning gravel placement, boulder clusters and bank stabilization.
- Construct side channels and other off-channel habitat, including spawning and rearing channels or ponds, ox-bow reconnection, dike breaching, etc.
- Restore salmon habitat in estuaries by re-establishing eelgrass beds, restoring or reclaiming saltwater marsh benches, etc.
- Restore fish passage through such things as culvert removal / replacement, remediation of barriers to migration.
- Restore and protect riparian and upland habitat, through activities such as livestock exclusion fencing, riparian re-vegetation and re-planting, upland sediment source remediation, conservation easements, etc.

The SFC encourages and looks for co-ordination, collaboration and partnerships between different stakeholders on proposed habitat restoration projects.

Fraser River Panel recommendations

The SFC has received advice about funding priorities from the Fraser River Panel which will inform SFC decisions about 2021 projects. The Fraser River Panel has not assigned a relative priority to the 7 areas listed below:

1. Additional Fraser sockeye salmon juvenile monitoring. Two types of projects addressing one or both of the two elements below are desired: (a) monitoring of juvenile sockeye in upstream locations in the Fraser watershed including either out-migrating smolts or lake surveys, and (b) monitoring of juvenile salmon in lower Fraser locations.
2. Examination of mechanisms affecting survival of Fraser River sockeye and pink salmon, in particular the impact of the Big Bar landslide. These projects would aim to understand

and/or predict the current and future impact of the Big Bar landslide on sockeye stocks located above the slide and would consider the priorities identified during the workshop organized by the PSC (funded by the SFC) to evaluate the key science activities related to the Big Bar landslide in support of the management of these stocks (Murphy, I. et al., 2020).

3. Improvement of species composition estimates in the Fraser River during sockeye salmon migration. Given the low returns of Fraser River sockeye salmon in recent years, species composition estimates and the possible bias they may create for both the daily and total sockeye abundance estimates require additional scrutiny. Proposals could include methods to improve the in-season assessment of the daily abundance of other salmon species comigrating with sockeye salmon within the Fraser River, methods to improve species composition estimates derived from test fishery data, or integrated multispecies assessment methods.
4. Further work to follow-up on the Test Fishery Workshop report's five recommendations. 2021 will be the eighth year of a return to 'use of fish' to fund test fishery programs used to assess the return abundance, timing and diversion rate of Fraser River sockeye and pink salmon. This change increased the quantities of fish required relative to the 2007-2012 period when the majority of funds came from agencies (largely DFO). We greatly appreciated SFC support of a two-year project to conduct two workshops related to this topic. This project resulted in a technical report.² The Panel supports proposals to conduct work in support of the report's five recommendations.
5. Improvement to in-season assessment of Fraser River pink salmon stocks. In 2019, the challenges regarding the in-season assessment of Fraser River pink salmon stocks highlighted the need for additional information regarding the migration speed, migration routes and delay behavior. Projects in support of the in-season pink salmon assessment would aim to increase understanding regarding pink salmon migration behavior or improve current in-season assessment methods, for example through using increased stock resolution (upper versus lower Fraser Stocks).
6. Work to restore salmon habitat that would be of benefit to Fraser River sockeye populations (and possibly also other salmon species). Over the past decade or more a number of Fraser River sockeye stocks which used to contribute to important fisheries have experienced significant declines, and despite large reductions in fishing pressure, have not recovered. Consequently, fishing opportunities for the two countries have been affected. While marine survival is likely a factor, changes to freshwater habitats may also be contributing to conservation challenges. The Fraser River Panel is therefore interested in opportunities to restore sockeye habitat, with the objective of taking action to address

² <http://www.psc.org/download/33/psc-technical-reports/10620/psc-technical-report-no-40.pdf>

persistent limitations to sockeye productivity in freshwater spawning and rearing habitats.

7. Projects that would help to further advance hydro-acoustic or other assessment techniques in the lower Fraser River, in support of continually improving in-season estimates of sockeye and pink salmon abundance. To ensure that conservation needs are met for stocks of Fraser River sockeye and pink salmon the Fraser River Panel (FRP) requires accurate and cost-effective assessment of abundance. Furthermore, to ensure that appropriate fishery management actions are taken in a timely manner these assessments must provide actionable data to the FRP as early as possible.

Southern Panel recommendations

The SFC has received advice about funding priorities from the PSC Southern Panel who have in turn received input from the Coho Technical Committee and the Chum Technical Committee. This advice will inform the SFC's decisions about 2021 projects and is summarised below.

Coho Technical Committee advice:

1. The Technical Committee are interested in proposals to improve data collection and sampling (for CWT/GSI) for Management Units and component populations to address issues identified in PSC Technical Report 25 ("An Action Plan in Response to the Coded Wire Tag Expert Panel Recommendations"). Coded-wire tag data are a key input for the base period in FRAM and status determination of some Coho Management Units. Improvements to sampling and addressing bias will increase the reliability of these data.
2. Work to develop escapement estimates for the Lower Fraser MU should continue.
3. Support is requested for a workshop in 2021 focussed on incorporating the effects of environmental variability on salmon survival into management strategies.
4. Support is requested to examine changes to the FRAM model to merge the GS-mainland and GS-VI Management Units into the new GS Management Unit.

Chum Technical Committee advice, in priority order:

The Chum Technical Committee have requested support:

1. For initiatives that improve our understanding of stock-specific temporal and spatial distribution of Southern BC and Washington State Chum salmon in the Strait of Juan de Fuca. Specifically, they have requested continued support for an ongoing project that is providing this information.

2. To continue a project to augment and standardize the SNP baseline for Southern BC and Washington State Chum salmon.
3. For proposals that assess the feasibility of using alternate assessment approaches to increase coverage and improve estimates of spawning escapement for Southern BC and Washington State Chum salmon.
4. For a workshop to update to the Southern Chum Salmon Strategic Plan.
5. For proposals that summarize the current state of Chum stock assessment data, and that provide advice on appropriate methodologies for escapement goal/reference point development given the existing data for Southern BC and Washington State Chum salmon.
6. For continued GSI sampling for documenting stock composition of Chum Salmon in mixed stock fisheries.
7. For proposals that seek to relate biological and environmental variables to Southern BC and Washington State Chum salmon productivity.
8. Continued maintenance and further development of the ChumGEM model.

Application Process

The SFC uses a two-stage submission and review process. The initial review stage is designed primarily to evaluate the proposal's relevance and significance to the Pacific Salmon Treaty and the priorities outlined in the Strategic Plan and this Call for Proposals. Project proponents should focus on providing a clear description of project objectives and benefits in this first round concept stage rather than providing detailed information about project implementation and budgets. That information will need to be provided for those project concepts selected for second stage review.

The two-page "Project Concept" form that accompanies this Call for Proposals is the format that must be used by all proponents. The use of this format allows the SFC to conduct its first-round review of submissions in a fair and expeditious manner. Completed forms must be returned to the Fund Manager at the Pacific Salmon Commission in electronic format only by midnight (24:00) on Friday, September 4 2020 at the following e-mail address: southfund@psc.org.

The first-round review of all Project Concept proposals will take place in September 2020. Those proponents whose Project Concepts best match the priorities described within this Call for Proposals will be invited to prepare a more detailed proposal for stage two. Projects approved to the second stage will have approximately one month to submit final, detailed applications on a form that will be provided. The detailed applications will be subject to an in-depth technical review. The SFC will make final funding decisions in February 2021.

Deadlines

Project Concept forms must be in electronic format and must be received at the following address: southfund@psc.org by **midnight on Friday, September 4 2020**.

Contact Information

More information and "Project Concept" forms may be accessed online at www.psc.org. Questions or points of clarification should be directed to the Fund Manager, Tom Alpe, or the Fund Assistant, Victor Keong, via phone at (604) 684-8081, or email at alpe@psc.org or keong@psc.org.