

The Miramichi Watershed Management Committee (MWMC) is a federation of stakeholder organizations who share a common interest in ensuring the conservation and wise use of the recreational fisheries resource of the Miramichi Recreational Fisheries Area (MRFA).

MWMC was formed in 1995 and plays several important roles in the management of the recreational fishery within the MRFA. Among these, and perhaps most significant has been the assumption of responsibility for the salmon stocking program within the Miramichi watershed, including taking over ownership of the Miramichi Salmonid Enhancement Centre (now called Miramichi Salmon Conservation Centre) from the Department of Fisheries and Oceans (DFO). The MWMC has also performed a valuable advisory role relative to resource protection and regulating change, and has been a major participant in the delivery of the stock assessment and research program activities for salmon and striped bass.

#### Our Vision

The focus of the MWMC is the management of the recreational fisheries within the MRFA. The MRFA is defined within the Province of New Brunswick's Angling Regulations and License Information booklet as "all lakes, rivers and streams draining into Tabusintac Bay and all waters draining into Miramichi Bay north of Point Escuminac".

The principal species of concern to the MWMC are the Atlantic salmon, brook trout (sea run and resident forms) shad and striped bass. The scope of our interest will also include all the freshwater dependent species within the MRFA that could potentially affect the wellbeing of the four recreational fish species designated and the health of the ecosystem of which they are an important part.

Our interest extends to the management of the fisheries resource upon which the recreational fisheries are dependent because the fisheries cannot be managed independent of stock conservation and the factors that could affect it. Our involvement in the management program is expected to encompass both conservation and non-conservation issues. We are strongly committed to working with all parties to ensure the conservation of both the stocks and their habitat. We also are committed to the resolution of non-conservation issues like those involving fishing access, resource allocation and the competing uses of the river by anglers and others on or along the river.

Many of our members are directly involved in the recreational fishing industry and accordingly our organization is very familiar with the industry and its value to the local communities and the many anglers fishing in those communities. We contend that the value of the recreational fisheries is a strong motivator for anglers, governments and the general public to ensure the conservation of the fisheries resource upon which the angling fisheries are dependent. We further contend that the socioeconomic value of our recreational fisheries is a major influence on the political will and the public's conscience to ensure a healthy environment and our quality of life.

In August of 2003 the Governments of Canada and New Brunswick signed a Memorandum of Understanding with the MWMC to formally engage us as a partner in managing the recreational fisheries within the MRFA.

## MWMC - Atlantic Salmon Recovery

Category	Sub Category	Issue	Strategy	Recommendation	Lead & Partner
Freshwater	Management	Miramichi Watershed drains 12,000 sq km of northeastern NB. Largest producer of wild Atlantic salmon in Atlantic Canada and numbers are declining. *See Appendix A	Develop management plan to address downward spiral of populations to preserve wild Atlantic salmon into perpetuity	Collect best science available	DFO, MWMC, MSA, NSPA, First Nations
				Write and implement management plan to ensure our strategy of preserving wild Atlantic salmon into perpetuity	
	Wild salmon not reaching spawning escapement numbers	Harvest of wild salmon not be allowed until spawning escapement is achieved in river in question each year. Collect proper science to allow harvest of salmon stock after spawning escapement is reached in current year.	Measurement of fish numbers entering river from mid May until October 30th each year	First Nations, DFO, MSA, NSPA	
			Tags for allocation be issued only after spawning escapement is achieved for current year	DNR	
Regulations	Minimize mortality of returning adults	Upcoming management plan implementing River Classification where harvest is based on abundance	Use current data for year of harvest to determine what if any harvest numbers should be	First Nations, DFO, MSA, NSPA	
			Education to reduce "Catch and Release" mortality	Mandatory course on catch and release (watch ASF video online); complete online test and print verification of taking the course	DNR, NBSC affiliates
			Regulated time limit to play fish in a catch and release zone	DNR, NBSC affiliates	
			Pinched-barb hooks in rivers designated as catch and release only	DNR, NBSC affiliates	
			To have an allowable catch and release fishery on all waters where wild Atlantic salmon are present to encourage the presence of anglers to safeguard the resource.	Whereas it is a recognized fact that poachers do not stop poaching when numbers are below spawning escapement it is essential that a catch and release fishery be allowed so that honest anglers are present to observe and report illegal activity. See Appendix A - letter to Gulf Regional Director Morley Knight	DFO

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<b>Freshwater (continued)</b>	<b>Harvest</b>	First Nations have a right to harvest for food and ceremonial purposes after conservation targets have been met.	Harvest using trap nets to facilitate multi-sea winter populations being released .	Each First Nation with salmon allocation develop management plan to sustain their fishery on their river	First Nations with salmon agreements for allocations
			Grilse harvest only		
	<b>Habitat</b>	Water Quality and Quantity	Ensure no sedimentation is running into streams from erosion on logging roads in the watershed	All logging roads to be built using best practices to ensure no sedimentation	Fornebu, JDI, DNR, MWMC
			Decommission old logging roads not being used for fire protection	Reforest roads and ditches of non-required logging roads	Fornebu, JDI
			Maintain adequate buffer zones on all streams and rivers in the watershed	Revert to buffer zone widths in place prior to 2012	DNR; Third party assessment
			Ensure best practice management for all mining operations in Miramichi watershed	Third party assessments	DNR, DOE
			Minimize impact of human activity and development of aquatic habitat	Proper sewage treatment facilities as well as upgraded and standardized private systems	DOE
	<b>Enforcement</b>	Illegal activity contributing to number of wild Atlantic salmon being below spawning escapement	Increased protection	Education of public enhancing public knowledge, promoting personal stewardship and ownership of resource	MWMC, DFO, DNR, NBSC affiliates, First Nations
				More joint patrols between DFO and DNR protection officers	DFO, MWMC, MSA, NSPA, First Nations
			Increased protection (continued)	Enhancement of Designated Guardian Program for First Nations with salmon agreements who have salmon management plans in place	

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				Utilization of technology to a greater extent than currently used such as cameras - video surveillance, drones	DFO, DNR

<b>Freshwater (continued)</b>	<b>Population Enhancement</b>	Numbers of wild Atlantic salmon being too far below spawning escapement requirements	Increase numbers with supplementation programs utilizing best practices of minimizing time in captivity	Collection of wild smolt for rearing	DFO, MSA, MWMC, NSPA
				Grow-out of smolt to sexual reproduction stage	
				Stocking of offspring from captive smolt to their river of origin	
				Explore new grow-out methodologies in natural environment	
				Return grown-out smolts (grilse) to their river of origin to supplement adult numbers for natural spawning and do it all over again and again and again...	
	<b>Predation</b>	Overall risk of small mouth bass in Miramichi Lake to the health of the aquatic ecosystem in the Miramichi watershed	DFO recognize that the use of rotenone is the only obvious solution to eradicate this invasive species	DFO work closely with its provincial, federal and NGO counterparts to implement a rotenone-based eradication as soon as possible	

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Tidal	Predator / Prey Interactions	High mortality of smolt through estuaries and bay zones during migration to sea	Determine impact of striped bass predation on salmon smolt	Stomach content analysis (diet of bass)	DFO, MWMC, MSA, NSPA	
				Analyze tracking data of bass and smolt		
			Determine impact of striped bass on smelt	Stomach content analysis (diet of bass)		
		Maintain striped bass at sustainable populations not grossly in excess of numbers required for the species survivability as currently exists	Reduce numbers of striped bass in Gulf of St Lawrence population so that it does not grossly exceed its spawning escapement which is the current status	Any bass caught exceeding 55 cm should be allowed to be harvested, eliminating the 2013 slot size where many anglers found it difficult to catch a fish to keep	DFO, First Nation communities where striped bass were and are part of their traditional culture	
						Any bass caught in non-tidal waters be eligible for harvest since they are preying on fish in that area
						Bag limit per day be set at least at 4/day which in MWMC's opinion would reduce the population to a healthier level for the overall ecosystem
						A person can be in possession of a maximum of 12, which should allow the fishery to continue on a sustainable basis
						That pinched barbed hooks be mandatory thus allowing anglers to continue to angle and release fish without excessive damage
						The recreational season open April 15 <sup>th</sup> and close November 15 <sup>th</sup> of each year
						*See Appendix B - letter to DFO Alain Hebert
Commercial By-Catch Damage	Accidental mortality of salmon from being handled in gaspereau fishery	Reduce incidental mortality of salmon both in gaspereau nets and as a result of handling while being released from gaspereau nets due to scale loss	Redesign gaspereau trap nets so that salmon cannot enter them.	DFO, Commercial Fishers		
		Interception in Shad gill nets	Elimination of gill nets	Change to trap nets	DFO	

**MWMC - Atlantic Salmon Recovery**

Category	Sub Category	Issue	Strategy	Recommendation	Lead & Partner
		Interception of salmon in other interceptory gill nets	Elimination of gill nets	Change to trap nets	DFO

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Category	Sub Category	Issue	Strategy	Recommendation	Lead & Partner
<b>Marine</b>	<b>Populations</b>	Assessment of population of forage fish in ocean - is the forage fish in ocean being over harvested by man leaving inadequate populations for the food chain	Ensure adequate populations of forage fish for food chain. Technology has moved fishing in the ocean to a science. With radar devices entire schools of fish can be harvested. Base allocations on those forage fish in the ocean into harvest based on abundance	Conduct proper up to date assessment of forage fish	DFO
	<b>Predation</b>	Where and when is mortality of salmon occurring	Accumulate precise data on salmon migration routes	Continue and expand ocean tracking telemetry for both smolt and adult salmon	DFO, MSA, ASF
		Seal Predation	Harvest of grey seals in provincial gulfs, bays as well as Gulf of St Lawrence. This harvest should be based upon abundance	Support business / management plan of Eel Ground First nation to harvest Grey Seals putting environment in equilibrium. *See Appendix C	DFO, Eel Ground First Nation
	<b>Mixed Stock Fishery</b>	Interception of salmon destined for underpopulated rivers	Salmon migrating to their home rivers must not be intercepted outside their river of origin	Interception of Maritime salmon off the coast of Newfoundland by First Nations must be stopped and their fishery moved inland into the waters of their specific rivers	DFO, First Nations in Newfoundland
				Collaborate with Greenland and St Pierre Michelin to harvest based on abundance - If they overharvest salmon off their shores causing inadequate salmon to return to their rivers of origin to spawn they are killing their own fishery. If ocean does not supply adequate salmon to rivers of origin to spawn adequate numbers cannot return to Greenland.	NASCO, DFO, Greenland, ASF

### GLOSSARY

DFO	Department of Fisheries and Oceans
DNR	Department of Natural Resources
MWMC	Miramichi Watershed Management Committee
MSA	Miramichi Salmon Association
ASF	Atlantic Salmon Federation
NBSC	New Brunswick Salmon Council
NSPA	Northumberland Salmon Protection Association
NASCO	North Atlantic Salmon Conservation Organization