

COMMISSION OF INQUIRY INTO
THE DECLINE OF THE SOCKEYE SALMON
IN THE FRASER RIVER

**SUBMISSIONS OF THE PARTICIPANTS
B.C. WILDLIFE FEDERATION AND
THE B.C. FEDERATION OF DRIFT FISHERS**

J. KEITH LOWES
Lawyer for the Participants
B.C. Wildlife Federation and
B.C. Federation of Drift Fishers

Name and address of lawyer:

J. KEITH LOWES
Barrister & Solicitor
406 – 535 Howe Street
Vancouver, BC V6C 2Z4
Telephone: 604-681-8461
Fax: 604-638-0116
Email: keithlowes@shaw.ca

BRAD M. CALDWELL
Counsel for the Participants

Name and address of counsel:

BRAD M. CALDWELL
Barrister & Solicitor
401 – 801 Hornby Street
Vancouver, BC V6Z 2E6
Telephone: 604-689-8894
Email: bcaldwell@admiraltylaw.com

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I. OBJECTIVES

1. This Participant has two objectives. The primary objective is to provide the Commission with a tool with which to organize, analyze and assess the evidence and submissions. The secondary and more specific objective is to inform the Commission of the nature, interest and perspective of the recreational fishing community.

II. METHODOLOGY

2. The methodology for the primary, general objective is to focus on a number of key concepts; to examine their implications when placed in important and relevant contexts. The concepts are: pragmatism, interest and values, proportionality, resource, public and terminology. The contexts are aggregates of some of the subject matters canvassed in the oral hearings.
3. This is the method behind this submission; it is also the method this Participant recommends to the Commissioner and, ultimately, Fisheries and Oceans Canada ("DFO").

III. PRELIMINARIES

4. Before engaging in the analysis, it is useful to place the Commission itself in context.

A. Process

1. Dynamism

5. This Commission is investigating a dynamic subject in a dynamic context. The species and its environment are clearly a dynamic “subject matter” for study; the context of politics, science and the law add further layers of dynamism and hence complexity.

2. Commission

6. The Commission itself represents a point in time; it is informed by numerous previous inquiries and in turn will inform an unknown and unfolding future.

3. Politics

7. The Commission sits in a dynamic political context. “Politics” here refers to both the mechanics of government (“fisheries” is one of many of the concerns of the Government of Canada; “habitat” spans Dominion, Provincial and Municipal jurisdictions) and to political pressure resulting from shifting social values (e.g., the “green” movement).

4. Science

8. The process of science is in its nature ongoing; lack of “finality” is the foundation of the discipline.

5. Law

9. The common law process is by definition ongoing and incremental. Further, the law particularly relevant to a central issue in these proceedings (that involving the distinction between Canadians of aboriginal descent and all Canadians, including those of aboriginal descent) which engages aboriginal rights and *Charter* rights is developed expressly on a case by case basis.

B. Substance: The Law

10. The work of the Commission must be informed by the law.
11. It is essential to understand at the outset that:
 - a. The fishery is rights-based; and
 - b. The Government of Canada has no proprietary rights in the fisheries.^{1, 2}
12. In the case of Fisheries in Tidal (Navigable) Waters, Canada is the trustee or steward of the common property resource belonging to all the people of Canada. In the case of Fisheries in Non-Tidal (Non-navigable) Waters, Canada is the regulator of fisheries, title to which is in British Columbia.
13. In either case, Canada cannot exercise the power of a proprietor. This has implications for both allocation and “co-management”.
14. Because it has no proprietary interest in the fishery, Canada cannot create entitlements of a proprietary nature in others³. This principle clearly places limits on the ability of Canada to create “entitlements” for individuals or groups of individuals.
15. Because occupying the position of a steward or trustee, Canada cannot abdicate its responsibility to the public by sharing its authority in such a way as to promote or enhance the interest of particular groups at the expense of others or the public at large.
16. These principles and their implications are apparently recognized by DFO but deserve emphasis.
17. It is this Participant’s position that policy distinctions between fishing by aboriginal Canadians and fishing by the Canadian public at large should be

¹ *British Columbia (Attorney General) v. Canada (Attorney General)* [1914] A.C. 153 (PC)

² Except where Canada holds title to the underlying submerged land.

³ See *Saunier v. Royal Bank of Canada* [2008] 3 SCR 166, 2008 SCC 58

congruent with judicially defined interfaces between first, aboriginal rights and the public right and second, between aboriginal rights and Crown sovereignty

18. With respect to the former, the interface between aboriginal rights and the public right, the law recognizes that:
 - a. Aboriginal rights exist within a legal context which recognizes an ancient public right (liberty) to fish⁴;
 - b. Aboriginal rights are additional to, not substitutional for, the public right;
 - c. The principle of special rights for some Canadians is an exception to the general constitutional rule of universal individual rights;
 - d. Consequently the existence, scope and protection of aboriginal rights should be defined by and confined to the rationale; and
 - e. Such rationale is the integrity of aboriginal identity⁵.
19. With respect to the latter, the interface between individual rights and Crown sovereignty, constitutional protection for aboriginal rights is limited to a burden of justification similar to that for the breach of *Charter* rights: aboriginal rights are not absolute; they may be infringed, but any infringement must be justified⁶.
20. Neither policy nor an overbroad application of the constitutional duty to consult and accommodate should be allowed to usurp the judicial determination of these crucial interfaces.
21. (By way of aside, it is noted that the case argued by Dr. Harris to the effect that the reserve creation process gives rise to Crown obligations to prioritized fishing

⁴ *R. v. Gladstone* [1996] 2 SCR 723, par. 67

⁵ *R. v. Vanderpeet* [1996] 2 SCR 507

⁶ *R. v. Sparrow* [1990] 1 SCR 1075; *R. v. Marshall (No. 2)* [1999] 3 SCR 533

rights has been essentially rejected by the Supreme Court of Canada in *Nikal*⁷ and *Lewis*⁸ and explicitly rejected by the Court of Appeal in *Lax Kw'aalams*⁹.)

22. The above comments can be supported on the basis of principle, particularly legal principle, alone. However, they are also supported by practical considerations.
23. These can be seen in the Reasons for Judgement in the case of *R. v. Kapp* where:
 - a. Brenner C.J.B.C., after upholding the constitutionality of the “pilot sales”, pointed out their social cost and queried the wisdom of their continuance¹⁰; and
 - b. McKenzie J.A. pointed out the problem of “balkanization” latent in separating aboriginal and public fisheries¹¹.

IV. GUIDING CONCEPTS

A. Pragmatism

24. This means focus on the immediate and practical as distinct from the remote and “merely” theoretical. From this point of view, the “truth” and the “good” are not abstractions; they are what is doable and workable as well as what is desirable. For example, it is more useful to focus on the enumeration and analysis of smolts than on the effects of volcanic ash on the abundance of plankton.

B. Interests and Values

25. This means having regard to the interest or value often hidden or obscured, which underlies the evidence and positions heard by the Commission.

⁷ *R. v. Nikal* [1996] 1 SCR 1013

⁸ *R. v. Lewis* [1996] 1 SCR 921

⁹ *Lax Kw'aalams Indian Band v. Canada*, 2009 BCCA 593

¹⁰ *R. v. Kapp et al*, 2004 BCSC 958, paras. 117, 118, 120, 121

¹¹ *R. v. Kapp*, 2006 BCCA 277, par. 115

26. This is not to suggest that all the witnesses and Participants have a hidden agenda, but rather that most of them bring deep and strongly felt values and/or serious and immediate interests to the issues, no matter how specific, technical or uncontroversial they appear. For example, discussion of the conservation value of “terminal fisheries” implicitly involves the reallocation of access from the public to the “aboriginal” fisheries.
27. Unlike the normal trial situation in which the function of the tribunal is to sift and discount the “biases”, this Commission should identify and include them. In short, **all** “world views” are to be identified and taken into account.

C. Proportionality

28. This means two things:
 - a. First, it means recognizing that most, if not all, of the difficult issues before the Commission are issues of degree; that they are relative rather than absolute; for example, what is the risk?; and
 - b. It also means having due regard to the interests and values underlying the various positions and evidence; and the relative priority or importance of those interests and values; for example, what is an acceptable risk in the particular circumstances?
29. This Participant has chosen the term “proportionality” rather than “balance” to emphasize the notion of judgment, of weighing and prioritizing.

D. Terminology

30. It is important that the Commission be sensitive to the use and especially misuse of language. Many, if not all, of the Participants (and witnesses) have special interests which can be obscured by the vagueness of their language; many, if not most, of the critical terms and concepts are ambiguous in the abstract and

require context in order to provide specific content. Some examples are: “co-management”, “over-escapement” and even “conservation”.

E. Perspective: Public Resource

1. Resource

31. This concept focuses on the Fraser River sockeye as a resource as distinct from (but not ignoring) an element of nature; it emphasizes that the appropriate perspective is not that of the species itself nor of Mother Nature, but rather of the human beings which relate to them; it emphasizes that the fishery is distinct from the fish. In this regard, this Participant refers to the Supreme Court of Canada in *Ward v. Canada* where, in describing the scope of section 91(12) of the *Constitution Act 1867*, the Court stated:

The fisheries resource includes the animals that inhabit the seas. But it also embraces commercial and economic interests, aboriginal rights and interests, and the public interest in sport and recreation.¹²

32. This description was put to Mr. Chamut, who agreed that it accurately reflected the subject matter over which the Department has jurisdiction and from which he viewed his responsibilities¹³.

2. Public

33. The concept “public” is closely linked to that of resource; it adds important legal overtones. By “public”, this Participant means the Canadian public. The concept has two important implications: first, public is the antithesis of private or exclusive; second, the public nature of fishery, described as a “common property resource”, emphasizes the obligations as distinct from the power of the Crown and, in particular, DFO.

¹² *Ward v. Canada (Attorney General)* [2002] 1 SCR 569, par. 41

¹³ Evidence of Pat Chamut, Transcript December 1, 2010, p. 81, ll. 12-40; see also Dansereau, Bevan, Farlinger Transcript September 27, 2011, p. 96, l. 43 – p. 97, l. 37

F. Use of the Guiding Concepts

34. These guiding concepts are a means of providing focus. For looking at the present and the past they manifest the following guidelines:
- a. **Pragmatism: focus on the “knowable” and the “doable”;**
 - b. **Proportionality: look at the situations and problems as matters of degree rather than as categorical;**
 - c. **Interests and values: focus on the underlying interests and values as well as the specific situations and problems;**
 - d. **Perspective: focus on the species as a public resource; and**
 - e. **Terminology: be clear to the point of bluntness.**

V. THE QUESTIONS

35. The Terms of Reference are predicated on a “... decline in sockeye salmon stocks in the Fraser River in British Columbia. ...” They also recognize the distinction between the fish and the fishery.
36. Essentially, they ask three questions:
- a. What is the present situation?
 - b. What is the cause of the present situation?
 - c. What should be done in the future?
37. This submission addresses those three questions in light of the preceding focussing concepts.

A. Present

1. Status

a. Stocks

38. The Terms of Reference direct the Commissioner to make findings regarding the causes for "... the decline of Fraser River sockeye salmon. ..." Before determining causes for decline or even the existence and degree of decline, it is necessary to ask two questions:
- a. What is the subject being measured? and
 - b. What is the metric being used?
39. These questions are necessary because "Fraser River sockeye salmon" are and have been historically treated as being an aggregate of a number of components generally referred to as "stocks". "Stocks", however, is a multiordinal term, the meaning of which is determined to a large extent by the context in which it is used.
40. A further complication is introduced into this question in that the Wild Salmon Policy is in the process of replacing, to a large extent, (at least for informational purposes) the traditional "stock" with the new "Conservation Unit".
41. Focussing on the traditional units, the pattern appears to be:
- a. In the aggregate, Fraser River sockeye have experienced a severe decline in the ratio of recruits to spawners between the years 1995 (approximate) to 2009;
 - b. The decline, however, measured in terms of abundance, is from an extraordinary high level to levels more consistent with historical averages;
 - c. The drastic decline in both is driven by the decline in the larger stocks;
 - d. Most of the stocks are relatively stable and healthy; and

- e. The most serious problems are stock specific and identifiable.¹⁴
42. In their large report *Status of Anadromous Salmon and Trout in B.C. and the Yukon*, T. Slaney and others state that there are up to 9,663 salmon stocks in British Columbia and the Yukon (of which 5,491 have had their status classified), 624 (11%) are threatened, 78 (1.4%) are at moderate risk and 230 (4.1%) are of special concern. Most importantly, only 142 (2.5% of the total number of classified stocks) have been extirpated. In most cases the extirpation is the result of urbanization and dams.¹⁵
43. It is acknowledged that, as Slaney acknowledges, assessments at the aggregate level mask the degree of success achieved in maintaining biodiversity, but even at the order of magnitude level, Slaney's statistics are significant.
44. Dr. Walters, in his report *Where Have All the Sockeye Gone?*, observes that of 106 Fraser Sockeye for which there is sufficient data, 56 were increasing, 38 stable and 8 declining under the extremely high harvest rates during the period 1980–1995. Dr. Walters added that two of the three stocks that were declining have shown recovery but the stock of most concern (Cultus) has not¹⁶.
45. Even Dr. Riddell, proponent of the Wild Salmon Policy and Conservation Units, when speaking in terms of the traditional "stocks", provided evidence to the same effect¹⁷.
46. One aspect of the Wild Salmon Policy (Strategy 1) involves redefining the concept of "stocks" or, more accurately, replacing them for some purposes with conservation units. At this stage, however, it is apparently not possible to

¹⁴ The decline in productivity trends is indicated in several of the exhibits; one of the most accessible is exhibit 12, *Speaking for the Salmon: Proceedings, Summit on Fraser River Salmon: Understanding Stock Declines and Prospects for the Future*, March 30-31, 2010, and in particular, pages 2-7 containing a summary of a report by Mr. Lapointe.

¹⁵ Slaney and others, *Status of Anadromous Salmon and Trout in B.C. and the Yukon*, Exhibit 188

¹⁶ Exhibit 12, Walters Report, *Where Have All the Salmon Gone?*

¹⁷ Dr. Riddell Transcript, December 1, 2010, p. 16, l. 16 – p. 17, l. 20; p. 21, ll. 25-42

interpret the status of the conservation units in a manner comparable to that of Slaney and Walters in terms of stocks.

b. Decline

47. There are two “declines” before the Commission; the “long-term” decline and the “precipitous collapse” in 2009.¹⁸
48. By long term decline this Participant refers to the facts that on a four year cycle average:
 - a. By 1993 the aggregate stocks were rebuilt from the low following the Hell’s Gate slide to approximately 23,000,000; and
 - b. From 1994 to 2008 the aggregate stocks had declined to in the order of 2,000,000.
49. By short term “collapse”, this Participant refers to the facts that in 2009 the escapement was 1,056,000, which is:
 - a. Less than one-half the average cycle escapement; and
 - b. Approximately one-third of the 3,300,000 escapement in the previous cycle year (2005).
50. This decline took place during a period when:
 - a. Harvesting (commercial) had dropped from an average rate of 80% between 1950 and 1990 to:
 - (i) First, approximately 40% (mid-nineties to mid-2000’s); and
 - (ii) Essentially zero from 2006; and

¹⁸ The following figures are approximations taken from exhibit 12, *Speaking for the Salmon: Proceedings, Summit on Fraser River Salmon: Understanding Stock Declines and Prospects for the Future*, March 30-31, 2010, and in particular, pages 2-7 containing a summary of a report by Mr. Lapointe.

- b. Escapement had increased by approximately a factor of three (from mid-1950 levels) from 1990 to the mid-2000's.

51. In terms of the ratio of recruits to spawner:

- a. Between 1950 and 1960 the ratio was increasing to approximately five to seven recruits per spawner;
- b. Between 1960 and 1968 it had fallen to an average of three recruits per spawner;
- c. Between 1968 and 1992 it was stable at approximately six to eight recruits per spawner; and
- d. Between 1992 and 2009 it dropped to barely one recruit per spawner.

c. Externalities (Constraints)

52. This Participant recognizes the existence of externalities which create real or apparent constraints to the governance of the resource.

53. SARA, COSEWIC, the MSC certification process and especially the political and economic pressures driving them are real and cannot be ignored. These pressures, however, should be recognized as emanating from sources with a relatively remote interest in the resource as a resource from which they benefit directly. The challenge is not to overreact: to convince the market that the resource, particularly the fisheries, is healthy and well-managed without pandering to the extreme "preservationists" who ignore or minimize the interests of those who depend upon and enjoy it.

54. The limited scope of Canada's jurisdiction respecting the habitat also presents a serious constraint and this Participant encourages the development of processes designed to inform and coordinate the activities of the various governments, industries and user groups in protecting habitat.

55. It is also recognized that “fisheries” is only one subject of interest to the Government of Canada and the DFO only one department. Resources are obviously limited and it is clear that DFO is operating under difficult budgetary constraints. This Commission should and DFO (and indeed the Government of Canada) must look closely at spending priorities.
56. As indicated previously, the law presents a constraint in that Canada’s fisheries are not a Crown asset but a common property resource. The Crown is a steward and not a proprietor. The constitutional implications of this are being and will be worked out in the courts in cases dealing with the implications of the common property nature of the resource (e.g., *Laroque*), the division of powers (e.g., *Ward*) and aboriginal rights (e.g., *Vanderpeet*).

B. Past

57. This decline did not occur in a policy/political vacuum. Over the critical period there were several significant changes in management mechanics and policies that were not driven or not solely driven by biological or environmental concerns. These measures were proactive rather than reactive. Among these were:
- a. The 1987 rebuilding program;
 - b. The Aboriginal Fishing Strategy (at least insofar as it created “pilot sales”, now termed “economic opportunity” fisheries);
 - c. The redesign of the commercial fishery for “economic efficiency” through the Mifflin and Anderson plans;
 - d. The expanding mandate of DFO; and
 - e. The shift in responsibility for setting escapement goals from the Pacific Salmon Commission to DFO.
58. A further significant change was that to “weakest stock management”. Although this policy cannot be completely delinked from conservation objectives, it does

share the characteristics of being proactive and aggressive rather than reactive and incremental; consequently it belongs in the list of political factors forming the context for the decline of the resource.

59. With respect to the 1987 rebuilding program, it is clear from the evidence, particularly that of Dr. Walters, that the “experiment” involved increasing escapements in the off-cycle years of major stocks has resulted in a drastic decline in the productivity of those stocks.
60. With respect to the introduction of the Aboriginal Fishing Strategy, there is an apparent correlation between the introduction of a new in-river fishery and a dramatic increase in the differences between the estimates of returning sockeye taken at Mission and on the spawning grounds respectively.
61. Prior to 1992 (when the Aboriginal Fishing Strategy was introduced), the total number of differences between estimates was approximately 200,000; from 1992 the difference between estimates is approximately 15,700,000 sockeye.¹⁹
62. With respect to the mandate of the DFO, a number of witnesses give evidence of increasing and sometimes contradictory objectives for the DFO.
63. The range of objectives and consequent policies can be seen in 1998 in the *New Directions* paper and the suite of policies as described by Ms. Farlinger²⁰.
64. It is suggested that the shift in responsibility from the Pacific Salmon Commission to DFO opened the door to these changes, and that most of the changes were driven by economic and social objectives as distinct from biological and environmental ones.

¹⁹ Evidence of Mike Lapointe, Transcript November 8, 2010, p. 83, l. 29 – p. 84, l. 22; January 18, 2011, p. 83, l. 45 – p. 84, l. 10. In fairness, Mr. Lapointe also pointed out apparent correlations between the differences between estimates and water temperature; he did not, however, attribute the rise in the difference between estimates to any one factor.

²⁰ The New Directions policy is Exhibit 32; policy papers preceding and following New Directions are found at Exhibits 258 – 270; Ms. Farlinger’s description of frameworks, policies, etc. can be found at Transcript March 4, 2011, p. 64, l. 26 – p. 66, l. 46; September 23, 2011, p. 54, l. 43 – p. 56, l. 31

1. Causation

a. Overview of the Evidence

65. Regard should be had for the nature and quality of the evidence; its strength is its range; its weakness is its lack of depth. The limitations on the depth of oral evidence is inherent in the process: strict time limits and the hearing of witnesses in panels compromised an adversarial approach; while the accommodation of Participants kept the process from being aggressively inquisitorial.

b. The Scientific Approach

i. The Fundamental Classification: Delayed Dependency / Environmental Effects

66. It is useful to look at the scientific evidence about causation from the perspective of a well established debate about the relative significance of population dynamics and environmental effects.

67. The debate has two aspects:

- a. The relative impacts of population dynamics and environmental effects on fish production; and
- b. The relative value of research into each area to the management of the fisheries.

68. This Commission has heard evidence from both schools of thought. Below this Participant analyzes the evidence in light of the two approaches (which are recognized as not mutually exclusive) and suggests that the framework of population dynamics is the more useful to this Commission in that:

- a. It provides a clear and supportable hypothesis for the cause of the long term decline;

- b. It provides an explanation for both the precipitous decline in 2009 and the large return in 2010;
 - c. It does not require identification of the specific causal factor (e.g., predators, disease) in order to be identified, analyzed, and rectified;
 - d. It provides a practical means of testing the hypothesis and, if supported, taking remedial steps.
69. While not to be ignored, the “environmental effects” approach in the main:
- a. Does not have the same clarity;
 - b. Does not account for the precipitous decline in 2009 and the large return in 2010;
 - c. Requires identification of the specific causal factor (indeed, such identification is the objective of the approach);
 - d. Cannot be tested within a reasonable time frame; and
 - e. If proven, offers no apparent short term remedy other than ever diminishing fisheries.

ii. **Density-dependent Effects**

• **The Principle**

70. Density-dependency is a well-known zoological theory. The basic proposition is that whenever an animal population increases, other factors in the ecosystem will respond to that growth through bio-feedback loops. For example, as a population grows the available food supply decreases or other factors such as predators or disease increase.
71. In the case of salmon, density-dependent effects are displayed by the Ricker stock recruitment model.

72. The delayed density-dependency hypothesis maintains that the effects of density-dependency (e.g., over-competition for food) can negatively affect productivity rates over more than one brood year or age class. It is asserted that the phenomenon of cyclical dominance in some (the largest) sockeye stocks is a dramatic demonstration of delayed density effects.
73. The theory of delayed density-dependency is embedded in the Larkin stock recruitment model.
74. This hypothesis maintains that the majority of the loss in productivity of Fraser sockeye over the past two decades is explained by the decline in productivity in the largest producing stocks because of density-dependent or delayed density-dependent effects.
75. The reasoning is:
 - a. The vast majority (approximately 90%) of Fraser River sockeye is composed of relatively few stocks;
 - b. All or most of these stocks are subject to the effects of delayed dependence or delayed density-dependence at escapements above or well above the average maximum sustainable yield and, in particular, above double the maximum sustainable yield;
 - c. Over the past twenty years, there have been several escapements at double the maximum sustainable yield on a number of these stocks (e.g., Chilko 2003; Horsefly 2001, 2005; Shuswap 2002);
 - d. These high escapements were not inadvertent; they were deliberate policy choices (e.g., Fraser Sockeye Rebuilding Initiative, FRSSI, WSP, desire to protect Cultus, desire to protect early migrating late runs, etc.); and
 - e. In virtually all cases the high escapements did not result in increased biodiversity or enhanced future productivity as expected, but rather

correlated with drops in productivity. (The only exception to this is the recent increase in Harrison sockeye; a stock with particular and unique characteristics and consequently not reflecting overall trends.)

- **The Evidence**

76. In looking at the evidence it is important once again to be clear on the meaning to be given to "... the decline in Fraser River sockeye salmon. ..."
77. If this phrase is taken as meaning the general decline in the production rate of the aggregate, there can be little, if any, controversy; as it is generally recognized that:
 - a. Major stocks suffered from density dependent effects; and
 - b. These stocks make up the bulk of the Fraser River sockeye.
78. It is only where the phrase is taken to mean a decline in all or virtually all of the individual stocks that there is real controversy.
79. This controversy exists on two levels:
 - a. First, there is controversy over which stocks appear to have suffered density dependent effects;
 - b. Second, there is controversy over whether there may exist a general or overriding condition other than density dependent effects which would explain a "decline" in all or most stocks.
80. It will be argued that the conclusion that density dependent effects are not the cause of decline in each individual declining stock is essentially irrelevant or unhelpful to this Commission and that the conclusion that density dependent effects explain some declines, and in particular declines in the major stocks, is of immediate concern to this Commission.
81. The evidence supporting this hypothesis is substantial and compelling.

82. First, density-dependency effects and delayed density-dependency effects are a well-known natural phenomenon applying to populations generally.
83. Second, Drs. Walters and Woodey, together with Dr. Riddell in a panel session on “over-escapement”, were all of the opinion that large escapements in the large stocks contributed to, if not caused, the decline in production of those stocks.²¹
84. Dr. Walters and Dr. Woodey specifically attributed the large escapements to:
 - a. A conscious “experiment” designed to increase production in the off-cycle years of the large stocks (which showed cyclical dominance);
 - b. Large escapements resulting from efforts to protect comigrating:
 - (i) Early migrating late stocks; and
 - (ii) The Cultus Lake stock.
85. Dr. Woodey referred to the problem of early migrating late-run stocks as “the elephant in the room”.
86. Dr. Walters and Dr. Riddell, architects of the “experiment”, both indicated that, in retrospect, they would be less sanguine about the wisdom of the “experiment” and both qualified by contextualizing their 2004 paper *Does Over-escapement Cause Salmon Stock Collapse?*²² Dr. Walters in particular referred to data about historical escapements (Gilhousen) and the results of 2009 and 2010 as support for rethinking the experiment.
87. The issue was not directly joined on the main thrust of this hypothesis; namely, that density-dependent and delayed density-dependent effects were a cause of decline in **some** (large) stocks.

²¹ Transcript February 9-10, 2011

²² Exhibit 417

88. The evidence of Dr. Peterman was directed essentially at a different “decline” than that of Dr. Walters and Dr. Woodey. The essential difference is the meaning given to “overall” in the concept, “overall decline”.
89. Drs. Walters and Woodey effectively treat “overall” as meaning a decline in the aggregate; a decline which is driven by the decline in the major components of the aggregate.
90. Dr. Peterman, however, effectively defines “overall” as “widespread”. He looks for causes of decline affecting all or most of the components.
91. Consequently (setting aside any controversies between Drs. Walters and Peterman about which particular stocks show density-dependent effects and technical differences on their computer modeling), Dr. Peterman’s conclusion to the effect that most Fraser River stocks and many non-Fraser River stocks do not exhibit density-dependent and delayed density-dependent effects is not inconsistent with the conclusions of Drs. Walters and Woodey (as well as Dr. Riddell) that density-dependent and delayed density-dependent effects do affect the important large Fraser River stocks.
92. Dr. Woodey provided cogent reasons why not all stocks and in particular their spawning systems are amenable to density-dependent effects.
93. It is important to note that while Dr. Peterman must out of necessity exclude the effects of density-dependence on a local stock basis in order to test his hypothesis, Dr. Walters does not have to exclude potential environment effects, and does not purport to do so, in order to make the case for density-dependent effects. Dr. Peterman excludes; Dr. Walters subsumes.

- **Conclusion**

94. As stated previously, the evidence shows that density-dependent effects are a likely cause of the decline in production of some stocks and that these stocks are the major components of the Fraser River sockeye. The possibility, or even

probability, that other factors are at play in other stocks, or even the same stocks, does not diminish the importance and urgency of attending to the impacts of “overescapement”.

95. As Drs. Walters and Woodey testified, this problem can be addressed without unacceptable risk to the comigrating “weak stocks” by abandoning the commitment to fixed escapements in favour of an “adaptive management” approach involving careful and sensitive increases in the exploitation rates of the major stocks while maintaining a sensitive and realistic concern for the “weak stocks” and a concern for biodiversity. In short, not to allow ideology to interfere with a nuanced management approach.

iii. Environmental Effects

96. There are many different hypotheses explaining “the decline of Fraser River sockeye salmon”. Most of these hypotheses were identified at the workshop sponsored by the Pacific Salmon Commission in 2010²³. That workshop identified nine hypotheses as follows:
- a. Predators;
 - b. Pathogens;
 - c. Oceanographic conditions;
 - d. Harmful algae blooms;
 - e. Contaminants;
 - f. Delayed density-dependency;
 - g. En route mortality; and
 - h. Competitive interaction with wild and hatchery salmon.

²³ Exhibit 73

97. These hypotheses were characterized as “likely”, “unlikely” etc.
98. To a large degree, the results of this workshop, and many of the same personnel, were used by this Commission in the organization and presentation of the evidence and, in particular, the Technical Reports. Those reports were, like the hypotheses put forward at the workshop, summarized and ranked with the terms “likely”, “unlikely” etc.
99. This Participant submits that terms such as “likely” and “unlikely”, while possibly useful to the scientists in setting their research agenda, are of limited use to this Commission which is charged with the responsibility of making findings of fact.²⁴
100. Consequently, subject to the following comments, this Participant has little to say about any or all of the Technical Reports and the oral evidence surrounding them.
101. The Technical Reports can be broken into two categories:
 - a. Reports that rule out whatever the given topic was; and
 - b. Reports that find some causal explanation within the given topic.
102. It is important to note that none of the Technical Reports found a “smoking gun” and all could produce only partial, or incomplete, explanations. Almost all of the reports called for further research.
103. With respect to Technical Report 7, *Fraser River Fisheries and Fisheries Management and Comparison With Bristol Bay Sockeye Fisheries* by K. English and others, this Participant simply urges the Commission to put the comments by Dr. English about monitoring and the recreational catch and release fishery into the context of:

²⁴ See eg. Dr. Richards Transcript September 27, 2011, p. 90, ll. 21-36

- a. With respect to catch and release mortality, his own oral evidence together with that of the J.O. Thomas report²⁵ and the evidence given by the recreational fisheries panels; and
- b. With respect to monitoring, the whole of the evidence and in particular that of the recreational fishing panel and that of Mr. Bevan in the final panel who, in the context of monitoring, described the recreational fishery as “low risk”.

C. Future

104. This Participant deals with the future at two different levels.
105. With respect to the main issue facing this Commission, it offers an approach. That approach, suggested essentially to DFO, flows from the guiding or focusing concepts set out at the beginning of the Submission: pragmatism, proportionality, interests and values, perspective and terminology.
106. The second level relates to matters specific to the recreational fishery. These recommendations are embedded in the section dealing with the recreational fishery.

1. The Main Issue

a. Pragmatism

107. **Be conservative in the approach to change to fisheries management.** What is needed is not “transformation” or radical change but rather attendance to the identifiable problems and incremental adaptations to deal with the unknown and uncertain.
108. This means looking to the wisdom of the past and in particular the past regimes under the PSC and the IPSC.

²⁵ Exhibits 529 - 531 - Report of J.O. Thomas

109. Witnesses for DFO often emphasize the “newness of challenges and responses”. Examples are the description of the Wild Salmon Policy as “transformative”; the implicit and express suggestion is that such “transformation” was necessary; that new approaches are necessary in order to manage the resource in the face of “uncertainty”.
110. Such evidence should be considered in light of the following:
- a. First, the problem or problems to which such responses are addressed did not arise in a political/policy vacuum. They arose in a context described by both Pat Chamut and Sue Farlinger which include:
 - (i) the transfer of jurisdiction to Canada from the Pacific Salmon Commission;
 - (ii) the introduction of a “new aboriginal fishery”;
 - (iii) the “rebuilding program”; and
 - (iv) changing social views about the “environment” and their political and economic implications.
 - b. It is arguable whether either the nature or degree of “uncertainty” faced by current DFO managers is different in either nature or degree than that faced by their predecessors both within DFO and within the PSC/IPSC.
111. Under the regime of the PSC/IPSC, sockeye stocks were rebuilt incrementally after the Hell’s Gate disaster. Although this rebuilding took place with an emphasis on commercial production, it did not ignore biodiversity and in the end resulted in sustainable and productive fisheries and a rich biodiversity.
112. **Attend to the known, stock-specific, problems.** Both the problems and their management were clearly identified in the proceedings before this Commission. The problems are: the early Stuart, the early migrating late runs, and the Cultus. The management of these problems is reduced essentially to a question of the timing of fisheries.

113. Protection of the early Stuart appears to be essentially a question of managing the aboriginal fishery.
114. With respect to the early migrating late runs, both the diagnosis and the remedy were given clearly by Dr. Woodey. According to his evidence, “protecting” these stocks by constraining fisheries on the comigrating healthy runs is a serious mistake from the biological as well as the social/economic point of view. According to Dr. Woodey, most, if not all, of the early migrating lake stocks will die before spawning and consequently are not “protected” by constraints on fishing them. Further, however, constraining fishing on the comigrating summer runs creates the problems related to “overescapement” with those (primarily large) stocks. His solution is, as this Participant understands it, to concentrate the “protection” on the latest, the “tail end” of the early migrants which have the possibility of spawning.
115. The Cultus appear to be an extreme example of the problem with the early migrating late stocks as well as being unique in relying on an urban spawning habitat. Insofar as it is not ripe for being the case study for the “trade-off” process, it too should be managed with a clear understanding of the potential for overescapement of the comigrating stocks.
116. **Apply the principles of adaptive management.** These principles are outlined in the evidence of Drs. Woodey and Walters and especially in the extensive writings on adaptive management by Dr. Walters.

b. Proportionality

117. **Look to the “costs” as well as the “benefits” of management decisions.** These costs are both biological and socio-economic.
118. Again, according to the evidence, the “protection” of “weak stocks” comes at a cost to comigrating strong stocks with little “benefit” to either biodiversity or other ecological factors. Thus, both the benefit and the cost should be calculated; and both should be dealt with as matters of degree rather than absolute values.

119. The trade-off between biological and socio-economic values is obvious. It is imperative to focus on the processes by which these trade-offs can be identified and the appropriate decisions made.
120. This is a difficult problem and is essentially one of governance.
121. **Strike the appropriate balance between management and science.** As Dr. Mamorek testified, it is management which gives science relevance and science which gives management information. Scientific evidence heard by this Commission generally and the specific evidence of the limits of science given by Dr. Mamorek and Dr. Richards show clearly that “science” alone cannot be relied upon to manage the resource.²⁶
122. **Science also must be balanced with experience, both personal and institutional.** In short, fisheries management is an art and not a science.

c. Interests and Values

123. The need to be inclusive, to take into account various, and sometimes competing, interests is inherent in the legal nature of the fishery and the Crown’s relationship to it.
124. As stated by Major J. for the Court in *Comeau’s Sea Foods*²⁷ (in the context of licensing), because it is a common property resource, the most appropriate method of managing the fishery is ministerial discretion. “Discretion” here denotes both good judgment and a case by case approach.
125. Broadly speaking, the problem is how to institutionalize that discretion in a way which best serves the needs of inclusiveness on the one hand and decisiveness on the other and how to clarify the mandate to clearly articulate both the complex of objectives and their relative priorities.

²⁶ See eg. David Mamorek Transcript September 19, 2011, p. 60, ll. 11-22, p. 66, l. 33; September 20, 2011, p. 49, l. 37 – p. 50, l. 9, p. 79, ll. 6-14

²⁷ *Comeau’s Sea Foods Ltd. V. Canada (Minister of Fisheries and Oceans)* [1997] 1 SCR 12, par. 37

d. Perspective

126. This Participant emphasizes that the fishery is a public resource and that indeed the scope of federal power, exercised through DFO, is defined essentially by that concept. Senior officials giving evidence, and indeed some not so senior, have expressly affirmed this perspective.²⁸
127. This Participant, however, has some concerns that, despite this express affirmation, some of the lines of policy development are inconsistent with the notion of a public resource and in particular a common property resource.
128. The first is the policy relating to aboriginal fishing.
129. As noted throughout this Submission, the contours of aboriginal fishing policy should be congruent with those of the legally defined interface between aboriginal rights and the public right.
130. This means essentially that:
- a. It must be recognized that, except where fishing pursuant to an aboriginal right, Canadians of aboriginal descent are exercising the public right; i.e., what aboriginal Canadians share together with their non-aboriginal countrymen is a common property resource;
 - b. Aboriginal rights are not absolute; they may be infringed if the infringement is justified; showing that aboriginal rights have been prioritized in the planning and execution of fisheries is a justification of particular infringements; and the standard for justification is reasonableness.²⁹

²⁸ Reference is made here generally to the concluding panel which included Ms. Dansereau, Ms. Farlinger and Mr. Bevan. This panel gave evidence from September 22 - 28, 2011. Similar evidence was given by Mr. Chamut and Mr. Sprout.

²⁹ See *Sparrow, supra*; *R. v. Badger* [1996] 1 SCR 771; *R. v. Douglas*, 2007 BCCA 265; *R. v. Quipp*, 2011 BCCA 235

131. This Participant suggests that **“aboriginal fisheries” be restricted to the exercise of aboriginal fishing rights and that any controversy on the scope of such rights be dealt with in the courts, where it belongs.**
132. To the extent to which DFO has created or intends to create separate regimes which are not dictated by section 35(1) of *The Constitution Act, 1982* as interpreted judicially (e.g., “economic development fisheries”), it is seriously misguided.
133. In this regard it is also important to underline the danger of allowing an overbroad interpretation of the duty to “consult and accommodate” to usurp the function of the Courts in the serious business of making distinctions between citizens on the basis of their ethnicity.
134. The second area in which DFO has compromised or come close to compromising the public nature of the resource is in its focus on “share-based management” as a panacea for an array of problems ranging from uneconomic commercial fisheries through allocation transfers from the public to aboriginal fisheries to “selective fisheries” designed to protect “weak stocks”.
135. This is not to say that share-based management may not be an appropriate mechanism for any or all of these objectives; it is to say that **it ought not to be, as it appears to be to some, an end in itself.**

e. Terminology / Transparency

136. In the context of the future, the concern for terminology manifests as a concern for transparency.
137. One of the witnesses on the final panel stated in evidence that it was important that all of the stakeholders understand and appreciate the perspectives of the

others³⁰. This Participant agrees wholeheartedly, adding that in this context the “stakeholders” include the DFO.

138. It is argued in this Submission that a fundamental, if not the fundamental problem, is that of the governance of a common property resource. In that light, a mutual understanding, if not agreement, is the *sine qua non* of progress rather than simply one of many objectives.
139. The evidence discloses a number of processes (including Strategy 4 of the WSP, FRSSI, IFMP, etc.) directed at communication leading to decision-making amongst the “stakeholders”.
140. The evidence, however, also discloses a lack of capacity in all users to effectively participate in such processes where they become technical and a substantial lack of trust (perhaps related to such lack of capacity) in the ability of DFO to understand or, while understanding, the willingness of DFO to appreciate, their concerns and interests.
141. It is suggested that if the development of the Wild Salmon Policy is to continue, **more emphasis be put on developing Strategy 4** because:
 - a. It is essential to the policy as a whole; and
 - b. Neglecting or delaying it while continuing on the development of Strategies 1-3 effectively reinforces the policy of “weakest stock management”, a policy which itself is to be quantified, analyzed, modified and, potentially, replaced through the Strategy 4 process.
142. A specific concern is the DFO’s lack of transparency about its “aboriginal agenda”. It is unclear, for example, the extent to which the policies relating to “aboriginal fishing” are being driven by DFO and which by the Department of Indian Affairs. For example, whether “terminal fisheries” are being seen through the lens of aboriginal policy respecting fishing or fisheries policy respecting

³⁰ Farlinger, Bevan Transcript September 27, 2011, p. 94, ll. 13-35

aboriginals; if the push for “share-based management” is driven by general economic or biological concerns or the ability to reallocate access from the public to “aboriginals” under the guise of compensating current licensees (not the public) for the “relinquishment” in a “buy-back” process.

2. Allocation

143. It is submitted that, with the exceptions noted herein, allocation issues, particularly intrasectoral allocation issues, are not directly within the scope of the Terms of Reference of this Commission.

144. The exceptions are:

- a. Allocations and reallocations to separate particularly prioritized “aboriginal fisheries” which are not congruent with aboriginal fishing rights; and
- b. Creation of “entitlements” incompatible with a common property resource.

VI. THE RECREATIONAL FISHERY

A. Perspective

145. The perspective and overriding interest of the recreational fishing community can be summed up with the simple statement: **“All Canadians have the right to fish and consequently the fishery should be inclusive.”**

B. Value of Fishery

146. The recreational fishery gives the biggest bang for the buck; it is the least cause for concern of all the fisheries.

147. The recreational fishery of British Columbia is an icon of west coast Lifestyle.³¹ In addition to providing both food for personal consumption and recreation for the residents of British Columbia, the recreational fishery also has a significant

economic value. For example, in 2005 all sport fishing and its associated activities contributed 287.8 million to the GDP and 7,700 jobs to the economy of British Columbia. This was 43 percent of GDP values of all fisheries in British Columbia.³²

148. Estimates from a number of sources have estimated the value for both the freshwater and marine recreational fishery to be “upward of 1.2 billion annually.”³³

C. Public Fishery

149. The Pacific Coast’s marine recreational fishery is the largest marine fishery in the Country.³⁴ Salmon is the critical backbone of both the marine and fresh water recreational fishery.³⁵

150. In the mid 1990’s when recreational fishing for sockeye was opened in fresh water, there emerged a large recreational sockeye fishery in the Fraser River.³⁶ For example, in 2011, over-flights observed 1,500 people fishing for sockeye in the lower Fraser.³⁷

151. Between 1999 and 2010 the total number of recreational licences issued each year to residents has ranged between 230,251 and 260,657. During the same period, between 44,000 and 86,750 recreational licences were issued each year to non-residents.³⁸

152. The recreational community as a whole believes very strongly that the recreational fishery should remain a public fishery both in law and in fact.³⁹

³¹ *A Vision For Recreational Fisheries in British Columbia 2009-2013*, Ex. 527, p. 3 and incorporated into PPR 7, *Recreational Salmon Fishing: Licensing, Management, and Related Issues*, p. 4.

³² IFMP Draft #2 June 2011 to May 31, 2012, Ex.; See also DFO 2001 National Operational Policy Framework Principle 1 as incorporated into p. 10 of PPR7.; transcript, 7 March 11, p. 59 (40 per cent).

³³ Evidence of Joe Tadey, transcript, 2 March 11, p. 81.

³⁴ Joe Tadey, transcript, 2 March 11, p. 4-5.

³⁵ Joe Tadey, transcript, 2 March 11, p. 5.

³⁶ PPR 7, p. 4.

³⁷ Debra Sneddon, transcript, 2 March 11, p. 6.

³⁸ PPR 7, p. 14; See also Vision (Ex. 527), p. 8, para. 5.

³⁹ Devona Adams, transcript, 2 March 11, p. 33.

153. The recreational fishing community believes that fish are a common property resource and must be managed for the benefit of **all** Canadians.⁴⁰
154. Recreational fish harvesters are the eyes and ears of those wishing to preserve the resource for future generations. It is an important partner in management and stewardship of the resource⁴¹.

D. Consultation

155. The Sports Fishing Advisory Board (“SFAB”) is frequently cited by DFO as the standard for consultation. It is based on grass root committees in local communities and appointed representatives appointed from organizations such as the B.C. Wildlife Federation and the B.C. Federation of Drift Fishers⁴²; it balances the interest of pure recreational fishers with business recreational fishing interests,⁴³ it is volunteer-driven;⁴⁴ and it assists with the dissemination of material to the angling community⁴⁵. It is involved in various advisory and consultative processes with DFO such as developing fishing plans, and policy development and recommending recreational fishing representatives to sit on various commissions and committees such as the Integrated Salmon Harvest Committee⁴⁶.
156. The Integrated Harvest Planning Committee (“IHPC”) is the primary vehicle for intersectoral communication and advice between DFO and those with interests in the salmon fishery, including the recreational fishery⁴⁷.
157. It should be noted as well that the recreational fishing community has participated actively in the working out of the relationship between “aboriginal

⁴⁰ Vision, Principle 3.

⁴¹ Vision, Principle 5.

⁴² PPR 7, p. 8, para. 19.

⁴³ Dr. Gerry Kristianson, transcript, 7 March 11, p. 36; PPR 7, p. 8, para. 21 (majority must be primary user group members).

⁴⁴ Jeremy Maynard, transcript, 7 March 11, p. 39.

⁴⁵ PPR 7, p. 8, par. 21.

⁴⁶ PPR, p. 9, para. 20-1.

⁴⁷ PPR 7, p. 10, para. 22 quoting from DFO’s 2001 national Operating Policy Framework.

fishing” and “public fishing” in both the judicial and political forums and, recently, directly with aboriginal groups.

E. Conservation

158. The Commission should have no concerns about the recreational fishery having serious negative effects on Fraser River sockeye either in the past or in the future.
159. The evidence as a whole indicates that fishing by either the commercial or recreational sector has not contributed in any material way to the decline being examined by the Commission.
160. Specific evidence, particularly that of Mr. Bevan, characterizes the recreational fishery as “low risk” because of its combination of low fishing power and high conservation ethic.⁴⁸

F. Pre-Spawn Catch and Release Mortality is Low

161. Since the bottom bouncing technique⁴⁹ primarily used in the Fraser River generally hooks the fish on the outside of its mouth, pre-spawn mortalities are lower than experienced in the marine troll fishery⁵⁰. The first three years of a study performed by J.O. Thomas and Associates showed that in the first 24 hours after release, catch mortalities were as follows:

1.2% (2008)

1.7% (2009)

2.3% (2010)

⁴⁸ Bevan Transcript, September 27, 2011, p. 90, l. 37 – p. 91, l. 20

⁴⁹ The evidence supports the position that “bottom bouncing” or “flossing” is an ethical rather than a conservation issue.

⁵⁰ Debra Sneddon, transcript 2 March 2011, p. 51.

162. As a result of this study, commencing in 2010 DFO has used a three percent mortality rate for sockeye caught and released by recreational fishers in the lower Fraser.⁵¹

G. Allocation Policy

163. The current Allocation Policy aims for providing the recreational fishery with “predictable and stable fishing opportunities for sockeye ...”⁵². In accordance with Vision Principle 6⁵³, **this Participant agrees that “the needs of the recreational fishery, such as for stable and predictable fishing opportunities ... be considered and clearly reflected in integrated fishery management plans.”**⁵⁴

H. Management

164. This Participant supports the PPR recommendation that “the fact that the recreational fishery does not have the ability to adjust in the same weekly or daily time scales as commercial fisheries should be reflected in management and planning.”⁵⁵ In particular, **this Participant re-iterates the need for at least 48 hours’ notice of a closure to the recreational sockeye fishery.**⁵⁶
165. **This Participant supports the suggestion that DFO explore smart phone applications which would provide updated information to recreational fishers.**
166. This Participant has concerns about “share based” management. These concerns exist at a fundamental level.
167. At the most fundamental level, no objection is taken to the notion of individual quotas as distinct from a total available catch as, at bottom, this is simply the

⁵¹ Exhibits 529 – 30; transcript 2 March 11, p. 50-3.

⁵² “An Allocation Policy for Pacific Salmon” Ex. 264, p. 23-5.

⁵³ Vision Principle 6

⁵⁴ Vision, p. 8.

⁵⁵ Vision p. 10 as incorporated into PPR7 p. 24.

⁵⁶ PPR7, p. 23, para. 55 and note 79.

replacement of a total limit with the sum of individual limits (this is in essence the way in which the recreational fishery is presently managed).

168. The difficulty arises where individual quotas, instead of being regarded as limits, are seen to be entitlements. This becomes particularly egregious when the “quota” becomes “transferable” through the mechanism of organized “relinquishments” by the quota holder and coordinated “issuances” by the Minister. Such a system is close to, if not over, the line between managing the common property resource (which is within the competence of Canada) and converting it to a system of statutory entitlements (which is, it is submitted, outside of Canada’s constitutional competence).
169. Setting aside this general concern, however, and assuming for the sake of argument that IQs and even ITQs are appropriate means for the regulation of the commercial fishery, such a regime creates both conceptual and practical obstacles to intersectoral reallocations.
170. **It is imperative that these fundamental issues be addressed before elements of “share based” management are introduced for reasons of expediency or ideology** as, once introduced, they will be difficult if not impossible to eliminate.
171. Creel Surveys are a systematic, planned, structured method for assessing recreational fishing effort and catch⁵⁷. They are conducted by way of interviews, primarily at access points and over flights⁵⁸. They have been peer reviewed⁵⁹ and are a satisfactory method of monitoring recreational fishing effort and catch. Recently, PICFI money has been used for Fraser River creel surveys. This money has a sunset provision. Accordingly, a more secure source of funding is needed⁶⁰.

⁵⁷ Joe Tadey, transcript 2 March 2011, p. 57.

⁵⁸ The methodology is described in Ex. 534 and 532.

⁵⁹ Joe Tadey, transcript 2 March 11, p. 74.

⁶⁰ Joe Tadey, transcript, 3 March 11, p. 15 (Recommendation 154).

172. The 2010 Integrated Fisheries Management Plan⁶¹ provides that:

If stock abundance information suggests that conservation objectives cannot be attained, closures or non-retention regulations will generally be applied. In some cases, recreational fisheries with a non-retention restriction in place will remain open while First Nations FSC fisheries directed on stocks of concern are closed, provided the recreational fishery is not directed on the stock of concern, nor is the impact on the stock of concern significant. If stock abundance information suggests that conservation objectives cannot be attained, closures or non-retention regulations will generally be applied. **In some cases, recreational fisheries with a non-retention restriction in place will remain open while First Nations FSC fisheries directed on stocks of concern are closed**, provided the recreational fishery is not directed on the stock of concern, nor is the impact on the stock of concern significant. *[emphasis added]*

173. This statement incorporates the decision of the British Columbia Court of Appeal in *R. v. Douglas*, 2011 BCCA 235 as recently approved by a five member panel of the B.C. Court of Appeal in *R. v. Quipp*, 2011 BCCA 235. **This Participant supports the continued incorporation of this principle in future integrated fisheries management plans⁶².**

174. In the mid-90's there were approximately 12 full-time people working in the Pacific Region on management of the recreational fishery. Now there are only four full-time managers⁶³. **Given the value of the recreational fishery this Participant would submit that more management resources ought to be allocated to it.**

VII. CONCLUSION

175. This Commission faces a challenge and presents an opportunity, neither of which can be overstated. The challenge is to deal with a multitude of issues, all of

⁶¹ Ex. 445, p. 56.

⁶² See also PPR7, p. 20, para. 47.

⁶³ Devona Adams, transcript 2 March 11, p. 54.

which are important, complex and dynamic. The opportunity is to deal with them both comprehensively and deeply; to provide an analysis of the past and present and a vision for the future that is both unified and detailed; principled and practical.

176. This Participant has full confidence in the Commission's ability and willingness to meet that challenge and fulfil that opportunity. The task is difficult: it requires wisdom, forthrightness and plain hard work; this Participant rests assured that all will be supplied and that the task will not only be accomplished but accomplished well. The result will be worth the effort – an analysis and vision which will guide government and interested Canadians, acting cooperatively, in ensuring a healthy and vibrant resource.

ALL OF WHICH IS RESPECTFULLY SUBMITTED.

Date: October 17, 2011

J. KEITH LOWES
Lawyer for the Participants
B.C. Wildlife Federation and
B.C. Federation of Drift Fishers

Name and address of lawyer:
J. KEITH LOWES
Barrister & Solicitor
406 – 535 Howe Street
Vancouver, BC V6C 2Z4
Telephone: 604-681-8461
Fax: 604-638-0116
Email: keithlowes@shaw.ca

BRAD M. CALDWELL
Counsel for the Participants

Name and address of counsel:

BRAD M. CALDWELL
Barrister & Solicitor
401 – 801 Hornby Street
Vancouver, BC V6Z 2E6
Telephone: 604-689-8894
Email: bcaldwell@admiraltylaw.com

COMMISSION OF INQUIRY
INTO THE DECLINE OF THE SOCKEYE SALMON
IN THE FRASER RIVER

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AND THE B.C. FEDERATION OF DRIFT FISHERS**

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