

# Fédération québécoise pour le saumon atlantique

Salmon Fishing in Quebec - Management Approaches  
Éric Poirier



Marketing Director,  
Fédération Québécoise pour le  
Saumon atlantique (FQSA)

In collaboration with Quebec  
salmon river managers

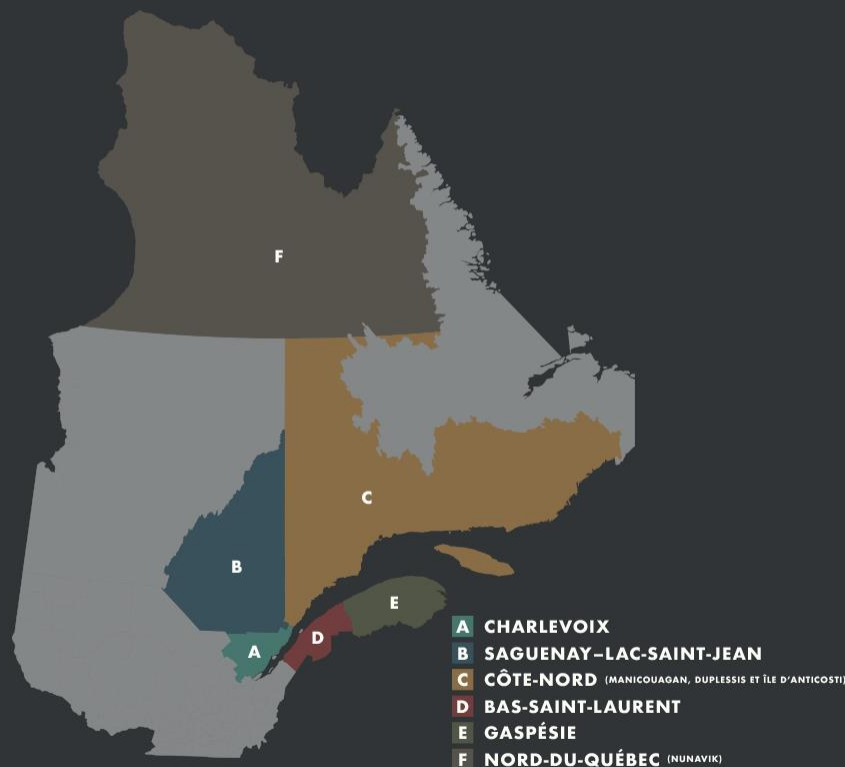
Salmon fisherman  
for over 35 years



# Presentation plan

- Rivers of Quebec
- The Atlantic Salmon Management Plan
- Partner organizations
- La Fédération québécoise pour le saumon atlantique:
  - Saumon Québec
  - Fondation Saumon

# The Province of Quebec



Quebec is:  
Canada's largest province;  
80% French-speaking;  
One of four Canadian provinces with  
Atlantic salmon rivers;  
Three times the size of Sweden;  
114 different salmon rivers;  
65 fully managed and exploited rivers  
15 000 licenses sold annually;  
65 000 daily fishing passes sold per year.



# River management and delegation

## Controlled harvesting zone (ZECs) (25)

- Designated sectors, rates and regulations
- By volunteers
- Most accessible rivers

## Outfitters (30)

- Trade authorization
- Private
- European or American plan

## Wildlife Reserves (10)

- Designated sectors, rates and regulations
- Possible flat-rate (guided or with accom modations and thus becomes more expensive)
- By volunteers

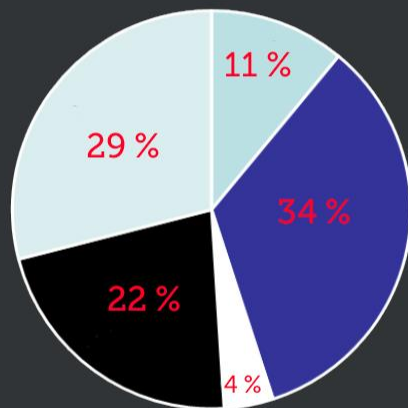
## Private Clubs

- A dozen in Quebec
- Concentrated only on a few rivers
- Good wildlife partners overall

**They are all delegated by the government through agreements**

# River management and delegation\*

## Exploitants



■ Gestions mixtes\*\*\*

■ Libre\*\*

■ Réserve Faunique

□ Zec

\* Excludes native fisheries

\*\* Open status includes rivers on private property

\*\*\* Mixed management refers to rivers with multiple statuses

# The main regions

## Québec / Charlevoix

- Smallest region where salmon are found but the closest to major cities.
- Two rivers that have gained tremendous popularity in recent years.



# The main regions

## Saguenay

- Four strong flowing rivers characterized by a brownish hue, becoming much calmer in some areas where they cascade into impressive valleys.





# The main regions

## Côte-Nord

- The region with the most rivers (over 30). Many are still wild and pose a great challenge to fishermen. The vast majority of these rivers are managed by outfitters.



# The main regions

## Bas-St-Laurent

- Three easily accessible small rivers that sustain a significant number of salmon from year to year. These tea-colored rivers are located near urban areas.





# The main regions

## Gaspé Peninsula

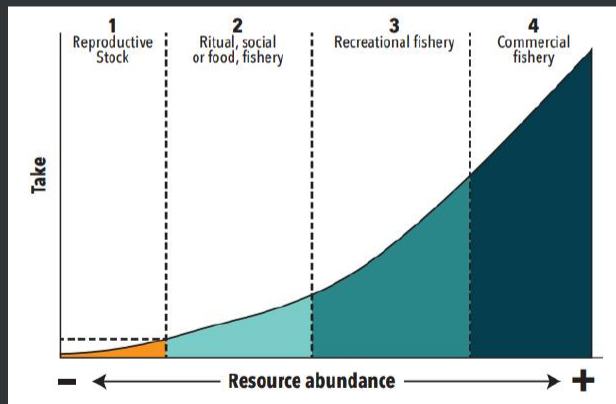
- The most popular destination. With more than 20 salmon rivers, it accounts for over 60% of all fishing days spent in Quebec. The pristine waters of the Gaspé Peninsula and the fact that it offers incredible sight fishing opportunities, both contribute to the reputation of its rivers.



# Salmon management and its statutory framework

In Quebec, the responsibility for the sustainable management of salmon and their habitat is the responsibility of the Ministère des Forêts, de la Faune et des Parcs.  
As a result, this same department is responsible for allocating, managing and protecting the resource.

Order of priority according to the Act respecting the conservation and development of wildlife:



**Native harvest is estimated at 5000 salmon per.**



# History of Atlantic salmon management in Québec

## Before 1980: Era of private clubs

The establishment of private clubs on salmon rivers led to the privatization of these rivers and restricted Québec citizens' access to this resource.

1980: The salmon river management policy was developed

The policy advocated the optimum use of resources, a better distribution of salmon between users, greater river access for a larger number of anglers, increased management in the sector and increased economic returns from the fisheries.

1984–1993: Five-year Atlantic salmon management plan

This plan, which was renewed in 1989, aimed to reduce the number of salmon intercepted in the ocean outside Québec waters, improve population management, maintain protection against poaching, serve as a statement on the development and marketing of salmon and a dialogue between users.

1990–2000: General population decline

This period is characterized by a general decline of many salmon populations throughout their distribution range. The rise in sea mortality is the main reason for the collapse.

1972–2000: Complete closure of the commercial fishery

The buyback of commercial fishing licences for Atlantic salmon from 1972 to 2000. Currently, there is no commercial Atlantic salmon fishing in Québec.

2003: Atlantic salmon conservation and exploitation plan for 2004–2009

This plan was never formally endorsed by the ministerial authorities and wildlife partners. The management modalities advocated therein; however, were generally applied in Québec

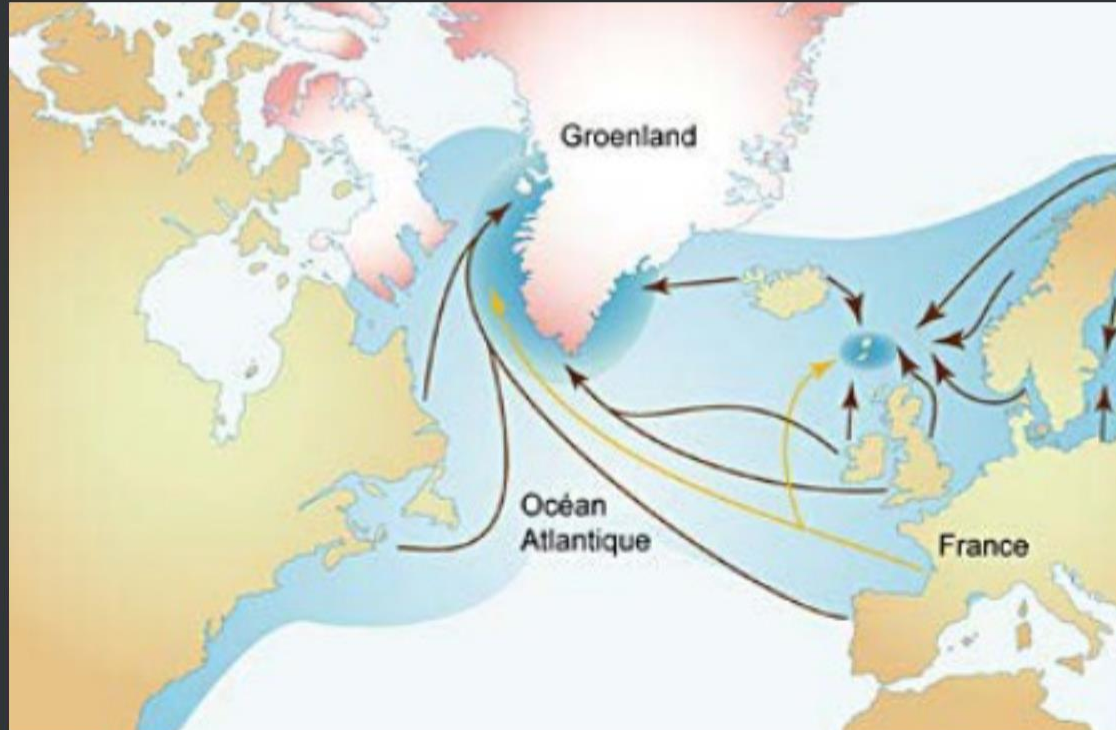
2016–2026: Actual management plan

Ensure the conservation and long-term stability of Atlantic salmon populations;

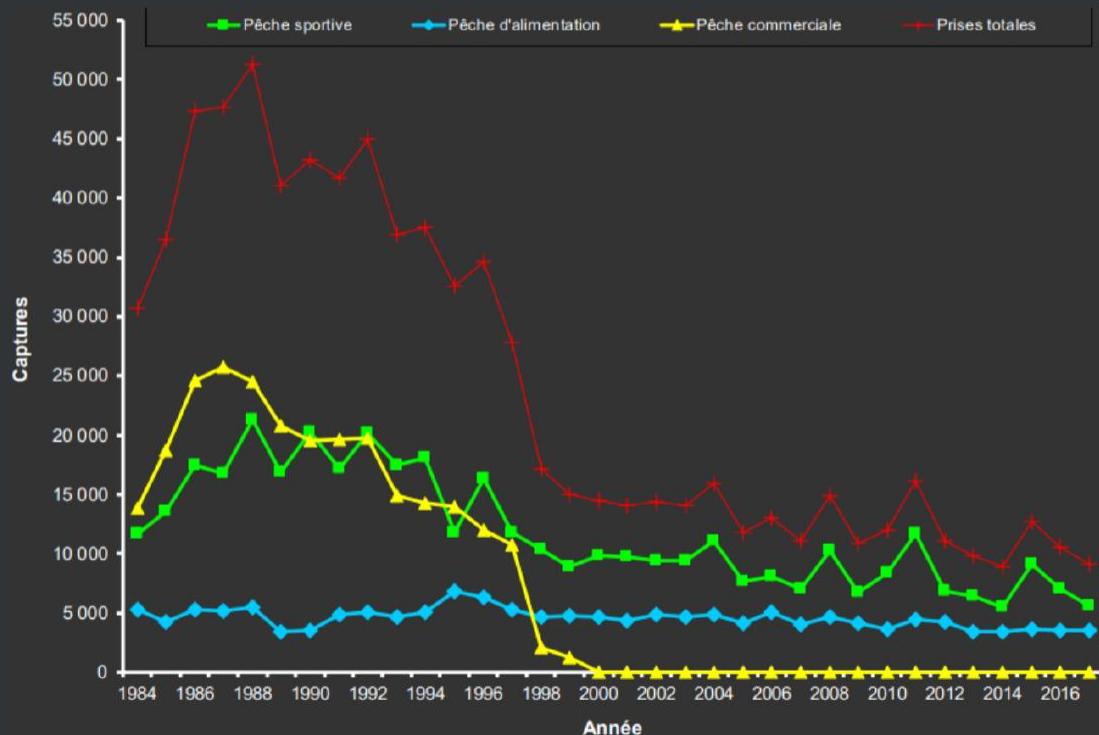
Foster the optimal exploitation and economic development of recreational Atlantic salmon fishing.



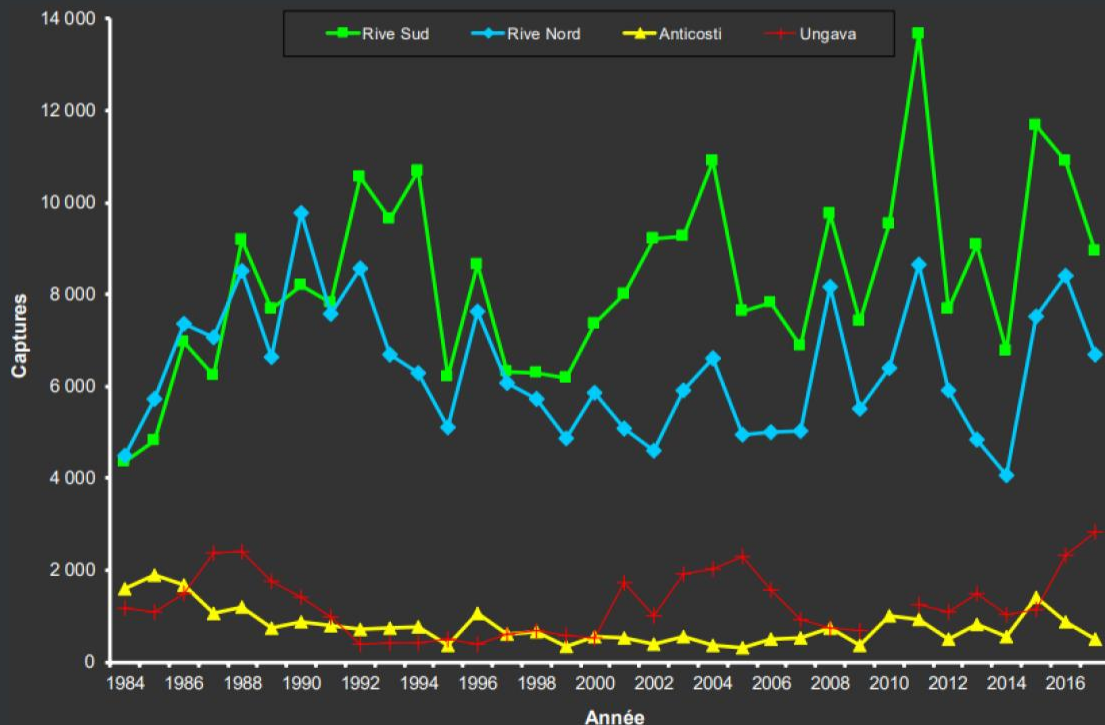
# Atlantic Salmon Migration



# The evolution of fishing ( captures )



# The evolution of "sport" fishing (Retention + Released)





# The evolution of the fishery (statistics in Quebec)

Tableau 5. Sommaire de l'exploitation de 1984 à 2017 au Québec.

Année	Captures sportives			Remise à l'eau	Jours-pêche	Succès (Cap-3-p)	Succès ajusté	Captures commerciales	Pêche alimentation	Prises totales
	Mod.	Réd.	Total							
1984	3 331	8 303	11 634		42 061	0,28		13 847	5 224	30 705
1985	3 906	9 626	13 532		45 478	0,30		18 712	4 233	36 477
1986	6 162	11 324	17 486		53 259	0,33		24 596	5 228	47 310
1987	7 270	9 453	16 723		54 046	0,31		25 737	5 169	47 629
1988	8 504	12 804	21 308		61 188	0,35		24 510	5 481	51 299
1989	5 932	10 875	16 807		63 071	0,27		20 790	3 438	41 035
1990	8 384	11 869	20 253		67 719	0,30		19 517	3 471	43 241
1991	6 119	11 055	17 174		66 447	0,26		19 654	4 892	41 720
1992	8 145	12 040	20 185	20	69 060	0,29	0,29	19 700	5 041	44 926
1993	7 985	9 495	17 480	3	69 478	0,25	0,25	14 869	4 615	36 964
1994	7 432	10 707	18 139	3	71 601	0,25	0,25	14 285	5 058	37 482
1995	4 048	7 748	11 796	378	59 420	0,20	0,20	13 953	6 790	32 539
1996	7 217	9 092	16 309	1 406	62 357	0,26	0,26	11 986	6 317	34 612
1997	5 261	6 568	11 829	1 762	61 125	0,19	0,22	10 733	5 236	27 798
1998	5 964	4 423	10 387	2 975	58 144	0,18	0,23	2 106	4 684	17 177
1999	4 459	4 466	8 925	3 023	55 609	0,16	0,21	1 285	4 748	14 958
2000	5 576	4 234	9 810	4 466	57 231	0,17	0,25	0	4 670	14 480
2001	4 361	5 344	9 705	5 617	57 693	0,17	0,27	0	4 375	14 080
2002	7 065	2 386	9 451	5 772	54 496	0,17	0,28	0	4 896	14 347
2003	4 864	4 498	9 362	8 296	57 227	0,16	0,31	0	4 680	14 042

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2004	6 733	4 379	11 112	8 793	59 978	0,19	0,33	0	4 841	15 953
2005	3 772	3 841	7 613	7 567	56 789	0,13	0,27	0	4 169	11 782
2006	5 259	2 787	8 046	6 846	56 183	0,14	0,27	0	5 020	13 066
2007	3 738	3 262	7 000	6 342	57 099	0,12	0,23	0	4 077	11 077
2008	7 563	2 646	10 209	9 181	58 680	0,17	0,33	0	4 642	14 851
2009	3 433	3 263	6 696	7 271	58 616	0,11	0,24	0	4 120	10 816
2010	5 054	3 318	8 372	9 039	59 679	0,14	0,29	0	3 611	11 983
2011	7 380	4 317	11 697	12 797	67 580	0,17	0,36	0	4 421	16 118
2012	4 075	2 732	6 807	8 382	64 105	0,11	0,24	0	4 262	11 069
2013	2 965	3 464	6 429	9 802	64 159	0,10	0,25	0	3 374	9 803
2014	3 836	1 639	5 475	6 911	59 231	0,09	0,21	0	3 450	8 925
2015	7 146	1 971	9 117	12 651	65 392	0,14	0,33	0	3 586	12 703
2016	5 247	1 823	7 070	15 439	67 727	0,10	0,33	0	3 499	10 569
2017	3 705	1 886	5 591	13 364	69 295	0,08	0,27	0	3 506	9 097
2012 - 2016	4 654	2 326	6 980	10 637	64 123	0,11	0,27		3 634	10 614
<b>Variations</b>										
2016	-29%	3%	-21%	-13%	2%	-23%	-18%		0%	-14%
2012-2016	-20%	-19%	-20%	26%	8%	-26%	0%		-4%	-14%
Remarque: De 1998 à 2000, programmes de rachat des permis et fermeture de la pêche commerciale.										

# The evolution of the fishery (statistics by river)

Sommaire de l'exploitation sportive de 1984 à 2017 de la rivière Bonaventure

Optimal: 3,935

Zone salmonicole Q1

No. rivière: 01080000

Seuils de conservation (million d'oeufs)

Démographique: 1,344

Année	Captures sportives			Remise à l'eau	Jours- pêche	Succès (Cap./j-p.)	Succès ajusté	Taux (%) Exploitation			Retrait	Prélè- vement	Montaison			Reproducteurs			
	Mad.	Réd.	Total					Mad.	Réd.	Total			Mad.	Réd.	Total	Mad.	Réd.	Total	Oeufs déposés (million)
2004	897	401	1 298	584	5 842	0,22	0,32	58	27	43	0	1 298	1544	1465	3009	647	1064	1711	5,51
2005	335	524	859	526	5 784	0,15	0,24	64	35	43	0	859	522	1479	2001	187	955	1142	4,66
2006	452	228	680	467	5 556	0,12	0,21	48	22	35	0	680	949	1019	1968	497	791	1288	3,93
2007	208	158	366	244	4 352	0,08	0,14	49	18	28	0	366	421	894	1315	213	736	949	3,33
2008	848	0	848	809	4 873	0,17	0,34	60	0	39	1	849	1424	753	2177	576	752	1328	3,54
2009	328	0	328	816	5 082	0,06	0,23	59	0	17	0	328	552	1430	1982	224	1430	1654	6,54
2010	434	0	434	1129	6 135	0,07	0,25	59	0	17	7	441	737	1851	2588	301	1846	2147	8,44
2011	704	0	704	1188	6 151	0,11	0,31	68	0	31	6	710	1040	1259	2299	336	1253	1589	5,76
2012	297	0	297	843	6 561	0,05	0,17	63	0	20	0	297	475	1001	1476	178	1001	1179	4,58
2013	186	0	186	1064	6 399	0,03	0,20	55	0	12	0	186	336	1226	1562	150	1226	1376	5,60
2014	465	0	465	646	6 409	0,07	0,17	56	0	31	0	465	837	665	1502	372	665	1037	3,09
2015	525	0	525	1100	7 652	0,07	0,21	55	0	20	4	529	953	1694	2647	427	1691	2118	8,80
2016	219	0	219	825	7 051	0,03	0,15	37	0	17	0	219	599	716	1315	380	716	1096	3,76
2017	225	0	225	905	7 346	0,03	0,15	47	0	15	3	228	482	1067	1549	256	1065	1321	5,54
2012 -2016	338	0	338	896	6 814	0,05	0,18	53	0	20	1	339	640	1060	1700	301	1060	1361	5,17

**Remarque :** En 2010, le nombre de reproducteurs est une estimation basée sur le décompte de mi-saison. En 2007, l'inventaire des reproducteurs effectué dans le sanctuaire est inclus. En 1999, la montaison est une estimation basée sur les proportions moyennes (1994-1998) de montaison à la mi-saison. En 1998, la montaison est une estimation basée sur les variations dans les montaisons entre 1997 et 1998 pour l'ensemble des rivières de la Gaspésie, excluant les rivières Bonaventure et Cascapédia.

# Knowledge of the resource is key

**Quebec is equipped with the most efficient system in Canada to properly monitor the state of salmon populations.**

Return numbers are estimated on more than 40 rivers in Quebec

- 13 rivers are equipped with counting traps
- More than 30 rivers, which represent 80% of fishing days, are subject to annual and multi-year counts

Monitoring of smolt downstream migration on three control rivers

- St-Jean River in the Gaspé Peninsula (since 1984)
- Trinity River on the Côte-Nord (since 1984)
- Rivière du Fort on the Basse-Côte-Nord (since 2011)

Catch data monitoring

- Mandatory registration of caught fish, which ensures effective egg count on most rivers.



# 2017 Quebec Salmon Sport Fishing

Numbers	
Anglers :	16 038 (2 626 non-residents)
Total fishing days :	69 295
Total captures :	
Fish caught :	18 955
Fish killed :	5 591 (66% grilse)
Fish released :	13 364
Catch and released :	More than 70%
Average daily success :	0,27 salmon / day / angler
Total revenue :	60 M\$

**The 2017 catch statistics indicate a 6% decrease in the number of caught fish compared to the average of the last 5 years.**

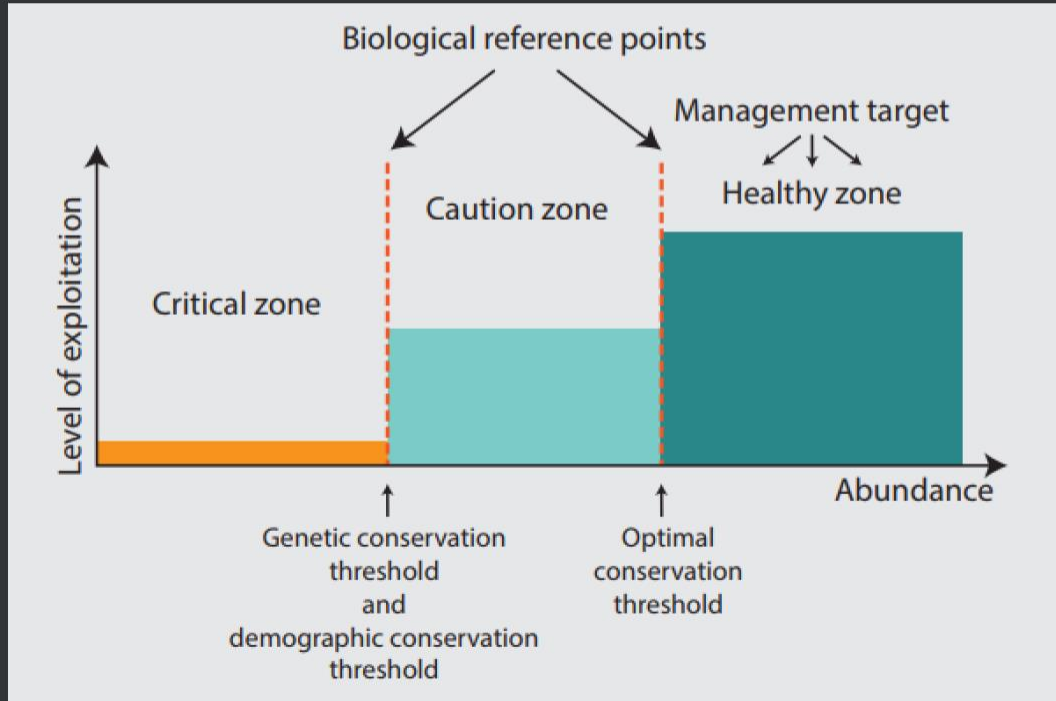


# A "truly" management plan (2016-2026)

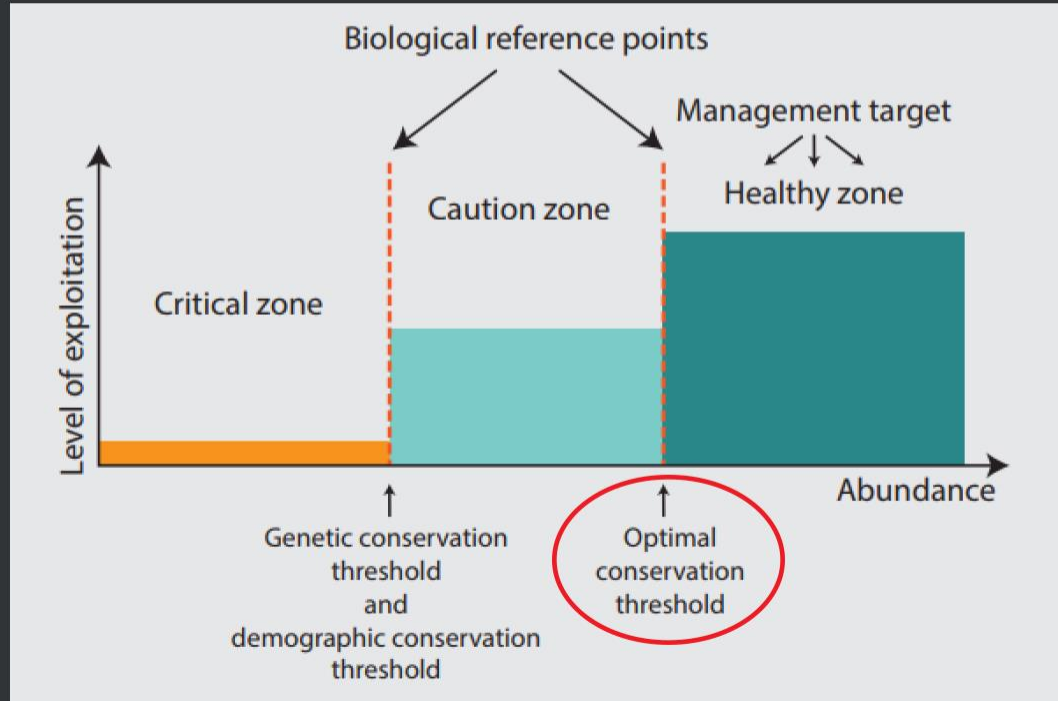
**The Atlantic Salmon Management Plan, introduced in 2016, has two objectives:**

- 1- Ensure the long-term conservation and persistence of Atlantic salmon populations;
- 2- Promote the optimal development and sustainable economic growth of the recreational Atlantic salmon fishery.

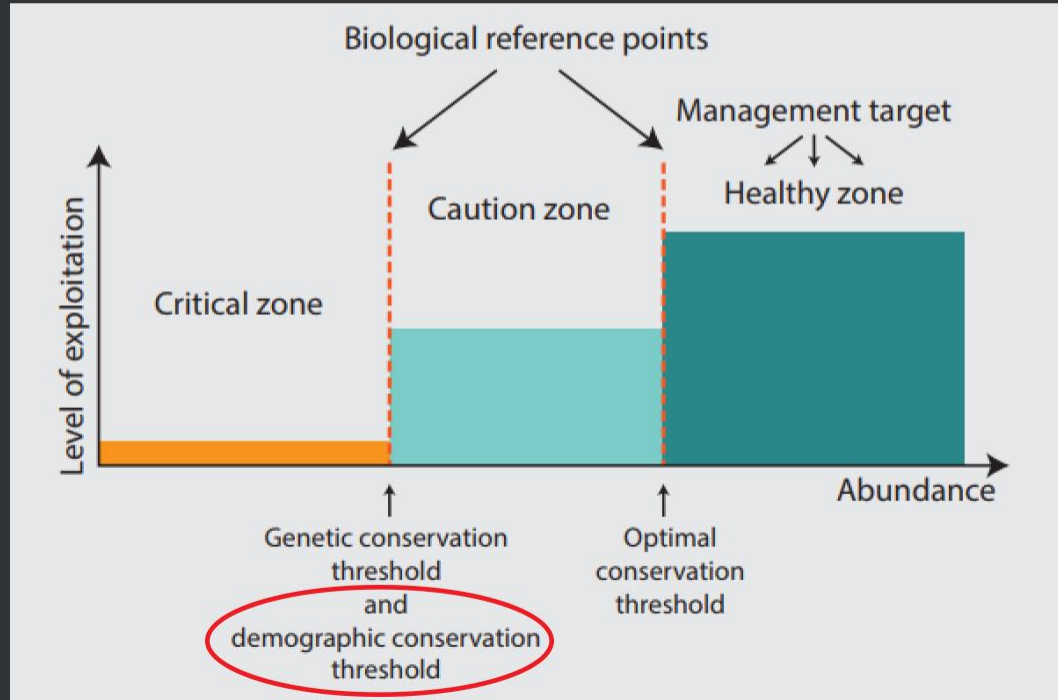
# Management categorization of salmon populations



# Optimal conservation threshold

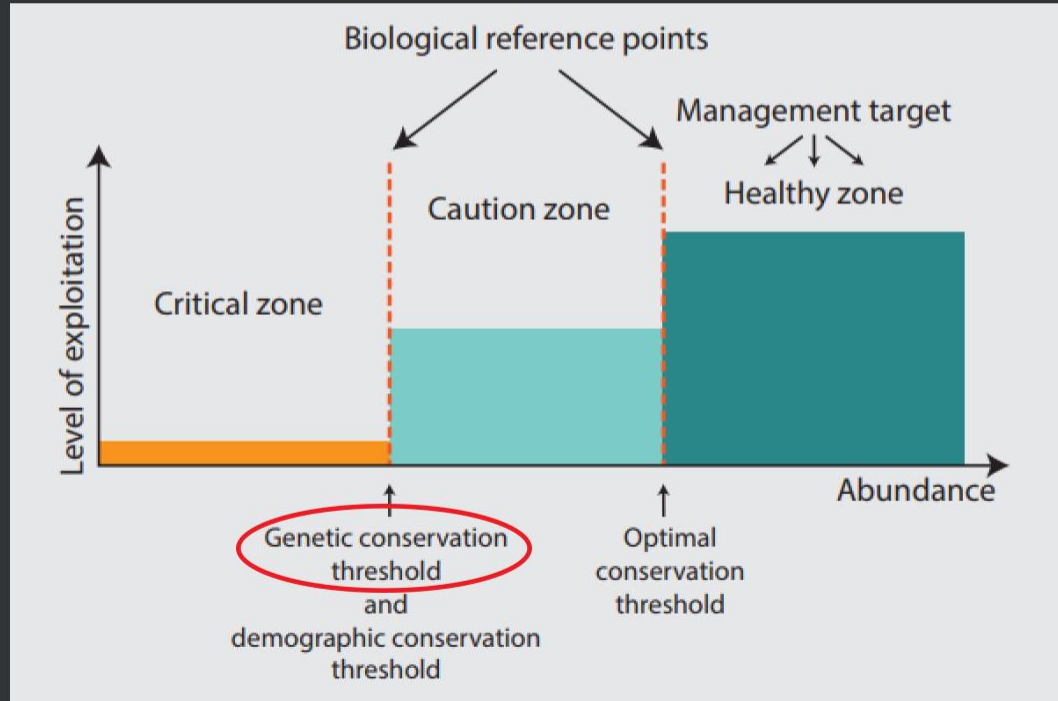


# Demographic conservation threshold

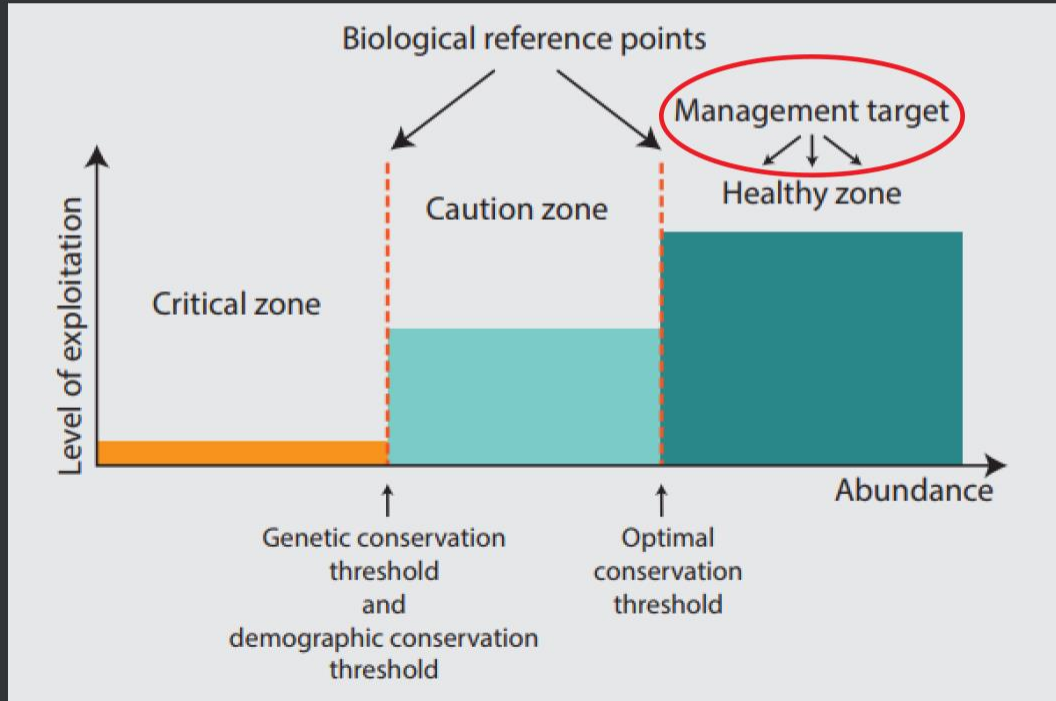




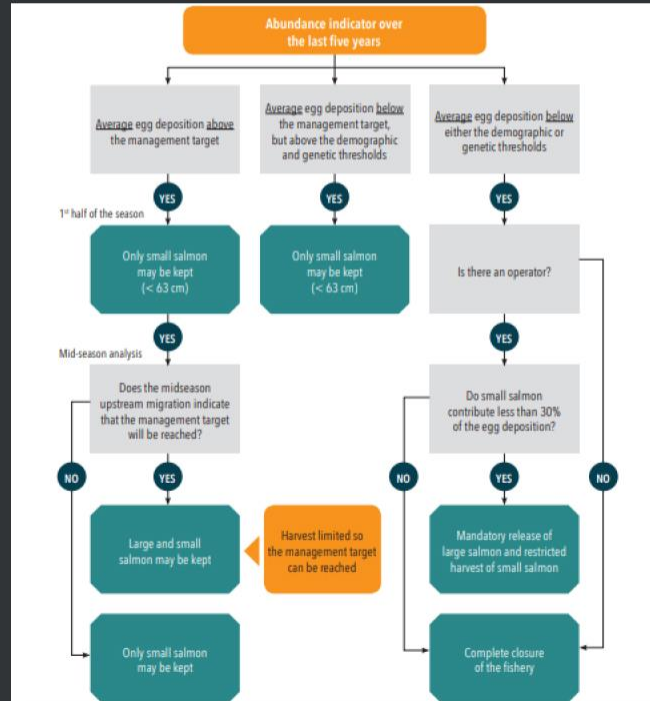
# Genetic conservation threshold



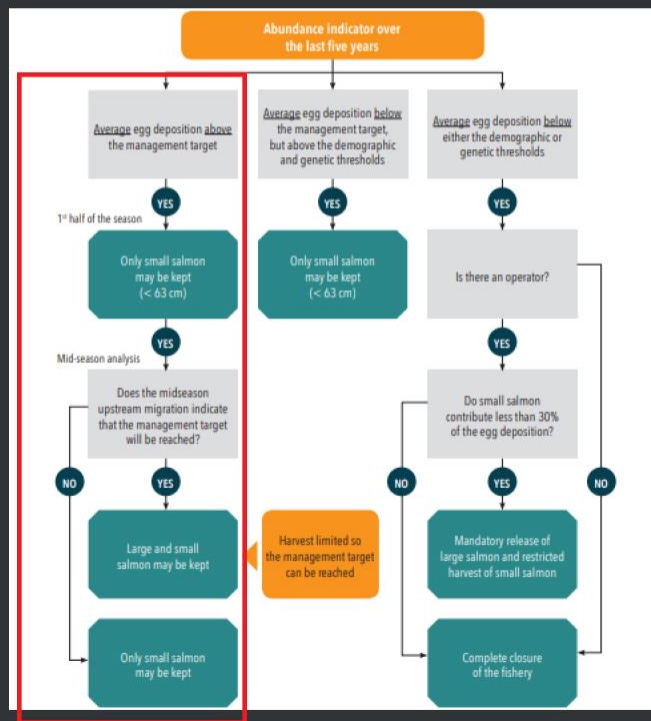
# Management target



# Fishing modalities based on population status

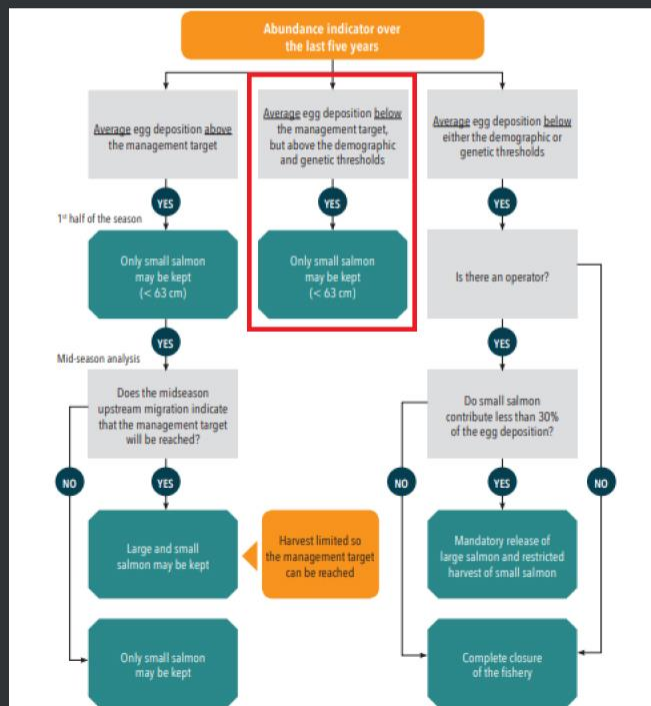


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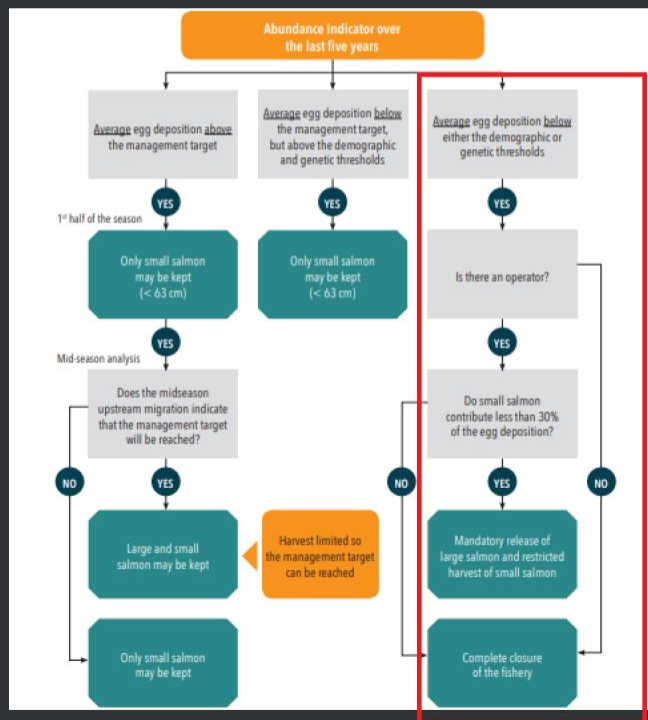




# Fishing modalities based on population status



# Fishing modalities based on population status



# General fishing modalities

Condition	Effective in 2015	Management Plan 2016–2026
Annual quota	7 (small or large)	4 (only 1 large) <sup>1</sup>
Short-term licence	Valid for 1 day	Valid for 3 days
Daily harvest quota	0, 1, 2 or 3 (depending on the river)	0, 1 or 2 (depending on the river)
Daily catch and release quota	None	3 <sup>2</sup>
Tagging of salmon by person who hooked it	Several rivers	All rivers
Harvest of large salmon caught outside salmon rivers	Authorized	Prohibited

1. Exception for the Nord-du-Québec region (limit of four salmon, large or small). This derogation is especially justified by the considerably limited effect of recreational fishing on these salmon populations.

2. Exception for the Nord-du-Québec region and the rivers east of the Natashquan River (no limit). This derogation is particularly justified by the favourable conditions for the survival of salmon after catch and release and by the very low impact of recreational fishing on these salmon populations.

**Summary of the changes made to the general fishing modalities set out in the Atlantic Salmon Management Plan 2016–2026**

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# Management plan and the future

## Essential monitoring for achieving results :

- Updating the habitat quality index;
- Updating the boundary of upstream migration for all rivers;
- Consolidate the salmon river temperature monitoring network;
- Developing a system for recording catches and releases.

# Management plan and initiatives

## Awareness Campaigns:

- Sound catch and release practices;
- The importance of reporting catches and releases;
- The effect of fishing during critical temperature episodes.

# The challenge

- Consolidate the upstream migration monitoring network;
- Refining the indirect abundance assessment methods;
- Updating and expanding the coverage of production unit estimates;
- Gathering further knowledge about the effect of fishing when the water temperature is very high.

# Partner organizations

## In Canada:

### **Fondation pour la conservation du saumon atlantique (FCSA)**

Gestionnaire d'un fonds de 30 millions de \$ canadi

All members of the Table Nationale de la Faune (nominated by government and adviser for his strategies):

### **Fédération pour le saumon atlantique (ASF)**

Leading science and advocacy organization dedicated to conserving and restoring wild Atlantic salmon;

Headquartered in New Brunswick, Canada, ASF oversees a network of seven state and provincial councils, and 103 affiliated groups.





# Partner organizations

## In Québec:

### Fondation de la Faune

A corporation committed to wildlife conservation.

All members of the Table Nationale de la Faune (nominated by government and adviser for his strategies):

- Quebec Outfitters Federation
- Zec Quebec
- Council Trappers of Quebec
- Fédération québécoise des chasseurs et pêcheurs
- Fédération québécoise pour le saumon atlantique (FQSA)



# Fédération québécoise pour le saumon atlantique (FQSA)

**Our divisions:**

Saumon Québec

Saumon Québec is our trademark for promoting fishing activities.



# Fédération québécoise pour le saumon atlantique (FQSA)

**Our divisions:**

## Fondation Saumon

- Protection
- Conservation
- Education
- Research



**Funding sources:**

**Major Donors - Cocktails - Interactive Auctions**



**Questions, comments?**

**Thank you and see you  
next summer !**

