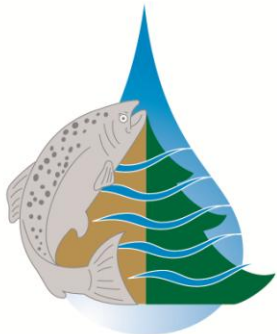
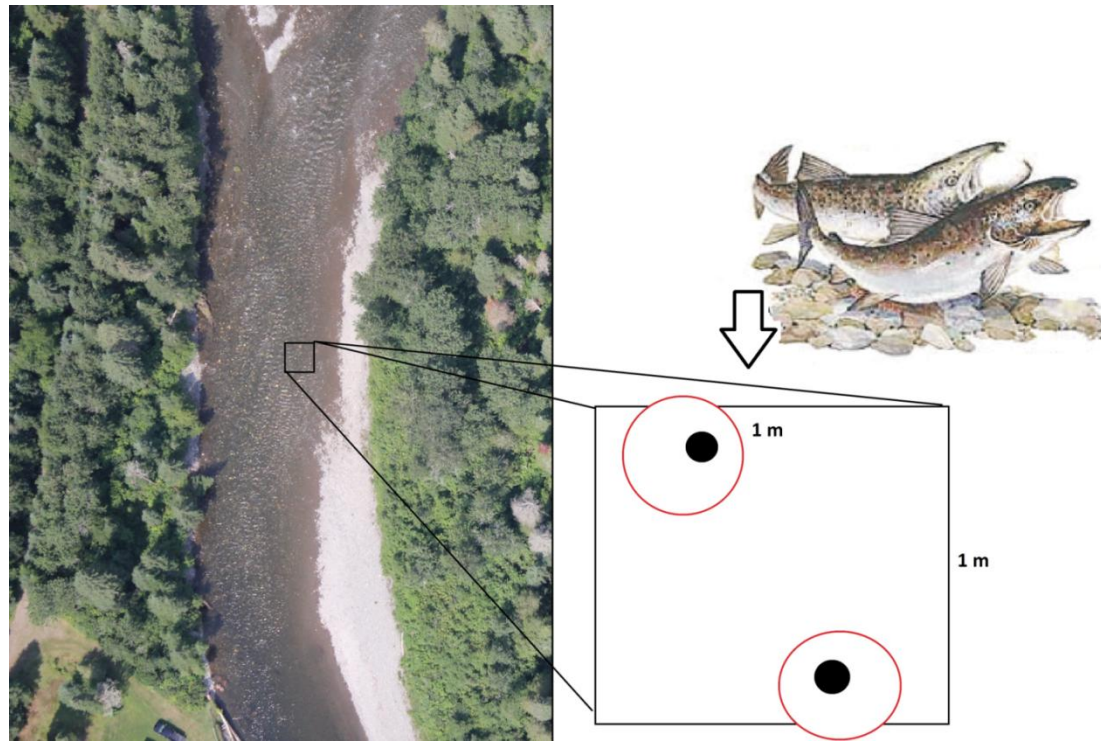


Restigouche habitat area update in the context of the precautionary approach



RRWMC
CGBVRR

RRWMC Science committee

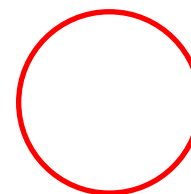
January 2018

River	Egg requirement (million)		Habitat characteristics		Population biological characteristics				LRP egg rate proposed	MSW requirement	
			Fluvial area (million sq m)		Prop. of MSW in run	Proportion of female in MSW	Nbr eggs/female	Prop of eggs from MSW		Before	Proposed
Restigouche (excl. Matapedia)	Before	Proposed	Before	Proposed	0,61	0,63	8978	0,993	1,52	6404	7091

Note 1: Increase of habitat size vs previous model comes from the use of 9,13 M sq m of wetted habitat compared to 4,36 M sq m used as Unit of Production on Main Restigouche river boundary waters (Tide Head to Patapedia) in the previous model

Note 2: Could increase due to unavailable information for some tributaries. Review of habitat area should be available in 2018 (project proposed to Wildlife Trust Fund to calculate actual juvenile habitat areas not included in the DFO calculation)

Note 3: Previous rate used was 1,68 eggs/sq m



Kedgwick River NB

	Area (m ²)	Juvenile Salmon Present	Locations surveyed; distance from mouth; source of data
Kedgwick River system	3,097,285		
Kedgwick main stem	2,005,281	Yes	DFO data
Falls Brook	285,333	Yes	rare at 2 sites (Peppar and Pickard 1979) found 9 km above mouth (Pickard 1997)
Clearwater Brook	→ NA	Yes	North Branch 3.5 km from forks, South Branch 0.5 km from forks (Pickard et al. 1983)
MacDougall Brook	→ NA	Yes	10.5 km from mouth (Pickard et al. 1983)
Fogs Brook	NA	?	no sampling (Pickard et al. 1983)
States Brook	→ NA	Yes	No fish at 3 sites (Pickard et al. 1983), fish at 1 site 8.5 km from mouth (Pickard 1997)
South Branch (main)	575,765	Yes	DFO data
Hornes gulch	NA	?	no sampling (Pickard et al. 1983)
Union Brook	NA	No	2 sites (Pickard et al. 1983, Pickard 1997)
East Branch Union	NA	No	Pickard et al. 1983
Portage Brook	→ NA	Yes	0.5 km from outlet (Pickard et al. 1983)
Indian Brook	NA	?	Pickard et al. 1983
North Branch (to NB-PQ border)	230,906	Yes	DFO data
Belle Kedgwick	→ NA	Yes	2.5 km from mouth (Peppar and Pickard 1979; Pickard et al. 1983; Pickard and Peppar 1984)

→ Tributaries requiring an update








Little Main Restigouche River

	Area (m ²)	Juvenile Salmon Present	Locations surveyed; distance from mouth; source of data
Little Main Restigouche System	3,313,318		
Little Main Restigouche (main stem)	1,739,474	Yes	DFO data; JDI data
Five Fingers Brook	364,894	Yes	(Peppar and Pickard 1979; Pickard and Peppar 1984)
Little Five Finger Brook	→ NA	Yes	5.0 km from Five Finger Brook (Pickard et al. 1983)
Jardine Brook	513,623	Yes	(Peppar and Pickard 1979; Pickard and Peppar 1984)
East Jardine Brook	NA	No	12.0 km from Jardine (Pickard et al. 1983)
Right Hand Branch Jardine Brook	NA	No	7.0 km from Jardine (Pickard et al. 1983)
Boston Brook	→ NA	Yes	8.0 km from mouth (Pickard et al. 1983)
Gounamitz River	637,652	Yes	DFO data; JDI data
Bells Brook	→ NA	Yes	Yes at 3.5 km from mouth (Pickard 1997); No salmon at 6.5 km from mouth (Pickard et al. 1983)
Big Brook	NA	No	1.5 km from mouth (Pickard 1997); 3.0 km from mouth (Pickard et al. 1983)
Cyr Brook	→ NA	Yes	2.0 km from mouth (Pickard et al. 1983)
North Branch	31,941	Yes	(Peppar and Pickard 1979; Pickard and Peppar 1984)
West Branch	25,735	No	4.5 km from forks (Pickard et al. 1983; Pickard 1997)
Rocky Brook	NA	No	5.0 km from mouth (Pickard et al. 1983)
Hunter Brook	NA	No	7.5 km from mouth (Pickard et al. 1983)
Cedar Brook	→ NA	Yes	JDI data
Wagansis Brook	NA	?	not fish sampled (Pickard et al. 1983)



Tributaries requiring an update





Upsalquitch River

	Area (m ²)	Juvenile Salmon Present	Locations surveyed; distance from mouth; source of data
Upsalquitch River System	5,314,168		
Upsalquitch River (main stem)	2,381,025	Yes	DFO data
Grog Brook	 NA	Yes	21.0 km from mouth (Pickard 1997)
Berry Brook	NA	No	3.5 and 11.5 km from mouth (Pickard et al. 1983)
Popelogan River	 NA	Yes	8.0 km from mouth (Pickard et al. 1983)
McDougalls Brook	NA	No	2.0 km from mouth (Pickard et al. 1983)
Savage Brook	 NA	Yes	DFO data
Northwest Upsalquitch River	1,800,529	Yes	DFO data
Oxford Brook	 NA	Yes	in East Branch of Oxford Brook (Pickard et al. 1983)
Ruisseau Savage (Indian Brook)	NA	No	3.5 km from mouth (Pickard et al. 1983)
McLeod Brook	NA	?	above beaver dam (Pickard et al. 1983)
Chisholm Brook	NA	?	not fish sampled (Pickard et al. 1983)
Southeast Upsalquitch River	851,517	Yes	DFO data
Little Popelogan	 NA	Yes	DFO data; 1.0 and 5.0 km above mouth (Pickard et al. 1983)
Jerry Ferguson	 NA	Yes	Yes at 8.0 and 15.5 km, No at 20.5 km (Pickard et al. 1983; Pickard 1997)
Little Southeast Upsalquitch	281,096	Yes	including Red Brook (Pickard et al. 1983; Pickard 1997)
Murray Brook	NA	No	8.0 km from mouth (Pickard et al. 1983)
Ramsay Brook	 NA	Yes	No in Pickard et al. 1983; Yes in Pickard 1997

 Tributaries requiring an update

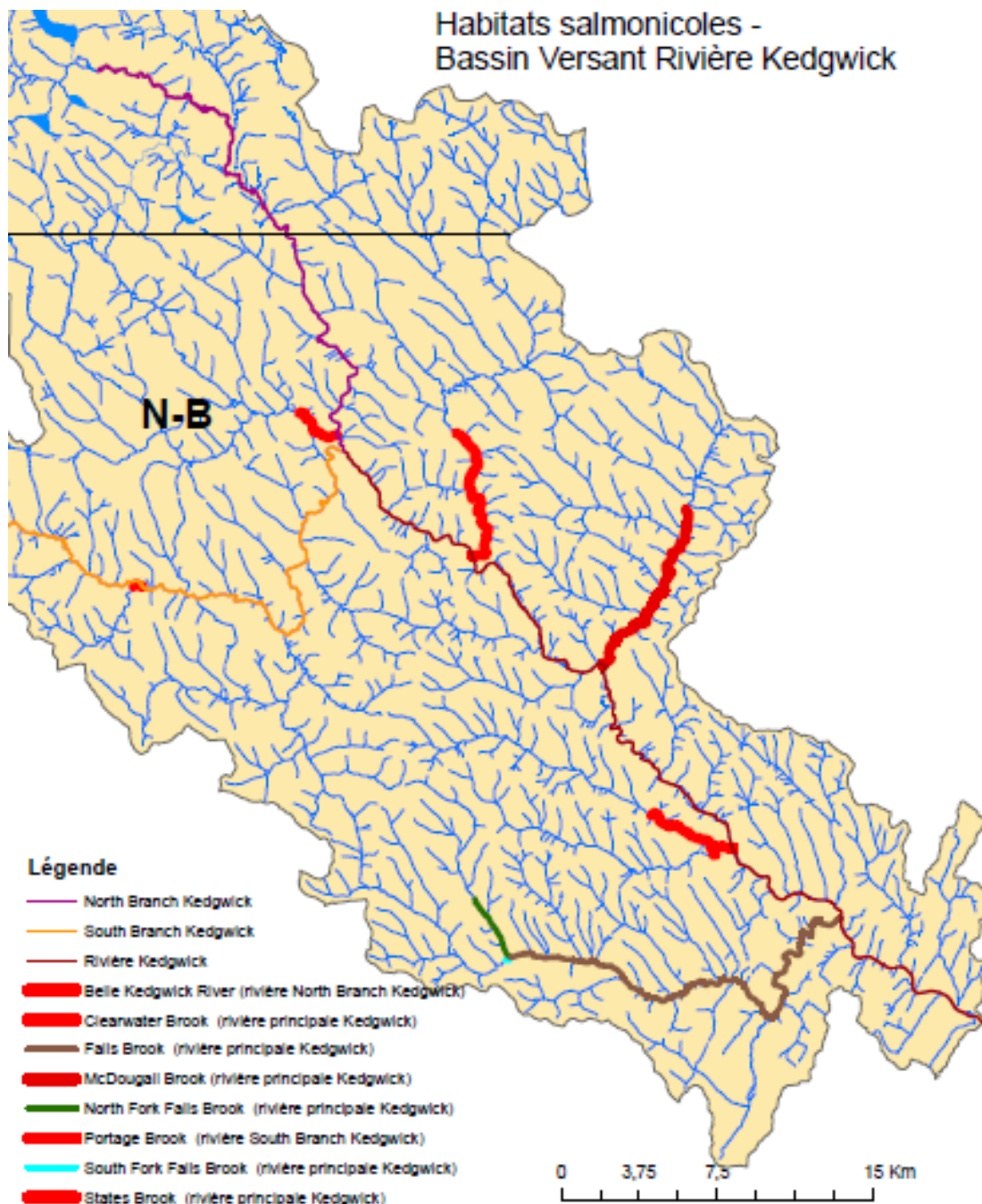
Main stem Restigouche River

Habitat – Restigouche (main stem, tronçon principal)

		Area (m ²)	Juvenile Salmon Present	Locations surveyed; distance from mouth; source of data
Restigouche River main stem		11,839,791		
Head of tide to Patapedia		8,806,830	Yes	DFO data
Christopher Kempt		NA	Yes	DFO data in main stem, at forks of two upper branches (Peppar and Pickard 1979; Pickard and Peppar 1984; Pickard et al. 1983; Pickard 1997)
Basket		114,810		
Chain of Rocks		73,185	Yes	
Ferguson		24,585	Yes	DFO data
Cheuters Brook		107,115	Yes	8.5 km from the mouth. (Pickard et al. 1983)
Patapedia to Junction Pool		3,032,961		
Whites Brook		241,872	Yes	DFO data; 29 km, narrow, not sampled (Pickard et al. 1983)
Stillwater Brook		NA	No	7.0 km from mouth. (Pickard et al. 1983)
Tracy Brook		130,310	Yes	4.0 km from mouth (Pickard 1997)
South Branch		127,849	Yes	Peppar and Pickard 1979
North Branch		111,394	No	10.5 km from forks (Pickard et al. 1983)
Beaver Brook		NA	Yes	1.5 km from fork with Tracy Brook (Pickard 1997)
Hailes Brook		NA	Yes	3 sites from mouth to 10 km (Pickard and Peppar 1984)

 Tributaries requiring an update

Habitats salmonicoles - Bassin Versant Rivière Kedgwick

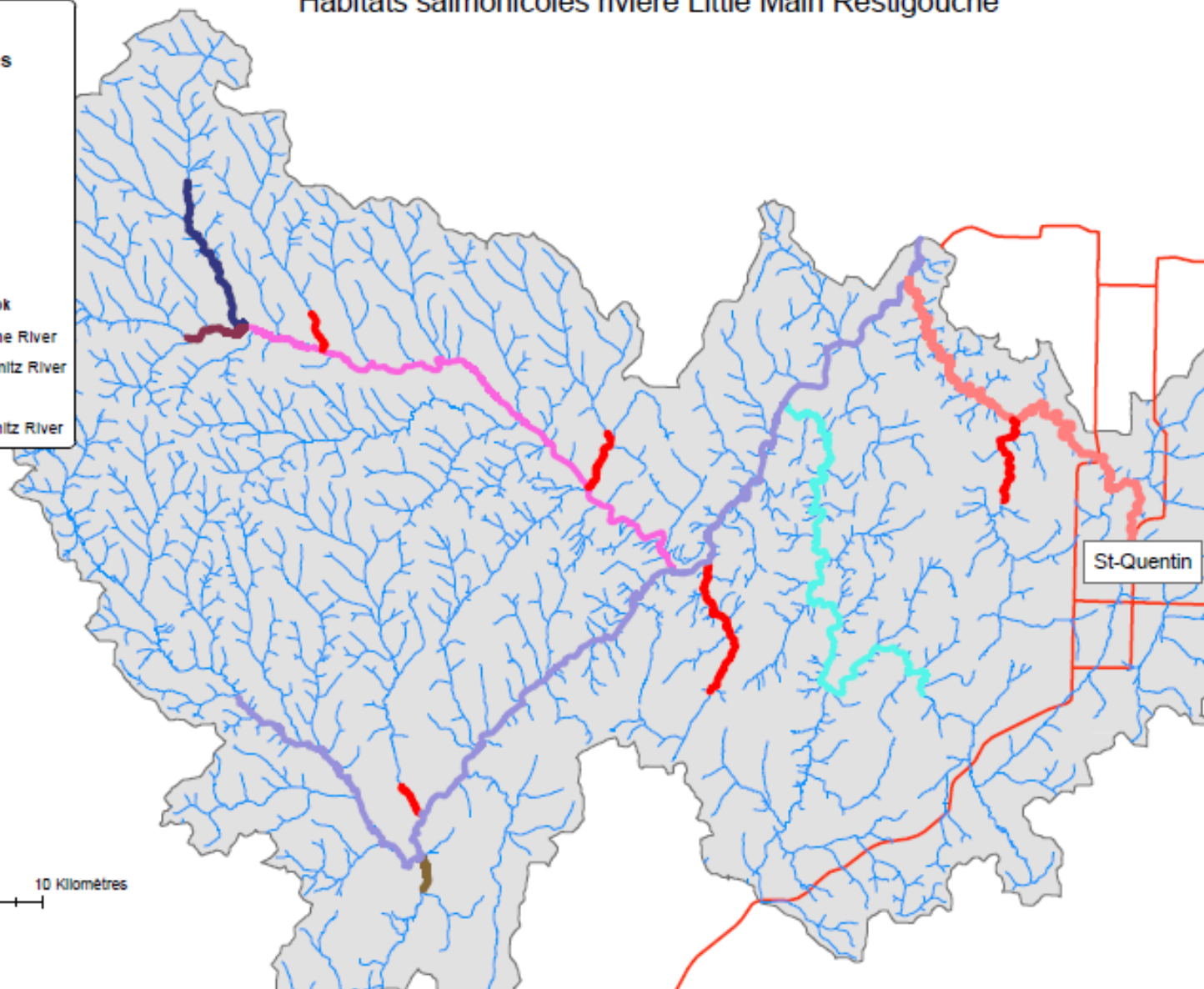


Habitats salmonicoles rivière Little Main Restigouche

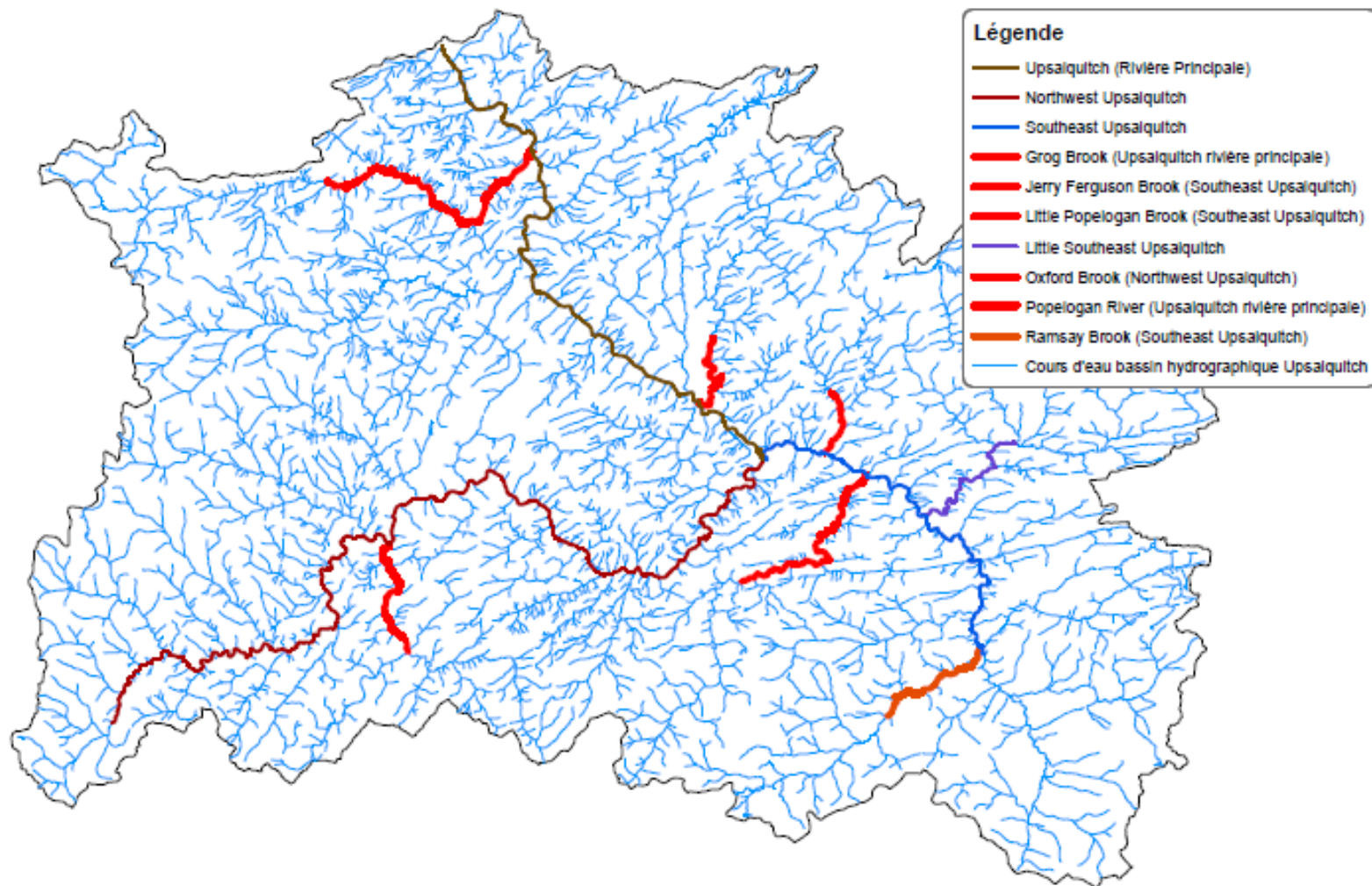
Légende

Habitats salmonicoles

- Bells Brook
- Boston Brook
- Cedar Brook
- Cyr Brook
- Five Finger Brook
- Gounamitz River
- Jardine Brook
- Little Five Finger Brook
- Little Main Restigouche River
- North Branch Gounamitz River
- Wagansis Brook
- West Branch Gounamitz River



Habitats salmonicoles rivière Upsalquitch



0 3,75 7,5 15 Kilomètres

Methodology of the WTF proposal



- Review of DFO/RRWMC electrofishing data to confirm juvenile presence;
- Review of 2008 field habitat inventory;
- Confirmation of DFO on watercourses sections to add;
- Possible electrofishing survey required to validate some information;
- Use of GIS software to calculate habitat area for each of the identified watercourse;
- Proposal to DFO for the new habitat areas per tributaries.

