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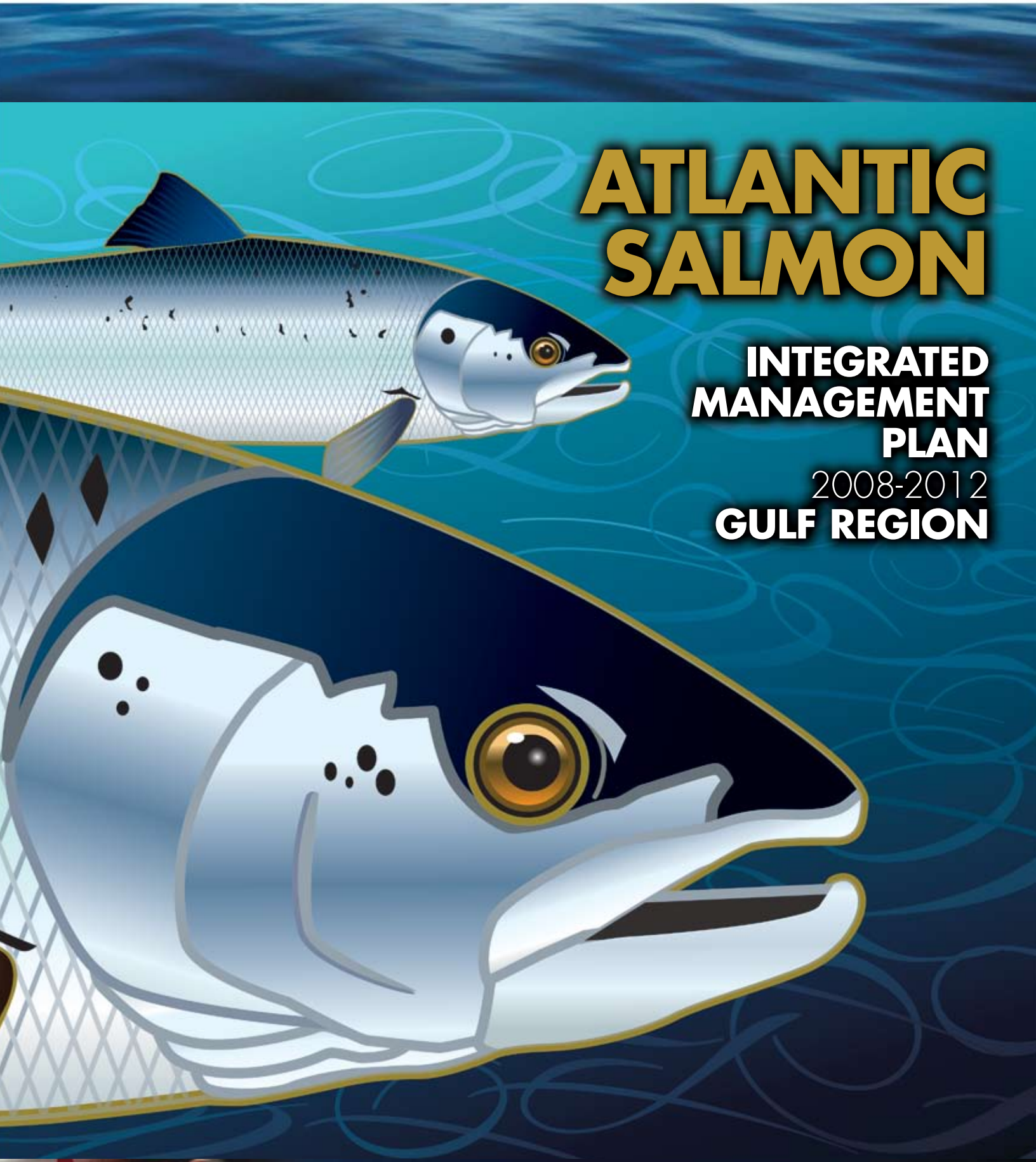
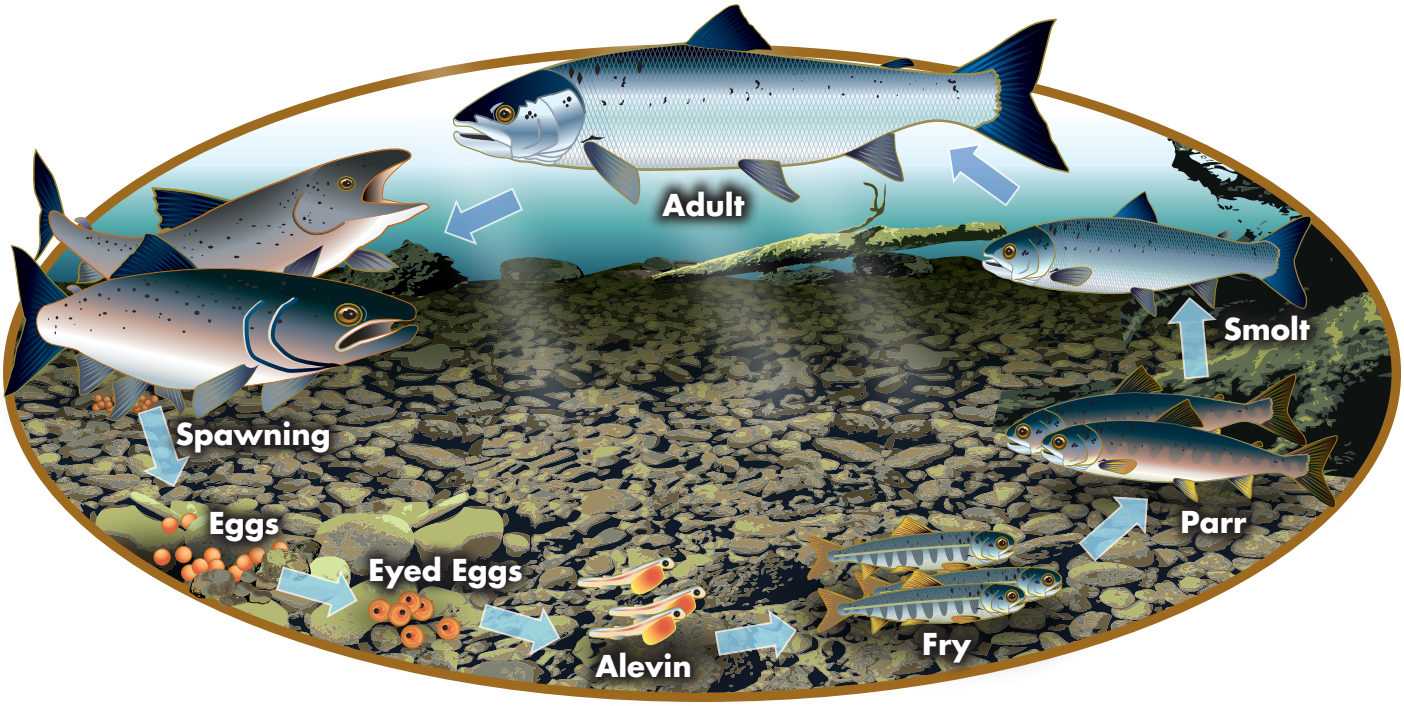


ATLANTIC SALMON

INTEGRATED MANAGEMENT PLAN 2008-2012 GULF REGION

Canada



Did you know that...

- Salmon eggs are spawned in freshwater during the fall, incubate during the winter, and hatch in the spring.
- Eggs hatch as fry and develop into parr over their first 2-4 years of life in freshwater.
- Parr develop into smolts which leave their freshwater environment in the spring and migrate to the ocean.
- Smolts that grow in the ocean for 1 year before they return to their native rivers to spawn are called grilse but smolts that grow in the ocean for 2 or more years before returning to spawn are called salmon.
- After spawning in the fall, salmon and grilse are called kelts or black salmons and remain in rivers under the cover of ice until spring at which time they return to the ocean environment.
- Salmon and grilse can spawn multiple times during their life.

ATLANTIC SALMON INTEGRATED MANAGEMENT PLAN GULF REGION

PLAN OVERVIEW

The future well-being of the Atlantic salmon resource depends upon all parties working together through an integrated approach and in a harmonized manner.

The Atlantic Salmon Integrated Management Plan for the Gulf Region is a five-year plan designed to engage the parties interested in the sustainable and orderly management of Atlantic salmon. It aim at strengthening their participation and to improve communications towards this endeavour. Engagement of the public and its community representatives should lead to better predictability and transparency in the decision making process.

It is also meant to be an umbrella plan that allows for an adaptive and inclusive management approach based on the stakeholders' capacity. Nonetheless DFO will maintain its legislative authority towards the conservation of Atlantic salmon and its habitat.

More specifically, it is intended to improve the public advisory process and its representation. Annual advisory and watershed management (where existent) meetings will be carried out with a special emphasis being placed on managing by sub-management units. This should lead to better communication with the provinces, aboriginal communities, organizations and stakeholders' groups. This will also help to improve the overall program delivery on a provincial basis within the Gulf Region boundaries.

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GLOSSARY

Aboriginal Right: The Constitutional and/or Treaty Rights of Canada's Indian and Metis peoples. In the context of this document they refer to the Aboriginal Right to fish for Atlantic salmon.

Anadromous: Fish that reproduce in fresh water and also spend a part of their life in the marine environment.

Atlantic salmon: The Atlantic salmon *(Salmo salar L.)* is the only species of the genus *Salmo* that is native to northeastern North America. It has both landlocked/freshwater and sea-run/anadromous forms but only populations of the anadromous form are addressed in this plan.

Aquaculture: The farming or culturing of aquatic organisms in the marine and freshwater environments.

Biodiversity or biological diversity: The full range of variety and variability within and among living organisms and the ecological complexes in which they occur; and the diversity they encompass at the ecosystem, community, species, and genetic levels; and the interaction of these components.

Black Salmon: A spent or spawned-out adult salmon, and which is also referred to as a 'kelt'.

Bycatch: The term generally used to refer to fish (in this case salmon) caught in commercial fishing gear that is not licensed to catch the species actually caught (e.g., salmon caught in nets licensed to catch shad, mackerel or some other species other than salmon). Term is synonymous to 'incidental catch'.

Compensation (for loss): The replacement of natural habitat, increase in productivity of existing habitat, or maintenance of fish production by artificial means in circumstances dictated by social and economic conditions, where mitigation techniques and other measures are not adequate to maintain habitats for Canada's fisheries resources.

Conservation: Planned management of a natural resource to prevent its loss or degradation. For Canadians, success in achieving conservation is defined in terms of the number adult spawners or fertilized eggs deposited in the substrate in relation to that required to achieve maximum sustained yield.

Conservation Limit: The minimum spawning requirement to ensure salmon stock conservation. Operationally for the salmon populations within the Gulf Region this limit is defined as an egg deposition rate of 2.4 eggs/m^2 of fluvial rearing habitat except for Restigouche River salmon for which the limit is defined as 1.68 eggs/m^2. The 2.4 eggs/m^2 limit is assumed to provide a modest margin of safety for some in stream adult losses between the time salmon enter the river and subsequent spawning, as well as for disproportionate adult exploitation and unequal rate of recruitment of the multiple stocks comprising a river population. The lower limit designated for the Restigouche River salmon is based on stock and recruitment relationships determined for Québec river populations and is based on estimates of spawner numbers immediately prior to spawning. Both egg deposition rates are regarded as proxies for the level of spawners which would result in maximum sustained yield (MSY).

Diadromous: Fish that spend parts of their life in both fresh water and the marine environment.

Ecosystem: The complex of a community and its environment functioning as an ecological unit in nature.

Extirpated species: Means a wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the wild.

Fish Habitat: Natural spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly in order to carry out their life processes.

Fork Length: In relation to a salmon, the distance measured in a straight line from the tip of the nose to the fork of the tail.

Grilse: Term used to refer to an adult salmon less than 63 cm in fork length and which generally has spent only one winter at sea.

HADD: Authorization issued under the authority of the *Fishery (General) Regulations* that allows the harmful alteration, disruption or destruction of fish habitat under specific conditions.

Index Population: Those populations of salmon that are biologically monitored and assumed to reflect the general health and stock status of their neighboring populations that are generally similar in terms of life history characteristics and the habitat type of the rivers in which they are produced.

Kelt: A spent or spawned-out adult salmon, and which is also referred to as a 'black salmon'.

Management: The application of the collective interests and means of the participating parties to ensure the conservation of the salmon resource and its wise and equitable use.

Mitigation: Actions taken during the planning, design, construction and operation of works and undertakings to alleviate potential adverse effects on the productive capacity of fish habitats.

Multi-Sea-Winter (MSW) Salmon: A salmon for which two or more winters have elapsed since migrating from the river as a smolt and which is generally equal to or more than 63 cm in fork length.

Population (or River Population): Comprised of all the biological stocks of a particular species found within a particular river.

Post-smolt: A juvenile salmon from the time that it departs the river as a smolt until it completes its first winter at sea, when it becomes a one-sea-winter salmon.

Productive Capacity: The maximum natural capability of habitats to produce healthy fish, safe for human consumption, or to support or produce aquatic organisms upon which fish are dependent.

Restoration: The reestablishment of stocks of salmon to former higher levels that are self-sustaining.

Salmon Fishing Area (SFA): Salmon Fishing Area illustrated and enumerated in Schedule VI of the *Maritime Provinces Fishery Regulations* and includes the waters of any province that flow into such an Area. For management purposes, the SFAs are further divided into sub-management units as identified in section 9 of this plan.

Self-sustainability: Used to refer to a population that is able to maintain itself over an extended period of time.

Smolt: Fully silvered juvenile salmon during its seaward migration and with physiological capability to survive transition from fresh water to salt water.

Spawning: The reproductive ritual involving egg fertilization and in the case of salmon in natural streams and rivers, the deposition of those eggs into the gravel riverbed.

Stakeholder: An individual with a vested interest in the resource.

Stewardship: Acting responsibly to conserve fish and their habitat for present and future generations.

Stock (or Biological Stock): Any group of interbreeding organisms that is reproductively isolated from other groups of the same species.

Sustainable Use and Benefit: The use of the resources in a way and at a rate that does not lead to their long-term decline, thereby maintaining the potential for future generations to meet their needs and aspirations.

Two-Sea-Winter (2SW) Salmon: A salmon for which two winters have elapsed since migrating from the river as a smolt and which is generally equal to or more than 63 cm in fork length.

Watershed: The region or area bounded peripherally by the water draining into a particular watercourse, which in this instance includes a river system and its tributaries or the collection of river systems and their tributaries in a particular Salmon Fishing Area.

Wild Salmon: The progeny of salmon that have spawned naturally.

1.0 INTRODUCTION

The rivers in the Gulf Region are historically renowned for producing an abundance of wild Atlantic salmon (*Salmo salar* L.) which supported Aboriginal communities for thousands of years, European settlers during the 1800's, and a major local commercial fishery up to the early 1970's. It is the elite recreational species throughout the world, and is regarded by most people in Atlantic Canada as one of its important natural symbols. The current management program for wild Atlantic salmon in these rivers is restrictive by necessity because of low stock abundance and management of the resource is relatively complex because of the involvement of numerous government organizations, the local First Nations and Aboriginal/Native Councils, recreational anglers' organizations, private interests and special considerations to international agreements.

Between 1971 and 1985, the estimated abundance of North American, essentially Canadian, Atlantic salmon at one sea-winter (1SW) of age fluctuated between 0.8 and 1.7 million fish annually.[1] Between 1995 and 2004, the estimated abundance declined to about 0.4 to 0.7 million fish. The largest decline occurred in the age component destined to return to Canadian rivers as two-sea-winter (2SW) salmon.

Adult salmon were more abundant in the Gulf Region rivers in the late 1980s and early 1990s (Chaput *et al*. 2006). Adult numbers have declined from those highs in all rivers but are generally showing a modest annual increase from the low returns of 1998 and 1999. This pattern of reduced adult salmon returns to rivers in the Gulf Region is common to the species throughout its natural range and at least in part the result of low marine survival that is well demonstrated in numerous data sets[2], including the recent smolt to adult return estimates for Miramichi salmon (Chaput *et al*. 2006). In spite of reduced adult returns, juvenile abundance remains at record high levels in many of the monitored rivers in the Gulf Region and smolt production is at a moderate but lower level than expected based on juvenile salmon densities (Chaput *et al*. 2006). Both the abundance and proportion of repeat spawners have increased among returns to the Miramichi River (Chaput *et al*. 2006), and probably in returns to other rivers in the Region.

In spite of a host of restrictive management measures since the early 1970s, including the subsequent moratoria on all Canadian commercial fisheries and severely reduced or voluntarily suspended Aboriginal fisheries in many areas, the return of salmon stocks remain critically low in many Maritime rivers and stocks are not rebuilding to anticipated levels in all Canadian rivers. It has become increasingly important for the Department of Fisheries and Oceans (DFO) to work collaboratively and involve and engage stakeholders in the recreational fishery, Aboriginal groups and the provincial governments in the decision-making process associated with the management of this public resource. This is consistent with DFO Strategic Plan 2005-2010 and the *Maritimes Provinces Stewardship Strategy*[3]. It is in this context that DFO officials of the Gulf Region wish to embark on a more intensive and inclusive approach to managing the Region's salmon resource.

[1] *See "http://www.ices.dk/iceswork/" for Report of the ICES Working Group on North Atlantic Salmon, 2005.*

[2] *See "http://www.ices.dk/iceswork/" for Report of the ICES Working Group on North Atlantic Salmon, 2006.*

[3] *http://www.glf.dfo-mpo.gc.ca/os/habitat/stewardship-intendance-e.php*

The *Atlantic Salmon Integrated Management Plan for the Gulf Region* described in this document is a five-year plan (2008-2012). It is designed to engage the parties interested in the Atlantic salmon and to strengthen their participation towards the better management of the common property resource. This will be done on a provincial basis by reconfirming the Atlantic management unit advisory process and by strengthening the federal, provincial, aboriginal and stakeholders' collaboration and communication. The future well-being of the Atlantic salmon resource depends upon all parties working together through an integrated approach and in a more harmonized manner. The management approach advocated in the plan is one that is intended to be adaptive and inclusive based on the local capacity and on the role and responsibilities of the parties.

DFO has been promoting an *integrated fisheries management planning* approach for more than five years. This planning process involves the development of management plans that apply the principles of risk management and the *precautionary approach* in establishing objectives, developing fisheries management strategies and applying resource conservation measures (DFO 2002). This plan for the Atlantic salmon in the Gulf Region was developed using this integrated planning process. It details the management objectives for the Region's salmon resource, the management measures used to achieve these objectives, and the process used to involve stakeholders, aboriginals and other interested parties.

In the new management framework, the concept of sub-management units have been introduced to assist in the orderly management of existing salmon fishing areas throughout the Gulf Region.

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2.0 OVERVIEW OF SALMON FISHERIES

Since 1984, Atlantic salmon have been harvested by two user groups: Aboriginal peoples and recreational salmon anglers. All commercial fisheries for Atlantic salmon in the Gulf Region have remained closed since 1984. Since 1998, all salmon fisheries have been closed in that portion of the Salmon Fishing Area (SFA) 16 known as 16B (southeast portion of New Brunswick, (Fig. 1)).

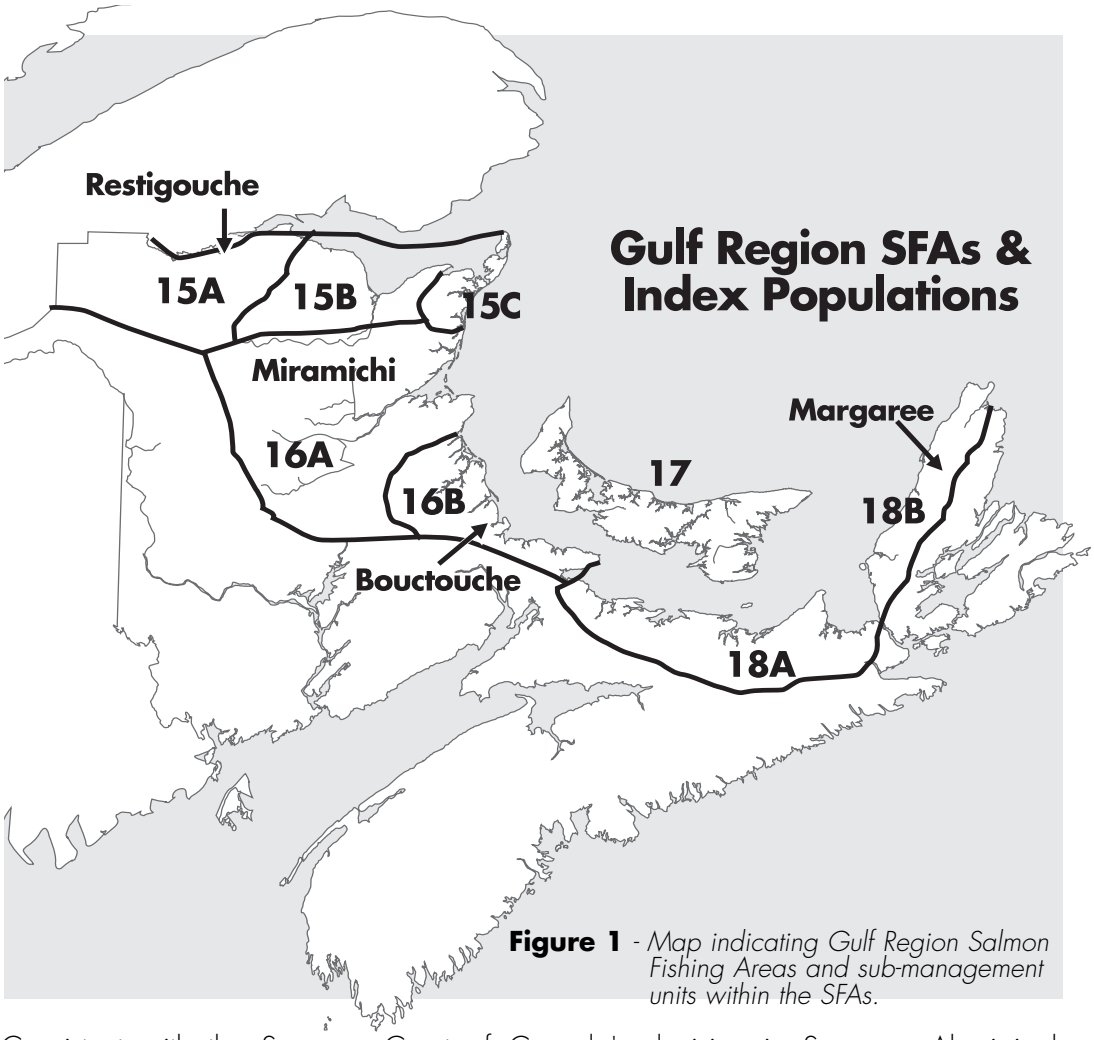

Figure 1 - *Map indicating Gulf Region Salmon Fishing Areas and sub-management units within the SFAs.*

Consistent with the Supreme Court of Canada's decision in Sparrow, Aboriginal peoples are given first access to fish for salmon (after conservation requirements) based on communal needs for food, social and ceremonial purposes. Aboriginal fisheries occur in the southern Gulf of St. Lawrence rivers which are open to salmon fisheries generally in accordance with agreements or arrangements and communal fishing licences. A list of the First Nations and Aboriginal/Native Councils authorized to fish for salmon for food, social and ceremonial purposes, in the Gulf Region rivers is provided for information purposes in Annex A. The Listuguj First Nation, which fishes for salmon on the Québec side of the Restigouche River at its mouth and under an agreement with the Province of Québec, is included in this list because the majority of the salmon harvested by members of this community are fish that are found in the stretch

of river that borders the Gulf and Quebec Regions. Also included in Annex A is a summary of the conditions for fishing as specified under their respective 2006 arrangement or agreement and used as an example.

ll recreational fisheries for two-sea winter (2SW) and multi-sea-winter (MSW) salmon throughout the Gulf Region, and the rest of the Maritime Provinces, are mandatory catch and release fisheries. Retention fisheries for grilse (1 sea winter salmon) are regulated by daily and season bag limits. In the Miramichi River (SFA 16A) and all rivers on Prince Edward Island (SFA 17), the daily grilse retention limit is one fish. In all other areas of the Gulf Region, the daily retention limit of grilse is two fish and will be subject to annual review on a required basis. The maximum daily catch-and-release limit is four fish of any size except for the spring salmon fishery in N.B. where the live release limit is set at 10. Season bag limits in recent years are 8 grilse in New Brunswick, 4 in Nova Scotia (as of 2008) and 2 in PEI. Angling season openings vary but extend from as early as April 15 in the Miramichi River to as late as October 31 in the SFA 18A and 18B rivers of Nova Scotia. A list of the 2006 recreational fishing seasons and catch limits for Gulf Region rivers is provided in Annex B. Included in this list are the angling regulations for those parts of the Restigouche River that lie within the Province of Québec and border New Brunswick. Generally, the regulations for the border waters are the same on both sides of the river although different for the tributary waters that lie solely in Québec. The season bag limit in Québec is 7 fish which may be comprised of grilse and/or large salmon.

Recreational catches of Atlantic salmon (both retained and released) in the Gulf Region generally total more than 30,000 grilse and large salmon annually (Chaput *et al.* 2006; Marshall *et al.* 2000; O'Neil *et al.* 2000). Correspondingly, fishing effort usually totals more than 120,000 rod-days annually. The New Brunswick rivers within the Region account for close to 90% of both the catch and fishing effort. The angling fishery on the Miramichi River is responsible for roughly 70% of the Region's catch and about three-quarters of its effort. In contrast, the rivers on Prince Edward Island (SFA 17) currently yield the lowest catch (about 250 fish) and effort (roughly 2200 rod-days) in the Gulf Region (Chaput *et al.* 2006). No comparable estimates of catch and fishing effort are available for the Aboriginal fisheries harvesting Gulf Region salmon stocks.

Retention of large salmon in local fisheries is low and authorized only for certain First Nations. Losses of large salmon will occur with incidental mortalities associated with catch and release fisheries. Exploitation on egg bearing females is low throughout the Gulf Region as the main exploitation is on the grilse which are most always less than 20% female, and for many of the populations comprise about 5% only (Chaput *et al.* 2004, 2006; Marshall *et al.* 2000; O'Neil *et al.* 2000).

Although tagging data indicates that salmon from Gulf Region rivers continue to be intercepted in the West Greenland fishery, the rate of exploitation is presumed to be very low compared to levels during the peak of the fishery in the 1960's and 1970's (Chaput *et al.* 2006).

3.0 VALUE OF THE SALMON RESOURCE

The Atlantic salmon is an important heritage of Atlantic Canada and Québec. It is an indicator of environmental health, an object of respect, a target of eco-tourism and has a unique intrinsic value.

In the Gulf Region, salmon is currently fished for food, social and ceremonial purposes by several First Nations and members of three Aboriginal/Native Councils. For both coastal and inland Aboriginal people, the salmon is important culturally as a food source.

The Atlantic salmon is also part of the non-aboriginal eastern Canadian heritage. This heritage was originally focused on commercial fishing until the recent downturn in marine survival and returns to all salmon rivers. The focus is now on higher valued, recreational fishing and the socio-economic opportunities it provides.

The Atlantic salmon recreational fishery represents a significant contribution to the provincial and regional economies in Gulf Region with an estimation of over $ 32 million dollars annually. These activities generate much economic benefits in predominately rural and coastal areas through either direct expenditures or equipment purchases. The economic and cultural values of Atlantic salmon provide an additional incentive to conserve, protect and enhance its habitat to ensure the stock sustainability for future generations.

4.0 LEGISLATIVE AUTHORITY

Management of the Wild Atlantic Salmon Resource within the Gulf Region is lead by the federal government through the Department of Fisheries and Oceans, but is also a shared jurisdiction between the federal and provincial governments.

The federal and provincial division of powers is set out in sections 91 and 92 of the *Constitution Act, 1867*[4]. Amongst other things, the Parliament of Canada has exclusive legislative authority for all matters relating to sea coast and inland fisheries (section 91(12)). Section 92 specifies that the legislature in each province may exclusively make laws in relation to property and civil rights in the province (section 92(13)). Parliament enacted the *Fisheries Act*, which gives the Minister of Fisheries and Oceans the authority to manage and protect the resource, to provide access to the resource, and to impose appropriate conditions on fishing licences. Pursuant to their provincial laws relating to fisheries, provincial governments have powers with respect to the harvesting of salmon in inland waters: they issue licences for recreational angling for salmon and other species and they collect fees for these licences. They have also adopted provincial regulations setting conservation measures such as angler licensing and fish tagging requirements. The Quebec government also has certain delegated powers with respect to fisheries administration, as reflected in the *Quebec Fishery Regulations, 1990*, which apply to the management and control of fishing for freshwater fish, as well as anadromous and catadromous species of fish in the waters of the Province and in tidal waters. This delegation of responsibility to the Province of Québec is relevant for this management plan as it relates to the management of the salmon resource of the Restigouche River which lies between the provinces of New Brunswick and Québec.

Since fisheries management is a shared responsibility, DFO has several Memoranda of Understanding ("MOUs") with the provinces, expressing the intentions of the parties to collaborate. These MOUs describe the respective roles and responsibilities of the parties in managing various fish species. For the Restigouche and Miramichi watersheds, this collaboration on the salmon management program is formalized in a MOU which allows a delineating and clarifying of the responsibilities between governments and the watershed management councils.

The legal context for management of wild Atlantic salmon is also defined by court decisions respecting Aboriginal and Treaty Rights. Existing Aboriginal and Treaty Rights are recognized and affirmed in section 35 of the *Constitution Act, 1982*[5]. In its 1990 decision in *R. v. Sparrow*, the Supreme Court of Canada held that the recognition and affirmation of existing Aboriginal rights in the *Constitution Act, 1982* means that any infringement of such rights must be justified. DFO seeks to manage fisheries in a manner consistent with the decision of the Supreme Court of Canada in *R. v. Sparrow*[6] and subsequent court decisions. Specifically, DFO is committed to managing fisheries such that Aboriginal fishing for food, social and ceremonial purposes has priority over other fisheries. Bi-lateral consultations take place with the individual First Nations and the Aboriginal/Native Councils to establish fishing plans for food, social and ceremonial purposes.

[4] *See "**http://laws.justice.gc.ca/en/Const/index.html**" for text on the 1867 Constitution Act*

[5] *See "**http://laws.justice.gc.ca/en/Const/index.html**" for text on the 1982 Constitution Act*

[6] *See "**http://www.scc-cse.gc.ca/**" for details.*

5.0 STOCK STATUS

Stock status is assessed annually for the various river populations within the Gulf Region on the basis of a variety of monitoring data sets including: i) angling catch and effort information, ii) trap counts of adult salmon returns, iii) snorkel counts of spawners, iv) juvenile abundance survey estimates, v) smolt production estimates, and vi) biological characteristics of adult salmon, namely age, sex and size. Stock status for the individual river populations is generally inferred from the status determined for *index populations*.

More specific details on the status of the individual populations are provided below. The SFAs are defined in part 9.1 - Sub-Management Units (Figure1).

SFA 15A (mainly the Restigouche River system)
Salmon of the Restigouche River are monitored annually with the monitoring encompassing the stocks in both the New Brunswick and Québec parts of the Restigouche system. For the Restigouche River, two-sea winter (2SW) and multi-sea-winter (MSW) salmon abundance, as inferred from the angling catches and counts at headwater facilities, was up in 2005 from 2004 (Chaput *et al.* 2006). Grilse were down from 2004 and the previous five-year mean and have shown large annual variations in abundance. Although fall spawner counts could not be conducted in 2005 due to high water conditions, a mid-season count of 2SW and MSW salmon in the Matapédia River suggested that the end of season counts would be well above the conservation requirements for that tributary and therefore likely achieved for the entire Restigouche River system (Chaput *et al.* 2006). Accordingly, conservation objectives for the Restigouche system were likely met or exceeded annually from 2000 to 2005 (Chaput *et al.* 2006).

SFA 15B (Northeastern New Brunswick south of Eel River)
The stock status of the Nepisiguit River salmon population is uncertain as a result of conflicting evidence. Specifically, estimates of returns and escapements based on fence counts, which are generally incomplete, indicate that conservation requirements were achieved in only 2 of 15 years when the population was assessed from 1982 to 1996 (Locke *et al.* 1997) whereas estimates based on redd counts in late fall, conducted by the Nepisiguit Salmon Association, indicate that spawner abundance has been close to or met the conservation requirements between 1994 and 2000 (DFO 2001). No assessment of stock status exists for Nepisiguit River salmon after 2000.

SFA 16A (Central Eastern New Brunswick)
The Miramichi and Tabusintac rivers are the two main rivers within this SFA and monitoring data exist for salmon populations of both although the Miramichi River is the main monitoring site for SFA 16A, and one of three main sites for the Gulf Region - the other two being the Restigouche and Margaree rivers.

For the Miramichi River population, the point estimate of the eggs in the 2005 returns of both grilse and 2SW and MSW salmon was 2.1 eggs per m^2, or 87% of the conservation egg requirement for the system (Chaput *et al.* 2006). The egg deposition rate from the estimated escapement of 2SW and MSW salmon is estimated to have been about 2.0 eggs per m^2, reflecting only a minor loss in eggs to the fisheries and other causes such as disease. 2SW and MSW salmon contributed 88% of the estimated eggs deposited in 2005. Since 1996, the conservation requirement in terms of eggs is estimated to have been met or exceeded in 4 of the last 10 years. In comparison, the conservation requirement was met or exceeded in 9 of the previous 12 years, i.e., from 1984 to 1995.

The conservation requirements for the Tabusintac River were exceeded in the four years assessed between 1994 and 1999 (Douglas and Swasson 2000). No assessment is available for this population after 1999.

SFA 16B (Southeastern New Brunswick)

The Bouctouche River salmon population is used as an index for the group of small river populations in SFA 16B. Annual assessments of the Bouctouche River salmon population indicated that the conservation requirements had been met or exceeded only once (in 1999) in the eight years from 1993 to 2000 (Atkinson and Peters 2001). A juvenile survey within the Bouctouche and its neighboring rivers provided supporting evidence of low spawning escapements in all of the other rivers in SFA 16B (Atkinson 2004). Accordingly, the rivers in SFA 16B have been closed to all salmon fishing since 1998 (Chaput *et al*. 2006).

SFA 17 (Prince Edward Island)

Natural egg depositions in SFA 17 rivers have little influence on future adult returns in view that most returns are of hatchery origin (DFO 2001). Small runs of late-run salmon persist in a number of unstocked rivers but natural production is generally inhibited in all rivers by heavy sedimentation, generally as a result of agricultural run-off (DFO 2000).

Salmon are stocked in up to six of the Island's larger rivers by release of smolts that have been raised semi-naturally in open impoundments. This program has been most successful in the Morell River, which has accounted for more than half of the province's salmon angling catch in recent years. Angling catch of grilse in the Morell River has decreased by more than 50% over the past three years (Chaput *et al*. 2006). This reduction in catches is largely attributed to reduced smolt stocking. Returns from hatchery stocking will decline further in 2007 and to zero in subsequent years because of reduced stocking in 2006 and no fish being produced for stocking after 2006. Accordingly, the outlook for salmon returns to SFA 17 rivers is for decreasing numbers of returns from hatchery stocking in 2007 and 2008 and a persistence of small numbers of late-run salmon returns to several of the rivers and streams on Prince Edward Island.

SFAs 18A (western Main Nova Scotia) and 18B (western Cape Breton)

The principal salmon populations in SFA 18A are those of River Philip, East River (Pictou) and West River (Antigonish). The Margaree River salmon is the main population within SFA 18B. 2SW and MSW salmon return to the Margaree River from early June onward. In contrast, salmon return to the rivers of the Northumberland Strait shore in late autumn, typically after September 15. 2SW and MSW salmon catches are greater than grilse catches throughout SFAs 18A and 18B. Angling catches for these two SFAs are used to infer stock status.

The 2004 angling catch of grilse for all rivers in SFAs 18A and 18B was 55% above the previous five-year mean catch (Chaput *et al.* 2006). Similarly, the 2SW and MSW salmon catch in 2004 was 50% above the previous five-year mean and the highest since 1998. Returns of 2SW and MSW salmon to the Margaree, based on angling catches, are estimated to have been above the conservation objective of 1,036 MSW salmon, every year since 1985. Similarly, stock conservation is not considered to be a concern in the Nova Scotia mainland rivers that lie within SFA 18A.

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6.0 MANAGEMENT GOAL AND OBJECTIVES

The *management goal* is to restore and maintain healthy and diverse salmon populations and their habitat for the benefit and enjoyment of the people of Canada in perpetuity. DFO will foster improved communication with stakeholders and aboriginal groups within the management units or by watersheds depending what is most appropriate aimed at exploring opportunities and engaging them in the pursuance of a collaborative management approach.

The *management objectives* are:

1. To safeguard the genetic diversity of wild Atlantic salmon; this confers safeguarding the individual populations and their freshwater and marine habitats;

2. To maintain and restore habitat and ecosystem integrity; the health and long-term well-being of wild Atlantic salmon is dependent upon the availability of diverse, healthy and productive freshwater, coastal, estuarine and marine habitats;

3. To manage the salmon fisheries for sustainable use and benefit in order to the extent that stock conservation allows, it is essential to provide opportunities firstly, to aboriginals to fish for food, social and ceremonial purposes and secondly, to participants in the recreational fishery to angle for salmon; and,

4. To increase stakeholder involvement in the conduct of the management program and the decision making process for the salmon resource and the fisheries that it supports.

7.0 GUIDING PRINCIPLES

The lead guiding principle in this plan is *salmon conservation*. Ensuring salmon conservation depends not only on maintaining salmon abundance but also their genetically diverse populations. That diversity includes the irreplaceable lineages of salmon that have evolved through time, the geographic distribution of these populations, the genetic differences and life history variations observed among them, and the habitats that support these differences. The protection and restoration of wild Atlantic salmon populations and their habitats are required to ensure the long-term health and productivity of wild populations and the continued provision of cultural, social and sustainable benefits.

A second guiding principle is *recognition of the Constitutional and Treaty Rights of Aboriginal peoples* and adherence to these *Rights* in the management of the salmon fisheries. Accordingly, access by Aboriginal peoples to fish for food, social and ceremonial purposes takes precedence over all other uses of the salmon resource and is second only to stock conservation.

A third guiding principle is *shared stewardship* of the salmon resource leading to increased partnership in its management and transparent and shared decision making. Both federal and provincial governments are committed to working with the local communities to enhance stewardship of the local fisheries resources, and in particular the Atlantic salmon resource, in accordance with the *Maritime Provinces Stewardship Strategy*[7].

[7] *See ((**http://www.glf.dfo-mpo.gc.ca/os/habitat/stewardship-intendance-e.php**.*

8.0 MANAGEMENT APPROACH

An *ecosystem approach* will be adopted in managing the Region's Atlantic salmon resource. The health and long-term well-being of wild Atlantic salmon is inextricably linked to the health of its freshwater, estuarine and coastal species such as shad, smelt, striped bass, eel, and marine ecosystems, and to maintaining biodiversity throughout these ecosystems (Environment Canada 1995). Adoption of the ecosystem approach to managing the salmon resource confers a commitment to conserve all species that interact with the salmon, including the forage species upon which it is dependent for food, the buffer species that offer protection from predation, and also the competitor and predator species which are sometimes viewed as harmful or threatening.

The current widely applied *conservation limit* will be used to assess stock status and determine the extent that management intervention is required to ensure stock conservation. Since the early 1990s, Canadian Atlantic salmon stocks have been managed against a lower limit for stock conservation that is defined as the number of spawners or egg deposition rate required to achieve maximum sustained yield (MSY) (CAFSAC 1991). In the absence of stock-specific information a generalized operational definition for this lower limit is currently applied throughout the Maritime Provinces, and thereby the Gulf Region except for the Restigouche River. That limit is an egg deposition rate of 2.4 eggs per m^2 of fluvial rearing habitat. For rivers in the Province of Québec, and the Restigouche River which borders Québec and New Brunswick, the *conservation limit* is 1.68 eggs per m^2 of rearing habitat. The *conservation limit* applied to Québec salmon stocks is based on a series of river-specific stock and recruitment analyses and is generally similar to the higher 2.4 eggs per m^2 rate since the former is based on estimates of actual egg depositions and does not include incidental losses of the returning salmon to poaching, disease and other causes. These conservation limits will be retained and used to determine the extent that management measures are required until such time as more finite stock-specific conservation level criteria become available. The application of this new system to decide on the extent and type of management measures required will be stock or stock grouping specific and decided on collectively by the various interests involved in the management of the specific salmon stock or stock grouping.

The *precautionary approach* (FAO 1995) will be adhered to in the decision making process relative to ensuring salmon stock conservation. Application of the precautionary approach will be applied when decisions are required under situations of high scientific uncertainty. Under these situations, decisions will be made that result in low risk of harm to stock conservation and the salmon resource in general.

A main theme of the new management regime for the salmon resource is *partnership* and accordingly DFO will seek to manage the salmon resource in partnership with the respective provincial governments and the local community organizations. Partners will be encouraged to participate to the program delivery. Again, the management approach and the level of engagement will vary based on respective capacities and interest.

This DFO integrated fisheries management process for Atlantic salmon fully recognizes the efforts and approaches deployed in the Maritime Provinces to promote and support fish habitat restoration and population enhancement through programs such as the Adopt-A-Stream in Nova Scotia and similar type initiatives carried on Prince Edward Island and carried out in New Brunswick with financial support from the New Brunswick Wildlife Trust Fund.

9.0 MANAGEMENT FRAMEWORK

9.1 Sub-management Units

The existing Salmon Fishing Areas (SFAs) will be further partitioned into sub-management units in those parts of the Gulf Region lying within New Brunswick and Nova Scotia to better reflect stock status similarities and to recognize stakeholder organizations and their current involvement in the management program. To maintain continuity with the original SFA numbering system, the original numbers have been retained but an "A", "B" or "C" was added to identify the sub-management units within the SFAs. PEI will continue to be managed as one salmon fishing area while allowing for river/watershed special initiatives based on the advice of the PEI Atlantic Salmon Advisory Committee. The SFAs sub-management units and their respective rivers are detailed below and illustrated in Fig. 1.

Salmon Fishing Area 15:

Sub-management unit 15A - the Restigouche River system that lies in New Brunswick eastward to and including the Eel River

Sub-management unit 15B - from the Eel River to the Caraquet River but excluding Rivière du Nord draining in the Caraquet Bay.

Sub-management unit 15C - from the Rivière du Nord to but excluding the Tabusintac River

Salmon Fishing Area 16:

Sub-management unit 16A - Central Eastern New Brunswick rivers (Miramichi River and Tabusintac River)

Sub-management unit 16B - Southeastern New Brunswick rivers

Salmon Fishing Area 17:

SFA 17 - Prince Edward Island rivers

Salmon Fishing Area 18:

Sub-management unit 18A - Western Main Nova Scotia rivers emptying into the Gulf of St. Lawrence

Sub-management unit 18B - Western Cape Breton rivers (Margaree River)

The biological status of non-monitored salmon populations will continue to be based largely on the status of a select number of *index populations* because of the impracticality of effectively monitoring all salmon populations within the Region. *Index populations* are generally similar in biological characteristics and situated nearby to the populations of which they are representative. The principal *index populations* by SFA and river systems are:

SFA 15A - Restigouche River system

SFA 16A - Miramichi River system

SFA 16B - Buctouche River (juveniles)

SFA 18B - Margaree River

Where practical and in the future, community based groups will be encouraged to work collaboratively with DFO and interested parties to develop *Salmon Management Plans* (SMPs) for managing the salmon stocks and protecting its habitat in full consideration with other species within their respective SFAs. Such plans will range from as simple as establishing management priorities with governments to being more complex with a full range of management activities.

In those management units where community organizations/advisory groups are nonexistent, DFO will encourage stakeholders to form a single salmon management group representative of the various interests in the local salmon and other diadromous species, or potentially affecting it. It is imperative that those parties fishing the resource (i.e., First Nations, the respective Aboriginal/Native Council, the various angler groups) be members of the organization and participants in the management program for the salmon resource. Other interests to be potentially represented include other conservation or environmental groups, local industries benefiting or potentially affecting the resource or its use (e.g., recreational fishing, canoeing/boating, forestry, agriculture, and mining) and the local municipal governments. The participation of both federal and provincial governments in the community salmon management organizations is also essential. Where such organizations already exist, like in the sub-management units for the Restigouche, Nepisiguit, Miramichi and Margaree river systems, those organizations will be encouraged to review their respective memberships and expand them as required to encompass the representation required of those having interest in any or all of the salmon populations within the SFA.

9.1.1 Eastern New Brunswick

DFO and New Brunswick's Department of Natural Resources are signatory to MOUs with watershed management organizations for the Miramichi and Restigouche systems (i.e., the Miramichi Watershed Management Committee and Restigouche River Watershed Management Council). Both MOUs confirm an understanding whereby the signatory parties agree to work together to manage the salmon resource in their respective watersheds.

The Province of Québec and Listuguj and Eel River Bar First Nations are also signatories of the MOU for the Restigouche watershed. The existing community salmon management organization for SFA 15A (i.e., the Restigouche River Watershed Management Council) already encompasses and represents the stakeholders (i.e., the local Aboriginal groups, recreational fishing interests, main industries in the watershed, and several of the municipalities) from both the New Brunswick and Québec portions of Restigouche River system. The involvement of the collective interests from both provinces is required to effectively manage this inter-provincial salmon resource.

For other rivers in Eastern NB where there are no MOUs, three (3) additional sub-management units have been incorporated into the Plan as described above. Where and when practical, it is proposed to hold annual advisory committee meetings to review progress, common issues, improve data collection and the overall management of Atlantic salmon.

9.1.2 Gulf Nova Scotia

In Gulf Nova Scotia SFA 18A and SFA 18B, the current management regime rests with advisory committees that will guide conservation making decisions. Efforts will continue at increasing the participation and representation of all stakeholders including Aboriginal groups at these committees.

9.1.3 Prince Edward Island

Since wild salmon returns are low throughout Prince Edward Island (SFA 17) and inhibited by agricultural and various other land use practices, the focus of any community organization will need to be the freshwater fish habitat and what is required to ensure its recovery. The species of interest to this organization would be the freshwater-dependent fish species with emphasis on the salmon and trout in appreciation that the latter (i.e., the anadromous and resident forms of trout) support the main recreational fishery on the Island and will benefit from any progress made to restore the freshwater habitat. No index population has been designated for SFA 17. Accordingly, DFO Science Branch will collaborate with stakeholders, Aboriginal communities and the Province to identify and carry out a juvenile salmon monitoring program.

9.2 Advisory Process

Good communications among the various parties involved in the management of the Gulf Region's salmon resource are essential to the effective delivery of the management program, the orderly conduct of the fisheries and the conservation of the individual salmon stocks. DFO Gulf Region's objective is to ensure timely and open communications pertaining to the salmon resource among the parties involved or otherwise interested in its management. Accordingly, the Gulf Region is committed to working in collaboration with its various provincial government agency partners, other federal organizations (e.g., the DFO Maritimes Region, Environment Canada), the local First Nations and Aboriginal/Native Councils, the community management organizations for the individual SFAs, and various individual conservation organizations.

The community management organizations will be expected to participate and collaborate with DFO at the dissemination of information on the salmon resource and its management to the members of their respective communities and the general public. These local organizations will be the '*windows*' into the communities and as such it will be essential that they be kept well informed and are capable and committed to disseminating the information and to ensuring the views and interests of their respective community members are represented.

9.3 Anticipated outcome from the proposed management framework

9.3.1 Federal/Provincial governments' meetings

The Gulf Region will attempt to meet at least once a year with the provincial governments to set and review provincial priorities. Additional meetings pertaining to the publication of angling summaries, scheduling of joint patrols or other projects of mutual interest will be ongoing on a need basis.

9.3.2 Provincial Salmon Councils

DFO intend to meet with provincial salmon councils at least once a year on a provincial basis to set and review priorities.

9.3.3 Aboriginal Communities and Organizations

DFO will attempt to meet at least annually with Aboriginal Communities and Organizations individually or within the context of Advisory Committees, to set and review priorities and issues related to the management of Atlantic salmon. Negotiations for food, social and ceremonial requirements will be conducted separately.

9.3.4 Watershed and Local Atlantic Salmon Advisory Committees

As a rule, annual meetings will be held by sub-management units with local Atlantic Salmon Advisory Committees, MOUs steering committees, watershed committees, river fishing associations, Aboriginal Communities and Organizations and other interested groups to review progress, common issues, improve data collection and set priorities and projects for the following year.

The following suggested subject-matters could form the basis of discussion at annual sub-management units meetings with the intent to improve predictability and transparency in the management of Atlantic salmon:

- establishment of annual work plans/fishing plans;
- aboriginal and stakeholders representation and engagement;
- conduct of post-season review of annual management plans;
- review annual management measures such as season, gear, bag limit, size limit, scheduled waters limits and others;
- annual reporting of program activities by DFO (Science, Habitat, Conservation and Protection, Aboriginal Fisheries and Resource Management);
- keeping in context concerns raised in section 11 of this Plan;
- share information on project proposals and ongoing projects;
- capacity building within sub-management units where feasible.

9.4 Gulf Region Contribution to the Atlantic Salmon Advisory Committee (ASAC) and the North Atlantic Salmon Conservation Organization (NASCO)

Gulf Region will report annually on the status, progress and issues related to salmon management to the Atlantic Salmon Advisory Committee (ASAC). This Committee is composed of aboriginal, stakeholders' groups, representatives of the four Atlantic Provinces and Quebec. This forum offers an opportunity to report and review the outcomes for the year and set priorities for the upcoming year. Gulf Region exchange with the Atlantic participants at ASAC also contribute significantly in preparing Canada's report into the North Atlantic Salmon Conservation Organization (NASCO). Over the duration of this Plan, the Gulf Region reference conservation regime for Atlantic salmon will also be guided by the Wild Atlantic Salmon Conservation Policy (once finalized) and by Canada's NASCO Implementation Plan which is based on the adoption and application of the precautionary approach as it relates to salmon management and conservation.

The International Council for the Exploration of the Sea (ICES) will continue to provide NASCO with scientific advice on North American and European salmon stocks. Regional input to ICES will be done through members of the DFO Gulf Region's Science Branch.

9.5 Performance Review

The duration of this plan is 5 years (2008- 2012). It will be reviewed annually against long term concerns identified in this plan (section 11) and anticipated annual work activities which will be conducted by the different divisions of DFO. Such activities consist of federal-provincial meetings, DFO and provincial salmon councils meetings, and, Watershed and Advisory Committees meetings. The Science Division will maintain stock assessment activities and juvenile sampling in selected rivers, collaborate in the compiling of salmon angling statistics and participate in fisheries management organized consultations. The Habitat Division will continue to serve on technical committees, help determine restoration plans for salmon habitat and monitor the restoration effectiveness, monitor project mitigation measures and plan compensation as required by a harmful alteration, disruption or destruction (HADD) of fish habitat. Negotiations of Aboriginals' food, social and ceremonial fisheries will be pursued by the Aboriginal Fisheries Division. Finally, the Conservation and Protection Division will continue to monitor and report on Recreational Fisheries' and First Nations' Fishery compliance: bag limits, licence, season, size, tags, allocation and gear.

Ongoing evaluation will be provided by interest groups when annual meetings and consultations are conducted. From comments and requests received and from issues raised, an annual update of the plan will be done. The annual update will consist essentially of revised management measures.

10.0 MANAGEMENT RESPONSIBILITIES

10.1 Habitat Management

Identifying, protecting, restoring and rehabilitating fish habitats are critical to Atlantic salmon conservation because without habitat there will be no salmon. The federal *Fisheries Act, 1985, R.S.C.* contains specific provisions and provides DFO Habitat Management Program with the regulatory framework for the conservation and protection of fish and fish habitat. Environment Canada is responsible for administration and enforcement of the pollution prevention provisions while DFO is responsible for the administration and enforcement of the habitat protection provisions. DFO is also required to apply the *Species at Risk Act* (SARA) and the *Canadian Environmental Assessment Act* (CEAA). Complimentary to these responsibilities of the federal government are those of the provincial and municipal levels of governments for the regulation of activities associated with land and water uses that may be detrimental to salmon. In addition to these various government responsibilities and regulatory authorities, it will be critical that the stakeholders assume a supporting role in ensuring compliance of any and all such regulations by complying themselves, promoting compliance among others, and reporting those that fail to comply. Federal and provincial governments will be committed to working cooperatively and collaboratively, and to enlisting the support of the stakeholders to protect, conserve, restore and enhance Atlantic salmon habitat.

DFO 1986 *Policy for the Management of Fish Habitat* (DFO 1986) will continue to guide DFO staff, developers and the public in managing Canada's fish habitat. Under this *Policy*, DFO objective in managing fish habitat is a "net gain" of habitat productivity for Canada's fisheries resources, and its main guiding principle is a "no net loss" of fish habitat productivity. DFO will strive to achieve this objective by working to i) conserve existing habitat, ii) restore damaged habitat, and iii) enhance habitat.

In 2004, DFO launched its Environmental Process Modernization Plan (EPMP) and thereby a more efficient, transparent and integrated approach to the delivery of its Habitat Management Program (HMP). A key element of EPMP is the application of a Risk Management Framework to categorize risks to fish and fish habitat associated with development proposals, to communicate these risks to proponents and to identify appropriate management options to reduce risks to acceptable levels. DFO HMP staff will be guided by this new approach in addressing all work proposals or activities potentially affecting fish habitat.

The main focus of the DFO HMP's effort will continue to be in the application of the habitat protection provisions of the *Fisheries Act, 1985, R.S.C.* to ensure that fish habitat is protected from land and water use activities and development projects.

Parties wishing to undertake such work in and near water will require a permit from the Provincial Department of the Environment for the respective province in which the work would be undertaken[8]. The provincial agency receiving such applications for *permits* will continue to refer those applications for work that would potentially be harmful to fish habitat and for which routine guidelines are not available, to the DFO Gulf Region Habitat Management Branch for assessment and recommendation on whether the activity should be permitted and the conditions under which it could be undertaken.

In accordance with DFO legislative responsibilities and the partnership approach that it has with the agencies to regulate work activities potentially affecting fish habitat, DFO HMP staff will conduct risk assessments on the individual 'habitat referrals' from the provincial departments of Environment to determine i) whether and under what conditions such activities can be carried out without harmful effects to fish and fish habitat, ii) the mitigation, if any, required to prevent harm to the fish and fish habitat, iii) whether the residual effects of the proposal, after mitigation is applied, will result in a HADD of fish habitat, iv) whether a proposal resulting in HADD will be authorized as per *Section 35(2) of the Fisheries Act, 1985, R.S.C.* triggering an environmental assessment as required under CEAA[9], and v) the habitat compensation required in the event that a HADD of fish habitat were to receive federal authorization. Following their assessment, HMP staff will recommend i) permitting (with or without conditions or habitat protection measures), ii) relocation or design of a proposed work activity which is likely to result in a HADD in order to reduce potential negative effects on fish habitat, iii) authorization of HADD for projects where HADD is unavoidable and the habitat is not critical, or iv) disapproval of proposed work activities which adversely affect critical habitats or species at risk.

A second focus of the HMP will be to foster local stewardship of the aquatic resources in recognition that community stewardship can be a major force towards protecting, restoring and enhancing fish habitat. HMP staff will work with community organizations to carry out integrated resource planning aimed at protecting and improving the general health of the local aquatic ecosystems potentially affected by industry (e.g., forestry, mining, farming), development (e.g., housing, road construction) and recreational activities (e.g., four wheeling, boating, camping). *The Environmental Damages Fund*[10] is one source of funding which can be accessed by community groups to carry out habitat-related work in their respective areas. HMP staff will also carry out effectiveness monitoring to measure how well the restored or enhanced habitat is working.

[8] *The respective provincial departments of the Environment are the "windows" for receipt of proposed work activities potentially affecting fish and fish habitat and the legal permitting body.*

[9] *An environmental assessment under CEAA is required before a federal authority takes action, such as; being the proponent, providing funding, providing land, or issuing an approval.*

[10] *See "**http://www.ec.gc.ca/edf-fde/default.asp?lang=En&n=C5BAD261-1**" for program details.*

10.2 Science

Good scientific advice is fundamental to ensuring effective management and conservation of the wild Atlantic salmon resource. Accordingly, the principal *objective* for the Region's science program is to provide the scientific advice required to effectively manage the Region's salmon, including its ecosystem. A second *objective* is to participate in the provision of scientific advice for the management of Canada's Atlantic salmon throughout its natural range, including international waters.

DFO's Diadromous Section will lead the Region's science program and assume responsibility for the provision of the scientific advice required to manage the salmon resource within the Gulf Region. The exception to this is the science program for the Restigouche River salmon resource for which the leadership will continue to be shared with Québec's Ministère des Ressources Naturelles et de la Faune because of the river system lying within both New Brunswick (Gulf Region) and Québec. The Region's program will be delivered jointly by DFO and its partners. The Community Salmon Management Plans, developed for the individual SFAs, will layout the process for annually reviewing the science program and deciding on what activities will be carried out and by whom.

The principal focus of the science program will be to provide advice on the status of the salmon stocks within the Region and on the fisheries harvesting them. A main activity will be the ongoing monitoring programs designed to provide the information required to formulate the advice. The Miramichi, Restigouche and Margaree river systems are the systems targeted for comprehensive monitoring of the salmon stocks and their ecosystems. Within these systems, juvenile abundances and adult salmon returns will be monitored and assessed, to the extent financial resources permit, to provide both annual descriptions of stock status and relationships between the different life stages. The latter is required to allow for the assessment of salmon stock status in the other rivers through the use of less intensive assessment methods (e.g., electrofishing to determine juvenile densities, angling catches as proxies of adult returns). A formal assessment of the Region's stocks will be conducted annually.

The other main focus of the science program will be a supporting research program aimed at improving understanding of the factors potentially threatening or contributing to the well-being of the Atlantic salmon. Researchers from universities and other establishments or organizations will continued to be encouraged to carry out applied research on the salmon and/or its ecosystem. Some incentives to attract researchers include existing long-term data bases, monitoring platforms (e.g., adult sampling traps), volunteer work forces and funding support from government programs and stakeholder organizations. Supporting research programs will be largely dependent upon non-DFO funding. As well, DFO science programs focused on other species or fish habitat will continue to provide insights into the general health of the salmon and its ecosystem.

Salmon assessment and research programs carried out in international waters will continue to be supported by DFO Gulf Region's Diadromous Fish Section through the provision of data and information on the Region's salmon stocks and input to the assessment of North Atlantic stocks carried out by the International Council for the Exploration of the Seas (ICES) Working Group on North Atlantic Salmon. The Section will also contribute to the planning of marine research studies for salmon being planned and coordinated by the North Atlantic Salmon Conservation Organisation (NASCO).

The Region's Fish Health Unit will continue to provide fish health diagnostic services and support to managing the wild salmonid fisheries resources. The Unit will also provide similar services to the salmon stock enhancement programs carried out through the hatcheries divested by DFO to community organizations.

Members of the Fish Health Unit and the Diadromous Fish Section will also input to the Introductions and Transfers Committees established for each of the three Maritime Provinces, lead by DFO, and comprised of representatives from both federal and provincial governments. The role of these committees is to provide advice for regulatory purposes on all proposed fish transfers (i.e., of wild or cultured origin), on the basis of potential fish health, genetic and ecological risks to the wild fish stocks. Under the federal *Fisheries Act, 1985, R.S.C.* and section 56 of the *Fishery (General) Regulations*, all fish transfers within the three Maritime Provinces require the approval of the Minister of Fisheries and Oceans.

During the late 1990s DFO curtailed its salmon stocking programs. At the time of its withdrawal from stocking salmon, DFO divested its four hatcheries in the Gulf Region to public interest groups who agreed to maintain the stocking programs for a minimum of five years. DFO agreed to provide biological support to those parties taking over the divested hatcheries and assuming responsibility for the salmon stocking programs. DFO accepts no responsibility for continuing stocking programs carried out by the private groups but will continue to provide biological support to those groups as per its original agreement with them. In addition to the stocking activities carried out by the divested hatcheries, the Province of Nova Scotia has recently made the commitment to produce Atlantic salmon for stocking rivers in Nova Scotia.

All stockings of public waters in the Maritime Provinces will continue to be subject to the approval of the Minister of Fisheries and Oceans and subject to the advice of the Introductions and Transfers Committee for the respective province. All three Introductions and Transfers Committees are comprised of biological experts from DFO and the appropriate agencies of the respective provincial governments. As well, all finfish stockings in public waters will be reviewed by the respective local community salmon management organizations and its recommendations will be given every consideration possible.

10.3 Aboriginal Fisheries

The Supreme Court of Canada's decision in *R. v. Sparrow* confirmed that Aboriginal fishing for food, social and ceremonial purposes has priority over other fishing activities. The decision also, confirmed a fiduciary obligation on the part of governments to consult with Aboriginals regarding any and all aspects pertaining to their fishery. Accordingly, DFO *objectives* for the Aboriginal fisheries for Atlantic salmon in the Gulf Region are i) to ensure local First Nations and Aboriginal/Native Councils priority in terms of access to fish for food, social and ceremonial purposes over other fishing activities, ii) to ensure that Aboriginal and other fisheries for salmon do not adversely affect stock conservation, iii) to build a trust relationship with Aboriginal peoples, iv) to determine the interests that the individual First Nations and Councils have in the salmon resource and to work with them to realize those interests, and v) to involve the local First Nations and Councils in the management of their own fisheries and the salmon resource upon which they are dependent.

To achieve the above objectives, Aboriginal Fisheries Program staff of the Gulf Region will continue to consult and negotiate with the First Nations within the Region and the Aboriginal Peoples Council for New Brunswick and the Native Council of Prince Edward Island regarding the management of the salmon resource. The Region will continue to license these First Nations and Councils to fish for salmon within Gulf Region rivers. DFO Maritimes Region staff will carry out a similar process with the First Nations situated in the Maritimes Regions but fishing salmon within the Gulf Region and also with the Nova Scotia Native Council. Similarly, the Québec Ministère des Ressources Naturelles et de la Faune will be responsible to consult with and maintain a contractual arrangement with the Listuguj First Nation regarding the management of its fishery for salmon at the mouth and on the Québec side of the Restigouche River. Since effective management of the salmon populations within the Gulf Region begins with understanding the current stock status limitations and is contingent upon harmonization of all fisheries harvesting these populations, the Maritimes and Gulf Regions will collaborate on fishing activities that the Maritimes Region licences within the Gulf Region. Similarly, the DFO Gulf Region and the Québec Ministère des Ressources Naturelles et de la Faune will keep each other apprised of Aboriginal fisheries within their respective jurisdictions that are directed towards Restigouche River salmon. These two parties will also work through the Restigouche River Watershed Management Council to harmonize all fisheries for Restigouche salmon.

DFO Aboriginal Fisheries Program will continue to be administered through i) an Aboriginal Fisheries Agreement/Arrangement for collaborative management of the fishery and resource, and ii) an Aboriginal Communal Fishing Licence that authorizes the fishing activity. The Aboriginal Fisheries Agreement/Arrangement details the conditions under which the fishery will take place, the program that will be carried out to manage the fishery and in support of the resource, and the financial arrangement between DFO and the individual First Nation or Aboriginal/Native Council. Many of these Agreements/Arrangements have duration of one year.

DFO will be striving to establish multi-year Aboriginal Fisheries Agreements/Arrangements with all First Nations and Aboriginal/Native Councils. The Aboriginal Communal Fishing Licence will continue to specify the conditions under which the fishery will be carried out, e.g., gear type, fishing area, season and catch limit. Both administrative documents pertain to multi-species with the specifics relative to the salmon resource generally dependent upon the interests and involvement of the First Nation or Council in fishing for salmon and managing the salmon resource.

Also a part of DFO Aboriginal Fisheries Program has been the development of Marshall Agreements with First Nations in lieu of the 1999 Supreme Court of Canada decision in *R. v. Marshall* that confirmed the communal right of Mi'kmaq, Maliseet and Passamaquaddy communities *'to hunt, fish and gather for a moderate livelihood'*. While the main focus of these agreements has been to provide income to First Nations from the commercial fisheries, some First Nations did receive funding support for employment and economic development related to the salmon resource, e.g., lodges were built, business plans developed and aboriginals were employed in salmon science, restoration and enhancement projects.

A new initiative that the Region's Aboriginal Fisheries Division is administering in support of Aboriginal peoples is the Aboriginal Aquatic Resource and Ocean Management Program (AAROM). The AAROM Program is a national program aimed at encouraging First Nations and existing Aboriginal organizations to group together to carry out program initiatives that they could not afford individually. This program will be directed towards involving First Nations and Aboriginal/Native Councils in i) coordinating their management program activities with other First Nations or Councils forming the group and also, with others involved in related or similar type programs, ii) carrying out scientific assessment and research programs, iii) conducting fish habitat assessment, restoration and enhancement initiatives, and iv) expanding their role in the conservation and protection of the fisheries resources. A new initiative under this latter program activity will be to facilitate the training and employment of Aboriginals as fully empowered Fishery Officers reporting directly to the Aboriginal groups created under the AAROM Program. The AAROM Program will provide the opportunity to further enhance the role of Aboriginals in the management of the fisheries resources, including the Atlantic salmon.

First Nations and Aboriginal/Native Councils will be encouraged to become involved in the community salmon management area organizations, if they are not already involved. Aboriginal organizations receiving funding assistance under the AAROM Program will find it necessary to participate in any community salmon management/advisory organizations for the salmon stocks that are subject to their actions under the AAROM Program. Activities funded through the AAROM Program would be subject to or components of the salmon management program for the specific SFA.

10.4 Recreational Fisheries

A mix of federal and provincial legislative and administrative responsibilities exists for recreational fish species within the Maritime Provinces. In general terms, the federal government manages the Diadromous and other marine species while the provinces manage the freshwater species and license all recreational fisheries in inland waters except within national parks where the federal government's Parks Canada Agency license recreational fishing. Because the federal government has legislative authority for inland fisheries, the provinces forward all recommendations for amendments to regulations under the *Fisheries Act, 1985, R.S.C.* (e.g., bag limits, seasons, close times, etc.) to DFO to obtain Governor-in-Council approval. General responsibilities and commitments of federal and provincial governments to manage the recreational fish species are outlined in *Memoranda of Understanding* (MOUs) between DFO and the provincial governments for New Brunswick and Nova Scotia. In addition, DFO is committed to collaborating and integrating its efforts, pertaining to the management of the recreational fisheries resources, with the provinces through the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM). At the direction of CCFAM, a DFO led Federal/Provincial/Territorial Forum on Recreational Fisheries was recently established. This Forum on recreational fisheries held its first meeting in November 2005 and is co-chaired by representatives of the federal and provincial governments. The Forum will act as a unified and collective assembly to promote national cooperation on recreational fisheries issues and will provide a mechanism for strategic liaison with other Federal, Provincial and Territorial initiatives related to recreational fisheries.

The Gulf Region's main *objectives* for the Atlantic salmon recreational fisheries and its role in their management are 1) to ensure sustainable recreational fishing opportunities for salmon, and 2) to collaborate and/or share responsibility for the management of the salmon resource and the recreational fisheries it supports with the respective provincial governments and parties participating or otherwise having an interest in the salmon angling fisheries. The lead responsibility for achieving these objectives will continue to rest with the Region's Recreational Fisheries Program.

DFO will monitor the recreational fishing regulations for their effectiveness in ensuring salmon conservation and equitable sharing of the allowable fishing opportunities. It will facilitate the amendment of regulations pertaining to the recreational fisheries for anadromous Atlantic salmon determined to be necessary to ensure stock conservation. Both the provinces of Nova Scotia and New Brunswick will continue to issue *Variation Orders* for the inland recreational species (e.g., trout and smallmouth bass). DFO will continue to collaborate in the implementation of the Integrated Management Plan and maintain the responsibility to issue *Variation Orders* for the salmon fishery.

DFO will collaborate with Aboriginal groups, provincial stakeholders organization, provincial governments, local community organizations and the new Atlantic Salmon Conservation Foundation to strengthen the representation and participation on community salmon/salmonid management in those SFAs where such organizations do not already exist. Where possible and practical DFO will encourage the development and/or implementation of community salmon/salmonid management plans to facilitate identification of SFAs priorities.

10.5 Conservation and Protection

The principal *objective* of the Conservation and Protection Program for the salmon resource is to ensure that the salmon stocks and their ecosystems within the Gulf Region are protected and conserved. DFO Fishery Officers will continue to work jointly with provincial enforcement Officers/Wardens, First Nation Guardians, the Habitat Program and the general public to achieve this objective which encompasses not only the Atlantic salmon but also the various habitats that it resides in during its different life stages.

DFO will continue to protect and conserve the Atlantic salmon resource through a number of activities starting with education and communications and the belief that an aware and supportive public is essential to an effective conservation and protection program. DFO Fishery Officers will speak to school classes on the local fisheries resources and what is required to ensure conservation of Atlantic salmon. They will also communicate formally with local community groups and informally with community members on the fisheries, the resources upon which they are dependent, and the issues that may be of interest to them or on which they might provide assistance. They will liaise with community organizations within the various SFAs to enlist their support and assistance in protecting the local fisheries resources. They will encourage the creation of 'River Watch' programs in communities where interest and opportunity exist to establish such programs.

DFO Fishery Officers will monitor and report on fishing activities which are potentially threatening or for which information is required for stock assessment and/or management purposes. They will also input to DFO's review of HADD referrals by conducting site visits and reporting findings to the Habitat Management Branch as part of both the pre-approval and follow-up assessment processes.

DFO will pursue every available opportunity to strengthened its salmon and habitat enforcement presence throughout the Region's watersheds, particularly where salmon populations and habitats are at risk and/or non-compliance activities are high, by means of the following initiatives: (i) continuous training of Fishery Officers, (ii) refresher training for aboriginal guardians, (iii) strategic investment in new equipment, (iv) strengthening relationships at the community level, (v) modernizing service-level agreements with other enforcement agencies, (vi) strategic increases in enforcement budgets when incidents arise that pose an elevated risk to the conservation of fish and fish habitat, and (vii) ensuring that a proactive recruitment program is in place to offset the anticipated level of Fishery Officer departures over the next five years.

10.6 Species at Risk

In 2004, the *Species at Risk Act* (SARA) came into force. SARA was created to prevent Canadian indigenous species, subspecies and distinct populations of wildlife (includes fish) from being extirpated or becoming extinct, to provide for their recovery, and to manage species of special concern to prevent them from becoming endangered or threatened. The Minister of Fisheries and Oceans may recommend to list aquatic species including fish and marine plants to the federal Minister of Environment who is responsible for overall coordination and administration of SARA and for all other non-aquatic species at risk. Parks Canada Agency is responsible for species in/or on federal lands, including national parks.

Species, subspecies and distinct populations of wildlife are designated 'at risk' by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), an independent body of experts that assesses wildlife according to a broad range of scientific data. COSEWIC generally bases its assessment on a proposal for designation from government agencies and private groups or individuals having a genuine concern for the species, subspecies or distinct population grouping. Following designation by COSEWIC, the federal Cabinet decides whether the designated entity should be granted legal protection under the SARA. Such decisions are made after consultations with affected stakeholders and other groups. Since no single government, industry or community can protect wildlife species at risk on its own, it is imperative that governments and stakeholder work together - a principle that applies to the management of the Atlantic salmon resource and other wildlife species regardless of their 'health' status.

None of the salmon stocks within the Gulf Region are currently potential candidates for designation by COSEWIC as 'at risk'. It is imperative however that collectively, we be diligent in our efforts to manage these stocks to prevent them from declining further, to the extent possible. The principal activities through which to achieve this objective are to monitor the stocks closely, protect both the salmon and their habitat, and manage the fisheries to prevent overexploitation.

11.0 IDENTIFYING CURRENT PROBLEMS/ISSUES

The following is a listing of current problems/issues which should be reviewed annually at sub-management unit meetings in an attempt to mitigate the impact of the issues presented. The solutions to some of these issues will require a long term and concerted approach that may involve other levels of governments as well as collaboration by various interested parties.

11.1 Representation, Priorities and Building Relationship

This Regional Management Plan is based on the active participation of aboriginal groups, stakeholders and the provincial governments under the leadership of DFO. Committee structure and representation, primarily in advisory functions as opposed to watershed management, are areas that require constant improvement to ensure effective program delivery at the local, provincial and regional levels. Good representation is a key element in setting priorities and in ensuring good communication in the development and maintenance of an adaptive management approach.

11.2 Capacity building within Stakeholder and Aboriginal Groups

Stakeholders and aboriginal groups will be invited to participate actively on committees, and where practical, share some responsibilities in conservation, management and restoration projects and programs for Atlantic salmon. In many instances, groups are limited in terms of financial capabilities, available time and expertise to take on the new role set out for them in this Plan.

11.3 River and Habitat Classification

Setting and monitoring salmon conservation objectives by individual rivers or by sub-management units remain a challenge while trying to maintain access and provide stability to the Atlantic salmon recreational fishery. River classification in the Gulf in terms of spawning requirement, suitable salmon habitat, and angling effort, etc. has been limited to the larger rivers. This makes it difficult to set long term management targets and guidelines. The merit or implications have not been assessed but the concept is in application in other Regions.

11.4 Low Marine Survival

Current low marine survival among Atlantic salmon populations throughout the North Atlantic has contributed to reduce returns to all rivers throughout the Gulf Region and as a result some stocks are well below their designated conservation limits and others are barely achieving them.

11.5 Juvenile Density Dependence

Juvenile abundance in many rivers within the Gulf Region is presently at historic high levels (Chaput *et al.* 2006). Although current low adult returns to these rivers may be purely a consequence of density independent reduction in marine survival, as has been noted in monitored stocks of eastern Canada, a possible density dependent factor in fresh water might also be a contributing factor. High juvenile densities could be resulting in inter-year-class competition for limited resources (e.g., winter habitat refuge) and thereby causing reduced over-winter survival of potential smolts in their final winter. This hypothesis remains to be objectively tested, but should not be discounted for the Gulf Region salmon populations.

11.6 Endocrine Disrupting Compounds and other Chemicals

Recent studies have demonstrated an impairment of the parr-smolt transformation and subsequent seawater adaptability resulting from exposure of smolts to endocrine disrupting compounds (Madsen and Korsgaard 1989). Fairchild *et al.* (1999) reported a link between past pesticide use and declines of some Atlantic salmon populations. The estimated levels of 4 nonyl phenol (4-NP), present after forest spraying, were similar to those currently found in industrial effluents, pulp mill discharges and municipal sewage outfalls (Bennie *et al.* 1998).

11.7 Recreational and Aboriginal Fisheries Catch Information Incomplete

Information on salmon catches and fishing effort are two of the key elements in the monitoring and decision making process to ensure the sustainability of the fishery. This information is too often incomplete for the recreational and aboriginal fisheries. Such information is essential to providing an accurate assessment of the status of the individual river populations and the impact of the fisheries that harvest them. It will be important for governments, aboriginals and stakeholders' group to acknowledge this situation and take concrete measures to improve the submission and analysis of catch statistics in each of the Maritime Provinces.

11.8 Salmon Bycatch

Bycatch of Atlantic salmon continues to persist to varying degrees throughout the Region in spite of the existing federal regulations that prohibits the retention of any salmon caught as bycatch. Examples include significant numbers of salmon smolts caught in smelt nets and adult salmon taken in various types of fishing gear for a variety of commercial species in the estuaries of many of the rivers.

11.9 Poaching or Illegal Fishing

Poaching of salmon remains an issue where DFO in collaboration with the Provinces and the public will have to remain vigilant and committed towards its elimination.

11.10 Agriculture Practices on Prince Edward Island

Wild Atlantic salmon production on Prince Edward Island is severely limited by stream sedimentation caused by agriculture and other land use activities (Cairns 2002; DFO 2000). As well, pesticide run-offs have resulted in frequent fish kills in streams and nutrient enrichment from fertilizer usage is contributing to eutrophication of streams and estuaries. Although cultivation techniques which reduce erosion, pesticide run-off and stream nutrification have become more widespread in recent years, the potato acreage has increased and the problem continues to persist. Substantial self-sustaining salmon runs cannot be re-established until these impacts are severely reduced.

11.11 Forestry Practices

Virtually all Gulf Region river systems and their salmon populations in New Brunswick and Nova Scotia have been impacted by past forestry practices. Current practices are more "environmentally friendly" to fish and fish habitat but habitat fragmentation and lack of fish passage remain issues that need to be addressed.

11.12 Mining Practices

Mining operations in both New Brunswick (base metal) and Nova Scotia (coal) continue to pose a potential threat to the salmon and other freshwater fisheries resources in those watersheds in which such operations exist (e.g., Upsalquitch, Nepisiguit, Miramichi, East (Pictou)). The main current threats lie in the potential for leaching from exposed areas and toxic run-off as a result of failed containment of mining solutions.

11.13 Water Withdrawal from River Systems

The large withdrawal of water from river systems by municipalities, agriculture and other industrial users is becoming an increasing threat to a number of freshwater ecosystems. Fish migration and/or fish production are potentially being affected by large water withdrawals from a number of river systems within the Gulf Region (e.g., James River, Nova Scotia and Middle and Charlo rivers, New Brunswick).

11.14 Fragmentation of Fish Habitat

Faulty road culvert installations, existing man-made dams, beaver dams and blockages due to windfalls and forestry practices (i.e., infilling small feeder-streams with brush and debris) are main contributors to habitat fragmentation.

11.15 Exotic Species

The principal exotic species potentially threatening the native Atlantic salmon and brook trout stocks in the Gulf Region are chain pickerel, smallmouth bass, rainbow trout, and brown trout. Chain pickerel and smallmouth bass have been found in a few lakes in the Gulf Region and are found in many nearby rivers and lakes of both Nova Scotia and New Brunswick in the Maritimes Region. The distributions of both these species have been dramatically extended in both provinces through illegal introductions by the public. The rainbow trout is known to have natural reproducing populations in rivers on Prince Edward Island, in at least one river within SFA 18A (South River), and perhaps in some rivers of eastern Cape Breton Island. Rainbow trout are occasionally sighted in the other rivers within the Gulf Region. The potential sources of rainbow trout that threaten the native salmonid populations within the Gulf Region are the nearby natural reproducing populations and escapees from hatcheries, fish ponds and marine cages, as well as directed stocking programs by the province of Nova Scotia.

Also exotic and of possible concern to the Gulf Region's native salmonid populations is a new invasive species of algae which was confirmed in 2006 to be present in parts of the Restigouche River system and also in a number of Québec rivers that empty into the Baie des Chaleurs. This new invasive species has been identified as *Didymosphenia geminata* or more commonly referred to as "didymo". Didymo poses no known health danger to humans but in cases of severe invasions, 100% of the substrate of a stream can be coated with an ugly brown mat to a depth of 2 cm of more. It is feared that this invasive species could adversely affect freshwater salmonid production although its actual threat is currently unknown. Didymo spreads when pieces break off and drift downstream. It only takes one cell, invisible to the naked eye, to colonize a new area. It can cling to boots, clothes, boats, fishing gear, etc. and thereby could be spread by anglers as they move within the watershed or to other river systems. The felt soles on waders are potentially one of the main collectors and distributors of small living organisms like didymo.

11.16 Finfish Aquaculture

With the closure of the last of the commercial fisheries by 2000, aquaculture is now the sole source of commercially available Atlantic salmon. Aquaculture operations, as with other human activities, pose risks to the natural environment. Potential impacts to wild Atlantic salmon include: the chance of disease and parasite transfer (i.e. Infectious Salmon Anemia, and sea lice), competition and genetic effects of escapes, and physical disturbances in nearshore environments (i.e. deposition of waste under cages).

11.17 Impact of Species at Risk Act (SARA) Listing of Other Species

The possibility exists that a species that is currently caught incidentally in one or more of the directed fisheries for salmon will by listed by SARA (e.g., striped bass) and accordingly afforded the protection extended to it by SARA. For example, COSEWIC has recommended to the Minister of the Environment that the striped bass population of the southern Gulf of St. Lawrence be added to Schedule 1 of the Species at Risk Act as a threatened species. Species listed as 'threatened' are those that are likely to become endangered if negative limiting factors are not reversed. Consultations were undertaken in early 2006 to inform the public of the SARA process and to solicit feedback concerning potential implications of listing striped bass in the southern Gulf of St Lawrence as a 'threatened' species. The consequence of such a listing would result in restriction, and possible closure, of any fisheries catching the listed species incidentally. Should the striped bass in the southern Gulf be listed by SARA, the Aboriginal gill net fisheries for salmon within Miramichi Bay and the lower Miramichi River system are potentially the most likely fisheries to be affected because they are known to catch striped bass and there would be at least some mortality associated with them being caught in a gill net and released.

11.18 Predation

Both avian (i.e. mergansers and cormorants) and mammalian (i.e. seals) predators are perceived by some members of the public as being responsible for low salmon returns to their local rivers. These individuals are of the opinion that bird control programs on their rivers and/or seal control programs in the estuaries along the coasts would yield large gains in adult salmon returns.

12.0 ACKNOWLEDGEMENT

It is recognized that many volunteers and local watershed groups are committed to actively protect and restore Atlantic salmon populations and their habitat. It is clear that Atlantic salmon has benefited greatly from the work of these individuals and groups.

DFO has intended to provide stakeholders, Aboriginal communities and provincial governments' opportunities to comment and contribute to the Atlantic Salmon Integrated Management Plan for the Gulf Region. DFO acknowledges the important contribution of the Provincial Salmon Councils of ASF namely the New Brunswick Salmon Council, the Prince Edward Island Council for the Atlantic Salmon Federation, the Nova Scotia Salmon Association, and, the Prince Edward Island Department of Environment, Energy and Forestry, the Nova Scotia Department of Fisheries and Aquaculture and the New Brunswick Department of Natural Resources in improving the content of this management plan.

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ANNEX A.

First Nations and/or Aboriginal/Native Councils potentially fishing for salmon in the Gulf Region rivers, along with the conditions for fishing as specified under their respective licence, arrangement or agreement for the 2006 season.

The gear type designated below as 'angling' means fishing with a line to which one or more hooks are attached and that is held in the hand or attached to a rod that is held in the hand or closely attended.

FIRST NATION/ COUNCIL	LOCATION OF FISHERY			GEAR TYPE	FISHING SEASON	CATCH LIMIT/ ALLOCATION
	SFA	RIVER	SITE			
Listuguj Mi'kmaq First Nation (FN)	15A[1]	Restigouche	estuary (in Québec)[1]	gill net, angling, trap net and spear	opened June 7	not specified.
Eel River Bar FN	15A	Restigouche	estuary (in NB)[2]	gill net and trap net	May 15 - Dec. 31	50 grilse and 500 large salmon
	15A	Eel	Crown Open Waters	angling		
	15B	Charlo				
	15B	Benjamin				
	15B	Jacquet				
Madawaska Maliseet FN	15A	Restigouche, Gounamitz and Kedgwick	Crown Open Waters	angling	April 1 - March 31	190 grilse and 60 large salmon
Pabineau FN	15B	Nepisiguit	site not specified[3]	trap net	June 1 - Dec. 31	400 grilse
			Crown Open Waters	angling		
	15A	Upsalquitch	Crown Open Waters	angling	April - March 31	50 grilse and 50 large salmon
Burnt Church FN	16A	Tabusintac	location to be agreed to by First Nation and DFO	angling and gill net	May 19 - June 30	black salmon - 100 grilse and 100 large salmon
				gill net	July 1 - Oct. 22	112 grilse and 304 large salmon
	16A	Miramichi	Miramichi Bay	gill net	May 1 - July 31	1380 grilse and 80 large salmon
			Crown Open Waters of Miramichi system and Bartibog	angling		
			Miramichi Bay	gill net	Aug. 1 - Oct. 15	700 grilse and 120 large salmon
			Crown Open Waters of Miramichi system and Bartibog	angling		
Eel Ground FN	16A	Miramichi	Northwest Miramichi between Anderson bridge and Hackett Beach Road	trap net, gill net	June 1 - Aug. 31	1880 grilse and 185 large salmon
			Crown Open Waters of Miramichi River system and Bartibog	angling		
			Northwest Miramichi between Anderson bridge and Hackett Beach Road	trap net, gill net	Sept. 1 - Oct. 31	780 grilse
			Crown Open Waters of Miramichi River system and Bartibog	angling		
			Main Southwest Miramichi	trap net and gill net	June 2 - Aug. 31	1320 grilse and 10 large salmon
			Crown Open Waters of Miramichi River system and Bartibog	angling		

[1] *Fishery situated outside SFA 15A, on the Québec side of the Restigouche River.*
[2] *Fishery situated in the estuary on the New Brunswick side of the river.*
[3] *Site to be agreed upon by both the First Nation and DFO.*

ANNEX A continued

FIRST NATION/ COUNCIL	LOCATION OF FISHERY			GEAR TYPE	FISHING SEASON	CATCH LIMIT/ ALLOCATION
	SFA	RIVER	SITE			
Eel Ground FN	16A	Miramichi	Main Southwest Miramichi	trap net and gill net	Sept. 1 - Oct. 31	780 grilse
			Crown Open Waters of Miramichi River system and Bartibog	angling		
			Big Hole Tract	counting fence/trap net	June 2 - July 31	200 grilse and 5 large salmon
					Aug. 1 - Oct. 31	40 grilse
Metepenagiag Mi'kmaq FN *(Red Bank)*	16A	Miramichi	between outflows of Little Southwest Miramichi and the Northwest Miramichi	gill net and trap net	June 1 - Aug. 31	2000 grilse and 250 large salmon
			Crown Open Waters of the Miramichi River system	angling		
			between outflows of Little Southwest Miramichi and the Northwest Miramichi	gill net and trap net	Sept. 1 - Oct. 31	2000 grilse and 250 large salmon
			Crown Open Waters of the Miramichi River system	angling		
Indian Island FN	16B	Allocations of 175 grilse and 375 large salmon were nationals only and subject to in-season review of stock status and approval of a fishing plan.				
Bouctouche FN	16B	All directed salmon fisheries closed that could potentially affect salmon stocks in SFA 16B.				
Elsipogtog FN	16B	All directed salmon fisheries closed that could potentially affect salmon stocks in SFA 16B.				
New Brunswick Aboriginal Peoples Council	15A	Restigouche	Crown Open Waters	angling	open angling season	240 grilse
	15B	Benjamin	Crown Open Waters	angling	open angling season	25 grilse
	15B	Jacquet	Crown Open Waters	angling	open angling season	35 grilse
	15B	Nepisiquit	Crown Open Waters	angling	open angling season	50 grilse
	16A	Tabusintac	Crown Open Waters	angling	open angling season	30 grilse
	16A	Miramichi	Crown Open Waters	angling	open angling season	280 grilse
Lennox Island FN	17	Subject to scientific advice and specific to management plans agreed to by Lennox Island band Council and DFO.				
Abegweit FN	17	All inland and tidal waters of PEI		angling, spear and snare	January 1 to December 31	200 grilse
Native Council of Prince Edward Island	17	Morell	entire river	angling and spear	June 15 - Oct. 31	300 grilse
Pictou Landing FN	18A	East (Pictou)	entire watershed	angling, snare and spear	May 1 - Nov. 30	30 grilse and 70 large salmon
	18A	West (Pictou)	entire watershed	angling, snare and spear	May 1 - Nov. 30	25 grilse and 37 large salmon
	18A	River John	entire watershed	angling, snare and spear	May 1 - Nov. 30	20 grilse and 10 large salmon
	18A	Merigomish Harbour	gill nets in harbour and other gear throughout watershed	angling, snare, spear and gill net	May 1 - Nov. 30	10 grilse and 30 large salmon
	18B	Margaree	entire watershed	angling, snare and spear	May 1 - Nov. 30	5 grilse and 10 large salmon

ANNEX A continued

FIRST NATION/ COUNCIL	LOCATION OF FISHERY			GEAR TYPE	FISHING SEASON	CATCH LIMIT/ ALLOCATION
	SFA	RIVER	SITE			
Eskasoni FN	18B	Margaree	Northeast and Main Margaree (including Southeast Margaree) up to and including the Hatchery Pool	trap net, angling and spear	June 1 - Aug. 31	6 grilse and 15 large salmon
				trap net, angling, spear and seine	Sept. 1 - Nov. 30	20 grilse and 50 large salmon
			anywhere in river	angling, fly fishing, snare and spear	Feb. 15 - May 31, 2007	black salmon as required for food, social and ceremonial needs
Membertou FN	18B	Margaree	Margaree River and estuary	trap net (in estuary), angling, spear, dip net, snare and seine	June 1 - Aug. 31	6 grilse and 15 large salmon
					Sept. 1 - Nov. 30	20 grilse and 50 large salmon
Wagmatcook FN	18B	Margaree	Northeast and Main Margaee (excluding Southeast Margaree) up to, including and above the Hatchery Pool	trap net, angling and spear	June 1 - Aug. 31	6 grilse and 15 large salmon
				trap net, angling, spear and seine	Sept. 1 - Nov. 30	20 grilse and 50 large salmon
Waycobah FN	18B	Margaree	Northeast and Main Margaee (excluding Southeast Margaree) up to, including and above the Hatchery Pool	trap net, angling and spear	June 1 - Aug. 31	6 grilse and 15 large salmon
				trap net, angling, spear and seine	Sept. 1 - Nov. 30	20 grilse and 50 large salmon
			anywhere in river	angling, fly fishing, snare and spear	Feb. 15 - May 31, 2007	black salmon as required for food, social and ceremonial needs
Chapel Island FN	18B	Margaree	Margaree River and estuary	trap net (in estuary), spear, snare and angling	June 1 - Aug. 31	6 grilse and 15 large salmon
					Sept. 1 - Nov. 30	20 grilse and 50 large salmon
Nova Scotia Native Council	18A	Tidnish, Shinimicas River Philip, Wallace, French, Waugh, River John West (Pictou) Middle (Pictou) East (Pictou) Barney's West (Ant.) South (Ant.) Pomquet	entire rivers including their estuaries	angling, trap net, fish trap, fish stand, snare, dip net, artificial light or flame, seine (in tidal water) and gill net (in tidal water)	June 1 - Nov. 5 (grilse only)	1,820 grilse and large salmon (equals the combined allocations to rivers in both SFAs 18A and 18B)
					Jan. 1 - May 14/07 (black salmon - male grilse and large salmon)	
					May 15 - 31 (black salmon - male and female grilse)	
	18B	Mabou Margaree Cheticamp	entire rivers including their estuaries	angling, trap net, fish trap, fish stand, snare, dip net, artificial light or flame, seine (in tidal water) and gill net (in tidal water)	June 1 - Nov. 5 (grilse only)	1,820 grilse and large salmon (equals the combined allocations to rivers in both SFAs 18A and 18B)
					Jan. 1 - May 14/07 (black salmon - male grilse and large salmon)	
					May 15 - 31 (black salmon - male and female grilse)	

ANNEX B. Description of the regulatory conditions for the 2006 recreational fisheries for Atlantic salmon within the Gulf Region.

PROVINCE	SFA	RIVER SYSTEM	STRETCH OF RIVER	SEASON	DAILY LIMITS	
					RETENTION	RELEASE
Québec	na[1]	Restigouche	Main River from its mouth upstream to Ruisseau Ferguson	April 15 - May 31[2]	0	unlimited
				June 1 - August 31	1 of any size[3]	unlimited
				Sept. 1 - Oct. 31[2]	0	unlimited
			Main River from Ruisseau Ferguson upstream to railway bridge at Matapédia	April 15 - May 31[2]	0	unlimited
				June 1 - August 31	2 grilse	unlimited
				Sept. 1 - Oct. 31[3]	0	unlimited
			Main River from railway bridge at Matapédia upstream to its confluence with the Patapédia	April 15 - May 31	0	unlimited
				June 1 - August 31	2 grilse	unlimited
				Sept. 1 - 30	0	unlimited
			Patapédia River from its mouth upstream to the border between New Brunswick and Québec	June 1 - August 31	2 grilse	unlimited
New Brunswick	15A	Restigouche	Main River from its mouth to its confluence with the Patapédia	April 15 - May 31	0	10
				June 1 - August 31	2 grilse	4
				Sept. 1 - 30	0	4
			Main River from the mouth of the Patapédia to the confluence of Kedgwick and Little Main	May 1 - 31	0	10
				June 1 - August 31	2 grilse	4
				Sept. 1 - 30	0	4
			Patapédia River from its mouth to the Québec border	June 1 - August 31	2 grilse	4
			Kedgwick River from its mouth to the Québec border	June 1 - August 31	2 grilse	4
				Sept. 1 - 30	0	4
			Little Main Restigouche River upstream to Cedar Brook, but not the Gounamitz River	May 1 - 31	0	10
				June 1 - August 31	2 grilse	4
				Sept. 1 - 30	0	4
			Little Main Restigouche River upstream of Cedar Brook plus the Gounamitz River	June 1 - August 31	2 grilse	4
				Sept. 1 - 30	0	4
			Upsalquitch River up to Nine Mile Brook on the Northwest, and to the pool above Boar's Head Pool on the Southeast - salmon angling prohibited upstream of these points	June 1 - August 31	2 grilse	4
				Sept. 1 - 30	0	4
		Eel	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
	15B	Charlo	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
		Benjamin	entire River	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
		Jacquet	from river mouth to and including Halfway Pool	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
			Upstream of Halfway Pool	May 16 - Oct. 15	2 grilse	4
		Nigadoo	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4

[1] *Not applicable because fisheries outside the jurisdiction of the DFO Gulf Region.*

[2] *Trout season but anglers permitted to fish for salmon provided they are released.*

[3] ***'Daily Retention Limit'** has been 1 grilse or large salmon through 2006 but will change to 2 grilse beginning in 2007.*

PROVINCE	SFA	RIVER SYSTEM	STRETCH OF RIVER	SEASON	DAILY LIMITS	
					RETENTION	RELEASE
New Brunswick	15B	Millstream	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	2 grilse	4
				Oct. 16 - 22	0	4
		Tetagouche	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
		Middle	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
		Little	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	2 grilse	4
		Nepisiquit	from the river mouth to Grand Falls Dam	June 1 - Oct. 15	1 grilse	4
				Oct. 16 - 22	0	4
		Bass	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
		Caraquet	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 22	2 grilse	4
		South Caraquet	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 29	2 grilse	4
		Pokemouche	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	2 grilse	4
		Little Tracadie	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	2 grilse	4
		Tracadie	from river mouth upstream to below Lord and Foy	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	2 grilse	4
			Upstream of Lord and Foy	May 16 - Oct. 15	2 grilse	4
	16A	Tabusintac	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 29	1 grilse	4
		Miramichi	Bartibog River	April 15 - May 15	0	unlimited
				May 16 - Oct. 29	1 grilse	4
			Northwest Miramichi River downstream of Little River	April 15 - May 15	0	unlimited
				May 16 - Oct. 29	1 grilse	4
			Northwest Miramichi River upstream of Little River	April 15 - May 15	0	unlimited
				May 16 - August 31	1 grilse	4
				Sept. 1 - 15	0	4
			Big Sevogle River downstream from Square Forks	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Big Sevogle River upstream from Square Forks	April 15 - May 15	0	unlimited
				May 16 - Sept. 15	1 grilse	4
			Little Southwest Miramichi downstream from Catamaran Brook	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Little Southwest Miramichi upstream of Catamaran Brook to Big Rock Pool	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Little Southwest Miramichi from Big Rock Pool upstream	April 15 - May 15	0	unlimited
				May 16 - Sept. 15	0	4
			Renous River downstream from forks of North and South Branches	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Renous River upstream from forks of North and South Branches	April 15 - May 15	0	unlimited
				May 16 - Sept. 15	1 grilse	4

PROVINCE	SFA	RIVER SYSTEM	STRETCH OF RIVER	SEASON	DAILY LIMITS RETENTION	DAILY LIMITS RELEASE
New Brunswick	16A	Miramichi	Dungarvon River downstream from Furlong Bridge	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Dungarvon River upstream from Furlong Bridge	April 15 - May 15	0	unlimited
				May 16 - Sept. 15	1 grilse	4
			Main Southwest Miramichi tributaries downstream of Cains River	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Cains River	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Main Southwest Miramichi tributaries - upstream of Cains River	April 15 - May 15	0	unlimited
				May 16 - Sept. 15	1 grilse	4
			Bartholomew River	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Rocky Brook	April 15 - May 15	0	unlimited
				May 16 - August 31	1 grilse	4
			Clearwater Brook	April 15 - May 15	0	unlimited
				May 16 - Sept 15	1 grilse	4
				Sept. 16 - 30	0	4
			Main Southwest Miramichi from junction with Burntland brook downstream to its mouth	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
			Main Southwest Miramichi from junction with Burntland brook upstream to forks at Juniper	April 15 - May 15	0	unlimited
				May 16 - Sept. 30	1 grilse	4
				Oct. 1 - 15	0	4
			Main Southwest Miramichi upstream of forks at Juniper	April 15 - May 15	0	unlimited
				May 16 - Sept. 15	1 grilse	4
		Napan River	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
		Black River	entire river	April 15 - May 15	0	unlimited
				May 16 - Oct. 15	1 grilse	4
	16B	all rivers in SFA 16B	All rivers in southeast New Brunswick closed to salmon angling because of low stock levels.			
Prince Edward Island	17	all rivers except the Morell	entire rivers	June 1 - Sept. 14	1 grilse	2
		Mill River	downstream from Howlan highway culvert (Route 148)	Sept. 16. - Oct. 31	0	2
		Trout River	downstream from Leard's Pond in Coleman (Route 140)	Sept. 2 - Oct. 31	0	2
		Dunk River	downstream from Scales Pond, West Newton (Route 109)	Sept. 16 - Oct. 31	0	2
		West River	downstream for Green Bay highway culvert (Route 249)	Sept. 16 - Oct. 31	0	2
		Morell	Mackay's to Forks	June 1 - Sept. 15	1	2
				Sept. 16 - Oct. 14	0	2
				Oct. 15 - 31	0	2
			Forks to Hazelgreen Rd	June 1 - Sept. 15	1	2
				Sept. 16 - Oct. 14	0	2
			Fork's to Leard's Pond	June 1 - Sept. 15	1	2
				Sept. 16 - Oct. 14	0	2
			Leard's Pond	June 1 - Sept. 15	1	2
				Sept. 16 - Oct. 14	0	2
				Oct. 15 - Nov. 30	0	2

PROVINCE	SFA	RIVER SYSTEM	STRETCH OF RIVER	SEASON	DAILY LIMITS	
					RETENTION	RELEASE
Nova Scotia	18A	all rivers In SFA 18A	entire rivers	Sept. 1 - Oct. 31	2 grilse	4
	18B	Margaree	Margaree River, Northeast Margaree, Southwest Margaree and tributaries, except the waters referred to below	June 1 - Oct. 15	2 grilse	4
			Margaree River upstream from the highway bridges at East Margaree to the Big Intervale bridges on the Northeast Margaree and to the Scotsville highway bridge on the Southwest Margaree, not including tributaries	June 1 - Oct. 31	2 grilse	4
			Northeast Margaree River and tributaries upstream from the Big Intervale bridges	Closed to salmon angling		
		All other rivers in SFA 18B	entire rivers	Sept. 1 - Oct. 31	2 grilse	4