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7.0 EXISTING HUMAN ENVIRONMENT

This chapter provides an overview of the demographic and socioeconomic setting of the province and the Northeastern Avalon for overall background and context before continuing with detailed descriptions of Indigenous communities and activities; commercial fisheries; and other oceans uses in the general vicinity of Project activities.

7.1 Commercial Fisheries

Fisheries in the waters off Newfoundland and Labrador (NL) are important socially, culturally and economically, and remain the major constituent of the human environment within and near the Project Area and of most other marine areas in eastern Canada.

In NL, the domestic fisheries sector employed approximately 16,600 people in 2017 in some 400 communities. This included 9,400 fish harvesters and 6,780 persons in the onshore processing sector, with the remainder associated with aquaculture operations (Government of NL 2018). Commercial harvesters from other Atlantic provinces may also fish in or near the Project Area at some time during the year. Within the Northwest Atlantic Fisheries Organization's (NAFO's) Regulatory Area (NRA), beyond Canada's 200 nautical mile (NM) Exclusive Economic Zone (EEZ), fishing enterprises from several other nations also depend to differing degrees on resources near the margins and slopes of the Grand Banks (particularly the "Nose" and "Tail") and the Flemish Cap (Figure 7-1).

The following sections describe the historical and current domestic and foreign commercial fisheries with a focus on the Project Area and Local Study Area (LSA), which includes the vessel traffic route. To provide overall context for the domestic and international commercial fisheries, including fisheries science surveys, the section quantifies harvesting in the broader Project Regional Study Area (RSA).

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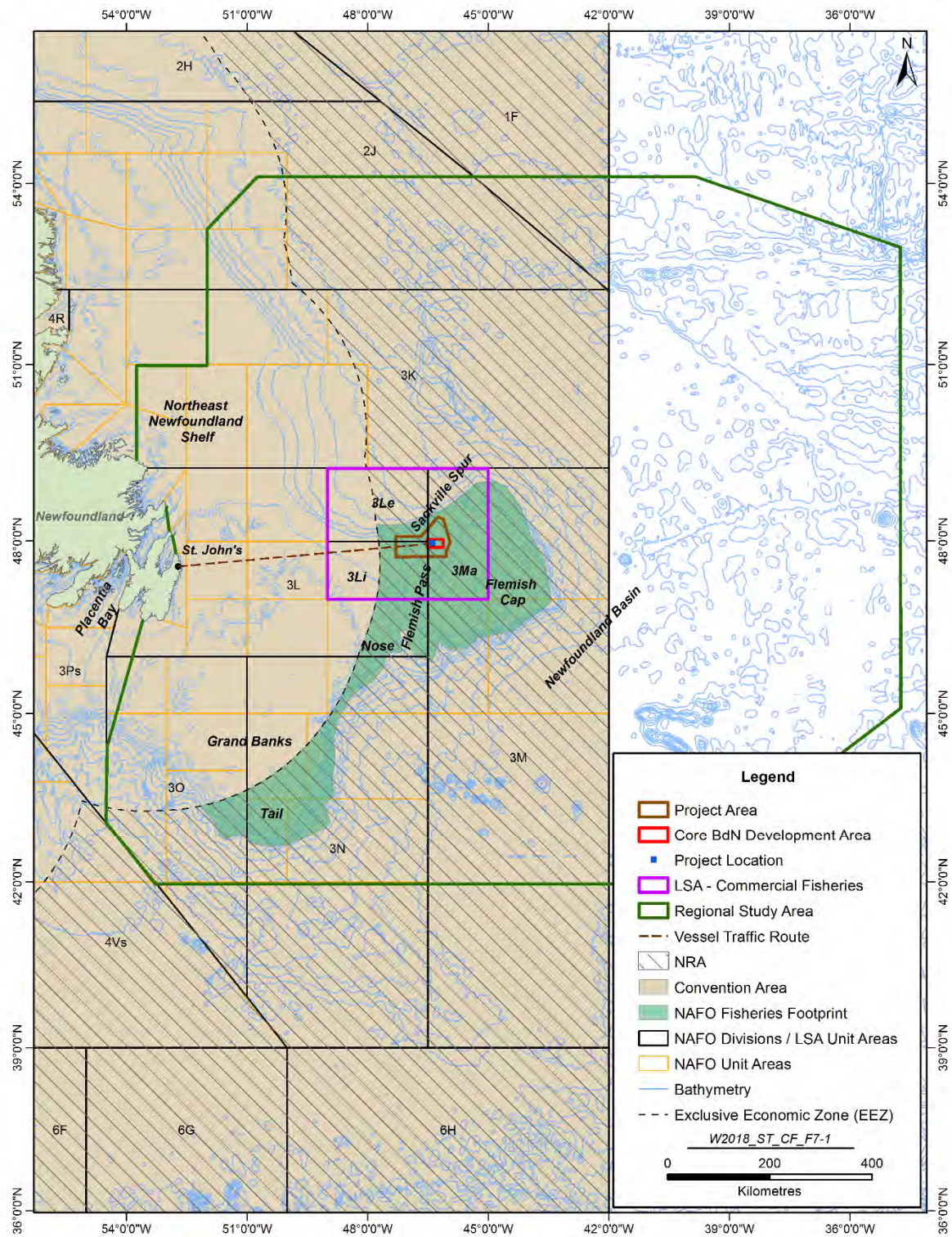


Figure 7-1 Fisheries Management Areas and NAFO Fisheries Footprint

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7.1.1 Fisheries Management Areas and Data Boundaries

The eastern Grand Banks and adjacent waters (including the Project Area and the LSA) overlap with two principal fisheries management zones. Canada (through Fisheries and Oceans Canada (DFO)) has management and regulatory responsibility for fish stocks and fishing activity within most of its EEZ and for certain sedentary species (e.g. snow crab) over the entire Canadian continental shelf. By international convention, NAFO participates in the management of some species in parts of the Canadian EEZ within its Convention Area and regulates most fisheries in the portion defined as the NRA, the part of the Convention Area outside the EEZ (NAFO 2004). The Project Area is located in an area of the NRA designated by NAFO as the “Footprint” or Existing Bottom Fishing Areas - a 120,048 km² portion of the NRA where bottom fishing (e.g. with bottom trawls) has historically occurred. The Project Area, which is approximately 4,900 km², represents approximately 4 percent of this area, while the Core Bay du Nord (BdN) Development Area, which is approximately 470 km², makes up just <0.4 percent. Within the Project Area there are two closed areas to bottom fishing (Section 6.4.4.3). As illustrated in Figure 7-1, the Convention Area is subdivided for administrative and management purposes into Divisions and Unit Areas (UAs). DFO also utilizes these areas in its data reporting, management and regulatory regimes (e.g. licence conditions). Where applicable, the fisheries descriptions herein use these same designations. Many of the large pelagic species (swordfish and tunas) in the RSA are managed by the International Commission for the Conservation of Atlantic Tunas (ICCAT), which has jurisdiction for key species throughout the North and South Atlantic.

For the following descriptions of the domestic commercial fisheries, information is presented for the Project Area and the LSA within the larger context of the RSA. The LSA for this VC is defined as the NAFO UAs 3Le, 3Li and 3Ma (the three UAs that overlap the Project Area) including the vessel traffic route. The Project Area, where all routine Project-related activities will occur, other than along the vessel traffic route, is approximately 6.5 percent of the LSA. The UA is the smallest geographical area by which DFO fisheries quantity and value data can be presented, as described below.

Due to NAFO data resolution limitations, data for Divisions 3L and 3M are used to characterize the international fisheries in and around the Project Area since it overlaps some part of both Divisions. The Project Area occupies less than one percent of the total geographical area of 3LM. The statistical information provided for the RSA includes all fisheries in NAFO Divisions 2J3KLMNO. There are no fisheries data for the part of the RSA east of NAFO Division 3M. Each of these areas is shown in Figure 7-1. The Project Area occupies < 0.3 percent of the nearly 1,760,000 km² RSA.

7.1.2 Information Sources

Information from DFO and NAFO are used to describe commercial fishing activities discussed in this section. Sources of data include fisheries management and harvesting plans, science advisory reports and quota reports, as well as personal communications from key sources. Statistical data include datasets available from NAFO for the period 2008 to 2017 (Statlant 21A and 21B), which capture catch quantities by species, month, gear type, harvesting nation and NAFO Division of harvest, for both Canadian and foreign fishers (NAFO 2016a, 2018f). Harvests from American fishing vessels are not reported for the 21B dataset. Datasets provided by DFO report the same data but

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aggregated at the UA for location of catch and only for Canadian landings; these data also include nominal landed values. DFO quantity and value datasets for 1986 to 2016 are used to characterize the historical (1986 to 2010) and recent (2011 to 2016) domestic LSA fisheries, while the NAFO datasets are used for most data related to the RSA (except where values are shown), since DFO datasets for more recent years (2011 to 2016) have been heavily redacted for some species owing to protection of privacy requirements. The 2016 data are the latest available from DFO (DFO 1986-2010; 2011-2016a). All quantities provided are in metric tonnes, and values are in current-year (unadjusted) Canadian dollars. Because of different redaction requirements, the DFO and NAFO data do not always match for all species.

DFO data for catch locations are used to generate the figures for domestic harvesting locations. The data provide a general indication of catch locations for a series of “cells” that are approximately 6 x 4 NM in size. Quantities or values of harvest are not included in the dataset for confidentiality reasons; however, the number of catch reports for each cell have been tabulated for the analysis and used to generate the relative harvest intensity figures presented (DFO 2011-2016b). Figures for the areas of multinational fishing effort in the NRA are derived from NAFO-provided data, as cited in the text.

7.1.3 Historical Domestic Fisheries

Commercial fish harvesting off the coasts of NL has been an important economic activity for centuries. The fisheries remain an important activity throughout the region, for both food and commerce. Until 1992, the primary harvesting activity in the offshore areas of NL was for groundfish species. This typically saw large offshore stern otter trawlers harvesting several species, including American plaice, Atlantic cod, redfish and halibut. With the collapse of groundfish stocks in the early 1990s, a moratorium was declared and fisheries for groundfish dropped drastically. This moratorium is still in effect in most areas for directed commercial fisheries. After the closures, harvesting of shellfish species, primarily snow crab and northern shrimp, took on a greater economic role and became the key species harvested by fishers offshore NL since 1992. Figures 7-2 and 7-3 illustrate this change in domestic groundfish harvesting in the LSA.

Although groundfish quantities declined drastically in NL waters, the landed value of the overall catch in the province remained relatively steady, or increased in some cases, owing to the higher-value species pursued after 1992. For example, the landed value of snow crab in NL increased from under \$13 million in 1992 to nearly \$180 million in 2008 (DFO 2010). Similarly, the landed value of northern shrimp increased from approximately \$230 million in 1997 to \$350 million in 2005 (DFO 2007). These trends are described further in the overview of historical fisheries and associated catch statistics presented in recent strategic environmental assessments (SEAs) and environmental assessments (EAs) that include the Project Area (e.g., Amec 2014).

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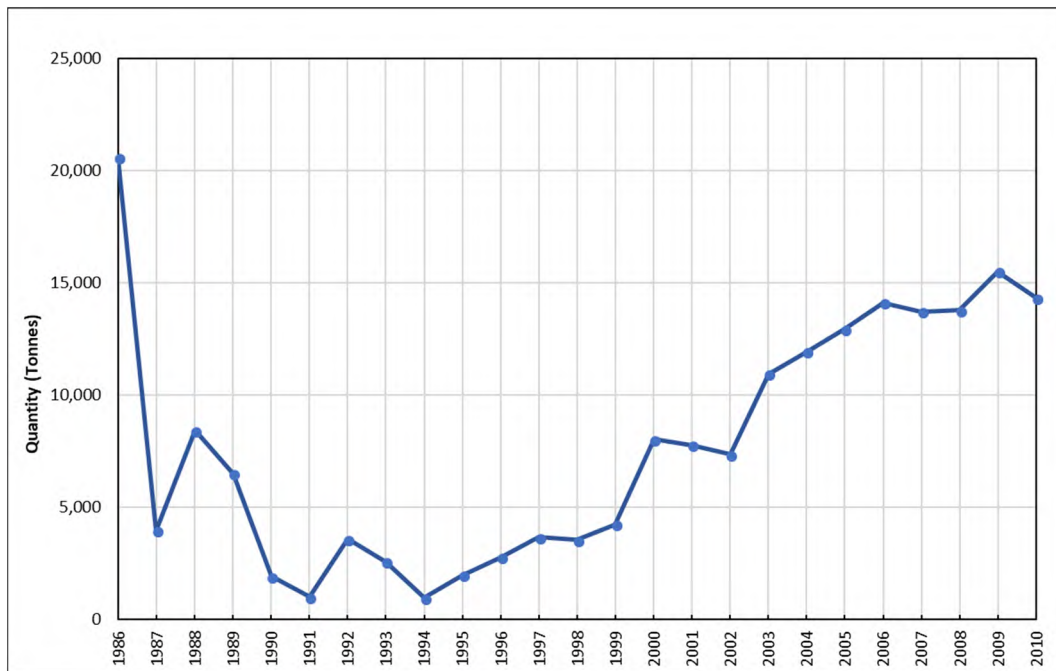


Figure 7-2 All Species Domestic Quantity of Harvest by Year, LSA 1986 to 2010

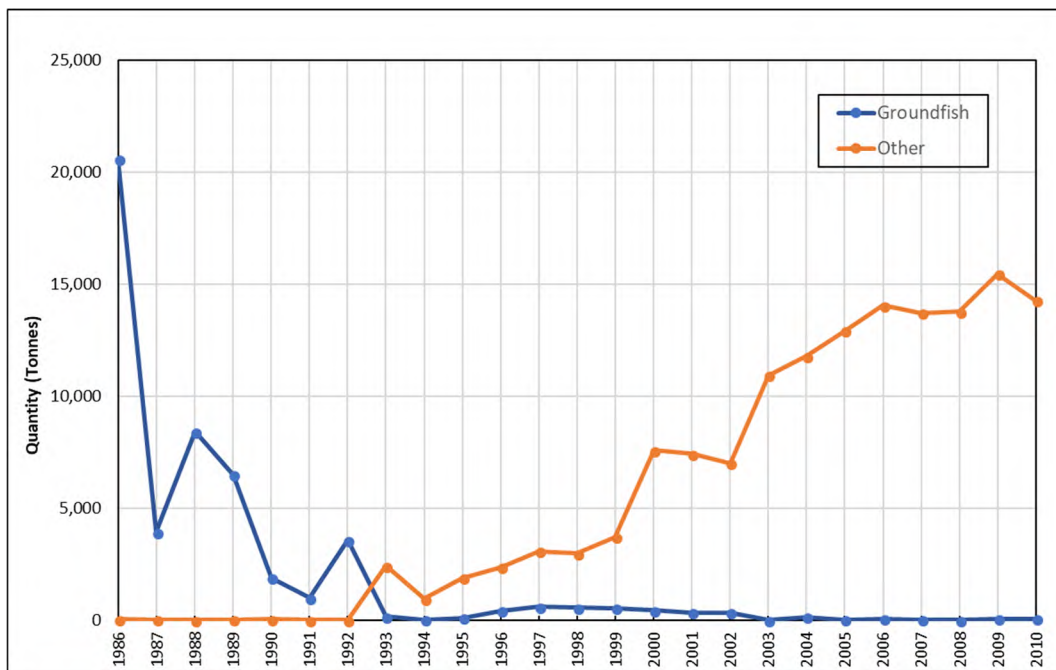


Figure 7-3 Groundfish vs Other Species, Domestic Quantity of Harvest by Year, LSA 1986 to 2010

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Note that in the following figures (Figure 7-4 to 7-41) only quantities of catch are presented as these are more directly comparable than the values of the harvest (particularly over many years) since the latter data reflect several factors other than resource availability or fishing effort. Value differences often occur from year to year simply because of price fluctuations determined by a variety of external market factors, including international exchange rates, demand and market competition, especially over a 25-year timeframe.

7.1.4 Recent Domestic Fisheries

The following sections characterize the current (2011 to 2016) fisheries in the LSA and the Project Area, based on the most recent DFO domestic data available. They also describe recent changes in fisheries management decisions for relevant fisheries, particularly for the LSA.

7.1.4.1 Domestic Harvesting Locations

Fish harvesting typically occurs where the targeted species have been harvested in the past and are therefore known to occur, which tends to make harvesting locations fairly consistent from year to year. The occurrence of a particular commercial fish species is primarily influenced by the availability of supporting habitat, including the presence of prey (food) species. Consequently, the information presented in Section 6.1 of this EA is also relevant to an understanding of harvesting locations. Other factors affecting where fishing occurs in this region are management regimes which may specify where fishing is allowed and/or restricted or closed to certain fleets or gear types.

Figure 7-4 identifies the location data for domestic commercial fishing activity in relation to the Core BdN Development Area, the Project Area, the LSA (including the vessel traffic route) and the RSA. The information presented includes data for all months of all years from 2011 to 2016, aggregated for all species and gear types. Cells in the figures are colour coded to provide an indication of relative fishing intensity based on the number of harvesting records at each cell location: green represents areas with relatively lower numbers of records and yellow to red indicates where more fishing activity reports occurred.

As illustrated in the Figure 7-4, less domestic harvesting has been reported within the Project Area compared to the LSA and other areas of the Grand Banks. Some harvesting occurs in the western Project Area, with no harvesting reported in the Core BdN Development Area. Most of those records within the Project Area are for groundfish trawling. The majority of the reported LSA domestic catches occur to the west of the Project Area, particularly in the shallower waters of UA 3Li.

Harvesting in UA 3Li is primarily for snow crab since the closure of shrimp harvesting in that area in 2015 (see Section 7.1.6.3). In the northwestern and deeper waters of the LSA (i.e., UA 3Le), most of the harvest recorded is groundfish, taken with mobile trawls or fixed gillnets. Along most of the vessel traffic route west of the LSA UA, fishing activity is almost exclusively focused on snow crab, though near the Port of St. John's (within approximately 50 km) there may also be groundfish gillnetting and some capelin seining.

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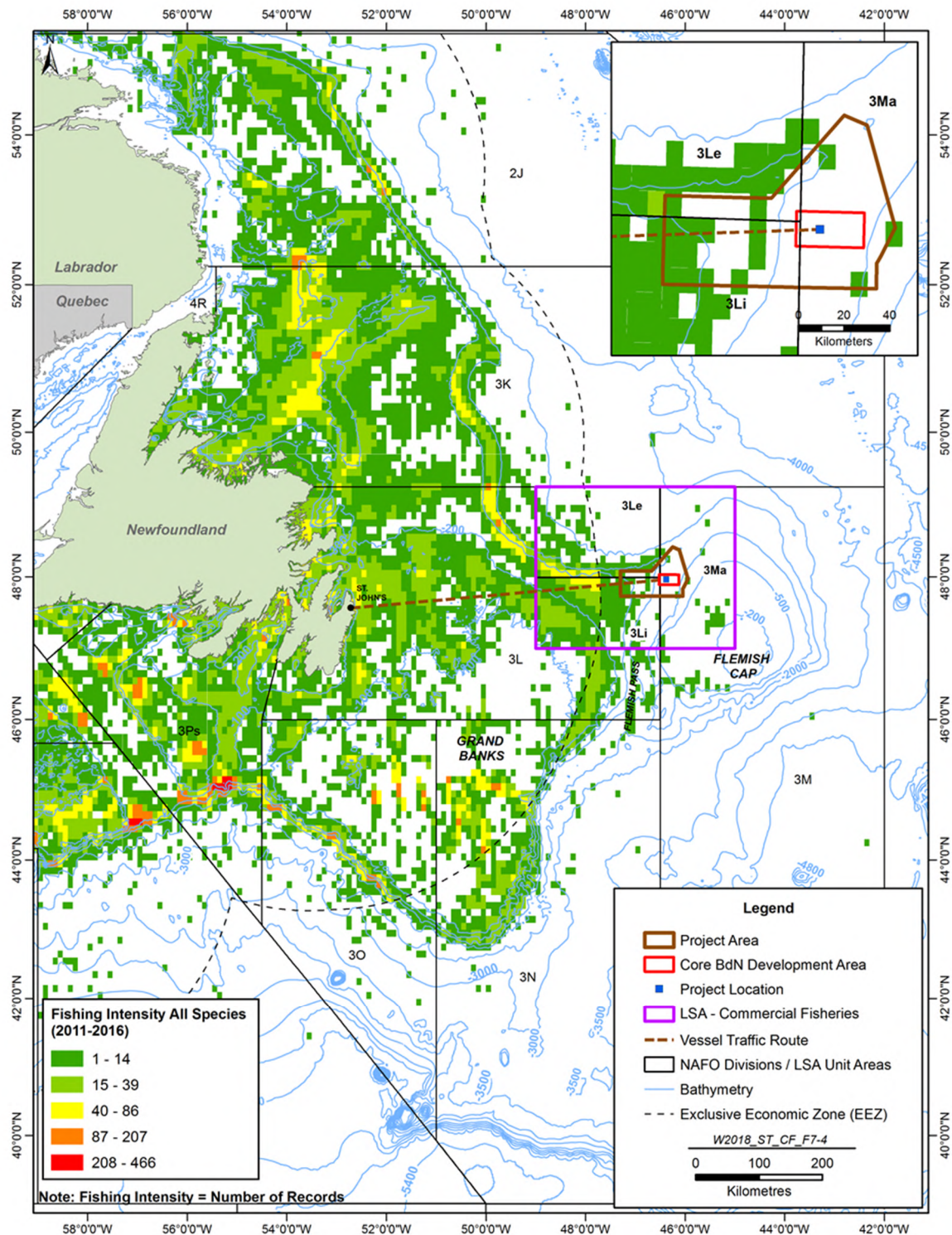


Figure 7-4 Domestic Commercial Harvesting Locations and Intensity, All Species, All Gear Types, All Months 2011 to 2016

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Figure 7-5 illustrates relative domestic harvest quantities for the three UAs that make up the LSA. Based on the DFO quantity and value data, UA 3Li accounted for 96 percent of the reported domestic catch quantity of the 2011 to 2016 period harvest while UA 3Ma, where the Core BdN Development Area is located, recorded none. However, the DFO geolocal mapping data shown above does indicate some harvesting in 3Ma. This difference is owing to the data redaction in the DFO quantity and value datasets.

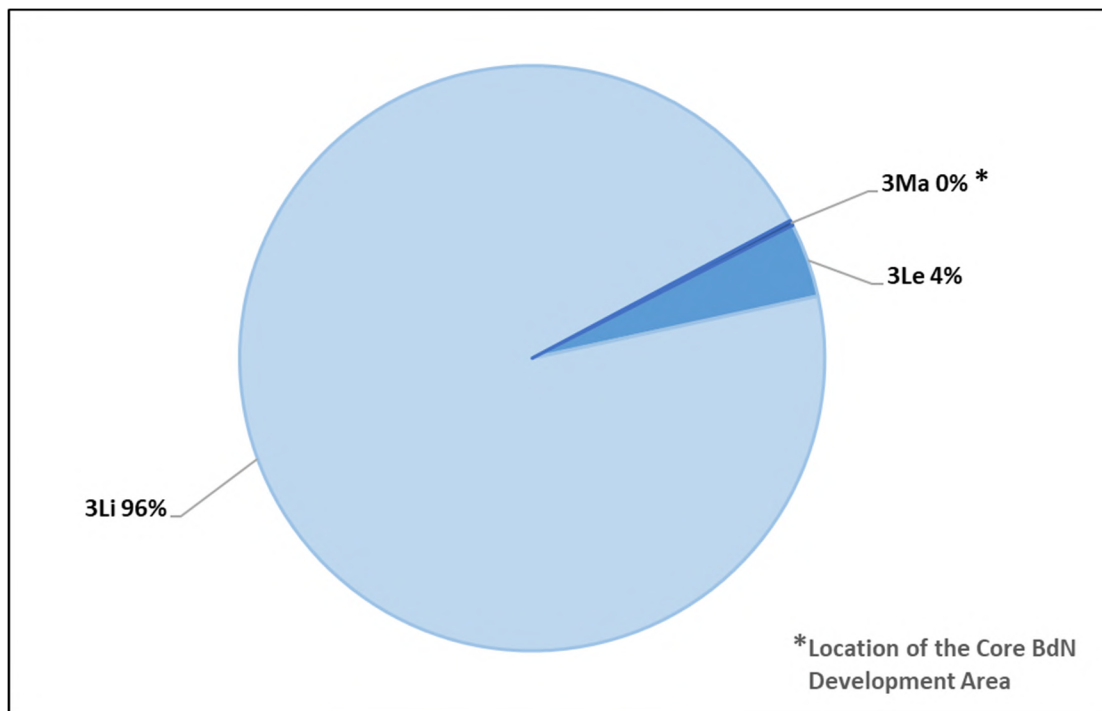


Figure 7-5 Relative Quantity of Domestic Harvest by Unit Area, LSA 2011 to 2016

7.1.4.2 Domestic Harvest Composition and Values

Fish harvesting quantities and values can only be captured for the entire LSA because of reporting requirements. However, as illustrated in the figures above, domestic harvesting activity within the Project Area is much lower than in larger LSA and RSA. Table 7.1 and Figures 7-6 and 7-7 illustrate the catch data by year in the LSA and RSA for the period 2011 to 2016. The comparatively stable overall value of the harvest for these years while quantities declined or remained constant is owing to the increasing price paid for snow crab

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Table 7.1 All Species Domestic Harvests Quantity and Value by Year, LSA and RSA 2011 to 2016

Year	LSA		RSA	
	Quantity (t)	Value (\$)	Quantity (t)	Value (\$)
2011	8,981	23,731,236	147,561	391,897,627
2012	5,910	18,538,769	152,666	387,008,786
2013	3,545	14,749,280	148,625	361,935,156
2014	3,402	16,185,016	132,809	401,221,714
2015	3,394	18,483,487	130,724	477,221,634
2016	3,502	22,623,669	119,589	432,299,394

As described in Section 7.1.6, in recent years catches within the Project Area have been largely groundfish (e.g., redfish, Greenland halibut (turbot), Atlantic cod and Atlantic halibut) while in the LSA overall the harvest is predominantly shellfish (northern shrimp and snow crab) (see Table 7.2). Table 7.2 presents average LSA and RSA harvests by key species for 2011 to 2016. The 2016 data are provided to reflect more recent changes in fish harvesting.

As Table 7.2 indicates, shellfish harvesting is dominant in the RSA in terms of overall quantities and values. It is important to note that fisheries in the RSA are also carried out within the province's bays and coastal areas, and includes such fisheries as lobster, sea urchin and capelin harvesting, which are not active in or near the Project Area or the LSA.

Based on these data, snow crab and northern shrimp together made up 98 percent of the total LSA quantity and value during those years, almost all of which was harvested outside the Project Area. However, as is shown in Table 7.2, since the closure of the shrimp fishing in the LSA, the harvest has been almost entirely snow crab. Within the RSA, these two shellfish species made up 73 percent of the domestic harvest by weight and 92 percent by value for the 2011-2016 period. It should be noted that for both the LSA and the RSA certain key species data (such as most deep-sea clams and some groundfish), have been largely redacted from the datasets provided by DFO.

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Table 7.2 Domestic Species Harvest by Quantity and Value, LSA and RSA, 2011 to 2016 Average and 2016

Species	2011-16 Average Quantity (t)	2011-16 Average Value (\$)	2016 Quantity (t)	2016 Value (\$)	2011-16 Average Quantity (t)	2011-16 Average Value (\$)	2016 Quantity (t)	2016 Value (\$)
	LSA				RSA			
Queen/Snow Crab	3,073	15,768,878	3,391	22,199,270	42,727	216,480,783	39,320	258,095,694
Northern Shrimp	1,620	2,965,871	0	0	58,798	157,110,026	32,390	130,320,655
Capelin	0	0	0	0	23,136	6,133,935	26,707	9,832,323
Atlantic Cod*	0	0	0	0	4,795	5,662,703	9,885	12,808,946
Greenland Halibut (Turbot)*	96	317,147	112	424,314	3,926	15,906,558	2,757	10,433,709
Atlantic Herring	0	0	0	0	3,287	899,862	4,210	1,262,377
Mackerel	0	0	0	0	449	273,613	2,557	1,505,145
Sea Urchins	0	0	0	0	427	772,875	382	774,415
Striped/Aesop Shrimp	0	0	0	0	262	986,461	400	1,699,357
Whelk	0	0	0	0	180	269,445	346	698,366
Lobster	0	0	0	0	160	1,682,384	166	2,525,033
Swordfish	0	0	0	0	77	687,892	179	1,939,144
All Other	<1	14	<1	85	517	1,404,005	289	404,230
Totals	4,789	19,051,910	3,503	22,623,669	138,662	407,582,649	119,589	432,299,394
* Classified by DFO as a groundfish (demersal) species.								

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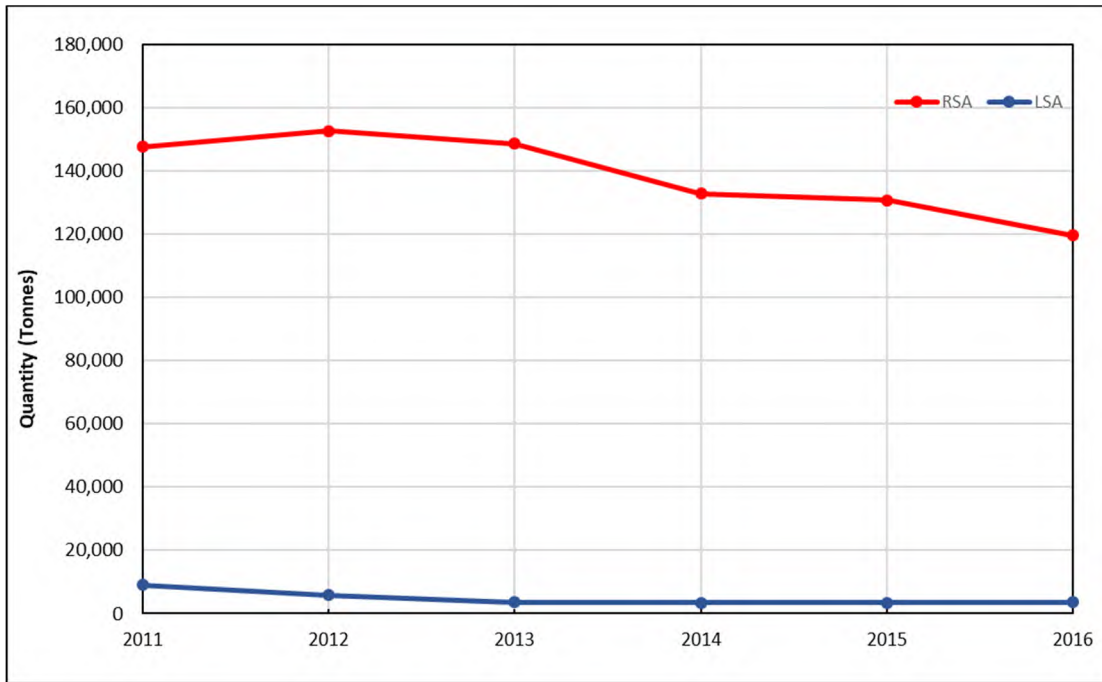


Figure 7-6 All Species Domestic Quantity of Harvest by Year, LSA and RSA 2011 to 2016

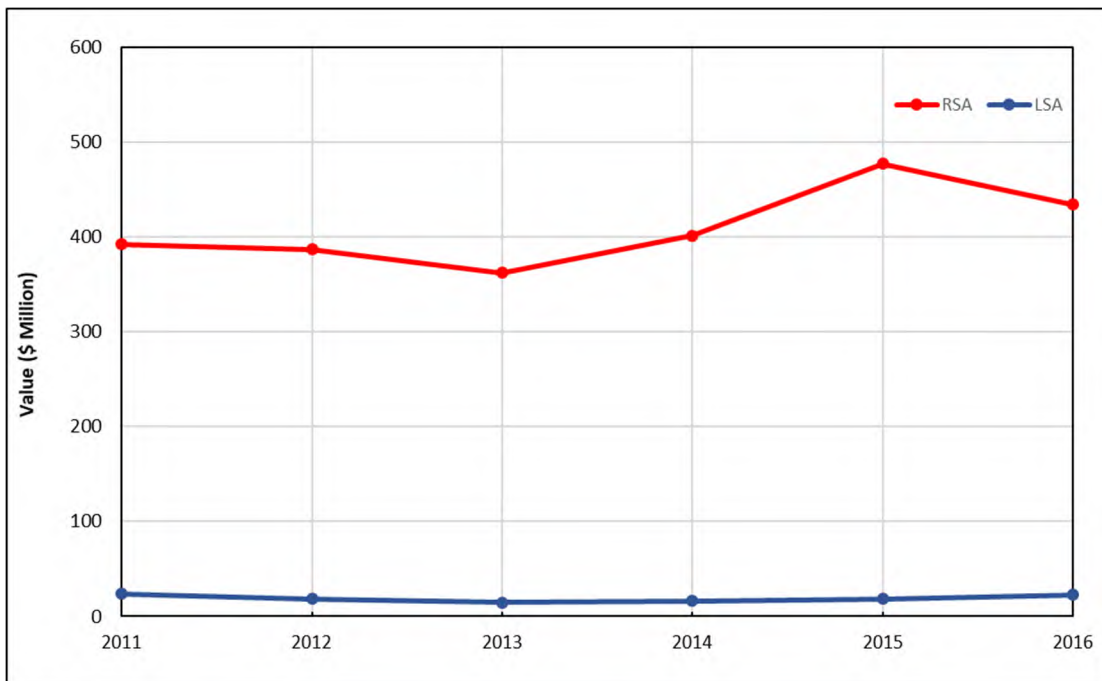


Figure 7-7 All Species Domestic Value of Harvest by Year, LSA and RSA 2011 to 2016

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7.1.4.3 Seasonality

The timing of most fisheries depends on many factors, such as open and closed management seasons, market cycles, individual fishing enterprise business priorities, the availability of the targeted resource at the time (depending on migration patterns and other influences), and the weather. The domestic harvest data (catch quantity) averaged by month for 2011 to 2016 are presented for the LSA and the RSA NAFO Divisions in Figure 7-8. As the graph illustrates, most domestic harvesting in both the LSA and the RSA is concentrated in the April to August period, though the RSA typically records relatively more activity in the winter months than does the LSA. This is also the case for foreign harvesting in the NRA, where a substantial level of activity continues throughout the year. Some fisheries in the RSA (such as shrimp and several groundfish fisheries) are open year-round until quotas are taken, while others (e.g. snow crab) have a fairly well-defined and relatively shorter open season, usually within the April to July period in the RSA. Section 7.1.6 provides more detailed information regarding the nature and timing of the key fisheries, both domestic and foreign.

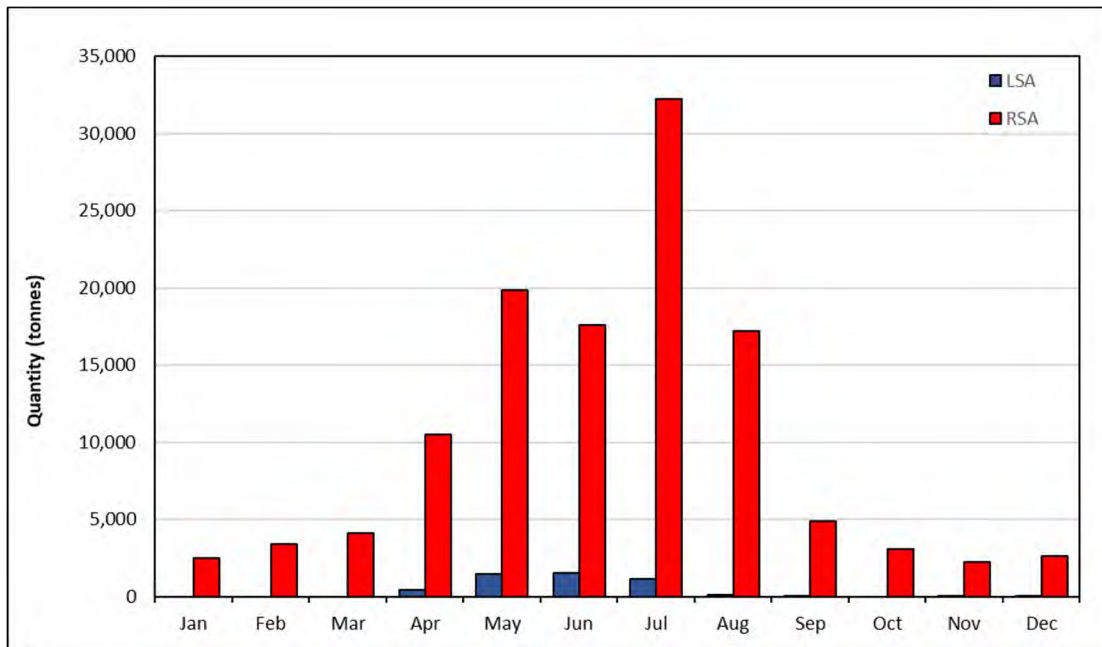


Figure 7-8 All Species Domestic Quantity of Harvest by Month, LSA and RSA 2011 to 2016

Figures 7-9 to 7-11 show the location of recorded domestic harvesting activity by month. As they illustrate, no activity was recorded for the Core BdN Development Area during these periods, and very little for the Project Area. Along the vessel traffic route harvesting activities are most concentrated in the April to July period when snow crab harvesting is most likely to occur in that part of NAFO Division 3L. Figures 7-12 and 7-13 illustrate the changes by quarter in the locations of fixed and mobile fishing gear in the same areas.

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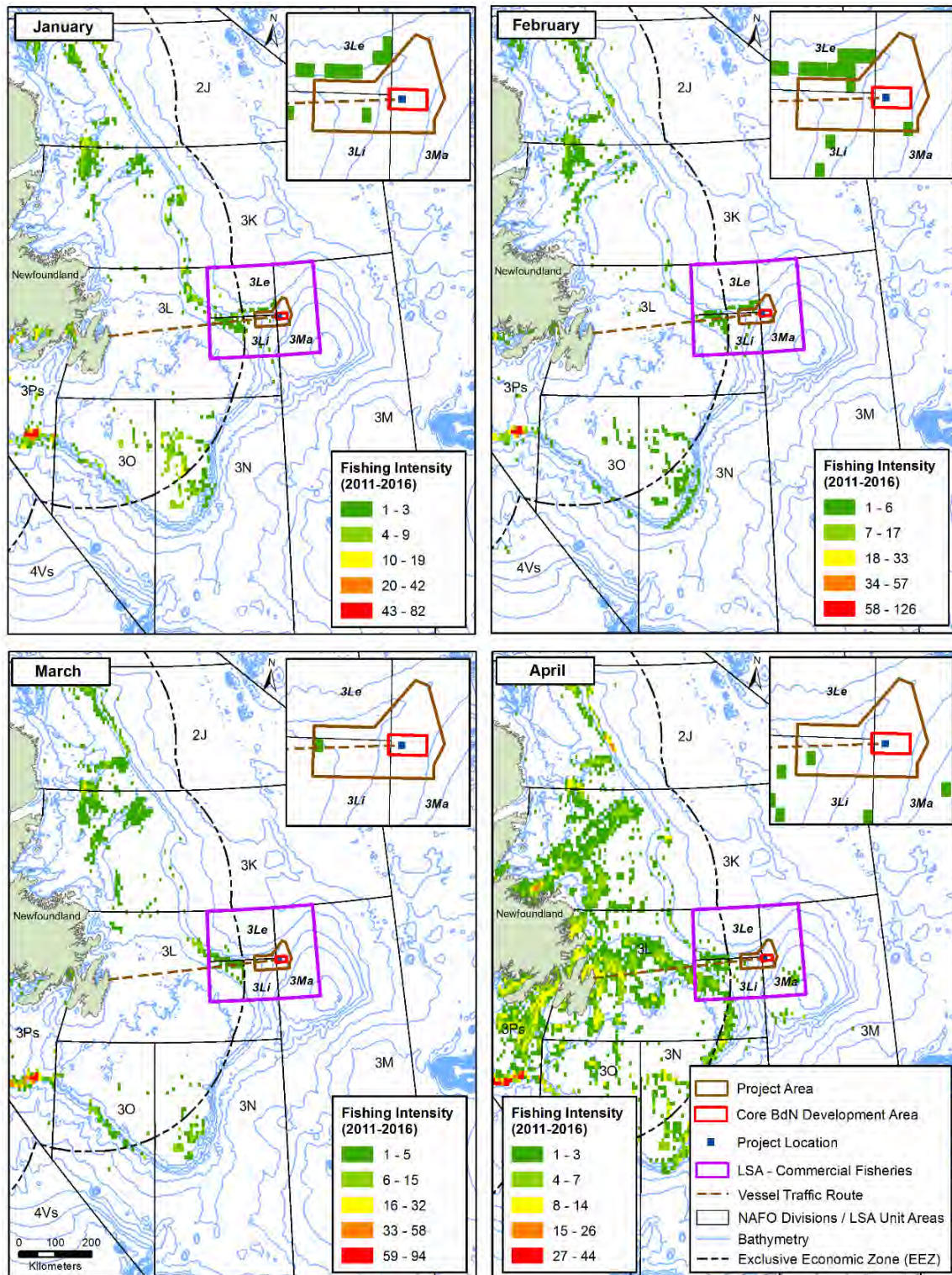


Figure 7-9 All Species Domestic Harvesting Locations and Intensity, January to April 2011 to 2016

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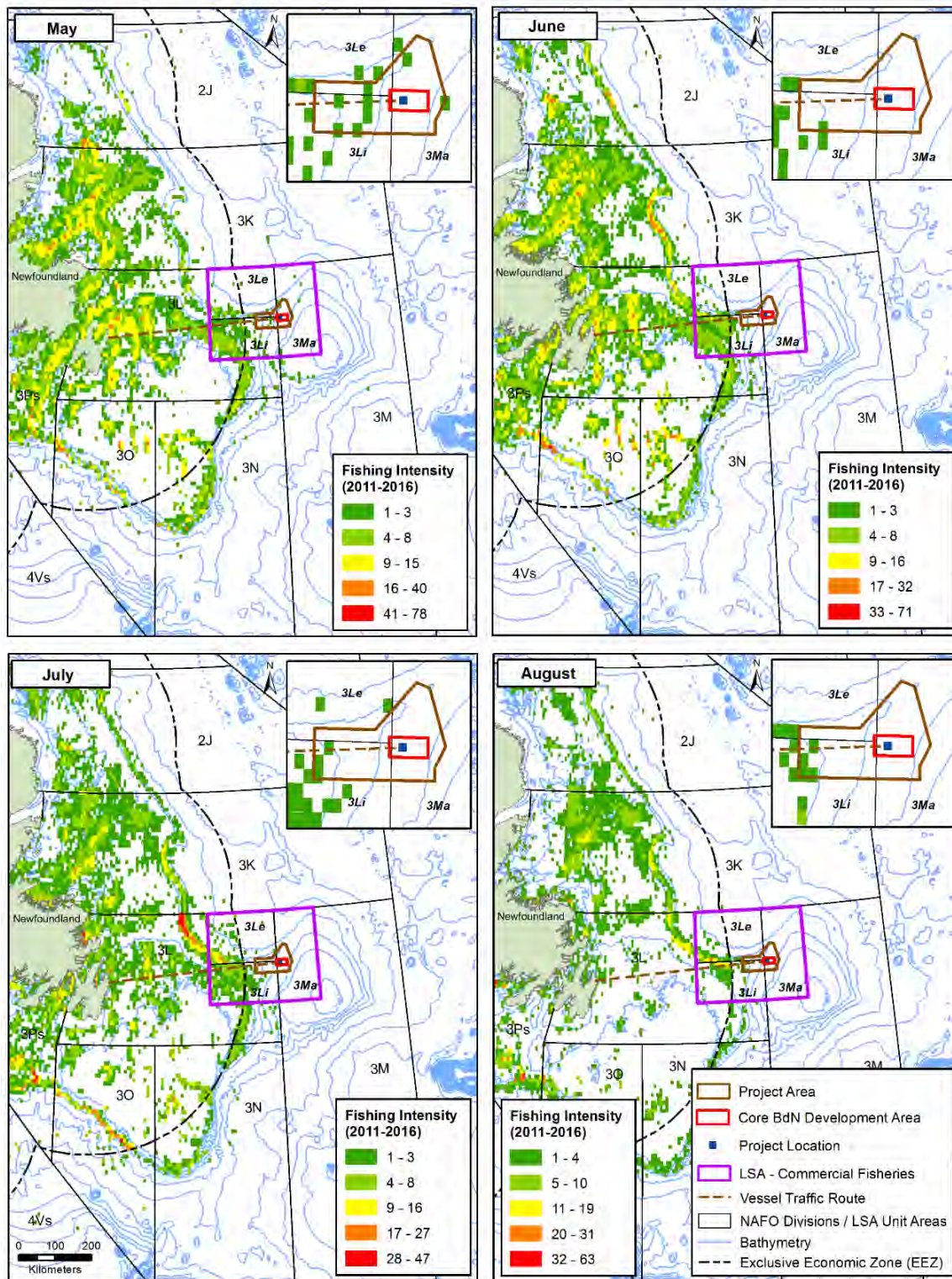


Figure 7-10 All Species Domestic Harvesting Locations and Intensity, May to August 2011 to 2016

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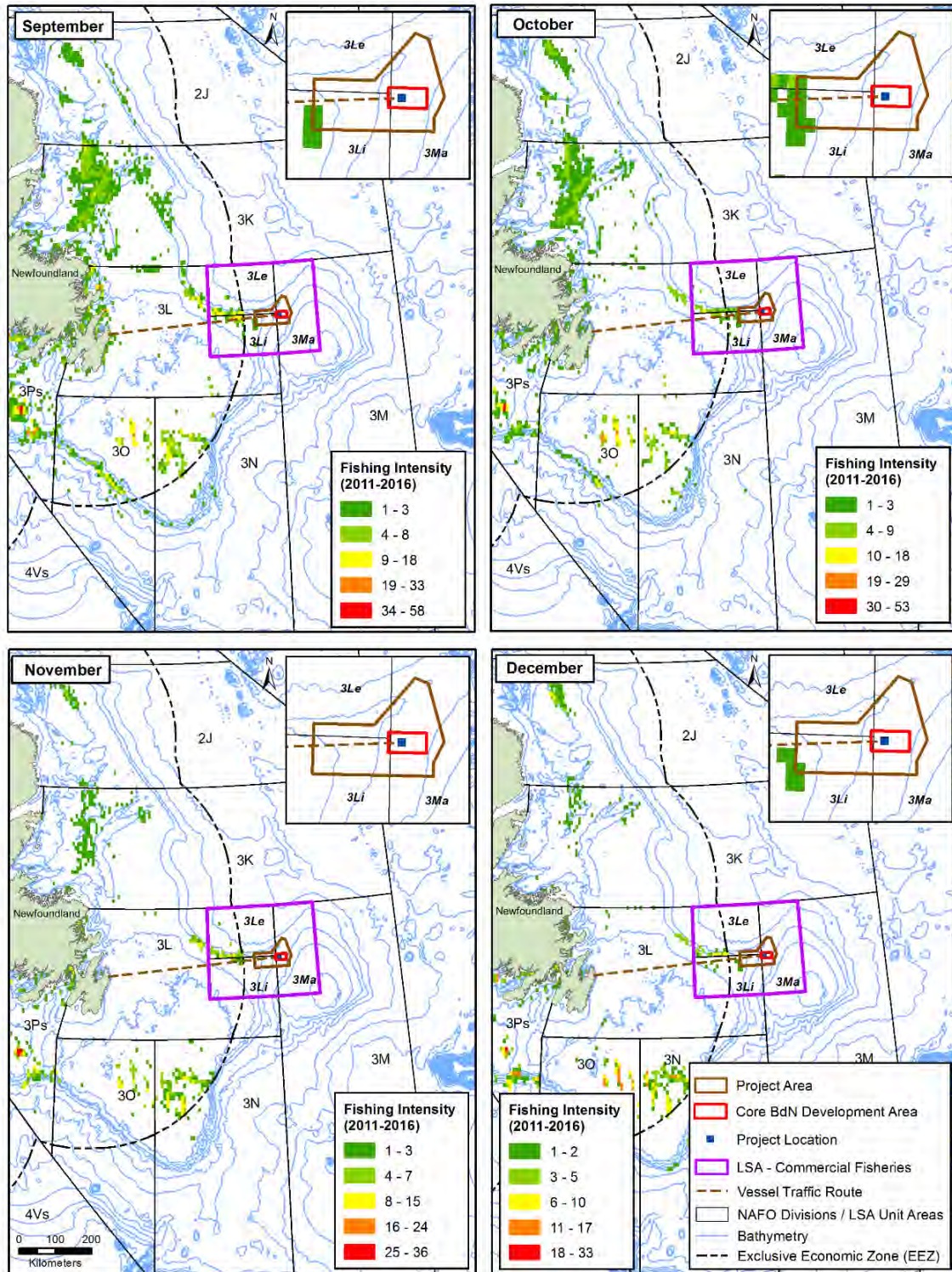


Figure 7-11 All Species Domestic Harvesting Locations and Intensity, September to December 2011 to 2016

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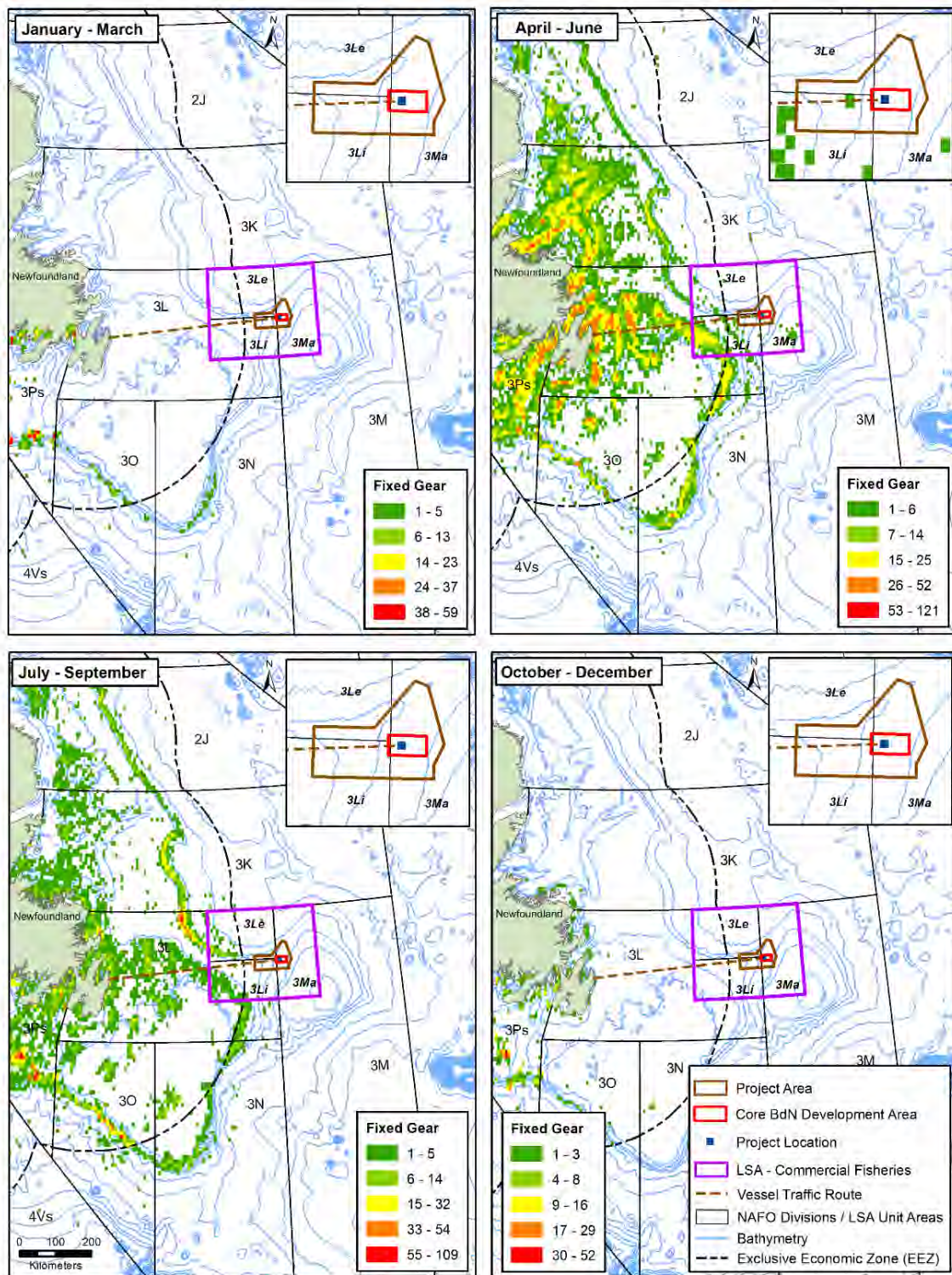


Figure 7-12 Fixed Gear Domestic Harvesting Locations and Intensity, by Quarter, 2011 to 2016

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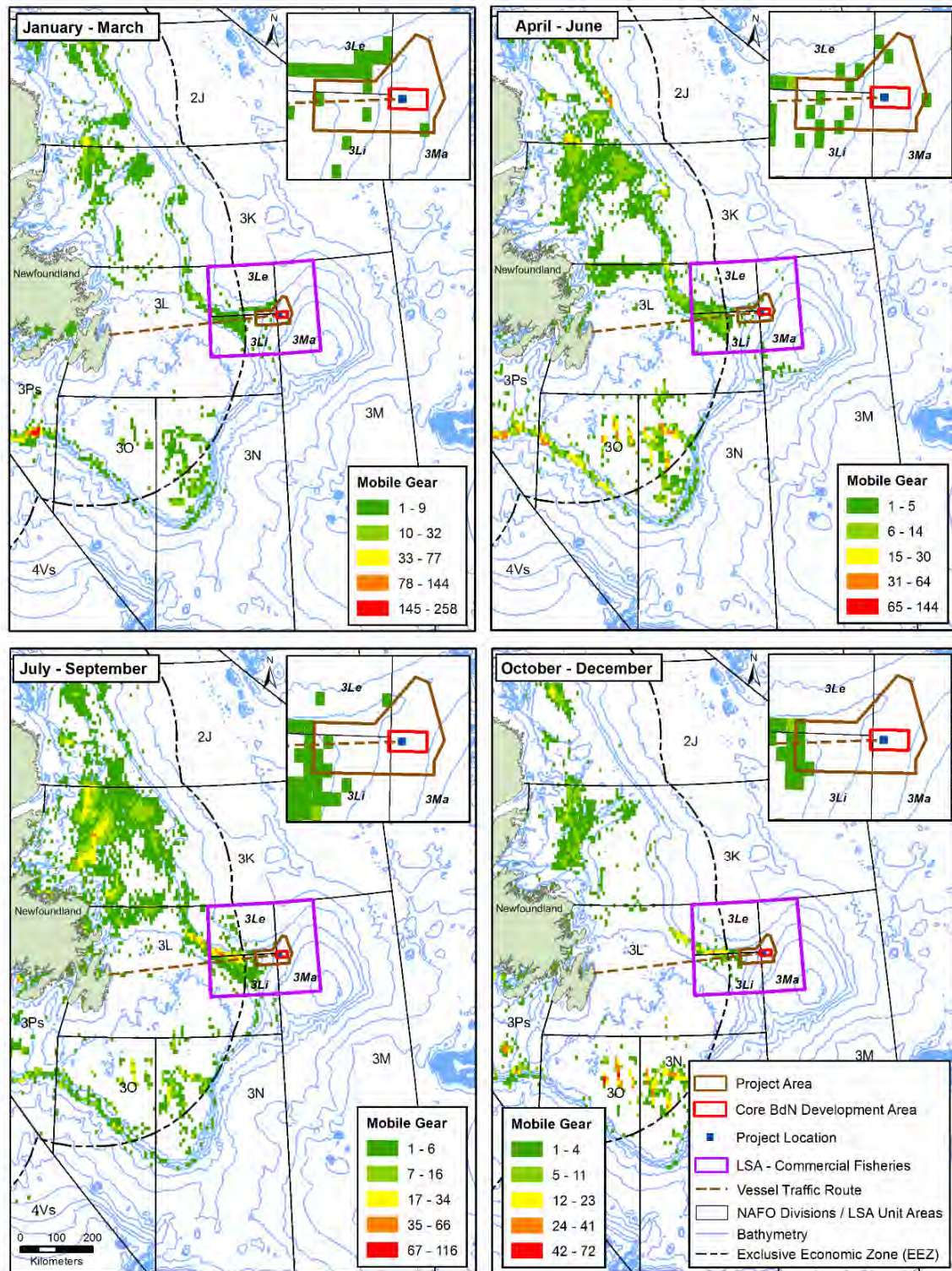


Figure 7-13 Mobile Gear Domestic Harvesting Locations and Intensity, by Quarter, 2011 to 2016

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7.1.5 International Fisheries

In addition to domestic harvesting, the Project Area, LSA and RSA waters have long been harvested by vessels from other nations (Amec 2014), particularly in those areas beyond the EEZ and primarily within the NRA around and near the Flemish Cap and southward to the “Tail” of the Grand Banks. Although comprising a smaller part of the overall harvest in the RSA, foreign fishery activity is an important presence in and near the Project Area, and in other offshore parts of the RSA.

As described in Section 7.1.1, NAFO manages most fisheries in the NRA, but also has management responsibilities for several species within the Canadian EEZ. These are primarily straddling stocks, which typically span domestic and international waters. As DFO (2016g) reports, NAFO management covers most fishery resources in the Northwest Atlantic except salmon, tunas/marlins, whales, and sedentary species (e.g. snow crab, lobster and various clams). NAFO covers the following straddling stocks: cod in NAFO division(s) 3NO, redfish in 3LN and 3O, American plaice in 3LNO, yellowtail flounder in 3LNO, witch flounder in 3L and 3NO, white hake in 3NO, capelin in 3NO, skates in 3NO, Greenland halibut in 3LMNO, squid in sub-areas 3 & 4, and shrimp in 3L (DFO 2016a).

Table 7.3 provides average catch totals by Canadian region and foreign nation for the same period, and Table 7.4 shows the composition of the recorded catches in NAFO 3LM and the RSA NAFO Divisions, by species, for foreign nations only, averaged for 2008 to 2017. The Canadian data include quantities presented earlier in the DFO datasets. Foreign harvesting along the vessel traffic route occurs only in the part of the route east of the EEZ, mainly for groundfish species harvested by bottom otter trawls. Figure 7-14 illustrates the annual aggregated quantities of harvests for the same period for Canadian and for non-Canadian NAFO harvesting in the two NAFO Divisions (3L and 3M) that overlap the Project Area, and for the full RSA NAFO Divisions (2J3KLMNO).

Table 7.3 NAFO Divisions 3LM and RSA Harvest by Canadian Region and Foreign Nation, 2008–2017 Averages

Region / Nation	3LM Average (t)	% of Total	RSA Average (t)	% of Total
Newfoundland / Canada	56,193	60.6%	150,087	70.7%
Scotia – Fundy / Canada	43	0.0%	3,371	1.6%
Maritimes / Canada	567	0.6%	2,889	1.4%
Québec / Canada	-	0.0%	7	0.0%
Canada Totals	56,803	61.2%	156,353	73.7%
Spain	9,589	10.3%	18,696	8.8%
Portugal	10,383	11.2%	16,739	7.9%
Russia	4,582	4.9%	6,739	3.2%
Estonia	3,770	4.1%	4,655	2.2%
Faroe Islands	3,923	4.2%	3,998	1.9%
Norway	1,086	1.2%	1,086	0.5%
Saint Pierre and Miquelon / France	329	0.4%	757	0.4%
Japan	418	0.5%	698	0.3%

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Table 7.3 NAFO Divisions 3LM and RSA Harvest by Canadian Region and Foreign Nation, 2008–2017 Averages

Region / Nation	3LM Average (t)	% of Total	RSA Average (t)	% of Total
United Kingdom	641	0.7%	641	0.3%
United States of America	37	0.0%	538	0.3%
Latvia	469	0.5%	477	0.2%
Lithuania	280	0.3%	366	0.2%
Cuba	214	0.2%	244	0.1%
Greenland / Denmark	155	0.2%	157	0.1%
Poland	41	0.0%	41	0.0%
Iceland	40	0.0%	40	0.0%
Federal Republic of Germany	30	0.0%	30	0.0%
Mainland / Denmark	-	0.0%	8	0.0%
Foreign Totals	35,986	38.8%	55,911	26.3%
Aggregate Totals (Average)	92,789	100.0%	212,263	100.0%

Table 7.4 NAFO 3LM and RSA Quantity of Foreign Harvest by Species, 2008–2017 Averages

Species/Type	Average Quantity (t) 2008- 2017	% of 2008 - 2017 Total	Average Quantity (t) 2008- 2017	% of 2008 - 2017 Total
	NAFO 3LM		RSA	
Redfishes (sp)	9,431	26.2%	18,015	32.2%
Atlantic Cod	9,464	26.3%	10,052	18.0%
Greenland Halibut (Turbot)	8,030	22.3%	9,124	16.3%
Northern Shrimp	4,882	13.6%	4,900	8.8%
Skates (sp)	229	0.6%	4,824	8.6%
Sharks (sp)	1,891	5.3%	3,093	5.5%
Yellowtail Flounder	5	0.0%	1,660	3.0%
American Plaice	248	0.7%	1,016	1.8%
Roughhead Grenadier	472	1.3%	550	1.0%
Witch Flounder	246	0.7%	511	0.9%
Roundnose Grenadier	276	0.8%	351	0.6%
Swordfish and Tunas	241	0.7%	337	0.6%
Atlantic Halibut	99	0.3%	315	0.6%
All Other	472	1.3%	1,164	2.1%
Total (2008-2017 Average)	35,986	100%	55,912	100.0%

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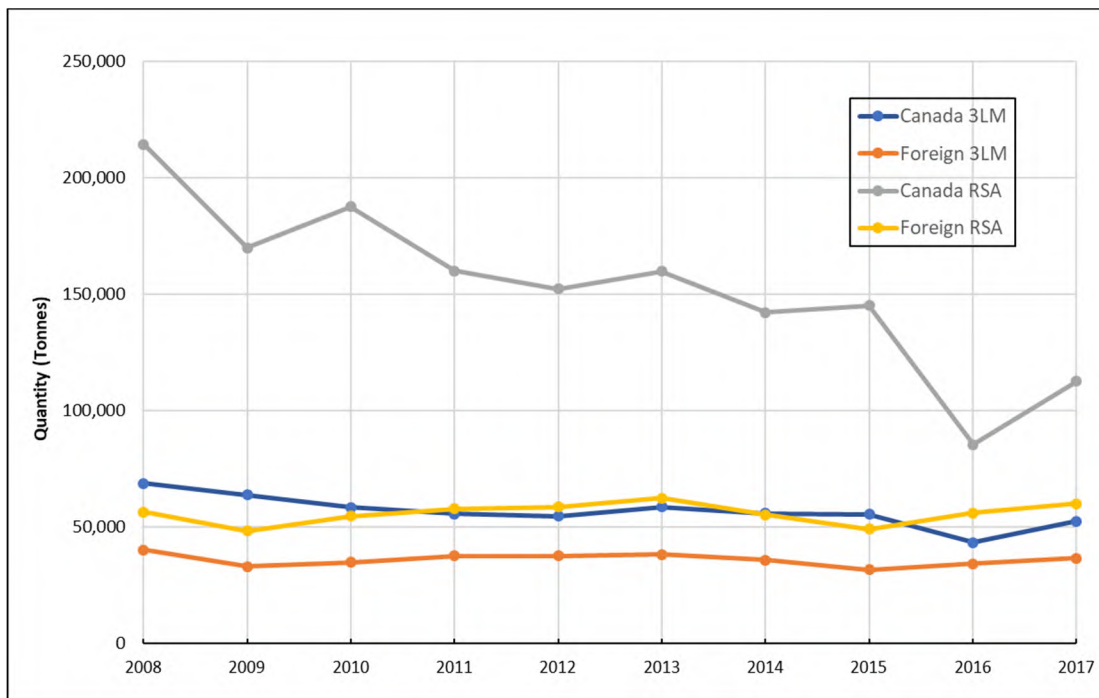


Figure 7-14 NAFO 3LM and RSA Domestic and Foreign Harvest by Year, 2007 to 2016

Error! Reference source not found. provides an overview of key international fisheries in or near the Project Area, summarized by NAFO Division and general water depths. Information is derived from NAFO 2016c, Annex VIII.

Table 7.5 Key NRA Fisheries by NAFO Divisions and Water Depth

NAFO Divisions and Water Depths	Key Species Fisheries	Details
Divisions 3NO at <800 m	Witch flounder	A directed fishery for witch flounder was re-opened in 2015 for the first time since it was placed under a moratorium in 1995. This fishery is conducted with 130 mm mesh size and is likely to occur at various depths to 800 m.
Divisions 3LNO at 200-1000 m	Redfish	The redfish fishery is conducted with 130 mm mesh size trawl bottom trawls with the primary areas being the slope area of Division 3O, the east-central area of Division 3N and the southeast area of Division 3L near the border with Division 3N in depths <600m. Redfish comprise 90 percent of the catch and the main by-catch species were American plaice (2 percent), cod (2 percent), silver hake (2 percent) and Atlantic halibut (2 percent) based on 2015 logbook information. Although mid-water trawling has comprised a significant percentage of redfish fisheries for principal Russian fleet in the past, its use has diminished in recent years and only bottom trawls were deployed in 2013-14.

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Table 7.5 Key NRA Fisheries by NAFO Divisions and Water Depth

NAFO Divisions and Water Depths	Key Species Fisheries	Details
Divisions 3LNO at 200-1000 m	Shrimp	The shrimp fishery was closed to directed fishing in 2015. When active, it was conducted with 40 mm mesh size bottom trawls in Division 3L, primarily concentrated in an area along the central eastern slope in depths between 300 and 500 m with shrimp comprising 99 percent of the catches.
Divisions 3LMNO at >800 m	Greenland halibut	The principal fishery is conducted from 800-1400 m with 130 mm mesh size bottom trawls and although widespread throughout the divisions, there were four primary areas. These included, in decreasing area of importance: (1) the northeast of Division 3L, (2) the northwest of Division 3M, (3) the southeast of Division 3L along the Division 3LM boundary, and (4) the northeast of Division 3N. Greenland halibut comprised 95 percent of the catch based on 2015 logbook data and main by-catch are grenadiers, witch flounder, skates and plaice (each species <1 percent).
Division 3M at 150-600 m	Shrimp	The shrimp fishery has been under moratorium since 2012 but previous fisheries were conducted with 40 mm mesh size bottom trawls primarily in depths between 300 and 500 m. Shrimp comprised 98 percent of the catches with redfish as main by-catch (2 percent).
	Redfish	The redfish fishery is conducted with 130 mm mesh size bottom trawl gear primarily within the 200m-600 m depth zone in Division 3M along the southern and north-western slope of the bank. Redfish comprise 80 percent of the catch and the main by-catch species were Greenland halibut (4 percent) and cod (3 percent).
	Cod	The cod fishery in Division 3M is conducted with 130 mm mesh size bottom trawl gear at depths between 150 to 550 m, with the highest concentrations of effort in the south western and south-eastern areas of the slope of the bank. Most of the hauls were carried out at depth between 300-400 m. Cod comprised 92 percent of the catches and the most important species in the by catch was redfish (7 percent). A long-line fishery is also conducted for cod between 200 and 400 m in the north west portion of the NAFO Footprint area along the slope of the bank. The principal by-catch in this fishery is skate and Greenland shark.
Divisions 3LNO at >30 m	White hake	The white hake fishery operates mostly along the shelf edge of the southern part of NAFO Division 3NO and tends to be an opportunistic fishery and therefore can be quite irregular. The fishery uses 130 mm mesh size bottom trawl gear.

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Figure 7-15 illustrates recorded fishing locations and activity levels in the NAFO NRA (2008 to 2012) based on automated vessel monitoring system (VMS) data, collected as part of NAFO's conservation enforcement measures. The mapped colours differentiate between areas of lower activity (greens) based on fewer received VMS "pings" over time, and areas with higher levels of activity (yellows to reds) based on more numerous VMS records. These data indicate that certain areas of the NRA, mainly focused within the Footprint, are subject to a greater degree of fishing activity by NAFO member states than other areas (WGEAFM 2012; NAFO 2014), including areas of the Sackville Spur and Flemish Pass that overlap with the Project Area, though not the Core BdN Development Area.

7.1.6 Key Fisheries

Snow crab has been by far the predominant species fishery in the LSA and RSA in recent years, though very little has been harvested in the Project Area. Groundfish harvesting is the most likely fishery to occur within the Project Area and is pursued by domestic and foreign harvesters, particularly for Atlantic redfish, Atlantic cod, Greenland halibut (turbot), and American plaice. Large pelagic fisheries (swordfish and sharks) may also occur in the area or nearby waters. Before the closures in 3L and 3M, northern shrimp trawling was also an important fishery in these Divisions. Along the vessel traffic route groundfish trawling may occur in areas closer to the western part of the Project Area, and snow crab harvesting most of the way westward to shore.

Key species fisheries that might occur in the LSA and/or Project Area and within the vessel traffic route are described in more detail in the following sections.

The RSA data presented below includes the LSA data, and that in all cases the fisheries location maps presented in this section show only reported domestic catches as there are no available equivalent species-level data for non-Canadian landings, though Figure 7-15 below does give an indication of overall RSA activity locations in the relevant areas.

7.1.6.1 Groundfish

Groundfish trawling is the predominant fishery likely to occur in the Project Area and in the eastern part of the vessel traffic route. Groundfish are the principal commercial species for both domestic and foreign harvesters in the NRA, accounting for approximately 95 percent of RSA harvest quantities since the northern shrimp fishery closures. Harvests of these species offshore NL have made up relatively modest amounts of domestic commercial fisheries landings in terms of weight and value in recent years, based on the DFO databases provided, compared to the overall fisheries in the LSA and RSA.

Many of the groundfish species are fished together in either a targeted fishery or as by-catch species. Historically, Atlantic cod and American plaice were the primary groundfish species in offshore NL and many inshore areas before the moratorium in the early 1990s. Since then, Atlantic redfish, Greenland halibut (turbot) and yellowtail flounder have become more important commercial groundfish species in the region. In the NRA in particular, Atlantic cod is still an important commercial fish species as the preceding data tables indicate.

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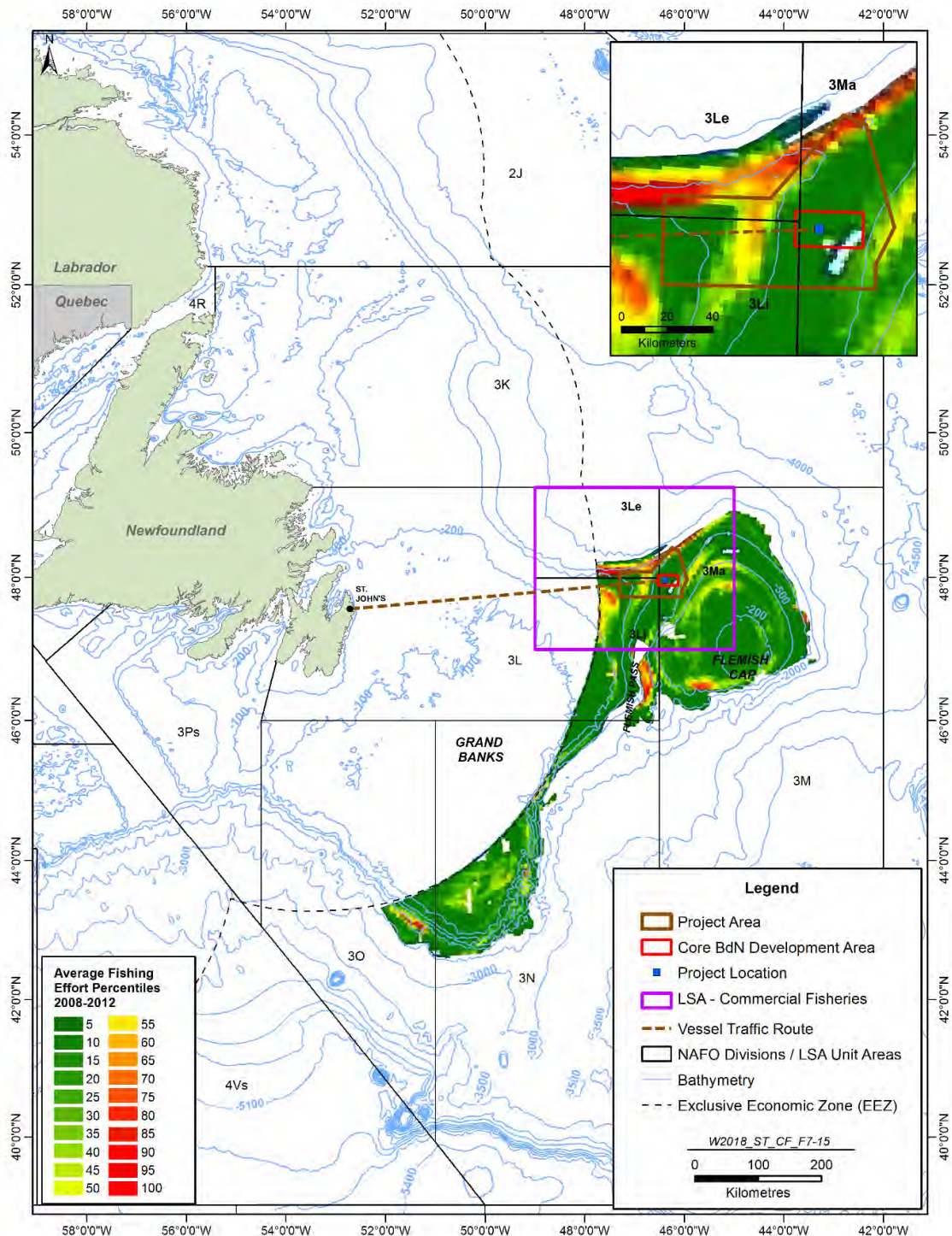


Figure 7-15 NRA Foreign and Domestic Fishing Effort Locations and Intensity 2008 to 2012

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Figures 7-16 to 7-18 illustrate reported domestic harvest locations and intensity for groundfish, all species all gear types, and fixed and mobile gear, respectively. Average monthly domestic catches for all groundfish species within the RSA NAFO Divisions, based on NAFO Statlant 21B data main species (NAFO 2016a), are presented in Figure 7-19 for domestic and foreign harvesters. As the data indicate, harvesting by non-Canadian vessels is more uniformly distributed throughout the year than by domestic harvesters.

Redfishes

There are three redfish species (also known as ocean perch) in the waters off NL – Acadian redfish, deepwater redfish and golden redfish – but they are typically harvested and reported together. NAFO manages the stocks of the three species in Divisions 3LMNO. The stocks in Divisions 2J3K are jointly managed with the Northeast Atlantic Fisheries Commission (NAFO 2018b). The directed fishery for redfish in Divisions 3LN was under moratorium from 1998 to 2009 but began again with a small quota in 2010, which has increased since then (Parrill 2016, NAFO 2018a;). With a 2018 quota in 3LMNO of 44,700 tonnes (12,549 tonnes for Canada), it is now one of the most productive groundfish fisheries reported in the RSA and is likely the main directed harvest in the Project Area.

Redfish are typically located at water depths below 200 m and are found along the northeast slope of the Grand Banks. Redfish harvesting tends to be concentrated around the continental shelf along the edge of the Grand Banks and may occur year-round, with domestic harvesting usually focused between June and December. Foreign harvesting is more evenly distributed throughout the year. Recent average landed quantities for Canadian and foreign harvesters are shown in Tables 7.1 to 7.3. As is illustrated in Figure 7-20 there is limited reported domestic redfish fishery in the Project Area compared to the LSA or RSA, though this may also be the most common species harvested by foreign fishers in the locations shown in Figure 7-15 above. Figure 7-21 indicates the reported RSA NAFO Divisions redfish harvest by both domestic and foreign harvesters for the 2008 to 2017 period based on NAFO Statlant 21A data (NAFO 2018f).

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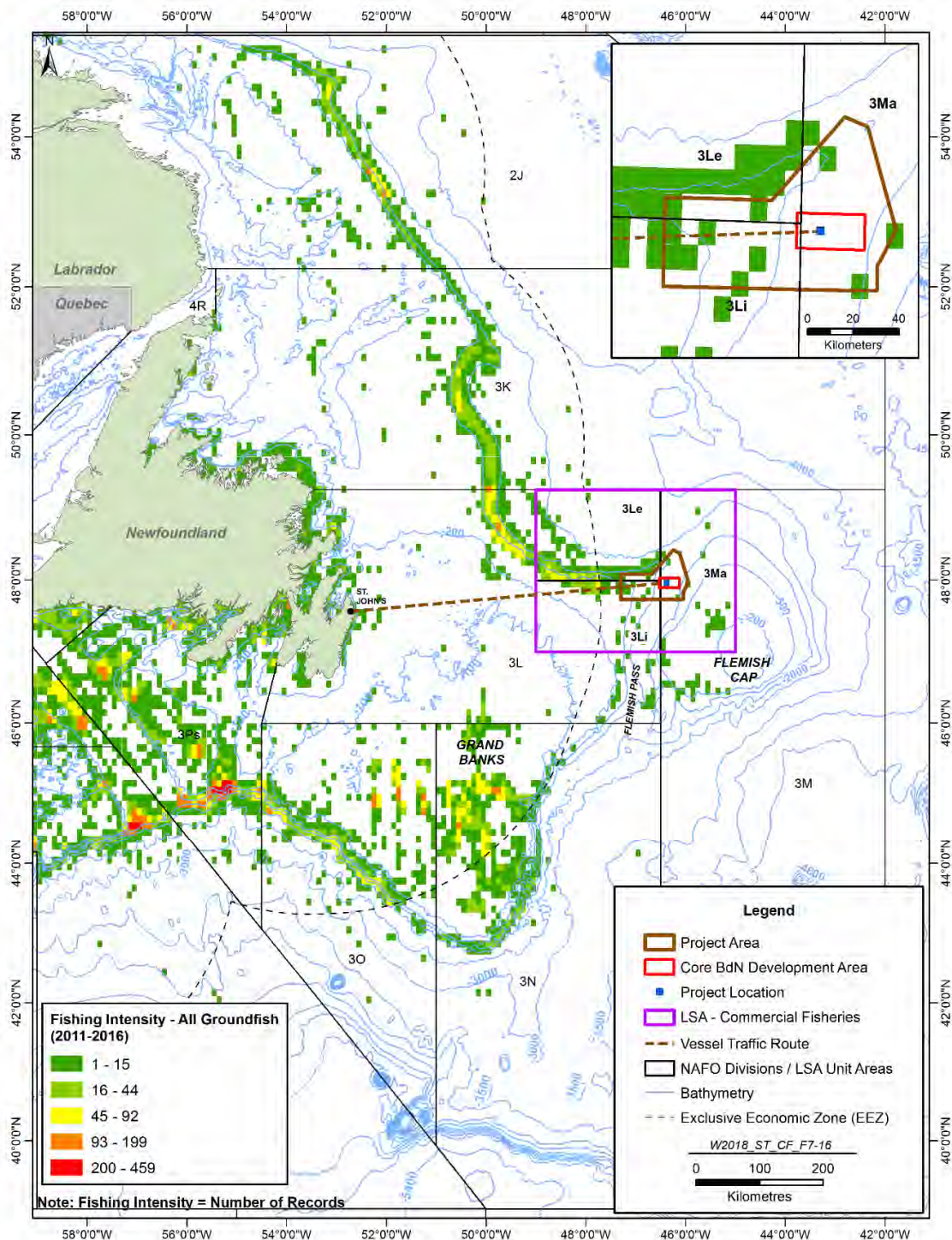


Figure 7-16 Groundfish Domestic Harvesting Locations and Intensity, All Gear Types, 2011 to 2016

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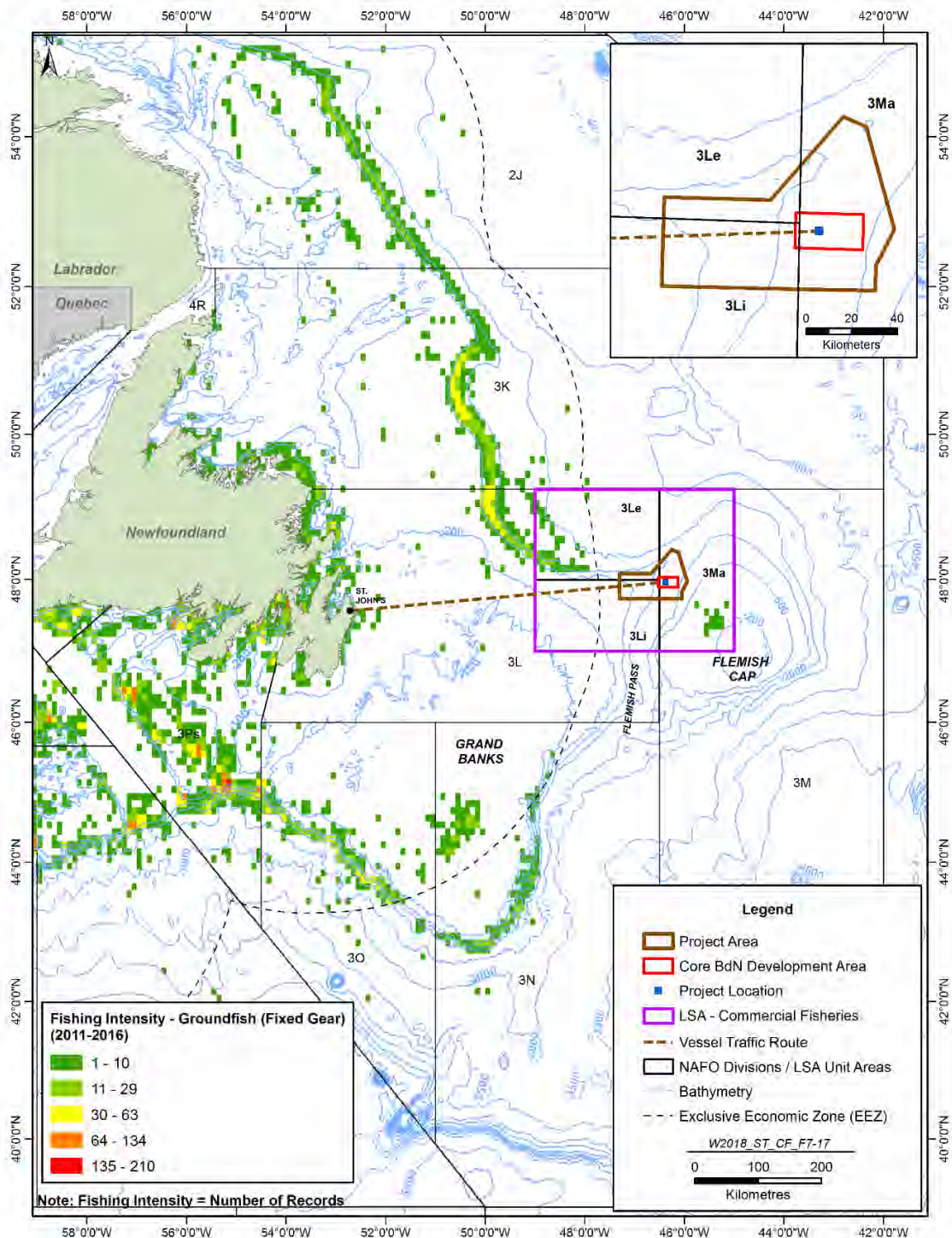


Figure 7-17 Groundfish Fixed Gear Domestic Harvesting Locations and Intensity, 2011 to 2016

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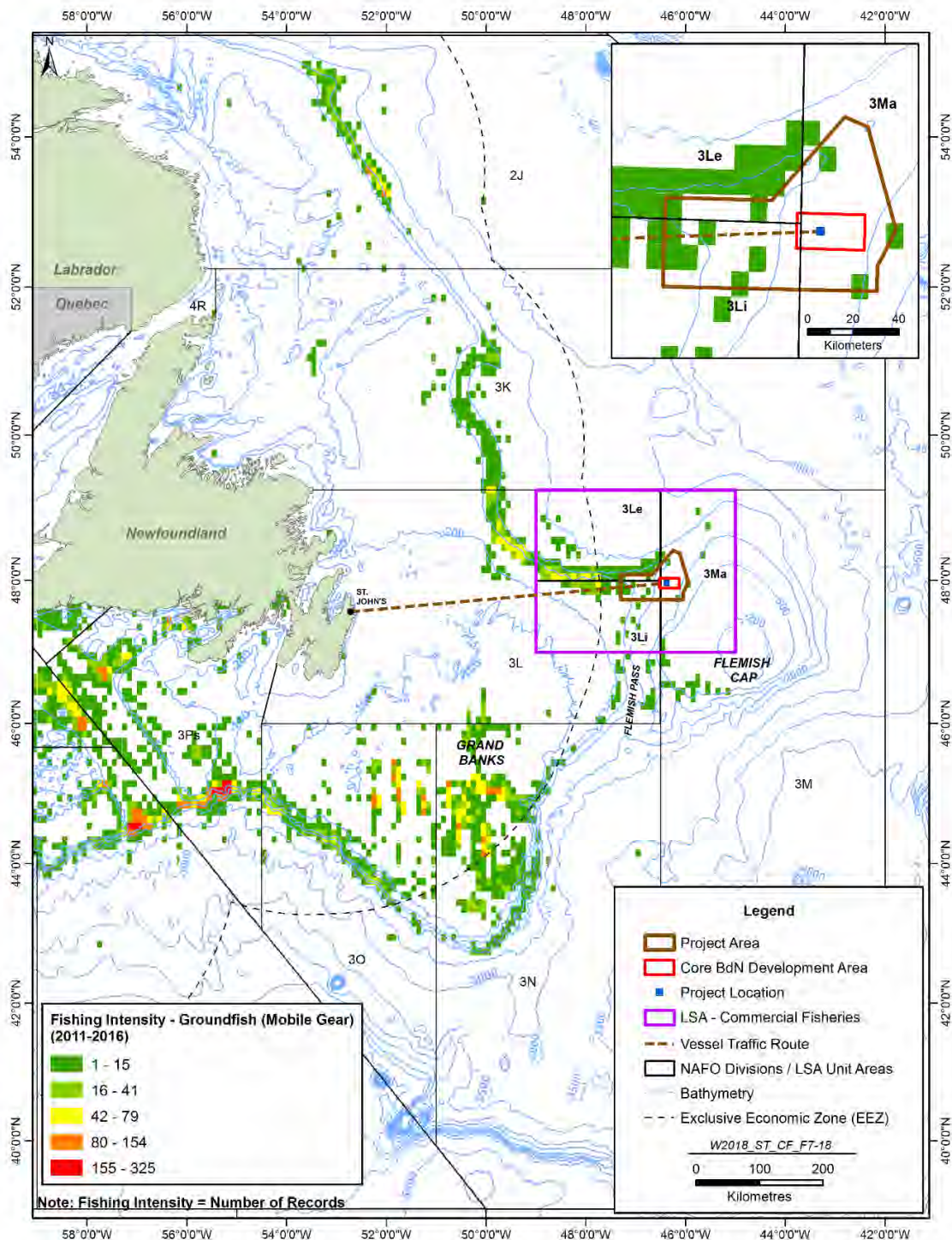


Figure 7-18 Groundfish Mobile Gear Domestic Harvesting Locations and Intensity, 2011 to 2016

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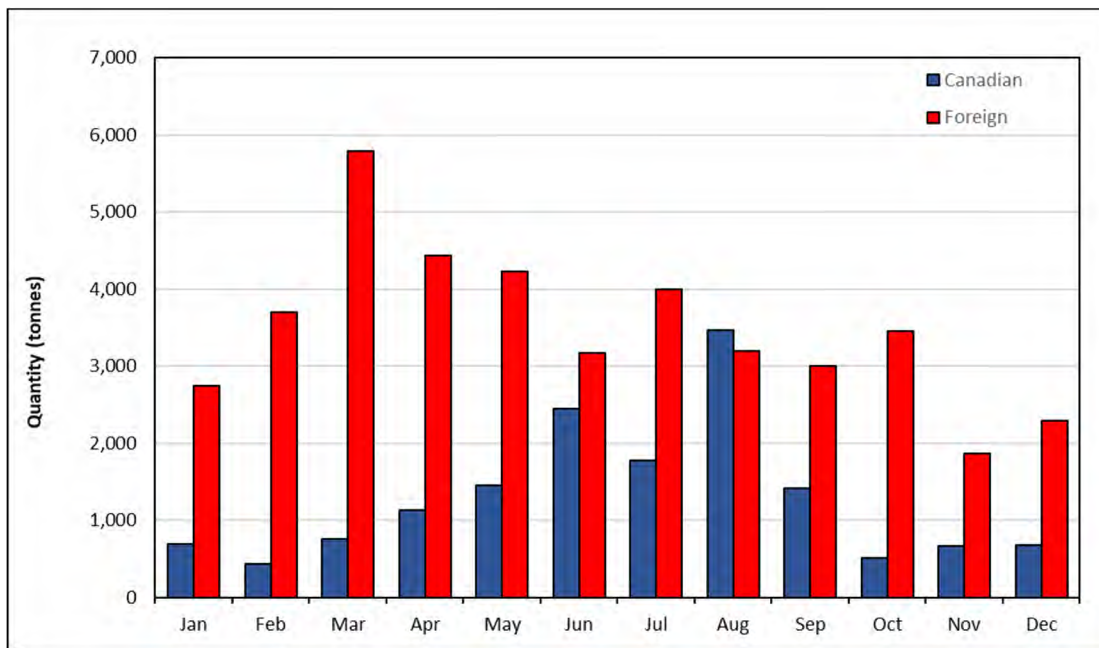


Figure 7-19 Groundfish, RSA Quantity of Harvest by Month, Domestic and Foreign 2011 to 2016 Average

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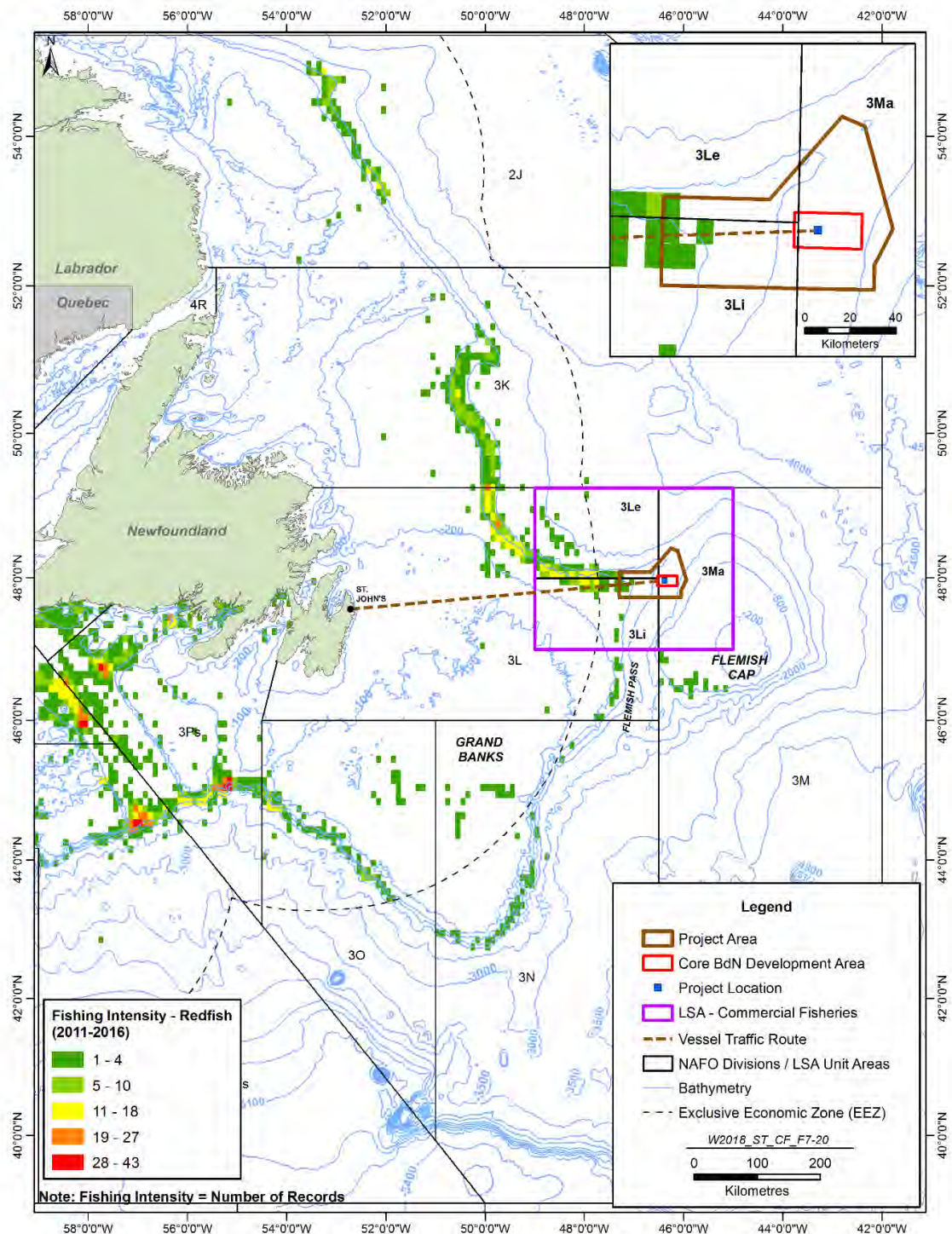


Figure 7-20 Redfish Domestic Harvesting Locations and Intensity, 2011 to 2016

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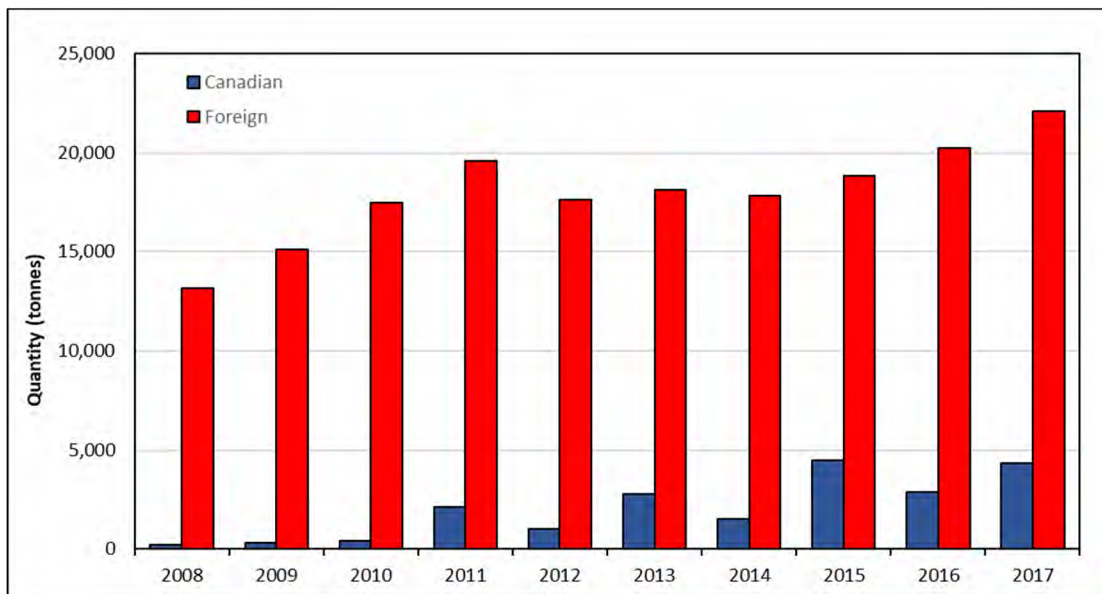


Figure 7-21 Redfish RSA Quantity of Harvest Domestic and Foreign 2008 to 2017

Greenland Halibut (Turbot)

Like redfish, Greenland halibut is taken in directed quota fisheries with about half the domestic fishery executed by smaller vessels (< 20 m) using fixed gear gillnets and the remainder of the quota taken by mobile trawls (Brodie et al. 2009). Foreign harvesting in the NRA is almost exclusively with bottom trawls. The directed fishery also harvests limited quantities of Atlantic cod and other groundfish by-catch and is taken as by-catch in other directed fisheries (NAFO 2016b).

There is some domestic Greenland halibut fishery within the Project Area, but this is most concentrated on the outer edges and slopes of the Grand Banks, stretching from south to north but with a greater concentration along the north shelf edge (see Figure 7-22). Foreign harvesters likely fish these areas as well. The domestic gillnet fishery is primarily between June and September while most of the trawl fishery occurs from December to July. Foreign harvesting is distributed through the year.

Within the RSA, NAFO sets Greenland halibut quotas for Divisions 3LMNO and DFO for 2J3K. The most recent NAFO quota for 3LMNO, which includes the Project Area and the LSA, saw an increase over 2017, raising it from 10,966 tonnes to 12,227 tonnes, of which 1,833 tonnes was allocated to Canadian harvesters (NAFO 2018c). As Figure 7-23 illustrates, foreign harvesters are responsible for the majority of the Greenland halibut catch in the RSA overall, particularly for Divisions 3L and 3M.

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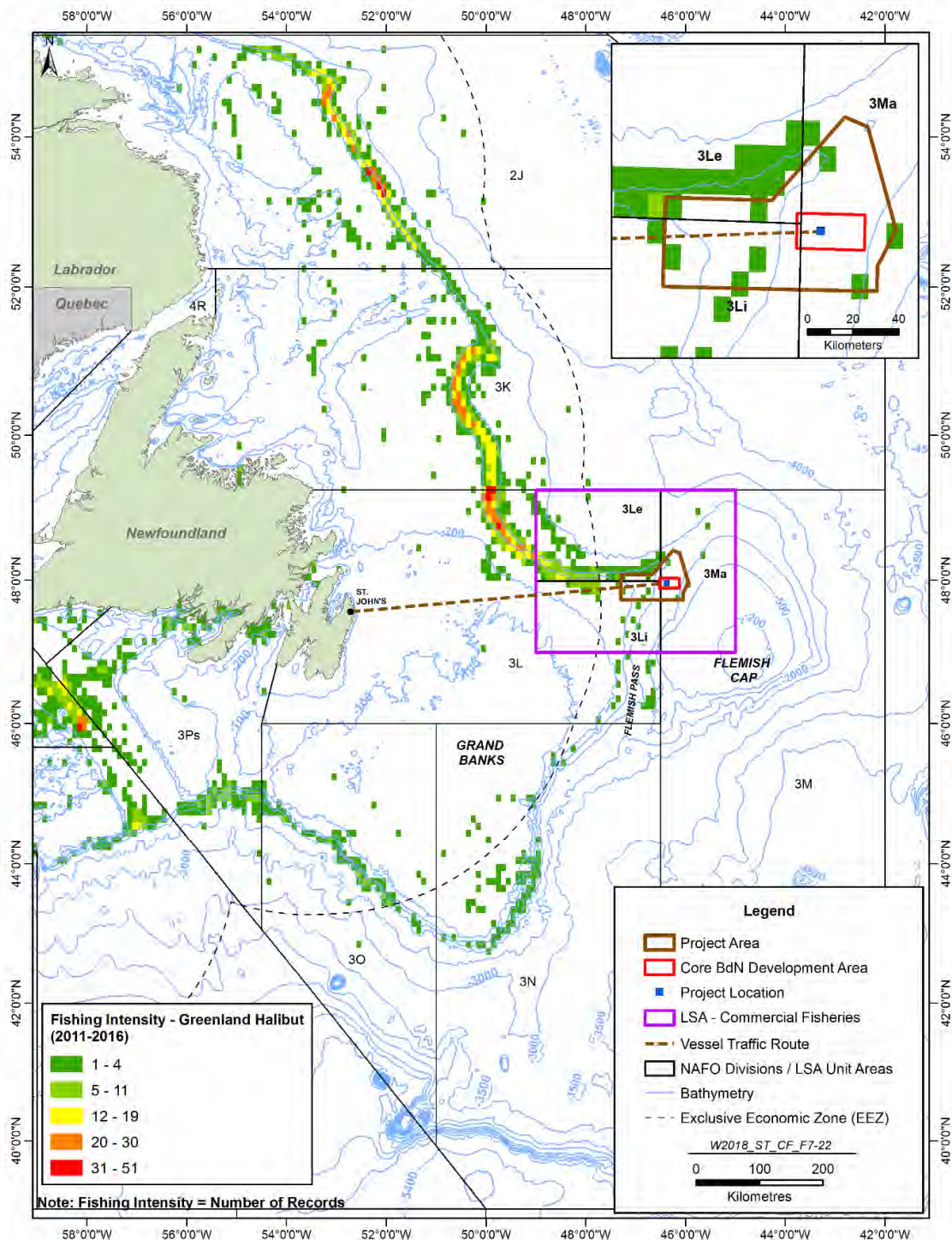


Figure 7-22 Greenland Halibut Domestic Harvesting Locations and Intensity, 2011 to 2016

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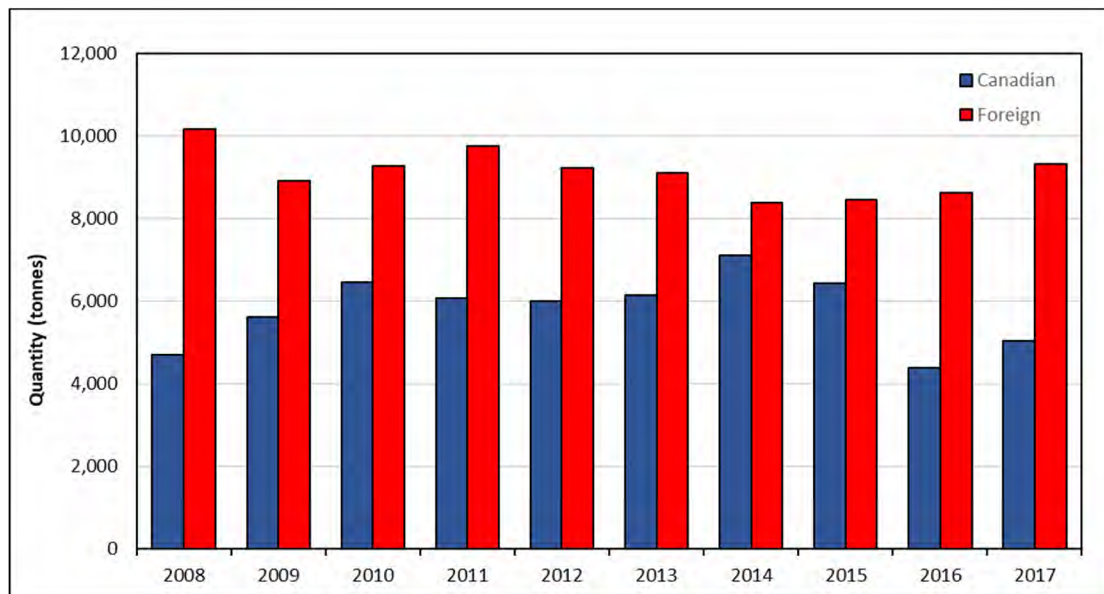


Figure 7-23 Greenland Halibut RSA Quantity of Harvest Domestic and Foreign 2008 to 2017

Atlantic Cod

As described in Section 7.1.3, since the 1990s the cod fishery in the Project Area and most of the RSA has been limited to by-catch landings. However, a directed domestic and foreign commercial fishery was reinstated in Division 3M in 2010 (NAFO 2018d). In 2018 the overall 3M quota was 11,145 tonnes, with 89 tonnes allocated for Canadian harvesters, though NAFO planned a quota reduction to 8,182 tonnes for 2019, based on the latest stock assessment which found that there was a relatively high probability of stock decline in the near term (NAFO 2017a, 2018a). By-catches occur in the redfish, Greenland halibut, yellowtail flounder and other-directed fisheries within the LSA and RSA, including the domestic gillnet fisheries in particular.

Within the Project Area, there has been some recorded domestic harvesting effort (Figure 7-24) and foreign catches likely occur there as well. Harvesting potentially occurs year-round but tends to be more concentrated in the summer for domestic harvesters. Most of the foreign harvest occurs in the February to July period.

Figure 7-25 illustrates quantities of Atlantic cod harvests based on NAFO data for Domestic and foreign harvests within the RSA NAFO Divisions.

Although some recent surveys have suggested that some of the moratorium stocks may be recovering, the 2016 Division 2J3KL cod stock assessment recommended no lifting of the existing closures as stock assessments indicate a high probability of continued decline (Bratty et al 2018; DFO 2016b, 2017, 2018a).

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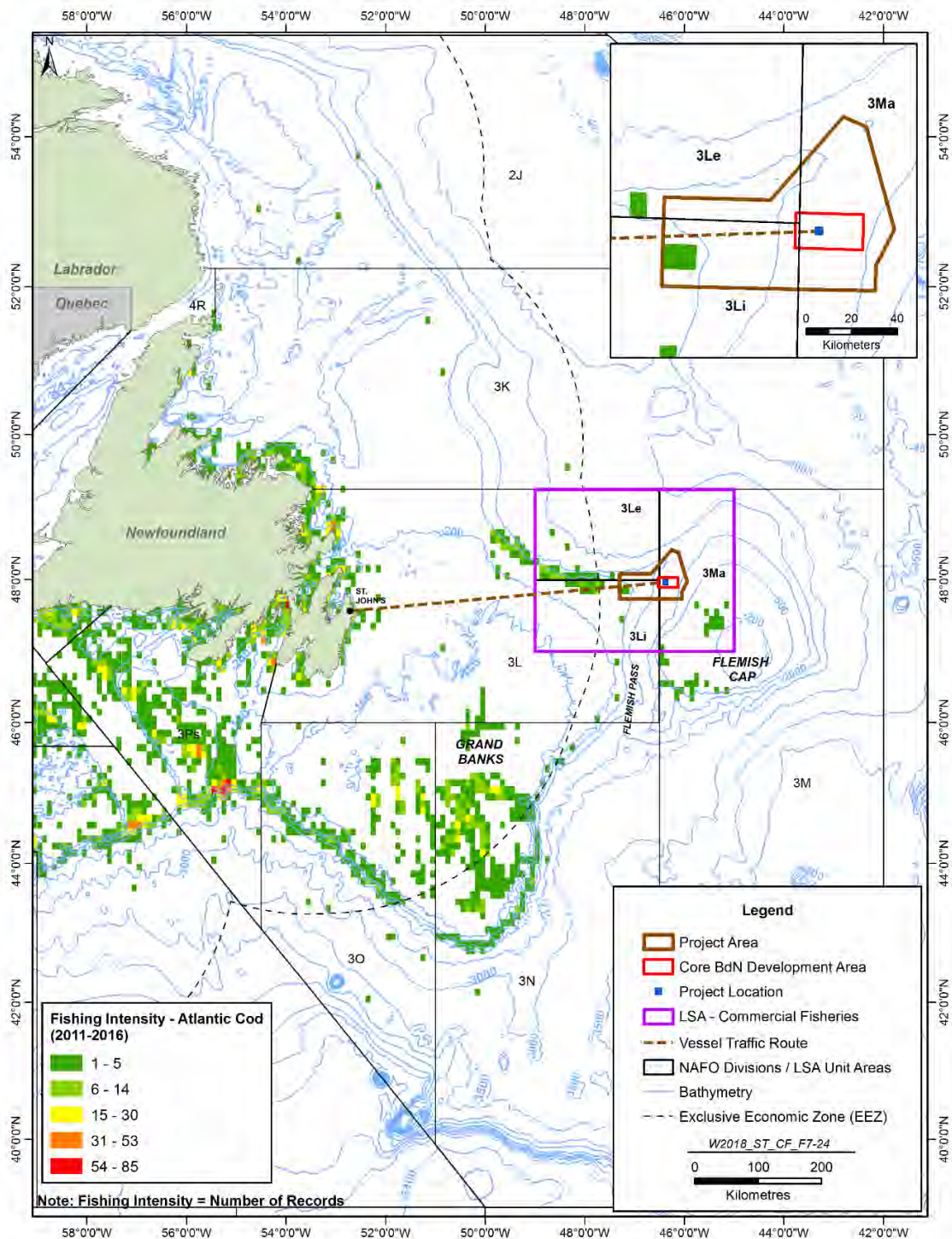


Figure 7-24 Atlantic Cod Domestic Harvesting Locations and Intensity, 2011 to 2016

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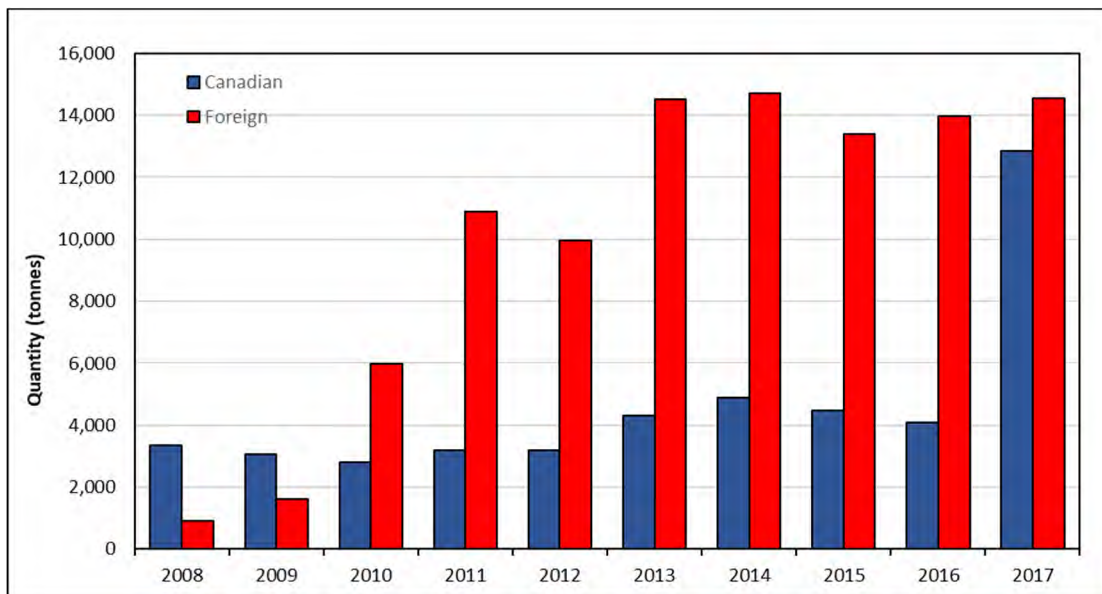


Figure 7-25 Atlantic Cod RSA Quantity of Harvest Domestic and Foreign 2008 to 2017

Yellowtail Flounder

The NAFO Division 3LNO yellowtail flounder stock is managed by NAFO and is considered a straddling stock because it occurs both within and outside Canada's EEZ and the NRA. NAFO's most recent stock assessment in 2015 determined that there was a low probability that the 3LNO stock will exceed its fishing limit, and it was projected to maintain a high population moving forward (NAFO 2015). The 2018 quota for the species was set at 17,000 tonnes, with 16,575 tonnes allocated to Canadian harvesters, though some of this amount has been transferred to US and French (Saint Pierre and Miquelon) harvesters in recent years (NAFO 2018a).

The reported domestic locations for yellowtail flounder show that landings occur outside the LSA and Project Area, mainly in NAFO Divisions 3NO in the southern part of the RSA (Figure 7-26). Foreign harvesting occurs primarily in these areas as well, based on NAFO data. The fish are typically found and harvested at depths of 40 m to 70 m and rarely at depths > 100 metres (DFO 2016c). Harvesting occurs year-round but is highest during the March to June and October to December periods.

Figure 7-27 shows the annual harvest by Domestic and foreign vessels for 2008 to 2017 within the RSA NAFO Divisions.

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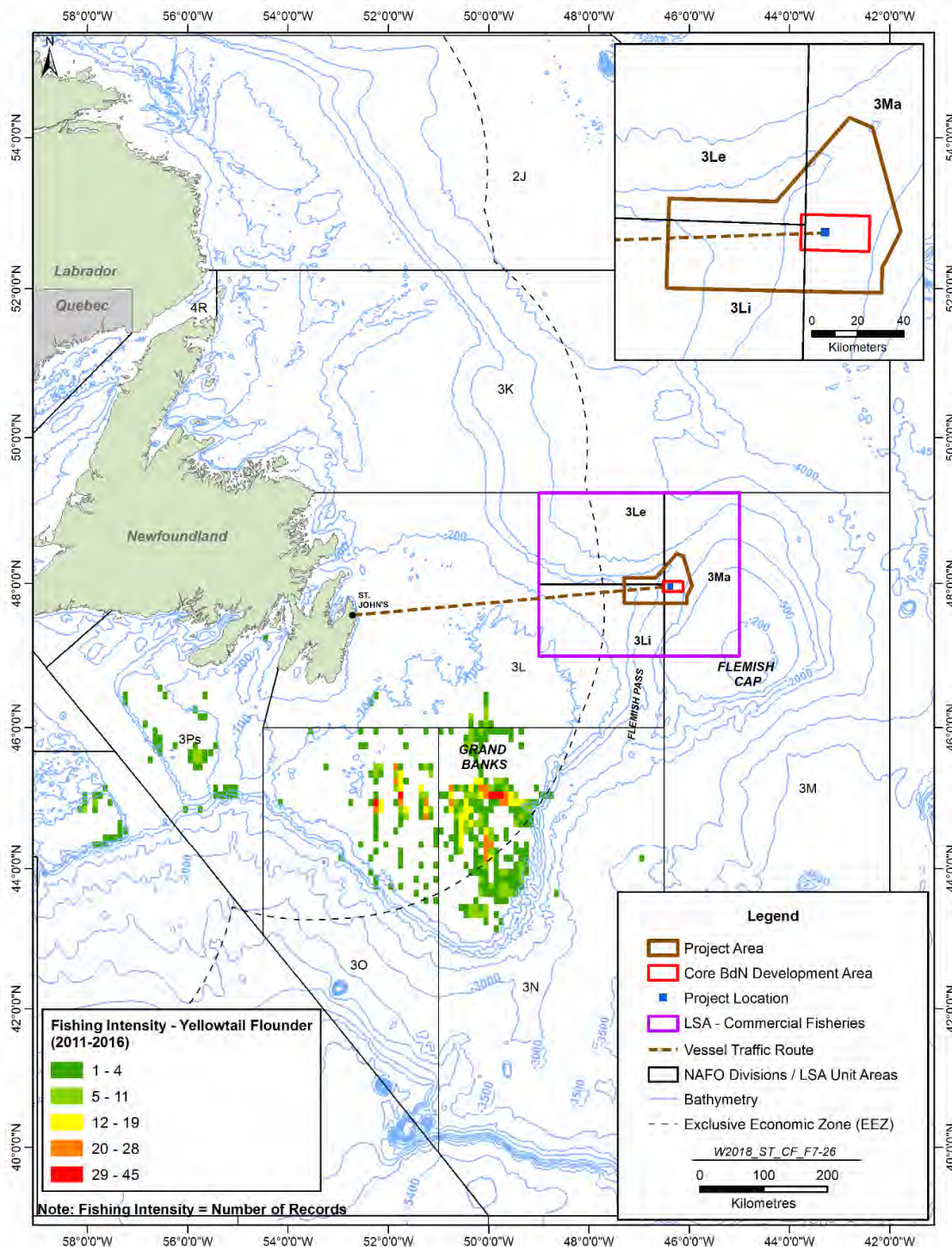


Figure 7-26 Yellowtail Flounder Domestic Harvesting Locations and Intensity, 2011 to 2016

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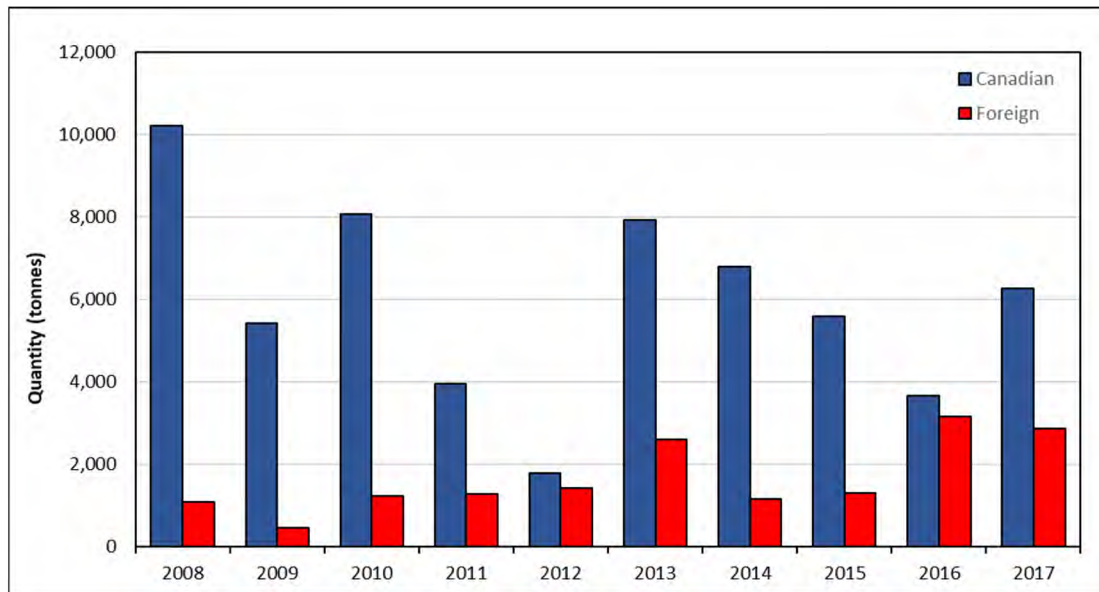


Figure 7-27 Yellowtail Flounder RSA Quantity of Harvest 2008 to 2017, Domestic and Foreign

American Plaice

NAFO manages American plaice stocks in Divisions 3M and 3LNO as separate stocks, and the species has had no directed fishery or quota since the 1990s in either Canadian waters or the NRA (NAFO 2018e). Within Divisions 3LNO, most of the by-catch is taken in the Canadian yellowtail fishery inside the EEZ and in the skate, redfish and Greenland halibut fisheries in the NRA. In 3M, American plaice is caught mainly in the Atlantic cod fishery (Alpoim et al. 2017; Wheeland et al. 2018).

Since harvests of American plaice are by-catch from fishing activities for other groundfish species, domestic harvesting locations shown in Figure 7-28 are similar to other groundfish harvesting locations. Figure 7-29 shows the domestic and foreign catch quantities for 2008 to 2017.

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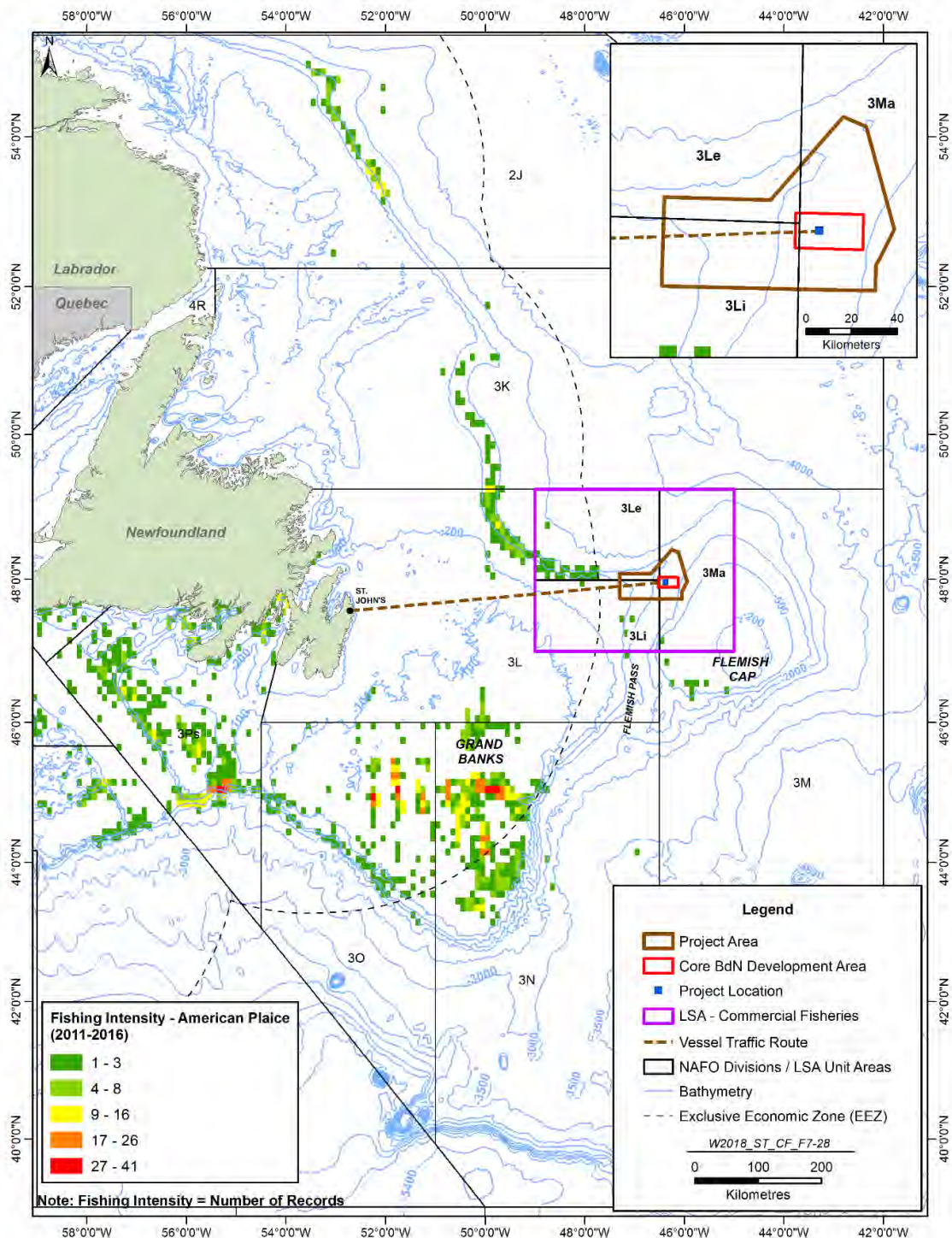


Figure 7-28 American Plaice Domestic Harvesting Locations and Intensity, 2011 to 2016

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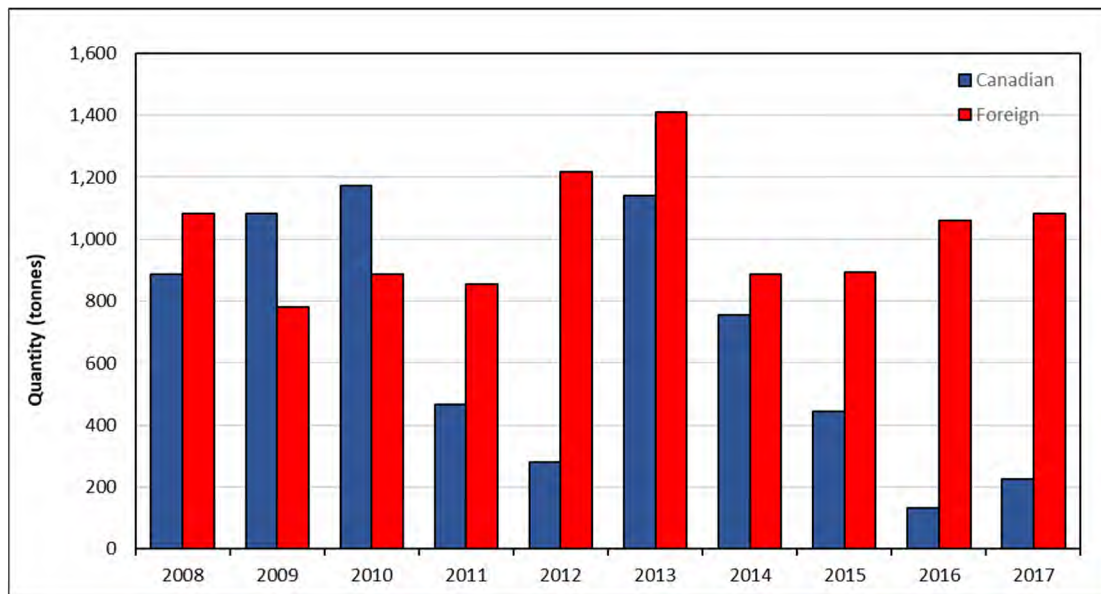


Figure 7-29 American Plaice RSA Quantity of Harvest 2008 to 2017, Domestic and Foreign

7.1.6.2 Snow (Queen) Crab

Although not fished in the Core BdN Development Area and only rarely fished in the Project Area, snow crab harvesting is currently the most substantial domestic fishery within the LSA and in most other parts of the RSA. The species is managed by DFO and there is no foreign fishery for snow crab in the NAFO Convention Area.

The snow crab fishery began a rapid increase after the groundfish closures in the early 1990s and has continued to increase in relative importance, particularly since 2015 and the closure of the northern shrimp fisheries. As indicated in Table 7.2 (above), snow crab made up nearly 65 percent of the reported LSA harvest by weight and approximately 83 percent of its landed value for the 2011-2016 period, based on DFO data. In 2016, after the closure of shrimp harvesting, snow crab accounted for 100 percent of the reported catch quantities and values in the LSA. Within the RSA, snow crab made up 31 percent of the harvest by quantity and 53 percent by value over the 2011 to 2016 period. In 2016, the harvest by quantity and value were approximately 33 percent and 60 percent, respectively. Overall harvests for the 2015 season marked an all-time high in the Divisions 3LNO with landings of 28,750 tonnes (DFO 2016d). However, based on data from stock assessments, quotas have been sharply reduced in most regions since then, dropping from a province-wide quota of 50,353 tonnes in 2015 to a total of 28,980 tonnes in 2018 (DFO 2018a).

Snow crab is harvested almost exclusively by vessels < 20 m in length using traps placed in fleets on sandy or muddy bottoms buoyed to the surface at water depths typically between 50 m and 600 m (DFO 2013a). As the locational data presented in Figure 7-30 illustrate, the fishery has been widespread along parts of the NL Shelf, the Flemish Pass, and the edges of the Grand Banks, with very little in the Project Area, and none in the Core BdN Development Area.

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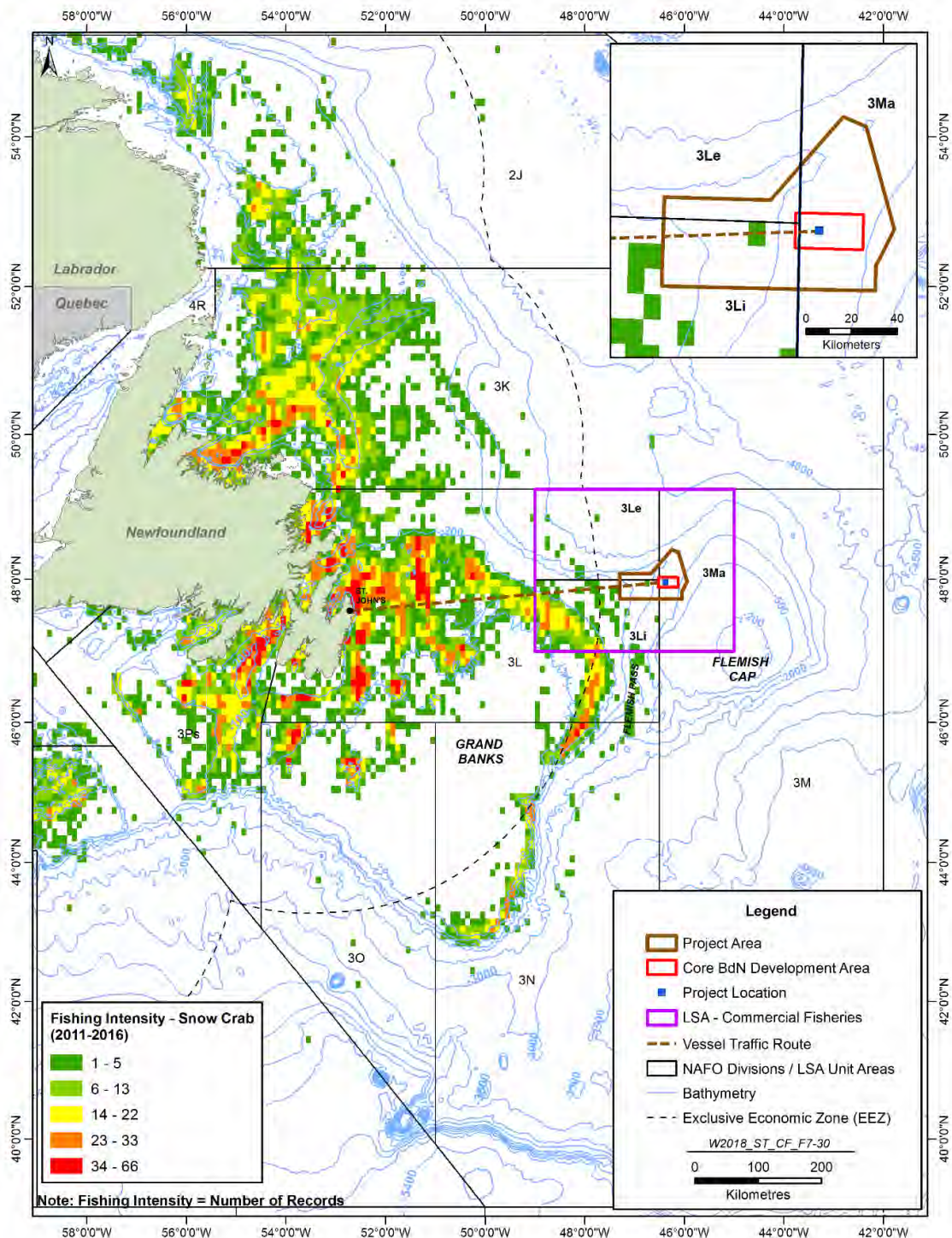


Figure 7-30 Snow Crab Harvesting Locations and Intensity, 2011 to 2016

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Crab harvesting is the main fishery along the vessel traffic route, but this is typically restricted to spring and summer months, with the exception of harvesting undertaken for the annual post-season science survey in the autumn (Section 7.1.9.2). Annual snow crab harvest quantity for the LSA and the RSA NAFO Divisions for 2011 to 2016 are shown in Figure 7-31. Figure 7-32 illustrates the average timing of the commercial harvest.

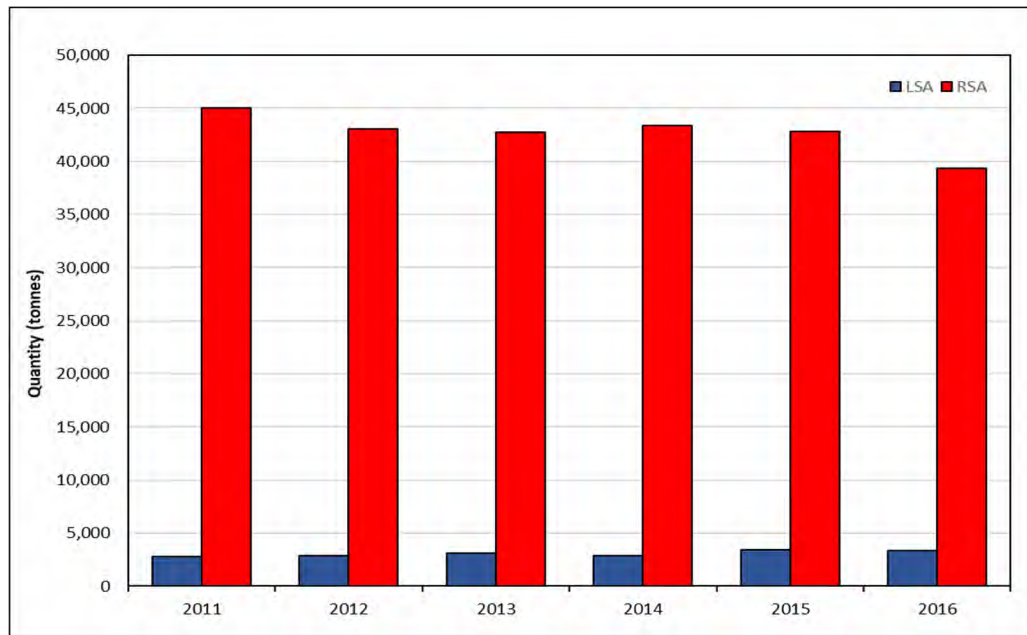


Figure 7-31 Snow Crab, RSA and LSA Quantity of Harvest by Year, 2011 to 2016

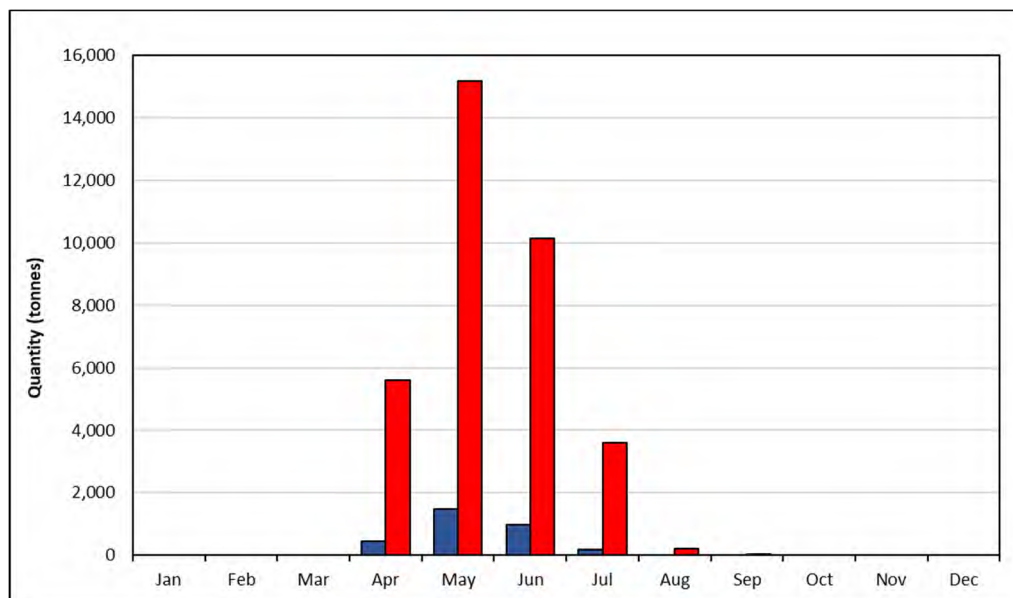


Figure 7-32 Snow Crab, RSA and LSA Quantity of Harvest by Month, 2011 to 2016 Average

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7.1.6.3 Shrimp

Shrimp harvesting is currently not permitted in the Project Area or the LSA. Prior to 2015 northern shrimp was one of the largest domestic commercial fisheries throughout the NL offshore, including the LSA and Project Area. It is still an active fishery in the northern parts of the RSA (Divisions 2J and 3K). Figure 7-33 illustrates the aggregated domestic shrimp harvesting locations from 2011 to 2016. While the harvest is directed primarily towards northern shrimp, striped shrimp (also known as pink or Aesop shrimp) are taken in smaller quantities.

Beginning in 2009, shrimp quotas for 3LNO – Shrimp Fishing Area (SFA) 7 were drastically reduced from more than 20,000 tonnes in 2009 to 1,415 tonnes in 2014, the last year that shrimp fishing was permitted in that area (DFO 2009, 2014c; Parrill 2016). The stock has been trending downwards as much as 70 percent to 90 percent over the last six to seven years (DFO 2016e). Similarly, the 2017 NAFO assessment of these stocks concluded that recent results gave no indication of short-term recovery (NAFO 2017b). Adjacent northern shrimp fisheries on the Flemish Cap (NAFO 3M) have been under NAFO moratorium since 2011 (NAFO 2017c).

In Divisions 3K and 2J (SFA 6 and the southern part of SFA 5), shrimp harvesting continues to be permitted; however, since the 2016/2017 season, quotas have been reduced from 27,825 tonnes to 10,400 tonnes for 2018/2019 season (DFO 2018b, DFO 2018c). Figures 7-34 and 7-35 provide the domestic and foreign quantity of harvest by year and month, respectively.

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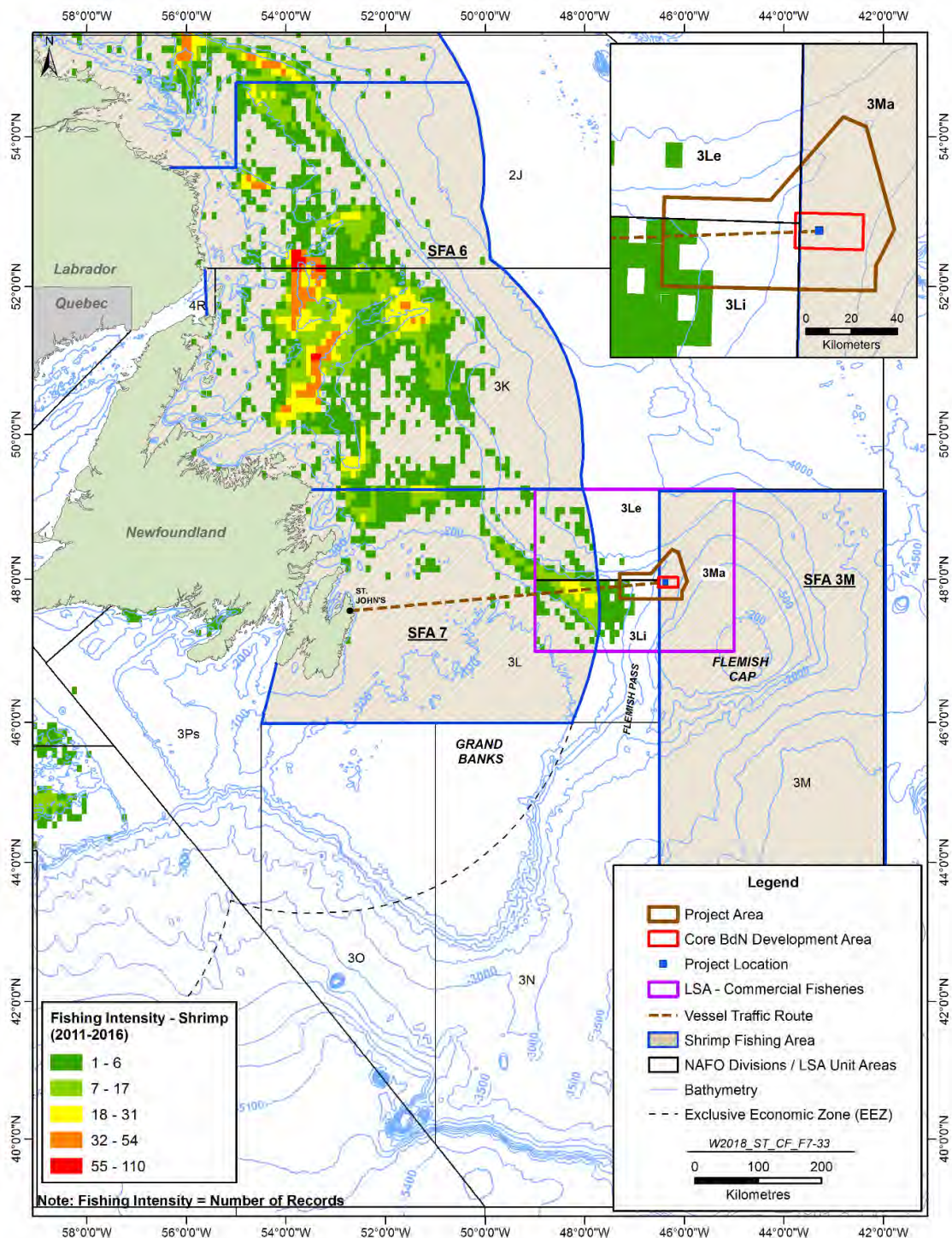


Figure 7-33 Shrimp Domestic Harvesting Locations and Intensity, 2011 to 2016

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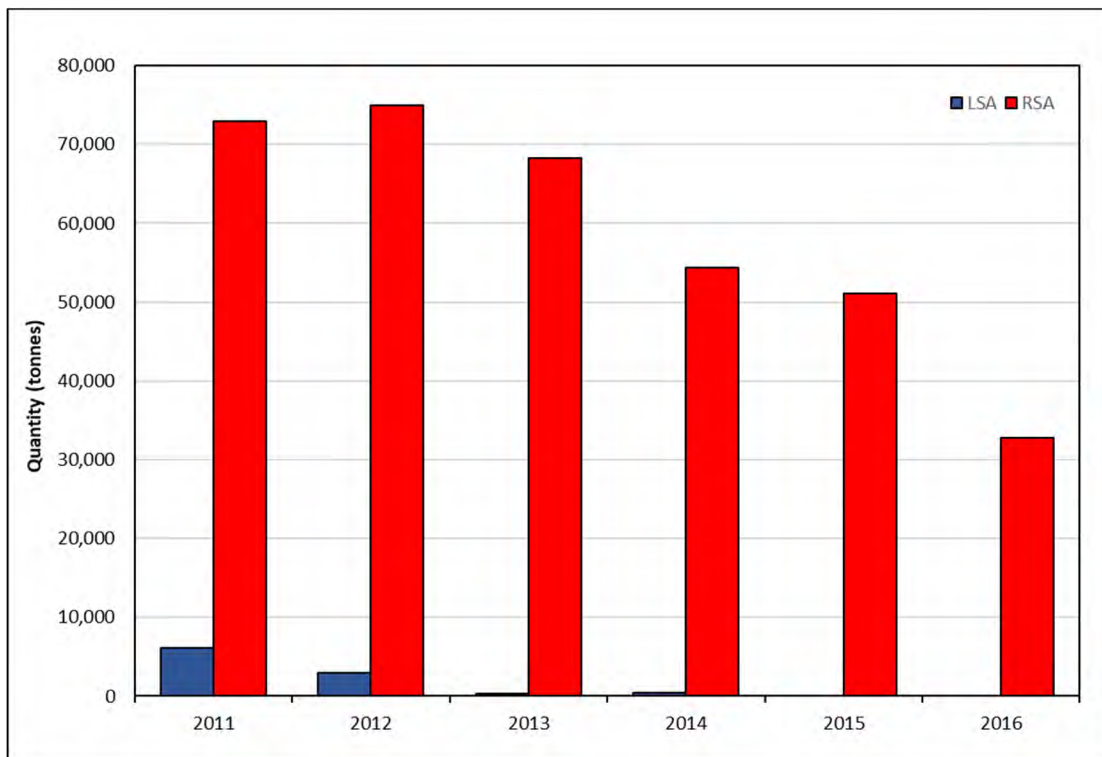


Figure 7-34 Shrimp, LSA and RSA Quantity of Harvest by Year, 2011 to 2016

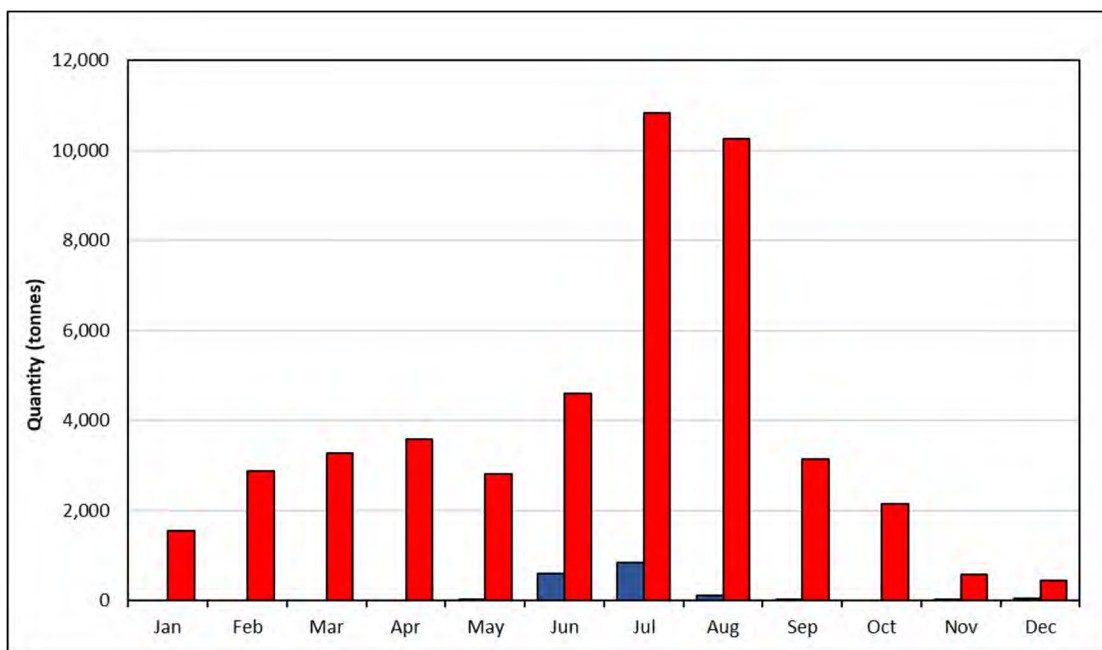


Figure 7-35 Shrimp, LSA and RSA Quantity of Harvest by Month, 2011 to 2016 Average

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7.1.6.4 Swordfish, Tunas and Sharks

Based on the DFO locational catch data, domestic harvesting for these species does not typically occur in the LSA or Project Area (Figure 7-36), though foreign harvesting may occur there. These high-value fisheries are pursued in the RSA primarily by foreign harvesters and to a lesser extent by Canadian enterprises. The species are typically taken in similar areas focused on shelf breaks and around the Flemish Cap, and often with the same or similar near-surface longline fishing gear.

The domestic effort in Atlantic Canada is conducted primarily on the edges of Georges Bank and the Scotian Shelf and to a lesser extent on the Grand Banks and as far north as the Flemish Cap from April to December (Andrushchenko et al. 2014; DFO 2013b). The much larger foreign component of these fisheries by harvest quantity (Figure 7-37) occurs mainly in NAFO 3M and to a somewhat lesser extent in 3N, over the same annual timeframe.

Swordfish quotas are assigned by ICCAT. Nearly all the active domestic fishing licences are held in the Maritimes Region with a few longline licences held in NL. While domestic swordfish harvesting levels have been relatively low in the NL Region compared to landings from Georges Bank and the Scotian Shelf in the Maritimes-Scotia Fundy Region, less favourable conditions to the southwest sometimes lead to more effort in waters around the Grand Banks and as far as the Flemish Cap. Typically, the movement from the Scotian Shelf to the Grand Bank occurs in mid- to late July, depending on fishing conditions in the west, and some harvesters may continue fishing in the east until late fall. Recent annual quotas for Canadian vessels are approximately 2,000 tonnes (Andrushchenko et al. 2014; T. Atkinson pers comm April 2017). International fishing for swordfish outside the Canadian EEZ is pursued primarily by Spanish harvesters and is most concentrated within 3M (NAFO 2018f; ICCAT 2013a, 2013b).

Domestic tuna harvesting does not usually take place in the Project Area. Within the RSA it occurs primarily in the waters off the southwestern Grand Bank. Tunas harvested include bluefin, bigeye and albacore as part of a directed fishery and as by-catch in other fisheries, such as swordfish (DFO 2014a). ICCAT assigns Canada a quota for harvesting bluefin tuna (DFO 2016e, 2016f). Tuna are harvested between spring and late fall, with most landings between late July and late September (DFO 2014b). International fishing for tuna is primarily for bigeye, and takes place mainly in 3M and 3N, outside the EEZ (NAFO 2018f; ICCAT 2013a, 2013b).

Shark fisheries in Atlantic Canadian waters are currently under DFO moratorium although limited by-catches are allowed in the swordfish and tuna longline fishery (DFO 2016e, 2016f). In the past, this fishery targeted porbeagle, great blue and shortfin mako sharks in the waters from the Scotian Shelf, and eastward to the southwestern Grand Bank, off Saint Pierre Bank and along the Laurentian Channel. International fisheries for sharks are active in the RSA and potentially in parts of the Project Area and make up the greatest portion of the large pelagic catch in those waters. The primary species caught is the great blue and to a lesser extent the shortfin mako shark. Harvest is most concentrated in 3M and to a lesser extent in 3N, pursued primarily by Spanish harvesters.

Figure 7-36 illustrates reported Canadian-only harvest locations for these species. Foreign fishing is focused in NAFO 3M, with smaller reported catches in 3N and 3O. Figures 7-37 and 7-38 provide the domestic and foreign quantity of harvest by year and month, respectively.

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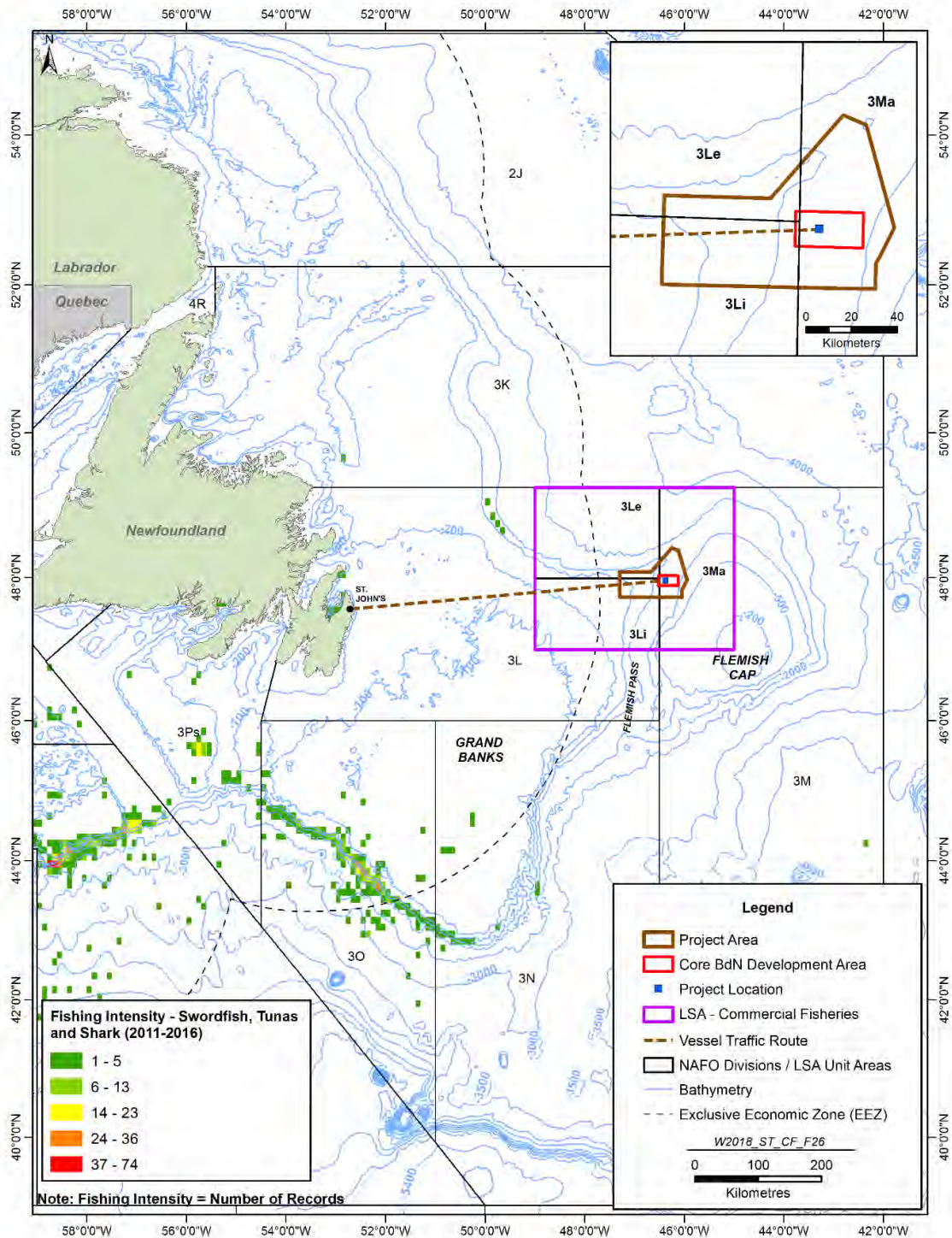


Figure 7-36 Swordfish, Sharks and Tunas Domestic Harvesting Locations and Intensity, 2011 to 2016

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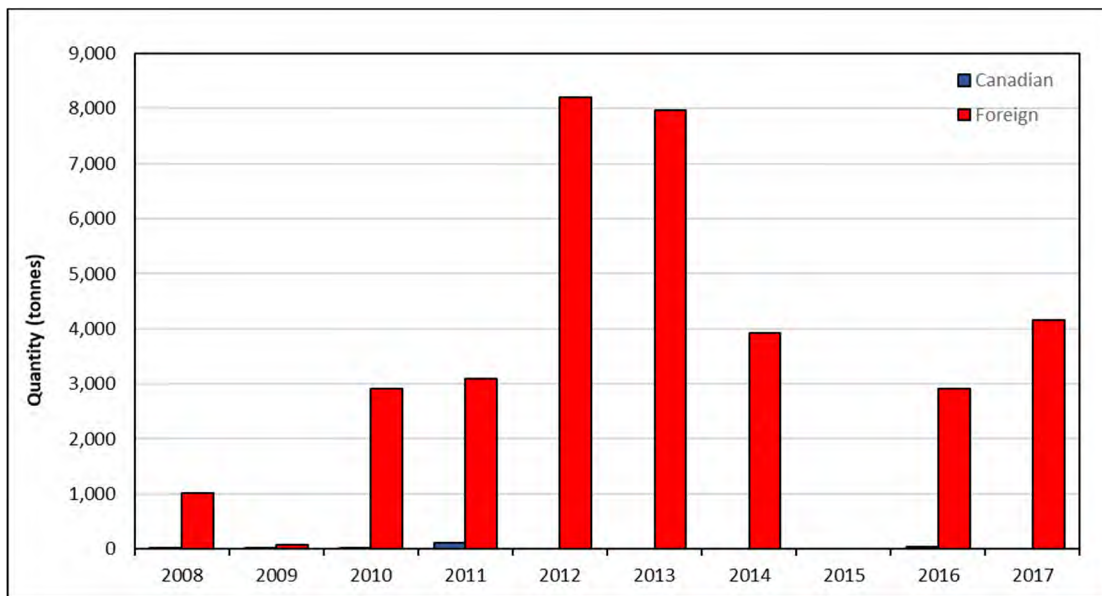


Figure 7-37 Swordfish, Sharks and Tunas RSA Quantity of Harvest 2008 to 2017, Domestic and Foreign

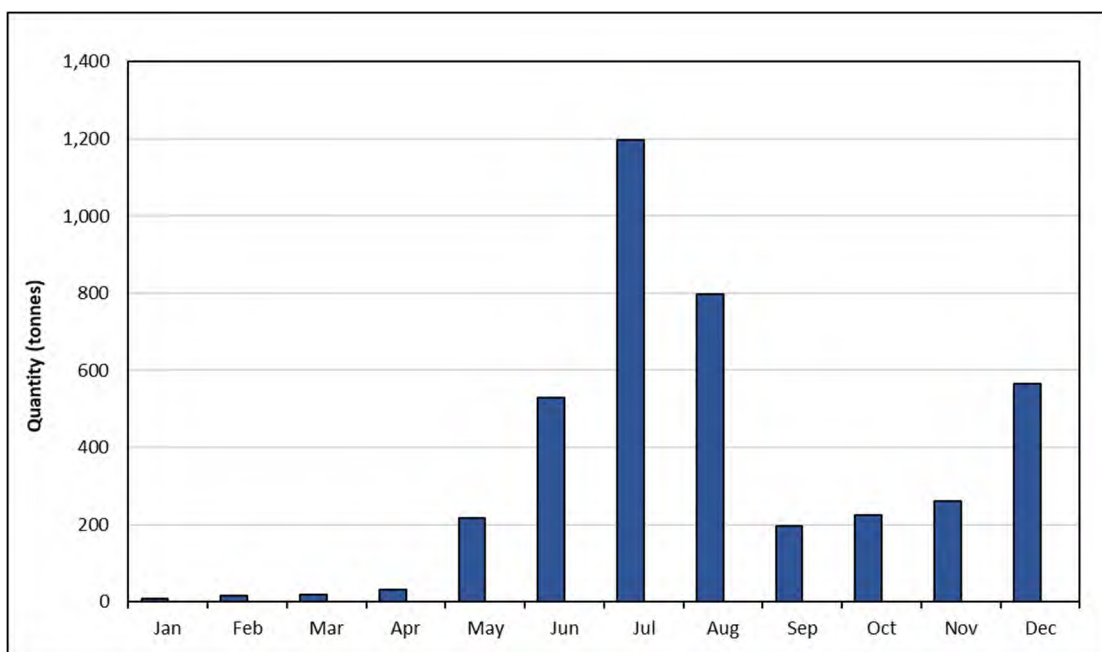


Figure 7-38 Swordfish, Sharks and Tunas RSA Quantity of Harvest by Month, 2011 to 2016 Average, Domestic and Foreign,

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7.1.7 Fishing Gear

Various types of commercial fishing gear are used offshore NL. The type of gear used is dependent on the species being harvested. For instance, the snow crab fishery uses fixed crab pots and the shrimp fishery employs shrimp trawls. Groundfish are usually harvested with either fixed (gillnets or bottom longlines) or mobile gear (otter trawls). Fisheries for large pelagic species, such as swordfish, primarily use surface longlines which can be more than 60 km long, while other pelagic species may be harvested with dragnets or seines.

The principal fixed and mobile gear used during offshore commercial fisheries in the RSA is listed in **Error! Reference source not found.** Figure 7-39 indicates the relative proportion of landings reported (2008 to 2017) for major gear types in the RSA by both foreign and domestic harvesters, based on NAFO’s Statlant 21B dataset (NAFO 2016a). Nearshore in the RSA, a variety of other gears are used, particularly lobster pots and fixed gear.

Table 7.6 Fixed and Mobile Gear Used in the NL Offshore

Fixed Gear	Mobile Gear
<ul style="list-style-type: none"> • Crab pots • Gillnets • Longlines (surface drift lines and bottom) 	<ul style="list-style-type: none"> • Otter Trawls (bottom and midwater) • Shrimp Trawls • Dragnets • Seines • Dredges

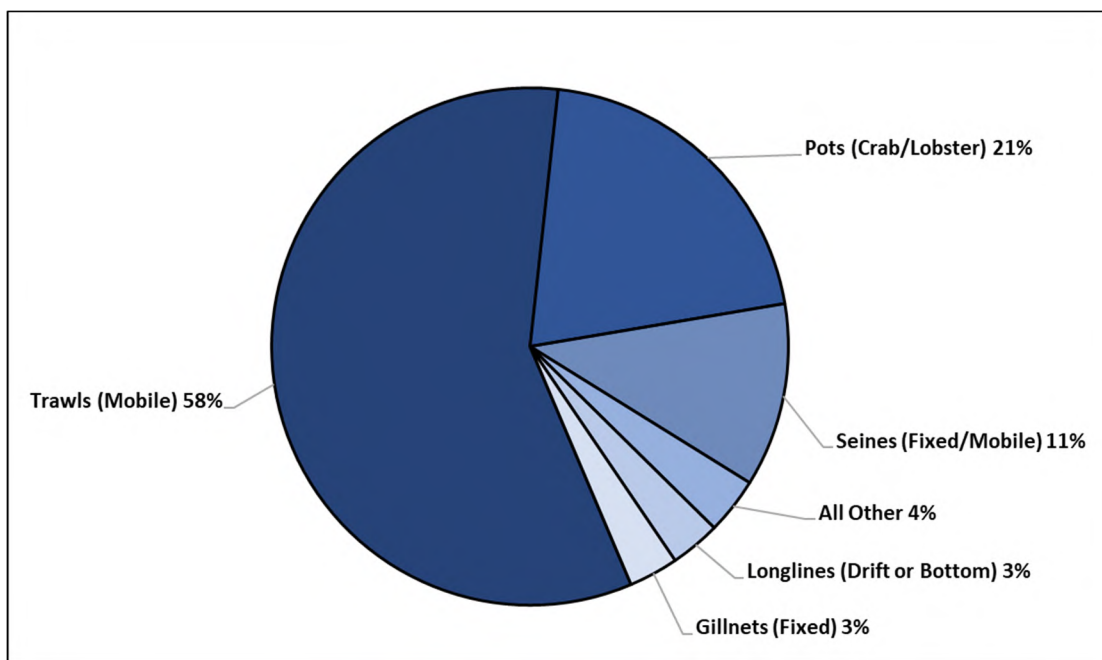


Figure 7-39 Major Gear Types by Quantity of Catch RSA 2008 to 2017, Domestic and Foreign

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Fixed gear harvesting predominates during the April to September period, while the mobile gear fisheries locations tend to be relatively widespread throughout the year (see Figures 7-12 and 7-13). As Figure 7-40 illustrates, very little domestic fixed gear harvesting has been reported within the Project Area and none in the Core BdN Development Area. Within the LSA (other than the vessel traffic route), fixed gear is focused in UA 3Li (mainly crab pots) and to the north in UA 3Le; along the shelf slope, Greenland halibut gillnetting is predominant.

Mobile otter trawl is the main gear type used in the Project Area by foreign and domestic harvesters. Domestic mobile gear harvesting has been recorded in the western and northern parts of the Project Area (Figure 7-41). Within the LSA, harvesting is focused in 3Le and 3Li. However, much of the harvesting effort shown in that area before 2015, particularly in 3Li, is for northern shrimp. Therefore, with the continuing absence of shrimp trawlers in Division 3L, the level of mobile gear fishing activity in this part of the LSA area will likely be lower.

Foreign fisheries in the Project Area and in the LSA east of the EEZ are most likely to be trawlers engaged in groundfish harvesting (see Figure 7-15) though some fixed gear (e.g. longlines) might be present at times.

Along the vessel traffic route within the LSA UAs, fixed and mobile gear may be used. To the west of the LSA, fixed gear (crab pots) is the main type of gear used near the vessel traffic route. Closer to St. John's, gillnetting for groundfish and some capelin seining have also been recorded (DFO 2011-2016b).

7.1.8 Potential Future Commercial Fisheries

Continuing changes within the marine environment are affecting the distribution and availability of several species (DFO 2012a, 2018d; Amec 2014). Recent changes in fisheries management include decreases in quotas for snow crab and the closure of the northern shrimp fishery in Divisions 3LM. In response to these changes, some fishers anticipate switching from shellfish back to groundfish as in pre-moratorium times (e.g. Amec 2014; Whiffen 2016; National Post 2017). Fishers have, therefore, stated that it is important to consider not only what the fishery looks like now, but how it may be in the future (see Section 3.4). For example, if a directed fishery for cod were to resume, there might be an increased use of mobile and fixed groundfish gear in certain areas. There is also a possibility that the northern shrimp fishery might be reinstated during the temporal scope of the Project in 3K and/or 3M, although recent stock assessments do not support a short-term return (see Section 7.1.6.3).

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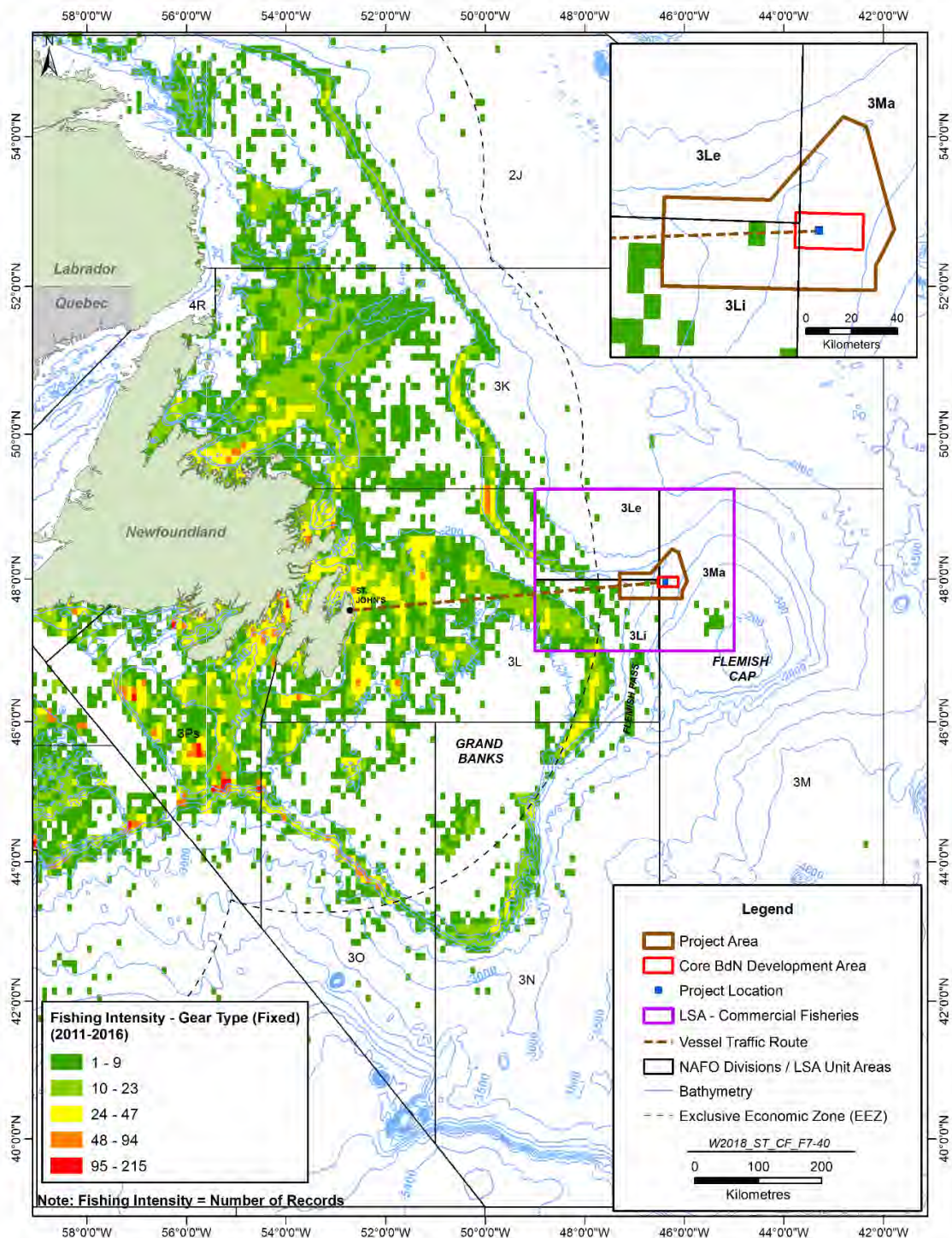


Figure 7-40 Fixed Gear Domestic Harvesting Locations and Intensity, All Months 2011 to 2016

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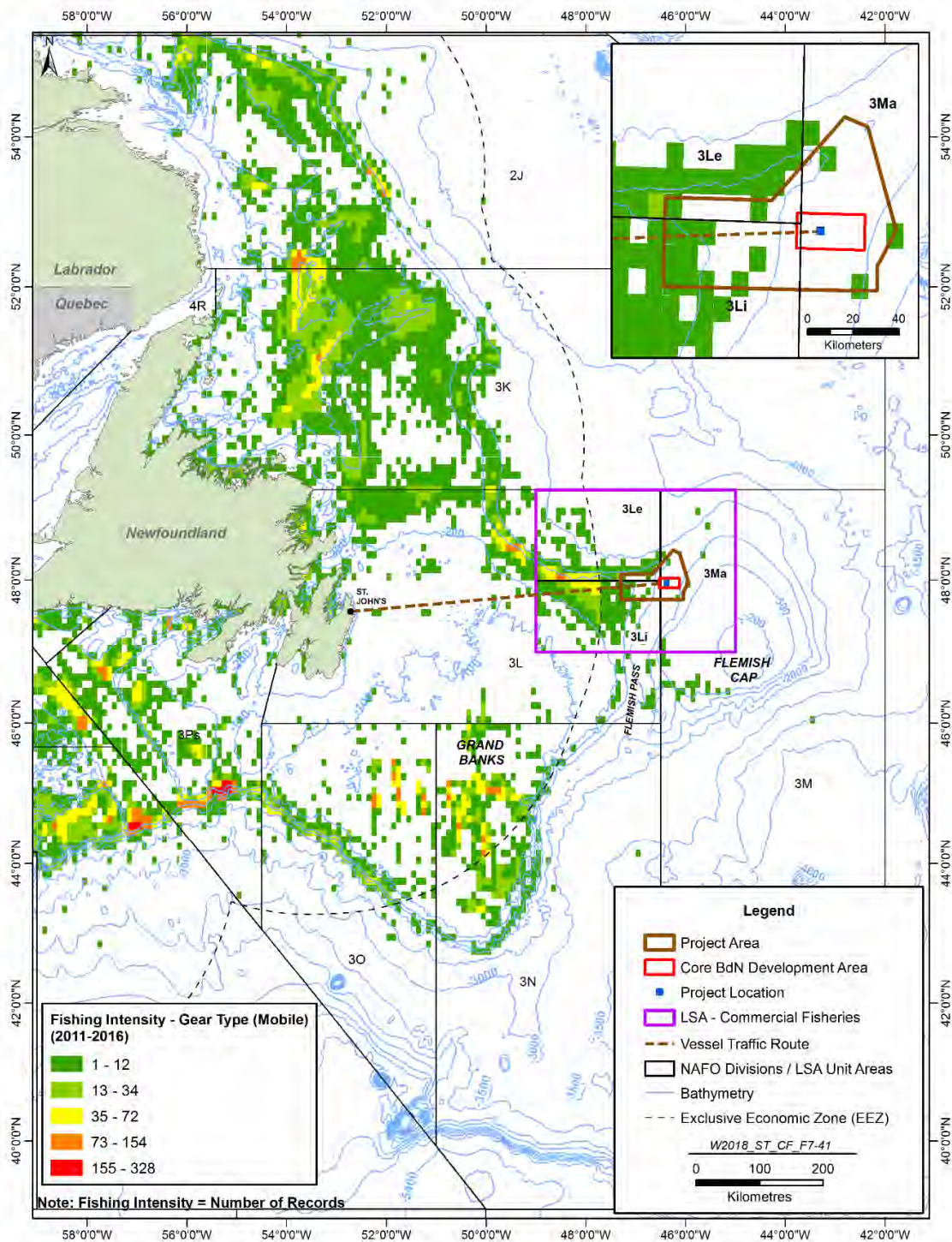


Figure 7-41 Mobile Gear Domestic Harvesting Locations and Intensity, All Months 2011 to 2016

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7.1.9 Industry and DFO Research Surveys

Fisheries science programs in support of stock assessments and fisheries management decisions may occur within the Project Area, LSA and the RSA. These surveys are conducted by DFO and/or fishing industry groups. NAFO fisheries surveys and other research studies are planned and conducted by some individual signatory states from time to time and reported through the Secretariat (see www.nafo.int/Science/Research), including annual surveys conducted by the European Union on the Flemish Cap and on the nose and tail of the Grand Bank (B. Healey, pers comm 2018). The locations and timing of these studies vary depending on the subjects being investigated from year to year.

7.1.9.1 DFO Multispecies Research Vessel Surveys

DFO conducts annual standardized trawl surveys to collect information for monitoring fish resources in the NL Region. While the survey design has remained fairly consistent, there may be some annual variation in exact location and timing. The location and/or timing of these surveys varies and can be obtained annually (L. Mello, pers comm 2018). Figure 7-42 illustrates the locations of recent DFO trawl survey transects.

7.1.9.2 Industry - DFO Collaborative Post-Season Snow Crab Trap Survey

Since 2003, an annual Industry-DFO Collaborative Post-season Trap Survey for snow crab has been conducted in NL inshore and offshore areas as a research partnership between the Fish, Food and Allied Workers-Unifor (FFAW-Unifor) and DFO. Fishers set snow crab traps at established stations starting in late August or early September after the commercial snow crab season has ended. The survey continues until all the stations selected for the year are finished, occasionally into November (FFAW-Unifor 2017; Stansbury et al. 2013, 2014). Since 2017, a total of 1,200 stations (Figure 7-43) have been surveyed annually, with half fixed in the same location from year to year, and the remainder random, selected annually from within the survey catchment area, as part of a stratified random design (K. Baker, pers comm 2018; R. Lee, pers comm 2018). As illustrated in Figure 7-43, there are no sampling locations in the Project Area; however, there are stations along the vessel traffic route.

7.1.9.3 Other Collaborative Surveys

Groundfish Enterprise Allocation Council (GEAC) / DFO-GEAC surveys occur biannually using bottom trawls and a commercial trawler. Locations and targeted fish species change from survey to survey (K. Vascotto, pers comm 2018).

DFO, in cooperation with Nova Scotia (NS) swordfish harvesters, has surveyed sharks in set locations from Georges Bank to the eastern Grand Banks in previous years. The timing of future surveys is not known (H. Bowlby, pers comm 2018).

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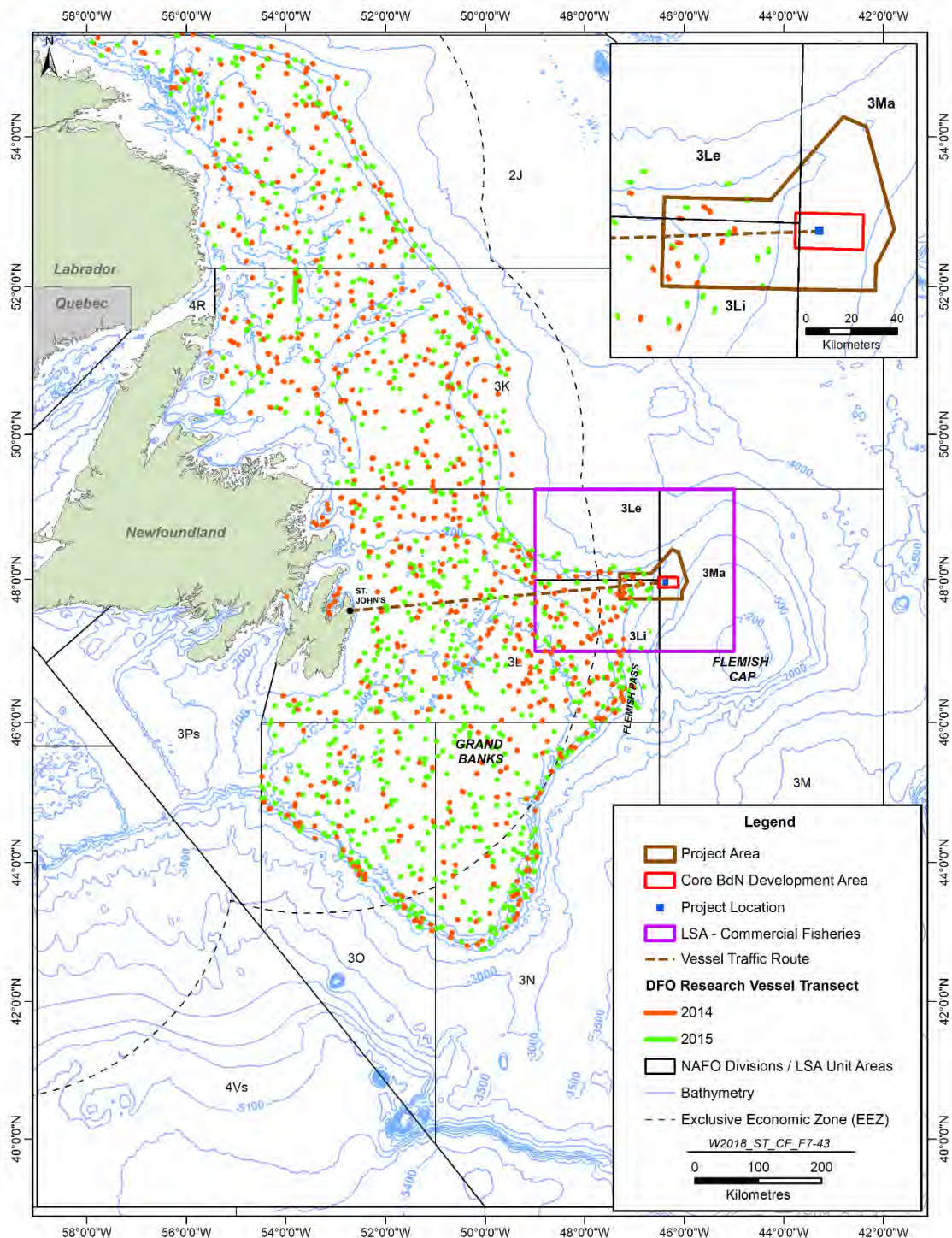


Figure 7-42 Location of DFO Research Vessel Survey Transects, 2014 to 2015

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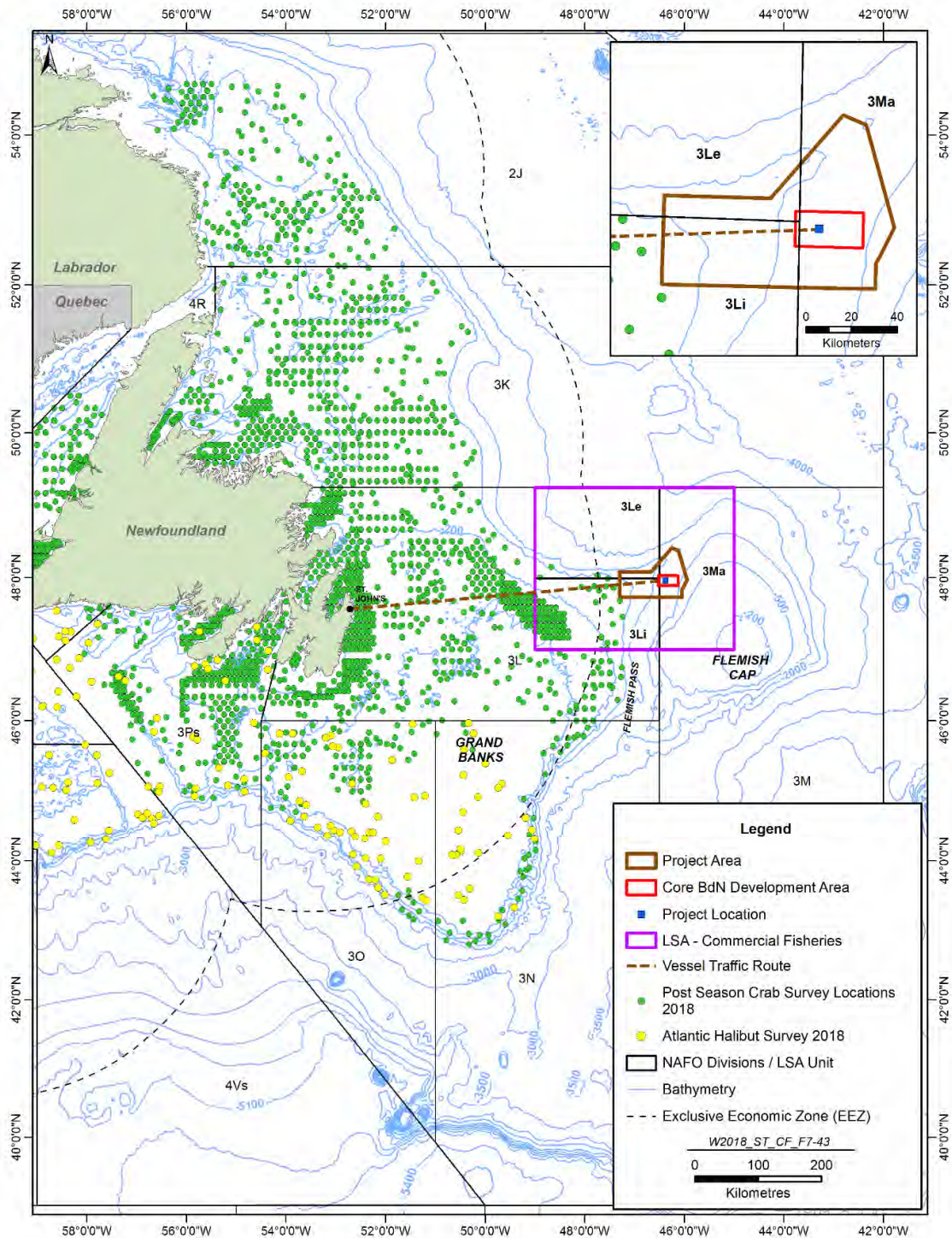


Figure 7-43 Locations of 2018 Industry-DFO Halibut and Post Season Crab Survey Stations

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The annual Atlantic halibut abundance survey takes place in waters south of the Project Area but within the RSA in 3NO. It is collaborative effort among DFO, the FFAW-Unifor, the Atlantic Halibut Council and the NS-based Eastern Shore Fisherman's Protective Association and Shelburne County Quota Group. The survey occurs each summer, usually from the end of May to the end of July, across the Scotian Shelf and southern Grand Banks Atlantic halibut management unit (3NOPs4VWX+5Zc). The survey consists of fixed and random stratified stations. Figure 7-43 illustrates the locations of both for 2018. Locations can be obtained from DFO annually (C. den Heyer, pers comm 2017; B. Wringe, pers comm 2018).

7.2 Other Ocean Uses

A number of other activities take place offshore NL that have the potential for interaction with the Project. This section provides an overview of these activities, with a focus on the Project Area, as well as the larger RSA. This overview is based on information obtained from relevant government departments and agencies and other sources as cited herein.

7.2.1 Marine Research

In addition to fisheries-related research (described in Section 7.1.9), the potential also exists for other research to be conducted in offshore NL during certain times of the year. These research activities can include those that may be carried out or funded by educational institutions, other industries (including oil and gas), non-profit organizations, and / or government agencies. Organizations that have supported or conducted research work in offshore NL include, but are not limited to: Petroleum Research Newfoundland and Labrador (PRNL), C-CORE, Provincial Aerospace Ltd. (PAL), Memorial University of NL and Marine Institute, The Environmental Science Research Fund (ESRF), and the Natural Sciences and Engineering Research Council. The amount of research that may occur in offshore NL can vary in a given year due to the amount of funding available and the number of research projects planned or proposed. The extent and duration of these research activities will also depend on the scope and nature of the activity itself.

7.2.2 Marine Shipping

Marine shipping is a common activity taking place in the offshore waters of NL. In 2011, there were approximately 698 international shipping movements out of or into eastern NL ports that handled some 16,654 tonnes of cargo. During that same year, there were approximately 3,044 domestic movements, which moved approximately 27,248 tonnes of cargo (Amec 2014). St. John's Harbour is one of the busiest ports in NL and has the most industrial infrastructure. It has also been recognized as a port with domestic and international shipping importance and is managed by the St. John's Port Authority (Amec 2014). In 2017, St. John's Harbour had approximately 1,344 vessel arrivals, of which approximately 55 percent were related to the offshore energy industry (B. McCarthy, pers comm 2018). Figure 7-44 illustrates the number of vessels that have visited St. John's Harbour between 2007 and 2017.

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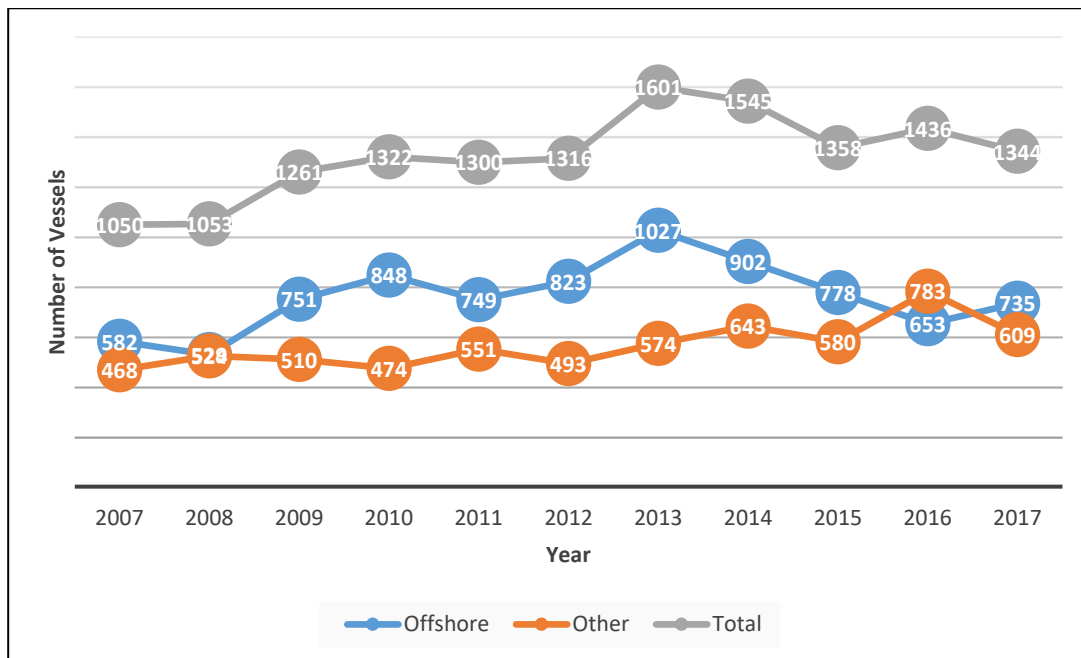


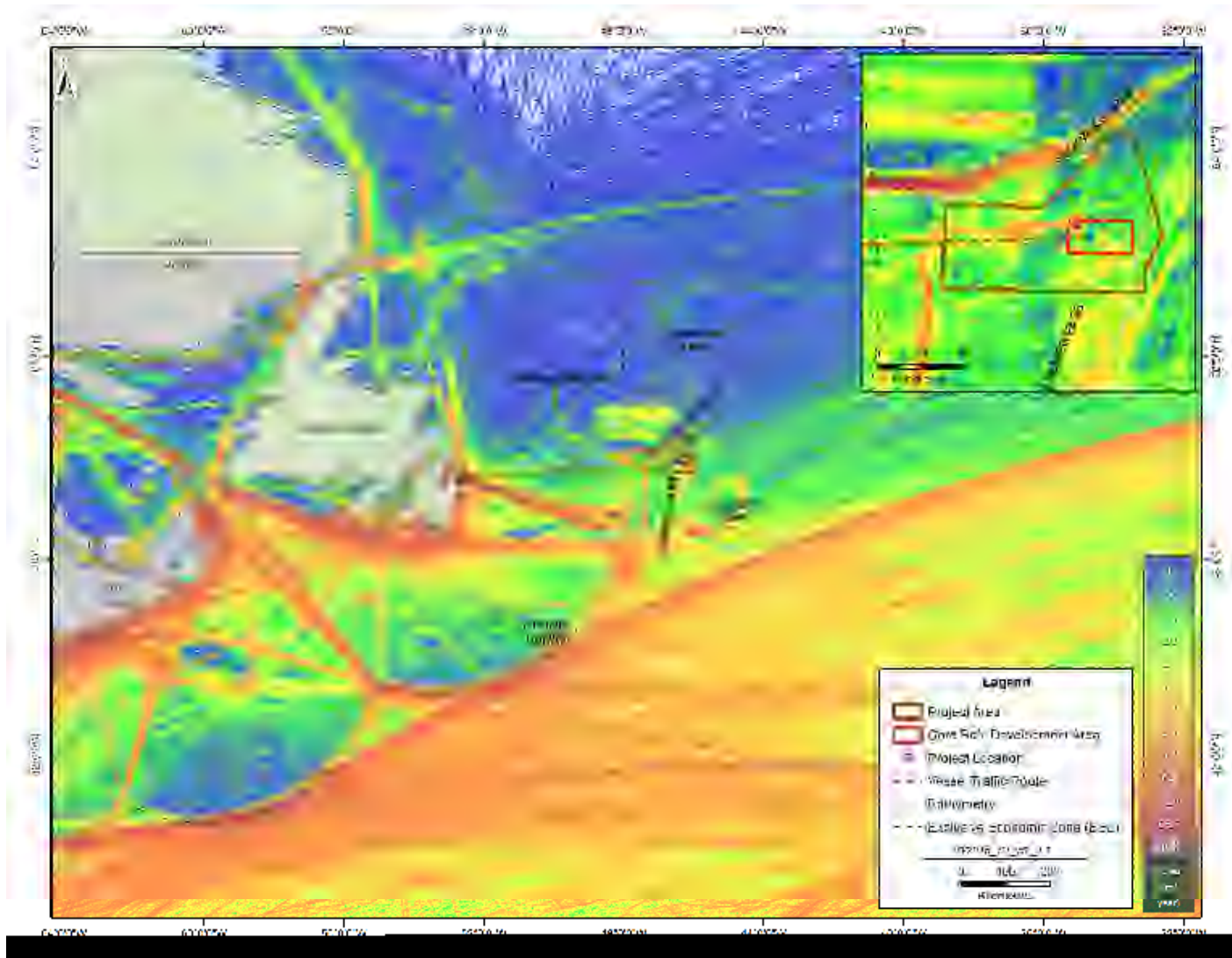
Figure 7-44 Number of Vessels Visiting St. John's Harbour, 2007 to 2017

In addition to St. John's Harbour, Placentia Bay has ongoing oil and gas related shipping activity. This is due primarily to the presence of the North Atlantic Refining Ltd. oil refinery located in Come by Chance and the Newfoundland Transshipment Ltd. (NTL) crude offloading facility. NTL offloads crude from the transshipment tankers servicing production operations offshore NL. According to NTL, as of December 31, 2017, NTL had received approximately 3,584 vessels at their facility and handled approximately 2.6 billion barrels of crude oil from the Grand Banks since production operations began on offshore NL (NTL 2018).

Shipping routes offshore NL are shown in Figure 7-45. Marine vessel traffic occurs throughout the Grand Banks, with concentrations nearshore and in the vicinity of the existing producing projects (Marine Vessel Traffic 2018). Currently, the Project Area is located in an area that has relatively low-density vessel activity (Figure 7-45). There are some higher-density areas around the Flemish Cap and Flemish Pass that are likely attributable to commercial fishing activity and commercial marine traffic. This traffic does not originate from Newfoundland (Marine Vessel Traffic 2018). There are several shipping lanes that transect the vessel traffic route to the Project Area and throughout the RSA (Figure 7-45). As illustrated in Figure 7-45, there is a high density of vessel traffic to the south of the vessel traffic route, which is associated with supply and servicing for the existing production operations on the Grand Banks and international vessel movements across the Atlantic Ocean. There is a higher concentration of vessel traffic closer to shore, where shipping lanes merge near the mouth of St. John's Harbour and along the coastline of NL.

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Source: Marine Vessel Traffic (2018)

Figure 7-45 Existing Marine Shipping Lanes and Transit Routes

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7.2.3 Marine Tourism

Marine tourism has become an important aspect of the NL economy, and is growing. This includes both conventional marine cruise traffic, along with other tourism activities such as eco-tourism that occurs along the coastlines of the province (e.g., hiking, bird watching, and other activities). According to the latest 2017 report issued by the provincial Department of Tourism, Culture, Industry and Innovation (TCII), NL received approximately 38,321 unique cruise visitors during the 2017 cruise season. This was an increase of approximately 62.8 percent, from 23,545 visitors in 2016 (TCII 2018). This includes 105 port calls to 20 different ports in the province by 31 vessels. This was also an increase of 59 percent, from 66 port calls in 2016. Table 7.7 outlines the tentative 2018 cruise schedule for NL, which provides context for the volume and timing of cruise ship traffic in the province.

In addition to cruise ship activity, NL is also regarded as a destination for eco-tourism activity. The rugged coastline of the province offers many hiking opportunities and local boating excursions to watch icebergs, whales, and colonies of seabirds. These eco-tours are located around many areas of the province and are prominent along the coastline of the Avalon Peninsula.

St. John's Harbour is the primary destination for most cruise ships visiting NL. Therefore, during certain times of the year (e.g., summer and fall), there would likely be a higher concentration of cruise ships within the vessel traffic route, near St. John's Harbour.

7.2.4 Marine Ferry Traffic

7.2.4.1 Intra-provincial Travel

No intra-provincial ferry services extend offshore or are within the vicinity of the Project Area or within the vessel traffic route. Within NL, the provincial government operates and oversees a fleet of ferries that are designed to support intra-provincial travel for passengers and cargo. Table 7.8 lists the number of trips and number of passengers that ferry services within the province recorded between 2013 and 2017.

7.2.4.2 Inter-provincial Travel

Inter-provincial ferry services within NL are based out of Argentia and Port aux-Basques and provide travel services between the province and NS. The ferry service from Port aux Basques operates year-round, while the Argentia ferry sails one to three times a week, from June to September. Both services are operated by Marine Atlantic, a crown corporation. The service between Port Aux Basques and North Sydney recorded 1,594 crossings during 2017, 50 fewer than in the previous year, resulting in 299,261 passenger movements and 109,244 passenger related vehicle movements. The seasonal service between Argentia and North Sydney registered 82 crossings, no change compared to the previous season, resulting in 31,451 passenger movements and 13,511 passenger related vehicle movements (TCII 2018). These ferry services are not present offshore and are not located near the Project Area.

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Table 7.7 Newfoundland and Labrador Cruise Ship Itinerary (2018)

Port	Date (2018)	Ship	Operator	Number of Passengers
St. John's	April 24	Fram	Hurtigruten	318
	April 28	Artania	Phoenix Resien	1,200
	April 28	Silver Muse	Silversea	596
	May 15	Marina	Oceania	2,402
	June 03	Hebridean Sky	Noble Caledonia	118
	June 15	AIDAvita	AIDA	1,266
	July 29	AIDAvita	AIDA	1,266
	August 21	Rotterdam	Holland America	1,404
	August 24	AIDAvita	AIDA	1,266
	August 31	Star Pride	Windstar	212
	September 09	AIDAluna	AIDA	2,030
	September 09	Zuiderdam	Holland America	2,272
	September 12	Marco Polo	Cruise and Maritime Voyages	800
	September 18	Silver Spirit	Silversea	540
	September 18	AIDAdiva	AIDA	2,050
	September 18	Silver Cloud	Silversea	254
	September 20	Amadea	Phoenix Resien	6,000
	September 22	Royal Princess	Princess	3,600
	September 24-25	Seaborn Quest	Seaborn	450
	September 27	Silver Cloud	Silversea	254
	September 28	Black With	Fred Olsen	804
	October 2	Ocean Endeavour	Adventure Canada	198
	October 7	Norwegian Jade	Norwegian Cruise Line	2,402
	October 12	Ocean Endeavour	Adventure Canada	198
October 12	Saga Sapphire	Saga Cruises	720	
	Total	20	14	32,620

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Table 7.7 Newfoundland and Labrador Cruise Ship Itinerary (2018)

Port	Date (2018)	Ship	Operator	Number of Passengers
St. Anthony	May 15	Fram	Hurtigruten	318
	August 20	Rotterdam	Holland America	1,404
	October 01	Fram	Hurtigruten	318
	Total	2	2	2,040
Battle Harbour	May 16	Fram	Hurtigruten	318
	July 27	Akademik Loffe	One Ocean Expeditions	96
	September 31	Fram	Hurtigruten	318
	Total	2	2	732
Terra Nova National Park	October 01	Ocean Endeavour	Adventure Canada	198
	Total	1	1	732
Hebron (Labrador)	July 29	Akademik Loffe	One Ocean Expeditions	96
	September	Ocean Endeavour	Adventure Canada	198
	Total	2	2	294
L'Anse aux Meadows	June 05	Hebridean Sky	Noble Caledonia	118
	July 26	Akademik Loffe	One Ocean Expeditions	96
	August 25	Seaborn Quest	Seaborn	450
	September 01	Star Pride	Windstar	212
	September 14	Viking Sea	Viking Cruises	930
	September 19	Silver Cloud	Silversea	254
	September 23	Seaborn Quest	Seaborn	450
	September 30	Ocean Endeavour	Adventure Canada	198
	October 03	Silver Wind	Silversea	294
	October 05	Ocean Endeavour	Adventure Canada	198
Total	8	7	3,200	
Hopedale	July 28	Akademik Loffe	One Ocean Expeditions	92
	Total	1	1	92

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Table 7.7 Newfoundland and Labrador Cruise Ship Itinerary (2018)

Port	Date (2018)	Ship	Operator	Number of Passengers
Northeast Coast of Newfoundland	October 3-4	Ocean Endeavour	Adventure Canada	198
	Total	1	1	198
Red Bay	May 14	Fram	Hurtigruten	318
	June 06	Hebridean Sky	Noble Caledonia	118
	July 23	Rotterdam	Holland America	1,404
	August 26	Seaborn Quest	Seaborn	450
	September 02	Star Pride	Windstar	212
	October 02	Fram	Hurtigruten	318
	October 06	Ocean Endeavour	Adventure Canada	198
Total	6	6	3,018	
Torngat Mountains National Park	July 30 to 31	Akademik Loffe	One Ocean Expeditions	96
	September 15	Silver Cloud	Silversea	254
	September 23-25	Ocean Endeavour	Adventure Canada	198
	Total	3	3	548
Nain	September 27	Ocean Endeavor	Adventure Canada	198
	Total	1	1	198
Happy Valley-Goose Bay	August 23	Seaborn Quest	Seaborn	450
	September 04	Amadea	Phoenix Reisen	600
	Total	1	1	1,050
Twillingate	June 04	Hebridean Sky	Noble Caledonia	118
	September 17	Silver Cloud	Silversea	254
	Total	1	1	372
Labrador Coast	September 28-30	Fram	Hurtigruten	318
	September 28-29	Ocean Endeavour	Adventure Canada	198
	Total	1	1	516
Source: Cruise NL 2018				

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Table 7.8 Marine Ferry Service in Newfoundland and Labrador, 2013 to 2017

Service	2013/2014		2014/2015		2015/2016		2016/2017	
	Trips	Passengers	Trips	Passengers	Trips	Passengers	Trips	Passengers
Bell Island - Portugal Cove	13,701	463,320	12,903	463,764	12,631	474,855	10,647	426,234
Fogo Island – Change Islands - Farewell	6,383	144,708	6,058	152,648	6,789	177,883	5,868	177,179
St. Brendan's - Burnside	2,428	15,746	2,335	16,678	2,622	17,806	2,351	17,217
Little Bay Islands – Long Island - Pelley's Island	6,574	38,059	7,706	38,645	7,828	44,480	7,865	43,439
Shoal Arm - Little Bay Islands – Pelley's Island - Long Island	1,444	6,028	N/A	N/A	N/A	N/A	N/A	N/A
Ramea – Grey River - Burgeo	1,817	19,694	1,741	16,751	1,778	19,864	1,821	18,376
Charlottetown - Norman's Bay – William's Harbour - Port Hope Simpson	478	1,443	398	1,071	443	1,038	367	929
La Poile - Rose Blanche	611	3,886	598	3,708	659	4,346	644	3,979
Francois – Grey River - Burgeo	1,107	4,238	1,093	4,884	1,168	4,364	1,066	4,020
Gaultois – McCallum - Hermitage	3,336	10,579	3,523	11,005	3,933	11,616	3,756	10,623
Rencontre East - Bay L'Argent - Pool's Cove	1,466	8,546	1,601	7,420	1,557	8,255	1,528	8,897
South East Bight-Petit Forte	1,663	6,702	1,845	6,826	1,785	6,674	1,575	7,033
Labrador Straits (St. Barbe - Blanc Sablon)	1,192	96,842	1,102	91,920	1,187	102,418	1,361	110,158
Labrador Straits (Corner Brook - Blanc Sablon)	21	1,101	14	492	N/A	N/A	N/A	N/A
Labrador North Coast - Passenger*	387	5,923	335	5,034	440	6,723	471	5,768

*Note that the number of trips for the North Coast services is the total number of individual port-to-port trips. A full round-trip for the passenger service is over a one-week turnaround with the following schedule: HV Goose Bay-Rigolet-Makkovik-Postville-Hopedale-Natuashish-Nain-Natuashish-Hopedale-Postville-Makkovik-HV Goose Bay-Rigolet-Cartwright-Black Tickle-Cartwright-Rigolet-HV Goose Bay.

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7.2.5 Small Craft Harbours

Small craft harbours are prominent along the coastlines of NL, including the east coast of the island of Newfoundland. These are harbours operated by DFO that have been determined important to industries such as fishing, and to overall viability of rural areas in the province. While the fishing industry is the main purpose of many small craft harbours, these harbours can also support other recreational marine activities. There are 339 small craft harbours within the province, and Figure 7-46 illustrates the location of these harbours along the east coast of NL. Along the vessel traffic route, there is one documented small craft harbour, Prosser Rock along the coastline leading into St. John's Harbour. This small craft harbour is managed by the Authority of Fort Amherst Small Boat Basin. This area is currently exposed to and has co-existed with marine traffic associated with the larger St. John's Harbour, including activity associated with oil and gas and other industries.

7.2.6 Other Offshore Oil and Gas Activity

Oil and gas exploration and development is an established and important industry offshore NL. Production activities for oil and gas have been occurring in the region since 1997, with activities related to exploration taking place since 1963. As of November 2018, 466 wells have been drilled, including 171 exploration wells, 57 delineation wells and 240 development wells (C-NLOPB 2018a) (Figure 7-46). This has led to more than 55 Significant Discovery Licenses (SDL) and 12 Production Licenses (PL) being issued offshore NL. As illustrated in the figure, a large concentration of drilling activity has occurred along the Grand Banks within the RSA.

Equinor Canada has drilled 20 wells offshore NL to date (C-NLOPB 2018a), with the majority of those being in the Project Area. To date there have been no wells drilled within the vessel traffic route.

Seismic survey activity has also been common in offshore NL and has been increasing in recent years. From 1964 to 2013, there were approximately 1,788,768 common mid-point (CMP) kilometers (km) of 3D seismic data collected in offshore NL. Between 2014 and 2017, a total of 1,978,908 CMP km of 3D seismic data were collected. The largest amount of 3D seismic data (approximately 794,287 CMP km) obtained since 1964 was collected in 2017 (C-NLOPB 2018b). 2D seismic data acquisition has been lower, dropping from 40,879 km of data collected in 2016 to 21,767 km of data in 2017 (C-NLOPB 2018b). Other exploration methods include gravity / magnetic surveys (e.g., controlled source electromagnetic, coring), and other methods (e.g., side-scan sonar, multibeam echo-sound). As illustrated in Figure 7-47, seismic survey activity has taken place with the Core BdN Development and Project Areas and along the potential vessel traffic route from the Project Area to the onshore supply base.

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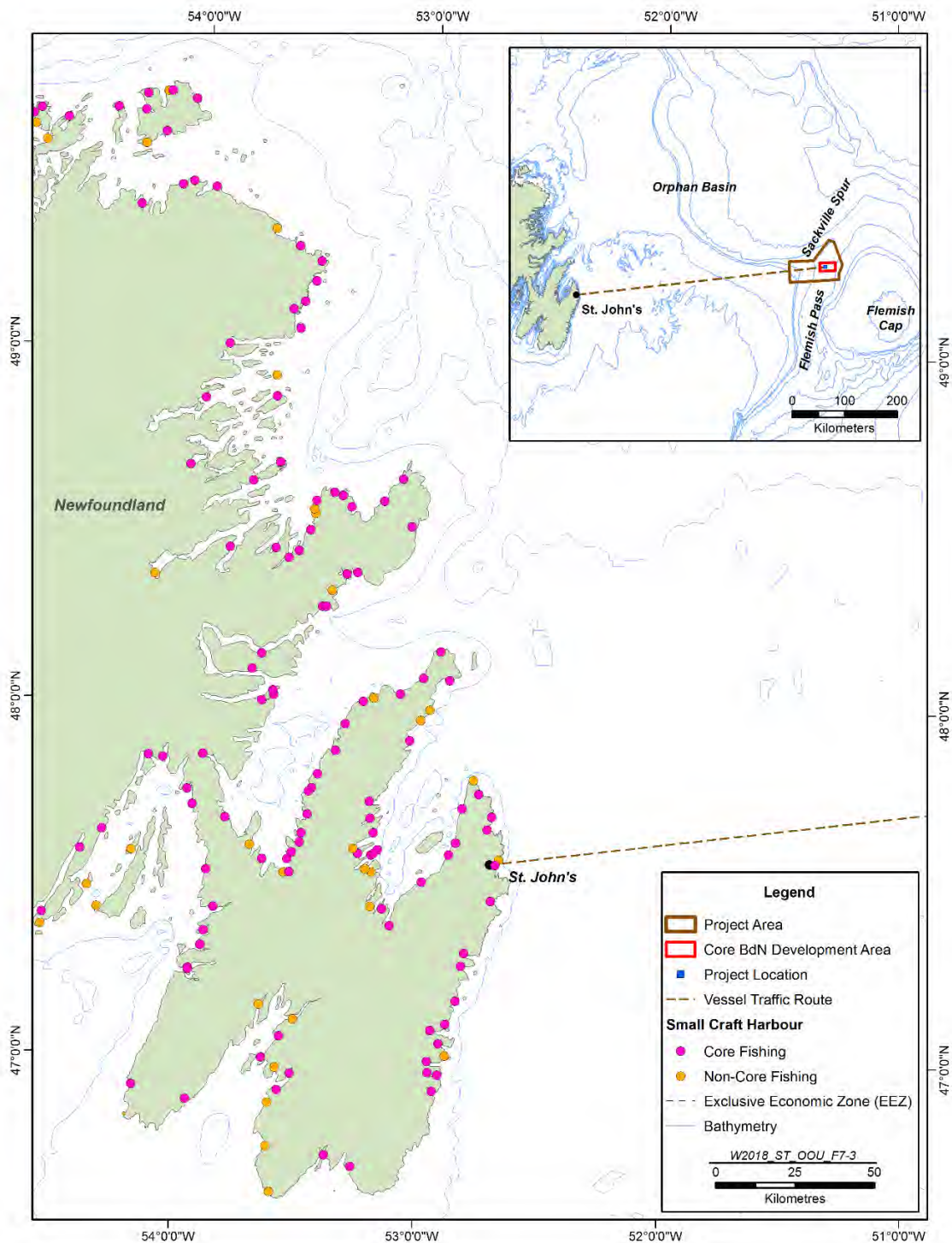


Figure 7-46 Small Craft Harbour Locations on the East Coast of Newfoundland

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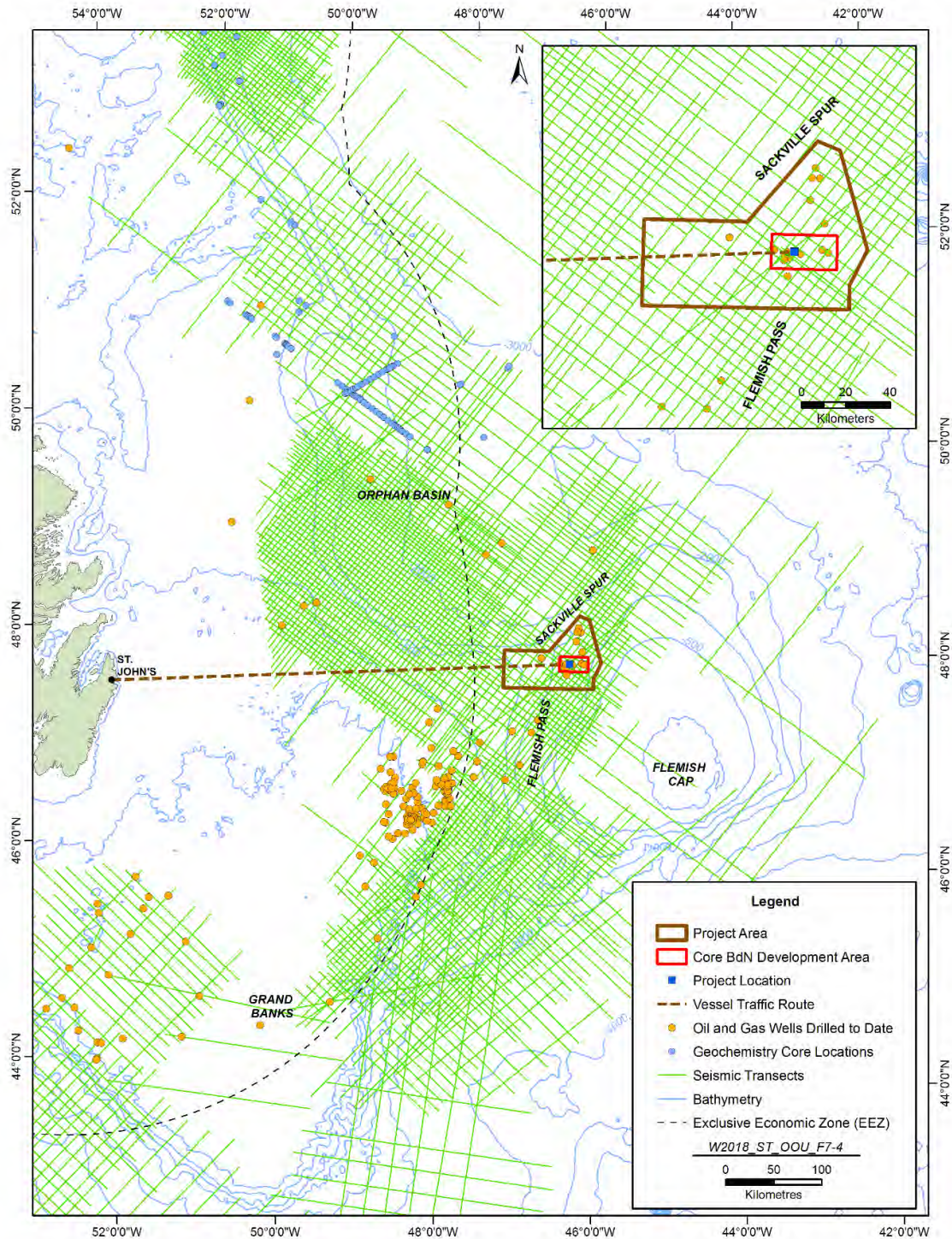


Figure 7-47 Oil and Gas Wells Drilled Offshore Eastern Newfoundland

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7.2.7 Military Operations

The Department of National Defence (DND) is responsible for the national security of Canada, including the defence and protection of waters under Canada's jurisdiction. As a result, the Royal Canadian Navy and Air Force routinely conduct training exercises and surveillance operations throughout Atlantic Canada, including the waters offshore NL. These operations include the use of marine patrols and aircraft off eastern NL, within the RSA and potentially the Project Area. On occasion, military vessels will support research initiatives or fishery patrols by DFO (Amec 2014).

In the past, many sites across Canada have been used for military training and weapons testing by DND. Legacy sites exist across Canada's coastline where unexploded ordnance (UXO) may remain, and there are 1,100 known UXO sites off Canada's east coast (Amec 2014). Figure 7-48 illustrates shipwreck and legacy sites off NL, relevant to the Project Area and RSA. Currently, there are no identified shipwrecks or legacy sites within the Project Area (DCC 2016).

Along the marine vessel traffic route, there are recorded shipwrecks and legacy sites. However, since these sites and shipwrecks are located on the seabed, there would not be an interaction or overlap with vessels that may be transiting through the area.

7.2.8 Other Marine Infrastructure

Marine subsea cables are known to be present offshore NL, but the majority are inactive or abandoned (Amec 2014). Within the Project Area, there is one active and one inactive subsea cable (Table 7.9, Figure 7-49). The Hibernia Canada Express Subsea cable, spanning from NS to Ireland, is active and transects the Project Area. As mentioned in Section 7.2.2, there would be no interaction between subsea cables and vessels moving through the vessel traffic route.

Table 7.9 Subsea Cables Within the Project Area

Name	Type	Status	Connecting
NFLD-3	Telegraph	Abandoned	N/A
Hibernia Canada Express Cable Issue 11	Communications	Active	Herring Cove (NS) to Europe

Note: This dataset was compiled by DFO, using information obtained from various sources.
Source: DFO (2015)

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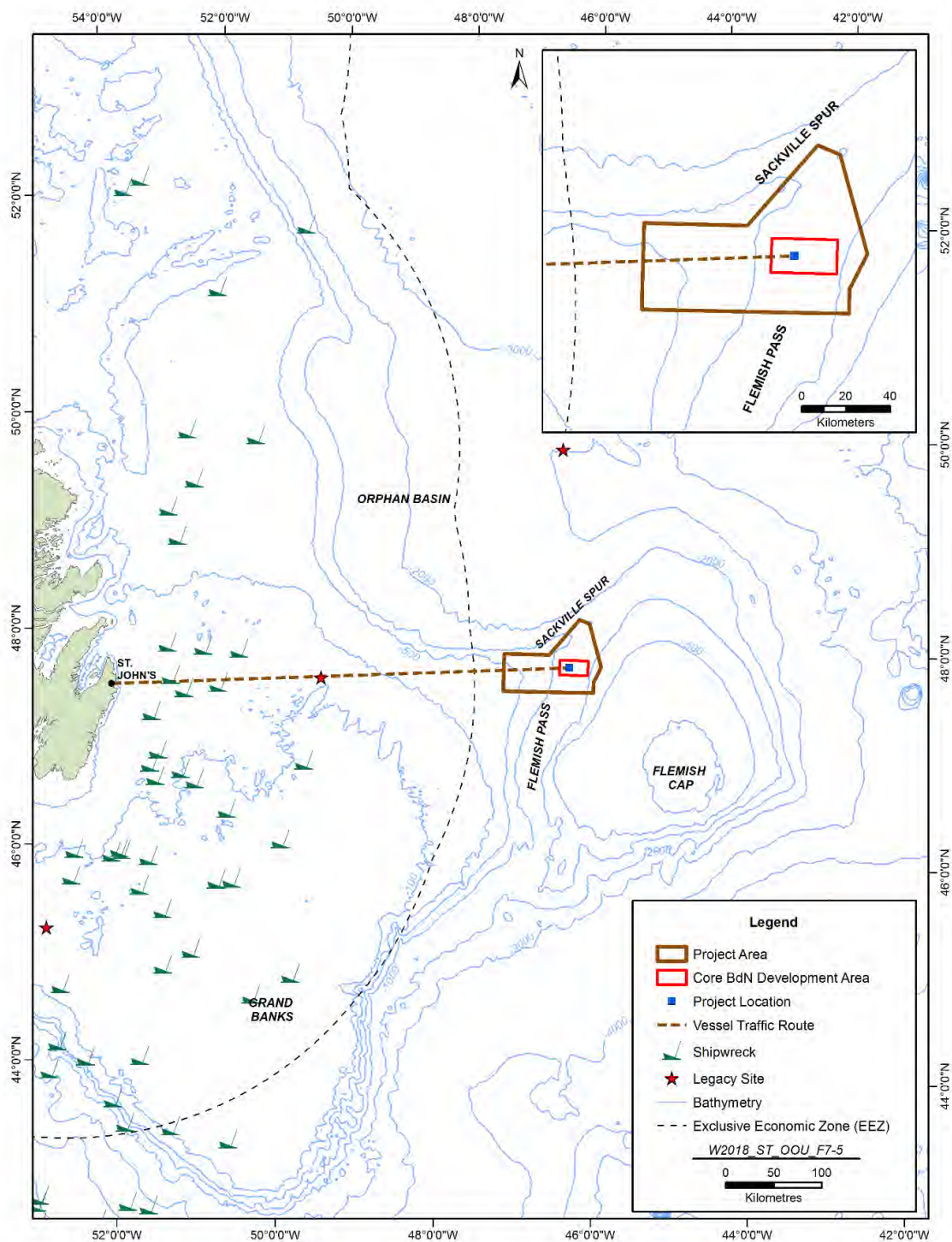


Figure 7-48 Known Shipwreck and Legacy Sites in Offshore Newfoundland and Labrador

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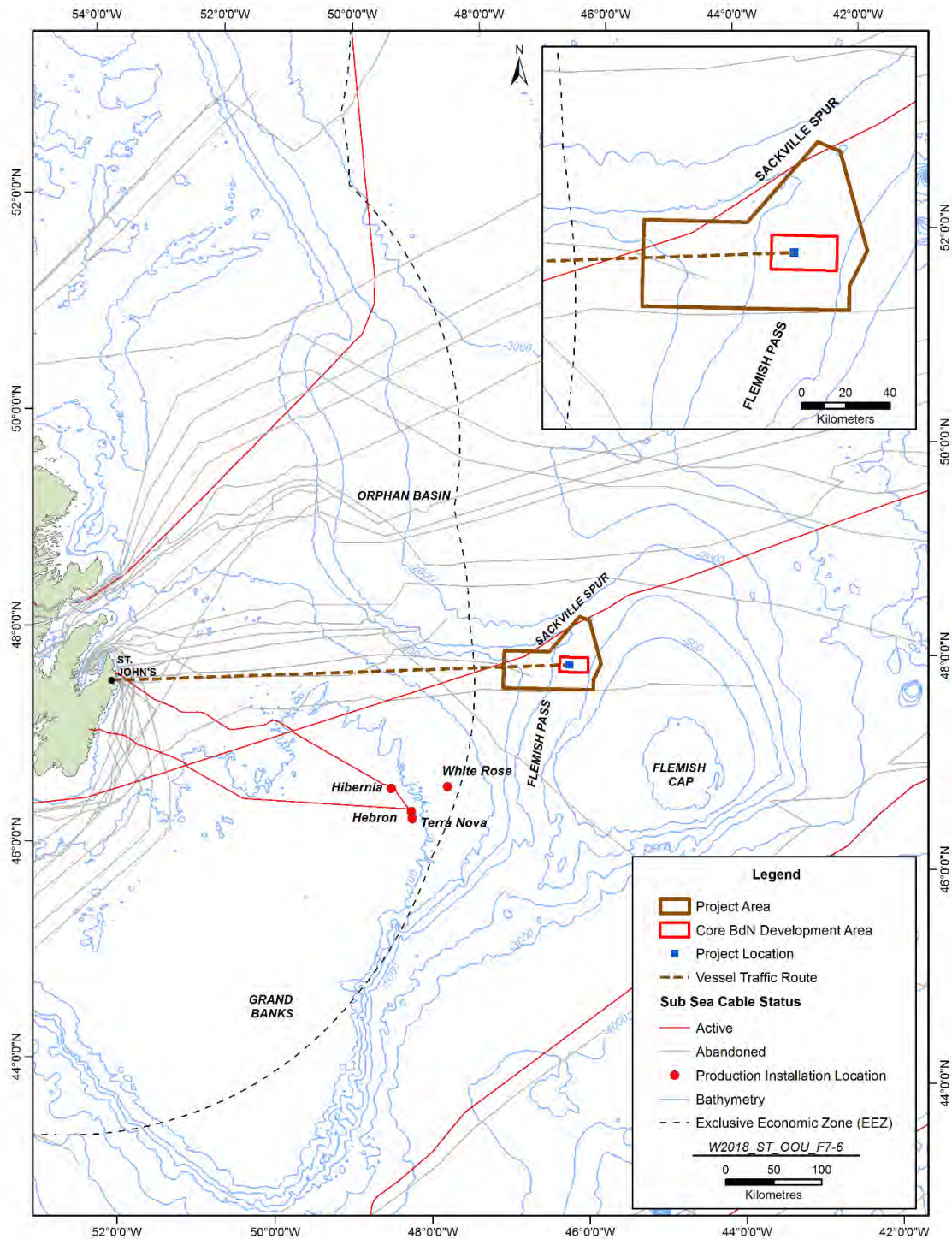


Figure 7-49 Subsea Cable Locations Offshore Newfoundland and Labrador

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7.3 Indigenous Peoples

Section 5 of the EIS Guidelines (Appendix A) directs Equinor Canada to engage with 41 Indigenous groups in NL, NS, New Brunswick (NB), Prince Edward Island (PEI), and Québec (QC). The EIS Guidelines indicate that the EIS is to provide information on baseline conditions of these identified groups to facilitate an assessment of Project effects upon any potential or established Aboriginal or treaty rights under section 35 of the *Constitution Act, 1982*. The EIS Guidelines also indicate that the EIS is to address potential Project effects on the following, as outlined in paragraph 5(1)(c) of CEEA 2012:

- Health and socioeconomic conditions
- Physical and cultural heritage
- The current use of lands and resources for traditional purposes
- Any structure, site or thing that is of historical, archaeological, paleontological or architectural significance

It is Equinor Canada's understanding that none of the listed Indigenous groups has asserted or established Aboriginal or treaty rights protected by section 35 of the *Constitution Act, 1982* (Section 35 rights) in or to the lands and waters of eastern offshore NL where the Project components and activities will be located. As illustrated in Chapter 2 and throughout this section of the EIS, the Project components and activities will be located at a considerable distance from Indigenous groups (approximately 640 km to 2,000 km from the various Indigenous communities) and many of their harvesting activities and other known interests (Figure 7-50). However, the various Indigenous groups identified in the EIS Guidelines have asserted or established section 35 rights to harvest for food, social or ceremonial (FSC) purposes or to earn a moderate livelihood in their traditional territories. Various groups hold commercial-communal fishing licences for NAFO areas that overlap with the Project. In addition, migratory species (including fish, birds and mammals) that move through the Flemish Pass may potentially be affected by Project activities and these species may be harvested by Indigenous groups in coastal areas through FSC fishing, commercial-communal fishing or through other harvesting activities.

Indigenous peoples have historically relied on harvesting a variety of species (e.g., fish, birds, marine mammals, wildlife, plants) for sustenance, medicine, spiritual and cultural practices, and for trade. Indigenous people continue to engage in traditional land and resource use practices though the location, species and methods of harvesting may have changed over time.

In Canada, Section 35 rights to harvest for FSC purposes or to earn a moderate livelihood have been affirmed in various Supreme Court of Canada (SCC) decisions, such as the "Sparrow decision" (1990), and the "Marshall decision" (1999). DFO issues two types of communal fishing licenses to Indigenous groups: FSC and commercial-communal. These licenses are held under the name of the Indigenous community, not under the name of a specific individual. Traditional harvesting (including FSC fishing) is an important component of Indigenous culture and sustenance, and central to community social and ceremonial activities. Revenue from commercial-communal licences is used to provide programs and services in Indigenous communities.

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In 1992, DFO introduced the Aboriginal Fisheries Strategy to provide a regulatory framework for FSC fishing. In Canada, following conservation measures, fishing for FSC purposes takes precedence over other fisheries, including commercial and recreational fisheries.

DFO implemented the Marshall Response Initiative (MRI) in 2000 to provide increased Indigenous access to the commercial fishery through commercial-communal licenses. In 2007, the MRI was replaced by the Atlantic Integrated Commercial Fisheries Initiative (AICFI) to sustain the public investment in Indigenous commercial fisheries. The AICFI provided the 34 Mi'kmaq and Wolastoqiyik First Nations, affected by the Marshall decision, with capacity-building support for commercial-communal fisheries and Indigenous participation in fisheries co-management (DFO 2012b, DFO 2012c, DFO 2012d).

Since the inception of the MRI and AICFI initiatives, the value of commercial-communal fisheries has increased, and growth is anticipated to continue. In the Atlantic region, commercial-communal fisheries contribute \$100 million to the economies of Indigenous communities annually. Commercial-communal fisheries are a high percentage of sole-sourced revenue for many Indigenous groups. Community ventures, social programs, and benefits are often funded from revenue generated by commercial-communal fisheries. Therefore, potential effects on commercial-communal fisheries may be broader than direct and indirect economic effects upon communities (DFO 2012b, DFO 2012c, DFO 2012d).

Through ongoing engagement and consultation for this Project and other offshore activities, Indigenous groups have communicated that their interests and concerns also extend beyond potential interactions and effects on commercial-communal and FSC fishing practices. Several species that could occur in the eastern NL offshore area (and potentially interact with Project activities) are also of cultural or spiritual significance to Indigenous peoples. These may include species that have been traditionally harvested for food, medicinal, social or ceremonial purposes, and may also hold other cultural value. These concerns also relate to species that have value as contributing to ecosystem sustainability and which, if adversely impacted, could potentially affected asserted or established Indigenous rights.

The following sections provide an overview of available information on the history and current socioeconomic conditions of each of the 41 identified Indigenous groups, focused on aspects that may have potential to interact with the Project and / or which are otherwise specified in the EIS Guidelines. Given that the Project is in the offshore NL marine environment and located at a considerable distance (approximately 640 km to 2,000 km) from the Indigenous communities listed in the EIS Guidelines (Appendix A), the description of baseline conditions, with specific reference to harvesting activity and the current use of land and resources for traditional purposes (i.e., 5(1)(c)(iii) of CEAA 2012), focuses on marine associated species of importance to Indigenous peoples, including species of importance for both FSC fishing and commercial-communal fishing.

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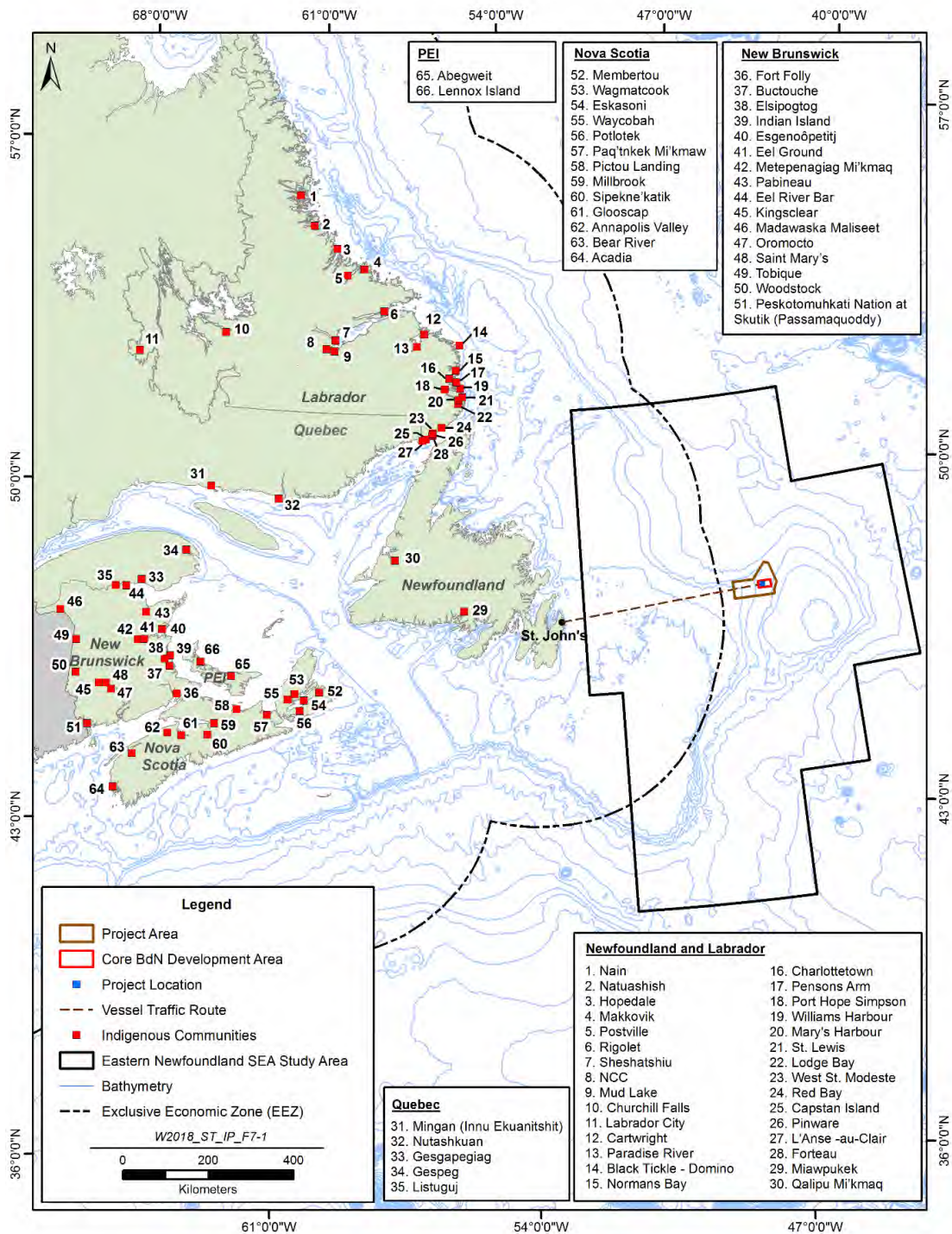


Figure 7-50 Indigenous Groups in Eastern Canada Identified in the EIS Guidelines

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7.3.1 Key Information Sources

A variety of existing and available data and information sources were used to understand and describe the various Indigenous groups and communities and their resource harvesting activities. These information sources include face-to-face meetings and workshops with Indigenous groups or affiliate organizations, telephone conversations, emails and letter correspondence (as described in detail in Chapter 3), publicly available land claims documentation, government documents and data, community / organization websites and traditional resource use reports and studies completed for other projects and their EAs, including an Indigenous knowledge study prepared for Equinor Canada's Flemish Pass Exploration Drilling Program. Equinor Canada also engaged an academic researcher to provide expertise on Indigenous resource use in Atlantic Canada to supplement the information base of publicly available Indigenous knowledge relevant to the Project (Appendix H).

The primary source of information on FSC and commercial-communal fishing activity is DFO. The DFO data provide information on collective fishing activities (e.g., FSC and commercial-communal) and not on fishing activities of individual Indigenous persons. Updated commercial-communal and FSC licencing data was obtained from DFO Gulf Region and Maritimes Region for 2018. DFO did not provide 2018 information on FSC and commercial-communal fishing licences for Indigenous peoples in NL as this information was stated to be essentially unchanged since 2017.

Information is provided for each Indigenous group identified in the EIS Guidelines. Data and information on demographic characteristics were obtained from Indigenous and Northern Affairs Canada (INAC) and Statistics Canada, but it should be noted that these sources may differ. Some data from the 2016 census and 2011 National Household Survey are rounded or suppressed for confidentiality due to the small populations involved. Where limited information was available on aspects such as community health or land and resource use for the Indigenous groups, more general information has been provided, if available. In November 2018, Equinor Canada provided the corresponding community profiles to each Indigenous group for comment and input (see Chapter 3). Where additional information was provided by Indigenous groups, it has been included in the corresponding profiles. Additional community information provided after the submission of the EIS will be taken into account by Equinor Canada as appropriate.

7.3.2 Newfoundland and Labrador

Indigenous groups in NL are:

- Labrador Inuit (Nunatsiavut Government)
- Labrador Innu (Innu Nation)
- NunatuKavut Community Council (NCC)
- Qalipu Mi'kmaq First Nation (QMFN) Band
- Miawpukek First Nation (MFN)

The locations of Indigenous groups in NL are provided in Figures 7-51 and 7-52. Profiles for each NL Indigenous group are provided in the following sections (Table 7.10).

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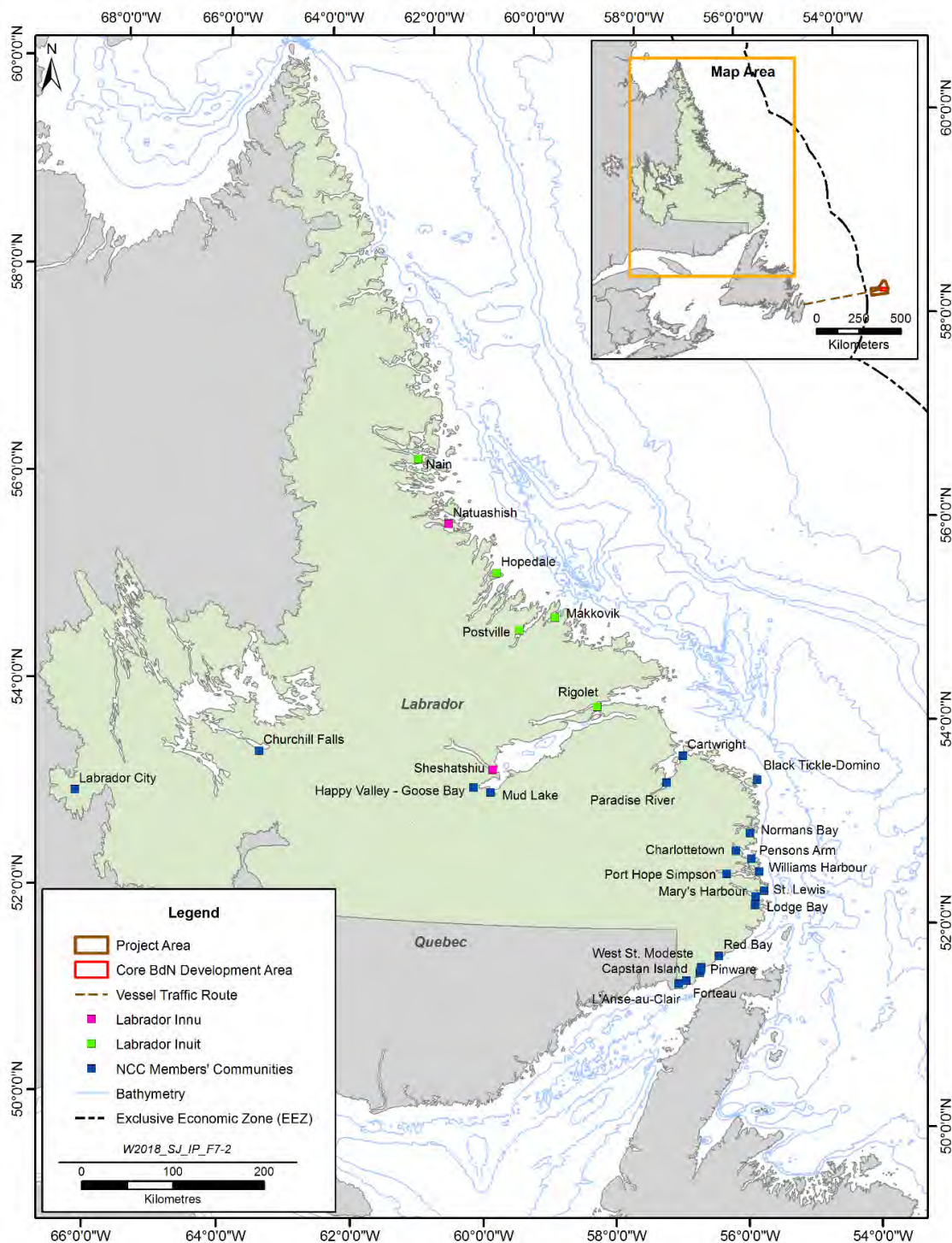


Figure 7-51 Indigenous Groups in Labrador

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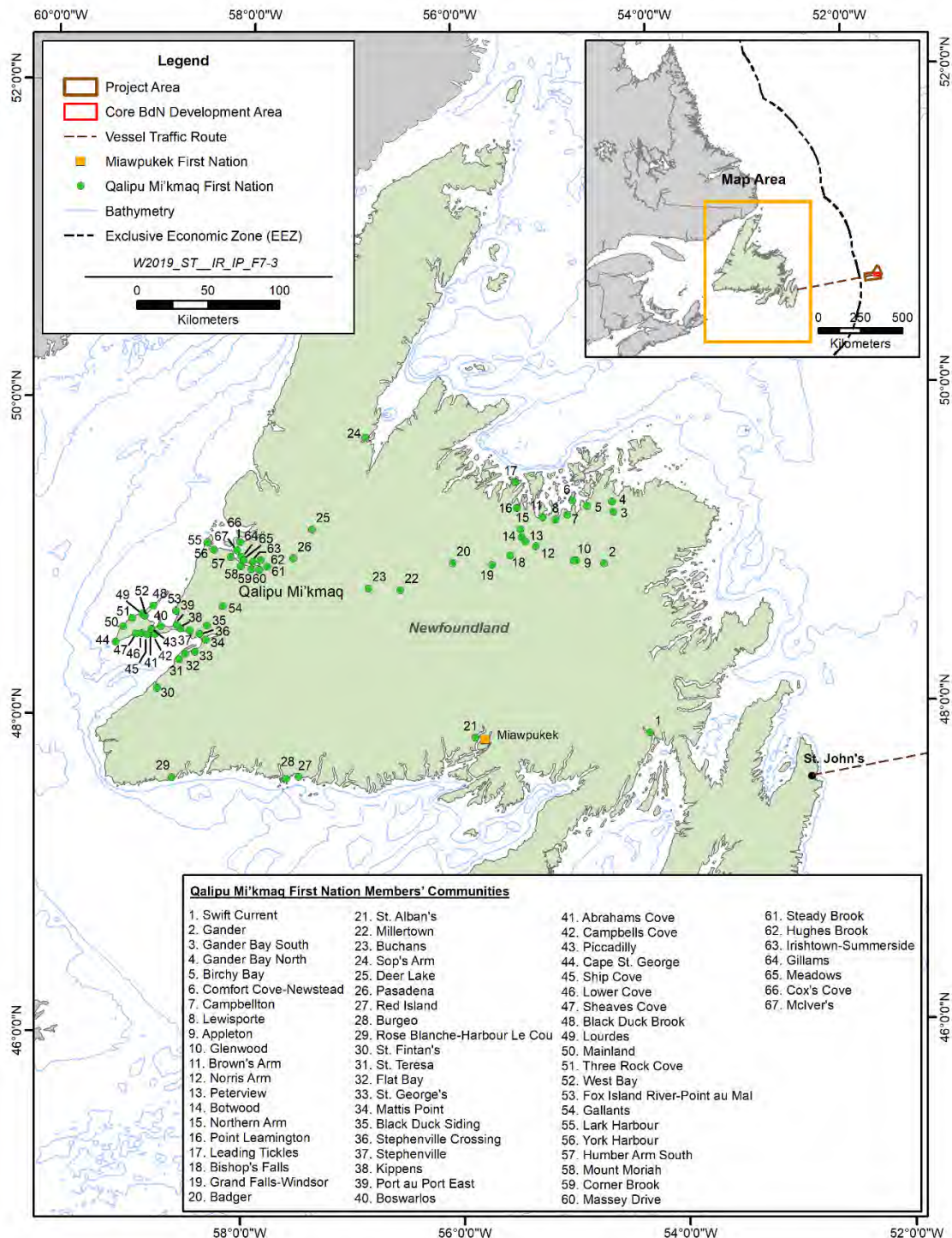


Figure 7-52 Indigenous Groups in Newfoundland

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Table 7.10 Newfoundland and Labrador Indigenous Groups Community Profiles

Community Indicator	Description
Labrador Inuit (Nunatsiavut Government)	
Location and Proximity to Project Area	<p>The traditional territory of the Labrador Inuit extends from Cape Chidley in the north, to south of Groswater Bay in Labrador and includes a portion of the offshore area adjacent to northern QC (C. Sheppard, pers comm 2018). To the west, it extends to the QC-Labrador border. To the east, it includes the adjacent Tidal Waters of the Labrador coast, extending 12 NM offshore to encompass the marine area referred to as the “Zone” in Schedule 2A of the Labrador Inuit Land Claims Agreement (LILCA) (NG 2005). The Labrador Inuit Settlement Area (LISA) is approximately 1,033 km from the Project Area. Nunatsiavut Government beneficiaries live in the Inuit communities Nain, Hopedale, Makkovik, Postville and Rigolet (Figure 7-51), and elsewhere.</p>
General Overview	<p>The Nunatsiavut Government, an Inuit regional self-government, was established following three decades of land claims negotiations between the Labrador Inuit Association (LIA) and the Governments of Canada and NL.</p> <p>On December 1, 2005, the LILCA came into effect, establishing land ownership, resource-sharing, self-government and delivery of programs and services within the LISA, and providing for harvesting rights within and outside of the LISA in interior, coastal, and offshore areas of northern Labrador. The LISA is comprised of approximately 72,520 km² of land in northern Labrador, of which 48,690 km² is within the Labrador Sea. The LILCA is a modern, comprehensive treaty and land claims agreement within the meaning of sections 25 and 35 of the <i>Constitution Act, 1982</i>. The LILCA gives the Nunatsiavut Government power and authority including administration, control, development, conservation and management of Labrador Inuit Lands (LIL) (15,799 km²).</p> <p>The Project does not overlap with lands covered by the treaty.</p> <p>The Nunatsiavut Government represents Labrador Inuit beneficiaries who live in the five Inuit communities: Nunainguk (Nain), Agvitok (Hopedale), Maggovik (Makkovik), KipukKak (Postville) and Tikigiaksaugusik (Rigolet) and elsewhere (spelling provided by D.M. Webb). The Nunatsiavut Government also includes two Inuit Community Corporations that provide representation in the Nunatsiavut Assembly for members living outside of the LISA. These are the NunaKatiget Inuit Community Corporation that serves beneficiaries residing in Happy Valley-Goose Bay (HV-GB) and Mud Lake and the Sivunivut Inuit Community Corporation serving beneficiaries residing in North West River and Sheshatshiu (Sivunivut 2018). Some of the five Inuit communities are experiencing population growth while others have declined. From 2011 to 2016, the populations of Hopedale and Makkovik increased while the populations of Nain, Postville, and Rigolet decreased. The population of most of the Labrador Inuit communities is relatively young as the percentage of population under 15 years of age (between 18 and 23 percent) is higher and the median age (31 to 41.2 years) is lower than that of the NL population in general (i.e., 14.3 percent below 15 years and median age of 46 years) (Felt, et al. 2012; Statistics Canada 2017; NG 2018). The Nunatsiavut Government reports that there are 7,133 beneficiaries of LILCA Canada-wide (Sheppard 2018).</p>

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Table 7.10 Newfoundland and Labrador Indigenous Groups Community Profiles

Community Indicator	Description
Health and Socioeconomic Conditions	<p>The Nunatsiavut Government provides community infrastructure and services such as schools, firefighting, drinking water, recreation, health care, home care, health promotion, healing and mental health services to the Labrador Inuit communities. Policing is provided by the RCMP.</p> <p>The Labrador Inuit communities are accessible seasonally (from July to November) by ferries operated by the Government of NL and Nunatsiavut Group of Companies (NGC). Regional airlines such as Air Borealis provide air transportation year-round (Statoil 2017). Labrador Winter Trails (funded by Provincial Government) provides grooming services for public trails to several communities throughout the winter.</p> <p>The NGC provides airline, helicopter, marine cargo, construction and other services to residents and industries such as mining and tourism.</p> <p>Common health-related issues across communities include, heart disease, diabetes, arthritis, high blood pressure, cancer, tuberculosis, high cholesterol, obesity, cigarette smoking, alcohol consumption, food insecurity, access to affordable housing and access to health services.</p> <p>Major employers include the Nunatsiavut Government, NGC, Torngat Fisheries Co-op, Inuit Community Governments, Torngat Regional Housing Association and the Voisey's Bay Mine / Mill near Nain.</p> <p>As described in more detail below, the Nunatsiavut Government has commercial-communal licences for a variety of fish and marine species. The Torngat Fish Producers Co-operative owns and operates seafood processing plants in Nain and Makkovik (Sheppard 2018).</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	<p>The Labrador Inuit are descendants of the pre-historic Thule people. The Labrador Inuit are culturally and linguistically part of the Inuit peoples who occupy the Arctic and parts of the sub-Arctic, from Alaska east across northern Canada, Greenland and the Arctic edges of the former Soviet Union. The Labrador Inuit are the most southernly expansion of this culture (Fitzhugh 1977; NG 2018).</p> <p>The pre-contact Inuit lifestyle included harvesting throughout the year for food, clothing, shelter and tools and seasonal migration to follow the movements of the animals and fish upon which the Inuit depended. European immigration and establishment of Moravian missions beginning in 1771 and Hudson's Bay Company (HBC) fur-trading posts beginning in the 1830s resulted in permanent communities and dramatic changes in traditional Inuit culture, settlement, and subsistence patterns. In the late 19th century and early part of the 20th century, Inuit became increasingly involved in the market economy and adapted new practices to earn income from industries focused on trapping and seal harvesting, as well as fishing for cod, char, and salmon (Brice-Bennett 1977; Kaplan 2012).</p> <p>Based on current research, 3,424 archaeological sites have been identified within LIL, LISA and Torngat Mountains National Park. There are no known physical, cultural or heritage sites within or near or near the Project Area (Sheppard 2018).</p>

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Table 7.10 Newfoundland and Labrador Indigenous Groups Community Profiles

Community Indicator	Description
<p>Current Use of Lands and Resources for Traditional Purposes</p>	<p>Many Labrador Inuit continue to undertake traditional land and resource use activities within the LISA, including hunting, fishing, and trapping. Key species, identified as being harvested by 50 percent or more households in 2007, included Atlantic salmon, Arctic char, caribou, eider ducks and eggs (Felt et al. 2012). Caribou are currently under a harvesting ban but each year a quota is approved for sharing among Indigenous groups. Traditional food has important value beyond market criteria, because its cultural, social and nutritional qualities are an integral part of the Inuit lifestyle. In a 2012 health survey, 90 percent of Labrador Inuit (15 years of age and older) indicated that they had participated in hunting, fishing, trapping or gathering plants in the previous 12 months (Statistics Canada 2015).</p> <p>Fishing activity is dispersed throughout the Labrador Shelf area, and is extensively fished for crab, rock cod, cod, Arctic char, sculpins, mussels, winkles and sea urchins (SEM 2008). Capelin is harvested for food within coastal waters around Hopedale, Postville, Sandy Beach, and Rapid Point area (SEM 2008). Capelin can be harvested in all communities and base camps. Salmon are also harvested by the Labrador Inuit (Sheppard 2018).</p> <p>Although there is no commercial salmon fishery, an Indigenous traditional fishery for Atlantic salmon exists in Labrador. In 2012, approximately 14,200 salmon (36 tonnes) were harvested by Labrador Indigenous Groups (DFO 2015).</p> <p>Migratory birds are also an important part of the Labrador Inuit harvest. The Labrador Inuit traditionally harvest eider and black ducks, ptarmigan/grouse, Canada goose, murre, mergansers, scoters and loons. Important areas for migratory birds along the north coast of Labrador include areas from north of Hopedale to the former community of Davis Inlet, Island Harbour Bay, Tunungayualok Island, Mugford Tickle to Cape Kiglapait, Okak Bay, Tasiuyuk Bay, Napartok Bay to Kangalaksiorvik Fjord, Kaipokok Bay, White Bear Island, Hare Islands, Windsor Harbour south the Byron's Bay, Turnavik Islands area, Ailik Islands, Cape Makkovik, Island Harbour Bay, Dunn's Island, Adlavik and Ironbound Islands, Jako's Bight, Makkovik Bay, Jeanette Bay, Groswater Bay and Back Bay (Brice-Bennett 1977).</p> <p>Other important bird areas and surrounding waters used by the Labrador Inuit for traditional harvesting activities include the waters and islands of the Backway, Table Bay and St. Peter's Bay where sea ducks are harvested, and the waters of Point Amour where sea ducks and murre (also called turrs) are harvested (Intervale Associates Inc. 2012).</p> <p>Following the ice break-up in spring, the Inuit hunt or net harp seals as well as ringed, harbour, grey and bearded seals in the outer island areas and in the bays as the seals move with the tide. Important harbour seal harvesting areas include Tunungayualok Island and area, Shoal Tickle, Big Bay, Flowers Bay, Kikkektak and Ivjogiktok Islands, Okak Bay, Tasiuyak Bay, Amitok Island, Illuviktalik Island, Iglusuaktaliak Island, Tikkigaksuk Peninsula, Napartok Bay, Seal Bight, Cod Bag Harbour, Shark Gut Harbour, Saglek Fjord, Kaipokok Bay, Big Brook, Jeanette Bay (including Sandy Cove), and Jako's Bight. Grey seal harvesting occurs in areas around Tunungayualok Island and near Tasiuyak Bay (Brice-Bennett 1977; SEM 2008). Labrador Inuit also harvest seals within Hamilton Inlet and Lake Melville and in Back Bay, Head of Groswater Bay, Black Island,</p>

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Table 7.10 Newfoundland and Labrador Indigenous Groups Community Profiles

Community Indicator	Description
	<p>Island Harbour Bay, Jako's Bight, Makkovik Bay, Adlavik Bay, Saglek Fjord and Kanairiktok Bay (Brice-Bennett 1977; SEM 2008).</p> <p>Ringed seals are harvested for subsistence purposes in the early spring. Important ringed seal harvesting areas include locations from Hare's Ears and The Highlands to Back Bay, Groswater Bay in The Channel area, Double Mer, areas around Drunken Harbour Point and the Advalik Islands, Napartok Bay, Hebron Fjord, Saglek Fjord, Kangalaksiorvik Fjord, Okak Bay, Tasiuyak Bay, Mugford Bay, Anchorstock Bight, Aulatsivik Island area, Tunungayualok Island, Nain Bay, Voisey's Bay, Tikkoatokak Bay, Webb Bay, Anaktalak Bay, areas around Hopedale, Flowers Bay to Island Harbour Bay, and the Turnavik Islands (Brice-Bennett 1977; SEM 2008).</p>
Commercial-Communal Fishing	<p>The Nunatsiavut Government currently holds several commercial-communal fishing licences. Groundfish licences are held for NAFO Divisions 2GHJ, 3KL and Greenland halibut may be harvested in 2+3K, 3LMNO and 0B. Seal licences permit harvesting in Sealing Areas 4 through 33, which includes all of Atlantic Canada. Scallop licenses have been issued for Scallop Area 1 off the coast of northern Labrador. Snow crab licences include Snow Crab Areas 1 and 2 (Lake Melville Area) as well as an exploratory licence for NAFO 2H (Northern Labrador). Northern shrimp licences are held for Shrimp Areas 4 and 5 (Central Labrador). The group also has an Arctic char licence for the area from Cape Rouge to Cape Chidley in Northern Labrador (D. Ball, pers comm 2018; Statoil 2017).</p>
Food, Social, Ceremonial Fishing	<p>The Nunatsiavut Government holds FSC fishing licences for salmon, trout, and Arctic char throughout the LISA. These three species as well as smelt and seal may be harvested in the Upper Lake Melville Area. As per the LILCA, beneficiaries have the right to harvest at any time of the year throughout the LISA for any species or stock of fish or aquatic plant, up to the quantity needed for their food, social and ceremonial purposes.</p>
Asserted or Established Aboriginal and / or Treaty Rights	<p>The Labrador Inuit have established Aboriginal rights under section 35 of the <i>Constitution Act</i> 1982, and beneficiaries of the LILCA have treaty rights within the LISA as set out in the Agreement, including the right to harvest species throughout the LISA. In addition, the Agreement allows for a negotiated arrangement for Beneficiaries residing in Labrador, outside of LISA, to harvest for food social and ceremonial purposes in tidal waters of Upper Lake Melville, outside of LISA (12E area). The Aboriginal and treaty rights of the Labrador Inuit do not extend to the lands and waters in or near the Project Area.</p>
Labrador Innu (Innu Nation)	
Location and Proximity to Project Area	<p>The Labrador Innu claim Aboriginal rights and title to much of Labrador and parts of Québec. The Labrador Innu primarily reside in two communities: Sheshatshiu in central Labrador and Natuashish on the North Coast of Labrador (Figure 7-51). Small numbers of Innu also reside in HV-GB. Sheshatshiu is approximately 1,088 km from the Project Area and Natuashish is approximately 1,286 km from the Project Area.</p>

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Community Indicator	Description
General Overview	<p>In 1978, the Labrador Innu land claim was accepted for negotiation by the Government of Canada. In 1991, following the completion of a land use and occupancy study, formal negotiations with the Governments of Canada and NL began. In 1996, a self-government framework agreement was signed and ratified in 1997. In 2008, the Government of NL and Innu Nation announced the Tshash Petapen (translated as “New Dawn”) Agreement, which resolved key issues related to the land claim, as well as impacts and benefits related to past and proposed hydroelectric developments in Labrador (IIAS 2018).</p> <p>The three parties have completed detailed agreements, including a Land Rights Agreement-in-Principle (AIP), which was signed in 2011. Under the AIP, areas of Labrador have been designated as Labrador Innu Lands (LIL, Category 1), Labrador Innu Settlement Area (LISA, Category 2), Permit-Free Hunting Area (Category 3) or other designated lands under the AIP. The AIP is not legally binding and forms the basis of ongoing treaty negotiations that will result in a Final Agreement (IIAS 2018; INAC 2018; Heritage NL 2018). The Project does not overlap with lands claimed by the Labrador Innu. The Sheshatshiu Innu and the Mushuau Innu of Natuashish are represented by Innu Nation in land claims negotiations and on other matters of common interest (INAC 2018). Sheshatshiu, located in central Labrador, was formerly part of North West River. In 1979, the Innu formed the community of Sheshatshiu, which is now a First Nation reserve with an elected Chief and Band Council (INAC 2017). The community of Natuashish was formed following the Innu’s relocation from the community of Utshimassit (Davis Inlet). Natuashish is a reserve with an elected Chief and Band Council (INAC 2018).</p> <p>The March 2018 registered population of the Labrador Innu was 2,728. Approximately 90 percent live on-reserve. Small numbers of Innu also reside in HV-GB and elsewhere. In 2016, the median age of the population of both First Nations (approximately 21.5 years) was less than half of that of the NL population in general (46 years) and the percentage of individuals below 15 years of age in Sheshatshiu (36.3 percent) and Natuashish (40.1 percent) was three times higher than that of the NL population (14.3 percent) (Statistics Canada 2017).</p>
Health and Socioeconomic Conditions	<p>Sheshatshiu and Natuashish are relatively small communities that offer services and infrastructure to their members and residents. Sheshatshiu is 40 km by road from the regional service centre of HVGB and is accessible year-round. The Natuashish community is approximately 300 km north of HVGB and is only accessible by plane or boat.</p> <p>Band Council and other agencies provide infrastructure and services such as schools, community recreation facilities, policing, firefighting and health care to both communities. Within Sheshatshiu, the RCMP and Health Canada have established a Sheshatshiu Crisis Intervention Team. The Labrador Grenfell Regional Health Authority provides health and community services to both communities. In Sheshatshiu, the Health Authority and the Sheshatshiu Innu Health Commission operate a community health clinic with basic trauma and resuscitation equipment (Statoil 2017). In Natuashish, the Health Authority, in partnership with Mushuau Innu Health Commission, operates a community health clinic with an emergency room bed, basic trauma and resuscitation equipment and a defibrillator (Statoil 2017). Health issues within the communities include</p>

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Community Indicator	Description
	<p>diabetes, youth mortality, teenage pregnancy and Fetal Alcohol Spectrum Disorder.</p> <p>The Innu Business Development Centre was created in 2001 to establish businesses and contribute to Innu communities. The Centre maintains a database of registered Innu businesses to facilitate business opportunities, and approximately 125 businesses were registered in April 2018. Innu Nation has invested in a range of businesses and partnerships to provide services mainly in construction and industrial supply (IBDC 2018). Sheshatshiu Innu First Nation Band Council is a major employer. Major employers in Natuashish include the Mushuau Innu First Nation Band Council, Mushuau Innu Health Commission, Mushuau Innu General Store and the Natuashish Hotel. Other major employers include Voisey's Bay and Muskrat Falls.</p> <p>As described in more detail below, Innu Nation holds several commercial-communal licences for a variety of fish and marine species. Ueushuk Fisheries Ltd. holds a mid-shore groundfish licence for various areas and a shrimp licence.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	<p>The Labrador Innu are descendants of Algonkian-speaking hunter-gatherers (Heritage NL 2018). The Innu were traditionally a nomadic people whose movements responded to the seasons and migrations of the animals (e.g., caribou) they relied upon for food and clothing. Labrador Innu culture and heritage are focused on their relationship to game animals most especially caribou, which is the focus of their philosophical and spiritual beliefs. For the Innu, Kanipinikassikueu (caribou master) is considered to be the most powerful of the animal masters.</p> <p>Archaeologists have documented Innu presence as early 1,500 A.D. at interior sites from Northwest River to Davis Inlet in Labrador. The Innu gathered in coastal areas in summer and spent the winter in the interior. During the 19th century, the life of the Innu people began to change with the establishment of European fur-trading posts and permanent settlements in Labrador (Fitzhugh 1977; Heritage NL 2018).</p> <p>Nearly 500 Innu archaeological sites are known to be located throughout northern, central and western Labrador. The identified sites are in inland and coastal areas and were often discovered in relation to developments such as communities, roads, railways, and mining areas. There are no known physical, cultural or heritage sites within or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes Marine Mammal Harvesting	<p>Following establishment of a permanent settlement in Sheshatshiu, women and children began to remain in the community for most of the year and men spent less time on the land harvesting and trapping. Nonetheless, the Sheshatshiu Innu continued to harvest a range of resources including caribou, black bear, small game and fish, in a relatively wide-ranging area not necessarily restricted to the lands and waterways surrounding the community (Nalcor 2011).</p> <p>An Outpost Program was established in the 1970s to help finance travel by Innu families to and from camps in the interior of Labrador and to enable Innu to travel into the country as an educational opportunity and community activity and to practice their traditional activities. In a 1997 study, approximately 42 percent of the Innu Nation population that participated in the survey indicated that they partake in country-based harvests year-round. Spring is the most active season, with 48 percent of participants spending at least one week on the land hunting, fishing and gathering wild foods (Nalcor 2011).</p>

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Community Indicator	Description
	<p>The Labrador Innu currently undertake land and resource use activities on their traditional lands within Labrador. The core areas traditionally used by Sheshatshiu Innu are the headwaters of Eagle River, the area bounded by Winnokapau Lake, Smallwood Reservoir, Seal Lake and Nipishish Lake, Shipiskan Lake, Snegamook Lake and Shapio Lake and parts of Québec. More recently, Labrador Innu have also harvested along the Trans Labrador Highway (TLH) between HV-GB and western Labrador. Various travel routes such as roads, snowmobile trails, walking trails, canoe and motorboat routes used by Labrador Innu have been recorded in southern Labrador, with a relatively high number of travel routes near the TLH between Churchill Falls and HV-GB and near Lake Melville (AIOC 2012).</p> <p>In 2010, an Innu traditional land use study was conducted for a travel corridor from central to western Labrador, for the period between 1990 and 2010. In this study, Innu stated that caribou is the priority large animal and caribou harvesting holds high cultural importance. Innu identified caribou harvesting sites in the study area between Tshiashku-nipi (Gull Lake) and Churchill Falls. Small animals and partridge harvested in the study area included snowshoe hare, porcupine, spruce grouse, ruffed grouse, and willow ptarmigan. A variety of furbearing animals were trapped, snared and shot within the study area including beaver, muskrat, river otter, marten, mink, red fox, and Canada lynx. For small game, beaver was the priority animal (mainly for edible meat) followed by marten. No kill sites were reported by respondents for weasel or wolf. A variety of migratory waterfowl were harvested in the study area including American black duck, black scoter, Canada goose, common loon, northern pintail, blue-winged teal, Harlequin duck, long-tailed duck, merganser, and surf scoter (Innu Nation 2010).</p> <p>The Innu hunt goose and duck near the TLH west of Churchill Falls, along the Churchill River and near Dominion Lake. Migratory waterfowl have been harvested around Crooks Lake and Parke Lake in southeastern Labrador, the shoreline of Lake Melville, along several roads between HVGB and Sheshatshiu, on the south side of the Churchill River at Gull island, the Eagle River plateau, the Mud Lake/Upper Lake Melville area and near Sheshatshiu and North West River (AIOC 2012).</p> <p>Important bird areas and surrounding waters are known to be used by the Labrador Innu as part of their traditional harvesting areas and include the waters and islands of the Backway, Table Bay, St. Peter's Bay and the waters of Point Amour, which are used for sea duck and murre harvesting. Eider ducks, murre, and other species harvested around the Labrador Shelf, are an important source of food for Indigenous people (Intervale Associates Inc. 2012).</p> <p>Although there is limited publicly available information, it is understood that Innu harvest seals in coastal areas in the spring, summer and fall (VBNC 1997).</p>

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Community Indicator	Description
Commercial-Communal Fishing	Innu Nation holds commercial-communal licences for groundfish in NAFO 0, 2GHJ, 3KL, groundfish (mobile gear) in NAFO 2GHJ, 3KL, mackerel and capelin in Fishing Areas 1 to 11 (northern Labrador to Burgeo) and shrimp in Shrimp Area 4, which is roughly from Rigolet to Postville. Ueushuk Fisheries Limited holds a mid-shore groundfish licence for various areas. This provides for harvesting a variety of species, including Greenland halibut in NAFO 2+3K, 3LMNO and 0B; skates in 3LNO and in 3Ps, 4X, 5Y, 5Z (j,m) with by-catch permitted in several other areas; white hake in 3NO and 3Ps with by-catch permitted in other areas; Atlantic halibut in NAFO 3NOPs and 4VWX+5Zc with a science quota and a competitive reserve in other areas; and haddock in 5Z (j,m) with by-catch permitted in other areas. Ueushuk Fisheries also holds a shrimp licence for Shrimp Fishing Areas 6 and 7, which include areas from southern Labrador to southwest NL (D. Ball, pers comm 2018; Statoil 2017).
Food, Social, Ceremonial Fishing	Innu Nation holds FSC fishing licences for Sheshatshiu and Natuashish. The Sheshatshiu licence includes salmon, trout, and Arctic char in the area from Fish Cove Point north to Cape Harrison (between Rigolet and Postville), including Lake Melville and the inland waters of Little Lake and Grand Lake. The Natuashish FSC licence permits harvesting salmon, trout, and Arctic char in tidal waters of Labrador extending north and east from Cape Harrigan inclusive of Big Bay and south and east of Anaktalik Bay inclusive of Anaktalik and Anaktalik Bays, and the inland waters of Sango Pond and Big Sango Lake (D. Ball, pers comm 2018; Statoil 2017).
Asserted or Established Aboriginal and / or Treaty Rights	Innu Nation asserts Aboriginal rights to land and resources within Labrador and to resources along the Labrador coast, including the right to hunt, fish, and gather throughout its traditional territory. This claim does not extend to the lands or waters in or near the Project Area.
NunatuKavut Community Council (NCC)	
Location and Proximity to Project Area	The NCC claims traditional territory that extends from central to southeastern Labrador. NCC members primarily reside in southern and central Labrador, along the southeast coast (Figure 7-51). The territory is approximately 800 km from the Project Area.
General Overview	<p>Originally established as the Labrador Metis Association in 1985, the NCC is the governing body of a membership of over 6,000 persons who reside primarily in southeastern and central Labrador and who are collectively known as the Southern Inuit of NunatuKavut. The NCC has asserted a land claim covering most of central and southeastern Labrador. While this claim has not been accepted for negotiation by the federal and provincial governments, on July 12, 2018, the Government of Canada and the NCC committed to work together to advance reconciliation and renew their relationship based on recognition of rights, respect, co-operation and partnership. The Project Area does not overlap with lands claimed by NCC.</p> <p>NCC members live throughout Labrador and elsewhere, mainly in communities along the southeast coast from Hamilton Inlet south to the Labrador Straits, including the towns of Cartwright, Charlottetown, Port Hope Simpson, St. Lewis and Mary's Harbour and the communities of Paradise River, Black Tickle-Domino, Norman Bay, Pinsent's Arm, Williams Harbour, and Lodge Bay, as well as in central and western Labrador and elsewhere.</p>

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Community Indicator	Description
	<p>Census data are not available specifically for NCC members as a group. In 2016, the population of the identified communities ranged from 15 or fewer to 427, with five communities (Paradise River, Pinsent's Arm, William's Harbour, Norman Bay and Lodge Bay) having fewer than 100 people. Where data are available, the median age is somewhat comparable to, or higher than the NL population in general (Statistics Canada 2017).</p>
<p>Health and Socioeconomic Conditions</p>	<p>The availability of community infrastructure within each community varies. For example, some communities have road access, airstrips, basic municipal services and nursing clinics, while others lack these services and residents must travel to other communities to access them (Martin et al. 2012). Health, policing, and education services also vary among the communities. RCMP travel to communities periodically from locations such as Mary's Harbour and Cartwright (Martin et al. 2012). Most communities have schools, but Paradise River, William's Harbour, Pinsent's Arm and Lodge Bay do not. Students from Pinsent's Arm and Lodge Bay travel to St. Mary's All Grade School in Mary's Harbour (Martin et al. 2012). Many of the communities have medical clinics, operated by Labrador-Grenfell Regional Health Authority. Clinics typically provide primary health care services and are staffed with nurses (Nalcor 2011). Generally, a physician and dentist visit each community every six weeks. A 2012 Health Needs Assessment outlined common health concerns such as high blood pressure, allergies, high cholesterol, arthritis, asthma, and diabetes.</p> <p>The NCC is invested in seasonal and year-round businesses including accommodations, convenience stores, and gas bars.</p> <p>As described in more detail below, the NCC holds several commercial-communal fishing licences for a variety of fish and marine species. The major employer in southern Labrador communities is the fishery. Employing hundreds of individuals, the Labrador Fisherman's Union Shrimp Company has processing facilities in Cartwright, Charlottetown, Pinsent's Arm, Mary's Harbour and L'Anse au Loup (LFUSLC 2014). NDC Fisheries Limited hold quotas for 450,000 lbs. of snow crab as well as shrimp quotas and is required to hire NunatuKavut members as crew.</p>
<p>Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)</p>	<p>In the 17th century, the Labrador Inuit first encountered Europeans. In southern Labrador, these interactions were based on trade with seasonal fishers and whalers, with the first European trading post being established in North West River in 1743 to 1744. Inter-marriage between the Labrador Inuit and European fur traders resulted in a generation of people of mixed descent who were born as early as 1775. Over time the population grew, and settlements were established throughout central and southern Labrador (Nalcor 2010; NCC 2018; Heritage NL 2018). Nearly 800 Inuit and Thule archaeological sites have been identified in northern, central and southern Labrador (the latter being the core area where most NCC members reside, and which is the focus of their land claim) and on the top of the Northern Peninsula on the island of Newfoundland. No known physical, cultural or heritage sites are located within or near the Project Area.</p>

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Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	<p>Members of the NCC place a high value on the importance of traditional foods, both in terms of their nutritional attributes and their cultural value. Members continue to rely upon the resources of the land, water and sea, and are known to undertake land and resource use activities throughout southern Labrador.</p> <p>They use the land in several ways as expressed through their movement along the overland and aquatic travel corridors, meeting in community gathering places, the establishment of habitation sites, trapper tilts and seasonal and permanent settlements (Clark and Mitchell 2010; Nalcor 2011; Martin et al. 2012). In 2014, the Iron Ore Company of Canada (IOC) gathered information from NCC members in Labrador West regarding their current land and resource use activities. Information gained from this study indicates that NCC members living in that region currently undertake a variety of land and resource use activities including hunting (i.e., big game, small game and waterfowl), trapping, fishing, ice fishing, cutting firewood and saw logs, collecting berries and medicinal plants, camping, boating, snowmobiling and all-terrain vehicle use. These activities occur throughout the western Labrador region, including areas adjacent to Labrador City and Wabush as well as at other locations along the TLH, roadways, the railway and snowmobile trails, near the Smallwood Reservoir and elsewhere. Some NCC members have cabins in Labrador West and around the Smallwood Reservoir but a larger number of cabins are located in central Labrador near their communities of origin (Amec 2014). In this data collection exercise, 53 percent of Labrador West NCC members (of the 30 who participated in the survey) reported consuming traditional foods weekly. Species consumed include: moose, caribou, bear, ptarmigan, grouse, hare, ducks, geese, porcupine, beaver, muskrat, squirrel, salmon, cod, trout, seal, partridgeberries, blueberries, bakeapples, black currants, red currants and squash berries. It should be noted that marine species (e.g. cod, salmon, seal) are not available in Labrador West and thus are harvested in coastal areas (Amec 2014).</p> <p>A 2012 land use study also showed that members of NCC travel on the land and sea by truck, snowmobile, boat, foot, dog-team and snowshoes. Use of automobiles is currently the main mode of travel for accessing land use areas. In addition, NCC members use a network of snowmobile trails that connect North West River, HV-GB, Mud Lake and Churchill Falls with other communities in Labrador, including Labrador City, Wabush and Cartwright. These roads and trails are used by many Labrador residents, both Indigenous and non-Indigenous, for travel as well as to access land and resource use areas (NCC 2010; AIOC 2012).</p> <p>Traditional migratory bird harvesting areas in Labrador include the waters and islands of the Backway, Table Bay and St. Peter's Bay, which are used for sea duck harvesting and the waters of Point Amour, which are used for sea duck and murre harvesting. The NCC has developed annual Spring Bird/Egg Harvest and Conservation Guidelines, which specify opening and closing dates, seasonal harvest of birds and gull eggs per household and associated restrictions. Members of NCC harvest a variety of birds, including geese and migratory birds such as black ducks (Intervale Associates Inc. 2012; AIOC 2012; NCC 2018).</p> <p>Members of NCC harvest marine mammals, with seals providing income and a source of meat.</p>

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Community Indicator	Description
Commercial-Communal Fishing	The NCC is engaged in commercial-communal fishing with licences held by the NCC or Nunacor Development Corporation (NDC) Fisheries Limited. The NCC holds seal harvesting licences in Sealing Areas 4 to 33 (all of Atlantic Canada). NDC Fisheries operates enterprises for groundfish in NAFO 2GHJ, 3KL and 4RS; scallop in Scallop Areas 1 and 2 (most of coastal Labrador); shrimp in Shrimp Area 6 (southern Labrador and northern Newfoundland; whelk in NAFO 2J; holds licences for northern shrimp, snow crab, capelin, herring and toad crab in southern Labrador; and bait in the Area of Home Port (D. Ball, pers comm 2018; Statoil 2017).
Food, Social, Ceremonial Fishing	The NCC holds FSC fishing licences for a variety of species. A licence for salmon, trout, Arctic char, Atlantic cod, rock cod, herring, scallop, whelk, smelt, and seal is held for a coastal area from Fish Cove Point to Cape Charles (central to southern Labrador). The NCC also holds a licence for salmon, trout, and Arctic char in the tidal waters of Upper Lake Melville. The Atlantic salmon fishery remains an integral part of the way of life. NCC members have been documented as fishing throughout central and southeastern Labrador, including around HVGB, Grand Lake and its tributaries, Sebaskachu Bay and Sebaskachu River, Mud Lake, Traversspine River, the mouths of Caroline Brook, McKenzie River and lakes south of the Churchill River, including Minipi Lake and Dominion Lake (AIOC 2012; D. Ball, pers comm 2018; Statoil 2017). The NCC also holds a licence for seals, which are harvested on the coast from Fish Cove Point to Cape Charles (NCC 2010; AIOC 2012; D. Ball, pers comm 2018; Statoil 2017).
Asserted or Established Aboriginal and / or Treaty Rights	The NCC asserts Aboriginal and treaty rights to land and resources within Labrador and to resources along the Labrador coast, including the right to hunt, fish, and gather throughout its traditional territory. This claim does not extend to the lands or waters in or near the Project Area.
Qalipu Mi'kmaq First Nation (QMFN) Band	
Location and Proximity to Project Area	QMFN Band members live in 67 communities throughout NL and in other areas (Figure 7-52). The Band's main administrative office is in Corner Brook and satellite offices are in Glenwood, Grand Falls-Windsor and St. George's (QMFN 2016; INAC 2018). QMFN communities are approximately 795 km from the Project Area.
General Overview	In 1972, the Federation of Newfoundland Indians (FNI) was formed with the primary goal of obtaining recognition for Mi'kmaq people in NL under the <i>Indian Act</i> . In 2008, the Government of Canada signed an agreement with the FNI to establish a landless Band for the Mi'kmaq of NL. The Agreement is not a treaty within the meaning of section 25 and section 35 of the <i>Constitution Act</i> , 1982. The signed Agreement initiated the enrolment process for the Mi'kmaq of Newfoundland (QMFN 2016; INAC 2018). In September 2011, QMFN was established as an Indian Band under the <i>Indian Act</i> and 23,877 members were found eligible and registered as founding members (QMFN 2016). It is anticipated that the founding member list will be finalized in 2018 (INAC 2018). The QMFN has not signed treaties with the Crown and there is currently no land base associated with the QMFN Band.

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Community Indicator	Description
Health and Socioeconomic Conditions	<p>As QMFN members live in an identified 67 communities throughout NL and these communities are not exclusively occupied by Qalipu Mi'kmaq, consolidated information on infrastructure and services, economic conditions, and community health is not readily available. Members access services and programs provided by municipal and provincial agencies, private businesses and service agencies in communities and regions where they reside.</p> <p>QMFN has identified health concerns such as chronic disease including diabetes, mental health and addictions, and communicable diseases.</p> <p>Economic and corporate development are led by the Qalipu Development Corporation (QDC) (QMFN 2016). QMFN has several wholly-owned commercial enterprises including Mi'kmaq Commercial Fisheries Incorporated (MCF), Qalipu Management Services Incorporated (QMS), Qalipu Marine Holdings (QMH) and Qalipu Project Support Services Limited (QPSS). Business partnerships have been negotiated and implemented between QMFN and several different construction firms. Marine Contractors Inc. Qalipu was created as a partnership between QMFN and Marine Construction to enable QMFN to bid on civil construction opportunities from Emera NL. Other business entities are Qalipu Project Support Services, Qalipu Safety and Industrial Supply, and Eastern Door Logistics. In 2016 to 2017, the QMFN earned revenues of \$10.2 million and had total expenditures of \$9.6 million (QMFN 2017).</p> <p>As described in more detail below, the QMFN and MCF holds several commercial-communal fishing licenses for a variety of fish and marine species. The QMFN and the MFN have a joint fisheries initiative, Mi'kmaq Alsumk Moiwimsikik Koqoey Association (MAMKA) which holds commercial-communal licenses for different fish and marine species.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	<p>Historical evidence demonstrates that the Mi'kmaq were living in NL by the 16th century; by the 17th century there are increasing historical references (Heritage NL 2018). Limited publicly available information exists on historic and cultural Qalipu sites; however, one has been identified (seal rocks near the Town of St. George's on the west coast (St. George's Indian Band 2017). Currently, 21 known Mi'kmaq archaeological sites exist in interior and coastal NL between the Port au Port Peninsula and Clarenville (Inside NL Archaeology 2013). In terms of culture, QMFN's practices and resources are focused on the lands and waters of the Island of Newfoundland. There are no known physical, cultural or heritage sites within or near the Project Area.</p>

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Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	<p>The QMFN undertake current land and resource use activities on their traditional lands which are extensive areas of land, sea, and water. Important sources of traditional food include moose, caribou, partridge, snowshoe hare, salmon, trout, eel, shellfish, and wild berries. Migratory birds, seals, and groundfish are harvested but of lesser importance. Groundfish, pelagic fish, shellfish, and seal harvesting are also of importance to the Mi'kmaq on the west coast of NL. Qalipu Natural Resources is undertaking studies to understand and monitor specific species, including Arctic hare, woodland caribou, elver and glass eel, commercial eel, Atlantic salmon, and eelgrass, as well as invasive species such as golden star tunicate and the European green crab. Qalipu Natural Resources is also engaged in a DFO Aboriginal Fisheries Guardian Program in western and central NL (Emera NL 2013; QMFN 2016; QMFN 2017).</p> <p>Harvesting birds such as murre (also called turr) and seals are also considered important traditional activities.</p>
Commercial-Communal Fishing	<p>QMFN and MCF hold commercial-communal fishing licences. These include groundfish licences in NAFO 2J, 3Pn, 4RST, 2GHJ and 3KL. The QMFN also has licences to harvest lobster in Lobster Areas 4B, 13A, 13B (eastern and western NL) and snow crab in Snow Crab Areas 4, 12, 12C, 12E and 12F (eastern and western NL). Various mackerel fishing licences are held in Mackerel Areas 1-11, 3-8, 4, 13 and 13B (coastal Labrador, and eastern and western NL). The Qalipu has licences for herring for Herring Area 13 (western NL); squid in Squid Areas 4 and 13 (eastern to western NL); scallop in Scallop Area 13 (western NL); capelin in Capelin Areas 1-11 and 13 (northern Labrador to western NL); whelk in Whelk Area 13 (western NL); shrimp in Shrimp Area 6 (northern NL) and licences to harvest bait in the Area of Home Port or Lobster Area. Qalipu First Nation also has licences for eel and smelt (D. Ball, pers comm 2018; Statoil 2017; QMFN 2017).</p> <p>MAMKA also holds commercial-communal licences for a variety of species including groundfish in NAFO 2GHJ, 3KL, 3Pn, 3Ps in offshore NL and 4RST in western NL; whelk in NAFO 3Ps; snow crab in Snow Crab Areas 10, 11, 12 C and 12E (southern and western NL); herring in Herring Areas 10 and 13 (Placentia Bay and western NL); capelin in Capelin Area 10 (Placentia Bay); lobster in Lobster Areas 13A and 13B (western NL); and bait in the Area of Home Port or Lobster Area. MAMKA also hold a commercial-communal scallop licence (D. Ball, pers comm 2018; Statoil 2017).</p>
Food, Social, Ceremonial Fishing	No information is available for FSC licences for the QMFN.
Asserted or Established Aboriginal and / or Treaty Rights	It is Equinor Canada's understanding that the QMFN Band has not asserted or established Aboriginal or treaty rights in relation to the lands and waters in or near the Project Area.

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Table 7.10 Newfoundland and Labrador Indigenous Groups Community Profiles

Community Indicator	Description
Miawpukek First Nation (MFN)	
Location and Proximity to Project Area	Miawpukek Mi'kamaway Mawi'omi First Nation (Miawpukek First Nation or MFN) is comprised of one reserve, the Samiajij Miawpukek reserve, located at the mouth of the Conne River on the south coast of the Island of Newfoundland (Figure 7-52) (BP 2017; Statoil 2017). The community is approximately 640 km from the Project Area.
General Overview	<p>According to traditional oral history, the Samiajij Miawpukek community was established in 1870. It was officially designated as Samiajij Miawpukek Indian Reserve under the <i>Indian Act</i> in 1987 (MFN 2018). In 2004, self-government framework agreement negotiations began between MFN and the federal and provincial governments and an agreement was signed in 2005. In 2013, MFN signed a Self-Government AIP with the governments of Canada and NL. The AIP is not a treaty or a land claims agreement within the meaning of sections 25 and 35 of the <i>Constitution Act, 1982</i>. The Agreement was an important step towards self-government and planning and management of economic opportunities and delivery of services to address community needs in culture and language, education, health, child and family services, land management, resource management, licensing, regulation and operation of business, and administration of justice. Progress is being made toward a final agreement (Government of NL 2013; MFN 2018; INAC 2018).</p> <p>The March 2018 registered population of MFN was 3,041 (INAC 2017). Approximately 27 percent live on-reserve. In 2016, the reserve population was 956, an increase of 3.9 percent since 2011. Overall, the population is younger than the NL population (Statistics Canada 2017; INAC 2018).</p>
Health and Socioeconomic Conditions	<p>The MFN community is accessible year-round by road. In 2017, the MFN opened a new school in the community, accommodating 180 students from kindergarten to grade 12. The school also includes a dental office and daycare centre. Conne River Health and Social Services provides access to community health services, including a medical clinic, wellness centre, youth centre, nutrition centre, ambulance services and on-call nurses. The MFN community owns and operates small businesses such as Christmas tree farms, hunting camps and small fisheries, and the Miawpukek Gas Bar and Convenience Store (INAC 2012). The community has also partnered with several outside communities and corporations in ventures including tourism and aquaculture (INAC 2012). The MFN community also owns and operates the Jipuijij'kuei Kuespem Nature Park which provides camping, kayak/canoe rentals, walking trails and float plane charters (Explore NL 2010).</p> <p>As described in more detail below, the MFN holds several commercial-communal licenses for a variety of fish and marine species.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	Some historical evidence demonstrates that the Mi'kmaq were present in NL by the 16 th century; by the 17 th century there are increasing historical references (Heritage NL 2018). Currently, 21 known Mi'kmaq archaeological sites exist in interior and coastal NL between the Port au Port Peninsula and Clarenville (Inside NL Archaeology 2013). There are no known physical, cultural or heritage sites in or near the Project area.

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Table 7.10 Newfoundland and Labrador Indigenous Groups Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq continue to use extensive areas of land, sea, and water for recreational and subsistence purposes such as hunting for caribou, moose, partridge and snowshoe hares; fishing for species such as Atlantic salmon; and harvesting of wild berries (Emera NL 2013). Salmon is important not only as a food source but is also important to the traditions and cultural identity of MFN. Harvesting birds such as murre (also called turr) and seals are also considered important traditional activities.
Commercial-Communal Fishing	MFN is engaged in commercial-communal fishing through its own licences and those held by MAMKA. MFN holds commercial-communal licences for groundfish in NAFO 2GHJ, 3KL, 3Pn and 3Ps, groundfish (mobile gear) in 2GHJ, 3KL, 3Pn, 3Ps, 4R, bluefin tuna in NAFO 3LNOP-Atlantic and seal in Areas 4 to 33 (all of Atlantic Canada). The First Nation also holds licences for sea cucumber and whelk in NAFO 3Ps (southern NL); capelin in Areas 1-11 and 10 (northern Labrador to southern NL); herring in Area 11 (southern NL); mackerel in Areas 10, 11 and 1-11 (northern Labrador to southern Newfoundland); snow crab in Areas 10 and 11 (southern NL); and squid in Squid Area 10 (Placentia Bay). The MFN also holds licences for other tuna species, swordfish, scallop, and bait. In addition, MFN also holds tuna and swordfish licences for the Scotia-Fundy region (D. Ball, pers comm 2018; Statoil 2017).
Food, Social, Ceremonial Fishing	MFN holds FSC licences in the coastal waters of 3Ps, which is in southern NL. This licence includes scallop, lobster, mackerel, herring, rainbow trout, brook trout, Atlantic cod, eel, smelt, capelin, harp seal grey seal, snow crab, and redfish (D. Ball, pers comm 2018; Statoil 2017).
Asserted or Established Aboriginal and / or Treaty Rights	It is Equinor Canada's understanding that MFN has not asserted or established Aboriginal or treaty rights in relation to the lands and waters in or near the Project Area.

7.3.3 The Mi'kmaq People of Eastern Canada

The earliest evidence of Indigenous peoples in the Maritimes Region shows that the Mi'kmaq people existed on the land for more than 11,000 years (NS OAA 2018). The first European contact with the Mi'kmaq occurred in the 16th and 17th centuries and at that time, the traditional Mi'kmaq territory (known as Mi'kma'ki) stretched from the southern portions of the Gaspé Peninsula eastward to most of modern-day NB, and all of NS and PEI (NS OAA 2018). The Mi'kmaq remain the predominant Indigenous group in NS as well as PEI, and have a substantial presence in NB, parts of northern Maine and eastern QC.

The Mi'kmaq people lived as fishers, hunters and gatherers throughout their territory within the context of seasonal cycles of the local vegetation, animals, and fish (MGS 2016). The Mi'kmaq generally lived in semi-permanent or permanent settlements at resource-rich locations with summer villages typically located by a navigable body of water (Mi'kma'ki All Points Services 2013). In summer, areas around the coastal camps provided fish, shellfish, fowl, and eggs (MGS 2016). The Mi'kmaq conducted most of their game-harvesting during the colder months, moving inland from the summer camps (Speck 1922 in MGS 2016; Denys 1993 in MGS 2016). When resources such as

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fish, game and plants became scarce near an encampment, the Mi'kmaq moved the encampment to a new location with the women being mainly responsible for breaking camp, transporting, and establishing the new camp (Robertson 1969 in MGS 2016; Speck 1922 in MGS 2016).

Following European contact, the Mi'kmaq participated in fur and other internal trade activities and were historically tied with French colonial forces against the British. Conflict between the British and the French, and therefore the Mi'kmaq, led to the signing of Peace and Friendship Treaties between the Mi'kmaq and the British in 1726, 1749, 1752 and 1760-61. Following Confederation, the treaties became the responsibility of the government of Canada. Today, existing Aboriginal rights and treaty rights, such as those established in the Peace and Friendship Treaties, are recognized as constitutionally protected under section 35 of the *Constitution Act, 1982*. As affirmed by recent SCC decisions, these Treaties guarantee the right to harvest, fish and gather throughout the region to pursue a moderate livelihood (Section 7.3.4). Currently, Canada is working with Indigenous Groups to uphold treaty rights in NS, NB, PEI, and the Gaspé region of QC (INAC 2017). The Mi'kmaq also assert Aboriginal rights and title throughout their traditional territory.

Some Mi'kmaq First Nations hold commercial-communal licences for NAFO divisions of eastern NL (Tables 7.10, 7.11, 7.12). In addition, Mi'kmaq First Nations may harvest marine migratory species (that use the Flemish Pass area during their life cycles and processes) in coastal areas through FSC or other traditional harvesting activities. The discussion of current use of lands and resources for traditional purposes by Mi'kmaq First Nations is focused on activities occurring in the marine environment, and species of cultural importance that may migrate through the marine environment in or near the Project Area.

7.3.4 Mi'kmaq of Nova Scotia

The 13 Mi'kmaq communities in NS are:

- Acadia First Nation
- Annapolis Valley First Nation
- Bear River First Nation
- Eskasoni First Nation
- Glooscap First Nation
- Membertou First Nation
- Paq'tnkek Mi'kmaw Nation
- Pictou Landing First Nation
- Potlotek First Nation
- Wagmatcook First Nation
- We'koqma'q (Waycobah) First Nation
- Sipekne'katik First Nation
- Millbrook First Nation

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The Mi'kmaq of NS have an established Aboriginal right to hunt, trap, and fish on ancestral lands (including the right to fish for FSC purposes) as well as a treaty right to harvest, fish and gather for a moderate livelihood (i.e., commercial-communal fishing), as established in the Peace and Friendship Treaties and assert Aboriginal title to the lands of NS and the adjacent offshore. The lands and waters in traditional territories are used by the Mi'kmaq for travel, harvesting, hunting and fishing for traditional and commercial purposes. The traditional territory of the Mi'kmaq does not extend to the Project Area, but some Mi'kmaq First Nations hold commercial-communal licences for NAFO Unit areas that overlap with the Project Area. In addition, Mi'kmaq First Nations may harvest marine migratory species in coastal areas through FSC or other traditional harvesting activities.

In 2002, following the Marshall Decision, the Mi'kmaq and governments of NS and Canada signed an Umbrella Agreement to establish a “Made-in-Nova Scotia” negotiation process to resolve outstanding issues related to Mi'kmaq Aboriginal and treaty rights. This includes the interests of the Mi'kmaq with respect to land, resource management and environmental protection, among other issues. A Framework Agreement was signed in 2007, between the three parties to establish negotiations towards a resolution of issues respecting Mi'kmaq rights and title (NS OAA 2018).

In 2010, after a three-year pilot period, the Mi'kmaq communities, through the Assembly of Nova Scotia Mi'kmaq Chiefs, signed an historic agreement with the Governments of Canada and NS. The Mi'kmaq-Nova-Scotia-Canada Consultation Terms of Reference establishes a consultation process for the parties to follow when governments are making decisions that have the potential to adversely impact asserted Mi'kmaq Aboriginal and treaty rights. The Terms of Reference were developed under the Umbrella Agreement. Additionally, the Mi'kmaq have signed agreements with the provincial and federal governments on national parks (2012) and education (1997) (INAC 2017).

Thirteen Mi'kmaq First Nation communities, with elected Chiefs and Councils, are located throughout the province from Cape Breton to the Yarmouth area. Eleven of those communities are currently represented by the Assembly of Nova Scotia Mi'kmaq Chiefs (ANSMC). The Kwilmu'kw Mawklusuaqn Negotiation Office (KMKNO), the administrative office of the Assembly, coordinates negotiations, and consultation on decisions / actions that may affect Mi'kmaq Aboriginal or treaty rights. In 2013 and 2016, respectively, Sipekne'katik and Millbrook First Nations withdrew from the ANSMC and now represent themselves in consultation. The Sipekne'katik First Nation and Millbrook First Nation assert the same rights as the other Mi'kmaq communities.

The locations of Mi'kmaq communities in NS are illustrated in Figure 7-53. Community profiles for the 13 Mi'kmaq communities located in NS are provided in the following sections (Table 7.11).

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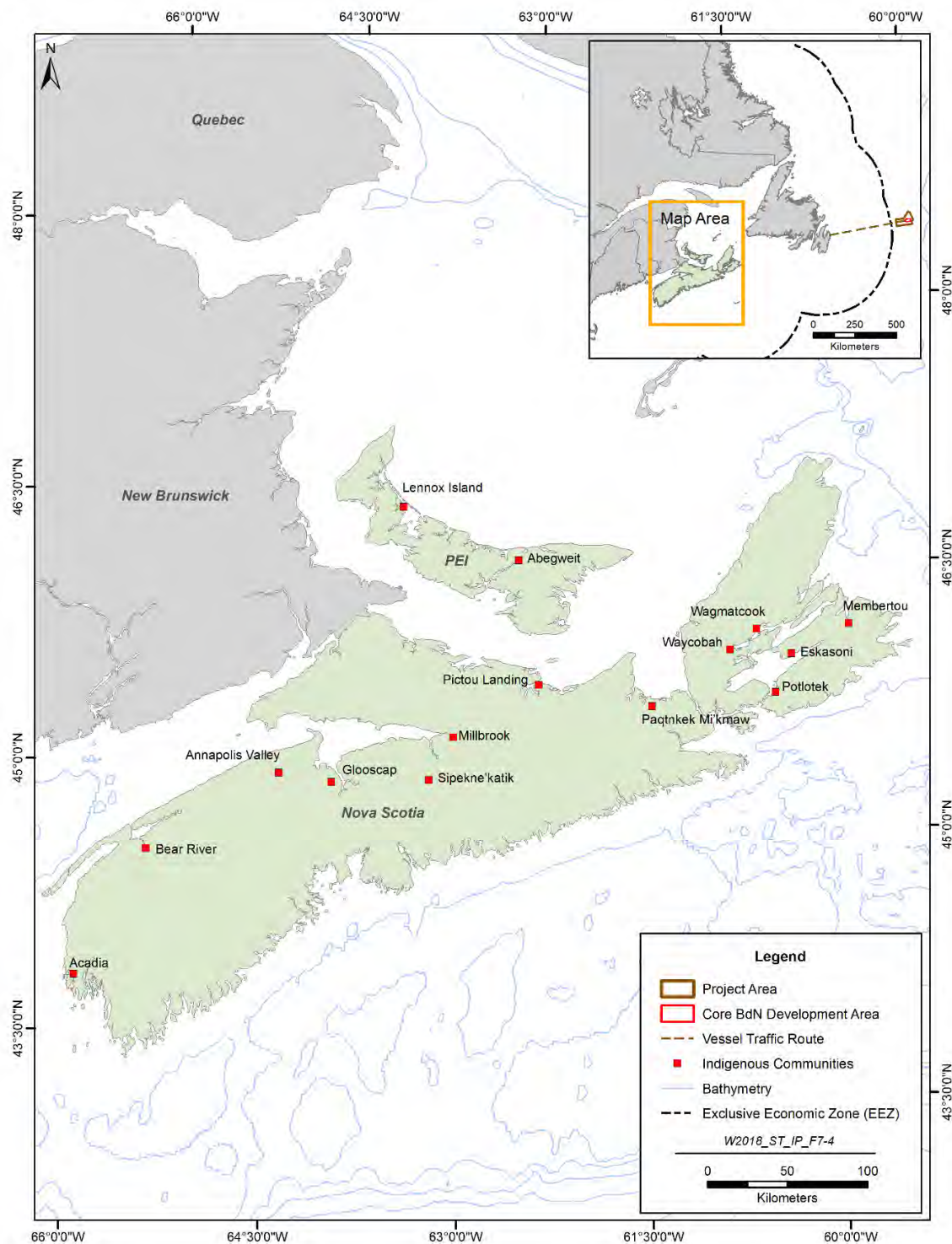


Figure 7-53 First Nation Communities in Nova Scotia and Prince Edward Island

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Acadia First Nation	
Location and Proximity to Project Area	Acadia First Nation, which is centred in Queen's County in southwestern NS, has five reserves (i.e., Yarmouth 33, Ponhook Lake 10, Medway River 11, Wildcat 12, and Gold River 21) between Yarmouth and Halifax. These reserves are approximately 1,527 km from the Project Area.
General Overview	Acadia First Nation is represented by the ANSMC. The March 2018 registered population of Acadia First Nation was 1,545. Approximately 15 percent (232 individuals) live on-reserve (INAC 2018). The median age of the on-reserve population ranges from 33.8 to 38.2 years, approximately 10 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017). No data are available for Medway River Reserve.
Health and Socioeconomic Conditions	The availability of infrastructure within each community varies. In general, Acadia First Nation has experienced infrastructure growth over the past decade, including the development of housing and roads (Acadia First Nation n.d.). Development and operation of community infrastructure, such as administrative buildings, health centres and gaming facilities, provide services and employment for community members and revenue for the First Nation. Acadia First Nation holds commercial-communal licences for a variety of fish and marine species. Kespuwick Resources, established in 2001, has 53 harvesting licences for 13 species (Acadia First Nation 2018).
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Indigenous artifacts have been found along the Mersey River in Queen's County. An interpretive centre is being developed to display archaeological and cultural history of the First Nation. The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). The practice of salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). American eel is also harvested within Aboriginal rights-based fisheries. The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Acadia First Nation holds commercial-communal licences for species including crab, groundfish, herring, lobster, mackerel, sea scallop, quahaug, clam and tuna. Lobster is licenced for LFAs 33 and 34. These licences are located inshore and offshore NS, and thus not within or near the Project Area.

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Food, Social, Ceremonial Fishing	Acadia First Nation holds FSC fishing licences for blue shark, blueback herring, brook trout, catfish, cod, crab (other than snow crab), eel, gaspereau, haddock, halibut, herring, lobster, mackerel, mussel, periwinkle, pollock, quahaug, rainbow trout, razor clams, scallop, seals, shad, smallmouth bass, smelt, soft-shell clams, squid, striped bass, and tomcod). Seventeen species are harvested in inland and tidal waters of NS. Acadia First Nation also hold an FSC licence for NAFO Units in and around NS to harvest groundfish, lobster and crab (other than snow crab). There are no location restrictions on fishing eel, shad and smelt. Acadia First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Annapolis Valley First Nation	
Location and Proximity to Project Area	Annapolis Valley First Nation has two reserves located in Kings County in southwestern NS. The reserves are approximately 1,371 km from the Project Area.
General Overview	Annapolis Valley First Nation is represented by the ANSMC. The March 2018 registered population of Annapolis Valley First Nation was 292. Approximately 40 percent (119 individuals) live on-reserve (INAC 2018). The median age of the population of the reserves range from 29.5 to 37.2 years, approximately 12 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	The Annapolis Valley First Nation Health Centre, established in 1998, has a registered community health nurse, access to prevention and weight control programs, foot care clinics, prenatal programs, massage therapy, physical activity programs, drug and alcohol abuse prevention, suicide prevention, injury / illness prevention and health and wellness promotion. The reserves do not have police detachments or fire halls (Annapolis Valley First Nation n.d.). Economic enterprises include Annapolis Valley First Nation Gaming, Annapolis Valley First Nation Smoke Shop, and Annapolis Valley First Nation Gas Bar. Annapolis Valley First Nation holds commercial-communal licences for a variety of fish and marine species. The Annapolis Valley Commercial Fisheries enterprise operates one lobster fishing boat.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Annapolis Royal and surrounding areas have a long history of Mi'kmaq presence and archeologists have identified several settlement patterns. When Europeans arrived, the Mi'kmaq lived in Annapolis Valley and their lifestyles were heavily influenced by the seasonal patterns of the ecosystems and a strong connection to the land. The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Annapolis Valley First Nation holds commercial-communal licences for sea urchins, groundfish, herring, lobster, and sea scallop for inshore and offshore NS, and these do not intersect with the Project Area.
Food, Social, Ceremonial Fishing	Annapolis Valley First Nation holds FSC licences for brown trout, clams, eel, flounder, gaspereau, halibut, herring, lobster, mackerel, mussels, pollock, rainbow trout, scallop, shad, smelt, speckled trout. Fish and shellfish species, including trout, mussels, clams, mackerel, and herring are harvested in tidal waters of NS. Annapolis First Nation also holds an FSC licence to fish for groundfish, lobster and scallop in NAFO units in and around NS. Annapolis Valley First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes. As these licences are for areas around NS, none are located within or near the Project Area.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Bear River First Nation	
Location and Proximity to Project Area	Bear River First Nation (also known as L'sitkuk Mainland) is located in the Annapolis Valley between Annapolis Royal and Digby. Bear River has three reserves: Bear River, Bear River 6A (known as Lequille), and Bear River 6B (known as Graywood) (KMKNO n.d.; INAC 2018). Bear River First Nation is approximately 1,462 km from the Project Area.
General Overview	The Bear River reserve was founded in 1801, with 1,000 acres set aside for the Mi'kmaq in the County of Annapolis and an additional 600 acres requested at the forks of the river (Mainland Mi'kmaq Development Inc. 2016). Bear River First Nation is represented by the ANSMC. The March 2018 registered population of Bear River First Nation was 343. Approximately 32 percent (111 individuals) live on-reserve (INAC 2018). The median age (i.e., 29.7 years) of the population was approximately 16 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	The majority of community members live on Bear River 6 (Mainland Mi'kmaq Development Inc. 2016). Community infrastructure includes Treaty Gas Bar, a seasonal Heritage and Cultural Centre, a Learning Centre that provides space for educational activities, and a Health Centre. An RCMP satellite office recently opened, and there are plans for a Fitness Centre. Revenue is generated through the Gas Bar and Heritage and Cultural Centre. As described in more detail below, Bear River First Nation holds commercial-communal licences for lobster and tuna.

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>For thousands of years, the Bear River Mi'kmaq have lived and travelled in what is now known as Digby and Annapolis counties. As early as 1612, the Mi'kmaq have been recorded as harvesting resources in the Annapolis River and French Bay (Bay of Fundy) (Mainland Mi'kmaq Development Inc. 2016). The traditional economy was based on hunting, fishing, and gathering, with people travelling a great deal in search of game.</p> <p>Bear River appeared to have been a capital village for the southwestern bands and central meeting place for the Mi'kmaq due to the location on traditional water routes. Bear River First Nation members are known for their artwork, specializing in embroidering porcupine quills on birchbark, leatherwork, and basketry (Mainland Mi'kmaq Development Inc. 2016).</p> <p>The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	<p>The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.</p>
Commercial-Communal Fishing	<p>Bear River First Nation holds commercial-communal licences for lobster and tuna. These licences are located inshore and offshore NS and do not overlap with the Project Area.</p>
Food, Social, Ceremonial Fishing	<p>Bear River First Nation holds FSC fishing licences for bar clams, crab, eel, gaspereau, groundfish, herring, landlocked salmon, lobster, mackerel, mussels, quahaug, razor clams, scallop, seals, shad, smallmouth bass, smelt, soft-shell clams, striped bass, and trout. These include licences to harvest species within the inland and tidal waters of NS. Bear River holds a licence to fish for other species in NAFO units in and around NS. Species include groundfish, lobster and crab (other than snow crab). There are no restrictions on the fishing of eel, shad and smelt. Bear River First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes. None of these licences overlap with the Project Area.</p>
Asserted or Established Aboriginal and / or Treaty Rights	<p>The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.</p>

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Eskasoni First Nation	
Location and Proximity to Project Area	Eskasoni First Nation is comprised of three reserves (Eskasoni 3, Eskasoni 3A, and Malagawatch 4) located along the shore of the Bras d'Or Lakes in Cape Breton. Eskasoni First Nation is approximately 1,043 km from the Project Area.
General Overview	Eskasoni First Nation is represented by the ANSMC. The March 2018 registered population of Eskasoni First Nation was 4,535. Approximately 85 percent (3,857 individuals) live on-reserve (INAC 2018). The median age of the population (i.e., 23.5 years) is approximately 22 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Eskasoni First Nation has community-owned infrastructure including a school for students from kindergarten to grade 12, a supermarket, ice rink, a cultural centre, and a fire department. The community operates Crane Cove Seafoods, which has 13 vessels. More than 100 community members are employed in fishing, with an additional 35 working in the processing plant. Eskasoni First Nation holds commercial-communal licences for a variety of fish and marine species. Harvesting takes place throughout NS from Ingonish to Yarmouth.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Eskasoni First Nation was first chartered in 1832 and became an official reserve in 1834. The population of Eskasoni grew in the 1940s because of a Department of Indian Affairs policy to centralize Indigenous people (Eskasoni First Nation n.d.). Eskasoni First Nation began controlling their own affairs in the 1950s and a Band Council was established in 1958 (Eskasoni First Nation n.d.). The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Eskasoni First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, mackerel, and shrimp. These licences are in inshore and offshore areas of NS.
Food, Social, Ceremonial Fishing	Eskasoni First Nation holds FSC fishing licences for clams, cod, eel, flounder, haddock, herring, lobster, mackerel, mussels, quahaug, salmon, scallop, shad, smelt, and trout within the inland and tidal waters of Cape Breton. Eskasoni holds a FSC licence to fish other species including groundfish and lobster in NAFO units in and around NS. Eskasoni First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Glooscap First Nation	
Location and Proximity to Project Area	Glooscap First Nation, comprised of one reserve (Glooscap 35), is located northwest of Halifax near Hantsport, approximately 1,340 km from the Project Area.
General Overview	Glooscap First Nation is represented by the ANSMC. The March 2018 registered population of Glooscap First Nation was 380. Approximately 25 percent (95 individuals) live on-reserve (INAC 2018). The median age (i.e., 32.5 years) is approximately 13 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	<p>Although there are no schools on-reserve, the Glooscap First Nation has appointed an education director to oversee primary and secondary education for on-reserve members who attend school off-reserve. Health care services are provided through an on-reserve health and healing centre.</p> <p>Glooscap Ventures, created in 2014, is responsible for on-reserve businesses including a variety store / gas bar, gaming facility, and commercial fisheries. The First Nation is in the process of developing Glooscap Landing, a 27-acre parcel of land along Highway 101 for retail purposes.</p> <p>Glooscap First Nation holds commercial-communal licences for a variety of fish and marine species.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>In June 1984, Glooscap First Nation (formerly known as Horton) became the thirteenth Mi'kmaq band in NS.</p> <p>The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	Glooscap First Nation's traditional activity is focused on harvesting marine species. The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Glooscap First Nation holds commercial-communal licences for groundfish, lobster, mackerel, swordfish, and tuna. Most of these licences are located inshore and offshore NS. Glooscap holds commercial-communal licences for swordfish and tuna within NAFO Unit 3LM in offshore NL.

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Community Indicator	Description
Food, Social, Ceremonial Fishing	Glooscap First Nation holds FSC fishing licences for brown bullhead, chain pickerel, cod, eel, flounder, gaspereau, haddock, halibut, lake whitefish, lobster, mackerel, mussels, pollock, scallop, shad, smallmouth bass, smelt, soft-shell clams, striped bass, trout, white perch, white sucker fish, and yellow perch. These include harvesting in the inland and tidal waters of NS. Glooscap First Nation also holds a FSC licence to fish for other species, including groundfish and lobster, in NAFO units in and around NS. There are no restrictions on the fishing of eel, shad and smelt. Glooscap First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to land or waters in or near the Project Area.
Membertou First Nation	
Location and Proximity to Project Area	Membertou First Nation is comprised of four reserves (i.e., Membertou 28B, Sydney 28A, Caribou Marsh 29, and Malagawatch 4) located in northeastern and southwestern Sydney. Membertou First Nation is 1,004 km from the Project Area.
General Overview	Membertou First Nation is represented by the ANSMC. The March 2018 registered population of Membertou First Nation was 1,534. Approximately 60 percent (920 individuals) live on-reserve (INAC 2018). The median age of the population (i.e., 26.9 years) is approximately 19 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Membertou First Nation has a gas station, church, medical clinic, community centre, band office, boxing gym, a business park which includes the Membertou Trade and Convention Centre, Membertou Heritage Park and Petroglyphs Gift Shop, hotel, a restaurant, Membertou Entertainment Centre, and other private businesses. Membertou has a school, Maupeltuewey Kina'matno'kuom, for kindergarten to grade 6 and a Sport and Wellness Centre. Membertou First Nation owns and operates First Fishermen Seafoods. Membertou First Nation holds several commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Membertou First Nation, formerly Kings Road Reserve, was originally located along the banks of Sydney Harbour. In 1926, it was moved to its present location. The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.

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Community Indicator	Description
Commercial-Communal Fishing	Membertou First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, mackerel, sea scallop, sea urchins, shrimp and tuna. Most of these licences are located inshore and offshore NS. Membertou holds commercial-communal licences for tuna within NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Membertou First Nation holds FSC fishing licences for clams, cod, crabs, eel, flounder, haddock, halibut, lobster, mackerel, mussels, oysters, pollock, quahaugs, salmon, scallop, smelt, and striped bass. These include harvesting in the tidal waters of Cape Breton and the Bras d'Or Lakes. Membertou First Nation holds an FSC licence to fish for other species in defined NAFO units in and around NS, including lobster and scallop. Membertou First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood," which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Paq'tnkek Mi'kmaw Nation	
Location and Proximity to Project Area	Paq'tnkek Mi'kmaw Nation is comprised of three reserves (i.e., Franklin Manor 22, Paq'tnkek-Niktuek 23, and Welnek 38) located southeast of Amherst and east of Antigonish. Paq'tnkek Mi'kmaw Nation is approximately 1,135 km from the Project Area.
General Overview	Paq'tnkek Mi'kmaw Nation is represented by the ANSMC. The March 2018 registered population of Paq'tnkek Mi'kmaw Nation was 595. Approximately 70 percent (421 individuals) live on-reserve (INAC 2018). The median age (i.e., 24.4 years) of the population is approximately 21 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	The Paq'tnkek Pre-School has been in operation in Afton, NS since the early 1980s. The Paq'tnkek Health Centre, which opened in 2008, is a multi-purpose facility that delivers health programs to the community, as well as offering a boardroom, classrooms, and space for private functions. An Economic Development Department manages development including the Paq'tnkek Entertainment Centre. The First Nation holds commercial-communal licences for a variety of fish and marine species, and Paq'tnkek Fisheries Enterprise employs 20 community members.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Paq'tnkek, meaning "by the bay", was established in March 1820 in Antigonish County, and (given its central location) has been a traditional stopping point for Mi'kmaq travelling to and from Unama'ki and a location where Chiefs would meet (Paq'tnkek Mi'kmaw Nation n.d.). The Paq'tnkek engage in important cultural and traditional practices, such as harvesting eels, salmon, and rabbits. The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.

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Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UJNR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UJNR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Paq'tnkek Mi'kmaw Nation holds commercial-communal licences, for sea urchins for areas of inshore NS. Paq'tnkek holds commercial-communal licences for swordfish within NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Paq'tnkek Mi'kmaw Nation members harvest marine fish and shellfish resources along the coast, including along the southern Chedabucto coastline where the waters generally do not freeze, offering unimpeded fishing during the winter months (Mi'kma'ki All Points Service 2013). Mackerel, herring, cod, haddock, urchins, mussels, oysters, clams are harvested on the Chedabucto coastline, and snow crab are fished in deeper waters (Mi'kma'ki All Points Service 2013). Freshwater species include salmon, trout, and eel (Mi'kma'ki All Points Service 2013). Paq'tnkek Mi'kmaw Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Pictou Landing First Nation	
Location and Proximity to Project Area	Pictou Landing First Nation is located on the south shore of the Northumberland Strait in Pictou County. The reserves include Franklin Manor 22 (also affiliated with Paq'tnkek Mi'kmaw Nation), Fisher's Grant 24, Boat Harbour West 37, Fisher's Grant 24G, and Merigomish Harbour 31. Pictou Landing First Nation is approximately 1,201 km from the Project Area.
General Overview	Pictou Landing First Nation is represented by the ANSMC. The March 2018 registered population of Pictou Landing First Nation was 668. Approximately 73 percent of these (487 individuals) live on-reserve (INAC 2018). The median age (i.e., 28.4 years) of the population is approximately 17 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	The community has a church, gas bar, health centre, and primary to Grade 6 elementary school, Pictou Landing First Nation School. Pictou Landing First Nation holds commercial-communal licences for a variety of fish and marine species. Fishing is the main industry, and close to 100 people (full / part time) are employed each year in harvesting lobster, rock crab, snow crab, mackerel, herring and tuna.

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Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Pictou Landing First Nation lived, on a seasonal basis, in and around a small tidal estuary connected by a narrow channel to the Northumberland Strait. The area provided a variety of resources including fish, eels, crustaceans, and shellfish as well as areas for harvesting and trapping near the shore. The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Pictou Landing First Nation holds commercial-communal licences for gaspereau, clams, crab, eel, groundfish, herring, lobster, mackerel, oysters, sea scallop, seal, smelts, squid, swordfish, and tuna. Most of these licences are located inshore and offshore NS and NB, with licences for swordfish in NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Pictou Landing First Nation holds FSC licences for lobster, salmon, striped bass, and trout. Pictou Landing First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Potlotek First Nation	
Location and Proximity to Project Area	Potlotek First Nation is comprised of two reserves (Chapel Island 5 and Malagawatch 4) located southwest of Sydney. Potlotek First Nation is approximately 1,058 km from the Project Area.
General Overview	Potlotek First Nation is represented by the ANSMC. The March 2018 registered population of Potlotek First Nation was 739. Approximately 76 percent (562 individuals) live on-reserve (INAC 2018). The median age (i.e., 24.2 years) of the population is approximately 21 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Potlotek First Nation has a day care, preschool program, and Mi'kmawey School. Other facilities include the Chapel Island Community Hall / Kateri Chapel, youth centre, RCMP building, medical centre, a store / gas bar and fire hall. Potlotek First Nation holds commercial-communal licences for a variety of fish and marine species. Fisheries is a key industry, including oyster cultivation. Apaqtukewaq Fisheries Co-op was formed in 1995, with four members employed fulltime in the co-op and seven during the peak season. Apaqtukewaq also manages lobster, snow crab, and tuna fishing.

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Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>Potlotek First Nation is a traditional meeting place for Mi'kmaq in the Maritimes and is one of the oldest reserves in Cape Breton. The Chapel Island Reserve, formerly Barra Head, became a reserve in 1834, following the receipt of a land grant.</p> <p>The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	<p>The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.</p>
Commercial-Communal Fishing	<p>Potlotek First Nation holds commercial-communal licences for gaspereau, herring, eel, crab, groundfish, lobster, sea urchins and shrimp. These licences are located inshore and offshore NS and do not overlap the Project Area.</p>
Food, Social, Ceremonial Fishing	<p>Potlotek First Nation holds FSC fishing licences for capelin, cod, eel, flounder, haddock, herring, lobster, mackerel, mussels, pollock, quahaug, salmon, scallop, shad, smelt, soft-shell clams, striped bass, and trout. These species are harvested in inland and tidal waters of mainland NS and Cape Breton. Potlotek holds a FSC licence to fish for other species including lobster and scallop in NAFO units in and around NS. Potlotek First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.</p>
Asserted or Established Aboriginal and / or Treaty Rights	<p>The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.</p>
Wagmatcook First Nation	
Location and Proximity to Project Area	<p>Wagmatcook First Nation is comprised of three reserves (Malagawatch 4, Margaree 25, and Wagmatcook 1) located within the Bras d'Or Lakes region of Cape Breton. Wagmatcook First Nation is approximately 1,061 km from the Project Area.</p>
General Overview	<p>Wagmatcook First Nation is represented by the ANSMC.</p> <p>The March 2018 registered population of Wagmatcook First Nation was 878. Approximately 74 percent (645 individuals) live on-reserve (INAC 2018). The median age (i.e., 25.6 years) of the population is approximately 20 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).</p>

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Community Indicator	Description
Health and Socioeconomic Conditions	Wagmatcook First Nation has a day care centre, kindergarten to Grade 12 First Nation school, and a fire hall. Community services and economic initiatives include a gas station, restaurant, grocery store, wharf and warehouse, Cultural and Heritage Centre, post office and community cable television network. Wagmatcook First Nation holds commercial-communal licences for a variety of fish and marine species. The commercial fishery, established in 1990, is an important communally-owned industry that employs up to 41 people each season.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Wagmatcook First Nation holds commercial-communal licences for crab, groundfish, lobster, mackerel, sea urchins, squid, and swordfish. Most of these licences are for inshore and offshore NS. Wagmatcook First Nation holds commercial-communal licences for swordfish in NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Wagmatcook First Nation holds FSC fishing licences for cod, eel, flounder, haddock, herring, lobster, mackerel, mussels, pollock, salmon, scallop, shad, smelt, striped bass, and trout within the tidal waters of Cape Breton. Wagmatcook First Nation holds licences to harvest lobster around Cape Breton in LFAs 27, 28, 29 and 30. Wagmatcook First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
We'ko'kmaq (Waycobah) First Nation	
Location and Proximity to Project Area	We'ko'kmaq (Waycobah) First Nation is comprised of two reserves (Malagawatch 4 and Whycomomagh 2) located within the village of Whycomomagh in Cape Breton. Waycobah First Nation is approximately 1,080 km from the Project Area.
General Overview	Waycobah First Nation is represented by the ANSMC. The March 2018 registered population of Waycobah First Nation was 1,000. Approximately 89 percent (886 individuals) live on-reserve (INAC 2018). The median age (i.e., 23.1 years) of the population is approximately 22 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).

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Community Indicator	Description
Health and Socioeconomic Conditions	Community infrastructure includes a primary-12 school, health centre, RCMP station, and volunteer fire department. Economic initiatives include a convenience store and gas bar, fitness centre, and a gaming centre. Waycobah First Nation holds commercial-communal licences for lobster, shrimp, crab, groundfish, and elver (eel), as well as inactive licences for tuna, whelk, urchin, mackerel, and herring. In 2011, a trout farm, owned by Cold Water Fisheries, was re-established in Waycobah and most staff are Waycobah First Nation members.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Waycobah First Nation (formerly We'ko'kmaq) was first established in the early 1800s. In the 1940s, the community experienced a decline in population with many members moving to the community of Eskasoni. The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Waycobah First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, mackerel, sea urchin, shrimp, and swordfish. Most of these licences are located inshore and offshore NS, with swordfish licences in NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Waycobah First Nation holds FSC fishing licences for clams, cod, eel, flounder, haddock, herring, lobster, mackerel, mussels, pollock, quahaug, salmon, scallop, shad, smelt, and trout for the tidal waters of Cape Breton. Waycobah First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Millbrook First Nation	
Location and Proximity to Project Area	Millbrook First Nation has seven reserves. Truro 27A, Truro 27B, Truro 27C and Millbrook 27 are near Truro, and Beaver Lake 17, Cole Harbour 30, and Sheet Harbour 36, near Halifax. Millbrook First Nation is approximately 1,260 km from the Project Area.

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Community Indicator	Description
General Overview	<p>Since 2016, Millbrook First Nation has chosen to independently represent itself in consultation and is not currently represented by the ANSMC. Millbrook First Nation asserts the same rights as other Mi'kmaq communities in NS.</p> <p>The March 2018 registered population of Millbrook First Nation was 1,868. Approximately 48 percent (894 individuals) live on-reserve (INAC 2018). The median age (i.e., 32.4 years) of the population is approximately 13 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).</p>
Health and Socioeconomic Conditions	<p>Facilities and services include the band office, community hall, ballfield, gym, early education centre, health centre, senior's centre and a church. Economic initiatives include the fishing industry, apartment buildings, a gaming centre, and a retail park.</p> <p>Millbrook First Nation holds commercial-communal licences for a variety of fish and marine species. Millbrook Fisheries is an important part of the local economy, with eight vessels, 52 commercial-communal licences province-wide, and more than 40 employees throughout the year.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>During the late 1700s and the early 1800s, the Mi'kmaq near Truro settled along the banks of the Salmon River and were later relocated to their current reserve at Millbrook.</p> <p>The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	<p>The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.</p>
Commercial-Communal Fishing	<p>Millbrook First Nation holds commercial-communal licences for crab, groundfish, hagfish, herring, lobster, mackerel, sea urchins, swordfish, and tuna. Most of these licences are for inshore and offshore NS. Millbrook First Nation holds commercial-communal licences for tuna and swordfish within NAFO Unit 3LM in offshore NL.</p>
Food, Social, Ceremonial Fishing	<p>Millbrook First Nation holds FSC fishing licences for brown trout, chain pickerel, eel, grey trout, herring, lake trout, lobster, mackerel, ocean quahaug, oysters, rainbow trout, salmon, scallop, smallmouth bass, smelt, speckled trout, and striped bass in inland and tidal waters of NS, including the tidal water of the Bay of Fundy. Millbrook First Nation holds an FSC licence to fish for herring, lobster, mackerel, ocean quahaug, oysters, and scallops in NAFO units in and around NS. Millbrook First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.</p>
Asserted or Established Aboriginal and / or Treaty Rights	<p>The Mi'kmaq of NS have a right to fish for a "moderate livelihood," which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.</p>

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Community Indicator	Description
Sipekne'katik First Nation	
Location and Proximity to Project Area	Sipekne'katik First Nation (also known as Indian Brook or Shubenacadie) is comprised of five reserves (Indian Brook 14, Wallace Hills 14A, Shubenacadie 13A, Pennal 19, and New Ross 20) in Hants County, near Shubenacadie. Sipekne'katik First Nation is approximately 1,281 km from the Project Area.
General Overview	In 2013, Sipekne'katik First Nation chose to independently represent itself in consultation, and currently is not represented by the ANSMC. The First Nation asserts the same rights as other Mi'kmaq communities in NS. The March 2018 registered population of Sipekne'katik First Nation was 2,692. Approximately 48 percent live on-reserve (INAC 2018). The median age (i.e., 27.7 years) of the population is approximately 21 percent below that of NS in general, which was 45.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Sipekne'katik First Nation has a primary-12 school, the gas bar, tobacco shop, gaming room and convenience store, a multi-purpose centre, the Sipekne'katik Entertainment Centre and the Sipekne'katik Health Centre. The fishery is an important industry for the community, and Sipekne'katik First Nation holds 33 commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	In 1820, Sipekne'katik First Nation was officially established as a reserve and given the name 'Indian Brook'. According to Mi'kmaq oral history, this area has been used for centuries as a sacred site to prepare for ceremonies and for harvesting and fishing trips. In 1752, one of the most important Peace and Friendship Treaties was signed at Shubenacadie District (Sipekn'katik First Nation 2016). The Project does not overlap with the traditional territory of the Mi'kmaq of NS, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of NS harvest Atlantic salmon as part of their Aboriginal right to fish for FSC purposes (UINR 2018). Salmon fishing creates opportunities for traditional knowledge sharing and expressing Mi'kmaq values of sharing catches with the community, and other uses specific to salmon that cannot be replaced by harvesting other species (UINR 2018). The Mi'kmaq of NS also harvest American eel within Aboriginal rights-based, treaty rights-based and commercial fisheries. In addition to a rich food source, American eel is also used for medicinal purposes.
Commercial-Communal Fishing	Sipekne'katik First Nation holds commercial-communal licences for crab, groundfish, lobster, sea scallop, sea urchins, swordfish and tuna. Most of these licences are located inshore and offshore NS. Sipekne'katik also holds commercial-communal licences for swordfish and tuna within NAFO Unit 3LM in offshore NL.

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Table 7.11 Mi'kmaq of Nova Scotia Community Profiles

Community Indicator	Description
Food, Social, Ceremonial Fishing	Sipekne'katik First Nation holds FSC fishing licences for bar clams, crab (other than snow crab), eel, gaspereau, herring, landlocked salmon, lobster, mackerel, mussels, quahaugs, razor clams, salmon, scallop, seals, shad, smallmouth bass, smelt, soft-shell clams, striped bass, trout, and unspecified groundfish. Harvesting occurs in inland and tidal waters of NS. Sipekne'katik First Nation holds an FSC licence for crab, lobster, scallops and unspecified groundfish in NAFO units in and around NS. There are no restrictions on the fishing of eel, shad and smelt. Sipekne'katik First Nation also has an Aboriginal right to fish for Atlantic salmon for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of NS have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.

7.3.5 Mi'kmaq of Prince Edward Island

Two Mi'kmaq communities are located on PEI. Abegweit and Lennox Island First Nations are represented in consultation and engagement by the Mi'kmaq Confederacy of Prince Edward Island (MCPEI). MCPEI was established in 2002 as a service delivery organization, but has expanded to include economic development, integrated resource management, government advisory services, and consultation and engagement on behalf of the two Mi'kmaq First Nations (MCPEI n.d.). MCPEI's mission includes promoting understanding of Mi'kmaq rights, culture and traditions, developing capacity within First Nation communities, working with other organizations dedicated to supporting the well-being of Mi'kmaq people and providing a common forum to advance treaty and Aboriginal rights for the Abegweit and Lennox Island First Nations (MCPEI n.d.).

The Mi'kmaq of PEI and the federal and provincial governments signed a Partnership Agreement in 2007 to establish a cooperative process for addressing matters of concern, including health, education, economic development, justice, and child and family services, for the First Nations.

PEI's Aboriginal Affairs Secretariat was created in 2009 to coordinate government's response to Aboriginal matters in the province (MCPEI n.d.). In 2012, the Government of Canada, the province, and the Mi'kmaq of PEI signed a tripartite consultation agreement, the *Mi'kmaq – Prince Edward Island – Canada Consultation Agreement* (Abegweit First Nation 2015). The Agreement outlines the process by which Canada and PEI will consult with the Mi'kmaq on proposed actions or decisions that may adversely impact asserted or established Aboriginal or treaty rights (Abegweit First Nation 2015).

The PEI Mi'kmaq are known to occupy and use the land and waters around PEI including use for travel corridors, land harvesting, and fishing for traditional purposes. The Project Area does not overlap with the traditional territory of the PEI Mi'kmaq, and Project components and activities will be located at a considerable distance from the Indigenous groups and associated communities. The discussion of current use of lands and resources for traditional purposes is focused on activities in the marine environment and species of interest that may migrate through the marine environment.

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The current use of lands and resources section therefore includes a discussion of FSC and commercial-communal harvesting in nearshore and offshore areas.

Table 7.12 provides community profiles for each Indigenous group. The locations of Mi'kmaq communities in PEI are illustrated in Figure 7-53.

Table 7.12 Mi'kmaq of Prince Edward Island Community Profiles

Community Indicator	Description
Abegweit First Nation	
Location and Proximity to Project Area	Abegweit First Nation is comprised of three reserves (Morell Rear Reserve 2; Rocky Pont Reserve 3; and Scotchfort Reserve 4), on the eastern portion of PEI, approximately 1,199 km from the Project Area.
General Overview	Abegweit First Nation is governed by an elected Chief and two Councillors and represented by the MCPEI in consultation and engagement. The March 2018 registered population of Abegweit First Nation was 381. Approximately 57 percent (218 individuals) live on-reserve (INAC 2018). The median age of the population of the three reserves ranges from 27.0 to 32.2 years, approximately 15 percent below that of PEI in general, which was 44.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Abegweit First Nation plays a substantial role in education from Kindergarten to Grade 12. The Mi'kmaq Wellness Centre has an interdisciplinary team consisting of a registered nurse, licenced practical nurse, registered dietician, native alcohol and drug addiction counselor, and community health representative. Abegweit First Nation operates several businesses and community initiatives including Epekwit Gas Bar, Redstone Truck and Marine, commercial fisheries, Epekwit Gardens and Preserves, Abegweit Biodiversity and Enhancement Hatchery, Stream Enhancement, and Forestry. Abegweit First Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Abegweit First Nation was created following the separation of PEI Mi'kmaq bands in 1972. The first election for the Abegweit First Nation occurred in May 1972. The Project does not overlap with the traditional territory of the Mi'kmaq of PEI, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of PEI are known to occupy and use the land and waters around PEI, including use for travel corridors, land-based harvesting and fishing for traditional purposes. Refer below for details on FSC fishing practices.
Commercial-Communal Fishing	Abegweit First Nation holds commercial-communal licences for clams, crab, eel, groundfish, herring, lobster, mackerel, mussels, oysters, quahuags, sea scallop, seal, silverside, smelts, squid, swordfish, and tuna. Most licences are located in inshore and offshore PEI. Abegweit holds commercial-communal licences for swordfish within NAFO Unit 3LM in offshore NL.

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Table 7.12 Mi'kmaq of Prince Edward Island Community Profiles

Community Indicator	Description
Food, Social, Ceremonial Fishing	Abegweit First Nation holds FSC licences for clams, eel, gaspereau, herring, lobster, mackerel, mussels, oysters, quahaug, rock crab, salmon, scallops, seals, silversides, smelts, striped bass, toad crab, and trout. Abegweit First Nation has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of PEI have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and assert an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Lennox Island First Nation	
Location and Proximity to Project Area	Lennox Island First Nation has one reserve, on the northwestern portion of PEI, facing the Gulf of St. Lawrence approximately 1,265 km from the Project Area.
General Overview	Lennox Island First Nation is represented in consultation and engagement by the MCPEI. The March 2018 registered population of Lennox Island First Nation was 967. Approximately 41 percent (393 individuals) live on-reserve (INAC 2018). The median age (i.e., 29.9 years) of the population is approximately 15 percent below that of PEI in general, which was 44.5 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Lennox Island First Nation has an elementary school, health centre, and fire department. The Lennox Island Development Corporation was established to further economic development and expansion of community businesses and resources. Lennox Island First Nation holds commercial-communal licences for a variety of fish and marine species. Fisherman's Pride Inc. harvests and sells inshore seafood. Minigoo Fisheries, established in 2010, processes lobster for international markets.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'kmaq of PEI, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'kmaq of PEI are known to occupy and use the land and waters around PEI, including use for travel corridors, land harvesting and fishing for traditional purposes. Refer below for details on FSC fishing practices.
Commercial-Communal Fishing	Lennox Island First Nation holds commercial-communal licences for clams, crab, eel, groundfish, herring, lobster, mackerel, mussels, quahaug, oysters, sea scallop, seal, shark, silverside, smelts, squid, swordfish, tuna, and whelks. Most of these licences are located inshore and offshore PEI. Lennox Island First Nation also holds commercial-communal licences for swordfish within NAFO Unit 3LM in offshore NL.

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Table 7.12 Mi'kmaq of Prince Edward Island Community Profiles

Community Indicator	Description
Food, Social, Ceremonial Fishing	Lennox Island First Nation holds FSC licences for clams, eel, gaspereau, groundfish, herring, lobster, mackerel, mussels, oysters, quahaug, rock crab, salmon, seals, smelt, and trout. The First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'kmaq of PEI have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and assert an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.

7.3.6 Indigenous Peoples of New Brunswick

There are three Indigenous Nations in NB: the Mi'gmaq, Wolastoqiyik, and Peskotomuhkati Nation at Skutik (Passamaquoddy). As previously described in Section 7.3.3 the first European contact with the Mi'gmaq occurred in the 16th and 17th centuries. Between 1725 and 1779 the British Crown signed several Peace and Friendship Treaties with the Mi'gmaq, Maliseet (Wolastoqiyik), and Passamaquoddy, which have been affirmed by various Supreme Court decisions. The treaties guarantee rights to hunt, fish and gather throughout the region to pursue a moderate livelihood (INAC 2017).

7.3.6.1 Mi'gmaq of New Brunswick

The nine Mi'gmaq First Nations of NB are listed below:

- Elsipogtog First Nation
- Amalamgog (Fort Folly) First Nation
- Natoaganeg (Eel Ground) First Nation
- Oinpegitjoig (Pabineau) First Nation
- Esgenoôpetitj (Burnt Church) First Nation
- L'nui Menikuk (Indian Island) First Nation
- Ugpig'anjig (Eel River Bar) First Nation
- Metepenagiag (Red Bank) Mi'gmaq Nation
- Tjipögtötjg (Buctouche) First Nation

In 2011, the Governments of Canada, NB and the Mi'gmaq and Wolastoqiyik Nations of New Brunswick signed the Mi'gmaq, Wolastoqiyik / NB / Canada Umbrella Agreement to establish a process towards the conclusion of a Framework Agreement on Aboriginal Treaty Rights, as well as self-government and consultation. The Mi'gmaq, Wolastoqiyik / NB / Canada Interim Consultation Protocol was signed in 2014 to facilitate consultation activities undertaken by governments with the signatory Mi'gmaq and Wolastoqiyik First Nations and the parties are currently finalizing a Framework Agreement (INAC 2017).

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The Mi'gmawe'l Tplu'taqn Incorporated (MTI) represents eight of the nine Mi'gmaq communities in NB (the exception is Elsipogtog First Nation). MTI was formed in late 2015, and is a not-for-profit organization established to manage consultation for the member First Nations in NB, and to promote and support the recognition, affirmation, exercise and implementation of the Aboriginal and treaty rights of its members. Elsipogtog First Nation conducts its own consultation and engagement, and in 2016 launched an Aboriginal title claim to the southeastern third of the province.

Seven of these First Nations are members of the North Shore MicMac District Council (NSMDC). NSMDC was established in 1987 to provide advisory and technical assistance to member First Nations. This assistance originally included finance, capital works (i.e., water and sewer), economic development and Band governance; it was expanded to include post-secondary education, child and family services, housing inspection, human resources, Indigenous fisheries, and other services. Three First Nations (i.e., Elsipogtog, Esgenoôpetitj, and Tobique) are members of the Mawiw Tribal Council, which provides services in education, health care and healing to member communities (INAC 2017).

The Mi'gmaq of NB are known to occupy and use the land and waters around NB, including use for travel corridors, harvesting, and fishing under treaty or for traditional purposes. The traditional territory does not overlap with the Project Area, but several NB First Nations hold commercial-communal fishing licences in NAFO 3LM in offshore NL. Given that Project components and activities will be located at a considerable distance from the Indigenous groups and associated communities, the discussion of current use of lands and resources for traditional purposes is focused on activities in the marine environment, and species of interest that may migrate through the marine environment. The current use of lands and resources section therefore includes a discussion of FSC and commercial-communal harvesting.

The locations of Mi'gmaq communities in NB are illustrated in Figure 7-54. The following sections provide community profiles for each Indigenous group (Table 7.13).

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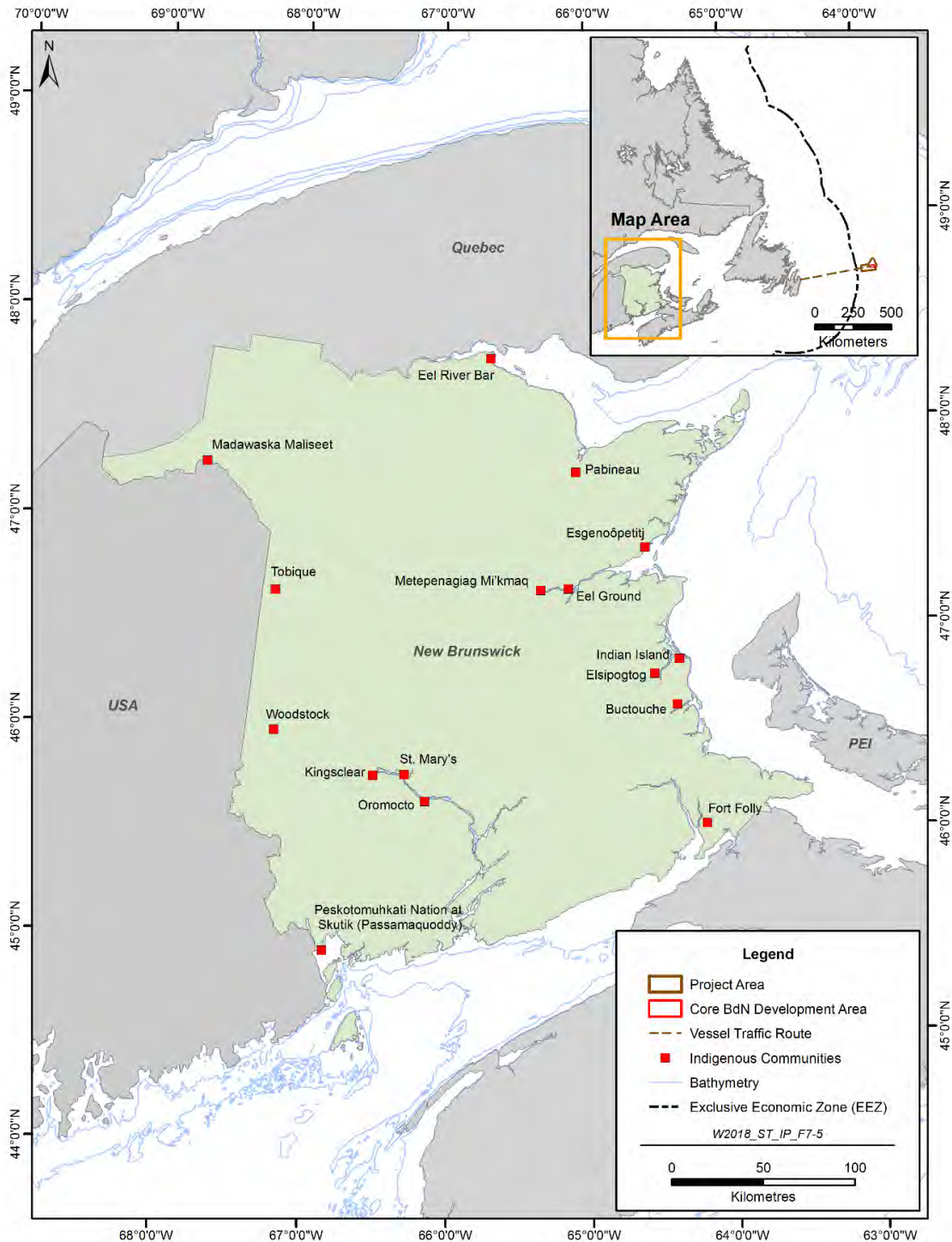


Figure 7-54 Location of First Nation Communities in New Brunswick

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Elsipogtog First Nation	
Location and Proximity to Project Area	Elsipogtog First Nation has two reserves (Richibucto and Soegao) located near Rexton and Moncton. Elsipogtog First Nation is approximately 1,348 km from the Project Area.
General Overview	Elsipogtog First Nation is affiliated with the MAWIW Council (the governing body for Elsipogtog, Tobique and Esgeñoôpetitj) (Energy East Pipeline Ltd. 2016). The March 2018 registered population of Elsipogtog First Nation was 3,365. Approximately 77 percent (2,576 individuals) live on-reserve (INAC 2018). The median age (i.e., 29.9 years) of the population is approximately 16 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Richibucto Reserve has a school for Kindergarten to Grade 8, a police detachment, and fire hall. The two primary economic development initiatives are a supermarket and pharmacy.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Elsipogtog First Nation holds commercial-communal licences for gaspereau, clams, crab, eel, groundfish, herring, lobster, mackerel, mussels, oysters, quahaugs, sea scallop, seal, smelts, and tuna. These licences are issued for inshore and offshore NS and NB and do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Elsipogtog First Nation holds FSC licences for clams, eel, gaspereau, herring, lobster, mackerel, mussels, oysters, quahaug, rock crab, salmon, scallops, seals, shad, smelts, striped bass, and trout. The First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood," which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to waters in or near the Project Area.
Amlamgog (Fort Folly) First Nation	
Location and Proximity to Project Area	Fort Folly First Nation has one reserve, located near Dorchester in Westmorland County, approximately 1,331 km from the Project Area.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
General Overview	Fort Folly First Nation is affiliated with the North Shore MicMac District Council and is represented in consultation and engagement by MTI. The March 2018 registered population of Fort Folly First Nation was 131. Approximately 27 percent (35 individuals) live on-reserve (INAC 2018). The median age (i.e., 46.0 years) of the population is similar to that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Fort Folly First Nation has a school offering a head start and kindergarten program. Fort Folly First Nation holds commercial-communal licences for a variety of fish and marine species. The First Nation supports economic development in the fishing industry, with two lobster boats, one of which also carries a scallop licence.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	In 1918, community members from the Fort Folly lands were relocated to the Robinson land outside of Richibucto. The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Fort Folly First Nation holds commercial-communal licences for groundfish, lobster, sea scallop, swordfish, and tuna. Most of these licences are located inshore and offshore NS and NB. Fort Folly holds commercial-communal licences for swordfish and tuna in NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Fort Folly First Nation holds FSC fishing licences for LFA 35 (Bay of Fundy) for lobster. Fort Folly First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to harvest for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to harvest for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Natoaganeg (Eel Ground) First Nation	
Location and Proximity to Project Area	Eel Ground First Nation has three reserves (Big Hole Tract 8, Eel Ground 2, and Renous 12) located along the Miramichi River near Newcastle. Eel Ground First Nation is approximately 1,389 km from the Project Area.
General Overview	Eel Ground First Nation is affiliated with the North Shore MicMac District Council and represented in consultation and engagement by MTI. The March 2018 registered population of Eel Ground First Nation was 1,062. Approximately 54 percent (577 individuals) live on-reserve (INAC 2018). The median age (i.e., 31.0 years) of the population is approximately 15 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Health and Socioeconomic Conditions	Eel Ground First Nation has a band hall, community development centre, group home and health centre. In 2015, the First Nation built a school to accommodate students from kindergarten to grade 8. Economic initiatives include a lumber production business. Eel Ground First Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Eel Ground First Nation holds commercial-communal licences for gaspereau, groundfish, herring, lobster, mackerel, oysters, sea urchins, snow crab, and soft-shell clams. These licences are located inshore and offshore NS and NB and thus not near the Project Area.
Food, Social, Ceremonial Fishing	Eel Ground First Nation holds FSC licences for clams, mussels, eel, gaspereau, herring, mackerel, oysters, quahaug, salmon, shad, smelts, striped bass, and brook trout. Eel Ground First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Oinpegitjoig (Pabineau) First Nation	
Location and Proximity to Project Area	Pabineau First Nation has one reserve, located south of Bathurst approximately 1,380 km from the Project Area.
General Overview	Pabineau First Nation is affiliated with the North Shore MicMac District Council (Energy East Pipeline Ltd. 2016) and represented in consultation and engagement by MTI. The March 2018 registered population of Pabineau First Nation was 318. Approximately 33 percent (104 individuals) live on-reserve (INAC 2018). The median age (i.e., 35.5 years) of the population is approximately 10 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Pabineau First Nation has a police detachment. An Economic Development Officer works to increase local employment. Pabineau First Nation owns and operates a seafood restaurant and a smoke shop and gas bar. Pabineau First Nation holds commercial-communal licences for a variety of fish and marine species.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Pabineau First Nation holds commercial-communal licences for crab, groundfish, herring, mackerel, oysters, sea scallop, and tuna. These licences are for inshore and offshore NS and NB and do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Pabineau First Nation holds FSC licences including for clams, herring, mackerel, mussels, oysters, salmon, and trout. Pabineau First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Esgenoôpetitj (Burnt Church) First Nation	
Location and Proximity to Project Area	Esgenoôpetitj First Nation has three reserves (Esgenoôpetitj Indian Reserve 14, Pokemouche 13, and Tabusintac 9), located southwest of the village of Neguac in Kent County. Esgenoôpetitj is approximately 1,345 km from the Project Area.
General Overview	Esgenoôpetitj First Nation is affiliated with the MAWIW Council (Energy East Pipeline Ltd. 2016) and represented in consultation and engagement by MTI. The March 2018 registered population of Esgenoôpetitj First Nation was 1,927. Approximately 69 percent (1,337 individuals) live on-reserve (INAC 2018). The median age (i.e., 30.6 years) of the population is approximately 15 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Esgenoôpetitj First Nation has a school for Kindergarten to Grade 8 and a fire hall. Esgenoôpetitj First Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Esgenoôpetitj First Nation holds commercial-communal licences for clams, crab, eel, groundfish, herring, lobster, mackerel, mussels, oysters, quahaug, smelts, and tuna for inshore and offshore NS and NB and these do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Esgenoôpetitj First Nation holds FSC licences for clams, quahaug, eel, herring, lobster, mackerel, mussels, oysters, salmon, smelts, striped bass, and brook trout. Esgenoôpetitj First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Tjipôgtôtjg (Bouctouche) First Nation	
Location and Proximity to Project Area	Bouctouche First Nation has one reserve (Bouctouche 16) located near the town of Bouctouche. Bouctouche First Nation is approximately 1,337 km from the Project Area.
General Overview	Bouctouche First Nation is affiliated with the North Shore MicMac District Council (Energy East Pipeline Ltd. 2016) and is represented in consultation and engagement by MTI. The March 2018 registered population of Bouctouche First Nation was 124. Approximately 65 percent (80 individuals) live on-reserve (INAC 2018). The median age (i.e., 28.2 years) of the population is approximately 18 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Bouctouche First Nation has a kindergarten, pre-school, and a fire hall. The Bouctouche MicMac Band Forestry Department administers the distribution of the royalties that are received from the Band's annual allocation by the province of NB. Bouctouche First Nation also owns and operates a gas bar. Bouctouche First Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Bouctouche First Nation was established in 1810. It was abandoned in 1924 until a family moved back to the reserve in 1958. Traditional fishing, trapping, and harvesting territories extended to the western portion of PEI, through the coast of NB from the Miramichi Bay along the Northumberland Strait, southeast between NS on the Bay of Fundy to Maine. In the winter, the traditional territory also encompassed inland areas around Fredericton, Grand Lake, Moncton and Miramichi (Bouctouche First Nation n.d.). The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Buctouche First Nation holds commercial-communal licences for gaspereau, clams, crab, groundfish, herring, lobster, mackerel, oysters, sea scallop, seal, shark, smelts, and tuna. These licences are located in inshore and offshore NS and NB and do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Buctouche First Nation holds FSC licences for clams, eel, mackerel, oysters, salmon, striped bass, and brook trout. Buctouche First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
L'nui Menikuk (Indian Island) First Nation	
Location and Proximity to Project Area	Indian Island First Nation has one reserve located near Miramichi Bay on the eastern coast of NB. Indian Island First Nation is approximately 1,333 km from the Project Area.
General Overview	Indian Island First Nation is affiliated with the North Shore MicMac District Council (Energy East Pipeline Ltd. 2016) and is represented in consultation and engagement by the MTI. The March 2018 registered population of Indian Island First Nation was 200. Approximately 54 percent (108 individuals) live on-reserve (INAC 2018). The median age (i.e., 29.0 years) of the population is approximately 16 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	The Indian Island Aquaculture Development Corporation has been producing oysters since 2007 and currently has approximately 2.6 million oysters on-site in various stages of growth. The Development Corporation employs five seasonal employees with additional students in the summer; employees are community members. Indian Island First Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Commercial-Communal Fishing	Indian Island First Nation holds commercial-communal licences for gaspereau, crab, eel, groundfish, herring, lobster, mackerel, oysters, sea scallop, smelts, snow crab, and tuna. These licences are located in inshore and offshore NS and NB and do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Indian Island First Nation holds FSC licences for clams, mussels, eels, gaspereau, herring, lobster, mackerel, oysters, quahaug, rock crab, salmon, smelts, striped bass, and trout. Indian Island First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Ugpi'ganjig (Eel River Bar) First Nation	
Location and Proximity to Project Area	Eel River Bar First Nation is comprised of three reserves (Eel River 3, Indian Ranch, and Moose Meadows 4) located near Dalhousie. Eel River Bar First Nation is approximately 1,425 km from the Project Area.
General Overview	Eel River Bar First Nation is affiliated with the North Shore MicMac District Council (Energy East Pipeline Ltd. 2016) and is represented in consultation and engagement by the MTI. The March 2018 registered population of Eel River Bar First Nation was 747. Approximately 47 percent (348 individuals) live on- reserve (INAC 2018). The median age of the population of the reserves ranges from 33.1 to 33.7 years, approximately 12 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Eel River Bar First Nation operates a pre-school. The community continues to make a living from traditional resource-based industries, such as fishing and forestry, and non-traditional sectors such as local government, housing construction, trades, small business, and band-based business operations. Eel River Bar First Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The area around the Benjamin and Eel Rivers was traditionally used by Mi'gmaq families as a summer encampment for completing their annual migration. The Benjamin River was a rich farming area and the Eel River provided a variety of fish. The area provided access to Heron Island, where it is thought that traditional burials took place. Historically, Eel River Bar First Nation would harvest resources of the land, ocean, lakes and rivers which provided a variety of fish, seals, shellfish, moose, deer, bear, small animals, and birds. The community would fish in the waters of the Bay of Chaleur and dig for clams on the shores of Eel River Bar. In 1963, due to the construction of a dam, flooding resulted in the loss of fishing and clam harvesting along Eel River (Eel River Bar First Nation 2018). The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Eel River Bar First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, mackerel, mussels, oysters, sea scallop, shrimp, smelts, and tuna. These licences are for inshore and offshore NS and NB and do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Eel River Bar First Nation holds FSC licences for soft-shell clams, herring, salmon, striped bass, lobster, and rock crab. Eel River Bar First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Metepenagiag Mi'kmaq Nation (Red Bank)	
Location and Proximity to Project Area	Metepenagiag Mi'kmaq Nation has four reserves. These include Big Hole Tract 8 (North Half), Indian Point 1, Red Bank 4, and Red Bank 7, on the Miramichi River near Newcastle. Metepngiag First Nation is approximately 1,404 km from the Project Area.
General Overview	Metepenagiag Mi'kmaq Nation is affiliated with the North Shore Micmac District Council (Energy East Pipeline Ltd. 2016) and is represented in consultation and engagement by MTI. The March 2018 registered population of Metepenagiag Mi'kmaq Nation was 690. Approximately 64 percent (444 individuals) live on-reserve (INAC 2018). The median age of the population of these reserves ranges from 36.9 to 37.2 years, approximately 9 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Metepenagiag School serves students from kindergarten to Grade 6. Metepenagiag Mi'kmaq Nation holds commercial-communal licences for a variety of fish and marine species.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	Traditionally, the Miramichi River served as a travel route and meeting place for the Mi'kmaq people in NB (MMFN n.d.). Metepenagiag Mi'kmaq Nation has developed a heritage park, which contains two important Indigenous heritage archeological sites: the Augustine Mound National Historic Site and Oxbow National Historic Site. Archeological findings at these sites prove that this location has been continuously inhabited by the Mi'gmaq people for over 3,000 years. The Project does not overlap with the traditional territory of the Mi'gmaq of NB, therefore there are no known physical, cultural or heritage sites in or near the Project Area.

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Table 7.13 Mi'gmaq of New Brunswick Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Mi'gmaq of NB are known to occupy and use the land and waters around NB primarily for travel corridors, harvesting and fishing for traditional purposes. Salmon and American eel have been identified as species of particular importance to the Mi'gmaq of NB. Refer below for information on FSC fishing practices.
Commercial-Communal Fishing	Metepenagiag Mi'kmaq Nation holds 18 commercial-communal licences for alewives / gaspereau, rock crab, herring, lobster, mackerel, oysters, scallops, shrimp, and snow crabs. Lobster is licenced for LFA 25.
Food, Social, Ceremonial Fishing	Metepenagiag Mi'kmaq Nation holds FSC licences for eel, salmon, shad, striped bass, and brook trout. Metepenagiag Mi'kmaq Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Mi'gmaq of NB have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.

7.3.6.2 Wolastoqiyik of New Brunswick

The Wolastoqiyik Nation is comprised of six Indigenous groups located in the Saint John River Valley (Wolastoq) and along its tributaries. The six Wolastoqiyik First Nations are:

- Kingsclear First Nation
- Madawaska Maliseet Nation
- Oromocto First Nation
- Tobique First Nation
- St. Mary's First Nation
- Woodstock First Nation

There are two additional Wolastoqey communities. Maliseet Viger First Nation is located in QC (Maliseet Viger First Nation n.d.) and Houlton Band of Maliseet Indians is located in the State of Maine, USA (Houlton Band of Maliseet Indians n.d.).

Archaeological evidence from across Wolastoqey territory in NB, Maine, and QC indicates that the Wolastoqey homeland has been inhabited for millennia. For instance, a recently discovered archaeological site near St. Mary's First Nation indicates that the region was inhabited for 12,600 to 12,700 years (CBC News 2017a). A comprehensive discussion of archaeological discoveries in Wolastoqey territory is beyond the scope of this document. For additional information on archaeological research in the Wolastoqey territory, refer to Blair 2003; Blair 2004; and Burke 2009.

During the era of first contact with Europeans, the Wolastoqiyik obtained their livelihood from a mix of hunting, fishing, horticulture, and gathering activities. They also traded with other Indigenous nations (Hall 2015; Erickson 1978; McFeat 2018; Bourque 1994).

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The Peace and Friendship Treaties that the Mi'gmaq, the Wolastoqiyik, and the Peskotomuhkati signed with British authorities between 1725 and 1779 included terms intended to establish peace and trade relations (AANDC 2013). As affirmed by recent Supreme Court of Canada decisions, these treaties continue to guarantee the Mi'gmaq, the Wolastoqiyik, and the Peskotomuhkati the rights to hunt, fish and gather throughout the region to pursue a moderate livelihood.

In 2011, the Governments of Canada, NB and the Mi'gmaq and Wolastoqiyik Nations of NB signed the Mi'gmaq, Wolastoqiyik / NB / Canada Umbrella Agreement to establish a process towards the conclusion of a Framework Agreement on Aboriginal Treaty rights, as well as self-government and consultation. The Mi'gmaq, Wolastoqiyik / NB / Canada Interim Consultation Protocol was signed in 2014 to facilitate consultation activities undertaken by governments with the signatory Mi'gmaq and Wolastoqiyik First Nations and the parties are currently finalizing a Framework Agreement (INAC 2017).

NB currently has six Wolastoqey communities which are referred to as “First Nations” by the Government of Canada although all six communities are part of the Wolastoqey (Maliseet) Nation. Each of the six communities / First Nations in NB are described in more detail below. Four of the communities are members of the Wolastoqey Tribal Council Inc. (St. Mary's, Oromocto, Kingsclear, and Madawaska), and five of the six (St. Mary's, Oromocto, Kingsclear, Madawaska, and Tobique) are members of the Wolastoqey Nation in New Brunswick (WNNB). The WNNB was established in 2016 and provides technical support and advice on consultation and engagement files. The Resource Development Consultation Coordinators (RDCCs) are the primary consultation body for these communities. The exception is Woodstock First Nation, which handles its own consultation and engagement, although WNNB and Woodstock sometimes combine efforts on specific consultation files. In the future, the Wolastoqiyik may consider a title claim to the western part of NB (CBC News 2017b).

The Wolastoqiyik have occupied and used land and waters in NB as well as adjacent areas in Maine and QC for many centuries. The Wolastoqiyik use the landscapes and waterscapes of their homeland for travel corridors, harvesting, gathering, wood harvesting, and fishing for traditional purposes (Maliseet First Nations 2016). They also have deep spiritual and cultural connections with the waterscapes and landscapes of their homeland, as well as the animals and plants they interact with. For instance, analysis of Wolastoqey traditional stories indicate that Wolastoqiyik considered the Atlantic Ocean to be an important cultural waterscape that was modified for their benefit by Klouskap, their cultural hero (WNNB 2018).

Given that the Project activities will be located at a considerable distance from the Wolastoqey homeland, the discussion of current use of lands and resources for traditional purposes is focused on activities in the marine environment, and species of interest to NB Indigenous groups that may migrate and feed throughout the marine environment. The current use of lands and resources section therefore includes a discussion of FSC and commercial-communal harvesting. The current FSC and commercial-communal harvesting schemes do not represent the species, abundance, or management regimes that Wolastoqiyik used traditionally (WNNB 2018).

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Brief community profiles are provided for each Indigenous group in the following sections (Table 7.14). The locations of Wolastoqey communities in NB are illustrated in Figure 7-54. The Wolastoqey communities in NB continue to use lands, waters, plants, and animals throughout their traditional territory (Maliseet First Nations 2016).

Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Kingsclear First Nation	
Location and Proximity to Project Area	Kingsclear First Nation is comprised of two reserves - The Brothers 18 [also affiliated with Woodstock First Nation, Tobique First Nation, and Madawaska First Nation], as well as Kingsclear 6 which is located in York County along the Saint John River directly downstream of the Mactaquac Dam. The Brothers 18 is a Wolastoqey reserve composed of 2 small islands situated above the Reversing Falls inside the city limits of Saint John, NB. This reserve is located in tidal waters at the mouth of the Kennebecasis River in close proximity to the Bay of Fundy (Maliseet First Nations, 2016). Kingsclear First Nation is approximately 1,507 km from the Project Area.
General Overview	Kingsclear is affiliated with the Wolastoqey Tribal Council. Kingsclear is represented in consultation through their RDCC, although WNNB offers technical advice on consultation (WNNB 2018). The March 2018 registered population of Kingsclear First Nation was 1,046. Approximately 70 percent (735 individuals) live on-reserve (INAC 2018). The median age (i.e., 31.8 years) of the population is approximately 14 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Kingsclear has a health centre, fire department, convenience store and band-operated school. Kingsclear First Nation is engaged in the forestry industry, and the allocation is generally cut by contractors under agreement with the First Nation. Kingsclear First Nation holds commercial-communal licences for a variety of fish and marine species. Kingsclear has been exploring opportunities to expand the fishing industry, whale watching tourism, and guided tours along the Saint John River (Kingsclear First Nation 2014).
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>The community of Kingsclear was officially founded in 1795 (Nicholas, 2005). However, the history of the Wolastoqiyik in this area goes back thousands of years as evidenced by the discovery of a fluted point approximately 11,000 years old (Kingsclear First Nation 2014). Prior to settling at the current location, many Wolastoqiyik in this region lived in a village called Ekwpahak, located a few miles downriver from Kingsclear. Wolastoqiyik lived here during the late spring and summer when they speared salmon, bass, and sturgeon; planted and tended maize fields; and gathered foods such as fiddleheads, berries, butternuts, and grapes (Nicholas, 2005).</p> <p>The Project does not overlap with the traditional territory of the Wolastoqiyik, therefore there are no known physical, cultural or heritage sites in or near the Project Area aside from the Atlantic Ocean itself which the Wolastoqiyik consider to be an important cultural waterscape (see above discussion). Further analysis of the important array of physical and cultural heritage associated with Kingsclear First Nation is beyond the scope of this summary description (WNNB 2018).</p>

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	The Wolastoqiyik were known to be traditional hunters, trappers, horticulturalists, gatherers, and fishermen / fisherwomen who travelled throughout the Saint John River valley and adjacent interior and coastal regions depending on the season to find sustenance, shelter, and to trade with Europeans and other Indigenous nations (WNNB 2018). Wolastoqey First Nations have traditionally, and continue to harvest, hunt and consume traditional foods including moose, deer, fish, fiddleheads and berries, and use resources from the local landscape for medicinal and ceremonial purposes. Salmon is historically and culturally important to the Wolastoqey Nation. Refer below for information on FSC fishing.
Commercial-Communal Fishing	Kingsclear First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, sea scallop, and sea urchins. These licences are located inshore and offshore NS and NB and do not overlap the Project Area.
Food, Social, Ceremonial Fishing	Kingsclear First Nation holds FSC fishing licences for striped bass and lobster. Harvesting of striped bass is limited to the portion of the Saint John River from head of the tide at McKinley Ferry to the Mactaquac Dam. Lobster harvesting occurs in LFA 36 and 38, located along the NB coastal area. Kingsclear First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Wolastoqiyik have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Madawaska Maliseet First Nation	
Location and Proximity to Project Area	Madawaska First Nation is comprised of two reserves - The Brothers 18 [a reserve also affiliated with Kingsclear First Nation, Tobique First Nation, and Woodstock First Nation] as well as St. Basile 10 which is located along the Saint John River near the mouth of the Madawaska River (WNNB 2018). Madawaska First Nation is located approximately 1,579 km from the Project Area.
General Overview	Madawaska is affiliated with the Wolastoqey Tribal Council and represented in consultation through their RDCC, although WNNB offers technical advice on consultation files (WNNB 2018). The March 2018 registered population of Madawaska Maliseet First Nation was 375. Approximately 41 percent (154 individuals) live on-reserve (INAC 2018). The median age (i.e., 45.6 years) of the population is similar to that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	The community has a Health Centre, which is staffed by a doctor and a nurse (WNNB 2018). The Madawaska Maliseet Economic Development Corporation is focused on business development. Businesses include Grey Rock Power Centre (along the Trans-Canada Highway), which has gas stations, restaurants, car dealerships, and the Grey Rock Casino (WNNB 2018). Madawaska Maliseet First Nation holds commercial-communal licences for a variety of fish and marine species.

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>Historic writings record Wolastoqiyik at the mouth of the Madawaska as early as the 1690s, and oral traditions indicate a much longer Wolastoqey tenure in the region (WNNB 2018).</p> <p>The Project does not overlap with the traditional territory of the Wolastoqiyik, therefore there are no known physical, cultural or heritage sites in or near the Project Area aside from the Atlantic Ocean itself which the Wolastoqiyik consider to be an important cultural waterscape (see above discussion). Further analysis of the important array of physical and cultural heritage associated with Madawaska Maliseet First Nation is beyond the scope of this document (WNNB 2018).</p>
Current Use of Lands and Resources for Traditional Purposes	<p>The Wolastoqiyik were known to be traditional hunters, trappers, horticulturalists, gatherers, and fishermen / fisherwomen who travelled throughout the Saint John River valley and adjacent interior and coastal regions depending on the season to find sustenance, shelter, and to trade with Europeans and other Indigenous nations (WNNB 2018). Wolastoqey First Nations have traditionally harvested, and continue to harvest, hunt and consume traditional foods including moose, deer, fish, fiddleheads and berries, and to use resources from the local landscape for medicinal and ceremonial purposes. Refer below for information on FSC fishing.</p>
Commercial-Communal Fishing	<p>Madawaska Maliseet First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, mackerel, and sea scallop for inshore and offshore areas of NS and NB.</p>
Food, Social, Ceremonial Fishing	<p>Madawaska Maliseet First Nation holds FSC licences for lobster, salmon, brook trout and lake trout. Madawaska First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.</p>
Asserted or Established Aboriginal and / or Treaty Rights	<p>The Wolastoqiyik have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.</p>
Oromocto First Nation	
Location and Proximity to Project Area	<p>Oromocto First Nation has one reserve (Oromocto 26) located in Sunbury County near the mouth of the Oromocto River (WNNB 2018). It is approximately 1,481 km from the Project Area.</p>
General Overview	<p>Oromocto First Nation is affiliated with the Wolastoqey Tribal Council (Energy East Pipeline Ltd. 2016). Oromocto is represented in consultation through their RDCC, although WNNB offers technical advice on consultation files (WNNB 2018).</p> <p>The March 2018 registered population of Oromocto First Nation was 707. Approximately 45 percent (321 individuals) live on-reserve (INAC 2018). The median age (i.e., 29.2 years) of the population is approximately 16 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).</p>
Health and Socioeconomic Conditions	<p>Oromocto First Nation has a health centre and a pre-school.</p> <p>Oromocto has fisheries and forestry departments and also holds commercial-communal licences for a variety of fish and marine species.</p>

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>Although land at Oromocto was not set aside as a reserve until 1895, there had been a Wolastoqey settlement in the area since at least 1835 (Pawling, 2017). Moreover, a Wolastoqey burial site in the community that was unearthed and looted by non-Indigenous road construction workers circa 1842 contained remains and burial items from the early contact period (circa 16th or 17th century) (Gesner, 1842).</p> <p>The Project does not overlap with the traditional territory of the Wolastoqiyik, therefore there are no known physical, cultural or heritage sites in or near the Project Area aside from the Atlantic Ocean itself which the Wolastoqiyik consider to be an important cultural waterscape (see above discussion). Further analysis of the important array of physical and cultural heritage associated with Oromocto First Nation is beyond the scope of this document (WNNB 2018).</p>
Current Use of Lands and Resources for Traditional Purposes	<p>The Wolastoqiyik were known to be traditional hunters, trappers, horticulturalists, gatherers, and fishermen / fisherwomen who travelled throughout the Saint John River valley and adjacent regions depending on the season to find sustenance, shelter, and to trade with Europeans and other Indigenous nations (WNNB 2018). Wolastoqey First Nations have traditionally, and continue to harvest, hunt and consume traditional foods including moose, deer, fish, fiddleheads and berries, and use resources from the local landscape for medicinal and ceremonial purposes. Refer below for information on FSC fishing.</p>
Commercial-Communal Fishing	<p>Oromocto First Nation holds commercial-communal licences for groundfish, herring, lobster, sea scallop, and sea urchins. These licences are located inshore and offshore NS and NB and do not overlap the Project Area.</p>
Food, Social, Ceremonial Fishing	<p>Oromocto First Nation holds FSC fishing licences for burbot, catfish, chub, eel, gaspereau, lamprey, lobster, muskellunge, perch (white and yellow), pickerel, pike, shad, smelt, striped bass, sturgeon, sucker fish, sunfish, trout, and whitefish. Most of these species are harvested within inland and tidal areas in NB. Lobster are harvested in LFA 36, in the Inner Bay of Fundy. Oromocto First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.</p>
Asserted or Established Aboriginal and / or Treaty Rights	<p>The Wolastoqiyik have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.</p>

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Tobique First Nation	
Location and Proximity to Project Area	Tobique First Nation is comprised of two reserves - the Brothers 18 near Saint John, and Tobique 20 in Victoria County at the mouth of the Tobique River. Tobique First Nation is approximately 1,547 km from the Project Area.
General Overview	<p>Tobique First Nation is affiliated with MAWIW Council (Energy East Pipeline Ltd. 2016).</p> <p>Tobique is represented in consultation through their RDCC, although WNNB offers technical advice on consultation files.</p> <p>The March 2018 registered population of Tobique First Nation was 2,469. Approximately 63 percent (1,552 individuals) live on-reserve (INAC 2018). The median age (i.e., 31.9 years) of the population is approximately 14 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).</p>
Health and Socioeconomic Conditions	<p>Tobique First Nation has a wellness centre and a school for students from kindergarten to Grade 8. Community-owned enterprises include a gaming centre, bingo hall, restaurants, youth centre and a convenience store and gas bar. There are several other community businesses, including tobacco shops, take-out restaurants, and convenience stores.</p> <p>Tobique First Nation holds commercial-communal licences for a variety of fish and marine species.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>The Wolastoqiyik were known to be traditional hunters, trappers, horticulturalists, gatherers, and fishermen / fisherwomen who travelled throughout the Saint John River valley and adjacent interior and coastal regions depending on the season to find sustenance, shelter, and to trade with Europeans and other Indigenous nations.</p> <p>Lands were initially set aside for the Wolastoqiyik along the Wolastoq at the mouth of the Tobique River by the NB government in the early 19th century. The Tobique reserve is now much smaller than the initial lands set aside by the colonial government as non-Indigenous squatters unlawfully took ownership of a large portion of reserve lands in the 19th century, and hydroelectric dams flooded additional lands in the 20th century (Cuthbertson 2015; Maliseet First Nations 2016).</p> <p>The Project does not overlap with the traditional territory of the Wolastoqiyik, therefore there are no known physical, cultural or heritage sites in or near the Project Area aside from the Atlantic Ocean itself which the Wolastoqiyik consider to be an important cultural waterscape (see above discussion). Further analysis of the important array of physical and cultural heritage associated with Tobique First Nation is beyond the scope of this summary description (WNNB 2018).</p>
Current Use of Lands and Resources for Traditional Purposes	Wolastoqey First Nations have traditionally, and continue to harvest, hunt and consume traditional foods including moose, deer, fish, fiddleheads and berries, and use local natural resources from for medicinal and ceremonial purposes. Refer below for information on FSC fishing.
Commercial-Communal Fishing	Tobique First Nation holds commercial-communal licences for crab, groundfish, herring, lobster, quahaug, mackerel, sea scallop, and sea urchin. These licences are located inshore and offshore NS and NB and do not overlap the Project Area.

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Food, Social, Ceremonial Fishing	Tobique First Nation holds FSC licences for smallmouth bass. Tobique First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Wolastoqiyik have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
St. Mary’s First Nation	
Location and Proximity to Project Area	St. Mary’s First Nation has two reserves (Devon and St. Mary’s 24) in the Saint John River Valley near Fredericton, approximately 1,490 km from the Project Area.
General Overview	<p>St. Mary’s First Nation is affiliated with the Saint John River Valley Tribal Council (Energy East Pipeline Ltd. 2016). St. Mary’s is represented in consultation through their RDCC, although WNNB offers technical advice on consultation files (WNNB 2018).</p> <p>The March 2018 registered population of St. Mary’s First Nation was 1,928. Approximately 46 percent (881 individuals) live on-reserve (INAC 2018). The median age (i.e., 27.9 years) of the population is approximately 18 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).</p>
Health and Socioeconomic Conditions	<p>The Chief Harold Sappier Memorial Elementary provides education for students from kindergarten to Grade 5. Businesses include the St. Mary’s Entertainment Centre, St. Mary’s Retail Sales and St. Mary’s Tree Service. St. Mary’s started a logging program in 1998. The program is self-sufficient and has sustained itself on the royalties that the program generates.</p> <p>St. Mary’s First Nation holds commercial-communal licences for a variety of fish and marine species. St. Mary’s First Nation currently owns six active commercial fishing vessels.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>The Wolastoqiyik were known to be traditional hunters, trappers, horticulturalists, gatherers, and fishermen / fisherwomen who travelled throughout the Saint John River valley and adjacent interior and coastal regions depending on the season to find sustenance, shelter, and to trade with Europeans and other Indigenous nations (WNNB 2018).</p> <p>Although the St. Mary’s community was not officially recognized by the colonial government until 1867, the first painting of a wigwam on the site was dated 1818. The site was thought to be of regular use as a campground since the 1800s. Many of the Wolastoqiyik settled at St. Mary’s maintained the migratory aspects of their traditional lifestyle by hunting, fishing and trapping when they could, and by traveling each summer to other areas within and beyond the St. John River Valley to make and sell their wares (Nicholas, 2005).</p> <p>The Project does not overlap with the traditional territory of the Wolastoqiyik, therefore there are no known physical, cultural or heritage sites in or near the Project Area aside from the Atlantic Ocean itself which the Wolastoqiyik consider to be an important cultural waterscape (WNNB 2018).</p>

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	Wolastoqey First Nations have traditionally, and continue to harvest, hunt and consume traditional foods including moose, deer, fish, fiddleheads and berries, and use resources from the local landscape for medicinal and ceremonial purposes. Refer below for information on FSC fishing.
Commercial-Communal Fishing	St. Mary's First Nation holds commercial-communal licences for herring, lobster, sea scallop, sea urchin, shrimp, and swordfish. Most of these licences are located inshore and offshore NS and NB. St. Mary's holds commercial-communal licences for swordfish within NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	St. Mary's First Nation holds FSC fishing licences for eels, gaspereau, groundfish, lobster, scallop, shad, smallmouth bass, soft-shell clams, striped bass, and trout. St. Mary's First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Wolastoqiyik have a right to fish for a "moderate livelihood", which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.
Woodstock First Nation	
Location and Proximity to Project Area	Woodstock First Nation has two reserves (The Brothers 18 [also affiliated with Kingsclear, Tobique and Madawaska Maliseet First Nation communities] and Woodstock 23), located on the Saint John River near Woodstock approximately 1,557 km from the Project Area.
General Overview	Woodstock First Nation is affiliated with the Saint John River Valley Tribal Council (Energy East Pipeline Ltd. 2016). Woodstock represents itself in consultation and engagement. The March 2018 registered population of Woodstock First Nation was 1,072. Approximately 27 percent (291 individuals) live on-reserve (INAC 2018). The median age (i.e., 36.9 years) of the population is approximately 9 percent below that of NB in general, which was 45.7 years in 2016 (Statistics Canada 2017).
Health and Socioeconomic Conditions	Woodstock First Nation has a pre-school. Economic enterprises include three gas stations / convenience stores, Eagle's Nest Gaming Palace, and Woodstock First Nation Logging. Woodstock First Nation holds commercial-communal licences for a variety of fish and marine species. The fishing industry has been an important source of revenue and employment for the First Nation. The fishing enterprise harvests scallop, lobster, sea urchins, swordfish, and tuna.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	The people of Woodstock First Nation are descendants of the Wulustukwiak people who have traditionally occupied southwestern NB along the Saint John River to Kittery, Maine, USA. The Project does not overlap with the traditional territory of the Wolastoqiyik, therefore there are no known physical, cultural or heritage sites in or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	Wolastoqey First Nations have traditionally, and continue to harvest, and consume traditional foods including moose, deer, fish, fiddleheads and berries, and use resources from the local landscape for medicinal and ceremonial purposes. Refer below for information on FSC fishing.

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Table 7.14 Wolastoqiyik of New Brunswick Community Profiles

Community Indicator	Description
Commercial-Communal Fishing	Woodstock First Nation holds commercial-communal licences for groundfish, herring, lobster, sea scallop, sea urchins, swordfish and tuna. Most of these licences are located inshore and offshore NS and NB, with licences for swordfish and tuna in NAFO Unit 3LM in offshore NL.
Food, Social, Ceremonial Fishing	Woodstock First Nation holds FSC fishing licences for eels, gaspereau, lobster, scallop, smallmouth bass, smelt, striped bass, and trout. These include FSC licences for inland and tidal areas of NB. Woodstock First Nation holds an FSC licence to fish for other species such as lobster and scallop in NAFO units in and around NB. Woodstock First Nation also has an Aboriginal right to fish for Atlantic salmon (outer Bay of Fundy population) for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	The Wolastoqiyik have a right to fish for a “moderate livelihood” which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.

7.3.6.3 Peskotomuhkati Nation (Passamaquoddy)

The traditional territory of the Peskotomuhkati Nation (Passamaquoddy) included all lands and waters of the St. Croix River watershed, Machias River watershed and the Magaguadavic River watershed, draining into the Bay of Fundy and Gulf of Maine (Bassett 2014, in MGS and UINR 2016). The territory was bordered on the northeast by the Wolastoqiyik traditional territory (i.e., all lands and waters draining the Saint John River watershed) and bordered on the west by the Penobscot traditional territory - the Penobscot River watershed and Union River watershed in Maine, USA (MGS and UINR 2016).

The Peskotomuhkati Nation asserts title to territories along the Maine and NB border, with most of the members currently living on the US side. The Passamaquoddy are specifically named in the Marshall decision based on the Peace and Friendship Treaties, which provides them the treaty right to fish. The Passamaquoddy have submitted a land claim to the federal government which has currently been accepted for review.

The community profile for Peskotomuhkati Nation at Skutik is provided in the following sections (Table 7.15). The Peskotomuhkati Nation community is located in NB (Figure 7-54).

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Table 7.15 Peskotomuhkati of New Brunswick Community Profile

Community Indicator	Description
Peskotomuhkati Nation at Skutik (Passamaquoddy)	
Location and Proximity to Project Area	Peskotomuhkati Nation at Skutik is located in St. Andrews approximately 1,550 km from the Project Area.
General Overview	<p>The homeland of the Peskotomuhkati people is located along the Passamaquoddy Bay, with drainage area of the Schoodic (St. Croix) River and the Fundy Islands (RSF n.d.). In 2013, it was estimated that the Schoodic Band numbered 300 members in NB.</p> <p>At least three Peskotomuhkati Reserves were established in Charlotte County, NB in the 19th and early 20th centuries, including the Schoodic Reserve, located in present day Milltown, NB. This community was established in 1785 on land adjacent to the Schoodic Falls, which was an important fishing place and tribal burial ground. The Canoose Reserve was established in 1851 at the confluence of the Canoose and Schoodic Rivers. The St. Croix Reserve was created in 1881 on the St. Croix River, near the outlet to the Chiputneticook Lakes. At least two other tracts of land, located at Qonasqamkuk (St. Andrews) and Grand Manan Island, known to be Peskotomuhkati gathering places, were the subject of various petitions for reserve status, but were never formalized as reserve lands (RSF n.d.). Reserve lands became occupied by British Loyalist settlers while the Peskotomuhkati were absent during seasonal harvesting and fishing migrations (RSF n.d.). A claim submitted to the Canadian government has currently been accepted for review (INAC 2017). No census information is available specifically for Peskotomuhkati Nation in NB.</p>
Health and Socioeconomic Conditions	Limited information is available on the health and socioeconomic conditions of the Peskotomuhkati as a group because they do not live on a reserve or in a separate community.
Physical and Cultural Heritage (including archaeological, paleontological, historical or architectural sites)	<p>Evidence shows that the ancestors of the Peskotomuhkati have inhabited their traditional territory for the last 13,000 years from Machias, Maine to Point Lepreau, NB (RSF n.d.).</p> <p>The point of land jutting into Passamaquoddy Bay (now occupied by the Town of St. Andrews, NB), was an important meeting place where sacred ceremonies, burial of chiefs and other activities occurred.</p> <p>The Project does not overlap with the traditional territory of Peskotomuhkati, therefore there are no known physical, cultural or heritage sites in or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	Seasonal journeys within their traditional territory extended inland north along the Schoodic River to the Chipputnecook Lakes, and typically involved harvesting various natural resources at different times of the year. In the spring, many Peskotomuhkati people occupied a field at Salmon Falls on the Schoodic River, taking advantage of the runs up-river by salmon, eels, and alewives. Much of the harvest was processed/dried for the following winter. Passamaquoddy Bay was also important for its abundance of pollock (RSF n.d.).
Commercial-Communal Fishing	Peskotomuhkati Nation has no commercial-communal licences.
Food, Social, Ceremonial Fishing	Peskotomuhkati Nation has an Aboriginal right to fish for FSC purposes.

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Table 7.15 Peskotomuhkati of New Brunswick Community Profile

Community Indicator	Description
Asserted or Established Aboriginal and / or Treaty Rights	The Peskotomuhkati's claim has been accepted for review by the Canadian government (INAC 2017). The Peskotomuhkati have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an aboriginal right to fish for FSC purposes. These rights do not extend to lands or waters in or near the Project Area.

7.3.7 Mi'kmaq and Innu of Québec

The Indigenous groups in QC identified in the EIS Guidelines for engagement and inclusion in the EIS are:

- Micmacs of Gesgapegiag
- La Nation Micmac de Gespeg
- Listuguj Mi'gmaq Government
- Les Innus de Ekuanitshit
- Première Nation des Innus de Nutashkuan

The locations of the identified QC Indigenous groups are provided in Figure 7-55. Community profiles for each Indigenous group are provided in the following sections.

7.3.7.1 Mi'gmaq First Nations of Québec

Three Mi'gmaq First Nation groups in QC were identified in the EIS Guidelines for engagement and inclusion in the EIS:

- Micmacs de Gesgapegiag
- La Nation Micmac de Gespeg
- Listuguj Mi'gmaq Government

These Indigenous groups are represented by the Mi'gmawei Mawiomi Secretariat (MMS) in the negotiation with the Governments of Canada and Québec. The MMS formally submitted a statement of claim to the federal and provincial governments in 2007. The Mi'kmaq, Québec, and Canada formally agreed to pursue land claims negotiations in 2008 and signed a framework agreement and a consultation agreement in 2012. The three parties are currently negotiating an AIP that should eventually lead to a final land claim agreement (INAC 2014, INAC 2016; MMS 2018).

The primary land claim area includes, but is not limited to, all the territory of Gesgapegiag. It covers the entire Gaspé Peninsula and extends westward along the St. Lawrence River past Rimouski, Québec. The primary land claim also includes Anticosti Island and an area north and northeast of Edmundston, NB. A potential secondary claim has been identified but is not presently being pursued (MMS 2018).

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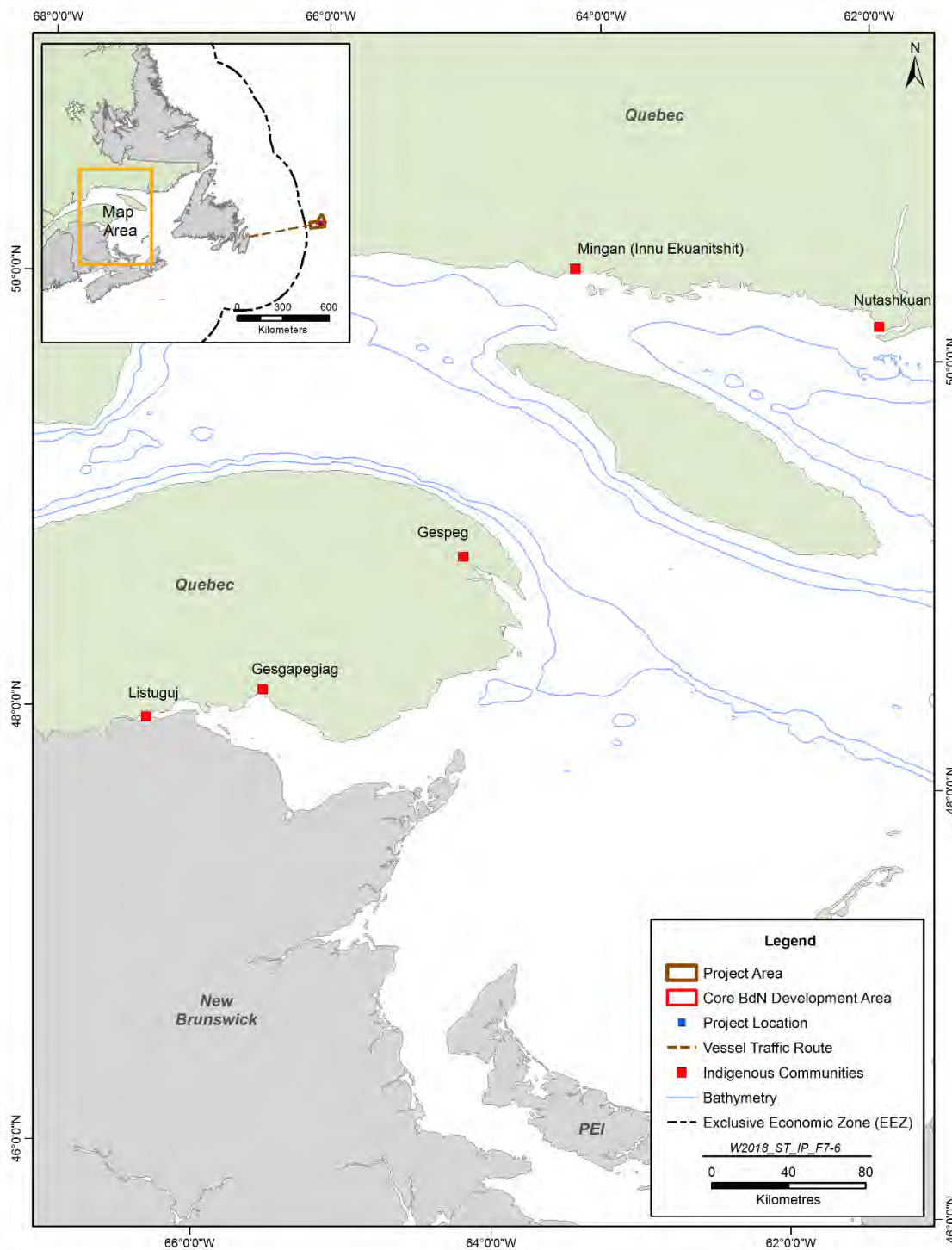


Figure 7-55 Québec Indigenous Groups Identified in the EIS Guidelines

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DFO is working with Indigenous groups in QC to implement initiatives to enhance the participation of these communities in the fisheries in keeping with treaty requirements and Supreme Court decisions regarding FSC and commercial-communal fishing rights. This includes Mi'kmaq First Nations on the Gaspé Peninsula and Innu First Nations on the Lower North Shore. DFO and the Indigenous groups are negotiating agreements to increase Indigenous involvement in resource management and to develop skills and capacity to engage in commercial fisheries and management of fishery-based businesses (DFO 2015).

Community profiles for each QC Indigenous group identified in the EIS Guidelines are provided in the following sections (Table 7.16). The locations of these Indigenous groups in QC are provided in Figure 7-55.

Table 7.16 Québec Indigenous Groups Community Profiles

Community Indicator	Description
Micmacs de Gesgapegiag	
Location and Proximity to Project Area	Micmacs de Gesgapegiag is comprised of one reserve, located on the south shore of the Gaspé Peninsula, at the intersection of the Gesgapegiag River estuary and the Baie des Chaleurs (Figure 7-55). The reserve is approximately 1,389 km from the Project Area.
General Overview	The Micmacs de Gesgapegiag has a Chief and eight Councillors and is represented by the MMS in land claims negotiations and consultation and engagement. The March 2018 population of Micmacs de Gesgapegiag was 1,538 (INAC 2018). Approximately 45 percent live on-reserve. The population of the Gesgapegiag community decreased between 2011 and 2016, which may be attributed to lower birth rates or possibly out-migration as approximately half of the registered population live off-reserve (Nexen 2018). The on-reserve population is younger than that of the QC population, as a whole (Statistics Canada 2017; INAC 2018; MOG 2018).
Health and Socioeconomic Conditions	<p>The Micmacs de Gesgapegiag Band Council and other agencies provide services and infrastructure to the community in education, health care, social services, public security (fire and police), public works, economic development (e.g., forestry and commercial fisheries), addictions treatment and employment. Identified health issues include healing, diabetes, mental health and addictions. The Wejgwapniag School provides primary and secondary education. Established in 1996, the Gesgapegiag Health and Community Services provides programs and services through a medical centre, healing lodge, and youth centre (MOG 2018). In addition, there is also a treatment centre in Gesgapegiag, the Mawiommi Treatment Centre, which specializes in the treatment of substance, drug, and alcohol abuse (Statoil 2017). The Walgwan Treatment Centre is one of a network of nine First Nation treatment centres in Canada that provide culturally-based treatment services for dependence on solvents and other substances as well as addictive behavior to First Nations and Inuit youth (Statoil 2017).</p> <p>The Micmacs de Gesgapegiag are active in the forestry industry, through a Forest Management Agreement with the provincial government to harvest 15,000 cubic meters of softwood to be sold to a local sawmill (MOG 2018). The Band's forestry industry employs 25 to 30 individuals on a seasonal basis. Other economic activities include construction, tourism, handicraft production and outfitting services for sport fishing and hunting (CDPDJ 2009). In 2011, the</p>

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Table 7.16 Québec Indigenous Groups Community Profiles

Community Indicator	Description
	<p>largest employer was Public Administration, employing approximately 42 percent of the workforce.</p> <p>As described in more detail below, the Micmacs de Gesgapegiag has an agreement with the provincial government for communal fishing which occurs primarily in the Cascapedia River mouth as well as in the Petite riviere Cascapedia and its mouth (MMAFMA 2017). Established in 2012, the Mi'gmaq Maliseet Aboriginal Fisheries Management Association (MMAFMA), in partnership with the QC School of Fisheries and Aquaculture, assists the Micmacs de Gesgapegiag in commercial fishing initiatives. The MMAFMA has a commercial fishing vessel and administers training programs for fishing mackerel, herring and bluefin tuna, pelagic species for which it holds commercial-communal licenses. The boat is also used for training programs in groundfish (Atlantic halibut, Greenland halibut, redfish) fisheries through a program with QC School of Fisheries and Aquaculture. The Micmac de Gesgapegiag are also engaged in a joint aquaculture initiative to grow and process kelp products. The Micmacs de Gesgapegiag co-manage sport salmon fishing in the Cascapedia River through Société Cascapedia inc. (MOG 2018; Samon Quebec 2017). The Gesgapegiag Fisheries Department (GFD) manages the Band's participation in commercial seafood harvesting. The GFD employs 48 registered First Nations members and nine non-Indigenous people in the fishing industry, seasonally. Fishers harvest lobster, shrimp, and crab off the coast of the Gaspé Peninsula.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	<p>Traditionally, the Mi'gmaq lived by hunting, fishing, and gathering throughout their territory which included the southeastern portion of the Gaspé Peninsula, NS, PEI, most of NB and southern NL. As fishers, hunters and gatherers, the people used their intimate knowledge of the land and seasonal cycles of vegetation, animals and fish to meet their physical and spiritual needs. Mi'gmaq hunters and fishers were also known to travel to Anticosti Island and the shore of the North Coast and the Magdalen Islands (CDPDJ 2009). Traditional camps of the QC Mi'gmaq were located along the shores of the St. Lawrence River. There are no known physical, cultural or heritage sites within or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	<p>Historically, the Mi'gmaq of the Gulf of St. Lawrence region harvested various fish species through the seasons. The fishing season began in the spring with the break-up of shore and river ice when the Mi'gmaq moved to coastal areas and river mouths such as the estuaries of the Restigouche and Cascapédia Rivers that flow into the Baie des Chaleurs. Fishing began with shallow water fish species exposed by the melting ice, the most important of which was winter flounder. The next fishing period included spawning runs of fish that were migrating from fresh water to the sea or the reverse. These species included smelt in March, alewife in April and sturgeon in May. Typically, salmon were harvested in May as well as July and August, eel in September, and Atlantic tomcod as late as December (CIE 2014). Fish spawning seasons were accompanied by the spring migration of seabird species that nested in the same areas. Seabird eggs were also collected from offshore islands in spring and seabird harvesting took place in early fall during the southern migration. During spring and summer, the Mi'gmaq harvested marine shellfish including oysters, scallops, quahogs, clams, American lobster, and northern crab. Oysters harvested from the southern Gulf of St. Lawrence were used for food and the shells were used for wampum (currency). During whelping season, the Mi'gmaq</p>

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Community Indicator	Description
	<p>also harvested marine mammals such as walrus and seal on the Gaspé Peninsula (CIE 2014).</p> <p>The Micmacs de Gesgapegiag traditionally used Atlantic salmon for barter, spiritual or ceremonial practices, bait (salmon skin), and crafts. Salmon fishing methods evolved from harpoons to gill nets and cages for communal fishing and fly-fishing rods for recreational fishing. Fishing occurred from late May to early November. Members of Gesgapegiag have caught salmon in the mouth of the Cascapédia River and upstream, as well as in neighbouring rivers (Petite rivière Cascapédia, Bonaventure, Nouvelle and Hall) (MMAFMA 2017). Annual subsistence harvests of salmon by the Micmacs de Gesgapegiag in the Cascapédia River were reported for the 1984-2008 period. Gesgapegiag has not taken salmon in the Cascapédia River since 2009 pursuant to an agreement with the Government of QC to cease fishing salmon in return for monetary compensation (MMAFMA 2017).</p> <p>Eel harvesting is a traditional Mi'gmaq activity, beginning in May and ending when the ice cover forms. According to members of the Micmacs de Gesgapegiag, eel is mostly taken in the mouth and estuary of the Cascapédia River. Harvesting sites extend along the coast from Carleton to Bonaventure, including the Nouvelle area (MMAFMA 2017).</p> <p>Cod fishing is also considered important to the economic and cultural landscape of the Gaspé Peninsula but is now restricted because of low cod stocks.</p> <p>Members of the Micmacs de Gesgapegiag have also reported that striped bass is mostly captured as by-catch in the Cascapédia River estuary and along the shoreline near Carleton and New Richmond. Striped bass is generally harvested between May and October and consumed or used as bait to catch smelt. The marine area of the Banc des Américains is of economic, ecological and cultural importance for the Mi'kmaq communities. The area and its periphery are used to harvest crab, lobster, mackerel, herring, cod, and waterfowl (MMAFMA 2017).</p>
Commercial-Communal Fishing	The Micmacs de Gesgapegiag holds commercial-communal licences for cod, turbot, halibut, mackerel, shrimp and winter flounder (Morrison 2018).
Food, Social, Ceremonial Fishing	The Micmacs de Gesgapegiag participate in fishing for FSC purposes. The First Nation has an agreement with the provincial government for communal fishing, which occurs principally in the Cascapedia River mouth as well as the Petite riviere Cascapedia and its mouth (MMAFMA 2017).
Asserted or Established Aboriginal and / or Treaty Rights	The MMS signed a Framework Agreement for a comprehensive claim with Canada (2012) that includes the Gaspé Peninsula and westward down the St. Lawrence River as well as Anticosti Island. Mi'gmaq First Nations have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. The asserted or established Aboriginal and treaty rights of the Mi'gmaq do not extend to lands or waters in or near the Project Area.

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Table 7.16 Québec Indigenous Groups Community Profiles

Community Indicator	Description
La Nation Micmac de Gespeg	
Location and Proximity to Project Area	La Nation Micmac de Gespeg has no land base; members live throughout the Gaspé Peninsula and in other areas (Figure 7-55). La Nation Micmac de Gespeg is approximately 1,287 km from the Project Area.
General Overview	La Nation Micmac de Gespeg is governed by a Chief and eight Councillors and is also represented by the MMS in matters relating to land claims negotiations, and consultation and engagement (INAC 2015; INAC 2018). The March 2018 population of La Nation Micmac de Gespeg was 829, living throughout the Gaspé Peninsula and in other areas. No additional census information is available specifically for La Nation Micmac de Gespeg.
Health and Socioeconomic Conditions	Publicly-available information of the health and socioeconomic conditions of La Nation Micmac de Gespeg could not be found. As described in more detail below, La Nation Micmac de Gespeg is active in commercial fisheries through the MMAFMA. The MMAFMA has a commercial fishing vessel and administers training programs for fishing mackerel, herring and bluefin tuna, pelagic species for which it holds commercial-communal licenses. The boat is also used for training programs in groundfish (Atlantic halibut, Greenland halibut, redfish) fisheries through a program with QC School of Fisheries and Aquaculture. La Nation Micmac de Gespeg is also engaged in a joint aquaculture initiative to grow and process kelp products.
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	Traditionally, the Mi'gmaq lived by hunting, fishing, and gathering throughout their territory which included the southeastern portion of the Gaspé Peninsula, NS, PEI, most of NB and southern NL. As fishers, hunters and gatherers, the people used their intimate knowledge of the land and seasonal cycles of vegetation, animals and fish to meet their physical and spiritual needs. Mi'gmaq hunters and fishers were also known to travel to Anticosti Island and the shore of the North Coast and the Magdalen Islands (CDPDJ 2009). Traditional camps of the QC Mi'gmaq were located along the shores of the St. Lawrence River. There are no known physical, cultural or heritage sites within or near the Project Area.
Current Use of Lands and Resources for Traditional Purposes	Traditionally, various fish species have been fished by the Mi'gmaq in the Gulf of St. Lawrence through the seasons. The fishing season began in the spring with the break-up of shore and river ice when the Mi'gmaq moved to coastal areas and river mouths such as the estuaries of the Restigouche and Cascapédia Rivers that flow into the Baie des Chaleurs. Fishing began with shallow water fish species exposed by the melting ice, the most important of which was winter flounder. The next fishing period included spawning runs of fish that were migrating from fresh water to the sea or the reverse. These species included smelt in March, alewife in April and sturgeon in May. Typically, salmon were harvested in May as well as July and August, eel in September, and Atlantic tomcod as late as December (CIE 2014). Fish spawning seasons were accompanied by the spring migration of seabird species that nested in the same areas. Seabird eggs were also collected from offshore islands in spring and seabird harvesting took place in early fall during the southern migration. During spring and summer, the Mi'gmaq harvested marine shellfish including oysters, scallops, quahogs, clams, American lobster, and northern crab. Oysters harvested from the southern Gulf of St. Lawrence were used for food and the shells were used for wampum (currency). During whelping season, the Mi'gmaq also harvested marine mammals such as walrus and seal (CIE 2014).

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Community Indicator	Description
	<p>La Nation Micmac de Gespeg traditionally used Atlantic salmon for barter, spiritual or ceremonial practices, bait (salmon skin), and crafts. Salmon fishing methods have evolved from harpoons to gill nets and cages for communal fishing and fly-fishing rods for recreational fishing. Fishing occurred from late May to early November. Members of La Nation Micmac de Gespeg took salmon in the Saint-Jean, Dartmouth, York, and Malbaie Rivers, and in the mouth of the Dartmouth River (MMAFMA 2017).</p> <p>Eel harvesting is a traditional Mi'gmaq activity, beginning in May and ending when the ice cover forms. Eel harvesting sites reported by La Nation Micmac de Gespeg include the shoreline between Gaspé and Percé.</p> <p>Cod fishing is also considered important to the economic and cultural landscape of the Gaspé Peninsula but is now restricted because of low cod stocks. According to some members of La Nation Micmac de Gespeg, cod is often taken in the Gaspé Bay, at the northern extremity, as well as along the southern part, along the Sandy Beach pier.</p> <p>Other fishing areas identified by La Nation Mimac de Gespeg include Rivière-au-Renard, the Malbaie River estuary, Percé and the Banc des Américains. Members of La Nation Micmac de Gespeg harvest striped bass at locations between Gaspé and the Malbaie River estuary generally between May and October. Other fishing areas identified by La Nation Micmac de Gespeg include Rivière-au-Renard, the Malbaie River estuary, Percé and the Banc des Américains.</p>
Commercial-Communal Fishing	The MMAFMA holds several commercial-communal licenses for mackerel, herring, and bluefin tuna (Nexen 2018). Commercial harvesting of groundfish (e.g., Atlantic halibut, Greenland halibut, redfish) is planned.
Food, Social, Ceremonial Fishing	La Nation Micmac de Gespeg participate in fishing for FSC purposes. The First Nation has an agreement with the provincial government for harvesting salmon on the Saint-Jean, Dartmouth, and York Rivers. Most of the salmon harvested is distributed to elders. Eel harvesting sites reported by La Nation Micmac de Gespeg include the shoreline between Gaspé and Percé.
Asserted or Established Aboriginal and / or Treaty Rights	The MMS signed a Framework Agreement for a comprehensive claim with Canada (2012) that includes the Gaspé Peninsula and westward down the St. Lawrence River as well as Anticosti Island. Mi'gmaq First Nations have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. The asserted or established Aboriginal and treaty rights of the Mi'gmaq do not extend to lands or waters in or near the Project Area.

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Table 7.16 Québec Indigenous Groups Community Profiles

Community Indicator	Description
Listuguj	
Location and Proximity to Project Area	Listuguj is comprised of one reserve, located at the mouth of the Restigouche River in the southwestern area of the Gaspé Peninsula (Figure 7-55) (INAC 2018). Listuguj is approximately 1,449 km from the Project Area.
General Overview	Listuguj is governed by a Chief and eight Councillors and is also represented by MMS in matters relating to land claims negotiations, and consultation and engagement (INAC 2015; INAC 2018). The Listuguj reserve was established in 1853. The March 2018, Listuguj population was 4,061. Approximately 50 percent live on-reserve. The population of Listuguj decreased from 2011 to 2016, which may be a result of out-migration because half of the registered population live off-reserve. The population of the Listuguj is younger than that of QC population, as a whole (Statistics Canada 2017; INAC 2018).
Health and Socioeconomic Conditions	<p>Listuguj Mi'gmaq Government (LMG) and other agencies provide community members with facilities and programs in housing, education, community and social services, health, community health, women's shelter, long-term care facility for the elderly, a youth group home, fire safety, policing, restorative justice, drinking water, wastewater management, solid waste management, roads and natural resource management. The Alaqsitew Gitpu School, established in 1997, accommodates 250 students from nursery to grade 8 (LMG 2017). The Band Council provides additional educational support through the Post-Secondary Student Support Program and Mi'kmaq language and culture programs (LMG 2017). The community also has a variety of community health services, provided by the Listuguj Community Health Services, including the Listuguj Health Centre, women's shelter, a long-term care facility for the elderly and a youth group home (LMG 2016).</p> <p>Identified health and social issues include chronic illness, mental health and addictions, diabetes, foster care, care of the elderly, physical inactivity and family issues.</p> <p>The LMG is actively involved in the forestry industry, with community members being employed in the LMG silviculture and forestry operations and as independent loggers (LMG 2016). In 2011, the largest employer in the Listuguj community was Public Administration, employing approximately 31 percent of the workforce.</p> <p>As described in more detail below, Listugui holds commercial-communal fishing licences for a variety of fish and marine species. Listuguj Fisheries directly employs community members and owns 13 fishing vessels (Listuguj Fisheries 2014). Listuguj Fisheries is also involved in fisheries training and policy development (Listuguj Fisheries 2014).</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	Traditionally, the Mi'gmaq lived by hunting, fishing, and gathering throughout their territory which included the southeastern portion of the Gaspé Peninsula, NS, PEI, most of NB and southern NL. As fishers, hunters and gatherers, the people used their intimate knowledge of the land and seasonal cycles of vegetation, animals and fish to meet their physical and spiritual needs. Mi'gmaq harvesters and fishers were also known to travel to Anticosti Island and the shore of the North Coast and the Magdalen Islands (CDPDJ 2009). Traditional camps of the QC Mi'gmaq were located along the shores of the St. Lawrence River. No known physical, cultural or heritage sites are within or near the Project Area.

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Community Indicator	Description
Current Use of Lands and Resources for Traditional Purposes	Traditionally, various fish species have been fished by the Mi'gmaq in the Gulf of St. Lawrence through the seasons. The fishing season began in the spring with the break-up of shore and river ice when the Mi'gmaq moved to coastal areas and river mouths such as the estuaries of the Restigouche and Cascapédia Rivers that flow into the Baie des Chaleurs. Fishing began with shallow water fish species exposed by the melting ice, the most important of which was winter flounder. The next fishing period included spawning runs of fish that were migrating from fresh water to the sea or the reverse. These species included smelt in March, alewife in April and sturgeon in May. Typically, salmon were harvested in May as well as July and August, eel in September, and Atlantic tomcod as late as December (CIE 2014). Fish spawning seasons were accompanied by the spring migration of seabird species that nested in the same areas. Seabird eggs were also collected from offshore islands in spring and seabird harvesting took place in early fall during the southern migration. During spring and summer, the Mi'gmaq harvested marine shellfish including oysters, scallops, quahogs, clams, American lobster, and northern crab. Oysters harvested from the southern Gulf of St. Lawrence were used for food and the shells were used for wampum (currency). During whelping season, the Mi'gmaq also harvested marine mammals such as walrus and seal (CIE 2014). Since 1984, Listuguj has taken approximately 1,000 salmon annually in the Restigouche River for subsistence purposes. Eel harvesting is a traditional Mi'gmaq activity that begins in May and ends when the ice cover forms (MMAFMA 2017).
Commercial-Communal Fishing	Listuguj holds commercial fishing licences for cod, turbot and halibut and commercial-communal licenses for snow crab (Morrison 2018).
Food, Social, Ceremonial Fishing	Listuguj participates in communal fishing for FSC purposes with licenses to harvest salmon and lobster (Statoil 2017).
Asserted or Established Aboriginal and / or Treaty Rights	The MMS signed a Framework Agreement for a comprehensive claim with Canada (2012) that includes the Gaspé Peninsula and westward down the St. Lawrence River as well as Anticosti Island. Mi'gmaq First Nations have a right to fish for a "moderate livelihood" which flows from the Peace and Friendship Treaties and an Aboriginal right to fish for FSC purposes. The asserted or established Aboriginal and treaty rights of the Mi'gmaq do not extend to lands or waters in or near the Project Area

7.3.7.2 Innu First Nations of Québec

Two QC Innu communities were identified in the EIS Guidelines for engagement and inclusion in the EIS:

- Les Innus de Ekuanitshit
- Première Nation des Innus de Nutashkuan

The Innu people were traditionally nomadic and depended on the products of hunting (mainly barren-ground caribou, moose and small game), fishing (including Atlantic salmon) and gathering activities (e.g., eggs, berries) for their subsistence. Their ancestral territory covers the region from Québec City extending north of Schefferville, and the southern part of Labrador. At the end of the 19th

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century, participation in the fur trade, settlement, the expansion of the forestry and mining industries, and interventions by the Canadian and QC Governments led to establishment of permanent Innu communities, mainly in the south of their territory. However, the occupation of the ancestral territory of Nitassinan and traditional Innu Aitun practices such as hunting and fishing still continue today. In northern parts of the territory, the process of settlement began in the 20th century, and in many cases not until after 1950 (CDPDJ 2009).

In 1979, QC Innu land claim negotiations were first initiated by the Atikamekw and Montagnais Council, which was established in 1975 to represent the nine QC Innu Nations and the three Atikamekw Nations. Due to differences of opinion, mainly with respect to recognition of Indigenous rights and certainty, the Atikamekw and Montagnais Council was dissolved. In 2004, the Mamuitun mak Nutashkuan Tribal Council completed negotiations on behalf of the Innu First Nation communities of Essipit, Mashteuiatsh, Nutashkuan and Pessamit and signed an Agreement-in-Principle of General Nature (APGN) with the governments of QC and Canada (Tremblay 2011). The APGN is important in that the Innu First Nations would not surrender title over their traditional territory and would no longer be subject to the *Indian Act* (National Post 2016). Instead, a form of self-government would be determined. The Mamuitun mak Nutashkuan Tribal Council has continued to represent the other three First Nations, including the Innus de Nutashkuan (RP 2017). In 2010, this Tribal Council was renamed the Regroupement Petapan Inc. Negotiations towards a final agreement in the form of a treaty are well advanced (INAC 2016).

The Regroupement Mamit Innuat Tribal Council (MICT) was formed in 1982 as an advisory body to create a common development structure for the four "Montagnais" Innu First Nations of the Lower North Shore (i.e., Ekuanitshit, Nutashkuan, Unamen Shipu and Pakua Shipu). The MICT represents the interests of the First Nations in public, provincial, national and international initiatives. In 1994, the Mamu Pakatatau Mamit Assembly was created to represent the Innu communities of Ekuanitshit, Unamen Shipu and Pakua Shipu in land claims negotiations, which took place from 1995 to 2007 with Canada and Québec. In 2008, however, the three member-communities ceased the negotiation process in favour of a litigation approach (INAC 2016).

Information on land and resource use activities of the Innu groups is mainly based on a 1983 study by the Conseil des Atikamekws et des Montagnais (CAM). Information from Hydro-Quebec Production's (HQC) environmental impact study for the Complexe de la Romaine Project was also accessed. Additional sources of information include a publication on Indigenous fisheries in eastern QC, an overview of salmon fishing in QC in 2016 (MMAFMA 2017) and the technical report by the Agence Mamu Innu Kaikusseth (AMIK) called "NUTASHKUAN. Portrait-diagnostic de la pêche et de la gestion du saumon atlantique."

Community profiles for Nutashkuan and Ekuanitshit are provided in the following sections (Table 7.17). The locations of these Indigenous groups are provided in Figure 7-55.

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Table 7.17 Québec Indigenous Groups Community Profiles

Community Indicator	Description
Les Innus de Ekuanitshit	
Location and Proximity to Project Area	Les Innus de Ekuanitshit is comprised of one reserve, at the confluence of the Mingan River and the Gulf of St. Lawrence (Figure 7-55). Ekuanitshit community is approximately 1,247 km from the Project Area.
General Overview	<p>Les Innus de Ekuanitshit is governed by a Band Council with a Chief and four Councillors and is represented by the MICT. The Mingan reserve was established in 1963 for the Innus de Ekuanitshit and settled mainly by Innu families who traditionally travelled the Magpie, Saint-Jean, and Romaine Rivers (MRCN 2010; INAC 2018).</p> <p>The September 2018 population of Les Innus de Ekuanitshit was 655. Approximately 92 percent live on reserve. The population of the Mingan Reserve has increased since the 2011 census. The median age is at least 10 years younger than the median age of the QC population (Statistics Canada 2017; INAC 2018). The percentage of population under 15 years of age is also higher than that of the general QC population (Statistics Canada 2017; INAC 2018).</p>
Health and Socioeconomic Conditions	<p>The Conseil des Innus de Ekuanitshit and other agencies provide community members with social development, finance and administration, patient services, social services, technical services, advisory services and health care. Ecole Teueikan accommodates students from pre-kindergarten to grade 4. A health centre provides emergency and preventive care and community health services. Five nurses are available on-reserve, and a nutritionist, psychologist and dentist visit regularly. The Conseil des Innus de Ekuanitshit is responsible for the provision of health services to community members, after this responsibility was transferred by Health Canada. The Innu Mukutan Economic Development Corporation is responsible for economic development for Innu communities under its jurisdiction, including Les Innus de Ekuanitshit. The main economic activities include arts and handicrafts, commercial fishing, outfitting (fishing for salmon, ouananiche, and brook trout), tourism, trapping and service businesses. In 2011, the largest employer for community members was Public Administration, employing approximately 31 percent of the workforce.</p> <p>As described in more detail below, economic activity includes commercial fishing. Les Innus de Ekuanitshit operate six boats and its commercial fishing activities employ approximately 40 persons on a full- or part-time basis (Nexen 2018). Les Innus de Ekuanitshit commercially harvest scallops, crab, halibut, sea cucumber and whelk.</p>
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	<p>Innu culture and heritage are based on their relationship with game and fish and the seasonal migrations and locations of various species, including caribou and salmon. The Innu people traditionally travelled over a vast territory encompassing the entire St. Lawrence catchment area between the Saguenay-Lac-Saint-Jean and Labrador. Families also occasionally crossed the St. Lawrence Estuary to hunt in the Bas-du-Fleuve area (MRCN 2010; Verreault et al. 2013). Les Innus de Ekuanitshit participate in a spring harvest of migratory birds, seal and Atlantic salmon (Englobe 2018). Numerous coastal sites exist dating from approximately a thousand years ago demonstrate intensive spring harvesting of migratory bird species, including the Canada Goose and common eider (Englobe 2018). Of the approximately 8,000 archaeological sites discovered in QC, over 1,600 are in traditional Innu territory. Two important</p>

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Table 7.17 Québec Indigenous Groups Community Profiles

Community Indicator	Description
	<p>Innu sites have been discovered. The first is approximately 60 km from the coast, on the northern shore of Lake Jourdain, and was used as a staging area for lengthy portages. The second site, on the shore of the Jean-Pierre River, demonstrates Innu relationships with groups to the West, North-West and North (MRCN 2010). These archaeological sites are located along the shores of lakes and rivers that were used as encampment areas and travel routes for the Innu. No known physical, cultural or heritage sites are within or near the Project Area.</p>
<p>Current Use of Lands and Resources for Traditional Purposes</p>	<p>Traditional hunting, fishing and gathering activities continue to support the domestic economy as well as local traditions for the Innus de Ekuanitshit (Englobe 2018). The Innu continue to use the resources of the St. Lawrence River for food and communal purposes. Activities include fishing for Atlantic salmon, herring, and brook trout; collecting goose eggs in the peat bogs between the River and its tributaries; collecting eggs of other bird species on the islands; hunting waterfowl (e.g., goose and black guillemot); gathering edible plants (e.g., black crowberry and small cranberries) that grow along the River banks and in the peat bogs; fishing for lobster and scallops with harpoons; and collecting other shellfish along the coast (AMIK 2016; CIE 2014).</p> <p>Fishing, mainly for Atlantic salmon, traditionally played and continues to play, an important role in Innu life on the North Shore of the St. Lawrence River and estuary. The Innus de Ekuanitshit have identified 35 harvesting areas and 21 camps for salmon fishing along the Romaine River and its main tributary, the Puyjalon River. The Innus de Ekuanitshit also harvest salmon in the Jupitagon, Magpie, Saint-Jean, Mingan and Manitou Rivers. Harpoons and fishing rods are used to take salmon in the Manitou River, while nets were used in the Romaine River. Salmon fishing (subsistence and sport) in the Romaine River is now closed because of the scarcity of the population (HQP 2007; Charest et al. 2012; MFFP 2017b). Salmon fishing appears to be more valued by the Innus de Ekuanitshit for social and cultural reasons than economic ones, although the latter should not be under-estimated because salmon remains an important source of high-quality food. A 2013 study of fishing and community management of salmon by the Innus of Ekuanitshit concluded that, for those who took part, the most important values were sharing and respect, shown through conservation and avoiding waste (HQP 2007; CIE 2014).</p> <p>On the Romaine River, immediately downstream of Grande Chute, hunting is practiced by the Innus de Ekuanitshit in a long corridor using motorized canoe and snowmobile. Trapping focuses on beaver and certain other furbearers (e.g., otter, muskrat). Canada geese, small game, and salmon are also harvested. Various species of ducks are harvested in areas such as Grande Hermine Bay, west of Baie-Johan-Beetz, and in the mouths of the Romaine and Mingan Rivers (HQP 2007).</p>
<p>Commercial-Communal Fishing</p>	<p>Les Innus de Ekuanitshit have commercial-communal licences in its own name, as a member of the Agence Mamu Innu Kaikusseht, and through the Pecheries Shipek fishing company. These three entities have commercial-communal fishing licences for several species of fish and shellfish (Ekuanitshit Innu Council, pers. comm. 2018).</p>

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Table 7.17 Québec Indigenous Groups Community Profiles

Community Indicator	Description
Food, Social, Ceremonial Fishing	Les Innus de Ekuanitshit has no FSC licenses. However, Atlantic salmon, herring, brook trout, lobster, scallop and other shellfish are known to be important species for FSC purposes.
Asserted or Established Aboriginal and / or Treaty Rights	Les Innus de Ekuanitshit assert Aboriginal rights, including the right to hunt, fish, and gather throughout its traditional territory. Les Innus de Ekuanitshit claim a territory that extends over parts of Labrador and QC, including Anticosti Island in the Gulf of St. Lawrence. The asserted or established Aboriginal and treaty rights do not extend to lands or waters in or near the Project Area.
Première Nation des Innus de Nutashkuan	
Location and Proximity to Project Area	The Première Nation des Innus de Nutashkuan has one reserve, located at the mouth of the Natashquan River in the Gulf of St. Lawrence. The Nutashkuan reserve is approximately 1,086 km from the Project Area.
General Overview	The Première Nation des Innus de Nutashkuan is governed by a Chief and four Councillors and is represented by MICT (INAC 2018). The Nutashkuan reserve was established in 1952. The March 2018 population of the Première Nation des Innus de Nutashkuan was 1,168. Approximately 91 percent lived on-reserve. The on-reserve population declined slightly in 2016. In 2016, the median age of the on-reserve population was approximately 10 years younger than the median age of the QC population (Statistics Canada 2017). The percentage of the population under 15 years of age was also higher than that of the general QC population (Statistics Canada 2017).
Health and Socioeconomic Conditions	<p>The Band Council and other agencies provide community members with education, medical care, fire protection, social development, finance and administration, patient services, social services, technical services and advisory services.</p> <p>Ecole Uauitshitun accommodates students from kindergarten to secondary V (grade 11). A health centre provides front-line, emergency, and preventive health services as well as community health services. Patients requiring hospitalization are transferred to regional centres. Five nurses are available on-reserve, and a nutritionist, psychologist and dentist visit regularly. The Première Nation des Innus de Nutashkuan has managed health services since this responsibility was transferred by Health Canada. Identified health issues include type 2 diabetes, obesity, and addictions.</p> <p>The Première Nation des Innus de Nutashkuan has established an Economic Development Office. Economic initiatives include handicraft production, trapping, tourism, construction, transportation, outfitting and forestry. In 2011, the largest employer for community members was Public Administration, employing approximately 31 percent of the workforce.</p> <p>The First Nation has commercial fishing enterprises, with several fishing licences. The Première Nation des Innus de Nutashkuan fish crab, clams, lobster and groundfish commercially and owns two fishing vessels (Nexen 2018). Pêcheries Commerciales Nutashkuan, which was established by the Band Council in 1994, employs between six and 25 individuals (FNQLEDC 2010).</p>

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Table 7.17 Québec Indigenous Groups Community Profiles

Community Indicator	Description
Physical and Cultural Heritage (including archaeological, paleontological, historical, or architectural sites)	<p>Innu culture and heritage are based on their relationship with game and fish and the seasonal migrations and locations of various species, including caribou and salmon. The Innu people traditionally travelled over a vast territory encompassing the entire St. Lawrence catchment area between the Saguenay-Lac-Saint-Jean and part of Labrador. Families also occasionally crossed the St. Lawrence Estuary to hunt in the Bas-du-Fleuve area (MRCN 2010; Verreault et al. 2013). The spring harvest for migratory birds, seal harvesting, and fishing for Atlantic salmon has been practiced by the Innus de Nutashkuan for several thousand years. Numerous coastal sites exist dating from approximately a thousand years ago demonstrating intensive spring harvesting of migratory bird species, including the Canada Goose and common eider (Englobe 2018). Of the approximately 8,000 archaeological sites discovered in QC, over 1,600 are in the traditional territory of the Innus de Nutashkuan. Two important Innu sites have been discovered, including one on an island located in the western part of the Nitassinan of Nutashkuan. No known physical, cultural or heritage sites are within or near the Project Area.</p>
Current Use of Lands and Resources for Traditional Purposes	<p>The Innus de Nutashkuan continue to use the resources of the St. Lawrence River for food and communal purposes. Activities include fishing for Atlantic salmon, herring, and brook trout; collecting goose eggs in the peat bogs between the River and its tributaries; collecting eggs of other bird species on the islands; hunting waterfowl (e.g., goose and black guillemot); gathering edible plants (e.g., black crowberry, small cranberries, red berries and cloudberries) that grow along the River banks and in the peat bogs; fishing for lobster and scallops with harpoons; and collecting other shellfish along the coast (AMIK 2016; CIE 2014). Fishing, including fishing for Atlantic salmon, played and continues to play an important role in Innu life on the North Shore of the St. Lawrence River, estuary, and Gulf.</p> <p>The waterways contemporarily used by the Première Nation des Innus de Nutashkuan, in addition to the Gulf of St. Lawrence, include the Natashquan, Romaine, De la Corneille, Piashti, Quetachou, Nabisipi and Aguanish Rivers. The southern portion of the land use area extends from the coast to Wakeham, Forgues, Pauline and Métivier Lakes. Trapping and small game hunting in that area is facilitated by good transportation routes (Route 138 and many snowmobile trails) and even terrain. Along the shore, west of Baie-Johan-Beetz, harvesting activities occur up to the Havre-Saint-Pierre region. Lobster and scallops are taken from Nickerson Bay. Canada geese and eider are harvested from the shoreline or by motorized boat, and waterfowl are harvested along the shore. Many harvesting areas and encampments are located at the Grande Hermine and Nickerson Bays, as well as on the coastal plain of the Romaine River, on either side of Route 138. Beaver trapping and gathering of small fruit occur on the Romaine coastal plain. Porcupine is often harvested near the shore along Route 138 and other roads leading north. The contemporary land use model of the Première Nation des Innus de Nutashkuan is similar to that of the Innus de Ekuanitshit. Members from both communities at times harvest together or rely one another (HQP 2007).</p> <p>The Première Nation des Innus de Nutashkuan has continued to be mobile and still cover a large territory but travels are not as expansive as they have been historically.</p>

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Table 7.17 Québec Indigenous Groups Community Profiles

Community Indicator	Description
Commercial-Communal Fishing	The Première Nation des Innus de Nutashkuan has commercial-communal licenses. The fisheries cover several areas and species including cod, Atlantic halibut, Greenland halibut, fluke, mackerel, herring, groundfish, whelk, lobster, Arctic surf clam crab and scallop (Innu First Nation of Nutashkuan, pers. comm. 2018).
Food, Social, Ceremonial Fishing	The Première Nation des Innus de Nutashkuan has no FSC licenses. However, Atlantic salmon, herring, brook trout, lobster, scallops, and other shellfish are understood to be important FSC species for the Innu.
Asserted or Established Aboriginal and / or Treaty Rights	The Première Nation des Innus de Nutashkuan asserts Aboriginal rights, including the right to hunt, fish, and gather throughout its Nitassinan. The Première Nation des Innus de Nutashkuan claim a territory that extends over parts of Labrador and QC, including part of Anticosti Island and Jacques Cartier Strait in the Gulf of St. Lawrence. The asserted or established Aboriginal and treaty rights do not extend to lands or waters in or near the Project Area.

7.3.8 Harvested Species

Given that the Project is located approximately 500 km offshore, and approximately 640 km to 2,000 km from Indigenous communities, potential interactions with Indigenous peoples are most likely to occur through Project interactions with species of cultural or commercial importance that have the potential to occur or migrate through the Project Area. For instance, various Indigenous groups hold commercial-communal fishing licences in offshore NL in areas that may intersect with Project components or activities. The Project may also intersect with areas used by migrating species that are harvested by Indigenous groups in coastal areas. In addition, coastal species could potentially be affected in the unlikely event of an accident that reaches coastal areas (refer to Chapter 16 for discussion on accidental events). This section discusses important species of interest to the identified Indigenous groups from NL to Québec. The discussion uses available information to focus on where these species are harvested and whether they are likely to occur near the Project.

7.3.8.1 Commercial-Communal Fisheries

A variety of species are commercially harvested in offshore NL and Indigenous groups hold commercial-communal licences to harvest some of these species within the RSA. Table 7.18 summarizes commercial-communal licences held by NL Indigenous groups and highlights those within the Project Area. Indigenous groups hold licences for capelin, groundfish, herring, mackerel, seal, shrimp, snow crab, tuna and whelk though the rights to these resources may not be currently exercised.

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Table 7.18 Commercial-Communal Fishing Licences Issued to Newfoundland and Labrador Indigenous Groups

Indigenous Group	Commercial-Communal Fishing Licence								
	Capelin	Groundfish	Herring	Mackerel	Seal	Shrimp	Snow Crab	Tuna	Whelk
	Capelin Fishing Area	NAFO Unit	Herring Fishing Area	Mackerel Fishing Area	Sealing Area	Shrimp Management Area	Crab Fishing Area	NAFO Unit	NAFO Unit
Innu Nation	2, 3, 4, 5, 6, <u>7</u> , <u>8</u>	2J, 3K, <u>3L</u>	-	3, 4, 5, 6, <u>7</u> , <u>8</u>	-	<u>6</u> , <u>7</u>	-	-	-
Nunatsiavut Government	-	2J, 3K, <u>3L</u>	-	-	4, 5, <u>6</u> , <u>7</u>	-	2	-	-
NunatuKavut Community Council	2	2J, 3K, <u>3L</u>	-	-	4, 5, <u>6</u> , <u>7</u>	<u>6</u>	2	-	2J
Miawpukek First Nation (MFN)	2, 3, 4, 5, 6, <u>7</u> , <u>8</u>	2J, 3K, <u>3L</u> , 3N	-	3, 4, 5, 6, <u>7</u> , <u>8</u>	4, 5, <u>6</u> , <u>7</u>	-	-	<u>3L</u> , 3NO	-
Qalipu Mi'kmaq First Nation Band (QMFNB)	2, 3, 4, 5, 6, <u>7</u> , <u>8</u>	2J, 3K, <u>3L</u> , 3N	3, 4, 5, 6, <u>7</u> , <u>8</u>	3, 4, 5, 6, <u>7</u> , <u>8</u>	-	<u>6</u>	4	-	-
Mi'kmaq Alsumk Mowimsikik Koqoey Association ¹	-	2J, 3K, <u>3L</u> , 3N	-	-	-	-	-	-	-
Notes: ¹ formed by MFN and QMFNB Band under DFO's Aboriginal and Aquatic Resources Management Program Bolded text indicates areas within the Project Area. Data provided by DFO (2018)									

Commercial fisheries are discussed in Section 7.1 and Figures 7-1 to 7-43 illustrate domestic harvesting locations and intensity for key commercial fisheries. These figures demonstrate that commercial fishing activities, including those carried out under commercial-communal licences by Indigenous groups, may potentially intersect with the Project Area.

As discussed in Section 7.1.6, commercial fishing activity occurs throughout the RSA, with shrimp, snow crab, and groundfish as the key species harvested. Within the Project Area, fisheries that are most likely to occur include harvesting groundfish such as Atlantic redfish, Atlantic cod, Greenland halibut and American plaice. Large pelagic fisheries (swordfish and sharks) may also occur in the area or nearby waters. Before the closures in 3L and 3M, northern shrimp trawling was also an important fishery.

Harp, grey, hooded and ringed seals are harvested in commercial-communal fisheries by Indigenous groups in NL. Sealing generally occurs between late March and mid-May; but harvesting can vary

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by species and other environmental factors and biological conditions (DFO 2011a). Ringed seal is the most commonly harvested species by the Inuit (DFO 2011b). Hooded seals are also important to subsistence harvesters.

Indigenous groups from the Maritime provinces hold commercial-communal licences for swordfish and tuna in NAFO subdivisions including 3LMNO. Fourteen of the Maritime groups hold swordfish and/or tuna licences in NAFO divisions that overlap with the Project Area (Table 7.19). An additional seven hold licences for these species in unspecified areas and thus may potentially include NAFO divisions off eastern NL.

Table 7.19 Commercial-Communal Swordfish and Bluefin Tuna Licences Issued to Maritime Indigenous Groups

Indigenous Group	Swordfish	Tuna
	NAFO Unit	NAFO Unit
Glooscap First Nation	3LMNO	3LMNO
Membertou Band Council	-	3LMNO
Millbrook First Nation	3LMNO	3LMNO
Paqtnkek First Nation	3LMNO	-
Pictou Landing First Nation	3LMNO	Not specified
Sipekne'katik First Nation	3LMNO	3LMNO
Wagmatcook First Nation	3LMNO	-
Waycobah First Nation	3LMNO	-
Abegweit Band	3LMNO	Not specified
Lennox Island First Nation	3LMNO	Not specified
Native Council of PEI	3LMNO	-
Bouctouche Micmac Band	-	Not specified
Eel River Bar First Nation	-	Not specified
Elsipogtog First Nation	-	Not specified
Esgenoopetitj First Nation	-	Not specified
Fort Folly First Nation	3LMNO	3LMNO
Indian Island First Nation	-	Not specified
Pabineau First Nation	-	Not specified
St. Mary's First Nation	3LMNO	-
Tobique First Nation	-	Not specified
Woodstock First Nation	3LMNO	3LMNO

Notes:
Bolded text indicates areas within the Project Area.
 - Indicates there is no licence held for the species
 Data provided by DFO (2018)

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The primary species of importance to commercial-communal fisheries in NAFO subdivisions intersecting with the Project Area are swordfish and Atlantic bluefin tuna. Detailed information on the health and distribution of fish species including swordfish and tuna are included in Section 6.1. Section 7.1 provides a detailed description of commercial fisheries. The range and distribution for swordfish and blue fin tuna are discussed below.

Tuna and swordfish are large-bodied pelagics that seasonally migrate from temperate areas into northern waters to feed. The general distribution and migration patterns of swordfish include most of the North Atlantic Basin (Dewar et al. 2011, Trenkel et al. 2014). Swordfish are generally associated with thermal fronts, where large horizontal temperature gradients in the water column (Podestá et al. 1993, Dewar et al. 2011) result in increased densities of swordfish prey items such as squid (Stillwell and Kohler 1985). The mixing of the cold Labrador Current and the North Atlantic Current creates these types of thermal fronts in some areas off Eastern NL, including the NL Seamounts and Flemish Cap (Carr et al. 2001). During their northern migrations, tuna and swordfish species typically remain in areas under the influence of the Gulf Stream (Walli et al. 2009; Vandeperre et al. 2014), and therefore would be expected to be at relatively low abundance in the Project Area, which is principally exposed to the Labrador Current (see Section 5.4.2).

Atlantic bluefin tuna spawn in open ocean areas east of the mid-Atlantic U.S. states, limiting any potential Project effects on early life stages. Individual adult bluefin tuna or schools of tuna (fewer than 50 individuals) may have seasonal / intermittent presence in offshore NL as they migrate through the area in summer (Richardson et al. 2016). However, this species is highly mobile, which further limits the potential for interactions with Project activities.

7.3.8.2 Current Use of Land and Resources for Traditional Purposes

The various Indigenous groups listed in the EIS Guidelines (Appendix A) undertake land and resource use activities including fishing, harvesting, and trapping in inland and coastal areas throughout Atlantic Canada. While harvesting activities are often undertaken for personal and family sustenance, natural resources hold additional importance to Indigenous peoples because harvesting, consumption, and sharing country foods are integral to Indigenous spiritual beliefs, cultural practices, and community life.

Table 7.20 provides a summary of marine-associated species that have been identified (through literature review including the Indigenous Knowledge Study (Appendix H), from other drilling project EIS reports, from DFO information regarding FSC licences, and engagement with Indigenous groups for this Project and the Drilling EIS (Statoil 2017)) as being used for traditional, cultural, recreational or commercial purposes by Indigenous groups listed in the EIS Guidelines. A large number of species including fish, shellfish, seals, whales, and migratory birds are harvested throughout the RSA. Additional information related to land and resource use is provided above in the community profiles. Based on available information, and as emphasized throughout engagement with Indigenous groups for this Project, two fish species (i.e., Atlantic salmon and American eel) have been identified as being of particular concern due to their importance to Indigenous groups for cultural reasons and the potential for interaction between these migratory species and Project activities. Migratory and marine birds and marine mammals (seals) have also been identified as being of importance to various Indigenous groups for food, social or cultural purposes.

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Table 7.20 Marine-Associated Species Used by Indigenous Groups

Group	Identified Species	
Newfoundland and Labrador		
Nunatsiavut Government	<ul style="list-style-type: none"> • Atlantic salmon • Arctic Char • Capelin • Cod • Mussels • Sea urchins • Sculpins • Snow crab • Trout • Turbot • Winkles • Bearded seals 	<ul style="list-style-type: none"> • Grey seals • Harbour seals • Ringed seals • Black ducks • Canada goose • Eider ducks • Loons • Murres • Mergansers • Sea ducks • Scoters • North Atlantic right whale
Innu Nation	<ul style="list-style-type: none"> • Atlantic salmon • Arctic char • Trout • American black duck • Black scoter • Blue-winged teal • Canada goose • Common loon 	<ul style="list-style-type: none"> • Eider duck • Harlequin duck • Long-tailed duck • Merganser • Murres • Northern pintail • Surf scoter
NunatuKavut Community Council	<ul style="list-style-type: none"> • Atlantic salmon • Arctic Char • Cod • Herring • Scallop 	<ul style="list-style-type: none"> • Trout • Whelk • Seals • Murres • Migratory birds (e.g. ducks and geese)
Miapuwkek Mi'kamawey Mawi'omi	<ul style="list-style-type: none"> • Atlantic salmon • American eel • Atlantic cod • Crab • Herring • Lobster 	<ul style="list-style-type: none"> • Mackerel • Rainbow Trout • Redfish • Scallop • Harp seals • Grey seals
Qalipu Mi'kmaq First Nation	<ul style="list-style-type: none"> • Atlantic salmon • American eel • Pelagic fish • Groundfish 	<ul style="list-style-type: none"> • Trout • Shellfish • Seals • Migratory birds

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Table 7.20 Marine-Associated Species Used by Indigenous Groups

Group	Identified Species	
Nova Scotia		
Not group specific	<ul style="list-style-type: none"> • Atlantic salmon • American eel • Blue shark • Blueback herring • Catfish • Capelin • Quahaug • Cod • Crab • Flounder • Gaspereau • Groundfish • Haddock • Halibut • Herring • Lobster 	<ul style="list-style-type: none"> • Mackerel • Mussels • Oysters • Periwinkles • Perch • Pollock • Clams (e.g. bar, razor, soft-shell) • Sea run trout • Sea urchins • Scallop • Shad • Squid • Tomcod • White sucker fish • Seals
Prince Edward Island		
Not group specific	<ul style="list-style-type: none"> • Atlantic salmon • American eel • Clams • Gaspereau • Groundfish • Herring • Lobster • Mackerel 	<ul style="list-style-type: none"> • Mussels • Oysters • Quahaug • Rock crab • Scallops • Silversides • Toad crab • Seals
New Brunswick		
Not group specific	<ul style="list-style-type: none"> • Atlantic salmon • American eel • Alewives • Catfish • Chub • Clams • Gaspereau • Groundfish • Herring • Lamprey • Lobster • Mackerel 	<ul style="list-style-type: none"> • Mussels • Oysters • Perch • Quahaug • Rock crab • Scallops • Shad • Sturgeon • Sunfish • Seals • Right whale
Québec		
Not group specific	<ul style="list-style-type: none"> • Atlantic salmon • American eel • Cod • Crab • Herring • Lobster 	<ul style="list-style-type: none"> • Mackerel • Scallops • Shellfish • Waterfowl (e.g., ducks, geese and black guillemot) • Migratory birds and eggs (unspecified) • Seals

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As noted, various marine species are harvested by Indigenous groups for traditional or other purposes. Many of these species are accessed in inshore environments and thus are not expected to interact with Project activities. Table 7.21 provides an analysis (based on existing and available scientific literature) of the distribution of species identified as having the potential to occupy or migrate through the Project Area at any time of year before arriving in the traditional territories of one or more Indigenous groups. Based on this analysis, several species including Atlantic salmon and American eel have the potential to occur in the Project Area. More detailed information is found in Section 6.1.

Table 7.21 Potential for Identified Marine-Associated Species in the Project Area

Identified Species	Potential for These Resources to Spend Time within the Project Area
Atlantic Salmon	Potential occurrence in the Project Area. Portions of the southern NL, Gulf of St. Lawrence, eastern-southern NS, or Outer Bay of Fundy populations may migrate through the Project Area as they move between the Labrador Sea feeding / overwintering area and the southern slopes of the Grand Banks at the beginning of spring spawning migrations (COSEWIC 2010). Large concentrations of Atlantic salmon are not likely, and sea surface temperatures would likely limit habitat use to temporary movement corridors during times of favourable water temperatures (Lacroix 2013; Reddin 2006; Reddin and Friedland 1993; Reddin and Shearer 1987).
American eel	Occasional presence in Project Area, as adults migrate from coastal areas to the Sargasso Sea (Scott and Scott 1988). Migrations of adults and larvae generally follow continental shelf areas (Wang and Tzeng 1998), reducing likelihood of passing through the Project Area.
Atlantic cod	Occasional presence in Project Area, inhabits offshore shelf areas in winter and onshore areas in summer (Scott and Scott 1988). Resident offshore populations are distinct from inshore populations (Beacham et al. 2002).
Rock cod	Does not occur in Project Area. Inhabits inshore regions and is less common offshore (Scott and Scott 1988).
Turbot (Greenland halibut)	Potential occurrence in the Project Area from shallow depth zones to deeper habitats. Mainly occurs on the slopes of the Grand Banks and on shelf areas off NL (north of the Avalon). Known to migrate between the Davis Strait and eastern NL indicating potential for long distance migrations (Bowering 1984; Vis et al. 1997).
Atlantic blue whale	Occurrence in the Project Area is considered rare. Regularly sighted in the Gulf of St. Lawrence and Estuary between April and December (COSEWIC 2002). Low numbers have been sighted in the eastern NL offshore area (Lawson and Gosselin 2009; Lesage et al. 2016; DFO sightings database).
North Atlantic right whale	Occurrence in the Project Area is considered rare. Found in Atlantic Canada during summer and fall primarily in the Bay of Fundy, on the Scotian Shelf and the Gulf of St. Lawrence, and only rarely observed in the waters off NL (COSEWIC 2013).

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Table 7.21 Potential for Identified Marine-Associated Species in the Project Area

Identified Species	Potential for These Resources to Spend Time within the Project Area
Marine Birds	Potential presence in the Project Area. Murres may be present in the Sackville Spur and northern Flemish Pass year-round but most commonly from April to July during the spring migration and early nesting period. The core wintering area of common murre is in the southern half of the Grand Banks to the southwest of the Project Area, while thick-billed murres winter mainly in the Labrador Sea (McFarlane Tranquilla et al. 2015). Waterfowl (e.g., ducks, geese) and divers (e.g., loons) are not likely to be found in the Project Area as they generally occur within 10 NM of the coastline. Individual ducks have been sighted occasionally offshore during migration (Abgrall et al. 2008; Jones and Lang 2013; Holst and Mactavish 2014). The 2006-2016 ECSAS dataset showed no waterfowl observations in the Project Area. The most frequently observed species in the offshore was common eider, followed by long-tailed ducks, loons, and scoters; a small number of other duck species were infrequently observed (ECSAS data (2006–2016)).
Seals	Potential occurrence in the Project Area. Of the seal species known to occur in the NL region, it is possible for harp and hooded seals to occur in the Project Area based on their annual migration patterns and distances covered (Stenson and Sjare 1997; Anderson et al. 2009). Harbour and grey seals are considered non-migratory and tagging studies have shown they do not travel through the Project Area (Lesage et al. 2004; Harvey et al. 2008). Ringed and bearded seals are primarily Arctic species that rarely venture further south than coastal Labrador (Gosselin and Boily 1994; DFO 2011a)

7.4 Other Aspects of the Human Environment

7.4.1 Rural and Urban Setting

NL is the easternmost province of Canada and consists of the Island of Newfoundland (111,390 km²), as well as Labrador (294,330 km²) which is located to the northwest on the Canadian mainland. The province had a 2017 population of 528,817 (NL Department of Finance 2018a). The Island of Newfoundland comprises less than 30 percent of the province's total land area but is home to nearly 95 percent of its population. Residents live in approximately 250 municipalities and many unincorporated communities that range in population from fewer than five to more than 100,000 (NL Department of Finance 2017a). Communities are widely distributed along the coastline as well as throughout the interior of the Island.

The populations of most areas of the province are declining but the overall population of the Northeast Avalon increased 4.4 percent to 210,564 between 2011 and 2016 (NL Department of Finance 2017a). Growth occurred in the Gander, Northern Arm, Bay Roberts, Deer Lake and Northeastern Avalon Local Areas, which include the greater St. John's area and other regional service centres. Some areas are experiencing growth mainly in the residential sector due to their proximity to these centres (Barry 2017).

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The Project Area is over 400 km east-northeast of St. John's, NL, which is the closest community to the Project. St. John's is the capital city of NL, with a population of approximately 219,207 individuals (NL Department of Finance 2018a). The population of the St. John's metropolitan area represents approximately 40 percent of the total population of NL (Statistics Canada 2017b). There are no known permanent, seasonal, or temporary residences in the vicinity of the Project Area; the nearest permanent residence is within the City of St. John's. The only residences that would be associated with the Project are the temporary living accommodations on drilling installation(s), the FPSO and supply vessels.

Since 2011, the population of the province has increased by approximately one percent (NL Department of Finance 2018a). However, this increase was concentrated in older age groups with the senior population (ages 65 or above) offsetting a decrease in the core labour force population (ages 20 to 64) and youth populations (ages 19 and below). The median age of NL was 45.3 years in 2016, which is the highest of any province in the country (NL Department of Finance 2017b).

In addition to the City of St. John's, the Northeastern Avalon Region comprises the City of Mount Pearl, and the Towns of Holyrood, Conception Bay South, Paradise, Portugal Cove-St. Philips, Bauline, Pouch Cove, Flatrock, Logy Bay-Middle Cove-Outer Cove, Torbay, Petty Harbour-Maddox Cove, Bay Bulls, Witless Bay, and Wabana. In 2011, the population of the Northeast Avalon Region was approximately 201,766. This represents an 8.5 percent population increase since 2006, with the communities of Bay Bulls, Flatrock, Paradise, and Torbay showing the highest growth in this period (Stantec et al. 2017).

7.4.2 Economy

The Northeastern Avalon is the location of the largest concentration of population and the largest and most diverse economy in the province. The provincial capital of St. John's and surrounding municipalities are home to a varied range of government services, industrial development, commercial and retail services, educational institutions and tourism activity. This area is also the primary supply base for the current offshore oil and gas industry, with related infrastructure and services in St. John's, Mount Pearl, and Bay Bulls. St. John's harbour is also an important landing and unloading area for fish harvesters and hosts several major operations, including a Canada Coast Guard Base, an Oceanex container shipping point, and the Newdock shipyard.

In 2016, there were 93 licenced seafood processors in NL, of which seven were on the Northeastern Avalon (NL Department of Fisheries and Land Resources 2016). The St. John's waterfront is a mixture of industrial marine activity as well as tourism, with boat tours and cruise ships operating seasonally. Top tourism destinations within the Northeastern Avalon include St. John's and George Street where the tourism season is fairly consistent throughout the year (NL Tourism 2017). The St. John's area has a strong market for tourism, particularly in meetings and conventions and general business activity.

In the past two decades, the economy of NL has experienced considerable growth largely due to development of the oil industry and expansion of the mining industry. However, since 2014, the economy has contracted due to a transition from major project construction to production and a decline in commodity prices. Real gross domestic product (GDP) declined by 3.4 percent in 2017,

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primarily due to lower levels of capital investment. Employment fell by 3.7 percent in 2017 to average 224,100, reflecting lower construction activity on several major projects. The unemployment rate averaged 14.8 percent, an increase of 1.4 percent over the previous year. In 2017, service sector industries accounted for approximately 79 percent of employment with goods-producing sectors accounting for the remaining 21 percent (NL Department of Finance 2018b).

There have been encouraging developments occurring throughout many sectors of the economy including offshore oil, mining, aquaculture and tourism. 2017 marked the 20th full year of oil production in the province, and first oil for Hebron. Oil production increased by five percent to 80.6 million barrels in 2017 and the estimated value of production grew by 27.9 percent to \$5.7 billion. Plans for commissioning and expansion of existing offshore oil developments, as well as proposed exploration programs, and new development projects such as this one, indicate that the oil and gas industry will continue to play an important role in the provincial economy. In fact, in 2015, a resource assessment of an area of the NL offshore spurred renewed optimism for the long-term future of the province's oil and gas sector. Nalcor Energy's resource assessment, which was completed by international petroleum consultancy firm, Beicip-Franlab, covered 11 offshore parcels offered in the Flemish Pass land sale area and estimated that the in-place oil and gas resource potential for the area was 12 billion barrels of oil and 113 trillion cubic feet of gas. The area assessed covers less than two percent of NL's offshore area and indicates that there is very likely much more oil to be developed in the NL offshore (NOIA 2015).

In December 2016, the Provincial Government established an Oil and Gas Industry Development Council in support of positioning NL globally as a preferred location for oil and gas development. The Council made a commitment to create a long-term vision for the province's oil and gas industry, with a focus on promoting development, competitiveness, and sustainability (NL Department of Finance 2018b).

The oil and gas industry accounted for just over 15 percent of the nominal GDP in 2016. The construction sector accounted for 12 percent of the nominal GDP in 2016, with mining contributing approximately six percent and fishing, harvesting, trapping and manufacturing of fish products accounting for 2.4 percent of nominal GDP (NL Department of Finance 2018b).

In 2019, the province is forecasted to experience an increase in real GDP by 1.1 percent with capital investment predicted to decline by 10.4 percent. Employment is expected to decrease 1.8 percent in 2019 and the rate of unemployment is expected to increase to 15.4 percent) (NL Department of Finance 2018b).

7.4.3 Human Health

The Project is not expected to affect human health conditions for Indigenous or non-Indigenous persons living in NL or elsewhere. The following information is intended to provide a general understanding of human health and well-being in the province, including health care infrastructure and services in the Northeastern Avalon. This section also describes the mechanisms in place to protect human health in the unlikely event of an accidental event.

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The Eastern Regional Health Authority (Eastern Health) provides health and community services to approximately 300,000 people in 111 municipalities, 69 local service districts, and 66 unincorporated units throughout its service area. Geographically, Eastern Health includes the island portion of the province east of (and including) Port Blandford. This area encompasses the entire Burin, Bonavista and Avalon Peninsulas as well as Bell Island, within a total of 21,000 km². The area also includes the provincial capital, St. John's, and the province's largest metropolitan area, the St. John's CMA (Statistics Canada Census Metropolitan Area).

Eastern Health delivers health services through a network of hospitals, community health centres, community clinics and long-term care facilities. These include 16 hospitals and health care centres that provide in-patient and/or out-patient services. In addition, a total of 83 clinics and health offices provide a variety of health promotion, physical health, mental health, community-based support and social services throughout the region. Patient ground transport is provided by public and private services and air ambulance is provided by the provincial government (Eastern Health 2016).

The Eastern Health region encompasses 59 percent of the provincial population. Eastern Health also has a provincial mandate to provide provincial services in surgery, rehabilitation, oncology, cardiology, gynecology, pediatric, mental health and addictions, laboratory services and diagnostic imaging. The agency receives patients from the French islands of Saint Pierre and Miquelon, through an external agreement (Eastern Health 2016). Health care services and community supports are also delivered through private organizations, non-profit agencies and volunteer groups.

The Air Quality Health Index (AQHI) considers current and predicted levels for ground level ozone, fine particulate matter and nitrogen dioxide values associated with an AQHI location and uses a scale to show health risk associated with air pollution to help users determine if there may be a health risk associated with local air quality. In NL, the AQHI is reported for six locations, with St. John's being the closest to the RSA. NL generally experiences "good" air quality, with the AQHI usually being in the "low" range for the province (NL Department of Municipal Affairs and Environment 2018). Atmospheric air and sound emissions, and discharges from the Project are not predicted to interact with onshore human receptors, and therefore there are no predicted effects on human health resulting from atmospheric air and sound emissions or discharges. As indicated in Section 5.6, the existing ambient air quality within the Project Area (which is already subject to emissions from marine vessels, helicopter traffic, and existing oil production platforms) is considered good.

Under the Management of Contaminated Fisheries Regulations of the *Fisheries Act*, DFO has the authority to close recreational and commercial fishing areas when the presence of biotoxins, bacteria, chemical compounds or other substances in fish habitat may pose a risk to human health (DFO 2014b). In addition, the Canadian Shellfish Sanitation Program is a federal food safety program led by the Canadian Food Inspection Agency in collaboration with Environment and Climate Change Canada (ECCC) and DFO intended to protect Canadians from health risks associated with the consumption of contaminated bivalve molluscan shellfish. In the unlikely event of an accidental spill, there are mechanisms in place to protect against effects on human health due to harvesting and consumption of potentially contaminated food sources.

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7.4.4 Physical and Cultural Heritage

The only known sites occurring in offshore NL that would be considered to contain physical and/or cultural heritage are shipwrecks that may be present in the Project Area and RSA. Locations of shipwrecks within the Project Area and RSA are shown on Figure 7-48. There are no other known structures, sites, or things of known historical, archaeological, paleontological, or architectural significance, within the Project Area. The Project is not predicted to interact with onshore archaeological resources or heritage areas.

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