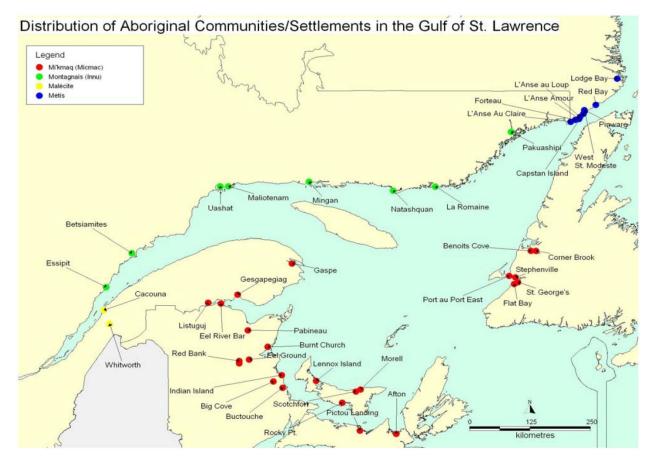
5.8.2 Other Users (Attachment B)

Commercial fishing has long been a major focus of economic activity for the western Newfoundland and it remains the most important economic base for many of the small communities. The number of active fishers in the region has remained relatively stable from 2000 to 2007 at approximately 1,100 for Fishing Area 13 (DFO 2011a). These 1,100 fishers work with the 316 enterprises for core, non-core and recreational fish harvesters in the western Newfoundland region (based on 2006 licence numbers).

5.8.2.1 Aboriginal Fisheries Newfoundland

In 1999, the Supreme Court of Canada handed down its decision in the Marshall case, which essentially agreed that the Treaties signed in 1760 and 1761 by Mi'kmaq and Maliseet communities include a communal right to hunt, fish and gather natural resources in pursuit of a 'moderate livelihood' (DFO 2011b; Gaudet and Leger 2011). In response, DFO began to negotiate interim fishing agreements in order to provide First Nations communities with the opportunity to enter commercial fisheries (though some communities already held Communal Commercial Fishing Licenses at this time). The number of licenses held by First Nations is divided into Communal Fishing Licenses that grant permission to fish for food and social and ceremonial purposes, and Communal Commercial Fishing Licenses that allow fishers from First Nations to sell their catch. The distribution of Aboriginal communities in the Gulf is illustrated in Figure 5.89.



Source: Alexander et al. 2010

Figure 5.89. Location of Aboriginal Communities with the Gulf of St. Lawrence Region

The Allocation Transfer Program is a process for voluntary retirement of commercial fisheries licence holders and the re-issuance of such licences to appropriate aboriginal groups. The program is therefore designed to provide aboriginal groups with employment and income while not placing additional burdens on existing resources (DFO 2011b).

The main species harvested in aboriginal fisheries in the Gulf are snow crab, lobster, rock crab, alewife / gaspereau, mackerel, shrimp and smelt. In 2007, \$22 million in revenue was generated through the Communal Commercial Fishing License program in the Gulf Region, and \$15 million was generated in the Quebec-Maritime Region (DFO 2011b). Snow crab and lobster are the most valuable species (Gaudet and Leger 2011).

The Federation of Newfoundland Indians (FNI) is sole owner of a company named Mi'kmaq Commercial Fisheries Inc. In NAFO Division 4R, FNI owns five core enterprises with vessels under 39'11". All five possess a groundfish licence, with four having a lobster licence, and three possessing a crab quota. There are pelagic fixed gear licences associated with three of the enterprises as well. One of the enterprises that the FNI possesses holds a groundfish licence that is currently being used by an Aboriginal person (DFO 2011a)

The Aboriginal Aquatic Resource and Oceans Management program provides funding to qualifying Aboriginal groups to establish aquatic resource and oceans management bodies. For eligible groups, funding was available to obtain access to commercial fishery opportunities (including vessels and gear) and to build the capacity of groups to take advantage of aquaculture opportunities. One such body has been set up for Western Newfoundland, whereby the FNI and Conne River Band have formed the Mi'kmaq Alsumk Mowimsikik Koqoey Association (MAMKA). MAMKA holds four enterprises with vessels less than 39'11". All four of these enterprises hold a lobster licence, with two of them holding a groundfish and snow crab quota. There are also pelagic fixed gear licences associated with three of the enterprises (DFO 2011a).

5.8.2.2 Recreational Fisheries

Statistics from the Maritime, Gulf and Newfoundland and Labrador regions suggest that recreational fishing has declined in recent years, though the value to the provinces has increased. From 2000 to 2006, the Maritime Provinces experienced a decline (23 percent) in the total number of days anglers spent fishing; however, the total expenditures per day associated with angling increased by 22.9 percent on average (Gaudet and Leger 2011). Pinfold (2009) reported on the estimated participation of anglers and revenue in the Maritime Provinces and Quebec (Table 5.25). The most commonly fished species include Atlantic salmon in some areas (Miramichi River), striped bass, chain pickerel, gaspereau, yellow perch, Atlantic sturgeon, trout species, shad species, smelt, eel and white perch. There are specific federal and provincial regulations governing recreational fishing including licensing, catch limits, gear restrictions, size limits, fishing season and area closures.

Table 5.25 Estimated Number of Saltwater Recreational Fishing Days for All Anglers (resident and visitors), Estimated Expenditure per Day and Total Expenditure per Year (2005)

Province	Number of Participation Days	Expenditures per day (\$)	Total Expenditures (\$000)	
Quebec	197,444	120	54,271	
Nova Scotia	198,802	98	19,273	
New Brunswick	40,838	114	7,013	
Prince Edward Island	61,515	52	2,137	
Source: Adapted from Pinfold 2009				

In Newfoundland and Labrador, recreational fishing may take place in coastal and inland waters. Coastal water fishing for Atlantic salmon is on a catch-and-release basis and may be done year-round and without a licence. Salmon Fishing Areas (SFAs) of the western Newfoundland region are SFA 13 (Cape Ray-Cape St. Gregory) and SFA 14A (Cape St. Gregory-Cape Bauld). A multi-year Atlantic Salmon Management Plan (2007 to 2011) that was developed with the collaboration of user groups and stakeholders contains elements of adaptive management strategies and river classification (DFO 2007a).

Of the 186 scheduled salmon rivers in Newfoundland and Labrador, 43 occur in the western Newfoundland and southern Labrador region. These rivers offer a great variety of angling opportunities in pristine settings. The Great Northern Peninsula coastal area tops the list with 22 scheduled salmon rivers, while the Bay St. George / Port au Port coastal area is second with 14 scheduled rivers. The salmon river catch data for 2007 are presented by coastal area in Table 5.26.

Table 5.26 Salmon River Catch Data for Western Newfoundland Coastal Areas, 2007

River	Effort (Rod Days)	Catch	Catch per Unit Area	
Bay St. George / Port au Port			•	
Bear Cove River	10	0	0.00	
Little Codroy River	151	31	0.21	
Great Codroy River	3,751	1,087	0.29	
Highlands River*	136	24	0.18	
Crabbe's Brook*	979	270	0.28	
Middle Barachois Brook*	135	44	0.33	
Robinsons River*	1,464	677	0.46	
Fischell's River*	610	269	0.44	
Flat Bay Brook*	1,927	662	0.34	
Little Barachois Brook*	302	99	0.33	
Southwest and Bottom Brooks*	2,448	734	0.30	
Harry's River*	2,792	730	0.26	
Fox Island River	109	39	0.36	
Serpentine River	849	315	0.37	
Bay of Islands				
Cook's Brook	Closed to angling	Closed to angling		
Humber River*	13,102	4,362	0.33	
Hughes Brook	36	3	0.08	
Goose Arm Brook	47	6	0.13	
Southern Labrador				
Forteau River	177	18	0.10	
L'Anse au Loup River	No Data Available			
Pinware River	1,688	971	0.58	
Source: DFO 2010				
* Rivers with watershed management plans in place.				

Atlantic salmon catch data for SFA 13 and SFA 14A for 1996 to 2007 are summarized in Figure 5.90. These data show a decline in catches for in the western Newfoundland.

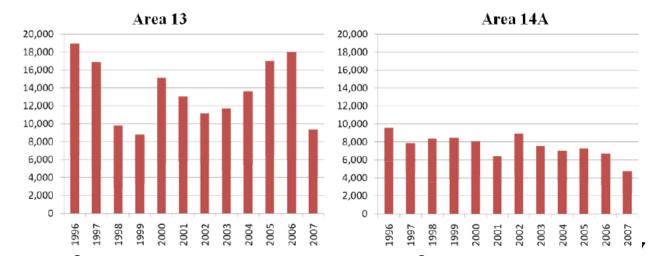


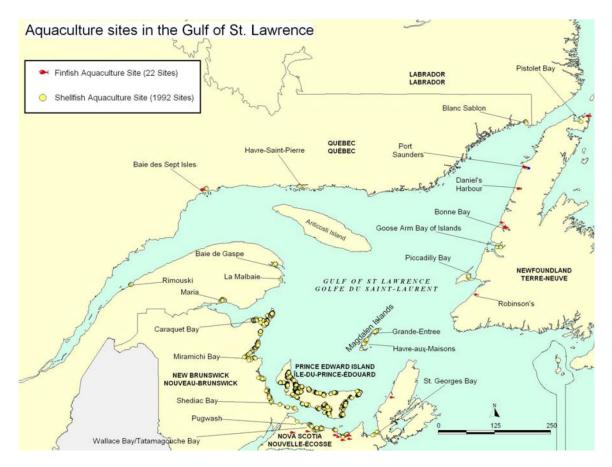
Figure 5.90 Atlantic Salmon Catch Data for Salmon Fishing Areas 13 and 14A, 1996 to 2007

5.8.2.3 Aquaculture

Marine aquaculture remains as an important industry throughout the Gulf, particularly as the number of commercial fisheries has declined. Aquaculture has experienced rapid growth in eastern Canada over the last two decades in response to a growing demand for seafood, declining wild stock fisheries and technological improvements in fish farming practices. Approximately 1,741 (2010) active aguaculture sites exist within the Gulf (Table 5.27), with the large majority concentrated in PEI and the Gulf coast of New Brunswick (Figure 5.91). In New Brunswick, most of these sites are located between Caraquet Bay and Miramichi Bay, and in Nova Scotia most of the sites occur along the north shore from Pugwash to St. Georges (Alexander et al. 2010). Shellfish account for 99 percent of aquaculture in the Gulf, with oyster and blue mussel being the most important species, though finfish are typically more valuable (Alexander et al. 2010). The majority of finfish (Atlantic salmon / rainbow trout) operations in the Gulf are land-based (hatcheries / fish-out ponds) and concentrated along the north shore of Nova Scotia, with a few seasonal marine grow-out sites distributed along western Newfoundland (Atlantic cod) and near Baie des Sept Îles (flounder and herring) on the Quebec North Shore. Other species of growing importance include quahaug, clams, scallop and sea urchin. The total value of aquaculture in the Gulf in 2001 was \$292 million, over half of which is Atlantic salmon (\$199 million) and the remainder is trout (\$41.2 million), blue mussel (\$30.5 million), oysters (\$9.5 million) and 'other' (\$11.4 million) (quahaug, scallop, clam, sea urchin, Arctic char, Atlantic cod, haddock) (Alexander et al. 2010; Gaudet and Leger 2011).

Table 5.27 Active Shellfish and Finfish Aquaculture Sites in the Gulf of St. Lawrence

Province	Shellfish	Finfish	Total Sites	
Gulf New Brunswick	520	0	520	
Gulf Nova Scotia	65	11	76	
Prince Edward Island	1,095	0	1,095	
Gulf Quebec	49	1	50	
TOTAL	1,677	10	1,741	
Source: Gaudet and Leger 2011, Alexander et al. 2010				



Source: Alexander et al. 2010

Figure 5.91 Distribution of Aquaculture Sites in the Gulf of St. Lawrence (2003)

The main species targeted for aquaculture production in Newfoundland and Labrador are Atlantic salmon, steelhead, Atlantic cod and blue mussels. On the whole, western Newfoundland, with its shorelines exposed to heavy winds and long ice-bound seasons, is not as suitable for aquaculture as other areas of the Province, particularly the South Coast. This is particularly true for Atlantic salmon, which do not grow well in temperatures below 4°C.

Seven companies were registered for aquaculture production within the region in 2008. Only one, Cold Ocean Salmon Inc. in Daniel's Harbour, is engaged in hatchery operations for Atlantic salmon; most others are involved in shellfish production. There is one eel hatchery in Robinsons and a cod grow-out facility in Keppel Harbour. Cod grow-out operations involve post-spawn cod, which are trapped, held in established farm sites, and cared for until they are ready for harvest.

There remain several conflicts and concerns associated with aquaculture in Canada, including: escapement of farmed stock and potentially invasive species; spreading of disease and parasites to wild fish stocks; eutrophication near sites; the use of chemicals and antibiotics; and benthic smothering. The industry is regulated by both federal and provincial legislation. A lease or license is required to operate any aquaculture facility. Aquaculture industry is expected to continue to grow and be a major economic contributor to local communities in Gulf, particularly as demand for seafood increases, and farming of new species (sea cucumber, sea urchin, seaweed) develops (Alexander et al. 2010).

5.8.2.4 Seal Hunting

The commercial seal hunt in Atlantic Canada dates back over 200 years. The industry grew throughout the 20th century, largely to meet the demand for fur (Alexander et al. 2010). Today the number of sealers is greatly reduced, but the hunt remains a valuable economic and cultural practice in the Gulf and Newfoundland and Labrador regions (Table 5.28). In the Gulf, two species are harvested: harp seal and grey seal. The commercial hunt occurs annually from November 15 to June 14, with the majority of sealing occurring between March and May in the Gulf, though sealing does occur along the Quebec North Shore in January and February. The estimated landed value (based on average prices paid to sealers) of harp seals (Atlantic Canada) in 2001 was \$5.5 million; however, the value increased to \$21 million in 2002 due to extremely favourable market conditions. In recent years, personal use sealing licenses have been issued to residents adjacent to sealing areas in Newfoundland and Labrador (south of 53°N latitude), the Quebec North Shore, the Gaspé Peninsula and the Îles-de-la-Madeleine (Alexander et al. 2010, Gaudet and Leger 2011).

Table 5.28 Number of Seal Hunting Licenses issued in 2007 for the Gulf Region

Province	Professional License	Assistant License		
Gulf New Brunswick	2	5		
Gulf Nova Scotia	21	21		
Prince Edward Island	23	15		
TOTAL	46	41		
Source: Licensing Unit, DFO Gulf Region (Moncton)				

Seal hunting has represented an important source of income to residents of the western Newfoundland and southern Labrador region during a time of year when employment opportunities are extremely limited. The majority of seals taken in Newfoundland and Labrador waters are either harp or hooded seals, although ringed and bearded seals are also landed, as are harbor seals and grey seals in small numbers. Approximately 70 percent of the commercial hunt occurs on the Front (in the northwest Atlantic off the northeast coast of Newfoundland while approximately 30 percent occurs in the Gulf. The majority of sealing occurs from late March through April and may extend into May. In addition to the commercial seal hunt, residents are allowed to take up to six seals for personal consumption.

The number of seals harvested annually varies greatly from year to year. A combination of factors contributed to the relatively low turnout in 2010, most notably the poor ice conditions, which made access to seal patches extremely difficult in certain areas, especially in the Gulf. Changes in market prices, demand for fur, the Canadian dollar and trade with the European Union greatly influence the number and value of the seals hunted each year.

5.8.2.5 Other Regional Activities

The hunted bird species and open seasons in the Western Newfoundland Migratory Game Bird Coastal Zones are posted in the provincial Hunting and Trapping Guide, published annually by the Newfoundland and Labrador Department of Environment and Conservation . The main groups of birds hunted in coastal zones are the seaducks (eiders, scoters and Long-tailed Ducks), Common and Thickbilled Murres, mergansers, geese and snipe. There is no open season for Harlequin Ducks.

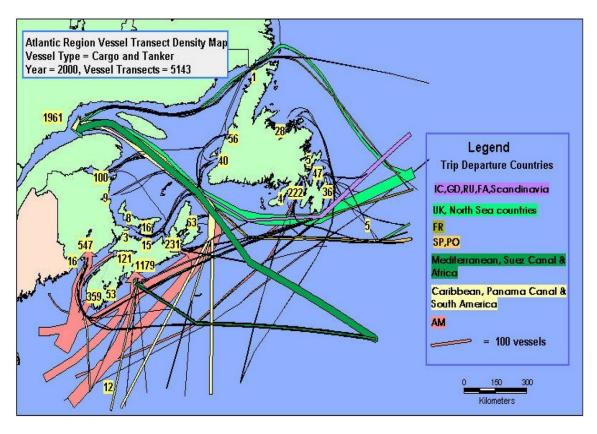
Common and Thick-billed Murres (referred by residents as "turrs") are seabirds that have been hunted in Newfoundland and Labrador since early settlement. Residents of the Province are the only people in North America, other than Aboriginal peoples, who legally can hunt turrs. The turr hunt, pursued traditionally for food, has become recognized in recent years as a recreational activity. It is generally known, and substantiated by studies conducted by Canadian Wildlife Service, that fewer people engage in turr hunting today than 30 years ago - a trend particularly evident in the younger generation. Turr hunting is still conducted in coastal areas of western Newfoundland and southern Labrador. The

hunting dates for turns occur around early October to mid-March. depending upon the area, and are designed to take into consideration the migratory patterns of turns along the shores of the Province.

NOTE: THERE IS NO CHANGE TO SECTION 5.8.2.6

5.8.2.7 Marine Traffic

The Gulf region contains one of the major seaways of the world, and the majority of ship traffic enters and exits via the Cabot Strait (or Strait of Belle Isle in summer) bound for the St. Lawrence Seaway (Figure 5.93). The Gulf accommodates approximately 6,400 commercial vessel transits annually supporting domestic and international trade and transport (Alexander et al. 2010). More than 40 ports throughout the Gulf accommodate vessel traffic; however, Charlottetown, PEI is the only major port within the Gulf. In addition, a number of major commercial ferry routes exist throughout the Gulf including: North Sydney, NS to Port aux Basques, NL; St. Barbe, NL to Blanc Sablon, QC; Caribou, NS to Wood Islands, PEI; Souris, PEI to Cap aux Meules, QC; and within Quebec, a number of coastal ferries service ports along the Quebec North Shore (Alexander et al. 2010, Gaudet and Leger 2011). Contamination of marine areas from bilge, ballast and wastewater disposal, marine safety and transport of foreign and invasive species are potential concerns within the marine transportation industry.



Source: Geocentric Mapping Consulting 2002, in Alexander et al. 2010

The arrow width represents vessel counts in the shipping corridor (traffic density); the color indicates the countries and continents of origin. Major ports are represented by a specified number of inbound transects.

Figure 5.93 Atlantic Inbound Vessel Transect Density Map: Inbound Cargo and Tanker Shipments in 2000

NOTE: THERE IS NO CHANGE TO THE REMAINDER OF SECTION 5.8.2.7

5.8.2.8 Tourism and Recreational Activities

Marine tourism and recreation is an industry experiencing growth throughout the Gulf, including increased cruise ship activity, offshore excursions (whale watching and marine tours), recreational boating, and recreational use of coastal areas (hiking, diving, kayaking). Owing to the climate, much of marine recreation and tourism activities occur from spring to fall.

Charlottetown, PEI, is the only major port in the Gulf. The 2011 cruise ship season was from May 2 to October 20, 2011 and during that time, 41 ships, with a total of 67,298 passengers and 28,563 crew (Charlottetown Harbour Authority Inc. No Date) arrived in port. For 2007, the average expenditure was \$60.68 per passenger and \$41.80 per crew member, which resulted in an estimated \$3.3 million in passenger expenditures and \$736,000 in crew expenditures (Gaudet and Leger 2011). Owing to the large size and capacity of modern cruise ships, these vessels are estimated to produce 400,000 gallons of wastewater per day. Similar to other large ocean vessels, cruise ships have the potential to transport non-native species and contaminate marine areas through bilge, ballast and wastewater disposal (Alexander et al. 2010).

There is a growing interest in a wide variety of marine-related recreation, with sea kayaking, in particular, growing in popularity among residents as well as visitors. Yachting is focused principally in the Bay of Islands and to a lesser extent the Gros Morne National Park area. The Bay of Islands Yacht Club has been active for many years. The waterfront at Norris Point and a new inn at Neddy's Harbour are attracting boaters to the Bonne Bay area. There is a Humber Valley Rowing Club that uses a section of coastline near Brakes' Cove in Humber Arm. Scuba diving as a sport has been popular in the Bay of Islands, Port au Port Bay and in Port aux Choix. Recreational boating occurs throughout much of the inshore areas of the Gulf and includes powerboats, sailboats and manually operated boats (canoes, kayaks and other rowboats). Recreational boating has the potential to adversely affect the marine environment through pollution, as well as interactions with marine mammals, sea turtles and marine birds.

There has been growth in other recreational activities in the region as well, including swimming, camping, hiking, whale and bird watching (DFO 2011a) and cottage development (Alexander et al. 2010). DFO (2011a) reports that marine-related tourist trips remained stable in the Maritimes-Gulf region between 2000 and 2006, while spending decreased overall, except in PEI, which had an increase of 3.6 percent in spending from 2003 to 2006. However, the Quebec-Gulf region experienced increases of 40 percent from 2000 to 2006, with the largest growth in Gaspé.

The dramatic coastal scenery of the western Newfoundland region and the abundant opportunities for viewing whales are some of the attractions that make the region popular for sightseeing and leisure hiking. Over decades, local communities combined have been pouring hundreds of thousands of dollars into the construction and signage for coastal trails from the Codroy Valley estuary to the headlands of the Labrador Straits. An inventory of trails would likely form a large database of information. One of the two best places for bird watching in the entire province is the Codroy Valley estuary and the municipal wetlands of Stephenville Crossing.

A network of national, provincial, municipal and private parks and historic sites as well as a number of conservation areas exist throughout the Gulf. These areas conserve and protect a number of important ecological and cultural areas, but at the same time, many of these areas attract large numbers of people. Currently there are seven national parks, seven historic sites, 59 provincial parks, 20 migratory bird sanctuaries, 13 national wildlife areas and eight ecological reserves (Alexander et al. 2010).