



Executive Secretary's Summary of Decisions 33rd Annual Meeting

The Pacific Salmon Commission held its 33rd Annual Meeting from February 12-16, 2018 at the Vancouver Hyatt Regency, and discussed a number of topics (see attached agenda).

The Commission AGREED:

1. The minutes from January 2018 are adopted.
2. The letter from the Commission to management agencies regarding workloads and succession planning is complete and will be delivered as soon as possible.
3. The Parties' views on 2018 Very High Priority Chinook Projects are accepted and will be transmitted to the Fund Committees in time to inform final funding decisions.
4. The Southern Panel may summarize the proposed amendments to Chapters 5 and 6, and the negotiating team will consider the forthcoming summary for possible public dissemination.
5. The CTC work plan is amended, directing the Committee to specify national data requirements for implementing the CYER metric in a revised Chapter 3.
6. The Committee should advise the Commission as soon as possible if it encounters delays in completing near-term work plan priorities in the order below:
 - a. completion of management scenario model runs;
 - b. Chinook model calibration for 2018 management planning;
 - c. base period recalibration.
7. The F&A Committee report is adopted, including:
 - a. FY2018/2019 budget;
 - b. 2-year pilot project for a database manager;
 - c. grievance policy for Secretariat staff;
 - d. HR policy for non-permanent staff;
 - e. bylaw amendments as modified by the Commission on February 15, 2018

ATTENDANCE

PACIFIC SALMON COMMISSION
POST SEASON MEETING
FEBRUARY 12-16, 2018
HYATT REGENCY VANCOUVER
VANCOUVER, BRITISH COLUMBIA

COMMISSIONERS

UNITED STATES

B. Turner (Chair)
P. Anderson
W.R. Allen
W. Auger
R. Klumph
C. Swanton

CANADA

R. Reid (Vice Chair)
B. Assu
S. Farlinger
J. McCulloch
M. Ned
B. Rezansoff
B. Riddell
P. Sprout



**Draft Agenda
33rd Annual Meeting
February 12-16, 2018
Hyatt Regency Downtown; Vancouver, B.C.**

1. Adoption of agenda
2. Approval of minutes: January 2018
3. Executive Secretary's report

Chinook issues

4. Base period calibration update
5. Commission guidance to Joint Fund Committee re. 2018 VHPC projects (as needed)

Other action items pending

6. Reports from Panels and Committees
 - a. Work plan progress
 - b. F&A Committee
 - c. Endowment Fund Committees
7. Negotiating team update
8. CTC Function and Operations Workgroup update
9. Public comment



February 15, 2018

MEMORANDUM

TO: Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund Committee
Southern Boundary Restoration and Enhancement Fund Committee

FROM: Bob Turner, Chair
Rebecca Reid, Vice-chair

CC: John Field, Executive Secretary
Angus Mackay, Fund Manager

RE: 2018 Very High Priority Chinook (VHPC) projects

The Pacific Salmon Commission (Commission) has received results from the January 2018 bilateral technical review of VHPC detailed proposals. Consistent with its process for addressing such projects, the Commission is transmitting its views on these results for your consideration.

The U.S. Section of the Commission recommends removal of project #24-C3 (Mid-Oregon Production Region Coded-Wire Tagging, Recovery, and Escapement of Elk River Fall Chinook Salmon) from consideration for funding by either Fund. The Canadian Section concurs in the recommendation of the U.S. Section thus making it a recommendation of the Commission. Furthermore, the Canadian Section of the Commission has considered project #23-C3 (ForecastR model development and workshops) in more depth. The Canadian Section understands the project, if funded, would include:

1. Progression of software development/enhancements;
2. Development of a graphic interface to facilitate use; and
3. Provision of workshops to train a broader set of users including management agencies responsible for providing forecasts for the annual Chinook model calibration.

The Canadian Section contemplated whether a link to the "template" for reporting agency forecast reporting to the Chinook Technical Committee could be included as an output. Nonetheless, the Canadian Section sees this project as an important step in responding to the 2017 expert panel on forecast methodology and its recommendations to improve forecasts with broader application for other users and other species. As such, the Canadian Section recommends that project #23-C3 be included in the list of funded VHPC projects. The U.S. Section concurs in this recommendation, thus making it a recommendation of the Commission.

Thank you for considering the Commission's views on funding for the 2018 VHPC projects, and we look forward to hearing of your final decisions in the coming weeks.

2018 PACIFIC SALMON COMMISSION ANNUAL MEETING

BRIEFING FOR THE COMMISSIONERS

Transboundary Panel (Chapter 1)

Post-Season and Annual Bilateral Report – Thursday February 15, 2018

Meeting Schedule:

2017 Post Season Meeting

- The Canadian and U.S. sections met independently on Monday January 8
- The Panel met bilaterally Tuesday January 9 through Thursday January 11

2018 Annual (Pre-Season) Meeting

- The Canadian and U.S. sections met independently on Monday February 12
- The Panel met bilaterally Tuesday February 13 through Thursday February 15

Meeting Summary:

2017 Post Season Meeting

- Reviewed Canadian and U.S. 2017 fishery management actions and harvest.
- Received presentations on 2017 post-season run reconstructions and escapements.
- Completed Paragraph 4 fishery performance review (Canadian fishery AC overage for Stikine River sockeye)
- Evaluated information on Chinook salmon stock trends and production in SEAK.
- Reviewed 2017 sockeye salmon enhancement program results (fry releases, egg takes).

2018 Annual (Pre-Season) Meeting

- Received 2018 bilateral forecasts for Transboundary Chinook, sockeye and coho stocks.
- Reviewed Canadian and U.S. fishery management strategies proposed for 2018.
 - Discussed measures for Chinook conservation.
- Approval of 2018 interim Canadian Taku coho fishery harvest share allocation.
- Received results of 2016 Alsek River sockeye stock differentiation study.
- Reviewed historical summary of Taku (Tatsameine) sockeye enhancement program and proposed options for extended rearing program.
- Received presentations on results of telemetry studies on Taku River sockeye and Chinook and Stikine River Chinook.
- Status report on salmon passage remediation at Tahltan River rock slide.
- Approval of 2018 Taku and Stikine River sockeye enhancement programs.
- Initial review of Transboundary Rivers Panel Strategic Salmon Plan (2009-2018).

2018 PACIFIC SALMON COMMISSION ANNUAL MEETING

BRIEFING FOR THE COMMISSIONERS

SEAK / Transboundary / Northern B.C. Chinook Management 2018

Report – Thursday February 15, 2018

U.S. and Canadian Chinook fisheries are managed under the umbrella of the Pacific Salmon Treaty. Trending declines in productivity, including lower than desired escapement levels for Chinook salmon that spawn in Southeast Alaska (SEAK), the Transboundary Rivers (TBR) and Northern British Columbia (NBC) rivers, have been observed in recent years. In a broader geographic context, during the same period escapement levels of Chinook salmon stocks in Southern British Columbia and the Southern U.S. have been below expectation. In consideration of this situation, the Alaska Department of Fish and Game (ADFG) and Fisheries and Oceans Canada (DFO) have cooperated to compile the most recent information on 5 key Canadian-origin TBR and NBC Chinook salmon stocks to inform fishery management strategies in the upcoming season. 2018 outlooks for the key stocks evaluated indicate:

- Taku River stock predicted to be <20% of recent 10-year average (record low)
- Stikine River stock predicted to be <30% of recent 10-year average (record low)
- Alsek River stock predicted to be <40% of recent 10-year average (lowest 5%)
- Skeena River stock predicted to be <40% of recent 10-year average (record low)
- Nass River stock predicted to be 70% of recent 10-year average

From a fishery contribution perspective, of the five stocks evaluated the greatest proportional contribution of northern Canadian-origin Chinook salmon to SEAK fisheries were from Stikine and Skeena River stocks (equal proportions), followed by Taku, Nass and Alsek stocks in decreasing proportions respectively. The greatest proportional contribution of northern Canadian-origin Chinook salmon to NBC fisheries was from the Skeena and Nass River stocks (primary contributors), followed by Stikine, Taku, Southeast Alaska and Alsek stocks in decreasing proportions respectively.

Given the extraordinary circumstances ADFG and DFO, in alignment with PST Chapter 1, Paragraph(s) 1, 3(a)(3), 3(b)(3) and 4; PST Chapter 3, Paragraph 13 and Attachment 1, are pursuing opportunities to align their respective strategies to pass SEAK, TBR and NBC-origin Chinook salmon through fishery areas to their respective spawning grounds in 2018. The objective is to explore design and implementation of conservation strategies in a manner that does not result in transfer of fishery impacts on other stocks.

PSC ANNUAL MEETING February 12-16, 2018

SOUTHERN PANEL MEETING REPORT:

Updates from January Post-season and February Annual 2018 meetings:

- *The US and Canadian sections of the Southern Panel developed a meeting agenda that facilitated continued progress on achieving the objectives and tasks described in the 2018 Southern Panel work plan.*
- *The bilateral Panel reviewed and discussed the specifics of our 2018 work plan. We planned our upcoming manager-to-manager information exchange meeting that is scheduled for March 16th, and began planning the Coho Working Group meeting scheduled for May 2018.*
- *The bilateral Panel met and received the following presentations:*

January meeting:

- US and Canadian post-season reports for the 2017 season.
- 2018 updates on Ocean Indicators data and predicted effects on Northwest salmon, from Laurie Weitkamp (NOAA, CoTC).
- Canada's Southern Endowment-funded project to develop reference points and associated exploitation rate caps for their Coho Management Units, starting with the Interior Fraser Coho MU.

February meeting:

- Salish Sea Marine Survival Project Presentation.
Michael Schmidt (Long Live the Kings – U.S.) and Isobel Pearsall (Pacific Salmon Foundation – Canada) provided an overview and latest updates on the overall project and presented preliminary results from selected research projects.
- *Renegotiation of the Coho Chapter (Chapter 5) - Completed*
 - On January 9, 2018, the bilateral Southern Panel reached agreement on the last two items to resolve in accomplishing renegotiation of the new Southern Coho Agreement within the Coho Chapter (Chapter 5), as follows:
 - *Paragraph 8(c)ii* – *the Parties developed and agreed to revised language that clarifies the process and role of Coho Technical Committee in the bilateral review of a Party's status determination methods for Coho Management Units;*
 - *Paragraph 8(g)* – *Canada agreed to the U.S. proposal to revise the date in the last sentence of Paragraph 8(g) from April 30th to March 31st. Therefore, during pre-season planning and information exchange between the Parties, March 31st will be the date after which a Party may not change the status of any of their Coho Management Units.*

- **Renegotiation of the Chum Chapter (Chapter 6) - Completed**
 - During the recent January PSC meeting, based on the Agreement in Principle reached during the bilateral Commissioner negotiations, the Southern Panel worked during section time and bilaterally to translate the *Agreement in Principle* into draft language for the new Chum Chapter. On January 10, the Southern Panel reached bilateral agreement for management error numbers of 10,000 fish at both the low (125,000) and high (160,000) catch ceilings for US 7/7A Chum Fisheries. See **Table 1** below for a summary of the Chum Chapter agreement.

Table 1. PST Chum Chapter renegotiation update: US-Canada Bilaterally Agreed-to Breakpoints and Allocations for U.S. Area 7/7A Chum Fisheries (Numbers of Chum), January 10, 2018.

Item	Current Chapter	Agreed-to Jan 10, 2018: new Chum Chapter	
		New Breakpoints and Allocations	Management Error
1st Fraser Chum run size breakpoint	900,000	1,050,000	
Resulting US 7/7A Allocation	130,000	125,000	+ 10,000
2nd Fraser Chum run size breakpoint	900,000	1,600,000	
Resulting US 7/7A Allocation	130,000	160,000	+ 10,000

- **Finalization of Chapters 5 and 6 Language Files**
 - In the weeks leading up to this February PSC meeting, the U.S. and Canadian Southern Panel chairs worked together to finalize and submit the bilaterally agreed-to new Chapter 5 and Chapter 6 language files into the PSC “Locker.” To enable ease of the legal review process, we used “Track Changes” in the files to show what language changed in the new versions of Chapters 5 and 6 compared to the previous 2009 PST agreement.
 - Southern Panel chairs will be available, as needed, for consultation and language review tasks during the legal review process for the new Chapters 5 and 6.
 - During bilateral Panel meetings this week, we evaluated differences in the new Coho and Chum chapters as compared to the 2009 PST agreement. We began working on a summary list of what has changed in the new Chapter 5 and Chapter 6 compared to the previous annex. We would like the completed version of this summary to eventually serve as a bilaterally-endorsed synopsis of the changes in Chapters 5 and 6 that could be shared with constituents in response to possible inquiries about the new agreement.
 - The bilateral Panel began strategizing on work needed of the Panel per Paragraph 11b and 11c within the new Coho Chapter – for which the Panel

needs to develop guidance and a process by which one party could request of the other party a reduction (11b) or increase (11c) in a particular coho management unit's ER cap during annual pre-season planning. Southern Panel members made substantial progress in outlining initial ideas on this topic during section time and bilateral meetings.

- Update from Chum Technical Committee

- This week the Chum Technical Committee presented to the bilateral Panel their updates on continuing research projects funded by the Southern Endowment Fund, including successful multi-year projects such as:
 - Genetic stock identification (GSI) sampling of Chum captured in mixed stock commercial and test fisheries;
 - Sampling of the Chum migration through the Strait of Juan de Fuca to determine stock-specific spatial and temporal distributions; and
 - Using new technology and techniques to improve escapement estimation methods and produce total Fraser River Chum escapement estimates.
- Chum TC also presented their priorities for 2019 SEF projects to Southern Panel.

- Update from Coho Technical Committee (CoTC)

- During the recent January PSC meeting, the U.S. and Canadian co-chairs of the Coho Technical Committee presented their 2018 work plan, and discussed recent new work for automating post-season exploitation rate report outputs that will help improve and streamline the CoTC's data compilation and reporting process.
- This week (on Thursday, February 15), the CoTC will present to the bilateral Panel their;
 - Annual post-season assessment of Coho exploitation rates for the 2016 season.
 - List of priorities for 2019 Southern Endowment Fund projects to Southern Panel.
 - Update on CoTC's continuing work to complete the next Periodic Report (years 2010-2015).
 - Proposal for Southern Panel consideration regarding an electronic version of the Periodic Report.

Fraser River Panel Report

15 February 2018

Kirt Hughes, U. S. Section – FRP Chair

Jennifer Nener, Canadian Section – vice Chair

2018 Annual Meeting of the Pacific Salmon Commission

Commission Briefing – Report of the Fraser River Panel

Items addressed in this report:

- Post-season review of 2017 season
- 2018 pre-season outlook
- Test-Fishing program review project
- Test Fishing plan for 2018
- Update on status of work being conducted for you Fraser Strategic Review Committee
- Chapter re-negotiation

Post-season review.

As you are aware the 2017 was the third year of very low returns of sockeye to the Fraser River system and the second year of poor pink returns. The total runsize of Fraser sockeye was 1.44 million – near the p10 level and the third smallest on record – diversion was 71%. The total return of Fraser pinks was 3.6 million – below the p10 level – the diversion rate was 57%. The Panel recognized early in the season that the return was below the p50 forecast. Notably the near final estimate of escapement for the Early Stuart management group at just over 15,000 was the second lowest for the historically dominant cycle-year while the Late management group was the lowest escapement on record with only 83,000 fish. The total escapement of Early Summers was about 68,500. The Summer management group escapement was 789,000. In contrast spawner success was noted to be good in most areas.

Stock	Escapement
Early Stuart	15,433
Early Summer	68,462
Summer	789,187
Late	83,119
Total	956,201

Given the low return there were very limited sockeye directed fisheries. The total harvest of sockeye was 86,900. The total harvest of pinks was 155,800.

In anticipation of the low return, in pre-season planning the Panel implemented a reduced test-fishing program; the program was further reduced in-season. Total expenditures was approximately \$970,000, revenue generated from sample fish and those retained in gillnet test fisheries was about \$433,000. The balance of expenditure (\$533K) was covered by the test-fishing revolving fund.

Pre-season Planning

The p50 forecast for 2018 is nearly 14 million. Similarly to the 2016 and 2017 return years there is concern that the ocean conditions these fish encounters were far less that optimal. The Panel is planning

test fisheries needed to assess the runsize with a moderate reducing from the full program implemented in 2014. The Panel anticipates the program will cost between \$1.3 and 1.5 million. It is expected that there will be sufficient revenue to cover the cost of the 2018 program. As in recent years the Panel will remain in communication with the Finance and Admin. Committee as needed during both our pre-season planning and in-season management.

Test Fishing Review

The Panel is nearly complete with the review of the test-fishing program we began in fall of 2016. A final report will be provided to the Commission upon complete on this work.

Test fishing planning for 2018

We expect harvestable surplus sufficient to allow fisheries across all sectors [including the taking of pay fish]. As noted above, the Panel has identified some reduction from the historical cycle line pattern. To provide some assurance to the Secretariat that there will be sufficient monies to cover the cost of the test fishing program, it is anticipated that the Panel, in consultation with the Finance and Admin Committee will develop a "Pre-season Plan on Test Fishing Deductions and Use of the Test Fishing Revolving Fund."

Fraser Strategic Review Committee

The Panel met with the FSRC during the post-season meeting in Portland during January. The FSRC has been reviewing the Panel's report on findings of assessments of the hydro acoustic programs. The Panel and FSRC will continue work to complete the report such that the FSRC can complete their synthesis document and recommendations to the full commission.

Chapter re-negotiation

Finally the Panel met briefly yesterday to discuss the items we anticipate addressing during the coming year. None of these items are a surprise to either country.

2018 SFEC Report

Pacific Salmon Commission
February 2018, Portland, OR
Rob Houtman
Kristen Ryding

Duties of SFEC

1. Serve as a coastwide clearinghouse for coordination and reporting on MM and MSF programs;
2. Provide advice on potential adverse impacts of MM and MSFs on the CWT program;
3. Assess and monitor the cumulative impacts of MSFs on stocks of concern;
4. Receive and review MM and MSF proposals to identify potential issues and concerns regarding impacts on the CWT program.

SFEC is to establish a technical review process for MM/MSFs that will

- Identify potential impacts on other jurisdictions and the CWT program;
- Review procedures and protocols for marking, sampling, and evaluation;
- Establish standard formats and reporting requirements to provide post-season information and estimates of mortalities on stocks of concern;
- Identify information needs or request modifications of proposals to meet concerns regarding impacts on the CWT program; and
- Periodically assess impacts of MM/MSF programs regarding the integrity of the CWT program.

Overview

- Proposals have been received and review is underway
- MM Proposals

Species	# 2016 Mass Marked	#2017 Mass Marked	#2018 Mass Mark Proposals
Coho	33.5 million	34.2 million	34.2 million
Chinook	117.1 million	116.2 million	116.2million

- MSF Proposals

Species	# Proposed for 2016	# Proposed for 2017	# Proposed for 2018
Coho	23	24	25
Chinook	36	40	43

MM Proposals

- All MM proposals received on time,
- MM levels relatively constant - slight increase for coho, slight decrease for Chinook over 2016 levels
- Change in CWT releases Chinook and coho
 - Coordination issues affect reporting of releases from Nez Perce operations
- Continued reduction of DIT groups continue
- ETD and Visual CWT sampling areas remain unchanged
- Not all MM Coho & Chinook releases are have associated CWT groups
 - Difficulty estimating source of MM'd encounters

MM Proposals for 2018 (excluding marked CWT'd fish)

Agency	Coho (million fish)	Chinook (million fish)
ADFG	0	0
CDFO	3.7	0
USFWS	1.7	25.0
WDFW/Tribes	22.5	70.9
ODFW/Tribes	6.2	20.3
IDFG	0	0
TOTAL	34.2	116.2

MSF Proposals for 2016-18

	Coho			Chinook		
<u>Agency</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
ADFG	0	0	0	1	1	3
CDFO	5	5	5	1	1	1
WDFW	10	11	12	24	27	27
ODFW	5	5	5	5	6	6
WDFW/ODFW	3	3	3	5	5	5
IDFG	0	0	0	0	0	0
CDFG	0	0	0	0	0	0
TREATY TRIBE	0	0		0	0	1
TOTAL	23	24	25	36	40	43

MSF Proposals

- Number of proposals for 2018 similar to 2017
- 3 Coho, 8 Chinook MSF's proposed but not conducted in 2017
- Continuing concerns for regulations and catch sampling programs

MSF Proposals at a glance: Green-Yellow-Red

Color	Level of concern to SFEC
	None
###	Moderate
###	Major

MSF Proposals

- R-Y-G tables & issue list
 - Regulations are complex (e.g., mixed bag, size limits, multiple dates)
 - Inadequate catch monitoring and CWT sampling programs
 - Voluntary recovery programs in BC sport fisheries
 - Misalignment between MSF strata and catch sampling programs
 - Insufficient data collection (e.g., mark status, size category, releases)

Proliferation of regulations for implementation of MSFs

- Major types with multiple variations

Category	Description
Simple	Only marked fish can be retained.
Marked mixed bag limit	A portion of total bag limit can be unmarked. This can be a daily limit bag or a seasonal bag limit
Mark and size-mixed bag limit	Size-range-specific allowances for retention of unmarked fish .

Implications of MSF Complexity

- Regulations affect complexity and costs for catch monitoring, sampling, and reporting systems
 - Difficulty of developing methods to estimate MSF impacts on unmarked fish
 - Reductions in numbers of DIT release groups; coverage & sampling inconsistent.

MSF Proposals

- Mark rates – a consideration in decisions regarding benefits of MSFs and impacts on comingled natural stocks.

Issues

- MSF proposals
 - required before details are known
- Post Season MSF reports:
Information (e.g.)
 - Sampling – type in MSFs, other fisheries, and escapement
 - If MSF occurred
 - Time/area/gear
 - Released and retained fish

Received from

- WA Coastal and Puget Sound Marine Areas, OR Coast, Lower Columbia River, SEAK
- Need to work with other areas/agencies on reporting

Issues – Budget Pressures

- Concerns for maintaining base sampling programs
- DIT programs and ETD sampling.
- Dependency on CWT system – concern for erosion of cornerstone for management, stock & fishery assessments
- Support for technical and policy processes to develop agreements and to clarify responsibilities for maintaining a functional CWT program

Operational Changes

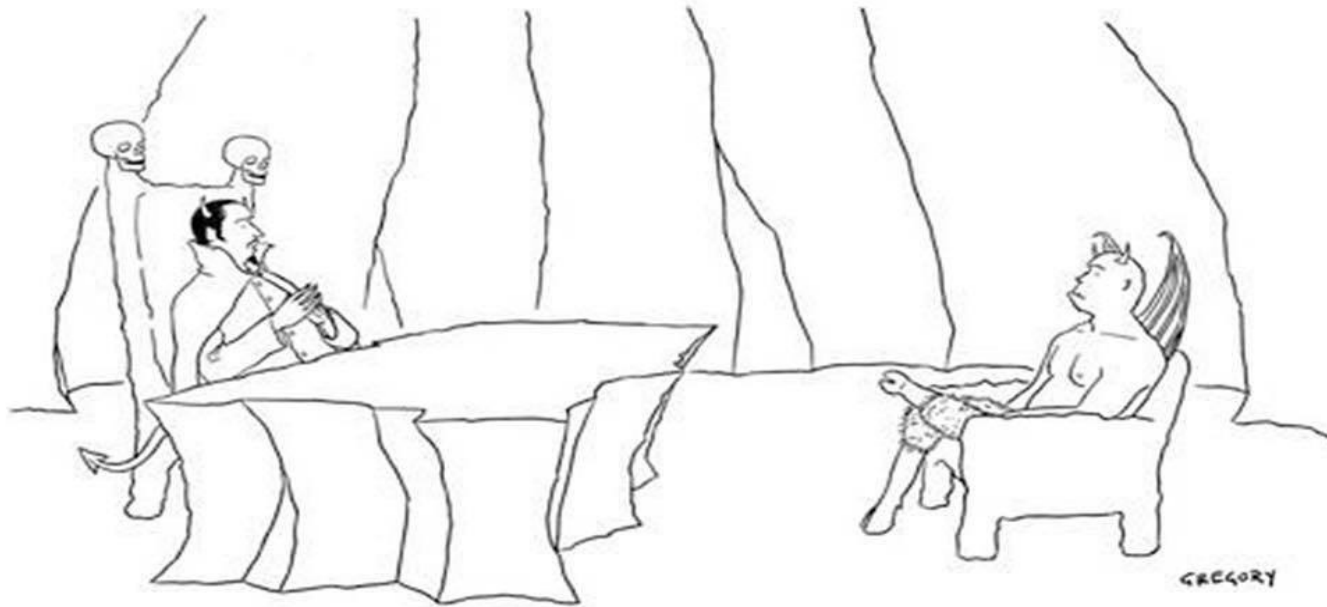
- RCWG proposes a change to the way MM proposals are requested and reviewed.
 - Annual proposal requests will ask for either
 - a notification of no changes to a previous proposal, or
 - a completed proposal for new or substantially changed proposals.
 - For their annual review of proposals
 - RCWG still review new and changed proposals, but they would use actual release data (from RMIS) for figures and tables documenting trends in marking and tagging levels.

Operational Changes

- Initiate a spring letter reminding agencies of the following June 1st deliverables (from the MOU):
 - “Provide early notice containing the agency’s plans to consider conducting MSFs over the next 3-5 years”.
 - “Provide new or substantially changed MM or MSF project proposals, by June 1 of the year prior to implementation”.
- A request for information on mark rates expected to be encountered in proposed MSFs will be included in MSF proposals.

Future Plans

- 2017 and 2018 MM/MSF reviews: Spring 2018
- MSFs
 - Focus on new or substantially changed proposals and post season reporting
- Coho DIT update – additional draft by end of January
- Chinook DIT reported by CTC in exploitation rate analysis and calibration reports- differences are becoming apparent.
- MSF database, e.g., NWIFC/WDFW pilot RAID database, to facilitate storage of postseason MSF estimates. Coordinate with Data Sharing and Data Standards committees.
- Archival/storage capability for version control of master documents



*“I need someone well versed in the
art of torture—do you know PowerPoint?”*

CSC 02/15/2018 Report to Commission on 2017/2018 Work Plan

The CSC has focused on those tasks in the 2017/2018 Work Plan approved by the Commission at the October 2017 Executive Session. The efficacy of the committee and its understanding of the scope and priorities of the PSC activities were impacted by being limited to a single face-to-face Commission meeting. We consider participation at both the Post-Season and Annual Meetings essential for the CSC to carry out its responsibilities under its Terms of Reference and its Work Plan as approved by the Commission. The CSC tasks from this year's Work Plan were initiation of work on approved elements of the CSC strategy document; roundtable discussion on RFID technology with the CoTC and the CTC; and roundtable discussion on emerging scientific issues with representatives of Panels and Technical Committees.

1. Variation in Environmental Indicators

The CSC, at the Commissioners' request, generated the document "*Elaboration of a strategy for consideration of annual variation in environmental indicators and salmon production and its implications for fisheries management under the Pacific Salmon Treaty.*" This document identified several elements for documenting anomalous environmental conditions and evaluating their implications for salmon production under the Pacific Salmon Treaty. The Commission approved moving forward with the development of improved communication and access to information sources and data relevant to this issue. They deferred a decision on developing capacity for compiling and evaluating annual variability in environmental and salmon indicators.

The CSC has worked with the Executive Secretary and Secretariat Staff (IT, Library Resources) to create an alpha version of a PSC SharePoint site titled "Variability in Pacific Salmon & their Environment." This portal aims to improve access to, and communication of, this type of information for PSC members. The alpha site was presented at the roundtable on Emerging Scientific Issues to get feedback from Panel and Technical Committee chairs and members attending. The current version is on view on the screen and is available on the PSC website for Commissioners' review. The CSC plans to have expert review of the content, and with the approval of the Commission, make the site available to the PSC community by April, 2018.

The CSC discussed how to implement the Strategy element for a Workshop on the status of salmon in relation to the state of the ocean from different regions across the eastern North Pacific Rim. A proposal will be generated for the 2018 Fund Committees cycle, which if approved would support a workshop at the 2020 Annual Meeting. We are exploring options to identify support for earlier (2019) implementation.

2. RFID Roundtable

The CSC disseminated its conclusions and recommendations on the RFID report to the CTC and CoTC and hosted a one hour meeting at the 2018 Annual Meeting to discuss future consideration of this tagging technology in relation to PSC management applications. The meeting and discussion was well-attended, with diverse views on the utility of RFID tags and potential future applications. Both CoTC and CTC members identified potential research projects that would provide better understanding on the feasibility and use of the technology. Funding to implement this type of research could be considered within the scope of Northern and/or Southern Fund Request for Proposals.

One of the recommendations for RFID tag applications was to revisit at some future date the feasibility of RFID microchips as a tool for PSC applications as the technology evolves. This is similar to the recommendation from the Parental Based Tagging review to stay updated on the development and applications of genetic assessment tools. An approach to keeping the PSC community current on these (and other) evolving technologies would be for the CSC to facilitate a future workshop, with 2021 as the earliest possible timing. This concept will be incorporated into the upcoming CSC Work Plan for Commission consideration.

3. Emerging Scientific Issues

The CSC hosted a roundtable discussion at the 2018 Annual Meeting on emerging scientific issues of importance to the PSC. Chairs and co-chairs of panels and technical committees were invited, as well as interested members. Members of the CoTC, CTC Fraser Technical Committee, Fraser Panel, Transboundary Panel and Technical Committee, and Southern Panel participated, as well as Secretariat IT and library staff.

The discussion was separated into two phases: (A) emerging issues; (B) feedback on the CSC alpha version of an information sharing portal on the PSC SharePoint site.

Issues identified under (A) included:

- a. knowledge gaps on the changes in life history parameters (e.g., survival, fecundity, age at maturity) in relation to changes in marine conditions;
- b. uncertainty about the role of ecological interactions of salmon with prey, competitor, and predator species;
- c. the need for a management framework that responds to rapidly-changing environmental and salmon population metrics;

- d. development of tools to evaluate management regimes for precision, risk-aversion, and cost-effectiveness.

There was substantial discussion on efforts to develop processes to integrate the status of salmon with variation and changes in the environment. There was general support for the CSC facilitation of a workshop in 2019/2020 to bring together the information that is already known about environmental and salmon population changes and how to analyze the data collected about them.

The Share-Point portal (B) was favorably received with the potential for high utility for the PSC science community. Several comments from the group will be incorporated, including adding a category for links to tools, models, and methods; and reorganizing the discussion component of the portal to improve its utility.



Report of the Standing Committee on Finance and Administration
February 15, 2018

The Standing Committee on Finance and Administration met on June 27, 2017 (teleconference), December 13, 2017, January 10, 2018, and February 13, 2018. The Committee addressed a number of issues and made recommendations for the Commission's consideration as noted below.

Database Manager position – pilot project

The Committee reviewed the Draft Pilot Project Proposal document (Attachment 1) and agreed to recommend the proposal for Commission adoption, including a progress report to be delivered by the Executive Secretary at the October 2018 Meeting. The report would provide a qualitative evaluation of the Database Manager's transition into the Chinook Technical Committee (CTC) work, interaction and training with PSC Secretariat biological staff, as well as specific benchmarks for deliverables.

The Committee made the following recommendations:

1. The position description should be amended to specify a 2-year term limit, and
2. The Secretariat should consult closely with the CTC to develop a work plan with objective measures of success, deliverables, and timelines.
3. The Commission should adopt the proposal with the caveats above.

Budget proposal for FY 2018/2019 and forecast through FY 2020/2021

The Committee reviewed the proposed budget for FY 2018/2019 and forecast budget for FY 2019/2020 and 2020/2021, as updated on January 30, 2018.

It was agreed that the proposed budget for FY 2018/2019 would incorporate the annual salary and benefits cost (approx. \$108,000) of the Database Manager position, as part of a two-year pilot project.

Accordingly, the Committee recommends that the Commission adopt the proposed budget for FY2018/2019 as shown in Attachment 2.

Revised grievance policy for Secretariat staff

The Committee has reviewed the revised grievance policy for Secretariat Staff (Attachment 3) and recommends that the Commission approve the policy.

Staff regulations for employees other than permanent/indeterminate

Currently, there are inconsistencies between the specifics of the Staff Regulations and the way the Secretariat must administer seasonal or term staff.

The Secretariat recommended the development of a set of tailored rules that apply to employees other than permanent/indeterminate, addressing their unique needs and circumstances. These rules would exist in a separate document that can be referenced in the regular Staff Regulations, and modified as necessary.

This would avoid cumbersome and extensive edits to the existing PSC bylaws (e.g. stipulating which ones do or don't apply to seasonal or term employees).

The Committee has reviewed the policy “Staff Regulations for Employees Other Than Permanent/Indeterminate” (Attachment 4) and recommends that the Commission approve the policy.

Technical and clarifying bylaw amendments

The Committee has reviewed the technical and clarifying bylaw amendments (Attachment 5) and recommends that the Commission approve them. These arose from a) input from the CTC Functions and Operations Group (CTC FOG) or b) advice from legal counsel, as noted in the margin comments on the document.

Test fishing

Test fishing finances continue to be a significant issue for the Parties, after extremely low returns of Fraser River sockeye and pink salmon in 2015, 2016, and 2017. The low returns precluded the capture and sale of adequate fish to recover test fishing costs in those years and lowered the Test Fishing Revolving Fund (TFRF) to approximately \$700,000 at the end of the test fishing season (after supplemental contributions from Canada and the U.S. in early 2017 of \$451,076 and \$288,259 CAD, respectively). In early 2018, Canada made an additional contribution of \$530,460, bringing the projected TFRF balance to approximately \$1,230,000 as at March 31, 2018.

The PSC Secretariat has raised the possibility of harvesting surplus pay fish in 2018 to build up the TFRF balance, in anticipation of much lower returns and revenues from 2019-2021. The Canadian Vice-Chair of the Fraser River Panel advised that forecast 2018 returns and conservation concerns may influence PSC's ability to retain surplus pay fish. She indicated that Canada was in the process of undergoing consultations with stakeholders on this and other issues for Fraser River fisheries. During this process, different forecast scenarios would be presented, and appropriate courses of actions would be designed for each scenario based on feedback from stakeholders. The F&A Committee will discuss the results of these consultations in spring 2018, with a view to developing bilateral guidelines for Secretariat test fishing operations.

For the long-term, the Fraser River Panel may address test fishing issues (e.g., the priority of fish for PSC retention and sale) in renegotiation of Annex IV, Chapter 4 before December 31, 2019.



DRAFT Pilot Project Proposal

Data management support for the CTC and Fraser River Panel

Developed by the Secretariat in consultation with CTC co-chairs and the F&A Committee

January 30, 2018

Background

Recent Annex IV negotiations have highlighted issues with CTC workload, capacity, and data management. The Parties established a CTC Functions and Operations Group (CTC FOG) in 2017 to explore these issues, including possible Secretariat support for the CTC.

One central issue is that data management challenges surpass the capacity and technical skills of personnel in the Secretariat and the CTC. Domestic agency IT policies often preclude foreign users and database support that might address CTC needs. The PSC Secretariat does not employ a database technician, although staff rely on a number of Fraser River databases (developed previously by a 3-year term technician). While Secretariat biologists can do simple troubleshooting of the existing databases, they lack the capacity to support either the CTC's or the Secretariat's more complex database needs.

Given the volume, complexity, and continual growth of CTC and Secretariat datasets, both groups seek improved data management support. This document summarizes recent conversations between the Secretariat, the CTC co-chairs, and the Finance and Administration (F&A) Committee on how to resolve this growing challenge. While this paper focuses on the overlapping needs of the CTC and the Secretariat, other PSC joint technical committees will likely face similar database/data management challenges in the coming years.

Data management issues

CTC

1. Time required to download large volumes of CWT release/recovery data from RMIS and upload this to the current database, with associated data entry errors;
2. Need to finalise and error check the next-generation CTC database ("Chinook Interface System" or CIS)¹;
3. Lack of time and skills to transfer data from Microsoft Access to SQL and eliminate impending data storage limitations;
4. Limited automation and error checking in data processing;
5. Problems with version control of the datasets and programs currently on multiple CTC members' laptops

Fraser River/Secretariat challenges

¹ This work was previously conducted under a contract paid from U.S. LOA funds. These funds are no longer available for this purpose, and the contractor has retired.

1. Accessibility and security of Fraser River sockeye and pink salmon datasets, e.g. test fishing catch and effort, sample information, stock identification (scale and DNA based), age, Mission passage, catch and total abundance estimates;
2. Need to migrate the sockeye scale database (containing more than 100 years of records) from Microsoft Access to SQL and eliminate data storage and run-time limitations;
3. Limited troubleshooting of existing databases;
4. Need for future database development, expansion, and refinement (e.g., test fishing database, endowment fund database)

Proposed solution

Database expertise is different from biological or statistical knowledge, and has become important in regional fisheries science (e.g., the International Pacific Halibut Commission employs four full-time IT staff in data management). Therefore, the F&A Committee recommends that the Commission approve a 2-year pilot project to start addressing the challenges above. Key elements of this project include:

- For a two-year term, the Secretariat retains a database manager who can assist both the CTC and the Secretariat's Fraser River assessment program.
- Funding for the pilot project (up to \$108,000 per year for two years) would be provided by the current surplus in the budget (through FY2019/2020).
- Near the project's conclusion, the Executive Secretary and CTC leaders would report on the successes and challenges encountered.
- The Commission would use the results of the pilot project to decide whether to permanently create a database technician position at the Secretariat, extend the project, or terminate it.

Conversely, under the status quo, the CTC and the Secretariat would try to address their respective data management needs within their current workloads using contractors as funding allows. The Secretariat would use contractual services to maintain Fraser database functionality while foregoing database support for the CTC and other technical committees. However, contractors' costs per hour are substantially higher than permanent staff salary/benefits.

Project considerations

Duties and classification

- See attached position description

Supervision and CTC interaction

- The incumbent would be supervised by Secretariat staff in direct coordination with CTC leaders, with regular reports to the Commission on implementation.
- It would be imperative the CTC name a project "gatekeeper" to liaise with this staff member, prioritize tasks, and vet requests from the CTC at large.
- The CTC should also designate one or more subject experts to explain jargon and CTC instructions and evaluate progress.

Priority tasks

- While crucial tasks are known, prioritizing them requires discussion and coordination by the Secretariat staff (Director of Data Analysis and Modeling) and the CTC co-chairs.
- Especially during the first year, the primary focus would be on CTC challenges (completion and error checking of CIS with migration to SQL, and remote access for CTC members) with secondary focus on Fraser River needs.

Budgetary impacts

- The project would cost up to \$216,000 in total over two years (\$108,000/year) in salary and benefits for the term employee (depending on placement in the pay grade). Travel should be limited and can be absorbed in the current budget.
- Project costs can be absorbed in the current budget surpluses through FY2019/2020, but FY2020/2021 is projected to yield a \$272,000 deficit as a result of the lower carryover from FY2019/2020. See revised budget projection table.

Risks

- Two years may not be sufficient to complete CTC work and troubleshooting.
- Centralizing CTC database at Secretariat without long-term support would require ad hoc contractual work after the project concludes.
- Skill shortages in CTC and Secretariat would reappear after pilot project ends.

Benefits

- Addresses data management issues of CTC and Secretariat in the near-term.
- Brings professional database support to bear on major issues for Chinook and Fraser River data management.
- Starts addressing forecast expert panel recommendation on centralizing and securing CTC data.
- Informs decision on longer term support for data management needs within the Fraser, CTC and across the PSC

Benefits of long-term expertise at Secretariat (beyond the pilot project)

- Modernize the PSC's approach to handling large, complex datasets in the CTC, the Fraser River assessment programs, and other species/rivers as needed, on par with similar fisheries management organizations;
- Central, secure location of CTC and Fraser River data rather than individual laptops and multiple versions (addressing certain Chinook forecast expert panel recommendations);
- Development of web based/SharePoint database solutions to enhance data access across the PSC family;
- Permanently develop the Secretariat's capacity to assist other joint technical committees with data management and data security (e.g., Coho and Chum TC's)



DRAFT Position Description: PSC Database Manager

The Database Manager will be part of the Stock Assessment and Data Management group within the Fisheries Management Division, and will focus on data management for Chinook salmon as well as Fraser River Sockeye and Pink salmon. The data consists predominantly of fisheries and biological information.

Major duties and responsibilities

Under the direction of the Quantitative Fisheries Biologist and in close collaboration with the Chinook Technical Committee (CTC), the incumbent will:

- 1) Perform an audit of the existing CTC database, identifying structural vulnerabilities and priorities for upgrading;
- 2) Complete and improve the new CTC database, (e.g., convert from Microsoft Access to SQL, refine ETL processes including automated QA/QC protocols and form development), and host it on a shared, centralized platform for Committee use;
- 3) Troubleshoot and maintain the various databases used by the Secretariat and by the CTC;
- 4) Continue development of the Secretariat's Fraser Sockeye catch and escapement database;
- 5) Perform an audit of the existing Secretariat test fishing database, identifying structural vulnerabilities and priorities for upgrading;
- 6) Run regular database queries and downloads to support Chinook and Fraser River assessments;
- 7) Develop and regularly update technical database documentation;
- 8) Implement quality control protocols and security measures to safeguard databases against accidental or unauthorized modification;
- 9) Provide advice and tools to help biologists prepare historical datasets for uploading into databases;
- 10) Provide information and advice to biologists that are engaged with database development, to help them improve and enhance their database skills (i.e., be a resource person);
- 11) Develop new databases, time permitting.

Salary and benefits

Salary range: \$70,000 – \$86,000, which is equivalent to the Canadian Public Service classification for CS-2. Benefits include a defined benefit pension plan, extended health and dental care, and health savings account.

Minimum Qualifications

- 1) Degree in computer science, information science, technology, engineering, mathematics, biology, or related field.
- 2) Demonstrated expertise in frontend and backend database design, implementation, use, and management using Microsoft Access.
- 3) Demonstrated expertise in Microsoft Access database migration to SQL server.
- 4) Demonstrated experience with remote database access.
- 5) Demonstrated proficiency in development of ETL processes moving data between Excel and Access environments.
- 6) Computer programming skills in SQL and VBA for Access.
- 7) Demonstrated ability to work as an effective and cooperative team member, and to work efficiently while under time constraints on multiple projects.
- 8) Excellent communication skills.
- 9) Experience producing clear and concise database documentation.
- 10) Willingness to advance current skills.

Advantages

- 1) Computer programming skills in R or VB.NET.
- 2) Experience in collaboration tools and document sharing systems such as Microsoft SharePoint.
- 3) Experience with cloud-based databases and web database applications.
- 4) Knowledge of ecology, and marine and anadromous fisheries science.

TABLE I

PACIFIC SALMON COMMISSION

FORECAST BUDGETS

(updated January 30, 2018)

	Forecast results 2017/2018	Proposed Budget 2018/2019	Forecast Budget 2019/2020	Forecast Budget 2020/2021
	(pink)	(Adams)	(pink)	(none)
1 INCOME				
A. Contribution from Canada	1,879,636	1,879,636	1,879,636	1,879,636
Special contribution pension CA	123,743	162,852	162,852	162,852
B. Contribution from U.S.	1,879,636	1,879,636	1,879,636	1,879,636
Special contribution pension U.S.A.	123,743	162,852	162,852	162,852
Sub total	4,006,758	4,084,976	4,084,976	4,084,976
D. Interest	35,000	32,000	32,000	32,000
E. Other income	185,000	185,000	185,000	185,000
Carry-over from previous fiscal year	1,216,135	1,057,561	559,053	81,943
F. Total Income	5,442,893	5,359,537	4,861,029	4,383,919
2 EXPENDITURES				
A. 1. Permanent Salaries and Benefits	2,624,426	2,888,750	2,972,897	2,934,009
2. Unfunded pension liability payments	247,486	325,704	325,704	325,704
3. Temporary Salaries and Benefits	223,354	261,152	243,650	187,433
4. Total Salaries and Benefits	3,095,266	3,475,606	3,542,251	3,447,147
B. Travel	129,694	97,396	95,828	94,098
C. Rents, Communications, Utilities	313,298	199,913	175,367	167,927
D. Contractual Services	577,673	754,940	693,697	680,432
E. Supplies and Materials	46,401	49,629	48,943	43,597
F. Equipment	223,000	223,000	223,000	223,000
G. Total Expenditures	4,385,332	4,800,484	4,779,086	4,656,201
3 BALANCE (DEFICIT)	1,057,561	559,053	81,943	(272,282)
Carry-over generated (expended) in the year	(\$158,574)	(\$498,508)	(\$477,110)	(\$354,225)



REVISED DRAFT

Policy on staff grievances for permanent employees

January 22, 2018

Purpose

The staff regulations in Chapter X of the PSC bylaws prescribe Secretariat staff compensation, benefits, discipline, and other personnel matters. From time to time, staff may perceive that these regulations are unfairly applied or misapplied to them. Rule 45 in Chapter X (Interpretation and grievances) stipulates that grievances from staff members in such situations shall be addressed in accordance with a policy developed by the Executive Secretary and approved by the Commission. This policy addresses the directive in Rule 45 for permanent employees.

Process

1. It is the responsibility of all staff to familiarize themselves with the staff regulations and policies, including amendments and changes to them. It is the Executive Secretary's responsibility to inform staff in a timely way when staff regulations are amended, or when new policies go into effect. All current staff regulations and policies will be posted continuously in a central electronic location.
2. If an employee perceives that a staff regulation or policy has not been applied, misapplied, or unfairly applied to them, and wish this resolved, they must first inform their supervisor ~~in a timely manner~~ within 10 working days. This informal phase of the grievance process should outline the employee's issue and the reasons for their concern ~~and does not have to be in writing, but must be in writing~~. The supervisor must respond ~~in writing to the complaint in a timely manner~~ within 10 working days with a proposed solution and a plan to implement it, or with reasons why the staff regulation/policy was correctly applied in their view. A supervisor who is not in the grievant's line of authority may facilitate this process, if desired by the grievant. It is hoped that most grievances can be resolved at this step in the process, and it must precede all other steps below.
3. If an employee is not satisfied with the informal approach shown above for resolving their grievance, or if the perceived problem recurs, they must engage in a formal process if they still seek resolution. The employee must have their grievance in writing and submit it to ~~their supervisor and~~ the next highest supervisor ~~in a timely manner~~ within 10 working days of step 2 concluding. The original supervisor will get a copy of this written grievance. Such written grievance shall include at a minimum a) details about the issue including persons involved, dates, and the relevant staff regulation or policy; b) previous attempts at resolving the issue and what occurred therein; and c) the employee's desired outcome. The person supervising the grievant's supervisor must respond ~~in a timely manner~~ within 10 working days with a proposed solution and a plan to implement it, or with reason(s) why the staff regulation/policy was correctly applied in their view. When desired, the staff member may meet in person with the supervisors involved to discuss their written grievance. In such circumstances, the grievant may ~~have~~ choose another PSC staff member to attend ~~and the supervisor may choose another manager to attend~~.
4. The process in paragraph 3 may be repeated by the grievant stepwise through their chain of supervisors, up to and including the Executive Secretary.

5. In cases where the process in paragraphs 3 and 4 is not satisfactory to the employee, or where the employee's immediate supervisor is the Executive Secretary (or when the Executive Secretary has a grievance), the Commission Chair and Vice-Chair may receive and consider written grievances. Such grievances shall contain the same types of information as shown in paragraph 3. The Chair and Vice-Chair shall render their decision on a grievance in writing within **90 days**. Alternatively, the Chair and Vice-Chair may instruct the Executive Secretary to undertake other personnel actions where they deem that receiving the grievance is not appropriate. The Chair and Vice-Chair's decision on all such matters is final and not subject to appeal.



DRAFT

Staff Regulations for Employees other than Permanent/Indeterminate

February 14, 2018

1. Purpose

This policy outlines the terms and conditions of employment for employees other than permanent/indeterminate. This policy may be amended at any time by the Executive Secretary. This Policy is referred to in Rule 1 of the Chapter X (Staff Regulations) of the PSC Bylaws. The rules in Chapter X of the PSC Bylaws do not apply to employees other than permanent/indeterminate unless stipulated otherwise.

2. Categories

Employees other than permanent/indeterminate fall into one of the following categories:

- Term: An employee hired to work for a specified period of time.
- Seasonal: An employee hired to work a portion of each year on specified seasonal tasks.
- Student: An employee hired for a specified period of time who is: a) registered as a full-time secondary or post-secondary student in an accredited institution; b) currently recognized as having full-time student status by the institution; and c) returning to studies in the next academic term.

3. Qualifying employees

Seasonal and Student employees are not "Qualifying Employees" and are therefore, among other things, not entitled to Pacific Salmon Commission ("PSC") benefits.

Term employees will only be considered Qualifying Employees if they: (i) work a minimum of 12.5 hours per week; and (ii) are scheduled to be employed for longer than 12 consecutive months of employment with no break in service.

4. Hourly-paid vs. salaried employees

Non- Qualifying Employees are remunerated on an hourly basis ("Hourly-Paid Employees").

Qualifying Employees are remunerated on a salary basis.

5. Rates of pay

- a. Rates of pay for Qualifying Employees shall be based on the appropriate job classification for the position, which shall be guided by the classification system of the Public Service of Canada.
- b. Appendix I outlines the rates of pay for Hourly-Paid Employees. The Executive Secretary may, however, approve a different rate of pay, as appropriate.
- c. Student rates of pay are guided by the Student Rates of Pay in the Public Service of Canada, unless otherwise determined by the Department Head and the Executive Secretary.

6. Benefits

Qualifying Employees are eligible to participate in the PSC's benefits plan, as outlined in the Summary of Benefits document available on the PSC Intranet.

WorksafeBC coverage (workers' compensation) is provided to all PSC employees who satisfy WorkSafeBC's legislative, regulatory, and policy criteria for coverage.

7. Vacation pay

Qualifying Employees earn paid annual vacation as guided by the Public Service of Canada's collective agreements for respective position classifications.

Hourly-Paid Employees are not entitled to vacation leave with pay. Hourly-Paid Employees receive statutory vacation pay of 4% of salary and overtime compensation on each pay cheque, in lieu of paid vacation leave.

8. Sick leave

Qualifying Employees earn paid annual sick leave as guided by the Public Service of Canada collective agreements for respective position classifications.

Hourly-paid employees are not entitled to sick leave with pay.

9. Pay for holidays

PSC employees are entitled to be paid for the holidays prescribed in the PSC Staff Regulations, subject to the following:

- a) Hourly-Paid Employees must have been employed for a minimum of two weeks prior to the date of the holiday in order to receive pay for that holiday.
- b) Returning PSC employees are exempt from the condition described in paragraph 9 a) and may receive pay for the holiday, regardless of their start date.
- c) Payment for the holiday will be equivalent to the amount the employee would have been paid for the day if it had not been a holiday and the employee had worked the employee's normal hours on that day.

10. Maternity and parental leave

Maternity and parental leave without pay shall be granted in a manner guided by the British Columbia Employment Standards Act. Non-Permanent Employees are not eligible for maternity/parental leave allowance (salary top-up), beyond what is provided through Employment Insurance.

11. Overtime compensation and work on a holiday

Overtime and compensation for work on a holiday shall be paid in accordance with the relevant Policy on PSC Staff Overtime.

12. Bullying and Harassment

All PSC employees and clients can expect to work in an environment free of discrimination and harassment. All PSC employees must abide by the Policy on Workplace Bullying and Harassment posted on the PSC intranet.

13. Confidentiality

Employees shall not, unless duly authorized by the PSC, disclose information acquired in the course of employment pertaining to the PSC or its clients and shall not use such information for their personal or a third party's benefit.

14. Reporting injuries and safety issues

Injuries at work and other safety issues must be reported immediately to the Joint Occupational Health and Safety Committee and in accordance with any WorksafeBC requirements, if the injured employee enjoys WorksafeBC coverage.

15. Probation

Non-Permanent Employees are not subject to a probationary period.

16. Lay-off payment in lieu of notice

Where an employee with three months continuous employment is laid off and has not received two weeks' notice in writing, two weeks' pay in lieu of notice shall be paid. For greater certainty, an employee is not laid off if their employment terminates due to the end of the term or season.

When an employee terminates employment after having been notified of the lay-off, but prior to the lay-off date, no two weeks' pay in lieu of notice shall be provided.

17. Dismissal

If at any time, the Executive Secretary considers that an employee does not give satisfactory service or fails to comply with the duties and obligations set out in this Policy, the employee may be dismissed with two week's pay in lieu of notice.

Proposed amendments to selected PSC bylaws
Provided by the Secretariat to the F&A Committee
February 2, 2018

CHAPTER I
AUTHORITY AND PURPOSE
SECTION A. AUTHORITY AND PURPOSE

Rule 2 Purpose. These bylaws provide for the exercise of the functions and conduct of meetings of the Pacific Salmon Commission and its subsidiary bodies. No bylaw, procedural rule, policy, or practice shall have the intent or be interpreted to alter, condition, or remove the responsibility of the Commission to make timely determinations pursuant to Article II, paragraph 8 of the Treaty.

Commented [JF1]: Recommended by the CTC FOG to clarify that the Commission has the ultimate responsibility to make determinations and recommendations to the Parties.

CHAPTER V
RULES OF PROCEDURE – JOINT TECHNICAL COMMITTEES

Rule 11 Decisions and Recommendations. Joint technical committees shall conduct their business according to guidelines for the conduct of technical committee members provided in Chapter VI. Decisions in joint technical committees shall normally be by consensus (defined as the absence of meaningful dissent among members). While joining consensus, members may nonetheless ask to have certain remarks non-conforming views included in the meeting record. In circumstances where, in the opinion of at least one co-chair, consensus cannot be achieved on all substantial issues within the required timeframe, the co-chairs will consult the Commission Chair and Vice-Chair for direction. If consensus cannot be attained, a joint technical committee shall In such cases, absent direction otherwise, the co-chairs shall report differing views and identify degrees of difference but not the individuals holding particular opinions.

Commented [JF2]: Recommended by the CTC FOG to help address non-consensus in technical committees.

CHAPTER X
STAFF REGULATIONS
SECTION A. GENERAL PROVISION

Rule 1 These regulations set out the conditions of employment, working relationships and rights and responsibilities of indeterminate/permanent employees in the service of the Pacific Salmon Commission (hereinafter referred to as the "Commission"). Secretariat staff shall enjoy the privileges and immunities provided to them as a consequence of the Pacific Salmon Treaty and domestic law in Canada and the United States. Policies and regulations applicable to staff other than indeterminate/permanent are specified in a separate policy issued by the Executive Secretary.

Commented [JF3]: Recommended by legal counsel. Clarifies that the staff regulations apply only to permanent/indeterminate staff, and that rules for other categories of staff are contained elsewhere. See companion set of rules for non-permanent staff.

Rule 2 Employee categories.

- Indeterminate/permanent: An employee hired to work at least one third of a normal work week for an unspecified amount of time. All permanent staff are qualifying employees for Commission benefits, subject to Section H of these regulations.
- Term: An employee hired to work for a specified period of time. Term employees hired for twelve consecutive months or more are qualifying employees for Commission benefits if they work at least one third of a normal work week.
- Seasonal: An employee hired to work a portion of each year on specified seasonal tasks. Seasonal employees are not qualifying employees for Commission benefits.
- Student: An employee hired for a specified period of time and who is: a) registered as a full- time secondary or post-secondary student in an accredited institution; b) currently recognized as having full-time student status by the institution; and c) returning to studies in the next academic term. Student employees are not qualifying employees for Commission benefits.

Commented [JF4]: Parallels treatment of seasonal staff

Rule 16 Probation

The Executive Secretary and all other staff shall be appointed subject to a probationary period of one year. Where circumstances warrant, the Executive Secretary may extend the probationary period by a period not exceeding six months. During the probationary period, staff may be dismissed if the Executive Secretary determines that their continued employment is not in the best interests of the Commission. In the case of the Executive Secretary's probation, such determination shall be made by the Commission Chair and Vice-Chair. This provision applies notwithstanding other staff regulations pertaining to performance and dismissal.

Commented [JF5]: Recommended by legal counsel. Clarifies probation operationally.

Rule 30 To Be Taken in Year Earned

Vacation leave is to be taken in the fiscal year it is earned. In exceptional circumstances and with the prior approval of the Executive Secretary, earned but unused vacation leave may be carried over from one year to another.

Carry-over Provision

Employees who have not used their earned vacation leave in any given year may carry over their vacation hours to a subsequent year in accordance with the carry-over provision in the respective collective agreements of the Canadian Public Service.

Commented [JF6]: Experience has shown that many staff do not or cannot take their earned vacation in the year it's earned, often due to scheduling conflicts or personal reasons. This change would allow PSC staff to carry over vacation similar to staff in the public service.

Chapter V

RULES OF PROCEDURE – JOINT TECHNICAL COMMITTEES

Rule 11 Decisions and Recommendations. Joint technical committees shall conduct their business according to guidelines for the conduct of technical committee members provided in Chapter VI. Decisions in joint technical committees shall normally be by consensus (defined as the absence of meaningful dissent among members). **However, the Commission prioritizes timeliness over consensus in the formulation of findings and recommendations.** While joining consensus, members may nonetheless ask to have certain ~~remarks~~ **non-conforming views** included in the meeting record. **In circumstances where, in the opinion of at least one co-chair, consensus cannot be achieved on all substantial issues within the required timeframe, the co-chairs will consult the Commission Chair and Vice-Chair for direction.** **Absent direction otherwise, the co-chairs shall** report differing views and identify degrees of difference but not the individuals holding particular opinions.



**Annual Report of the
Southern Boundary Restoration and Enhancement Fund and the
Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund
for the year 2017.**

Introduction

In June of 1999, the United States and Canada reached a comprehensive new agreement (the “1999 Agreement”) under the 1985 Pacific Salmon Treaty. Among other provisions, the 1999 Agreement established two bilateral funds: the Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund (Northern Fund); and the Southern Boundary Restoration and Enhancement Fund (Southern Fund). The purpose of the two funds is to support activities in both countries that develop improved information for fishery resource management, rehabilitate and restore marine and freshwater habitat, and enhance wild stock production through low technology techniques. The United States agreed to capitalize the Northern and Southern Funds in the amounts of \$75 million U.S. and U.S. \$65 million respectively. Canada also contributed CAN \$500,000. The 1999 Agreement also established a Northern Fund Committee and a Southern Fund Committee, each comprised of three nationals from each country, to oversee investment of the Funds’ assets and make decisions about expenditures on projects. Only the earnings from investments can be spent on projects.

Committee Members

Northern Fund Committee

Canada:

Steve Gotch
Carmel Lowe
John McCulloch

United States:

Doug Mecum
Bill Auger
Charlie Swanton

Southern Fund Committee

Canada:

Andrew Thomson
Don Hall
Mike Griswold

United States:

Larry Peck
Peter Dygert
Joe Oatman

Executive Summary

- Total contributed capital (nominal) was U.S. \$140,065,000 (the equivalent of CDN \$209,796,000 using the exchange rate at the time the last installment was made). Actual fund asset value at December 31st, 2017 was U.S. \$224,230,000 or CDN \$281,296,000.
- 2017 was a turbulent year marked by natural disasters, geopolitical tensions, and political divisions in many countries. However, from an economic perspective, 2017 ended on a high note, with GDP continuing to accelerate over much of the world in the broadest cyclical upswing since the beginning of the decade. Equity markets continued their climb with most markets ending the year close to record highs, as central banks maintained accommodative monetary policies amid weak inflationary conditions.
- In 2017 the Southern Fund Committee supported a total of 34 projects for U.S. \$2.86 million including U.S. \$800,000 provided to Year 4 of the Salish Sea Marine Survival Program.
- In 2017 the Northern Fund Committee supported a total of 57 projects for U.S. \$4.59 million.
- Informed by advice provided by the Commission, U.S. \$2.6 million was contributed to support 26 *Very High Priority Chinook* projects in 2017. The Northern Fund contributed U.S. \$1.5 million and the Southern Fund contributed U.S. \$1.1 million.
- Combined project spending by the Northern and Southern Funds was U.S. \$7.45 million in 2017.
- Since 1999, the total Northern and Southern Fund expenditures are U.S. \$76 million, which as contributed financial support to 1,087 projects. This sum is inclusive of including U.S. \$4.65 million to the *Very High Priority Chinook* projects and the Southern Fund's contribution of U.S. \$4.2 million to the *Salish Sea Marine Survival Program*. In addition, to the U.S. \$76 million, the Funds have contributed another U.S. \$10 million to the *Sentinel Stocks Program*.
- In 2017 the Northern and Southern Fund Committee members met in person jointly on three occasions, February, April and November. In addition, the Northern and Southern Fund Committee's met separately on three occasions.
- An investment sub-committee worked with the Fund's investment consultants on an Asset Mix Optimization study. The sub-committee met by conference call in January and August and in person in April, June and September to interview and select (for recommendation) three new managers for mortgages, direct infrastructure and core plus investment portfolios.
- Fund staff provided administrative services for the Yukon River Panel's annual U.S. \$1.2 million Restoration and Enhancement Fund for a seventh year in 2017.

Investment Review

Although 2017 was a good year for equities with double-digit returns, in terms of spending, the benefits for the Funds were somewhat offset by the rising value of the Canadian dollar against the U.S. dollar. Global economic growth, and U.S. growth in particular, by and large surpassed expectations and the Fund's global equities manager Morgan Stanley ended the year strongly, leading our other equity managers with the highest outperformance against the benchmark. The Fund's U.S. equities held by BlackRock in an indexed fund also performed well in this environment. The Fund's non-North American equities manager LSV posted strong absolute returns, but lagged the benchmark. Exceptionally low volatility and a continuation of the rally in "growth" stocks limited returns on their "value-style" of investing. Infrastructure manager RARE's performance showed them essentially flat against the benchmark for the year, however, their performance will soon no longer be a concern since the Fund is switching to "direct" infrastructure in the near future as a result of the asset mix optimization process. Real estate manager Invesco performed slightly ahead of the benchmark as of the end of the third quarter and the fixed-income bond fund managed by BlackRock delivered a modest return. The change to an active core-plus fixed income manager will take place early in 2018. ACM the new Canadian mortgage manager was added to the portfolio on September 30th and the mortgage fund increased slightly in the fourth quarter. Longer term, they have a history of out-performance that places them right at the top amongst their peers. 10% of the Fund's bond portfolio had been re-profiled into this new investment vehicle.

Total contributed capital (nominal) was U.S. \$140,065,000 (the equivalent of CDN \$209,796,000 using the exchange rate at the time the last installment was made). Actual fund asset value at December 31st, 2017 was U.S. \$224,230,000 or CDN \$281,296,000.

Contributed capital and asset value of the individual Funds as of December 31st, 2017 stood as follows:

	Contributed Capital	Asset Value
Northern:	U.S. \$75,000,000 CDN \$112,388,000	U.S. \$122,679,000 CDN \$153,901,000
Southern:	U.S. \$65,000,000 CDN \$97,408,000	U.S. \$101,551,000 CDN \$127,395,000

Note #1:

In 2003 a rescission of 0.65% applied to the FY 2003 appropriations reduced the final contribution to the Northern Fund by U.S.\$162,500 and to the Southern Fund by U.S.\$97,500. Thus the actual Contributed Capital is:

Northern:	U.S. \$74,837,500
Southern:	U.S. \$64,902,500

Note #2:

U.S. Dollar Exchange (noon) rate: per Royal Trust, December 31, 2017	1.2545	0.79713
U.S. Dollar Exchange (noon) rate: per Royal Trust, November 30, 2017	1.2888	0.77592
U.S. Dollar Exchange (noon) rate: per Royal Trust, December 31, 2016	1.3427	0.74477
U.S. Dollar Exchange (noon) rate: per Royal Trust, December 31, 2015	1.3840	0.72254

Note #3:

Cash withdrawals performed in May & July 2017 to a total of U.S. \$5,900,000 and CDN \$3,875,000

Asset Mix Optimization Study

Phase I

In November 2016 the Joint Northern and Southern Fund Committees instructed their consultants Aon Hewitt to perform an analysis of the Funds Investment Policy Asset Mix. The purpose was to review the current asset mix and identify opportunities to improve the risk-reward profile of the Master Trust by investigating the following:

- Including additional asset classes.
- Changing the mix between fixed income and variable income asset classes.

Aon Hewitt's Asset Mix Optimization Study was begun in December 2016 and January 2017 and completed by April 2017.

To facilitate the asset mix optimization process, a sub-committee of the Joint Northern and Southern Fund Committees was formed in November 2016 and tasked with advancing Aon's recommended changes to optimize the Fund's asset mix on behalf of the Joint Northern and Southern Fund Committees. The four sub-committee members were Doug Mecum and Steve Gotch (Northern Fund), and Mike Griswold and Larry Peck (Southern Fund).

The specific short-term goals for Aon Hewitt and the sub-committee arising from the Joint Northern and Southern Fund Committee review of the completed Asset Mix Optimization Study were identified at the Fund's April 2017 meeting in Vancouver. These were as follows:

- Develop a recommendation for the Joint Fund Committee to transfer the Fund's infrastructure assets from "listed" to "direct".
- Develop a recommendation for the Joint Fund Committee to move 10% of the fixed income portfolio to Canadian mortgages.
- Investigate active management options for the remaining 20% of the fixed income assets.

The culmination of the sub-committee's work-plan was to conduct in-person interviews and then develop recommendations on Canadian mortgage and direct infrastructure managers for the Joint Fund Committee from selected investment management firms short-listed by Aon Hewitt as the best potential candidates to manage these new elements of the Fund's portfolio. At the same time, the sub-committee held an active fixed income education session with two managers to develop a next-steps recommendation on that goal too.

The sub-committee met on Thursday, June 15th and Friday, June 16th to conduct the interviews, to discuss their impressions and finalize their recommendations. Ms. Satinder Sidhu of Aon Hewitt was present and provided comprehensive background information; interview facilitation; as well as on-the-spot commentary and advice. (Ms. Sidhu is the Fund's new investment consultant and took over that position from Ms. Kamila Giesbrecht in June 2017). Each interview lasted one hour.

Based on a perceived higher level of stability and better returns, the recommendation of the sub-committee was that IFM be chosen to manage the Fund's Direct Infrastructure portfolio. This recommendation was approved by the Joint Fund Committees. In addition, the recommendation of the sub-committee was that ACM Advisors Ltd be chosen to manage the Fund's Canadian mortgages portfolio; the somewhat higher fee structure being offset by a track record of excellent performance. This recommendation was also approved by the Joint Fund Committees. Furthermore, the Joint Fund Committee accepted the sub-committee's recommendation that Aon

Hewitt be instructed to undertake a manager search process and facilitate manager interviews for an active fixed income strategy.

Phase II

The sub-committee met with Ms. Sidhu by teleconference on August 23rd to review Ms. Sidhu's report on selected investment management firms short-listed by Aon Hewitt as the best potential candidates to manage an active fixed income portfolio. Four managers were profiled and the sub-committee elected to invite all four to Vancouver for in-person interviews.

The sub-committee met again on Wednesday, September 13th to conduct the interviews, to discuss their impressions and finalize their recommendations. Ms. Sidhu was again present and again provided comprehensive background information; interview facilitation; on-the-spot commentary and advice. Each interview was scheduled for 50 minutes.

The recommendation of the sub-committee was that Philips, Hager and North Investment Management be chosen to manage the Fund's Core Plus Fixed Income Strategy. The somewhat higher fee structure is offset by a track record of excellent performance. This recommendation was approved by the Joint Fund Committees.

Phase III

In addition to the changes described above, the asset mix analysis also provided insight into the level of spending risk based on the Funds' existing spending policies. The Northern and Southern Fund Committees most recently jointly reviewed their spending policies in 2012. At that time, changes in capital market conditions had resulted in lower expected returns from equities and fixed income assets. The expected long-term annual total Fund return was revised downward to 6.5% from 8.4% previously. As a result, changes were made to the Fund's investment policy, broadening the target asset mix by adding real estate and infrastructure to diversify the portfolio and reduce volatility. Based on this information, the Southern Fund Committee lowered its target maximum spending rate by 1.5% while the Northern Fund Committee maintained its spending policy based on adjustments implemented in 2011. Over the past five years, actual returns exceeded the forecast long-term annual total Fund return by 1.2% (actual return rate of 7.2%) due to an extended bull equity market, coupled with strong returns in the new real estate and infrastructure asset classes. None the less, the Fund's investment advisor have recommended that the recent period of above-forecast performance is unlikely to continue, and the forward-looking capital market return expectations are below the 6.5% rate projected in 2012.

In consideration of these findings, the Fund Committees determined that further analysis of the spending policies of each Fund was warranted and have requested their investment advisor to develop recommendations for presentation to the Joint Fund Committee by April 2018.

2017 Project Funding

In 2017 the Southern Fund Committee supported a total of 34 projects for U.S. \$2.86 million. The list included projects addressing (i) specific priorities identified by the Pacific Salmon Commission's Fraser River and Southern Panels for U.S. \$903,764 or 31.6% of their overall spending, (ii) eleven *Very High Priority Chinook* projects for U.S. \$1.1 million or 38.6%, (iii) year

4 of the *Salish Sea Marine Survival Program* for U.S. \$800,000 or 28%, and (iv) a \$50,000 contribution to the economic impact analysis of Pacific Salmon Treaty fisheries project proposed by PSC Executive Secretary Mr. John Field.

In 2017 the Northern Fund Committee supported a total of 57 projects for U.S. \$4.59 million. Of these, five projects with a total value of U.S. \$214,036 were in the Enhancement envelope with the majority dealing with sockeye enhancement in the Transboundary region and Lakelse Lake in northern BC. U.S. \$308,907 was invested in two Habitat Restoration works in the Transboundary region; by far the largest being the Tahltan River slide remediation project. U.S. \$2.55 million was directed to 35 Improved Information-type projects across South East Alaska, the Transboundary and Northern BC. In addition, the Northern Fund provided U.S. \$1.5 in total to fifteen *Very High Priority Chinook* projects across the region. The Northern Fund also provided a \$50,000 contribution to the economic impact analysis of Pacific Salmon Treaty fisheries project proposed by PSC Executive Secretary Mr. John Field.

In the nine years between 2009 and 2017 the Northern Fund has granted U.S. \$ million to projects while the Southern Fund has granted U.S. \$ million to projects. Included in this total is a sum of U.S. \$4.65 million contributions towards *Very High Priority Chinook* projects (2015 to 2017) and U.S. \$4.2 million from the Southern Fund to the *Salish Sea Marine Survival Program*. In addition to these amounts, the *Sentinel Stocks Program* was funded jointly by the Northern and Southern Funds between 2009 and 2014 in the amount of U.S. \$10 million.

Very high priority Chinook projects

Very high priority chinook projects 2017 funded by the Southern Fund			Cost	
	Title	Agency	CA \$	US \$
1	Abundance estimates for Stillaguamish River chinook salmon using trans-generational genetic mark recapture	WDFW		\$55,139
2	Genetic-based abundance estimates for Snohomish River chinook salmon	WDFW		\$181,586
3	Abundance estimates for Nisqually River Chinook salmon using trans-generational genetic mark-recapture	WDFW		\$43,851
4	South Fork Nooksack Chinook captive brood implementation	WDFW		\$109,113
5	Improvements to evaluation methods of fall Chinook assessments at-age	ODFW		\$33,407
6	Mark Recovery Program Coded Wire Tag Sampling, Dissection and Reporting	DFO	\$242,401	
7	Increased Chinook salmon stock coded-wire tagging to improve the quality of Chinook indicator stock analyses	DFO	\$301,293	

8	Cowichan Adult Chinook Enumeration methodology change	DFO	\$40,397	
9	DNA stock composition of Juan de Fuca chinook catch	DFO	\$16,000	
10	Chilko River Chinook Salmon Indicator Stock (Fraser River Summer-run Age 1.3 stock)	DFO	\$199,950	
11	Burman River Chinook salmon mark-recapture 2016. Year 8	NTC	\$98,807	
	Total 2017 very high priority chinook funding from the Southern Fund.		\$898,848	\$423,096

	Very high priority chinook projects 2017 funded by the Northern Fund.		Cost	
	Title	Agency	CA \$	US \$
12	Mixed stock analysis of districts 108 and 111 chinook fisheries	ADFG		\$57,695
13	Origins of Chinook harvested in SEAK in 2017	ADFG		\$282,600
14	Mark Recovery Program Coded Wire Tag Sampling, Dissection and Reporting	DFO	\$242,401	
15	Terminal Abundance of WCVI Chinook salmon	DFO	\$257,000	
16	Estimation of Fraser River - South Thompson Age 0.3 Chinook Aggregate Escapement	DFO	\$211,500	
17	Nass chinook salmon mark-recapture project 2017	NLG	\$114,000	
18	Atnarko River Chinook Escapement Estimation project 2017	DFO	\$77,000	
19	Klukshu Chinook	DFO	\$49,800	
20	Stikine River Coded Wire Tagging	DFO	\$105,800	
21	Stikine Fishery Sampling & Stock Assessment	DFO	\$80,300	
22	Taku Fishery Sampling & Stock Assessment	DFO	\$35,034	
23	Kitsumkalum chinook	DFO	\$100,000	
24	Chinook salmon Escapement Estimation to the Skeena River using Genetic techniques 2017	DFO	\$36,000	
25	Genetic Stock Identification of Chinook salmon caught in Northern BC Troll fisheries 2017	DFO	\$73,000	

26	Area 3 and 4 Creel Survey, 2017	DFO	\$159,004	
	Total 2017 very high priority chinook funding from the Northern Fund.		\$1,540,839	\$340,295

	Total 2017 very high priority chinook funding.		\$2,439,687	\$763,391
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The combined total of all Northern and Southern Fund grant awards to Very High Priority Chinook projects in 2017 was U.S. \$2.6 million (exchange rate calculated at 0.76).

Joint Fund Committee Meetings

The Northern and Southern Fund Committees have agreed that given the congruent nature of their agendas, their decision to combine the funds into a single master account for investment management purposes, and the efficiencies involved with respect to interaction with the Fund managers, it was appropriate to meet together as a Joint Fund Committee at least once a year, preferably twice, for Fund financial reviews and investment manager interviews. The Fund Committees have also determined that it is beneficial to meet jointly early in the year during their annual project selection meetings to discuss and determine co-funding arrangements for *Very High Priority Chinook* projects. Thus the Joint Fund Committees met in person three times during 2017 on February 22nd (a.m. only), 2017; again on April 25th (p.m. only) and 26th (a.m. only), 2017 and finally, on November 8th and 9th, 2017.

In February the two Fund Committees met to select their projects for funding support in 2017. A crucial element of these discussions was the suite of Very High Priority Chinook projects. In a change from previous years, the Fund Committees received recommendations from the Commission on “themes” to address priority Chinook salmon initiatives in support of implementation of Chapter 3, for inclusion in their Call for Proposals. In 2015 and 2016, the Commissioners had identified specific projects. Each Fund Committee grouped project proposals that either self-identified or most closely aligned with the Chinook themes in the Call for Proposals, and identified these as the list of *Very High Priority Chinook* projects for the year. The Southern Fund identified and funded 11 such projects at a total cost of U.S. \$1.1 million while the Northern Fund identified and funded 15 at a total of U.S. \$1.5 million. Discussions at the Joint Fund Committee meeting centered on funding questions pertaining to coast-wide projects not exclusively associated with Northern or Southern Fund areas of interest by virtue of their geographical location.

Following these decisions Executive Secretary Mr. John Field presented an update on the economic impact analysis of Pacific Salmon Treaty fisheries project. He stated that a draft of the final report was due in April 2017 and that the project was still on target to deliver a final report by May 2017.

The Spring meeting of the joint Northern and Southern Fund Committees was held in Vancouver on the afternoon of April 25th and the morning of April 26th. Ms. Kamila Giesbrecht of Aon Hewitt

presented the 2016 Q4 investment performance report that was characterized by strong equity returns in both U.S. and Global markets and gave a preview of Q1 2017. Ms. Giesbrecht then reported to Committee members on the activities of the investment sub-committee and the results of Aon Hewitt's Asset Mix Optimization study. Responding to the findings of the report, a number of follow-up actions were approved by the Joint Fund Committee:

- To reassign 10% of the Fund's fixed asset portfolio to mortgages.
- To reassign the Infrastructure investments from listed to direct.
- Schedule manager interviews with 2-3 direct infrastructure managers and 2-3 mortgage managers for mid-June 2017.
- Concurrently, to investigate active management options for the remaining 20% of the fixed asset portfolio and have the sub-committee develop a recommendation on this for the full Committee either at the soonest in June or at latest the November 2017 meeting.
- At the November 2017 meeting, analyze the spending policies of both Funds & make recommendations to each Fund Committee on how to enhance their spending policies.
- At some future date consider investigating options for diversification of global equities e.g. into small cap and/or emerging markets.
- Maintain a watch on developments in Diversified Growth Funds.

Following the Aon presentations, Mr. Mackay led the Committee in discussion of potential administrative cost items for consideration in developing the 2017 administrative budget. Next, PSC Secretariat Controller Ms. Ilinca Manisali presented the Fund's 2017/18 administration budget for Committee consideration. A motion to accept the budget as presented was moved and seconded. In an additional agenda item, the Fund Committees agreed that going forward each Committee would establish their own rules with respect to honoraria payments to Canadian and U.S. non-government members. Subsequent to the joint meeting, the the Southern Fund implemented a change which aligned honoraria payments made to Canadian non-government members with that of U.S. non-government members. The Northern Fund chose to maintain existing honoraria payment rates unchanged. Finally Mr. Mackay introduced the Commissioner's advice for 2018 Very High Priority Chinook proposals to be included in the 2018 Call for Proposals in the coming months.

The joint Northern and Southern Fund Committees met together for the third and final time in 2017 in Vancouver on November 8th and November 9th. Joining the Joint Fund Committees for the first time was Aon Hewitt's new investment consultant to the Fund Committees, Ms. Satinder Sidhu, who took over that position from Ms. Kamila Giesbrecht in June 2017. Ms. Sidhu provided the Third Quarter report on Fund Performance.

The Committee then received the in-person presentations from the Fund managers: LSV (international equities manager), ACM (Canadian mortgage manager), Invesco (real estate manager) and Morgan Stanley (global equity manager). The Committee was generally satisfied with the managers' reports and were interested to hear in-person from their new Canadian mortgage manager, local firm ACM, for the first time.

Ms. Sidhu provided the Committees with an update on the asset mix optimization process initiated earlier in the year. She described the new target asset mix that was chosen to improve the risk / return profile of the endowment funds. The changes from the previous asset mix were:

- A 10% reduction in bonds, replaced with mortgages.
- A change from passive universe bonds to active core plus bonds.
- A change from listed infrastructure to direct infrastructure.

Ms. Sidhu noted that year over year, the presentations from the more established managers changed little and that perhaps consideration might be given to changing the format of this agenda item going forward. In future the Fund Committees, Fund staff and the investment consultant would jointly select a sub-set of managers for in-person interviews in November each year, rather than automatically inviting them all.

The Asset Mix Optimization review and subsequent alterations to the target asset mix necessitated a revision of the Fund's Statement of Investment Policies and Procedures. Ms. Sidhu provided the Committees with an edited version of the existing SIPP that highlighted all the changes and walked through the document to review each of these. The Committees approved of the suggested edits and directed Ms. Sidhu to revise the SIPP when the new core plus account was fully invested.

Day 2

In November 2016, the Fund Committees had directed Aon Hewitt to undertake an Asset Mix Optimization study early in 2017 to review the current asset mix and identify opportunities to improve the risk-reward profile of the master trust given the twin objectives of the preservation of capital and the maintenance of a stable and sustainable rate of spending. An additional benefit of the asset mix analysis was the insight it provided into the level of spending risk based on the existing Northern and Southern Fund spending policies. In consideration of these findings and noting that the spending policies had last been reviewed in 2012, the Fund Committees decided that further analysis of the spending policies of each Fund was warranted and instructed Aon Hewitt to develop recommendations for changes, as needed, by April 2018.

Executive Secretary Mr. John Field raised a process (timing) matter concerning the Commissioners expectations with respect to information from the Fund Committees on the review of 2018 Very High Priority Chinook proposals. It was agreed that the Commissioners would be provided with the results of the Northern Fund Committee's technical review following the January 2018 post-season meeting in Portland. The technical review document will list the VHPC proposals being considered by the Northern and Southern Fund Committees, as well as the results of the bilateral Northern Fund technical review on January 7, 2018. Fund Committee members noted that the PSC meetings in January and February 2018 would provide the opportunity to determine the likelihood of other sources of funding to support 2018 VHPC projects (e.g. Letter of Agreement – LoA – funding). This information would be of critical importance to the Fund Committees in making their project funding selections on February 20 and 21.

Executive Secretary Mr. John Field briefed the Committee reporting that a sub-committee of the joint Fund Committees had been struck in September to review the Fund's by-laws and provide recommendations to the full joint Committee on a finalized set of by-laws in the new-year. Two members had volunteered from each Fund, one U.S. and one Canadian. The members are Mr. Doug Mecum (U.S. N Fund); Mr. Steve Gotch (Canadian N Fund); Mr. Larry Peck (U.S. S Fund); Mr. Don Hall (Canadian S Fund). To date an initial draft version of the revised by-laws has been developed and a list of ten key themes to address had been identified by the sub-committee.

In an additional item to the agenda, Mr. Peter Dygert (U.S. S. Fund) briefed the Committee members on recent developments with respect to increasing the prey (principally chinook salmon) available to Southern Resident Killer Whales and the effect that might have on fisheries. Mr. Dygert felt that the subject was one that should be addressed broadly, involving both Parties, and hence was likely to become a significant Commission issue with potential implications to the Fund Committees via possible future project funding requests.

During the lunch break the Joint Fund Committees received a presentation from Mr. Mark Saunders of the North Pacific Anadromous Fish Commission on the “2019 International Year of the Salmon”. It was noted that Mr. Doug Mecum from the U.S. section of the Northern Fund and Executive Secretary John Field are both on the IYS steering committee. The Committee appreciated the briefing and felt confident that they would be kept informed of developments going forward.

PSC Secretariat Controller Ms. Ilinca Manisali presented the Fund’s 2016/17 Audited Financial Statements prepared by KPMG for Committee consideration. A motion to accept the audit as presented was moved and seconded.

The PSC Secretariat’s IT Manager Mr. John Son gave a presentation on SharePoint and specifically a SharePoint site that has been designed and developed for the use of the Fund Committees. Mr. Son walked the Committee members through the site and its features and sought feedback from Committee members as to content, utility, navigability and future developments, emphasizing that the main purpose of the site was document sharing. Committee members were satisfied with the site, but requested that communications between PSC staff and Committee members concerning links to SharePoint content should include a reminder of log-on protocols.

The meeting closed with confirmation of next Fund Committee meeting dates in February 2018 and April 2018.

By-laws Sub-Committee

A sub-committee of the joint Northern and Southern Fund Committees was struck in September 2017 to review the Fund’s by-laws and provide recommendations to the full Joint Fund Committee on a finalized set of by-laws. The four sub-committee members were Doug Mecum and Steve Gotch (Northern Fund), and Don Hall and Larry Peck (Southern Fund).

To date the sub-committee has prepared and reviewed a number of drafts of the by-laws and has identified a number of key themes to address as the revisions proceed. Sub-committee members met twice in 2017 with PSC staff. A final version of the by-laws is expected to be tabled for Joint Fund Committee consideration in April 2018.

Fund Committee SharePoint Site

Within the last few months of 2017, a SharePoint site was built and configured for the dedicated use of Fund Committee members. This marks a milestone for the Committees, for it was they who first gave financial support to the roll-out of SharePoint as a tool for the PSC. Four years ago, in December 2013 the Fund Committees granted CDN \$64,320 to fund the initial purchase of

computer hardware and software infrastructure upgrades at the PSC Secretariat offices to make implementation of SharePoint possible.

SharePoint is an information and document management solution that does and will support an array of PSC bodies with virtual workspace, data archives, document libraries, and other functions accessible online.

In April 2014 the Fund Committees approved a further grant of CDN \$85,000 for building and implementing the PSC Secretariat's internal office SharePoint site and sites for other PSC bodies besides the Fund, including the Chinook Technical Committee, the Fraser Panel Technical Committee, the Commissioners, the administrative branch of the U.S. section and, early in 2018, the Chum Technical Committee portal is expected to be launched.

Northern Fund Committee Meetings

The Northern Fund Committee met in separate session on three occasions during 2017.

February 21st and 22nd (p.m. only), 2017

- Final selection of Northern Fund projects for funding in 2017.
- Discussions with Southern Fund on funding strategies and co-funding for the *Very High Priority Chinook* projects.
- Development of specific performance criteria for selected *Very High Priority Chinook* projects.
- Technical feedback to proponents from the technical advisors to the N Fund.
- Final report reviews and formatting.
- Posting of N Fund final reports on the PSC website.

April 26th (p.m. only), 2017

- Performance criteria for selected very high priority chinook projects as proposed by the Committee's bilateral technical support personnel.
- Potential for a Call for Proposals for 2018.
- Fund financial obligations in 2018.
- Consideration of Year 4 very high priority Chapter 3 chinook projects.
- Timetable for Call for Proposals.

October 2nd and 3rd, 2017.

- First round selection of 2018 Northern Fund project concepts to be invited to proceed to Stage Two detailed proposals.
- Review of audited financial statements.

Southern Fund Committee Meetings

The Southern Fund Committee met in separate session three times during 2017.

February 21st (p.m. only) and 22nd (a.m. only), 2017

- Final selection of Southern Fund projects for funding in 2017.

- Discussions with Northern Fund on funding strategies and co-funding for the very high priority chinook projects.

April 26th (p.m. only), 2017.

- Annual report on Year 3 (2016) of the Salish Sea Marine Survival Program from U.S. and Canadian partners Long Live the Kings & the Pacific Salmon Foundation.
- Potential for a Call for Proposals for 2018.
- Fund financial obligations in 2018.
- Consideration of Year 4 very high priority Chapter 3 chinook projects.
- Timetable for Call for Proposals.
- Revision of honoraria payments made to Canadian non-agency Committee members.

September 14th, 2017.

- First round selection of 2018 Southern Fund project concepts to be invited to proceed to Stage Two detailed proposals.
- Review of audited financial statements.

Investment Sub-Committee Meetings

The Investment Sub-Committee met five times during 2017.

January 19th, 2017

- Initial conference call with Aon Hewitt staff to launch an analysis of the Fund's investment policy asset mix by reviewing the current asset mix and identify opportunities to improve the risk-reward profile by investigating additional asset classes and potentially changing the mix between fixed income and variable income asset classes. During this call, the sub-committee reviewed and established Aon Hewitt's modeling parameters and the assumptions that would underpin the report.

April 25th, 2017

- An in-person meeting with Aon Hewitt staff to review their Asset Mix Optimization Report and develop a final recommendation for the new asset mix and a preliminary action plan for implementation to be presented to the Joint Fund Committee later the same day.

June 15th and 16th, 2017

- Members of the sub-committee with Fund staff and the consultant from Aon Hewitt met over two days to develop recommendations for the Joint Fund Committee to transfer the Fund's infrastructure assets from "listed" to "direct"; and to move 10% of the fixed income portfolio to Canadian mortgages. Two direct infrastructure managers were interviewed - IFM Investors (U.S.), LLC; and Colonial First State Infrastructure Managers. IFM was selected. Two mortgage managers were interviewed: ACM Advisors Ltd; and Greystone Managed Investments Inc. ACM was selected.

August 23rd, 2017

- Conference call with Aon Hewitt staff to review the results of their research and analysis of selected active fixed income managers. Four managers were profiled and all four were selected by the sub-committee to be invited to in-person interviews in Vancouver.

September 13th, 2017

- Members of the sub-committee with Fund staff and the consultant from Aon Hewitt interviewed representatives from MFS Investment Management; CIBC Asset Management; Philips, Hager and North Investment Management; and, PIMCO. Philips, Hager and North was selected to be recommended to the full Joint Fund Committee as the new core plus fixed income strategy manager for the master trust.

By-laws Sub-Committee Meetings

The By-laws Sub-Committee met twice during 2017.

October 3rd, 2017

- Initial meeting of Northern Fund sub-committee members and PSC staff.

November 8th, 2017

- Meeting of Northern & Southern Fund sub-committee members and PSC staff.

2017 Call for Proposals for projects in 2018/19

Both Fund Committees issued Calls for Proposals in mid-2017 for projects starting in 2018 including once again soliciting proposals for *Very High Priority Chinook* projects. In the Calls, both Committees included a list of six *Very High Priority Chinook* themes for projects to support the implementation of Annex IV, Chapter 3. The list of themes was recommended to the Fund Committees by the Pacific Salmon Commission in consultation with the Chinook Technical Committee (CTC).

The Northern Fund Committee received a total of 94 proposals requesting U.S. \$6.76 million. At the first round review meeting in October 2017, 68 of the proposals were selected to move to the second round detailed proposal stage having a total value of U.S. \$4.9 million. Bilateral technical reviews of the detailed proposals took place in January 2018 and a final decision on 2018 funding will be made at a meeting of the Northern Fund Committee in mid-February 2018.

The Southern Fund Committee focused its 2018 Call for Proposals on specific priorities identified by the Pacific Salmon Commission's Fraser River and Southern Panels as well as the very high priority chinook themes recommended by the Commission. The Fund Committee accepted 46 proposals requesting U.S. \$3.6 million. During the first round review meeting in September the Southern Fund Committee approved 10 multi-year, on-going proposals and 31 new proposals that together were in total requesting U.S. \$3.4 million to move to the second stage. The final decisions on 2018 funding will be made at a meeting of the Southern Fund Committee in mid-February 2018.

Yukon River Panel Restoration and Enhancement Fund

In March 2011, PSC Fund staff were assigned responsibility for the administration of the Yukon River Panel's Restoration and Enhancement Fund (R&E Fund). 2017 was the seventh year in which PSC Secretariat Fund staff have administered the R&E Fund.

The Yukon River Panel continued to place emphasis on Chinook Restoration priorities in their R&E Fund selection of projects to be funded in 2017; this in response to the decline of Yukon River Chinook salmon stocks experienced in recent years.

In 2017, a total of 32 projects were selected for R&E funding, of which, 24 were on-going multi-year projects and 8 were new. In U.S. dollar terms 63% of the funds were directed towards Conservation projects; 14% to Restoration; 10% towards Stewardship; and 13% towards Communications.

Funds in the amount of U.S. \$1,489,205 were allocated to projects. This sum was comprised of the annual U.S. \$1.2 million disbursement supplemented by unspent funds held by the Panel from previous years.

During 2017 PSC Fund staff redesigned and launched a new website for the Yukon River Panel which can be accessed at <http://www.yukonriverpanel.com/>. In addition, Fund staff facilitated a workshop held in Anchorage, AK in September 2017 to update the Panel's Budget Priorities Framework document and to offer remodeled and refreshed design ideas for the final product.