

Policy and Practice Report

Recreational Salmon Fishing: Licensing, Management, and Related Issues

7 February 2011

Table of Contents

Introduction	3
Legislation and Jurisdiction	5
Federal legislation.....	5
Federal-provincial jurisdiction	7
Provincial legislation and involvement	7
Consultative Process, and the 2010 Vision Paper	8
DFO processes involving the recreational sector	8
A Vision for Recreational Fisheries in British Columbia, 2010	10
Licensing and the Published Fishing Guides.....	13
Licensing for recreational salmon fishing in BC	13
The published Sport Fishing Guides.....	15
Licence fees	16
Conservation stamps.....	17
Proposals for licence-fee increases	18
Management	18
Management tools	19
Pre-season and in-season management; consultations	21
Communicating with recreational fishers	24
Defined share management systems, ITQs, etc.....	25
Harvest Levels	26
Measuring the impact: the creel survey methodology.....	26
Criticisms and defences of the creel survey	29
Selective Fishing	30
Selective fishing in the recreational context.....	30
Release mortality.....	33
Fishing Method Controversies.....	34
Appendix A: List of Acronyms Used	37

Introduction

- 1 This policy and practice report (“Report”) provides an overview of the Department of Fisheries and Oceans’ (“DFO” or the “Department”) policies and practices with respect to recreational fishing for salmon, in particular sockeye salmon, in the province of British Columbia. This Report relies principally on information obtained from documents disclosed to the commission or otherwise made available during the commission’s investigations. The accuracy of this report is contingent on the accuracy of those documents.
- 2 This Report does not purport to be comprehensive nor authoritative, but instead aims to provide a contextual background to inform the hearings on issues in the recreational fishery. This Report should be read alongside the more detailed policy and practice report entitled “Commercial Salmon Fishing: Licensing, Allocation, and Related Issues”, circulated to participants on December 22, 2010, as the commercial fishing report addresses topics – such as intersectoral allocation, alternative methods of managing fisheries (share-based management and quotas), and selective fishing – relevant to the recreational fishing sector. Certain other topics not addressed here, but relevant to recreational salmon fishing, such as habitat management and enforcement, are addressed in other sections of the commission’s hearings plan. There is a list of acronyms used in this Report, at Appendix A.
- 3 Recreational salmon fishing has a long-standing tradition in British Columbia. It is a pastime that engages many thousands of the province’s residents, who enjoy the challenges and rewards of fishing for the iconic salmon. Recreational fishing is also a significant attraction for visitors, some of whom travel to BC exclusively for the chance to catch salmon.
- 4 In 2010, the Government of Canada, the Government of British Columbia (the “Province”), and the Sport Fishing Advisory Board (“SFAB”) jointly prepared “A

Vision for Recreational Fisheries in British Columbia, 2009-2013” (“Vision”)¹ — a document discussed at some length below. Vision describes angling² for salmon as “an icon of west coast lifestyle,” and continues:³

Recreational fishing has given Canadians a unique opportunity to connect with their natural environment. It has given them both an appreciation of the importance of maintaining a healthy ecosystem capable of supporting an abundance of marine life and a sense of the need to work responsibly with others to protect that ecosystem.

- 5 The face of the recreational fishery for salmon has evolved over time. In the more recent past, the 1990s saw a significant decline in the numbers of chinook and coho salmon in the Strait of Georgia, while at the same time recreational activity grew on the West Coast of Vancouver Island and on the Northern coastlines.⁴ The mid-1990s saw the emergence of a large recreational fishery in the Fraser River, targeting Fraser sockeye. That fishery – much of which occurs near large population centres in the Fraser Valley, such as Chilliwack – is remarkably accessible: anglers equipped with basic equipment and a licence may walk to the shoreline and catch sockeye, without the expense associated with owning or using a boat. The in-river fishery is a relatively recent phenomenon. In 1957, the federal government closed non-tidal waters to angling for sockeye, pink and chum salmon; the Fraser River was only re-opened in 1995.⁵

¹ Government of Canada, Province of British Columbia, and Sport Fishing Advisory Board “A Vision for Recreational Fisheries in British Columbia, 2009-2013” (2010), CAN257671 (“Vision”). Please note: The commission’s Terms of Reference direct the Commissioner to use the automated documents management program specified by the Attorney General of Canada, the Ringtail Database. Some references in this Report list the unique document identifier attached to a given document by the Ringtail Database, such as “CAN002605.”

² The terms “angler” and “angling” refer to a person fishing “with a hook and line”; they are used in this report synonymously with “recreational fisher” or “recreational fishing”. See *The Canadian Oxford Dictionary*, Ed. K. Barber (Oxford University Press, 2001), at p. 47.

³ Vision, p. 3

⁴ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 22; Vision, p. 4

⁵ G. Kristianson and W. Otway, “British Columbia’s Freshwater Recreational Fishery” (2006), CAN013540, at p. 7

Legislation and Jurisdiction

Federal legislation

- 6 The federal *Fisheries Act*⁶ provides that the Minister of Fisheries “may, in his absolute discretion, wherever the exclusive right of fishing does not already exist by law, issue or authorize to be issued leases and licences for fisheries and fishing, wherever situated or carried on.” As well, the Minister may charge fees for fishery or fishing licences, and may suspend or cancel licences in certain circumstances.⁷ According to the Supreme Court of Canada, “The Minister gives and the Minister (when acting properly within his jurisdiction under s. 9 of the Act) can take away according to the exigencies of his or her management of the fisheries.”⁸
- 7 The *Fisheries Act* also allows the Governor in Council to make regulations for carrying out the purposes and provisions of the *Fisheries Act*, including regulations “respecting the issue, suspension and cancellation of licences and leases” and “respecting the terms and conditions under which a licence and lease may be issued.”⁹
- 8 In addition to the *Fisheries Act*, the central federal legislation is the *British Columbia Sport Fishing Regulations, 1996* (the “Regulations”).¹⁰ Part I of the Regulations addresses fishing in tidal waters generally, while Part IV addresses fishing for *salmon* in tidal and non-tidal waters. Schedule VIII sets out the penalties for various offences.
- 9 The Regulations “apply in respect of sport fishing in the Canadian fisheries waters of the Pacific Ocean and the Province,” excluding waters in the Chilkoot Trail National Historic Site and waters to which the National Parks of Canada Fishing Regulations apply. The Regulations do not apply to fishing and related

⁶ R.S.C. 1985, c. F-14, as am., s. 7

⁷ *Fisheries Act*, ss. 8-9

⁸ *Saulnier v. Royal Bank of Canada*, [2008] 3 S.C.R. 166, at para. 48

⁹ *Fisheries Act*, ss. 43(f)-(g)

¹⁰ *British Columbia Sport Fishing Regulations, 1996*, SOR/96-137 (the “Regulations”)

activities carried out under the *Aboriginal Communal Fishing Licences Regulations*.¹¹

- 10 The Regulations provide for management of the recreational fishery by way of “close times” in particular areas, lakes or streams.¹² Retention limits regulate how many salmon of a given species may be caught and retained per day (that is, using a daily limit). Schedule VI sets out the close times, daily limits, and minimum length requirements per fish. For example, it indicates that sockeye salmon of at least 30 cm overall length may be retained up to the daily quota of four sockeye.¹³
- 11 The Regulations set out restrictions on the gear that anglers may use. For instance, an angler fishing in a lake or stream may only do so with one fishing line, unless he or she is fishing alone in a boat on a lake, in which case two lines are permitted.¹⁴ Similarly, there are restrictions on the weight an angler may attach to a fishing line,¹⁵ and on the number of hooks that may be used on a fishing line.¹⁶
- 12 The Regulations also prohibit certain fishing methods, such as using a light, using snares or foul-hooking.¹⁷ Foul-hooking is defined to mean “to hook a fish in any part of its body other than the mouth.”¹⁸ There are likewise restrictions on angling from a vessel in particular waters at particular times.¹⁹
- 13 While the Regulations are the source of legal authority and guidance as to how recreational fishing may take place, in a practical sense it is the Sport Fishing Guides (discussed below) that are looked to most often for guidance on what is

¹¹ Regulations, s. 3

¹² Regulations, s. 43

¹³ See also Regulations, s. 45(2)

¹⁴ Regulations, s. 6

¹⁵ Regulations, s. 7

¹⁶ Regulations, s. 8

¹⁷ Regulations, s. 10

¹⁸ Regulations, s. 2(1); foul-hooking is discussed later in this report.

¹⁹ Regulations, ss. 11-12

permitted and what is not. The *Tidal Waters Sport Fishing Guide*, for instance, sets out a series of rules and requirements for salmon anglers.²⁰

Federal-provincial jurisdiction

- 14 As a constitutional matter, the federal government has jurisdiction over “Sea Coast and Inland Fisheries” pursuant to s. 91(12) of the *Constitution Act, 1867*. The province, meanwhile, has jurisdiction over “property and civil rights” and the “management of public lands” in the province, under s. 92. As a result, the lead role in managing the salmon fishery, which involves an anadromous fish, belongs to the federal government. That is true for the marine recreational fishery, as well as for the freshwater recreational fishery for salmon. The DFO’s mandate includes “ensuring conservation of the resource, healthy and productive ecosystems, sustainable fisheries, and safety on the water.”²¹
- 15 While the federal government is responsible for the management of recreational salmon fishing, both the federal and provincial governments are involved in licencing anglers. The split between the two is based on “tidal” and “non-tidal” waters. Tidal licences are issued by Canada; non-tidal licences are issued by the Province. The line between tidal and non-tidal waters, for the Fraser River, is drawn at the downstream side of the CPR Bridge at Mission, BC. There is an explanation of this geography in the *Tidal Waters Sport Fishing Guide*.²²

Provincial legislation and involvement

- 16 The provincial *Fisheries Act*²³ mandates that a person must not fish or attempt to fish “unless the person holds a valid licence issued for that purpose and has paid the fee prescribed.” The provincial *Wildlife Act*²⁴ states a similar requirement (to hold a valid licence in order to fish in non-tidal waters). The provincial regulations, in the main, apply to freshwater species rather than salmon. If

²⁰ 2009-2011 British Columbia Tidal Waters Sport Fishing Guide, CAN046961, at pp. 12-13

²¹ Vision, p. 2

²² 2009-2011 British Columbia Tidal Waters Sport Fishing Guide, CAN046961, after Table of Contents

²³ R.S.B.C. 1996, c. 149, as am., s. 8

²⁴ R.S.B.C. 1996, c. 488, as am, s. 12

freshwaters are closed to fishing or have gear restrictions imposed because of the provincial regulations, those restrictions apply to fishing for salmon as well as for non-salmon.

Consultative Process, and the 2010 Vision Paper

DFO processes involving the recreational sector

17. The Sport Fishing Advisory Board is the primary process for consultation involving the recreational fishing sector. The SFAB has a relatively lengthy history, dating to 1964.²⁵ It has served as an official advisory body to the DFO since that time.²⁶
18. The SFAB is made up of 22 local sport fishing advisory committees, covering much of the province's geography. The local advisory committees are represented in the north and south coast regional committees of the SFAB. The north and south coast regional committees, in turn, are represented in the Main Sport Fishing Advisory Board, referred to as the Main Board. In addition to this hierarchical and regional organization (from local to regional to the Main Board), the SFAB has specific working groups for particular species or issues, including a "sockeye, pink and chum working group", and a "coho and chinook working group."
19. The Main Board includes the chairs and elected representatives from the north and south coast regional committees, as well as appointed organization representatives (including the BC Wildlife Federation, the BC Drift Fishers Federation, the Sport Fishing Institute, and the Pacific Salmon Commission), and *ex-officio* government representatives.

²⁵ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 13; it was created in 1964 as the Advisory Committee on Salt Water Sport Fishing and took its current name in 1974.

²⁶ *Vision*, p. 2

20. The Main Board generally meets twice a year to discuss and advise the DFO on recreational fishing plans, regulations, and areas of concern to anglers.²⁷ The SFAB is involved in various advisory or consultative processes with the DFO, giving input on, for example: fishing plans and management; stock assessment and monitoring; enforcement and regulations; and policy development.²⁸
21. The SFAB's Terms of Reference set out principles to guide decisions on the structure and operations of the SFAB.²⁹ The Board aims to be: transparent; accountable; inclusive in its representation; effective; and efficient. It has a membership policy that requires the majority of the SFAB to be "primary level user group members," which means "persons who do not receive a significant amount of their annual income directly or indirectly from the recreational fishery."³⁰ The Board provides advice to the federal and provincial governments, and assists in disseminating information to the angling community and the general public. It also recommends recreational fishing representatives to sit or participate in the Pacific Salmon Commission; the North Pacific Anadromous Fish Commission; the Integrated Pacific Halibut Commission, and the Integrated Harvest Planning Committee, which is addressed below.³¹
22. In managing the recreational fishery, the DFO consults the Salmon Integrated Harvest Planning Committee ("IHPC"). The Salmon IHPC is discussed in detail in the commission's Policy and Practice Report entitled "Overview of Fraser River Sockeye Salmon Harvest Management." It was summarized therein as follows:³²

The Salmon IHPC is the primary vehicle for inter-sectoral communication and advice between DFO and those with interests in the salmon fishery. Its mandate is to make recommendations to DFO on operational decisions

²⁷ The Sport Fishing Advisory Board: An Overview, CAN004204

²⁸ Vision, p. 3; see, for example, Email exchange, CAN085979

²⁹ Sport Fishing Advisory Board, Terms of Reference (2010), CAN202389; see also the Terms of Reference for the SFAB regional committees (CAN202424), and local advisory committees (CAN202387)

³⁰ Sport Fishing Advisory Board, Terms of Reference (2010), CAN202389, at p. 3

³¹ Sport Fishing Advisory Board, Terms of Reference (2010), CAN202389, at p. 2

³² Cohen Commission policy and practice report "Overview of Fraser River Sockeye Salmon Harvest Management", released November 9, 2010, at pp. 64-66.

related to salmon harvesting.³³ The goal of the Salmon IHPC is to ensure that fishing plans are coordinated and integrated, to identify potential conflicts between sectors and to make recommendations for solutions if there is disagreement among sectors.³⁴

23. The IHPC includes representatives from the three fishing sectors (commercial, recreational and First Nations) and the environmental community, to consult on development of Integrated Fisheries Management Plans (“IFMPs”).
24. In addition, for allocation issues, the DFO has established the Allocation Implementation Committee (“AIC”), (also referred to as the “Recreational-Commercial Salmon Allocation Implementation Committee”) to consult with the recreational and commercial sectors on issues related to allocation of the combined commercial and recreational Total Allowable Catch (“TAC”) for salmon.³⁵

A Vision for Recreational Fisheries in British Columbia, 2010

25. As noted earlier, “A Vision for Recreational Fisheries in British Columbia, 2009-2013,”³⁶ referred to here simply as “Vision,” was released in early 2010, although it arose out of a workshop in 2005.³⁷ It is a joint effort of Canada, the Province of BC, and the SFAB.
26. An important precursor to Vision was the DFO’s 2001 national Operational Policy Framework, which set out five “guiding principles” for recreational fisheries:³⁸

Five principles will guide Fisheries and Oceans in its task to develop and implement recreational fisheries policies, programs and initiatives.

³³ Integrated Salmon Harvest Planning Committee (IHPC): Terms of Reference (May 2005), CAN002470, at p. 1; specific operational decisions are set out in the Terms of Reference under the “Roles and Responsibilities” section at p. 4.

³⁴ Integrated Salmon Harvest Planning Committee (IHPC): Terms of Reference (May 2005), CAN002470

³⁵ For a fuller explanation of the AIC, see Cohen Commission policy and practice report “Commercial Salmon Fishing: Licencing, Allocation, and Related Issues”, December 22, 2010, at para. 161 ff

³⁶ Cited above, footnote 1, and referred to throughout as “Vision”

³⁷ G. Kristianson and W. Otway, “Choosing a Vision for the Recreational Fishery” (2006), CAN013542, at p. 2; the authors note that there were attempts at a national vision including policies developed in 1987 and 2001

³⁸ Fisheries and Oceans Canada, “Recreational Fisheries in Canada: An Operational Policy Framework” (2001), CAN242001 (full document at <www.dfo-mpo.gc.ca/fm-gp/policies-politiques/op-pc-eng.htm>), at pp. 5-6

- 1 Recreational fishing is a socially and economically valuable and legitimate use of fishery resources.
 - 2 Fisheries and Oceans is responsible for providing sustainable recreational harvesting opportunities as part of integrated management plans consistent with its policies.
 - 3 Recreational harvesters have responsibility for shared stewardship for resource conservation and enhancement.
 - 4 Mechanisms for federal/provincial cooperation in areas of shared jurisdiction will be established and strengthened.
 - 5 Fisheries and Oceans has a leadership role to coordinate policies/programs with the federal government which relate to recreational fishing.
27. As noted, Vision was released in 2010. It addresses marine fish species, and Pacific salmon, including both marine and freshwater angling for salmon. It describes itself not as an allocation document, but as one “intended to create a common understanding and a common basis for the management and development of the recreational fishery.”³⁹ Its aim is to provide “a plan to ensure progress toward a collective vision for the recreational fishery....It is meant to serve as a framework for developing goals, initiatives and actions to support achievement of a collective vision for the recreational fishery in B.C.”⁴⁰ As noted in Vision: “The framework operates within the existing legislative and policy framework, as well as the strategic context such as government priorities, fishery resource status and dynamics of the recreational fishery and community.”⁴¹
28. Canada, the Province and the SFAB state their shared vision and mission for the recreational fishery as follows:⁴²

The Vision: A sustainable and vibrant recreational fishery in British Columbia, providing broad social and economic benefits through diverse opportunities that recognize and respect other users of the resource.

The Mission: To achieve this vision through the best managed recreational fisheries in the world, consisting of:

- A healthy environment and fishery resource;

³⁹ Vision, p. 1

⁴⁰ Vision, p. 1

⁴¹ Vision, p. 5

⁴² Vision, p. 6

- Sound management and decision-making;
- Sustainable, stable, and diverse recreational fishing opportunities.

29. There are nine principles in Vision which describe common values of the sector and government. As put in Vision, these principles “represent a collaborative attempt to bring together the existing guidance from a multitude of sources,” and “define the underlying values that should guide decision-making, priority setting, and operational activities affecting the recreational fishery.” They are set out here verbatim, without the accompanying commentary for each principle:⁴³

1. Conservation of naturally reproducing fish and their habitat is the highest priority.
2. Shared responsibility for conservation, stewardship and careful harvesting of the fisheries resource is essential.
3. Fish are a common property resource and fisheries are managed for the benefit of all Canadians.
4. After conservation, First Nations fishing for food, social and ceremonial purposes has priority.
5. Recreational fishing is a socially and economically valuable use of fishery resources and is the means by which many Canadians access and experience these resources.
6. The needs of the recreational fishery, such as for stable and predictable fishing opportunities, will be explicitly considered and clearly reflected in integrated fishery management plans.
7. Prior to making decisions on recreational fishery management issues, governments will seek advice through appropriate inclusive, transparent and accountable consultation processes.
8. Stock enhancement and habitat restoration may be used to rebuild fish stocks and create fishing opportunities.
9. The recreational fishery will be managed to foster its current and future potential.

⁴³ Vision, pp. 7-9

30. The seven strategic goals set out in Vision, again verbatim, are as follows:⁴⁴
1. Achieve healthy and productive marine and freshwater ecosystems that support recreational fisheries.
 2. Realize the full social and economic potential of the recreational fishery.
 3. Maintain and enhance a consultative framework which provides for a supportive relationship between governments and the recreational fishing community, and encourages a healthy and respectful dialogue with other users through inclusive and meaningful processes.
 4. Ensure that the management of the recreational fishery is based on the best available information while taking into account local and traditional knowledge.
 5. Provide sustainable fishing opportunities which consider the needs of and foster the potential of the recreational fishery.
 6. Establish a framework for sharing responsibility for activities which benefit the recreational fishery.
 7. Promote understanding of the recreational fishery and recreational fisheries management practices.

Licencing and the Published Fishing Guides

Licencing for recreational salmon fishing in BC

31. For many decades, there was virtually no restriction on recreational fishing in BC's tidal waters. In 1951, the federal government introduced a daily "bag limit" of ten salmon, along with a minimum size of eight inches.⁴⁵ Daily possession was reduced from ten to eight in 1959, and to four in 1963, at which point the size limit was increased to 12 inches.⁴⁶ According to Vision, by 1980, "effort in the Strait of Georgia exceeded half a million boat trips a year and a million salmon

⁴⁴ Vision, pp. 11-13

⁴⁵ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 6; Vision, p. 3

⁴⁶ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 6

were harvested annually.”⁴⁷ In 1981, the federal government began issuing tidal water recreational fishing licences.⁴⁸

32. According to the DFO’s Pacific Region statistics, in the past ten years there have been between 230,251 and 260,657 recreational licences issued to residents, and between 44,000 and 86,750 licences issued to non-residents (Of note, the number of licences issued to non-residents has declined in recent years.). The majority of anglers purchase a Pacific Salmon Conservation Stamp; in the past decade the figures for the stamp range from 205,335 to 243,647. The total revenue to the federal government from both the licence and stamp has ranged from \$5,879,853 to \$6,726,136 (including tax).⁴⁹
33. Recreational fisher must hold a licence to fish for salmon in BC’s tidal waters, with the one exception being fishing on the Father’s Day weekend.⁵⁰ A person may hold only one licence, which is not transferable and is not valid unless signed by the licence holder, and which must be produced on request by a fishery officer, conservation officer or fishery guardian.⁵¹
34. To retain salmon, an angler must have a salmon conservation stamp (discussed below) affixed to his or her licence. This is true for both (federal) tidal and (provincial) non-tidal licences.
35. As noted earlier, the Province and Canada divide their responsibilities for licencing recreational fishers based on geography, with federal licences required for those fishing in tidal waters (downstream of the Mission CPR Bridge), and provincial non-tidal licences required for those upstream of that bridge.

⁴⁷ Vision, p. 3

⁴⁸ The year 1981 also saw regulatory changes to reflect the more rigorous approach to recreational fishing in the province. These included an increase in the minimum size for chinook, to 18 inches, and a reduction of the daily bag limit for chinook to two: G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 6

⁴⁹ Fisheries and Oceans Canada, Pacific Region Stats, 1999 to November 2010, CAN185415 <<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/licence-permis/Stats/99tocurrent-nov-10.htm>>

⁵⁰ Regulations, s. 18

⁵¹ Regulations, s. 21; Tidal Sport Fishing Guide, at p. 3

The published Sport Fishing Guides

36. In the commercial salmon fishery, the conditions attaching to a particular licence type may be numerous. In contrast, recreational fishing licences do not attach as many conditions; the Department communicates applicable restrictions and regulations mainly by the published Sport Fishing Guides, which are then supplemented by Fishery Notices, discussed below.
37. There are two Sport Fishing Guides relevant to salmon, produced every two years by the DFO: the *Tidal Waters Sport Fishing Guide* and the *British Columbia Freshwater Salmon Supplement*, referred to here as the “Freshwater Salmon Supplement”.⁵² The printed version of the Sport Fishing Guide contains the tidal guide on one side, with the Freshwater Salmon Supplement on the back. The two documents are to be read together, and in various places the Freshwater Salmon Supplement refers to the *Tidal Waters Sport Fishing Guide*. The Freshwater Salmon Supplement may also be read in conjunction with the Province’s “British Columbia Freshwater Fishing Regulations Synopsis,” although that document does not focus on salmon.⁵³
38. Collectively, these documents contain practical information designed to help anglers fish within the regulations. They contain the following (among other things):
- maps to assist anglers in determining what rules apply (since rules are specific to areas or sub-areas);
 - detailed tables setting out the default management approach for particular species in particular areas (all subject to variation);
 - detailed tables by area listing the closures in that area (also subject to variation);

⁵² Available online from Fisheries and Oceans Canada at <<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/SFG-GPS-eng.htm>>.

⁵³ Available online from the British Columbia Ministry of Natural Resource Operations website, at <<http://www.env.gov.bc.ca/fw/fish/regulations/>>.

- a list of requirements and the basic rules for recreational anglers targeting salmon;
- a description of unlawful actions;
- a list of licence fee rates;
- guidance on obtaining more recent information about openings and closures and restrictions;
- information on the DFO's "Observe, Record, Report" line for reporting violations;
- the SFAB's Code of Conduct for ethical fishing;
- advice and guidance on catch and release techniques;
- information on packing and transporting fish;
- information on identifying hatchery marked fish (which are missing their adipose fin);
- pictures and text to identify particular species of salmon (and other fish too); and
- information about salmon tagging programs.

Licence fees

39. The fees for recreational tidal-water fishing licences are set out in a table under s. 17 of the Regulations. That information is reproduced in the *Tidal Waters Sport Fishing Guide* as follows:⁵⁴

Category	Resident*	Non-resident
Adult Annual (16-64 years old)	\$21.00	\$101.00
5 Day	\$16.00	\$31.00
3 Day	\$11.00	\$19.00
1 Day	\$5.25	\$7.00
Senior Annual (65 years plus)	\$11.00	\$101.00
Salmon Conservation Stamp	\$6.00	\$6.00
Juvenile annual (under 16 years old)	FREE	FREE

* A resident is a person who normally resides in Canada. Valid identification of proof of residency must be provided.

⁵⁴ Tidal Sport Fishing Guide, at p. 3

40. For the provincial, non-tidal angling licence, the following fee structure applies.⁵⁵

Licence Type	<u>Resident</u>	<u>Non-Resident</u>	<u>Non-Resident Alien</u>
Basic Licences			
Annual Angling Licence	\$36	\$55	\$80
One Day Angling Licence*	\$10	\$20	\$20
Eight Day Angling Licence*	\$20	\$36	\$50
Annual Licence for Disabled	\$1	••	••
Annual Licence for Age 65 Plus	\$5	••	••

* You may buy as many One Day and Eight Day Licences as you need, but only one Annual Licence.

•• Fee reduction not available. Regular licence required.

All licence fees except Annual Licence for the Disabled include a surcharge for the Habitat Conservation Trust Foundation.

None of these fees include taxes.

Conservation stamps

41. Recreational anglers who wish to keep the salmon they catch must purchase a salmon conservation stamp for the year; their licence permits them to fish for salmon but not to *retain* any salmon caught. Conservation stamps for tidal-water anglers are authorized under the Regulations.⁵⁶ The current fee for a conservation stamp for salmon is \$6/year. Of this, \$1 is directed to the Pacific Salmon Foundation, “to help support salmon restoration and enhancement efforts in BC.”⁵⁷

42. For provincially issued non-tidal angling licences, there is an equivalent program: the provincial salmon conservation stamp. To keep a salmon of any legal size or species from non-tidal waters, an angler must have a Non-Tidal Salmon Conservation Surcharge Stamp (it is not required for anglers who will release all salmon caught⁵⁸). The annual cost for a salmon conservation surcharge stamp is \$10 for a resident; and \$20 for a non-resident or non-resident alien, a portion

⁵⁵ Angling Licences and Fees, British Columbia Ministry of Natural Resource Operations, at <<http://www.env.gov.bc.ca/fw/fish/licences/>>

⁵⁶ Regulations, ss. 16-17; see also Tidal Sport Fishing Guide, at p. 3

⁵⁷ Pacific Salmon Foundation, “Conservation Stamp”, available at <http://www.psf.ca/index.php?option=com_content&view=article&id=47&Itemid=29>

⁵⁸ Freshwater Salmon Supplement, p. 2

of which goes to the Freshwater Fisheries Society of BC, which operates hatcheries.⁵⁹

Proposals for licence-fee increases

43. Representatives of the SFAB have, in recent years, asked the DFO to consider a licence fee *increase*, on the condition that any funds raised would be directed to recreational fishing issues. The federal government has not raised licence fees since 1996. The SFAB calculates that the annual licence fee revenues from the roughly 325,000 tidal water licences and stamps amount to roughly \$6.5 million per year.⁶⁰ It suggests that fees be increased but that the additional funds not disappear into general revenue; instead the additional funds should be dedicated to the management of recreational fishing and catch monitoring.
44. One hurdle to such a fee increase may be the federal *User Fees Act*,⁶¹ which mandates a longer process and more scrutiny before federal government departments can increase fees.⁶²

Management

45. The current report does not focus on allocation, which is addressed in detail in the commission's policy and practice report "Commercial Salmon Fishing: Licencing, Allocation, and Related Issues", released December 22, 2010.⁶³ For

⁵⁹ Angling Licences and Fees, British Columbia Ministry of Natural Resource Operations, at <<http://www.env.gov.bc.ca/fw/fish/licences/#Conservation>>

⁶⁰ Issue: Meeting with Sport Fishing Advisory Board (SFAB) Representatives – Cost Recovery, CAN036095; see also the discussion above mentioning the past ten years' statistics which suggest revenue (including HST) to the federal government in the range of \$5.8 to \$6.2 million/year over the past decade: Fisheries and Oceans Canada, Pacific Region Stats, 1999 to November 2010, CAN185415 <<http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/licence-permis/Stats/99tocurrent-nov-10.htm>>

⁶¹ S.C. 2004, c. 6, AS AM.

⁶² See the discussion in See Cohen Commission, policy and practice report "Commercial Salmon Fishing: Licencing, Allocation, and Related Issues", December 22, 2010

⁶³ For a discussion of allocation in relation to the recreational sector, see G. Kristianson and D. Strongitharm, The Evolution of Recreational Salmon Fisheries in British Columbia (2006), CAN002605, at pp. 6-11

convenience, and as context, that report commented on allocation as between the commercial and recreational sectors in these terms:⁶⁴

80. Between commercial and recreational fishers, the Salmon Allocation Policy⁶⁵ recognizes the following:

Recreational and commercial salmon fisheries operate very differently. The recreational fishery accounts for a relatively small portion of the total annual harvest of salmon. It is primarily concerned with the quality of the angling experience and with the opportunity to fish throughout the year. In contrast, the commercial fishery, which takes place mainly from July to November, accounts for the vast majority of the total salmon harvest and is primarily concerned with the quantity and value of the catch.⁶⁶

81. Principle 4 grants recreational harvesters priority access to chinook and coho. It also limits the recreational harvest of sockeye, pink and chum “to a maximum average of 5% of the combined recreational and commercial harvest of each species over the period 1999 to 2005.”⁶⁷ The Salmon Allocation Policy allows for some adjustment to allocation targets during 1999 to 2005 in the event that projections show that the recreational cap would be exceeded during this period.

82. Under Principle 5, the Salmon Allocation Policy grants the commercial sector 95 percent of the combined recreational and commercial catch for sockeye, pink and chum. At the time, DFO and fishers alike understood that it was unlikely that the recreational fishery would reach its five percent cap in most years.⁶⁸ Any uncaught portions of the recreational allocation were to be harvested by the commercial fishery. Also, the commercial 95 percent was to be “broken out by species.”⁶⁹ The commercial fishery was only to receive access to chinook and coho through directed commercial fisheries when “harvestable surpluses are sufficiently high” to meet conservation objectives, provide for First Nations’ food, social and ceremonial needs and requirements set out in treaties and agreements, allow for a directed recreational fishery, and still be sufficiently high to permit a directed commercial fishery.⁷⁰

Management tools

46. As noted above, the Minister has a wide discretion to control the recreational salmon fishery. The main tools used by DFO managers, for the recreational

⁶⁴ See Cohen Commission policy and practice report “Commercial Salmon Fishing: Licencing, Allocation, and Related Issues”, December 22, 2010, at paras. 80-82

⁶⁵ Fisheries and Oceans Canada, *An Allocation Policy for Pacific Salmon, A New Direction: The Fourth in a Series of Papers from Fisheries and Oceans Canada* (October 1999), CAN000543, Exhibit 264 in Cohen Commission hearings

⁶⁶ *Ibid.*, at p. 20

⁶⁷ *Ibid.*, at p. 25

⁶⁸ *Ibid.*, at p. 21

⁶⁹ *Ibid.*, at p. 21

⁷⁰ *Ibid.*, at 28

salmon fishery, are: (1) time and area closures; (2) restricting retention; and (3) reducing daily limits. The Department may conclude that the risk arising from recreational fishing in a particular area is so significant, that it must close that area to salmon fishing entirely, or to fishing for a particular species of salmon. Alternatively, there may be a prohibition on *retaining* fish of a particular species, though this would permit a “catch and release” fishery to continue. As a lesser measure, the daily limits could be lowered, so that an angler could keep, for example, one chinook rather than two. It is also possible for the Department to vary the size requirement for the fish that may be retained.

47. The general approach to managing the recreational salmon fishery is set out in the 2010 Integrated Fisheries Management Plan, or IFMP, as follows:⁷¹

Under the Department’s *Allocation Policy for Pacific Salmon*, after FSC fisheries, the recreational sector has priority to directed fisheries for chinook and coho salmon. For sockeye, pink and chum salmon, the policy states that recreational harvesters be provided predictable and stable fishing opportunities. Management actions previously applied in 1999-2009 will be implemented in 2010 and include: recreational harvest of sockeye, pink, and chum will be limited to a maximum average of 5% of the combined recreational and commercial harvest of each species on a coast-wide basis. 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. Prior to a directed commercial fishery on specific chinook and coho stocks, the fishing plan will provide for full daily and possession limits for the recreational sector on those stocks. Decision guidelines may also identify considerations for changing the area of the fishery, modifying dates or changing daily limits.

48. The Sport Fishing Guides set out default rules for various areas and species. In some cases, the default rule is that the recreational fishery is open with set retention limits. In other cases, the default rule is that the fishery is closed. In either situation, the Department may (and routinely does) vary the default rule, thereby opening a closed fishery for a period, or closing an open fishery. Such changes are effected by way of a variation order, which is generally prepared by

⁷¹ Fisheries and Oceans Canada, 2010/2011 Integrated Fisheries Management Plan – Southern BC Salmon, CAN185436, at pp. 56-57

staff in the Pacific Region and issued by the Regional Director-General under the authority of the *Fishery (General) Regulations*.⁷²

Pre-season and in-season management; consultations

49. The commission's policy and practice report entitled "Overview of Fraser River Sockeye Salmon Harvest Management" provides a description of the processes giving rise to the annual IFMP that regulates the southern salmon fishery generally, including recreational fishing. As described previously, the SFAB is involved in the preparation of the IFMP and in pre-season planning, both bilaterally with the Department and via the IHPC process.
50. The DFO, in recent years, has considered the *impact* of recreational fishing in a particular area, in making management decisions. For instance, the south coast tidal water recreational sockeye fishery is considered a low-impact fishery, because fishers are not concentrated in a small area to the point where their impact on particular stocks or species may be significant. In contrast, the in-river recreational sockeye fishery in the Mission to Hope area is considered medium- to high-impact. Tens of thousands of fish may be harvested in this area by recreational fishers.⁷³
51. The 2010 IFMP describes the relationship between pre-season and in-season management in these general terms:⁷⁴

Where possible, in-season decisions will be consistent with pre-season plans; however, the implementation and applicability of decision guidelines and pre-season plans can be influenced in-season by a number of factors. These include unanticipated differences between pre-season forecasts and in-season run size estimates, unexpected differences in the strength and timing of co-migrating stocks, unusual migratory conditions and the availability and timeliness of in-season information.

⁷² *Fishery (General) Regulations*, SOR/93-53, as am., s. 6

⁷³ Memorandum for the Regional Director FAM, Decision Guidelines for the Recreational Fraser River Sockeye Fishery, CAN012736, at p. 2

⁷⁴ Fisheries and Oceans Canada, 2010/2011 Integrated Fisheries Management Plan – Southern BC Salmon, CAN185436, at p. 55

52. Later in the IFMP, there is a description of the fishing plan for sockeye which serves as an example of how the recreational fishery was expected to be managed in advance of the 2010 fishing season:⁷⁵

For southern BC tidal waters, it is anticipated that sockeye non-retention will be in effect during those times and in those areas when stocks of concern are present. For example, in inside waters (Johnstone Strait, Strait of Georgia, Strait of Juan de Fuca) sockeye retention is unlikely to be permitted until late July or early August when more abundant stocks are migrating through the area. In non-tidal waters, sockeye non-retention is in effect year-round except where harvestable surpluses are identified and potential impacts on stocks of concern are within management constraints. For 2010, sockeye fishing opportunities are anticipated to begin in late July in tidal waters or early August in non-tidal waters.

53. Using the low/medium/high-risk classification, the Department in recent years has employed standards not contained in the IMFP, to determine when to open or close a particular recreational fishery in a particular area. An example of this is the 2006 standards, which were again employed in 2009.⁷⁶ The 2006 decision guidelines determined when there would be a sockeye retention fishery. They describe both when the fishery would be opened (*i.e.*, what the triggers are), and when it would be closed:⁷⁷

South Coast Marine Waters, Fraser River downstream of Mission and Fraser River above Hope

These fisheries are viewed as low impact fisheries, therefore, allow sockeye retention in the tidal water recreational sockeye fishery, including the waters off the mouth of the Fraser once local First Nations [“FN”] FSC fisheries are taking place.

The sockeye retention of fishery in marine waters by the recreational fishery would be permitted unless:

- it is expected that FN FSC needs will not be met; or

⁷⁵ Fisheries and Oceans Canada, 2010/2011 Integrated Fisheries Management Plan – Southern BC Salmon, CAN185436, at p. 116

⁷⁶ Email from D. Sneddon, 22 June 2009, attaching 2006 Information Note, Memorandum for the Regional Director FAM, Decision Guidelines for the Recreational Fraser River Sockeye Fishery, CAN056590, at p. 1 of Memorandum; Email exchange, CAN015783

⁷⁷ Email from D. Sneddon, 22 June 2009, attaching 2006 Information Note, Memorandum for the Regional Director FAM, Decision Guidelines for the Recreational Fraser River Sockeye Fishery, CAN056590, at pp. 2-3 of Memorandum

conservation objectives (i.e. exploitation rate limits for Sakinaw, Cultus and Interior Fraser River coho) and sockeye escapement targets established in the IFMP will not be met.

Fraser River Non-tidal Waters (Mission Bridge to Hope Bridge)

This fishery is viewed as a medium to high impact fishery, therefore allow sockeye retention in the Fraser River from Mission to Hope:

- once in-river FN FSC open times are regularized (i.e. 72 hour set nets); and
- a harvestable surplus for recreational/commercial fisheries is expected.

Close the in-river recreational sockeye fisheries when:

- a change in formation leads to the expectation that FN FSC needs will not be met; or
- conservation objectives (i.e. exploitation rate limits for Sakinaw, Cultus and Interior Fraser River coho) and sockeye escapement targets established in the IFMP will not be met.

54. As these short descriptions suggest, the management of the recreational sockeye fishery, in particular, is subject to change mid-season. As noted, while there is a fishing plan at the outset of the season — the IFMP — that plan may be altered or adjusted as new information arrives during the sockeye run. The Department and the SFAB Sockeye Working Group hold weekly conference calls on Tuesday evenings during the sockeye season.⁷⁸
55. The DFO has committed to providing 48 hours' notice of a closure to the recreational sockeye fishery, wherever possible, and to avoiding implementing any closure on a weekend or statutory holiday.⁷⁹ Barring something highly unusual — such as the serious change to expected sockeye returns in August of

⁷⁸ See, for instance, Email exchange, CAN144861

⁷⁹ Memorandum for the Regional Director FAM, Decision Guidelines for the Recreational Fraser River Sockeye Fishery, CAN012736, at p. 2

2009⁸⁰ — the aim is to give 48 hours' notice of a closure, and to avoid disrupting weekenders' plans (or the situation where fishers out on the water cannot be reached).

Communicating with recreational fishers

56. The Department communicates new information about a fishery (e.g., open/close times; areas; daily limits) primarily through “fishery notices,” which identify the particular changes, the affected areas, and when the changes will take effect. To disseminate such information, the DFO employs: in-season conference calls (with SFAB committees); posting information on the Internet; sending fishery notices and updates by fax and email (to a list of recipients); and providing phone lines with recorded updates.⁸¹ It may also rely on its “on-water staff,” including Fisheries Officers, creel staff, and Area staff, to spread the word.⁸²
57. When the Department concludes it must close or restrict a recreational fishery, it attempts to communicate with anglers who are affected by the change. This can be challenging. Anglers – many of who are individualists, doing their own thing, perhaps in remote areas – cannot easily be contacted *en masse*. And a closure, in particular, can affect an angler's planned vacation, family summer camping trip, etc. Vision refers to the challenge of implementing changes for the recreational sector: “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”.⁸³
58. The Department's use of a published sport fishing guide, applicable to a two-year period, has been faulted (for instance in a 2006 paper by representatives of the

⁸⁰ See, *i.e.*, Email exchange, CAN087743, at p. 5; Email exchange, CAN133014; Email exchange, CAN086957; see also, in relation to 2007, Briefing Note for the Deputy Minister: Fraser River Recreational Fisheries for Sockeye, CAN076665

⁸¹ Draft Review of the 2002 Fraser River Sockeye Fishery, CAN184150

⁸² Email exchange, CAN144861

⁸³ Vision, p. 10

recreational sector) because “important parts of any handbook inevitably are outdated almost immediately after publication.”⁸⁴

The growing complexity of conservation measures and the efforts to integrate fishing plans for all three harvest sectors has led to a situation in which each year’s detailed requirements often are not known until well into the recreational season. This means that key parts of the regulations are not available for a publication which comes out in advance of the season. This has created a very unsatisfactory situation. It is difficult for recreational anglers to know with certainty the rules that apply at any time in any given location. This not only can mean lost fishing opportunity but also can mean that anglers are not aware when conservation measures have been imposed. The published sport fishing guide continues to be helpful as a general guide and educational tool. ...

However, there is an obvious need to find alternative means to ensure that anglers have reasonable access to conservation rules that may have been established after the guide was printed.

59. The DFO also faces the challenge of communicating to the diverse and disparate group of people who make up the angling community. Many residents do not speak English or French. Many visitors, likewise, face this language barrier, and in addition may have little sense of how the federal DFO operates and how they would learn of mid-season changes.

Defined share management systems, ITQs, etc

60. Share based management (“SBM”) is discussed in the commission’s policy and practice report “Commercial Salmon Fishing: Licencing, Allocation, and Related Issues.”⁸⁵ In brief, it is a method of managing a fishery that assigns catch shares to particular users. An oft-mentioned type of SBM involves individual transferable quotas, or “ITQs”. There are controversies and debates arising in relation to SBMs generally, and that is true for their potential application to the recreational salmon fishery as well.

⁸⁴ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 12

⁸⁵ See Cohen Commission, policy and practice report “Commercial Salmon Fishing: Licencing, Allocation, and Related Issues”, December 22, 2010, at para. 167 ff; in addition, for the identification of issues and arguments relating to SBM models, see Terry Glavin, *Transferable Shares in British Columbia’s Commercial Salmon Fishery* (Watershed Watch Salmon Society: September 2007), CAN003213

61. Over the past several years, recreational fishers have expressed concern to the Department about the implications of share based management on the recreational salmon fishery. Those concerns were summarized in a 2009 memorandum for the Minister as follows:

Recreational representatives are primarily concerned about potential implications of ITQ style fisheries on the allocation of TAC between commercial and recreational sectors, largely based on their experience in the halibut fishery. Other concerns relate to direct effects on the recreation fishery from on-water conflicts if the commercial fishing periods is extended under an ITQ management system and potential impacts on inland recreational fisheries from moving quota inland to First Nations.⁸⁶

62. Representatives of the SFAB have expressed concerns to the DFO “that the property right conveyed by an ITQ will give the Minister less flexibility to accommodate recreational fishery needs.”⁸⁷ They have suggested that Canada determine allocations for the recreational fishery on an annual basis in advance of setting the commercial TAC.⁸⁸
63. There appears to be some level of commitment on the part of the DFO to moving toward SBM for the commercial salmon fishery,⁸⁹ but it is unclear whether the Department envisions the same approach for the recreational salmon fishery.

Harvest Levels

Measuring the impact: the creel survey methodology

64. Just as licences were not required of recreational salmon fishers until 1981, until the 1980s, “no formal count was made of the recreational salmon harvest. Its impact does not seem to have been considered worth the effort and cost of

⁸⁶ Memorandum for the Minister: Report on 2008 Commercial Salmon Demonstration Fisheries and Recommendations to the Department, CAN065927

⁸⁷ Briefing note for the A/RD, FAM, Pacific Region: Meeting with the SFAB Main Board on April 23, 2005, CAN259703 at p. 2

⁸⁸ Ibid., at p. 2

⁸⁹ See, for instance: Workshop Summary: DFO Internal Workshop on Implementing Share Based Management in the Pacific Salmon Fishery (4-5 March 2008), CAN029976; Fisheries and Oceans Canada, Pacific Region, Discussion Paper: Towards Share Based Management of the British Columbia Commercial Salmon Fishery (January 2009), CAN007421; Strategic Plan for Salmon Share Based Management, Draft (23 March 2009), CAN003198; Presentation, CAN007419

collecting data.”⁹⁰ Building on the recommendations of the 1982 Pearse Report,⁹¹ efforts were made to improve the information gathered about the harvest level and impact of the recreational salmon fishery.

65. For the Pacific salmon fishery, the principal approach to recreational fisheries assessment is the creel survey. At a general level, the creel method has these main features:⁹²

- Anglers are interviewed while fishing, or just afterward, with a view to determining their effort (hours spent fishing); what they caught; what they kept; and information such as species and location.
- Surveys may be done at access points (landing sites used by fishers who have just completed their fishing trip), or by roving creel survey (approaching anglers by boat or on foot and speaking to them during their fishing).
- In addition to the interview information, the second component of a typical creel survey is counting the number of anglers, in order to estimate the effort. This counting may be done by way of an aerial overflight, or by boat. The surveyor counts active fishers, or rods in use.
- The creel survey aims to provide accurate estimates of both harvest and effort in a fishery. The precision of the survey depends on the level of sampling effort. The survey also depends on the accuracy of the information provided during angler interviews.
- The creel survey will provide information on total harvest (number of fish retained); angler effort (number of days or hours spent by anglers); and total number of released fish. Depending on the questions asked in the interview, there may be additional information about the target species, and the gear and method used by the angler.

66. As noted, the Department relies principally on the creel survey to assess the recreational salmon fishery. In addition, the Department conducts voluntary mail surveys every five years to develop an overall picture of recreational fishing

⁹⁰ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 17

⁹¹ P. H. Pearse, *Turning the Tide: A New Policy for Canada's Pacific Fisheries*, Final Report of the Commission on Pacific Fisheries Policy (1982), CAN002481, at p. 191

⁹² Fisheries and Oceans Canada, *Recreational Fishery Monitoring and Catch Reporting Consultation Document – Draft* (2004), CAN018637, at pp. 10-11; Fisheries and Oceans Canada, *Fraser Stock Assessment: Recreational Fisheries Assessments* (2010)

across the country.⁹³ Furthermore, there are other methods of assessing the harvest, effort, and release levels of a recreational fishery, though not employed for Pacific salmon.⁹⁴ One example is a mandatory reporting regime that would require all anglers to report information about their fishing trips. A second alternative approach is to employ “off-site” methods which rely on information provided by anglers after they have returned home from their fishing trips, rather than information collected at (or soon after) the time the person is out fishing, for example:

- sampling anglers from a list, and interviewing them by mail, phone, or door-to-door;
- diaries, catch cards, logbooks; or
- mail surveys of all anglers, voluntarily or mandatorily.

67. Of note, logbooks are used on a voluntary basis by some fishing lodges in BC. The electronic logbooks are described in the 2010 IFMP:⁹⁵

7.1.2. Recreational Electronic Logbooks

The development of an improved catch monitoring regime will continue to be a priority in the management of recreational fisheries. Fisheries and Oceans Canada is working with the Sport Fishing Institute and the Sport Fishing Advisory Board to develop catch monitoring standards and logbook systems for the recreational fishery.

In 2010, the Department will be continuing with this co-management project with the Sport Fishing Institute, Sport Fishing Advisory Board and members from the Provincial Government by expanding the pilot for the fourth consecutive year. The software application consists of three components: a PC based component, a Dockside handheld component and an On Water handheld component. The design of the handheld components is based on the content of current paper logbooks and advice from the recreational sector. The ultimate goal of this new initiative is to improve the efficiency and compliance of reporting catch and other recreational fishing information to the Department.

⁹³ See < <http://www.dfo-mpo.gc.ca/stats/rec/can/2010/notice-eng.htm> > and < <http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/survey-enquete-eng.htm> >

⁹⁴ Fisheries and Oceans Canada, Recreational Fishery Monitoring and Catch Reporting Consultation Document – Draft (2004), CAN018637

⁹⁵ Fisheries and Oceans Canada, 2010/2011 Integrated Fisheries Management Plan – Southern BC Salmon, CAN185436, at pp. 112-13

68. In the BC salmon fishery, recreational surveys such as the Georgia Strait Creel Survey (focusing on recreational chinook and coho harvest) were introduced in the 1980s.⁹⁶ Coverage has been cut back over the years. There are now established creel surveys used both for the BC coast and in the Fraser River area, though creel surveys are not conducted comprehensively in all coastal areas or river systems.

Criticisms and defences of the creel survey

69. Some recreational anglers, First Nations and commercial fishers have been critical of the creel survey approach to assessing the recreational fishery. Some feel the impact of recreational fishing is vastly overstated by the creel survey method, while others hold the opposite view, and feel it does not properly reflect the full impact of recreational fishing.

70. The criticisms vary in nature. Some focus on the inadequacy of the resources given to creel surveying; they are complaints about how few overflights are conducted, or that creel interviews only take place at a few landing sites.⁹⁷ Other critics question the soundness of the creel method itself. Related to this are concerns about the release mortality rates used to estimate the impact of the recreational fishery on stocks and species of concern. Release mortality is addressed below.

71. A further issue in relation to catch monitoring — though not specifically a pro/con-creel question — involves the *cost* of monitoring. The Department has suggested that the recreational sector should self-fund fishery monitoring and catch reporting, while the sector has questioned this idea:⁹⁸

There is an obvious need to clarify what is meant by terms such as “partner” and “co-management” in the context of recreational fishing. How does a “harvest group” composed of nearly 400,000 individual anglers represented

⁹⁶ Fisheries and Oceans Canada, Recreational Fishery Monitoring and Catch Reporting Consultation Document – Draft (2004), CAN018637, at p. 15

⁹⁷ See, for instance, Bill Otway’s comments: Email exchange, CAN087750 and Email exchange, CAN015784

⁹⁸ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 28

by volunteer advisors take on the job of conducting and financing a task with such important conservation implications as catch monitoring?

Selective Fishing

Selective fishing in the recreational context

72. Selective fishing is “the ability to avoid non-target fish, invertebrates, seabirds, and marine mammals or, if encountered, to release them alive and unharmed.”⁹⁹ The topic of selective fishing generally – and the 2001 Selective Fishing Policy¹⁰⁰ in particular – is covered in much greater depth in the commission’s commercial fishing policy and practice report.¹⁰¹
73. Of note for present purposes, the Department’s 1998-2002 Pacific Salmon Selective Fisheries Program¹⁰² saw measures implemented such as barbless hooks for all salmon fisheries, Special Management Zones, and non-retention of coho. Going back further, there are also examples of how the recreational sector has resisted being “regulated through the tackle box,” such as an abortive attempt by the Department to ban downriggers in the 1980s.¹⁰³
74. The Selective Fishing Policy sets out four fundamental strategies, all relevant to recreational salmon fishing:¹⁰⁴
1. Avoidance of non-target species and stocks through time and area restrictions;
 2. Avoidance through gear design;

⁹⁹ Fisheries and Oceans Canada, *A Policy for Selective Fishing in Canada’s Pacific Fisheries* (January 2001), CAN000324, Exhibit 266 in Cohen Commission Hearings, at p. 7

¹⁰⁰ Fisheries and Oceans Canada, *Selective Fishing in Canada’s Pacific Fisheries: A New Direction: The Third in a Series of Papers from Fisheries and Oceans Canada* (May 1999), CAN000325

¹⁰¹ See Cohen Commission, policy and practice report “Commercial Salmon Fishing: Licencing, Allocation, and Related Issues”, December 22, 2010, at para. 101.

¹⁰² Fisheries and Ocean, *Selective (Salmon) Fisheries Program, Final Report*, CAN000444; Document Summary, CAN176467

¹⁰³ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 29

¹⁰⁴ Fisheries and Oceans Canada, *Selective Fishing in Canada’s Pacific Fisheries: A New Direction: The Third in a Series of Papers from Fisheries and Oceans Canada* (May 1999), CAN000325, at p. 9

3. Release alive and unharmed before being brought aboard or ashore, through gear design; and
 4. Release alive and unharmed from the deck of the vessel or landing site (e.g., shore or fishing pier).
75. The Department seeks to promote these strategies in its management of the recreational salmon fishery. For instance, it employs time and area restrictions to protect stocks and species of concern. There are gear and method restrictions in the Regulations (e.g., using a barbless hook; not permitting foul-hooking whereby a fish is hooked on a part of its body other than its mouth). The *Tidal Waters Sport Fishing Guide* offers guidance on catch and release techniques, including these suggestions:¹⁰⁵
- Use large lures or artificial baits to reduce the incidental catch of undersize fish.
 - Do not overplay the fish; bring it in as quickly as possible.
 - For a salmon under 30 cm, unhook it at the water surface to minimize handling. For a larger salmon, if it is too difficult to unhook it in the water, bring it onboard, remove the hook quickly and release it. This will cause less stress and damage to the fish.
 - Use a soft knotless mesh net to minimize scale loss.
 - Handle the fish securely. Keep it immobile while the hook is removed then quickly release the fish into the water.
 - Remove the hook with needle-nose pliers or surgical haemostats.
 - Do not touch or handle a fish by its gills.
 - To avoid injury, support the fish when lifting by placing one hand around the base of its tail and the other under its belly.
 - To return the fish to water, release it at a 45 degree angle with the head pointing down and just above the waterline. If the fish is exhausted, revive it in the water by keeping a grip on its tail; move it back and forth slowly to increase water flow over the gills; wait until it is strong enough to swim out of your hands.

¹⁰⁵ Tidal Sport Fishing Guide, pp. 8-9

- Some fish may be hooked deep inside the mouth. If this is the case, cut the line as close to the hook as possible and leave it in. The hook will erode in time.

76. These are guidelines rather than legal requirements for anglers. The Regulations do contain a general prohibition on molesting or injuring fish unless authorized under the Regulations.¹⁰⁶ Schedule VIII of the Regulations authorizes a fine of \$250 for molesting or injuring fish.

77. In a report prepared for the Pacific Fisheries Resource Conservation Council in 2006, Gerry Kristianson and Deane Strongitharm acknowledged the need for the recreational sector to control the impact of its fishing, in these terms:¹⁰⁷

The government policy of priority access to chinook and coho means conservation measures [for those species] inevitably have their first impact on the commercial sector. This said anglers have to recognize that much of their activity takes place in areas and at times when stocks are mixed and their fishery can have an adverse impact on small and weak runs. Especially in the context of the Wild Salmon Policy and the Species at Risk Act, recreational anglers and their representatives have to help ensure that their impact on the resource is adequately measured and that it is not undermining future expectation and opportunity by an unsustainable impact on any salmon stock.

78. Although not a selective-fishing measure, *per se*, there is an initiative of potential relevance to selective fishing in the move for certification of fishing guides in marine waters. The Sport Fishing Institute, in conjunction with the DFO, the Province, and others, has recently developed a Tidal Angling Guide certification program.¹⁰⁸ The Certified Tidal Angling Guide provides for provincial certification issued by the Industry Training Authority, reflecting best practices and standards for saltwater fishing guides.

¹⁰⁶ Regulations, s. 4

¹⁰⁷ G. Kristianson and D. Strongitharm, *The Evolution of Recreational Salmon Fisheries in British Columbia* (2006), CAN002605, at p. 2

¹⁰⁸ Sport Fishing Institute of British Columbia, *Certified Tidal Angling Guide Certification and Membership Program* (2010), < <http://www.sportfishing.bc.ca/docs/sfi%20ctag%20-%20december%202010.pdf> >; Fisheries and Oceans Canada, 2010/2011 Integrated Fisheries Management Plan – Southern BC Salmon, CAN185436, at p. 58

Release mortality

79. As noted, the *Selective Fishing Policy* aims first at *avoidance* of non-target species or stocks. It next directs that where a non-target fish is hooked, it should be released alive and unharmed. While anglers following the guidelines outlined above might witness the fish they release swim away, they cannot know whether those fish survive to spawn, or whether their interactions with those fish affect the prospects of survival for those fish.¹⁰⁹
80. Fishery managers use release mortality estimates for a particular species and a particular type of fishing to assist in their decision-making. “Catch and release” fishing (i.e., not retaining fish reeled in), may have a negative impact on fish that are not immediately or directly killed, for example, through injury to the fish. In situations where recreational salmon fishing is open, but retention of certain species of salmon is not allowed, anglers may be legally required to release fish back into the water. Release mortality rates, along with release estimates, can provide a fuller understanding of the impact of recreational fishing, than can a more narrow focus on the number of fish harvested. Release mortality rates may also inform fishers about the relative effectiveness of their gear and methods in achieving the aims of the *Selective Fishing Policy*.
81. For Fraser River sockeye, until recently the mortality rate used for the recreational fishery employing the bottom bouncing method in the Fraser River was ten per cent. This number was based on information from a commercial troll fishery in the ocean, and was criticized by some recreational fishers as being far too high a rate to employ.¹¹⁰ In particular, it was not clear that the rate arising in the ocean for a troll fishery could be transposed to the in-river recreational fishery, employing the “bottom bouncing” or “flossing” methodology for catching sockeye.

¹⁰⁹ Fisheries and Oceans Canada, *Salmon Sense: A Training Series for Responsible Fishing*, DVD (2002)

¹¹⁰ Sport Fishing Advisory Board, Main Board Meeting, Final - Detailed Minutes (2008), CAN013128, at pp. 30-31; Email exchange, CAN015369

82. The Department, in 2007, initiated a three-year release mortality study for the in-river Fraser sockeye fishery. With involvement and support from the Pacific Salmon Foundation, the Department, and local First Nations people, the study was conducted over three years, 2008, 2009 and 2010. It was led by biologist Jim Thomas. The study concluded that the bottom bouncing method of fishing for sockeye in the Fraser River led to mortality rates of 1.2 per cent in 2008, 1.7 per cent in 2009 and 2.3 per cent in 2010.¹¹¹ As a result of this study, the Department has changed the mortality rate it uses for managing this fishery, reducing it in 2010 to a three per cent rate.¹¹²

Fishing Method Controversies

83. For Fraser River sockeye, a handful of techniques are used by anglers using fishing rods and lines. For those fishing in-river, if the sockeye are abundant, fishers may have success with a method known as “bottom bouncing,” sometimes referred to as “flossing.” The angler casts a line without a float, but instead with a weight that bounces along the bottom, with the hook moving across the water.¹¹³ The hook is usually bare, without a lure or bait, since sockeye do not feed once they enter the river.
84. “Bottom bouncing” is controversial although the Department’s position is that it is a legal method of fishing. Because the sockeye are not feeding in the river, they do not deliberately bite at the hook in order to feed. This is seen by some as unethical, because the angler does not persuade or fool the fish into biting onto a hook, but instead randomly hooks a salmon which is not eating but is swimming

¹¹¹ J.O. Thomas & Associates Ltd., 2010 Lower Fraser River Sockeye Recreational Hook and Release Mortality Study: Summary of Findings (17 November 2010); see also Hook and Release Mortality Study Design, CAN004825; Hook and Release Mortality Study – 2008 Report, CAN017660; Hook and Release Mortality Study – 2009 Report

¹¹² Fisheries and Oceans Canada, 2010/2011 Integrated Fisheries Management Plan – Southern BC Salmon, CAN185436, at pp. 58-59

¹¹³ Email exchange, CAN104181 (note that for the email discussion of 21 August 2009 between Hugh Kingwell and Debra Sneddon, font size denotes who the writer is; Ms. Sneddon’s words are in a larger-sized font. See also Chilliwack River Watershed Strategy, DRAFT Issues & Alternatives Document, Sport Angling Behaviour (2007), CAN044363, at p. 28

with its mouth open.¹¹⁴ Some say this is not “real” sport fishing, that it is unethical, and must be prohibited. Others say it can be seen as legal harvesting, but is not sport fishing.

85. In general terms, the opposing view is that the Regulations prohibit hooking a fish elsewhere on its body,¹¹⁵ but so long as it is hooked in the mouth area, there is nothing unlawful or improper.¹¹⁶ The “bottom bouncing” or “flossing” method is not contrary to the Regulations and is not considered unlawful by the Department. Some “defend it as a fishing method that gives ordinary non-aboriginal Canadians an opportunity to harvest Fraser sockeye during the period when no other hook and line technique is effective after these fish have entered fresh water.”¹¹⁷

86. On the anti-bottom bouncing side, a 2007 draft paper by the Chilliwack River Watershed Strategy, focused on the Chilliwack River specifically, identified a number of behaviours said to be unethical or problematic:¹¹⁸

- A growing number of anglers who show no respect for the fish they bring ashore (e.g., fish are often handled very roughly prior to release).
- An increase in “flossing” or “snagging” angling techniques or willfully attempting to foul hook fish (i.e., obvious snagging with gear that would not be effective via standard sport angling methods).
- Retaining foul hooked fish.
- An increase in the amount of litter, such as fishing line, weights and other gear, and general disrespect for the environment.
- Fishing with prohibited gear, such as barbed hooks.

¹¹⁴ Chilliwack River Watershed Strategy, DRAFT Issues & Alternatives Document, Sport Angling Behaviour (2007), CAN044363 provides a detailed review of this debate.

¹¹⁵ Regulations, ss. 10 and 2(1), which prohibit “foul-hooking” and define the term as being “to hook a fish in any part of its body other than the mouth”

¹¹⁶ For an interesting discussion of these issues, through the eyes of a fishery manager in Washington State, see Email exchange, CAN120611

¹¹⁷ G. Kristianson and D. Strongitharm, The Evolution of Recreational Salmon Fisheries in British Columbia (2006), CAN002605, at p. 19

¹¹⁸ Chilliwack River Watershed Strategy, DRAFT Issues & Alternatives Document, Sport Angling Behaviour (2007), CAN044363, at p. 4

- Catching and retaining more than the daily or possession limit of salmon. This charge is common with people who “party fish” (where one person catches fish for several licenced people and/or children who are at the river but are not actively fishing) or with people who catch their limit and then drop fish off at home before returning to the river.
- Fishing without an angling licence or failing to produce an angling licence.

87. The *Tidal Waters Sport Fishing Guide* provides guidance on the ethics of sports fishing:¹¹⁹

Code of Conduct

Fishing responsibly not only means protecting the environment and the resource, but also practising safe fishing habits and respect towards others. This Code of Conduct has been developed and endorsed by the Sport Fishing Advisory Board.

1. Handle all fish with care.
2. Limit your catch to ensure fish for the future.
3. Leave your fishing spot cleaner than you found it.
4. Respect the rights of property owners and other outdoor enthusiasts.
5. Use the proper tackle and methods for the species being targeted.
6. Promote the sport by teaching children and new participants how to fish.
7. Become informed about your fishery and participate in its management.
8. Report all illegal fishing activities to the proper authorities.
9. Respect the space of others; leave enough room for everyone to fish.
10. Learn the fishing and boating laws and abide by them.

¹¹⁹ Tidal Sport Fishing Guide, p. 8

Appendix A: List of Acronyms Used

AHC: Area harvest committee

AIC: Allocation Implementation Committee

DFO: Department of Fisheries and Oceans

IFMP: Integrated Fisheries Management Plan

IHPC: Integrated Harvest Planning Committee

ITQ: Individual transferable quota

SBM: Share Based Management

SFAB: Sport Fishing Advisory Board

TAC: Total Allowable Catch