



Executive Secretary's Summary of Decisions  
Intersessional Meeting  
July 10, 2020  
via webinar

The Pacific Salmon Commission held an intersessional meeting via webinar on July 10, 2020 and discussed a number of topics (see attached agenda).

The Commission AGREED:

1. The agenda is adopted with the addition of three items under "other business": an update on Chapter 4 ratification (Canada), an update on the Big Bar Landslide (Canada), and announcement of the second U.S. CSC member (United States)
2. The minutes from February 2020 are adopted.
3. The Executive Secretary will review the bylaws to assess their applicability to webinar meetings and the ability to convene executive sessions online. He will report his findings to the Chair and Vice-Chair.
4. The Executive Secretary will work with National Correspondents to identify a budget for potential country-specific meeting room costs during the bilateral October 2020, January 2021, and February 2021 meetings.
5. A small working group of two or three Commissioners from each section will convene with the Executive Secretary to examine the test fishing documents submitted for this meeting and recommend a course of action at the October 2020 Fall Meeting. The Sections will appoint Commissioners to this working group in the coming weeks.
6. The National Sections will collaborate to develop October 2020 reporting requirements for Panels and Committees, with a view to assessing the impacts of COVID-19 on Annex IV implementation. These requirements will be agreed bilaterally through the National Correspondents within two weeks and provided to the Secretariat.
7. Canada will provide a Big Bar Landslide update at the October 2020 meeting.

ATTENDANCE

PACIFIC SALMON COMMISSION  
INTERSESSIONAL MEETING  
JULY 10, 2020  
Via Webinar

COMMISSIONERS

UNITED STATES

P. Anderson (Chair)  
W.R. Allen  
W. Auger  
R. Klumph  
S. MacCorkle  
M. Oatman  
R. Turner  
D. Vincent-Lang

CANADA

R. Reid (Vice Chair)  
R. Jones  
B. Rezansoff  
B. Riddell  
A. Thomson



**Draft Agenda  
Intersessional Meeting  
July 10, 2020  
via webinar**

1. Meeting logistics review
2. Adoption of agenda
3. Approval of minutes: February 2020 Annual Meeting
4. National policies/operations under COVID19 restrictions wrt treaty implementation/field work/etc.
5. Commitment to virtual vs. in-person bilateral meetings through Feb. 2021
6. Acknowledgment of Taku River sockeye agreement
7. Report from F&A Committee re. test fishing issues
8. Endowment fund issues
  - a. Introduction of new Fund Manager Tom Alpe
  - b. 2019 annual report
9. Reporting needs from Panels and Committees for October 2020
10. Preliminary discussion: Terms of reference for CWT&R, CEII, and MSF Fund processes
11. Other business
12. Public comment

## **Annotated agenda**

### **Intersessional Meeting: July 10, 2020**

(Executive Secretary's annotations in *italics*)

1. Meeting logistics review

- *The Executive Secretary will review the use of the webinar software, troubleshoot problems, and answer questions from Commissioners. Participants are encouraged to log on 10 minutes early to ensure proper connection and audio controls.*

2. Adoption of the agenda

- *Consistent with PSC bylaws, an agenda shall be adopted by the Commission at the start of each meeting. The Commission shall not ordinarily take a decision on any item that has not been included in the draft agenda for the meeting. Where circumstances warrant, supplementary decision items may be added to the agenda with the concurrence of the Chair and Vice Chair.*

3. Approval of minutes

- *The Parties received draft minutes from the February 2020 Post-Season Meeting for review, and Canada has shared its edits with the United States.*

4. National policies/operations under COVID19 restrictions wrt treaty implementation/field work/etc.

- *The National Sections will provide updates on how the pandemic has affected domestic implementation of the treaty, including field work and data processing. They are also invited to identify any issues for follow-up or assistance from the other Party/Secretariat.*

5. Commitment to virtual vs. in-person bilateral meetings through February 2021

- *The Commission is slated to meet in October (normally at the PSC offices), January (normally at the Hyatt Regency Vancouver), and February (normally at the Embassy Suites in Portland). Travel and social gathering restrictions have jeopardized all of those in-person events, and the Commission must decide on how it will proceed to minimize hotel contractual penalties.*

6. Acknowledgment of Taku River sockeye agreement

- *At its 35th Annual Meeting, the Commission established a working group of Commissioners with a view to resolving the Transboundary River Panel's disagreements over certain implications of Annex IV, Chapter 1. That working group transmitted its recommendations to the Commission on May 15, 2020 via email. The National Sections concurred with these recommendations and confirmed this via email exchanges concluding on May 21, 2020. The Sections are invited to discuss and note this for the record.*

7. Report from the F&A Committee re. test fishing issues

- *The F&A Committee has worked closely with the Secretariat and Fraser River Panel to recommend two draft documents for Commission consideration: a test fishing policy and revolving fund financial regulation. The Commission is invited to review these, resolve any outstanding policy issues, and take action as appropriate.*
8. Endowment Fund issues
    - *The new Fund Manager Tom Alpe will introduce himself and provide a verbal review of the 2019 annual report (provided by email on March 17 to the Chair and Vice-Chair).*
  9. Reporting needs from Panels and Committees in October 2020
    - *The Commission is invited to discuss any reporting required from Panels and Committees regarding impacts of the COVID-19 pandemic on treaty implementation in the 2020 fishing season and beyond. It is anticipated that such reports could be prepared for the October 2020 Fall Meeting.*
  10. Preliminary discussion: terms of reference for CWT&R, CEII, and MSF Fund work groups
    - *At its February 2020 Annual Meeting, the Commission accepted the CIG's recommended plans regarding the Coded Wire Tag & Recovery (CWT&R), Catch and Escapement Indicator Improvement (CEII), and Mark-Selective Fishery (MSF) Fund work groups. Specifically, the Parties will develop terms of reference for these work groups for CIG discussion in September 2020 and Commission review in October 2020. The Commission is invited to review these assignments and discuss next steps.*
  11. Other business
  12. Public comment: *When appropriate, and with the concurrence of the Vice-Chair, the chair may provide time for public visitors to speak during the meeting. Access information for the webinar will be provided to the public via [www.psc.org](http://www.psc.org).*

**Taku River Sockeye Salmon Harvest Arrangement (2020-2028)**  
**Pacific Salmon Treaty – Chapter 1 – Transboundary Rivers,**  
**Adopted: May 21, 2020**

At its 35<sup>th</sup> Annual Meeting, the Commission established a working group of Commissioners (Auger, Reid, Riddell, Thomson, and Vincent-Lang) with a view to resolving the Transboundary River Panel's disagreements over certain implications of Annex IV, Chapter 1, paragraphs 3(b)(i)(F)(i-iv). That working group successfully completed its task and transmitted its recommendations to the Commission on May 15, 2020 via email. The National Sections concurred with these recommendations, shown below, and confirmed this via email exchanges concluding on May 21, 2020.

The Commission provides the following direction with respect to Taku River sockeye salmon pursuant to Chapter 1 paragraphs 3(b)(i)(F)(i) to 3(b)(i)(F)(iv) inclusive for the 2020-2028 fishing seasons of the Pacific Salmon Treaty.

Both Parties recognize inconsistent use of terminology throughout Chapter 1 and Transboundary Technical Committee (TTC) management plans and reports has been the source of disagreement between the Parties over details of Taku River sockeye salmon catch sharing arrangements identified in Chapter 1. Both Parties also agree that defined and consistent use of terminology throughout Chapter 1 and accompanying management plans and reports will provide clarity and be beneficial for future discussions.

Given this, both Parties agree to the following terminology for use in TTC annual management plans, catch and escapement reports, and other agreements for Taku River sockeye in relation to Chapter 1 through the end of 2028:

- Escapement goal range—is a range of desired escapements with a minimum and maximum value. Ideally, this range would be MSY-based. The escapement goal range has been referred to as *escapement objectives* or *spawning objectives*.
- Management objective—is the value used to calculate total allowable catch (TAC). This value would be within the escapement goal range and would typically be the midpoint of the range or the MSY point goal. This value has been referred to as a *spawning objective*, *escapement objective* or *management target*.

The Parties agree to the following arrangement for Taku River sockeye salmon pursuant to Chapter 1 paragraphs 3(b)(i)(F)(i) to 3(b)(i)(F)(iv) inclusive for the 2020-2028 fishing seasons:

- 1) Beginning in the 2020 fishing season through 2028, the escapement goal range will be the MSY-based escapement goal range of 40,000 to 75,000 sockeye salmon.
- 2) Beginning in the 2020 fishing season through 2028, the management objective for Taku River wild sockeye salmon will be 58,000 fish. This number will be used to determine:

- a) Pursuant to 3 (b)(i)(F)(ii) TAC and resulting harvest allocations will be based on estimates of the Taku River wild sockeye salmon terminal run size minus the management objective.
  - b) Pursuant to 3 (b)(i)(F)(iii) Canada may, in addition to its share of the TAC, harvest any projected sockeye salmon in excess of the management objective and broodstock needs apportioned by run timing.
- 3) If either Party identifies it will be unlikely to harvest all or a portion of its AC, the other party may, in addition to its share of the TAC, harvest any projected sockeye salmon in excess of the management objective and broodstock needs apportioned by run timing.
  - 4) The TTC will update the Taku River sockeye salmon escapement goal analysis with returns through the 2023 season and present any recommendations to the Panel for consideration by the conclusion of the 2024 Post Season meeting. The Panel shall take any actions, as needed, based on this review.

Beginning in 2020, pursuant to Chapter 1 section 3(b)(i)(C), both Parties agree to implement improvements to the Taku River sockeye salmon assessment program provided by the Parties' experts. (Reference document: *Pestal, G., C. J. Schwarz and R. A. Clark. 2020. Taku River Sockeye Salmon Stock Assessment Review and Updated 1984-2018 Abundance Estimates. Pacific Salmon Comm. Tech. Rep. No. 43: 118 p.*).

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Phillip Anderson, Chair

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Rebecca Reid, Vice-Chair



**DRAFT Financial Regulation  
to address the Test Fishing Revolving Fund**

**Prepared by the F&A Committee  
July 2, 2020**

Background

While the Commission has utilized a test fishing revolving fund (TFRF) in different ways for many years, there is no financial regulation in the PSC bylaws that codifies how it will be funded or used. At its December 2019 meeting, the F&A Committee directed the Secretariat to draft such a rule and submit it for consideration. This document responds to that request. Any amendment of the PSC bylaws, including this draft rule, requires Commission approval.

Draft rule (for potential insertion after existing Financial Rule 25, Chapter IX of the PSC bylaws)

**Rule 25 (bis) Test Fishing Revolving Fund**

In accordance with Chapter IX, Section E, Rule 18, the Commission has established a Test Fishing Revolving Fund (TFRF). The following shall govern use of the TFRF to support assessment of Fraser River sockeye and pink salmon:

- a) The following definitions are consistent with the Test Fishing Policy and are included for clarity:

Test fish = all fish caught (and sold) in test fisheries that are required for sampling purposes and those fish incidentally killed in gillnet test fisheries

Pay fish = all fish caught in test fisheries, in excess of test fish, up to the level which is required to cover test fishing program costs in the current year

Extra pay fish = all fish caught in test fisheries exceeding that which is required to cover the test fishing program costs in the current year

Surplus = any revenues from the sale of retained fish in excess of test fishing program costs

Deficit = any shortfall in revenues from the sale of retained fish below test fishing program costs



Conservation issues or concerns = conservation and management constraints on co-migrating stocks, management groups, or other species as agreed by the Fraser River Panel in a given year.

- b) Monies held in the revolving fund shall be a) used to pay for test fishing deficits when insufficient fish are available for retention and sale; b) supplemented by test fishing program surpluses; and c) supplemented by the Parties if they so agree.
- c) The Executive Secretary shall provide a full annual accounting of TFRF activity to the Standing Committee on Finance and Administration (F&A Committee) including categories of revenues and expenses affecting the fund, and the proportion of the fund balance allocated to each Party. The Commission shall address, as appropriate, any positive or negative TFRF balances it deems excessive upon advice from the F&A Committee.
- d) The PSC test fishing policy shall prescribe the fish available for retention and sale in any given year. That policy is separate and distinct from the PSC bylaws, and is subject to amendment separately from these bylaws.
- e) Test fishing program costs (contractual or administrative) shall not be borne from the PSC's ordinary budget or sources other than fish sales or the TFRF, unless otherwise agreed by the Commission. Changes to the types of test fishing costs recoverable from fish sales or the TFRF shall be approved by the Commission on advice from the F&A Committee.

#### TFRF accounting

The following TFRF accounting guidelines are subject to the availability of funds from each Party.

In all cases below, the Secretariat will maintain timely records of the deficits (or surpluses) incurred, and apportion those U.S./Canada [50][16.5]% / [50][83.5]% equally, as stated in the TFRF Decision Tree. between the Parties after the conclusion of the sampling season ~~(f, unless otherwise noted below)~~:

- f) ~~Where in-season the Fraser River Panel determines that conservations issues will result in no directed harvest of Fraser River sockeye, no pay fish will be retained~~ ~~Where in-season the Fraser River Panel determines that there are conservation issues or concerns, there will be no pay fish will be retained.~~
- g) Where in-season the Fraser River Panel determines that the sockeye run sizes are such that there is no international TAC, no pay fish will be retained.
- h) Where in-season the Fraser River Panel determines that the sockeye run sizes are such that there is in Canada, within and outside Panel area waters, inadequate TAC to address First Nation food, social, and ceremonial fisheries, no pay fish will be retained.
- i) Where in-season the Fraser River Panel determines that the sockeye run sizes are such that the international TAC is insufficiently large, no pay fish will be retained;

**Commented [JDF1]:** U.S. edit

**Commented [JDF2]:** U.S. edit: switch brackets to parentheses

**Commented [TA3]:** Canada proposes revised language for f

j) Where in-season the Fraser River Panel determines that the sockeye run sizes are such that there are:

1. in Canada, within and outside Panel area waters, adequate TAC to address First Nation food, social, and ceremonial fisheries; and
2. sufficient international TAC to allow the retention of pay fish up to the levels needed to meet program costs in accordance with the PSC Test Fishing Policy;

then pay fish will be authorized.

k) Where conditions allow for the harvest of “extra pay fish” due to an extremely high abundance of Fraser River sockeye or pink salmon, such harvest may be authorized by the Fraser River Panel.

**Commented [JDF4]:** Canada edit

l) [Where conditions allow for the harvest of “extra pay fish” and a Party announces an inability to harvest their full TAC, the Fraser River Panel may agree to reallocate some of this uncaught TAC to be harvested as “extra pay fish”. The Secretariat will maintain timely records of the revenues less any incremental costs incurred from such uncaught TAC taken as pay fish which will be apportioned 100% to the party whose uncaught TAC was taken as pay fish and 0% will be apportioned to the other country.]

**Commented [TA5]:** Canada does not agree with this clause as it appears to assign a level of ownership to the uncaught TAC proportion beyond that described in the treaty. Furthermore, as the amount of uncaught TAC is not known until the close of the fishing season, it does not seem to be operationally feasible.

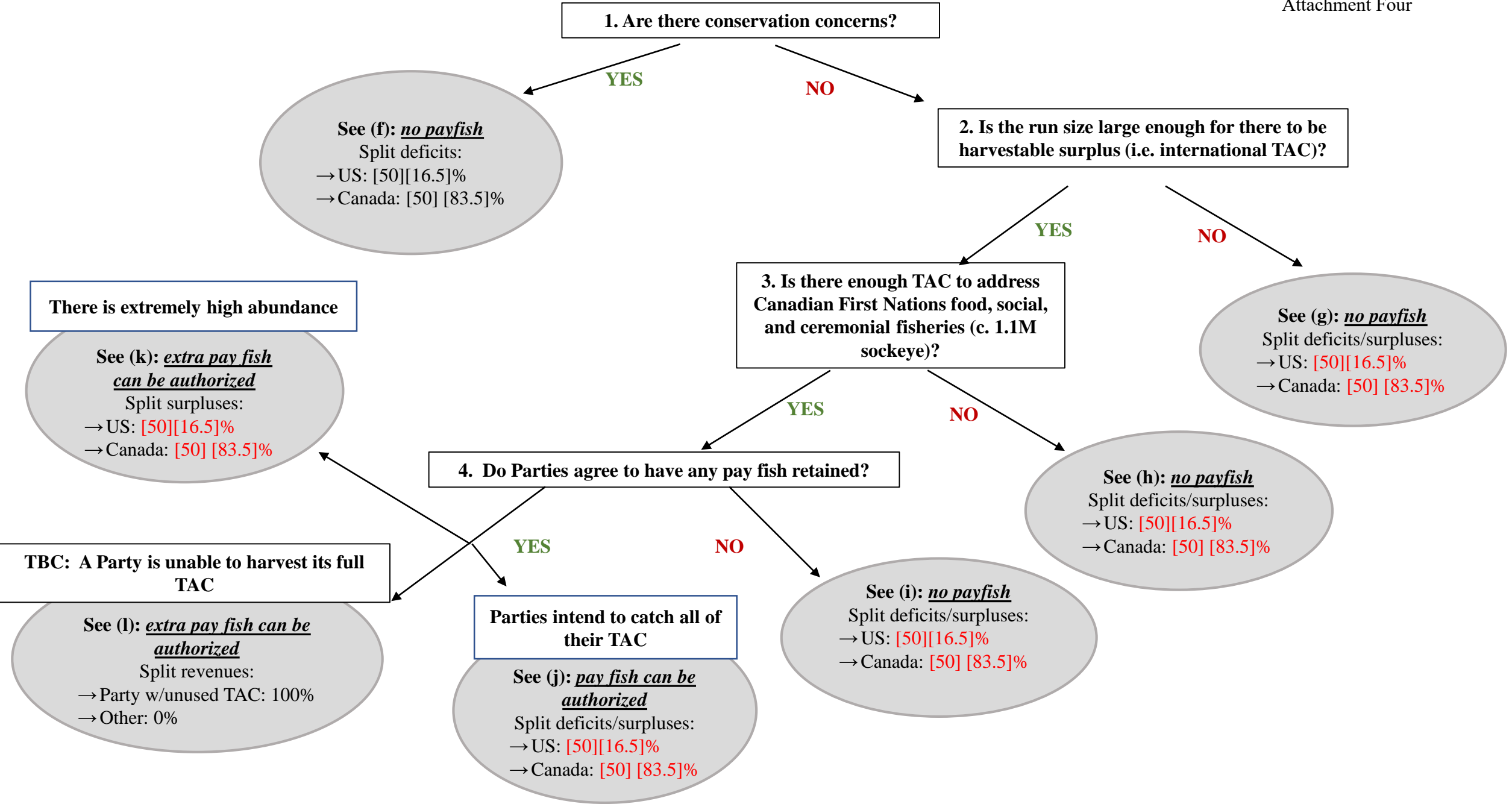
m) In the event that either country depletes its available resources in the revolving fund, the country would need to make a timely contribution to the revolving fund to cover outstanding costs.

**Commented [TA6]:** Is this not contradictory to the chapeau language inserted between e and f above with respect to funding by the parties?

n) The Secretariat shall regularly calculate forecast cash flows pre-season and in-season, including deficit implications of Panel decisions. If the forecast deficit is greater than 75% of the revolving fund balance, the Fraser River Panel shall apprise the F&A Committee. Otherwise, the F&A Committee shall not be engaged in Panel decisions on test fishing schedules.

o) As appropriate under paragraph (n), the F&A Committee shall collaborate with the Panel and the Secretariat to revise the test fishing schedule to minimize deficits, enable conservation, and ensure adequate assessments of Fraser sockeye and pink salmon.

Test Fishing Revolving Fund Accounting Decision Tree 7-2-20





**Annual Report of the  
Southern Boundary Restoration and Enhancement Fund and the  
Northern Boundary and Transboundary Rivers Restoration and Enhancement Fund  
for the year 2019.**

***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 CAD \$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  
Doug Vincent-Lang

Southern Fund Committee

**Canada:**

Laura Brown  
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 CAD \$209,796,000 using the exchange rate at the time the last installment was made). Actual fund asset value at December 31<sup>st</sup>, 2019 was U.S. \$235,456,000 or CAD \$305,328,000.
- Concerns of slowing global growth and trade wars were common themes in 2019 which caused some market volatility. However, 2019 ended with positive returns across most asset classes over the one-year time period. Equity markets were particularly strong throughout 2019. The sharp downturn that occurred in the fourth quarter of 2018 was mostly reversed during the first quarter of 2019.
- In 2019 the Southern Fund Committee supported a total of 45 projects for U.S. \$2.83 million.
- In 2019 the Northern Fund Committee supported a total of 63 projects for U.S. \$5.1 million.
- Combined project spending by the Northern and Southern Funds was U.S. \$7.93 million in 2019.
- Since 2004, the total Northern and Southern Fund project expenditures have been U.S. \$93.43 million, contributed to support 1,290 projects. This sum is inclusive of U.S. \$6.95 million to the *Very High Priority Chinook* projects and the Southern Fund's contribution of U.S. \$5 million to the *Salish Sea Marine Survival Program*. In addition to the U.S. \$93.43 million, the Funds contributed U.S. \$10 million to the *Sentinel Stocks Program*.
- In 2019 the Northern and Southern Fund Committee members met in person jointly on three occasions: February, May and November. In addition, the Northern Fund Committee met separately on three occasions and the Southern Fund Committee met separately on three occasions.
- The Fund Committees decided in 2018 to review the investment consultant services provided by Aon Hewitt. A decision to replace the investment consultant followed the review. A sub-committee of four members, two from each Fund Committee, was tasked with shortlisting potential investment consultants to be interviewed at the May Joint Fund Committee meeting. The Fund Committees selected the firm George & Bell as their new investment consultant.
- Mr. Doug Vincent-Lang took over from Mr. Charlie Swanton on the Northern Fund U.S. section.
- Fund staff provided administrative services for the Yukon River Panel's annual U.S. \$1.2 million Restoration and Enhancement (R&E) Fund for a ninth year in 2019.

## ***Investment Review***

Over the course of 2019, capital markets performed quite strongly, while the Canadian dollar strengthened versus the U.S. dollar with an increase of approximately 5% over the year. Positive performance in the portfolio was primarily due to public equity and infrastructure asset classes whose returns ranged between 15-25%. As a result, the total portfolio had strong positive performance over the year in both CAD and USD.

Managers that notably outperformed over the year included ACM (Canadian commercial mortgages) and Morgan Stanley (global equities). The portfolio's passive U.S. equity manager, BlackRock, achieved its objective of replicating the performance of its benchmark in the strongest performing market of the year. LSV Non-North American Equities ended the year strongly as outperformance in the fourth quarter erased most of the underperformance in the first three quarters of 2019, however the strategy still lagged its benchmark slightly as value stocks continued to struggle relative to growth stocks during most of 2019.

The Bank of Canada kept interest rates unchanged at 1.75% throughout 2019 and fixed income investors continued to have a negative outlook on the global economy. The PH&N Core Plus Bond fund delivered a positive absolute return in CAD over the year and the strategy performed close to its benchmark as the firm continued to take a defensive stance in response to the low interest rate environment.

The portfolio's U.S. Real Estate manager, Invesco, continued to deliver consistent positive performance, although the strengthening of the Canadian dollar relative to the U.S. Dollar detracted value. The transition from RARE (listed infrastructure) to IFM (direct infrastructure) occurred on October 23, 2019. The \$28 million CAD commitment to IFM was drawn down to fund the partnership's acquisition of Buckeye Partners, L.P., a leading energy midstream company based in Houston, Texas. All funds have now been liquidated from RARE. RARE's year-to-date performance as of September 30, 2019 was below its benchmark, but still resulted in positive, double-digit returns. The first full quarter of performance for IFM will be available starting in 2020.

Total contributed capital (nominal) was U.S. \$140,065,000 (the equivalent of CAD \$209,796,000 using the exchange rate at the time the last installment was made). Actual fund asset value at December 31<sup>st</sup>, 2019 was U.S. \$235,456,000 or CAD \$305,328,000.

Contributed capital and asset value of the individual Funds as of December 31<sup>st</sup>, 2019 stood as follows:

<b>Contributed Capital</b>		<b>Asset Value</b>	
<b>Northern:</b>	U.S. \$75,000,000 CAD \$112,388,000	U.S. \$127,476,000	CAD \$165,305,000
<b>Southern:</b>	U.S. \$65,000,000 CAD \$97,408,000	U.S. \$107,980,000	CAD \$140,023,000

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, 2019	1.29675	0.77116
U.S. Dollar Exchange (noon) rate: per Royal Trust, November 30, 2019	1.32825	0.75287
U.S. Dollar Exchange (noon) rate: per Royal Trust, December 31, 2018	1.36420	0.73303
U.S. Dollar Exchange (noon) rate: per Royal Trust, December 31, 2017	1.25450	0.79713

Note #3:

Cash withdrawals performed July 2<sup>nd</sup>, 2019.

### ***Investment Consultant Transition***

The Fund Committees sent out a Request for Proposal (“RFP”) for investment consulting services in December 2018 to five potential firms. Submissions were received in February 2019 and interviews were conducted in May 2019.

George & Bell was selected as the new investment consultant effective July 1, 2019. The transition from Aon Hewitt to George & Bell went smoothly. George & Bell produced the second quarterly monitoring report.

### ***Custodian Transition***

The Fund Committees engaged George & Bell (through an independent RFP, and prior to retaining George & Bell as the investment consultant in 2019) to perform a custodian search in 2018. Interviews were conducted in February 2019, resulting in a recommendation to the Joint Fund Committees to hire Northern Trust as the Fund custodian and terminate RBC. The recommendation was accepted. The custodian transition went smoothly with assets being transferred at the beginning of July 2019.

### ***Asset Mix Study***

At the November Joint Fund Committee meeting the decision was made to proceed with an updated asset mix study to determine whether the Funds’ risk-return profile could be improved. The previous asset mix study was conducted in 2017.

## ***2019 Project Funding***

In 2019 the Southern Fund Committee supported a total of 45 projects for U.S. \$2.83 million. The list included projects addressing specific priorities identified by the Pacific Salmon Commission's Fraser River and Southern Panels for U.S. \$2.38 million or 84% of their overall spending.

In 2019 the Northern Fund Committee supported a total of 63 projects for U.S. \$5.1 million. Of these, six projects with a total value of U.S. \$265,198 were in the Enhancement envelope (5%) with the majority dealing with sockeye enhancement in the Transboundary region. U.S. \$421,533 (8%) was invested in six Habitat access improvement projects in the Transboundary region. U.S. \$4.39 million (86%) was directed to 51 Improved Information-type projects across South East Alaska, the Transboundary and Northern BC.

In the sixteen years between 2004 and 2019 the Northern Fund has granted U.S. \$51.7 million to 722 projects. Over this same period the Southern Fund has granted U.S. \$41.7 million to 568 projects. Total Fund project expenditures to date are U.S. \$93.4 million in support of 1,290 projects. Included in this total is a sum of U.S. \$6.95 million between 2015 and 2018 on Very High Priority Chinook projects and U.S. \$5.0 million from the Southern Fund to the Salish Sea Marine Survival Program. In addition to these amounts, the Chinook Sentinel Stocks Program was funded jointly by the Northern and Southern Funds between 2009 and 2014 for U.S. \$10 million.

## ***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. Thus, the Joint Fund Committees met in person three times during 2019: February 20 (a.m. only); May 7 and 8, and November 21.

## ***February 2019***

In February the two Fund Committees met separately to select their projects for funding support in 2019. As in previous years, the two Committees took the opportunity to also meet jointly to discuss funding issues. 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 the project location.

The Southern Fund identified and funded two such projects at a total cost of U.S. \$28K while the Northern and Southern Fund identified and jointly funded one project at a total of U.S. \$217K.

The Northern Fund prioritized and completed its 2019 project selections which included all core agency projects and, in the process, reached its spending target of U.S. \$5M. As a result, the



Northern Fund did not have sufficient funds to support the CTC's data management project in 2019.

The PSC Executive Secretary Mr. John Field reminded the Northern Fund Committee that the CTC's data management project is a two-year pilot project and not intended to be supported indefinitely by the Funds. The goal of the Commission is to monitor the progress of the pilot project in its support of the CTC and other technical committees and, if successful, to establish the data manager as a permanent staff member at the PSC when budgets allow. The PSC Secretariat covered the shortfall in funding support for the data manager in 2019.

The PSC Director of Finance Ms. Ilinca Manisali outlined the process to review and consider the replacement of Aon Hewitt with a new investment consultant. A shortlist of candidates was identified by a Joint Fund subcommittee (Don Hall (Can), Larry Peck (U.S.), Steve Gotch (Can), and Doug Mecum (U.S.)) prior to the May Joint Fund meeting. Ms. Manisali developed the evaluation matrix to be used in selecting the successful candidate. The Fund Committees made the final decision on the successful investment consultant at the May 2019 meeting.

## **May 2019**

The spring meeting of the Joint Fund Committees was held in Vancouver on May 7 and 8.

Mr. Federico Cervantes and Ms. Michelle Richardson of Aon Hewitt provided the 2019 Q1 investment performance report. The structure of the report was "streamlined" to provide essential information but in less depth as a cost saving measure. Morgan Stanley continued to outperform. LSV's deep value style remains out of favor and returns have been disappointing. Philips, Hager and North Investment Management are pessimistic about the future and anticipate volatility. The Committee was generally satisfied with the report, apart from the on-going poor performance of LSV. The managers for the in-person interviews at the November meeting were selected. The managers will be LSV (international equity), Invesco (real estate) and IFM (infrastructure). A recap on the spending policies was provided for information purposes.

At the April 2018 meeting, it was noted that the fees for custodial services (Royal Bank of Canada) represented a considerable administrative cost burden and that those fees should be further investigated with a view to reducing them if possible. Subsequently, the Fund Committees engaged George & Bell to perform a custodian search in 2018. In March 2019, following in-person interviews by a Joint sub-Committee, Northern Trust was recommended to the Joint Fund Committees as the new custodian. The recommendation was accepted. The Committee received an update on the expected date of transfer from the Royal Bank (as custodian) to Northern Trust from Ms. Manisali. The date is expected to be in July 2019.

Ms. Manisali provided a summary of the Investment Consultant search process including the initial action item to staff, the selection of a four person working group, and the RFP. She discussed the responses to the RFP and the review and selection of a short-list of finalists for interview by the full Joint Fund Committee. Members of the working group provided insight into the issues that had influenced their recommendations.

The Committee then received in-person presentations from the Investment Consultant candidates: Aon Hewitt; Mercer Investments; and George & Bell Investments.

Following the presentations the Committee held a wide-ranging discussion on the pros and cons of the managers interviewed. Topics of discussion included staff turnover and continuity, bench strength, local presence, fees, client lists large and small, and the anticipated time likely to be taken to “come up to speed” with the Funds. The Committee agreed to reconvene in the morning and make a final decision.

## Day 2

A motion to change the Funds’ Investment Consultants from Aon Investment Consultants to George & Bell was moved and seconded. The motion was amended to add that the term of the contract with George & Bell should be 5 years, with a review after 2 years. A July 1<sup>st</sup>, 2019 start date was approved.

There was further discussion with Committee members expressing approval for the George & Bell’s fees compared to the other two candidates. The size, location and available resources, including staff, of George & Bell was also discussed and Committee members were generally satisfied in these regards. The issue of “trust” based on demonstrated performance, as in confidence in the firm’s ability to deliver came up and the majority of Committee members felt that the George & Bell presenters had justified the Committee member’s trust in their ability to deliver. A dissenting view held that the Committee’s decision was being primarily influenced on the basis of their confidence in the performance of an individual who had very recently joined the George & Bell team (Ms. Giesbrecht, formerly of Aon Hewitt) rather than on the performance of the company as a whole and that another candidate firm had deeper bench strength, more resources and a longer track record, albeit their fees were nominally higher.

Following the discussion, the motion was passed with 10 in favour, 1 opposed and 1 absent.

Accordingly, the Committees assigned an Action Item to the PSC Secretariat to draft a contract with George & Bell to be reviewed by lawyers acting for the PSC Secretariat and then the Fund working group before sign-off.

PSC Secretariat Director of Finance Ms. Ilinca Manisali then presented the draft 2019/20 Northern and Southern Fund administration budgets. The 2018/19 administration costs had come in under budget with the exception of the professional services fee paid to Morgan Stanley. The Morgan Stanley fee structure allows for a performance-based increment to the fees and, given Morgan Stanley’s recent out-performance, these additional costs were justified. In developing the 2019/20 budget an allowance has been made for anticipated continued out-performance by Morgan Stanley in the year ahead. Bank charges associated with maintaining separate U.S. chequing accounts (\$200 per account) for project payments by manual cheques would be addressed in 2019 with the major U.S. proponents moving to Electronic Fund Transfers. Those unable to implement EFT’s, such as NOAA, would have cheques issued via a single central account. The Committee discussed the format for the presentation of annual Northern, Southern and Yukon River Panel administration budgets, particularly, Fund staff salary costs and their relation to administrative overhead fees allocated to Secretariat support functions such as accounting, IT, and travel management. Going forward the Controller agreed to develop an improved budget format incorporating enhanced levels of detail. The new format will be made available as a draft for Committee member review

and discussion in the coming months. Committee approval and adoption of the revised format will be sought at the November 2019 meeting.

A motion to approve the 2019/20 Northern and Southern Fund administration budgets was passed.

Lastly, the Committees set meeting dates for later in 2019 for their first round proposal reviews in September and October and for the annual financial review meeting in November.

An in-camera meeting between the Joint Committees and the Executive Secretary regarding staffing for the Committees followed this last item.

## **November 2019**

The joint Northern and Southern Fund Committees met together for the third and final time in 2019 in Vancouver on November 21. The meeting opened with a Third Quarter report presentation on Fund Performance in 2019 presented by Ms. Kamila Giesbrecht and Mr. Brendan George, investment consultants from George & Bell.

Ms. Giesbrecht provided an update on the transfer of responsibility for management of the Fund's infrastructure portfolio from listed (RARE) to direct (IFM) which was completed in 2019. In October the Fund's commitment with IFM was fully invested following a legal review and the identification of suitable investment assets.

She also highlighted the large proportion (50%) of equities in the Fund's portfolio and recommended a reduction in these holdings to reduce the Fund's risk exposure during a market correction. Furthermore, Ms. Giesbrecht suggested the possibility of adding another global equity manager to complement the Fund's existing global manager as an effective alternative for the funds currently invested with LSV.

Lastly, Ms. Giesbrecht provided an update on the administrative cost savings associated with the transition from RBC to Northern Trust as the Fund's custodian and the changeover from Aon Hewitt to George & Bell as its investment consultant.

Next on the agenda Ms. Giesbrecht reviewed LSV's performance and provided an overview of the Fund's existing global equity structure and overall asset mix. She restated the risks associated with large equity holdings and the Fund's recent efforts in mitigating those risks by diverting a portion of its equities into real estate and infrastructure. Furthermore, Ms. Giesbrecht suggested the Fund Committees consider further diversification in its investment portfolio as a protection against a market downturn while maintaining existing returns to support project funding.

Regarding the Fund's current composition, Ms. Giesbrecht proposed an updated asset mix review of the progress made since the 2017 asset mix study. From this review, George & Bell will generate portfolio options for consideration. The portfolio's updated asset allocation will consider incorporating funds from the disposition of the LSV investment.

Regarding potential delays in the capitalization of funds following a change in portfolio managers as in the case of IFM, Ms. Giesbrecht assured the Committees that future transactions can be completed promptly if the manager's investment queue is short. Mr. George added that

trading costs associated with rebalancing the Fund's portfolio will be insignificant when compared with the amount of time and resources required to perform the portfolio change.

Ms. Giesbrecht emphasized that the Fund's portfolio has performed well due to the changes initiated by the Committees; however, market dynamics have changed over time and a consideration of further adjustments was recommended. The Fund's portfolio is protected against a market downturn; however, the extent of that protection is unknown. She stressed that the Joint Fund Committee's most important decision is selecting the right asset mix for the current market environment to generate sufficient annual project funding. This may result in changes in the Fund's portfolio or none.

A motion to establish a sub-committee to work with George & Bell to conduct an asset mix review in January 2020 was passed. Steve Gotch (N Fund), Doug Mecum (N Fund), Larry Peck (S Fund), and Don Hall (S Fund) volunteered to assist with this task.

The Committee then received in-person presentations from the Fund managers: LSV (EAFE/NNAs equities); Invesco (real estate); and IFM (direct infrastructure). Apart from LSV, the Committee was generally satisfied with the managers' reports.

The next item on the agenda was a review of the manager presentations with Ms. Giesbrecht and Mr. George. They pointed out that the strong performances of Invesco and IFM have validated their place in the Fund's portfolio. In addition, both managers provide the downside protection the Fund requires in a market correction. Conversely, Ms. Giesbrecht and Mr. George felt that LSV's poor performance will continue and will likely suffer during a recession without providing the downside protection the Committees seek.

Mr. Mackay reminded the Committees of their instructions to George & Bell to conduct an asset mix review update and generate portfolio options for consideration. George & Bell will provide a cost estimate for Committee approval before initiating the study. Mr. Mackay repeated that a small group will meet in January 2020 to review the result of George & Bell's findings and will provide their recommendations to the Joint Fund Committees in February when both Committees are scheduled to meet in Vancouver.

Lastly, Ms. Giesbrecht and Mr. George presented their transition plan to address the management changes at George & Bell. Ms. Giesbrecht announced her departure from George & Bell but offered to continue her involvement with the Joint Fund Committee as an advisor in a voluntary capacity. Mr. George will replace Ms. Giesbrecht as the Fund's lead consultant.

Following George & Bell's presentation, and specifically Ms. Giesbrecht's notice of departure, the Fund Committees emphasized that they had chosen to hire George & Bell based on their capacity to meet the needs and goals of the Fund, lower fees, and mature state of the Fund. It was stressed that the Committee's relationship is with George & Bell and not a specific individual. The Fund Committee discussed Ms. Giesbrecht's offer to provide advice in a volunteer capacity, including the option that Ms. Giesbrecht should serve as an (unpaid) member of the George & Bell team as opposed to a second advisor to the Fund Committee directly. The PSC Secretariat was tasked with reviewing existing bylaws, policies and procedures regarding engagement of volunteers in a professional capacity.

### ***Northern Fund Committee Meetings***

The Northern Fund Committee met in separate session on three occasions during 2019.

February 18<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup> (a.m. only), 2019

- Separate U.S. and Canadian section meetings with their technical advisors.
- Final selection of Northern Fund projects for funding in 2019.
- Technical feedback to project proponents from the technical advisors to the Northern Fund.
- Overview of Transboundary Technical Committee (TTC) Strategic Plan.

May 8<sup>th</sup> (p.m. only), 2019.

- Potential for a Call for Proposals for 2020 emphasizing projects that are located within and focus on stocks which impact fisheries in the Northern Fund's geographic area.
- Proposal to develop a formal policy on core agency funding.
- Discussed shared support of Gulf of Alaska expedition with the Southern Fund.
- Reviewed 2019 Alsek Sockeye and Chinook stock restoration project.
- Fund financial obligations in 2020.
- Timetable for Call for Proposals.

October 8<sup>th</sup> and 9<sup>th</sup> (Co-Chairs a.m. only), 2019.

- First round selection of 2020 Northern Fund project concepts to be invited to proceed to Stage Two detailed proposals.
- Review and approval of annual audited financial statements.
- Status report on the transition to new investment consultant and financial custodian.
- Review of Q2 quarterly performance report.

### ***Southern Fund Committee Meetings***

The Southern Fund Committee met in separate session three times during 2019.

February 19 and 20 (a.m. only), 2019.

- Final selection of Southern Fund projects for funding in 2019.

May 8 (p.m. only), 2019.

- Review of Lower Fraser Coho Escapement proposal.
- Potential for a Call for Proposals for 2020.
- Fund financial obligations in 2020.
- Timetable for the Call for Proposals.
- PSC Secretariat to track progress of ongoing projects.

September 25 and 26 (site visit), 2019.

- First round selection of 2020 Southern Fund project concepts to be invited to proceed to Stage Two detailed proposals.
- Review and approval of annual audited financial statements.
- Review of Q2 quarterly performance report.
- Status report on the transition to new investment consultant and financial custodian.
- Discussed renewal of the Southern Fund's Strategic Plan.
- The Southern Fund Committee conducted a site visit and attended a presentation in the Chilliwack, BC area on September 26<sup>th</sup>.

### ***Committee Appointments***

In April 2019 Mr. Doug Vincent-Lang took over from Mr. Charlie Swanton on the Northern Fund Committee. Mr. Vincent-Lang's seat on the Northern Fund Committee (U.S. Co-Chair) is ex-officio, tied to his role as the Alaskan Commissioner. His first Committee meeting was on May 7<sup>th</sup>. Mr. Swanton had served on the Northern Fund Committee for a four year term.

### ***2019 Call for Proposals for projects in 2020/21***

Both Fund Committees issued Calls for Proposals in mid-2019 for projects starting in 2020.

The Southern Fund Committee focused its 2020 Call for Proposals on specific priorities identified by the Pacific Salmon Commission's Fraser River and Southern Panels. The Fund Committee accepted 49 proposals requesting U.S. \$3.5 million. During the first round review meeting in September the Southern Fund Committee approved 40 proposals in total requesting U.S. \$2.9 million to move to the second stage. In addition, the Committee will also consider 3 on-going proposals requesting U.S. \$160K that missed the first stage of the selection process. The final decisions on 2020 funding will be made at a meeting of the Southern Fund Committee in February 2020.

The Northern Fund Committee received a total of 84 proposals requesting U.S. \$6.8 million. At the first round review meeting in October 2019, 67 of the proposals were selected to move to the second round detailed proposal stage having a total value of U.S. \$5.4 million. Bilateral technical reviews of the detailed proposals took place in January 2020 and a final decision on 2020 funding will be made at a meeting of the Northern Fund Committee in February 2020.

### ***Yukon River Panel Restoration and Enhancement Fund***

In March 2011 the Yukon River Panel (YRP) invited PSC Fund staff to take responsibility for the administration of the Panel's Restoration and Enhancement Fund (R&E Fund) on a fee-for-service basis. In April 2014 this arrangement was formalized in a three-year contract between the YRP and the PSC. In May 2016 after an open competition process, the PSC was again selected by the Panel to administer the Fund for a further three-year period. In April 2019 the Panel extended the

PSC's administration of the R&E Fund with another three-year contract. 2019 was the ninth year in which PSC Secretariat Fund staff have administered the R&E Fund.

In 2019 the Yukon River Panel continued to place emphasis on Chinook Restoration priorities in their R&E Fund selection of projects for the year; this in response to the decline of Yukon River Chinook salmon stocks experienced in recent years.

A total of 35 projects were selected for R&E funding, of which, 30 were on-going multi-year projects and 5 were new. In U.S. dollar terms 47% of the funds were directed towards Conservation projects; 23% to Restoration; 9% towards Stewardship; and 21% towards Communications.

Funds in the amount of U.S. \$1,359,666 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. Unspent funds are principally a result of exchange rate fluctuations and, to a lesser extent, from projects that complete under budget.

### ***Staffing changes***

In December 2019, the Fund Manager position at the Secretariat became vacant. The Executive Secretary launched an external competition to fill the vacancy. The position is expected to be staffed by March 2020.

Chinook Interface Committee Report to the Pacific Salmon Commission.

2020 Annual Meeting

The CIG met twice during this week with a focus on agenda items from our last report to the Commission in January 2020. The following reports our work and recommendations for the Commission's consideration.

- 1) **Development of CIG agenda:** Following discussion on preparing CIG agendas, CIG recommends that future agendas follow previous arrangements whereby a draft agenda is developed by the CIG co-chair of the Country hosting the meeting and provided to the other Country's co-chair for review prior to being sent to the secretariat for inclusion in the Commission agenda.
- 2) **Succession Planning for the CTC:** CIG recommends that succession planning be on the CIG forward agenda and that on an annual basis CIG be informed of changes to CTC membership and plans by management agencies, where these are available, to address membership changes. It is anticipated that overtime broader aspects of supporting the CTC, such as mentoring, orientation and training will be considered by CIG in concert with the CTC. This item will be further considered by CIG in the fall session. Canada has advised that it will provide a presentation at the 2020 Fall Executive session on its plan to address succession for Canadian membership in the CTC.
- 3) **Okanagan Chinook Workplan:** CIG reviewed the revised workplan and the U.S. members' concerns over the inclusion of work plan items 3 and 4. After discussion and clarification of the concerns and proposals from both Canada and the United States, it was agreed to recommend a finalized workplan to the Commission with the following changes:
  - Item 3 in the workplan has been revised by the workgroup, and subsequently approved by CIG co chairs,.
  - Item 4 is to be delayed for potential consideration at a later date.

Canada provided clarification on the intent of item 3 in the workplan, specifically, that the workgroup is not intended to address management issues but to provide a baseline to measure change due to subsequent habitat improvements and enhancement. In particular for Canada, measuring this change will hopefully strengthen public support for necessary actions. Canada further clarified that any management issues between the parties would be addressed, if necessary, through the appropriate Commission process and its negotiation process.. The United States expressed appreciation for the clarification.



- 4) **Incidental Mortality Standards.** The CIG asked for further clarification from the CTC in setting out the work and the timelines for the completion of this task. With that clarification in the memo attached and further discussion, CIG recommends that the Commission direct the CTC as follows:

Part 1. Conduct a literature review and confirm or update existing assumed mortality rates for use in assessments and modeling. The CTC anticipates providing the results of this review and any recommendations at the October 2020 meeting.

Part 2. Conduct an assessment of current methods used to estimate the number of Chinook encountered and released in fisheries and the desired levels of precision and accuracy in these estimates. The CTC anticipates that it could provide recommendations on data collection standards and desired levels of precision and accuracy of encounter estimates at or before the February 2021 PSC Annual Meeting.

- 5) **CYER workgroup:** CIG considered options for how the CYER group could best interact with others Commission groups with common interests. CYER co-chairs reported on coordination efforts, including conference calls between CTC, FSEC and CYER chairs; co-scheduled meetings, and calls with the CYER workgroup.

CIG members support the CYER groups approach to coordination and recommends to the Commission:

- That the CYER workplan is reviewed by CTC, SFEC and other relevant committees to ensure coordination of efforts.
- That the CYER results are reviewed by the relevant committees prior to being reported to CIG and the Commission.

The final point relating to the CYER is the need to send the letter to the Management Entities (attached) seeking improvements in the CWT program necessary to implement provisions to the chapter. . CIG recommends that the Commission send the Management Entities letter.

- 6) **CEII and CWT&R workgroup and MSF fund process:** The United States presented a matrix comparing several committees and their objectives that was helpful in guiding the conversation.

CIG recommends development of the Terms of Reference for the CEII and CWT workgroup based on the U.S. matrix. Membership will be technical staff. These will be as stated in the chapter. **Canada will take on this task.**

CIG recommends the development of Terms of Reference and responsibilities for the MSF fund process based on the U.S. matrix. **The U.S. will take on this task.** Membership will be discussed further.

CIG will receive the draft Terms of Reference for the two committees by September 1, 2020 prior to a telephone conference of the CIG to take place in September 2020 and to be organized by the secretariat.

An updated draft of Terms of Reference will be reviewed in the CIG meeting during the October 2020 Fall Executive Meeting. It is intended that CIG will recommend Terms of Reference for both committees to the Commission in October.

There will be delays in the implementation of both these groups related to the timing of receipt of implementation funding for the U.S.

- 7) **CTC Coordinator Proposal:** The Finance and Administration Committee will report on the CTC Coordinator position.

**PACIFIC SALMON COMMISSION WORK PLAN**  
**[2019-2020]**  
**Updated February 20, 2020**

**Panel / Committee:** *The Okanagan Working Group (OWG) reports to the Pacific Salmon Commission.*

**Date:** *PSC Post Season Meeting, January 13-17, 2020.*

**Update on Bi-lateral Tasks Assigned Under Current PSC Agreement:**

The Pacific Salmon Commission assigned 9 tasks to the OWG on February 14, 2019:

- 1) Summarize existing information on the population structure of Chinook spawning in the Okanagan River.
- 2) Summarize existing information on factors limiting the abundance, productivity, and spatial distribution of Chinook spawning in the U.S. and Canadian sections of the Okanagan River.
- 3) Describe existing actions to improve the abundance, productivity, and spatial distribution of Chinook spawning in the U.S. and Canadian sections of the Okanagan River.
- 4) Provide existing fishery management objectives for Chinook spawning in the Okanagan River.
- 5) Compile existing information on opportunities to enhance the productivity and abundance of Chinook salmon spawning in the U.S. and Canadian sections of the Okanagan River (habitat restoration; supplementation; water management).
- 6) Describe the current summer Chinook CWT indicator stock and identify whether any limitations exist in using it to monitor fishery impacts on Chinook salmon spawning in the Okanagan River.
- 7) Discuss new information that could assist the Parties in more effectively implementing Chapter 1, Paragraph 7, which may include a discussion of options for additional management objectives or fishery obligations in U.S. and Canadian fisheries and whether adoption of those measures could benefit the abundance, productivity, and spatial structure of Chinook salmon spawning in the Okanagan River.
- 8) Identify research projects that could promote the mutual, effective conservation of Chinook salmon spawning in the U.S. and Canadian sections of the Okanagan River.
- 9) Recommend annual reporting needs to inform the Commission over time.

The OWG provided a report to the Commission on all 9 of these tasks at the 2019 Fall Meeting. A final report was delivered to the Pacific Salmon Commission office on December 16, 2019 it has been published in the PSC Technical Report series (Technical Report #42).

**Obstacles to Completing above Bi-lateral Tasks:**

*None identified.*

**Outline of Other Panel / Committee Tasks or Emerging Issues:**

At the 2019 Fall Meeting, the Commission identified that it will maintain the ad hoc Bilateral Okanagan Chinook Work Group, which will a) not be constituted under Article II of the Treaty; but will nonetheless b) provide an annual work plan for the Commission (initially in January 2020, and ongoing at the October Fall Meeting).

The OWG work plan tasks for this year are to:

1. Report historical and recent escapement abundance estimates of hatchery- and natural-origin summer Chinook in the U.S. and Canadian sections of the Okanagan River through 2019.
  - a. This task will add another year of data collected by the management entities to the current analysis by the OWG and it would be included with the description of the escapement programs described in #7 below.
2. Conduct an exploitation rate analysis for Okanagan summer Chinook with CWT recovery data through 2018 and report the CWT statistics (e.g. mortality distribution tables, survival rates, maturation rates).
  - a. This task will add another year of data to the current analysis by the OWG.
3. The Parties recognize the value of creating a baseline assessment of the current productivity and capacity of Okanagan River Summer Chinook against which to measure the benefits of future habitat restoration and enhancement actions. The workgroup will coordinate a management entity exploration of alternative approaches to create such a baseline assessment. Alternatives may include a monitoring program for juvenile production, an analysis of spawner and recruit data, the use of habitat-based production models, or other approaches as appropriate.
4. Organize a workshop with the management entities that could be involved in a bilateral supplementation program for Okanagan summer Chinook. Identify U.S. and Canadian supplementation objectives. Review the current supplementation circumstances relative to the objectives. Identify any issues and options to address the issues. Summarize the findings and any recommendations for the Commission.
5. Have a session at the workshop (#5) with the management entities and others about the potential survival issues for juvenile and adult summer Chinook in the U.S. and Canadian sections of the Okanagan River. Examine the current survival monitoring projects relative to these issues and identify any gaps or modifications to existing study designs to learn about locations where the Okanagan summer Chinook may be experiencing poor survival. Summarize findings and recommendations for the Commission.
6. Have a session at the workshop to review the current escapement monitoring programs that the management entities use for summer Chinook in the U.S. and Canadian sections of the Okanagan River. Review the current escapement estimates relative to the CTC bilateral data standards for Chinook escapement indicator stocks. Develop the study design recommendations that could help the management entities achieve these CTC data standards and summarize them for the Commission.
7. At the workshop, have a session about the potential invasion of Northern Pike into the Okanagan River. Review the monitoring and control programs currently happening in the Columbia River upstream of Grand Coulee Dam. Seek advice from the management entities and other experts about the steps and methods to prevent the spread of Northern Pike into the Okanagan River. Summarize the findings and recommendations for the Commission.

**Potential Issues for Commissioners, including enhancement activities reported under Article V:**

Development and implementation of a bilateral supplementation program involves multiple entities.

Planning for the bilateral supplementation program and the prevention of the Northern Pike spread into the Okanagan could begin during this cycle, and it could involve a workshop(s) among technical experts from both countries. The focus of Northern Pike discussions would be to develop an understanding of the gaps in current control efforts, and what assistance the Commission might usefully provide.

Resources for the workshop could become an issue that comes to the Commission. The OWG requests that funding be provided by the national sections for travel and per diem costs. If the Commission could sponsor this then it would indicate good support to initiate these efforts. A working group meeting can be tacked on to the workshop to facilitate other work tasks (e.g. escapement review, biologically-based management objectives, etc.).

**Potential Issues for Committee on Scientific Cooperation**

None identified.

**Proposed Meeting Dates and Draft Agendas:**

<b>Meeting</b>	<b>Dates</b>	<b>Location</b>	<b>Meeting Objectives</b>
OWG-Task List Planning	Feb 10-14	Conference Call & email	Outline more detailed plans to complete prioritized task(s) from Commission
PSC 35 <sup>th</sup> Annual (& OWG)	Feb 20-21	Vancouver	1-2 day meeting to work on tasks
OWG-workshop planning	Mar/Apr	Conference Call & email	Check in on work tasks, planning for supplementation workshop
Supplementation workshop	Jun 15-19 (TBD)	Wenatchee	Support the development of a bilateral supplementation plan with options (~15-20 people)
OWG Workshop Summary	Jun 22-26	Conference Call & email	OWG to summarize main workshop findings, next steps and prepare report for Commission
OWG-task work	Sep	Conference Call & email	Check in on OWG work task analysis and report preparation for Commission
PSC Fall Session	Oct (TBD)	(TBD)	OWG co-chairs attend and present supplementation plan and options to Commission, results from tasks

**Status of Technical or Annual Reports:**

The OWG provided a report to the Commission on all 9 of these tasks at the 2019 Fall Meeting. A final report was delivered to the Pacific Salmon Commission office on December 16, 2019 for and published in the PSC Technical Report series.

**Comments:**

None.