

**Southern Boundary
Restoration & Enhancement Fund**

**The Strategic Plan
of the
Southern Fund
Committee**

June 2008

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Origin of the Southern Boundary Restoration and Enhancement Fund

In June of 1999, the United States and Canada reached a comprehensive agreement under the 1985 Pacific Salmon Treaty (PST). The agreement established new fishery management regimes governing salmon fisheries throughout the Pacific Salmon Treaty area lasting for a period of 10-12 years. These fishery regimes are contained in Annex IV of the Treaty, and are amended from time to time as circumstances change or when they expire.

In addition to the fishing regimes, the 1999 Agreement established two bilateral endowment funds, called the Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund (the Northern Fund), and the Southern Boundary Restoration and Enhancement Fund (the Southern Fund). This Strategic Plan applies only to the Southern Fund.

The two Funds were created to contribute to implementation of the Treaty by supporting three categories of activities to improve the status and management of salmon stocks and fisheries in their respective geographical areas. The three categories of activities specifically mandated by the 1999 Agreement are as follows:

- Development of improved information for resource management, including better stock assessment, data acquisition, and improved scientific understanding of limiting factors affecting salmon production in the freshwater and marine environments;
- Rehabilitation and restoration of marine and freshwater habitat, and improvement of habitat to enhance productivity and protection of Pacific Salmon; and
- Enhancement of wild stock production through low technology techniques rather than through large facilities with high operating costs.

The Southern Fund Committee

The Southern Fund Committee (SFC) was established in the 1999 Agreement to administer the Southern Fund. This mandate includes overseeing investment of the Fund's assets and disbursing monies earned from those investments to support activities within the categories identified above.

Pursuant to its mandate, the SFC is obligated to administer the Southern Fund to ensure that its benefits continue to flow to both countries over the long term.

Accordingly, the SFC has adopted investment, expenditure, and operating policies to guide administration of the Southern Fund. These policies can be found in Appendix B. The membership of the SFC can be found in Appendix C.

Geographic Area

The geographic area for the Southern Fund includes southern British Columbia, the States of Washington and Oregon, and the Snake River Basin in Idaho. Southern British Columbia in this context means the geographic area covered by those watersheds flowing into the Pacific Ocean south of Cape Caution, including the entire Fraser River watershed and the Columbia River watershed in British Columbia.

The Strategic Plan of the Southern Fund Committee

This plan has been developed by the SFC to guide project selection over the next five years. It reflects the accumulated advice of the Pacific Salmon Commission, the Southern and Fraser River Panels, and their Technical Committees. The SFC will continue to solicit the advice of these groups and the plan will be a “living document” amended periodically in response to future input as circumstances and priorities evolve over time. The purpose of this plan is to:

- guide potential project proponents (funding recipients) and focus proposals to achieve the outcomes described in the Strategic goals identified herein; and
- help the SFC communicate with agencies, partners, proponents and the general public about its procedures and the rationale for funding decisions and to make its decisions more transparent.

Vision

The Southern Fund Committee envisions a vibrant Pacific salmon resource supporting healthy fisheries in Canada and the United States, managed within a scientifically sound framework based on bilateral cooperation, efficiency, long-term sustainability, and conservation.

Mission

Guided by the Pacific Salmon Treaty and priorities recommended by the Commission and its Panels and Technical Committees, the Southern Fund Committee serves both countries’ citizens by providing funds and direction to assist the protection, restoration and enhancement of salmon stocks and their habitats while providing sustainable fisheries.

Principles

In pursuing its Mission, the SFC will be guided by the following principles:

Principle 1. Ensure relevance to the Pacific Salmon Treaty.

Relevance to the PST is a measure of the degree to which an activity contributes to the fundamental purposes of the Treaty, which include conservation, optimum production, cooperation, and fair sharing of the benefits of the resource. The SFC will maintain relevance to the PST by evaluating proposals against specific criteria that will be considered in the first stage of the proposal process as described below and illustrated in the accompanying diagram.

Conservation: The level of conservation concern is related to the status of a stock relative to established benchmarks or based on trends in total abundance or survival rates. The level of concern may also be reflected by the extent of each country's commitment to protect and recover a stock. In general, the level of conservation concern will be categorized as low, medium, or high. The level of concern should be based on a recent average or trend (e.g. three years minimum) rather than responding to a single year. However, the SFC acknowledges that some concerns or catastrophic events (e.g. landslide, hatchery failure, etc.) will need to be addressed immediately to avoid certain decline in a stock.

Bilateral Fishery Relevance: For the SFC, the relevance of a project to a fishery will be considered a function of the following concepts: i) the level of impact in the other country and ii) the level to which a stock constrains or may constrain fisheries in the other country. Fishery relevance will be ranked as low, medium, or high.

Fishery Benefits: Projects should foster and enhance mutual and sustainable fishery benefits to either or both Parties' fisheries and, over the long term, the fund should provide equitable benefits to the Parties to the Pacific Salmon Treaty. For the SFC, the potential benefit of each proposed project will be evaluated using the following definitions: i) the potential numerical contribution to either or both Parties' fisheries or the expected level of production increase resulting from the project; ii) the amount of habitat restored or made accessible; iii) the potential for management actions to reduce impact on constraining stocks; or iv) the potential to address social or cultural values. The potential benefit will be ranked as low, medium, or high in relation to the level of conservation concern and fishery relevance.

Collaboration: projects should encourage collaboration between the Parties, relevant agencies, and stakeholders.

This diagram illustrates how the level of conservation concern for a stock and fishery relevance may be related in evaluating project proposals.

Conservation Concern	High	<ul style="list-style-type: none"> - Snake River Chinook - Sakinaw sockeye - Ozette sockeye - Oregon coastal coho - Hood Canal chum - Upper Columbia Spring Chin - Willamette Spring Chinook 	<ul style="list-style-type: none"> - Lower Columbia Fall Chinook - Early Stewart sockeye - Lower Georgia Strait Chinook 	<ul style="list-style-type: none"> - North Puget Sound spring Chinook - North Puget Sound fall Chinook - Thompson Coho - WCVI Chinook
	Med	<ul style="list-style-type: none"> - Fraser spring age 0.3 Chinook - Far north migrating Oregon coastal Chniok 	<ul style="list-style-type: none"> - Lewis River Fall Chinook - Strait of Georgia coho 	<ul style="list-style-type: none"> - Fraser summer age 1.3 Chinook - Columbia Upriver Bright Chinook
	Low	<ul style="list-style-type: none"> - WCVI coho - Columbia River summer Chinook - Coastal Washington coho 	<ul style="list-style-type: none"> - Skagit chum - Fraser late Chinook - FR pink - Coastal Washington Chinook - North/Central BC Chinook 	<ul style="list-style-type: none"> - Skagit coho - FR summer run sockeye - Fraser summer age 0.3 Chinook - Upper Georgia Strait Chinook
		Low	Med	High
		Fishery Relevance		

Placements of specific stocks within the cells are illustrations reflecting the current judgement of the SFC and will change over time based on input proactively solicited each year from the Commission process. Stocks in the red cell in the upper right corner will receive a higher ranking than stocks in the lower left hand cell. In the future, with help from the PSC Technical Committees, definitions associated with various levels of risk to stocks will be incorporated to better define the concept of conservation concern.

Principle 2. Ensure projects are implemented to the highest standards.

Technical Merit: projects should be designed and conducted in accordance with sound scientific, management and administrative principles.

Efficiency: projects should provide the greatest long-term benefits to the resource for the dollars spent.

Effectiveness: projects should achieve measurable results towards their intended purposes.

Comprehensiveness: projects contributing to multiple objectives and addressing the full scope of causes of resource problems are encouraged.

Partnerships: projects that foster a broader sense of stewardship and leverage the benefits of the Southern Fund are encouraged.

Accountability: the SFC is committed to monitoring and evaluating the effectiveness and efficiency of the activities it supports and its overall program.

Principle 3. Ensure the process for considering projects is fair and transparent.

Fairness: the SFC will be sensitive to the distribution of benefits within the Southern Fund area.

Transparency: the SFC will strive to make funding decisions in an objective and transparent manner. The SFC will report and communicate the outcomes of the activities it supports to, and will seek inputs from, the broader community in which it exists.

Suitability: the SFC will not provide funding to support core or ongoing activities that are normally management agency responsibilities, except under extraordinary circumstances.

Principle 4. Ensure processes and procedures are sufficiently adaptive to respond to critical issues as and when they arise.

Emerging Issues: in addition to providing funds to support activities proposed and carried out by others, the SFC, in consultation with PSC Panels and Technical Committees, and/or on its own initiative may identify critical and emerging needs, and may facilitate the identification and implementation of projects that support meeting those needs.

The Strategic Goals

The SFC has worked with the Pacific Salmon Commission Panels and Technical Committees to develop a strategic framework to guide the selection and funding of activities to improve the status of salmon stocks and the sustainability of salmon fisheries within the SFC's geographical area. This framework consists of the following strategic goals and associated objectives to achieve its vision.

GOAL 1: Improve the Management of Fisheries Relevant to the Pacific Salmon Treaty

GOAL 2: Address Priority Stocks of Interest

GOAL 3: Improve Collaboration between the Parties, Relevant Agencies and Stakeholders.

GOAL 4: Gain Better Understanding and Incorporate Ecosystem Factors into Underlying Science and Management Processes

GOAL 5: Ensure an Open, Accountable, Efficient, and Cost Effective Program Management Process that is responsive to the needs of Treaty implementation

GOAL 1: Improve the Management of Fisheries Relevant to the Pacific Salmon Treaty.

The Pacific Salmon Treaty provides regimes for the management of salmon stocks and fisheries within the geographical scope of the Treaty. The SFC will support activities which are required for, or which assist in, the effective implementation of the regimes that are relevant to the Southern Fund's geographical scope through achievement of the following four objectives.

Objective 1. Refine stock and fishery management objectives and the means to assess them.

Managing for sustainable fisheries and stocks requires the identification and development of stock objectives; the definition and identification of clear fishery management objectives; and the means to measure them. Therefore, the SFC will support activities which:

- a) Refine or establish stock management objectives including but not limited to escapement benchmarks, abundance thresholds for determining stock status, allowable exploitation rates, individual stock definitions and management groupings, and similar stock management parameters.
- b) Develop, evaluate or refine assessment frameworks, including but not limited to indicator stock programs, escapement monitoring programs, abundance indicator programs, stock definitions, calibration of programs, trend analysis and risk assessment frameworks.

Objective 2. Improve stock abundance estimation

Improved management of fisheries will result from improving the accuracy, precision, timeliness and cost effectiveness of abundance estimation. This includes a range of activities from the preseason forecast of returns, to in-season run size estimates, to post-season assessments of spawner abundance. The SFC supports the development and improvement of abundance estimates by:

- a) Improving methods of estimating abundance and understanding the timing and distribution of stocks. Potential activities include, but are not limited to, specific applications such as pre-season forecasting, in-season run size estimation and spawner abundance estimation methods.
- b) Providing funding in the amount of \$1.0 million per year beginning in 2009 to support (in cooperation with the Northern Fund Committee) the Chinook salmon Sentinel Stocks Program identified in paragraph 3(a) of Chapter 3 of Annex IV (as proposed by the Commission for adoption by the Parties for implementation beginning in 2009). The selection of indicator stocks and the specific kinds of research activities to be supported will be determined in a manner consistent with that provision, the overall purpose of which is to improve estimates of spawning escapement for a designated set of escapement indicator stocks.

Objective 3. Develop tools and technologies for fisheries management

To meet the principles of the Pacific Salmon Treaty, salmon fisheries should be managed collaboratively, compatibly and comprehensively using jointly recognized and verifiable tools, methods and models. To improve existing management tools and develop new ones, as well as supporting the transfer of new technologies into the management of salmon fisheries, the SFC supports work to:

- a) Develop, deploy and improve new or existing models or analytical methods for fisheries management. Assist with the parameterization of fishery management models. Conduct studies of stocks or fisheries to increase certainty, or improve understanding of, the sensitivity of fishery management models to data uncertainties.
- b) Test, field trial and deploy new tools and equipment, or improve existing ones, that have the potential to advance the management of salmon fisheries through the use of innovative technology. Facilitate the early adoption of successful innovations by fisheries managers.
- c) Develop innovative and/or proactive means to address current problems and issues that are relevant to the Treaty.

Objective 4. Improve stock identification techniques

Increased stock resolution and the ability to manage for stock specific constraints is an important goal for salmon fisheries management. The SFC supports the development and application of stock identification methodologies and programs that contribute to improved management of stocks and fisheries relevant to the PST and which:

- a) Improve or develop genetic technologies used to address PST needs, such as lab infrastructure improvements, “tools” and/or methods that integrate Genetic Stock Identification (GSI) data into fisheries management models.
- b) Improve baseline information by, for example, obtaining samples for baselines, or making baseline data more accessible.
- c) Develop bilaterally accepted protocols and procedures for genetic data collection and analysis.
- d) Improve the usefulness and reliability of existing coast-wide Coded Wire Tag (CWT) programs and the quality of CWT data through activities such as analysis and improvements to CWT recovery and sampling programs in various fisheries. (Note, however, that the SFC does not intend to fund work that properly is the ongoing responsibility of management agencies).
- e) Facilitate the development and/or application of other mark technologies, such as thermal marking, especially to identify hatchery origin returns to indicator stocks.
- f) Develop management “tools” that integrate and synthesize data and analysis from multiple sources/technologies, eg. CWTs; genetics; thermal marking, etc.

The near term priority species under this goal is Chinook, but other species will be considered in the following order of priority: coho, sockeye, chum and pink salmon.

GOAL 2: Address Priority Stocks of Interest.

Projects that improve the ability to manage fisheries to achieve desired levels of stock-specific mortalities, particularly for constraining stocks and that provide significant benefit through collaboration will be given priority consideration for funding.

Objective 5. Improve the implementation and assess the stock specific effects of selective fishing.

Current variation in environmental conditions, inherent differences in productivity and anthropogenic effects result in varying abilities of stocks to withstand harvest. In order to maintain diversity and ensure long term sustainability of the resource, it

is important to improve the selectivity of fishing utilizing, for example, changes in regulatory policies, fishing practices and gear or by temporal and spatial shaping of fishery openings. The SFC encourages projects that:

- a) Apply stock identification methods to shape fisheries to achieve stock and fishery specific objectives.
- b) Improve estimates of incidental mortalities associated with catch and release fisheries.
- c) Develop, evaluate and/or improve methods and models to assign mortalities to specific stocks and/or fisheries.

Objective 6. Address habitat and other non-fishing factors which limit the production of priority stocks.

Recognizing that protection and restoration of salmon habitat; maintenance of adequate water quality and quantity and the acquisition of relevant scientific information to guide decision-making and evaluation are vital to the production of salmon; the SFC will consider projects that:

- a) Improve habitat project planning, priority setting and feasibility studies. Habitat inventory and mapping.
- b) Assist water use planning, water flow conservation, augmentation and water quality improvements.
- c) Implement modifications of in-stream habitat to improve productivity e.g. large woody debris structures, spawning gravel placement, boulder clusters and bank stabilization.
- d) Construct side channels and other off-channel habitat, including spawning and rearing channels or ponds, oxbow reconnection, dike breaching, etc.
- e) Restore salmon habitat in estuaries by re-establishing eelgrass beds, restoring or reclaiming salt water marsh benches, etc.
- f) Restore fish passage through such things as culvert removal / replacement, remediation of barriers to migration.
- g) Restoring and protecting riparian and upland habitat, through activities such as livestock exclusion fencing, riparian re-vegetation and re-planting, upland sediment source remediation, conservation easements, etc.
- h) Monitor habitat restoration projects to evaluate results.

Objective 7. Improve the status of priority stocks through enhancement.

Carefully designed enhancement programs can in some cases contribute significantly to the restoration of depressed natural stocks. The SFC will consider short-term projects that help develop and establish enhancement activities directed at priority stocks of interest. High cost, capital-intensive projects (e.g., traditional

hatchery facilities) will not be considered by the SFC. Examples of activities that will be considered include:

- a) Introduce small scale enhancement to address priority stocks of interest, using tools such as in-river incubation boxes or supplementation with hatchery-reared fry of appropriate stock origin.
- b) Initiate aquatic habitat nutrient enrichment, using tools such as fish carcasses, carcass analogs or other sources of nutrients. This activity could include research, product acquisition, feasibility and implementation
- c) Develop and improve gene conservation techniques and other advances in the genetic management of brood stock for hatchery-reared fish, including captive brood stock rearing programs.

GOAL 3: Improve Collaboration between the Parties, Relevant Agencies and Stakeholders.

Proper management of stocks and fisheries of interest to multiple jurisdictions requires the compilation and exchange of ideas, the transfer of results of studies and other programs, and the sharing of information of known origin and veracity. The SFC supports partnering in projects which result in improved collaboration between the Parties, improved communication, and the flow of reliable information between Parties, management agencies, stakeholders and the public.

Objective 8. Improve information sharing between parties, relevant agencies and stakeholders

The bilateral usefulness of information, data and analysis depends in large part on how they are acquired and/or applied. Accordingly, the SFC supports the development of common methods, protocols and standards through activities that:

- a) Improve collaboration by developing common information management systems as well as common standards, methods and procedures for sharing information.
- b) Facilitate the exchange of methods, results, or ideas from past and ongoing activities by sponsoring workshops, communication and outreach efforts, and other information sharing initiatives.
- c) Encourage coordination and synergies with other projects and funding sources.

GOAL 4: Gain Better Understanding and Incorporate Ecosystem Factors into Underlying Science and Management Processes.

The role of the ocean environment has been shown to be important to the productivity and sustainable harvest levels of wild salmon. The complex life histories of Pacific wild salmon require greater information on relationships between habitat and spatial processes which affect past and future population trajectories. Our knowledge of limiting factors and relationships is incomplete and not fully integrated into the management framework. Moving toward ecosystem-based management will require the following objective to be achieved.

Objective 9. Improve understanding of variation in the environment and the effect on stocks and fisheries.

The SFC encourages activities that address the health of, and changing relationships between, the environment, the aquatic organisms and the human communities in the salmon fisheries in a holistic manner. Examples of supportable activities include:

- a) Identify and monitor **linkages** between salmon and their environment. For example, the effects of off-shore currents; the distribution of nutrients in the ocean; and the use of these in fisheries management.

- b) Improve the understanding of ecosystem **relationships** affecting salmon production, migration and distribution as well as the influence of the ecosystem on salmon life history.
 - Research into the status, distribution and control of salmon predators e.g. seals.
 - Research into the status, distribution and control of invasive freshwater aquatic species e.g. yellow perch, Eurasian milfoil.

- c) Encouraging consideration of the possible effects of ecosystem **changes** on the management of salmon fisheries.
 - Identify and monitor trends in the environment and their effects on salmon abundance and distribution; for example, ocean process modelling.
 - Identify means for sustaining the benefits of the salmon fishery in the face of climate change and its likely effects.

GOAL 5: Ensure an Open, Accountable, Efficient, and Cost Effective Program Management Process that is responsive to the needs of Treaty implementation

The following three Objectives concern the operations of the SFC itself. It is intended that the fulfilment of these Objectives will be accomplished internally by Fund Committee members and staff. These activities are not eligible for funding by grants from the Southern Fund to third parties responding to the annual Call for Proposals.

Objective 10. Ensure that funding decisions of the Southern Fund Committee reflect input and priorities identified by the Commission and the Southern and Fraser River Panels and their Technical Committees.

Given the relationship of the Southern Fund to implementation of the Treaty and the work of the Pacific Salmon Commission, the SFC will regularly seek and be responsive to priorities identified by the Commission, its Panels and Technical Committees. Toward that end, the SFC will:

- a) Annually and proactively seek advice regarding priority needs from the Commission, the Southern and Fraser River Panels, and the associated Technical Committees.
- b) Modify this strategic plan from time to time as may be necessitated by evolving shifts in major priorities recommended by the Commission, Panels and Technical Committees; and
- c) Respond to more immediate, shorter-term adjustments in priorities through targeted references to such needs in the annual Call for Proposals,

Objective 11. Ensure that Southern Fund Committee internal operations and all funded projects are managed accountably and efficiently.

The SFC will implement a multiple account evaluation process that will support the evaluation of all key functions of SFC operations, including project evaluation. To that end the SFC will:

- a) Use relevant benchmarks established in the Fund's formal Statement of Investment Policies and Procedures (e.g the S&P 500, Russell 3000 and the EAFE indices) to evaluate financial performance against long-term investment goals.
- b) Routinely monitor program integrity and compliance with the Strategic Plan using simple measurements and surveys, interviews, observation and the use of existing documents.
- c) Evaluate outcomes or achievements of the Fund in terms of project results by means of annual site visits by SFC members to selected projects. Also by staff assessment of interim and final reports to evaluate compliance

performance on the part of project proponents. More intensive monitoring of sample projects by members of the Southern Fund's two technical review teams will also be implemented.

- d) Continue to implement all four levels of financial audit established by the SFC concerning program and project operations and initiate on-site audits of sample projects as provided for in the terms of the Fund's Contribution Agreements.

Objective 12. Improve the capacity of the Southern Fund Committee to openly share information and knowledge gained.

The SFC is committed to strive for quality process improvements and ensure knowledge gained is readily accessible to all interested parties. To meet this commitment, the SFC recognizes that the development of user-friendly internet communication tools is essential. For example:

- a) Develop a project registry that will include project descriptions, expenditures and final reports.
- b) Develop a web-based information system to further share and improve access to SFC activities. Key items to be included will be the project registry, the strategic plan, application forms and guidelines for project proposals, fund balances, and other relevant information.