



Pacific Fisheries Resource Conservation Council

# Annual Report 2010

*Issued*

November 2011

**Annual Report 2010**

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November 2011

The Honourable Keith Ashfield  
Minister of Fisheries and Oceans  
Government of Canada  
House of Commons, Ottawa

The Honourable Terry Lake  
Minister of Environment  
Province of British Columbia  
Legislative Building, Victoria

Dear Ministers,

On behalf of my colleagues in the Pacific Fisheries Resource Conservation Council, I am pleased to present you with our twelfth annual report. It addresses key issues and topics important to the conservation of wild Pacific salmon and provides our perspectives on the status of salmon stocks and their aquatic habitats.

As you will note, we published a number of reports and undertook associated activities on your behalf as providers of public information and strategic advice. The past year brought a sharp focus to issues relating to the health of wild Pacific salmon and Fraser River sockeye salmon, with the appointment of the Cohen Commission of Enquiry. For our Council, 2010 was also an important transitional year. With reduced resources, we concentrated on continuing to advance a relatively small number of critical initiatives, including Salmon Strongholds. We also published our Strategic Issues report, which put our Council's significant historical body of work into perspective, while highlighting key strategic directions for our future work. A third key focus was on laying the groundwork for new initiatives to be undertaken in 2011.

Our Council acknowledges the exceptional contribution of Mark Angelo, who retired in March 2010 after serving as a member for many years and as Chair since March 2009. We are also grateful to Dawn Steele and Alexandra Warren for their assistance in preparing this annual report.

Along with my fellow members of the Council – the Honourable John Fraser, Mary Sue Atkinson, Marilyn Murphy, Marcel Shepert and Dr. Richard Beamish – I appreciate the opportunity in the current year to work with you and your departmental officials, particularly to address the strategic issues we identified in our recent overview report.

Yours sincerely,

Jeff Marliave, PhD  
Chair

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## EXECUTIVE SUMMARY / SOMMAIRE

During 2010, the Pacific Fisheries Resource Conservation Council continued to serve as a strategic advisor to the federal and British Columbia government ministers responsible for fisheries. The Council's activities during its twelfth year of operation continued to support the state of wild salmon and steelhead stocks and their freshwater and ocean habitats.

This was in many ways a transitional year for the Council, with leadership changes, relocation to new offices and publication of a major retrospective report examining the body of work undertaken by the Council during its first decade. The Council also continued to play a leadership role in sponsoring innovative projects, such as the Canadian pilot project for the Salmon Strongholds Partnership, and a variety of science events that advance technical knowledge, public understanding and improved salmon management practices.

Wild salmon are increasingly defying predictability. While declines for many populations remain cause for serious concern, 2010 also saw record high returns of some Fraser River sockeye populations, with a total run size that exceeded all pre-season expectations. The appointment of the Cohen Commission of Enquiry in 2010 brought a sharp focus to these issues and their underlying causes. The Council's extensive body of work on Pacific salmon conservation has provided an important source of credible and objective background information to support the challenging task facing Commissioner Cohen. Our mandate as an independent source of strategic advice on salmon conservation also places us in a unique position to support implementation of Commissioner Cohen's recommendations, once his final report is presented in 2012. The Council can serve as a neutral party, listening to competing interests and offering complete and balanced information to governments and the public, to support effective follow-up action and successful outcomes.

In 2010, the Council published a major strategic overview report, *Priorities and Strategies for Canada's Wild Pacific Salmon and Steelhead*, which provided a compendium of the many reports and other Council publications issued since 1998. It presented a synthesis of past advice, and put forward brief recommendations related to the key emerging issues and challenges to wild Pacific salmon.

In 2010, the Council also co-hosted the Summit on Fraser River sockeye, where Council members and staff played a key role in exploring the state of knowledge, and knowledge gaps, regarding threats to the survival of Fraser River sockeye during different stages of their life cycle.

The Council also continued to support the Wild Salmon Policy (2005) as a key tool for achieving conservation objectives, with a report and with the Council offering advice on the evaluation and effective implementation of the Policy. The Council stressed the importance of an objective evaluation and the need for resources to support full implementation. A significant accomplishment was the official designation in February 2010 of British Columbia's Harrison Basin as Canada's first Salmon Stronghold, following extensive work to develop the salmon strongholds concept as an important tool for the conservation of wild Pacific salmon in Canada.

The Council continued to pursue its work program even with limited resources due to budget reductions, key staff vacancies and the continuation of several membership vacancies, some of which remain unfilled after more than four years. Council members and government officials continue to investigate further ways in which measures can be taken to improve efficiency and productivity, while fulfilling the Council's mandate to inform the public and provide strategic advice to both ministers.

## 1. SALMON STOCKS AND HABITAT OVERVIEW

In line with its mandate, the Pacific Fisheries Resource Conservation Council provides an annual report on its activities and output. This report provides a valuable review and summary of the key findings, observations and recommendations from published background reports and other Council activities conducted during the 2010 calendar year.

The Council is mandated under its terms of reference to serve as an independent body that provides advice to the Minister of Fisheries and Oceans Canada, to the British Columbia Minister responsible for fisheries and environmental protection and to the public, reporting on matters relating to the status of Pacific fish populations (specifically salmon and steelhead) and their freshwater and ocean habitat in British Columbia and Yukon Territory. Among the issues the Council is asked to consider are:

- Conditions in freshwater and marine ecosystems;
- Stock conservation and enhancement programs;
- Habitat restoration, protection and improvement;
- Fisheries conservation objectives;
- Research programs;
- Stock and habitat assessments; and,
- Integrating scientific with local and traditional knowledge.

The Council's work focuses on developing objective advice on long-term strategic issues and priorities for the conservation and sustainable management of wild Pacific salmon and steelhead. Council activities in 2010 included publishing several reports and advisories, sponsoring a major fisheries science event and undertaking background study and discussions to guide future projects. A major achievement was the international designation of British Columbia's Harrison River as Canada's first Salmon Stronghold, largely as the result of the work undertaken by the Council in 2008 and 2009.

### 1.1 Status, Conditions and Trends

The Council played a significant role in both the development and subsequent efforts to implement the Wild Salmon Policy and continues to support this as a key tool for moving Pacific salmon conservation and sustainability objectives forward. The 2005 Wild Salmon Policy called for an evaluation to be undertaken five years after it was established. In 2010, the Council provided a consultant's report summarizing stakeholder advice on an appropriate process and criteria for that evaluation. The report was followed by a Council advisory stressing the importance of an independent, thorough and inclusive evaluation, and highlighting the need for additional funding to allow full implementation of the Wild Salmon Policy. Council's advisory also called for additional investment to undertake needed assessment work in both the marine (near shore and open ocean) and freshwater environments, and to identify important salmon habitat.

In 2010, the Council followed up its 2009 technical background paper on southern area stocks with a summary report that synthesized key findings for the lay public. The south coast stocks

## 1. Salmon Stocks and Habitat Overview

report confirmed that many salmon stocks were relatively stable until 1990, when environmental conditions appear to have contributed to increasingly unpredictable productivity patterns. Problems related to marine survival, particularly for Fraser River sockeye, have been identified in several instances in the past decade, particularly in 2005 and 2009. The slow recovery of Coho in the southern region, despite rigorous fishing restrictions and freshwater habitat projects, has been a frustration for fisheries managers. High returns of pink salmon to the Fraser River, coupled with growing concerns over the depressed and/or declining status of many Southern BC Chinook stocks adds to the complex picture.

The Council first drew attention to these apparent marine productivity trends in letters to the Minister of Fisheries and Oceans Canada in 2002, citing the severity of the declines and urging a comprehensive research and management program to deal with them. Since then, the Council has continued to highlight the importance of marine productivity, and the urgent need to invest in research in this area, as a key strategic issue in Pacific salmon conservation.

In March 2010, the Council co-sponsored the “*Summit on Fraser River Sockeye Salmon: Understanding Stock Declines and Prospects for the Future.*” Council Chair Mark Angelo opened the conference, which explored questions raised at the Scientists’ Think Tank held in Vancouver in December 2009. These questions included factors that affect marine survival at different stages of the salmon life cycle, challenges in pre-season forecasting, how to improve monitoring and management in a changing world, and research priorities. The Hon. John Fraser, Council member and former Chair, delivered a closing presentation that stressed the importance of releasing good information to both political leaders and the public in order to support leadership responding effectively to the complex challenges in salmon conservation. Council staff Ken Beeson also participated, with his presentation on the potential of Salmon Strongholds as a tool to support conservation, ecosystem-based management and sustainable resource use.

### 1.2 Emerging Challenges

In 2010, the Council published a major report advising on priorities and strategies for wild Pacific salmon and steelhead. The report summarizes many of the key findings and recommendations contained in the 69 background papers, advisories and other Council publications published over the previous 11 years. Conditions such as climate change, population growth and competition for water access were identified as among the most significant factors undermining salmonid populations. Council warned that downward trends and increased variability in salmon productivity in many of British Columbia’s once-abundant salmon areas had become even more severe in the past decade.

The report noted the Council’s disappointment at the reluctance or inability of governments to apply the precautionary approach in aspects of fisheries management, especially in ways that assign tangible value to the conservation of wild salmon and steelhead and their habitat in regulatory and development decisions. The report also noted the Council’s disappointment of the government to act proactively to avoid predictable and preventable losses. Growing gaps in the collection and analysis of stock status information has hindered salmon and steelhead management, as fisheries department budgets have been repeatedly cut. Public misconceptions about the causes behind stock decline and a failure to understand the complex underlying factors have obstructed solutions that could provide for the long-term sustainability of wild salmon stocks. The Council’s view is that wild Pacific salmon will face greater uncertainty and pressures in the coming decade than at any previous time.

## 1. Salmon Stocks and Habitat Overview

The Council identified five strategic priorities in its report: 1) a new science agenda focused on emerging issues and practical conservation applications; 2) implementation of an ecosystem-management approach that integrates scientific disciplines and introduces alternative perspectives; 3) a joint review by the two levels of government to support more seamless and rigorous application of laws and policies to protect salmon and steelhead populations; 4) support for innovative projects, such as the North American Salmon Stronghold Partnership; and 5) a new fund established by both levels of government to support a comprehensive salmon sustainability strategy.

A significant challenge is to move the salmon and steelhead conservation agenda towards more proactive and preventive initiatives to reinforce the work of fisheries management agencies. Salmon Strongholds can provide an important supplement to the Wild Salmon Policy by identifying and protecting the most crucial salmon habitats in watersheds and basins across the province. In cooperation with the Wild Salmon Center in Portland, the Council played a lead role as a catalyst in highlighting the potential benefits of the Salmon Stronghold approach to protecting salmon and steelhead habitat, and in adapting the concept to accommodate Canadian circumstances.

In 2009, the Council published "*Applying the Salmon Strongholds Concept in Canada*," a background paper authored by Ken Beeson. In February 2010, British Columbia's Harrison River was formally designated as Canada's first Salmon Stronghold under the North American Salmon Stronghold Partnership. Located less than 100 kilometers from Vancouver, the Harrison River sustains healthy populations of all five species of salmon, as well as steelhead. It is an excellent example of crucially important salmon habitat that faces industrial and urbanization pressures. The Salmon Stronghold designation has served as a rallying point for local residents and diverse interests to work together to protect the uniqueness of the river's salmon values while supporting sustainable development. In the wake of this significant accomplishment, the Council's role will shift towards supporting local leadership and broad ownership of this initiative, both critical factors in maximizing the benefits associated with Stronghold recognition.

British Columbians care deeply about wild salmon and steelhead as resources that support important traditional, recreational and commercial fisheries, as key parts of natural ecosystems, and as iconic species with intrinsic value. But public debates about the health of wild salmon and the threats they face have not always been well-informed or productive, nor have they supported policy decisions that must take into account the important but difficult trade-offs required to balance environmental, social and economic values. It is possible to maintain strong and healthy wild salmon populations for the future, but this will require leadership and a strong political commitment towards fisheries sustainability.

In 2010, the Council published several reports and advisories and undertook additional work to support improved understanding of salmon and steelhead conservation issues.

## 2. COUNCIL REPORTS AND INITIATIVES

In 2010, the Council published several reports and advisories and undertook additional work to support improved understanding of salmon and steelhead conservation issues.

### 2.1 Wild Salmon Policy Initiative

The Council commissioned a background report entitled *Developing a Wild Salmon Policy Review Framework* to capture the perspectives of conservation stakeholders on how to evaluate and improve Wild Salmon Policy implementation. The report authored by Dr. Julie Gardner was based on a series of interviews and discussions with informed individuals. The outcomes included a proposed review framework, which included criteria for the identification of performance measures and advice on an effective public engagement strategy, with particular emphasis on involvement by First Nations communities.

The report cited concerns by many conservation stakeholders over the slow pace of the Wild Salmon Policy's implementation and uncertainty about whether the policy is making a difference. Stakeholders generally acknowledged the need for the Wild Salmon Policy to satisfy many different interests and to accommodate divergent perspectives on conservation.

The report was followed by a Council advisory stressing the importance of an independent, thorough and inclusive evaluation process. Other key recommendations included the need for additional funding to allow full implementation of the Wild Salmon Policy, additional investment to undertake needed assessment work in both the marine (near shore and open ocean) and freshwater environments, and the need to identify important salmon habitat.

### 2.2 Harrison Salmon Stronghold Pilot Project

A number of important Council initiatives undertaken in 2009 helped lay the foundation for establishing Canada's first Salmon Stronghold. These included a technical report on adapting the concept for the Canadian context and a scientific evaluation to determine how British Columbia's Harrison Basin would rank in relation to the North American Salmon Stronghold Partnership's criteria for salmon productivity. The latter review found that the Harrison Basin qualified with exceptionally high marks for its highly productive and unique salmon runs, including Chinook populations that have remarkable physical and behavioural characteristics.

In February 2010, the Council was able to announce that this work had resulted in the formal designation of the Harrison River as Canada's first Salmon Stronghold. The Harrison River's sustains healthy populations of salmon and steelhead, an example of crucial salmon habitat that faces industrial and urbanization pressures. The designation has served as a rallying point for local residents, led by the Chehalis First Nation, to work together to protect the uniqueness of the river's salmon values while supporting sustainable development. As the initiative progresses, community groups will identify priority measures, such as pointing out areas meriting special habitat protection, to ensure that this extraordinary region is highlighted and safeguarded.

In the wake of this accomplishment, the Council's role will shift towards supporting local leadership and broad ownership of this initiative, both critical factors in maximizing the benefits associated with Stronghold recognition.

### **2.3 Strategic Issues Overview Report**

In February 2010, the Council published a major strategic overview report, *Priorities and Strategies for Canada's Wild Pacific Salmon and Steelhead*. This report summarized many of the key findings and recommendations contained in the 69 background papers, advisories and other Council publications published over the previous 11 years. Conditions such as climate change, population growth and competition for water access were identified as among the most significant factors undermining salmonid populations. The Council warned in the report that downward trends and increased variability in salmon productivity in many of British Columbia's once-abundant salmon areas had become even more severe in the past decade. The convening of the Cohen Commission to investigate declines in Fraser River sockeye salmon illustrated the extent of public apprehension and the level of confusion over contributing factors.

The report expressed Council's frustration over the government's reluctance to apply the precautionary approach in ways that tangibly value the conservation of wild salmon and steelhead in regulatory decision-making. It also noted the Council's dissatisfaction with the government's disinclination to act proactively to avoid preventable losses. Growing gaps in the collection and analysis of stock status information has also hindered salmon and steelhead management, as fisheries department budgets have been repeatedly cut. Public misconceptions about causes and a failure to understand the complex underlying factors have obstructed solutions that could provide for the long-term sustainability of wild salmon stocks. The Council's view is that wild Pacific salmon will face greater uncertainty and pressures in the coming decade than at any previous time. While Council members acknowledge that restoration of pristine salmon habitat conditions might not be a realistic goal, British Columbians have not yet come to grips with the choices before them. It is important to confront these choices and to decide how much more of the salmon resource we are willing to sacrifice to support conflicting environmental, social and economic objectives.

In this report, the Council set out strategic advice for specific action on five priority issues: 1) a new science agenda focussed on emerging issues and practical conservation applications; 2) implementation of an ecosystem-management approach that integrates scientific disciplines and introduces alternative perspectives; 3) a joint review by the two levels of government to support more seamless and rigorous application of laws and policies to protect salmon and steelhead populations; 4) support for innovative projects, such as the North American Salmon Stronghold Partnership; and 5) a new fund established by both levels of government to support a comprehensive salmon sustainability strategy.

### **2.4 Annual Report 2009**

The annual report for 2009 marked the Council's eleventh year of work, a year in which the Council was able to release an extensive list of reports, background papers and other publications, several of which had been initiated in previous years. With significant budget reductions, Council chose to focus its more limited resources on a number of crucial initiatives, particularly Salmon Strongholds and the Strategic Issues Overview.

The annual report noted growing concerns over unpredictable and/or declining returns. The shockingly low returns of Fraser River sockeye salmon in 2009 served as a high-profile example

of conditions and trends that have negatively impacted British Columbia's wild salmon and steelhead populations in the past decade.

The Annual Report referenced Council habitat reports on the declining conditions of crucial salmon and steelhead habitat. More extensive and inclusive land use planning was emphasized as a means to cope with conflicting demands for water resources and access.

The annual report also noted that feedback from community meetings continued to reflect widespread public dissatisfaction with the effort of governments to maintain salmon habitat and wild salmon populations, warning that British Columbians have considerably higher expectations of salmon protection than government agencies are willing or able to deliver.

### **2.5 Southern BC Salmon Stock Status: Summary Report**

In 2010, the Council followed up on the 2009 technical background paper authored by fisheries biologist Mark Labelle by publishing a summary for the lay public that synthesized his key findings on the status of southern BC salmon stocks. Labelle's original report, *Status of Pacific Salmon Resources in Southern British Columbia and the Fraser River Basin*, confirmed that many salmon stocks were relatively stable until 1990, when environmental conditions appear to have contributed to increasingly unpredictable productivity patterns. Specifically, problems related to marine survival, particularly for Fraser River sockeye, were identified in several instances in the past decade, particularly in 2005 and 2009. In addition, the slow recovery of coho in the southern region, despite rigorous fishing restrictions and freshwater habitat projects, has been a frustration for fisheries managers. High returns of pink salmon to the Fraser River, coupled with growing concerns over the depressed and/or declining status of many Southern BC Chinook stocks adds to the complex picture.

### 3. APPENDICES

The mandate of the Pacific Fisheries Resource Conservation Council is to provide information and strategic advice to fisheries ministers and the public on the conservation of wild Pacific salmon and steelhead populations and their freshwater and ocean habitats. The Council members bring diverse perspectives and experiences related to wild salmon, and work on a consensus basis to develop public-interest positions and recommendations.

#### 3.1 Council Members

**Dr. Jeff Marliave** chairs the Council. He is a scientist who has worked in several senior positions at the Vancouver Aquarium, and leads an extensive marine research program.

**The Honourable John A. Fraser** is one of Canada's outstanding leaders in environmental and conservation issues. He is a former federal fisheries and environment minister, and served as Canada's Ambassador for the Environment.

**Mary Sue Atkinson** is one of British Columbia's active stream keepers and serves as a dedicated salmon advocate, with a special interest in coho conservation.

**Marilyn Murphy** has had extensive involvement in the recreational fishery through various sector and community organizations and continues to be a strong advocate for both the protection and sustainable use of wild salmon.

**Marcel Shepert** leads the Fraser River Aboriginal Fisheries Secretariat and serves on several panels and advisory bodies involved in wild salmon conservation.

**Dr. Richard Beamish** is Senior Scientist at Fisheries and Oceans Canada, involved in several innovative fisheries-related research projects. He is an ex-officio member of the Council.

#### 3.2 PFRCC Publications

All of the reports and other publications listed below are accessible in their entirety and précis form on the website of the Pacific Fisheries Resource Conservation Council at [www.fish.bc.ca](http://www.fish.bc.ca).

**Annual Report 1998-1999** (PFRCC, released June 1999)

**Freshwater Habitat** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, June 1999)

**Salmon Stocks** (Background paper authored by Dr. Carl Walters and Josh Korman, June 1999)

**Fraser River Sockeye** (Background paper authored by Dr. Rick Routledge and Ken Wilson, June 1999)

**Coast-Wide Coho** (Background paper authored by Dr. Rick Routledge and Ken Wilson, June 1999)

**Climate Change and Salmon Stocks** (Conference Proceedings Summary, October 1999)

**Annual Report 1999-2000** (PFRCC, released May 2000)

**Water Use Planning: A Tool to Restore Salmon and Steelhead Habitat in British Columbia Streams** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, May 2000)

**Review of the Coho and Chinook Salmon Sections of the “Agreement Under the Pacific Salmon Treaty” Between Canada and the United States, dated 30 June 1999** (Background paper by Dr. Randall Peterman and Brian Pyper, May 2000)

**Sand and Gravel Management and Fish-Habitat Protection in British Columbia Salmon and Steelhead Streams** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, May 2000)

**State of Salmon Conservation in the Central Coast Area** (Background paper by Allen Wood, May 2000)

**The Wild Salmon Policy and the Future of the Salmonid Enhancement Program** (Council Advisory, June 2000)

**Salmon Conservation in the Central Coast** (Council Advisory and Background paper by Allen Wood, March 2001)

**A Crisis in Fisheries Education** (Council Advisory, September 2001)

**The Role of Public Groups in Protecting and Restoring Freshwater Habitats in British Columbia, with a Special Emphasis on Urban Streams** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, September 2001)

**Annual Report 2000-2001** (PFRCC, released December 2001)

**Annual Report 2001-2002** (PFRCC, released October 2002)

**The Protection of Broughton Archipelago Pink Salmon Stocks** (Council, Advisory, November 2002)

**Making Sense of the Salmon Aquaculture Debate: Analysis of Issues Related to Netcage Salmon Farming and Wild Salmon in British Columbia** (Background report prepared by Julia Gardner, David L. Peterson, Allen Wood and Vicki Maloney, January 2003)

**Wild Salmon and Aquaculture in British Columbia** (Council Advisory, January 2003)

**Annual Report 2002-2003** (PFRCC, released August 2003)

**Conflicts Between people and Fish for water: Two British Columbia Salmon and Steelhead Rearing Streams in Need of Flows** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, September 2003)

**The Salmon Aquaculture Forum: Discussion Paper on Practices & Findings** (Background paper prepared by Kenneth Beeson and the Honourable John Fraser, December 2003)

**The Salmon Aquaculture Forum: Briefing Note for Ministers** (Background paper prepared by Kenneth Beeson and the Honourable John Fraser, December 2003)

**Pacific Salmon Resources in Central and North Coast British Columbia** (Background paper prepared by Dr. Brian Riddell, February 2004)

**Salmon Conservation Challenges in British Columbia with Particular Reference to Central and North Coast** (Council Advisory, February 2004)

**Making Sense of the Debate About Hatchery Impacts: Interactions Between Enhanced and Wild Salmon on Canada's Pacific Coast** (Background report prepared by Julia Gardner, David L. Peterson, Allen Wood and Vicki Maloney, March 2004)

**Annual Report 2003** (PFRCC, released April 2004)

**Does Over-Escapement Cause Salmon Stock Decline?** (Technical paper prepared by Carl Walters, Paul LeBlond and Brian Riddell, April 2004)

**Reality Stewardship: Survival of the Fittest for Community Salmon Groups** (Background paper prepared for PFRCC and Vancouver Foundation by Brian Harvey and David Greer, April 2004)

**The Evolution of Commercial Salmon Fisheries in British Columbia** (Background report prepared by Stuart Nelson and Bruce Turriss, December 2004)

**Annual Report 2004** (PFRCC, released April 2005)

**Perspectives on Salmon Enhancement and Hatcheries: What the Council Heard** (PFRCC, May 2005)

**Conflicts Between Agriculture and Salmon in the Eastern Fraser Valley** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, June 2005)

**Selection and Use of Indicators to Measure the Habitat Status of Wild Pacific Salmon** (Background paper, February 2006)

**Managing Pacific Salmon for Ecosystem Values: Ecosystem Indicators and the Wild Salmon Policy** (Background paper, March 2006)

**First Nations, Salmon Fisheries and the Rising Importance of Conservation** (Background paper, April 2006)

**The Evolution of Recreational Salmon Fisheries in British Columbia** (Background paper, June 2006)

**Feeling the Heat: Can We Help Salmon Survive?** (Council public information pamphlet, June 2006)

**Annual Report 2005** (PFRCC, released June 2006)

**Implementing the Habitat and Ecosystem Components of the Wild Salmon Policy** (Council Advisory, October 2006)

**What's Happening in Your Community? What the Council Heard: Vancouver Island Public Meetings** (PFRCC, released October 2006)

**An Ecosystem-based Approach to Managing Salmon in Georgia Strait** (Council Advisory, June 2007)

**Annual Report 2006** (PFRCC, released June 2007)

**Report on Habitat Threats: Major Impacts on British Columbia Fish and Fish Habitat and Human Activities That Cause Those Impacts** (Background paper authored by Otto Langer, June 2007)

**Helping Pacific Salmon Survive the Impact of Climate Change on Freshwater Habitats**  
(Background paper authored by Essa Technologies Limited, September 2007)

**Helping Pacific Salmon Survive the Impact of Climate Change on Freshwater Habitats: Case Studies** (Background paper by Essa Technologies Limited, September 2007)

**What's Happening to Wild Salmon in Your Community? What the Council Heard: BC Interior Public Meetings** (PFRCC, released June 2007)

**Saving the Heart of the Fraser: Addressing the Human Impacts to the Aquatic Ecosystem of the Fraser River, Hope to Mission, British Columbia** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, November 2007)

**What's Happening to Wild Salmon in Your Community? What the Council Heard: North Coast Public Meetings** (PFRCC, released March 2008)

**Mountain Pine Beetle: Salmon Are Suffering Too** (Council public information pamphlet, March 2008)

**Climate Effects on Pacific Salmon in the Ocean** (Background paper authored by Dr. D.B.Preikshot, April 2008)

**What's Happening to Wild Salmon in Your Community? What the Council Heard: Mid and Upper Fraser Public Meetings** (PFRCC, released July 2008)

**Annual Report 2007** (PFRCC, released July 2008)

**Computer Modeling of Marine Ecosystems: Applications to Pacific Salmon Management and Research** (Background paper authored by Dr. D.B.Preikshot, October 2008)

**Summary: Computer Modeling of Marine Ecosystems: Applications to Pacific Salmon Management and Research** (Public information paper authored by Dr. D.B.Preikshot, April 2008)

**What's Happening to Wild Salmon in Your Community? What the Council Heard: Fort Langley and Sechelt Public Meetings** (PFRCC, released January 2009)

**Responsible Fishing In Canada's Pacific Region Salmon Fisheries** (Background paper authored by Elmar Plate, Robert C. Bocking and Karl K. English, February 2009)

**Landscape-Level Impacts to Salmon and Steelhead Stream Habitats in British Columbia** (Background paper authored by Dr. Marvin Rosenau and Mark Angelo, March 2009)

**Pacific Salmon in Canada's Arctic Draining Rivers, With Emphasis on Those in British Columbia and the Yukon** (Background paper authored by J.R. Irvine, E. Linn, C. McLeod and J.D. Reist, March 2009)

**Annual Report 2008** (PFRCC, released April 2009)

**What's Happening to Wild Salmon in Your Community? What the Council Heard: Haida Gwaii / Queen Charlotte Islands Public Meetings** (PFRCC, released April 2009)

**Applying the Salmon Stronghold Concept in Canada** (Background paper authored for the PFRCC by Kenneth Beeson, June 2009)

**Status of Pacific Salmon Resources in Southern British Columbia and the Fraser River Basin** (Background paper authored by Marc Labelle, July 2009)

**Freshwater for Fish and People: Moving Towards “Living Water Smart”** (Background paper authored by Marc Nelitz, Tanis Douglas and Murray Rutherford, July 2009)

**Freshwater for Fish and People** (Council public information pamphlet, July 2009)

**Nisga’a Fisheries Management Program: A Model for Sustainability Under Stress** (Council public information pamphlet, released November 2009)

**Developing a Wild Policy Review Framework: Stakeholder Perspectives on Review Components** (Background report authored by Julia Gardner, January 2010)

**PFRCC Advisory on the implementation of Canada’s 2005 Wild Salmon Policy** (Council Advisory, January 2010)

**Adapting to Change** (Summary of the 2010 Science Workshop co-hosted by the PFRCC on factors contributing to poor returns of Fraser sockeye salmon in 2009).

**Annual report 2009** (PFRCC, released March 2010)

**Priorities and Strategies for Canada’s Wild Pacific Salmon and Steelhead** (Synthesis of key findings and recommendations from 69 Council background papers, advisories and other publications issued during the previous 11 years since Council’s formation. Released February 2010)

**Summary report: Status of Pacific Salmon Resources in Southern British Columbia and the Fraser River Basin** (Summary of Marc Labelle’s 2009 technical background paper, released February 2010)

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