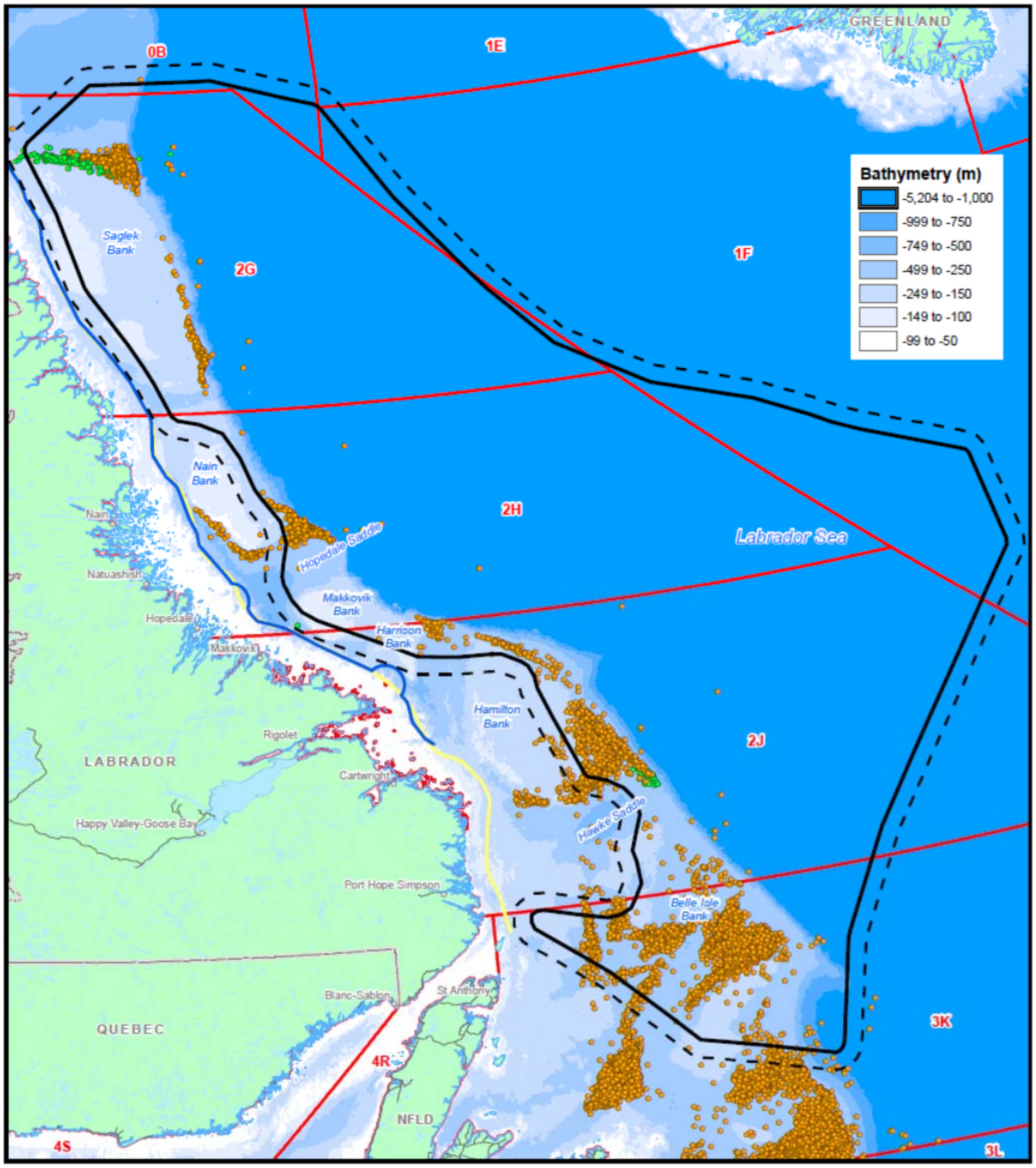

Figure 5.28: Harvesting Locations, Shrimp, 2005 to 2009, August

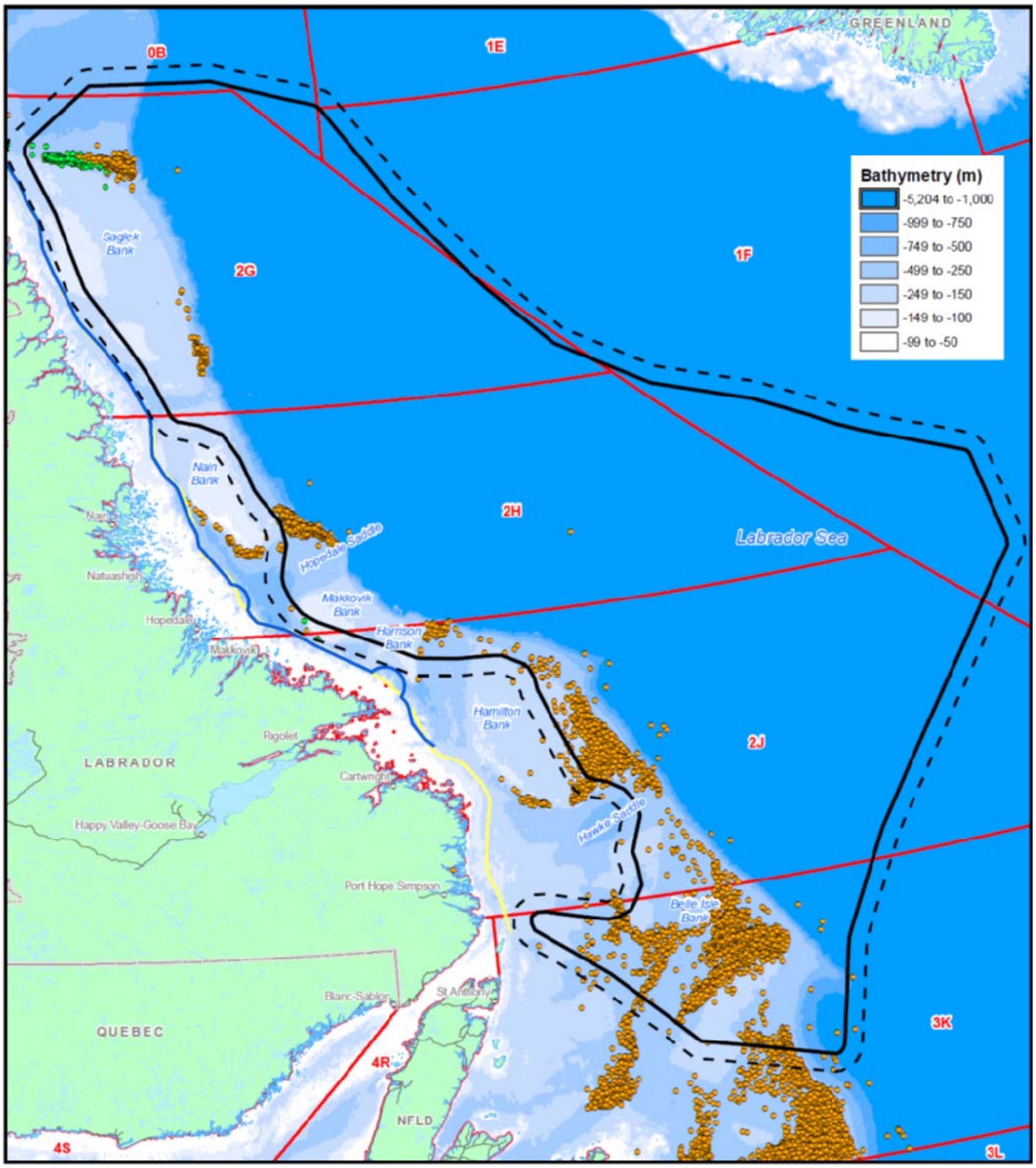

Figure 5.29: Harvesting Locations, Shrimp, 2005 to 2009, September

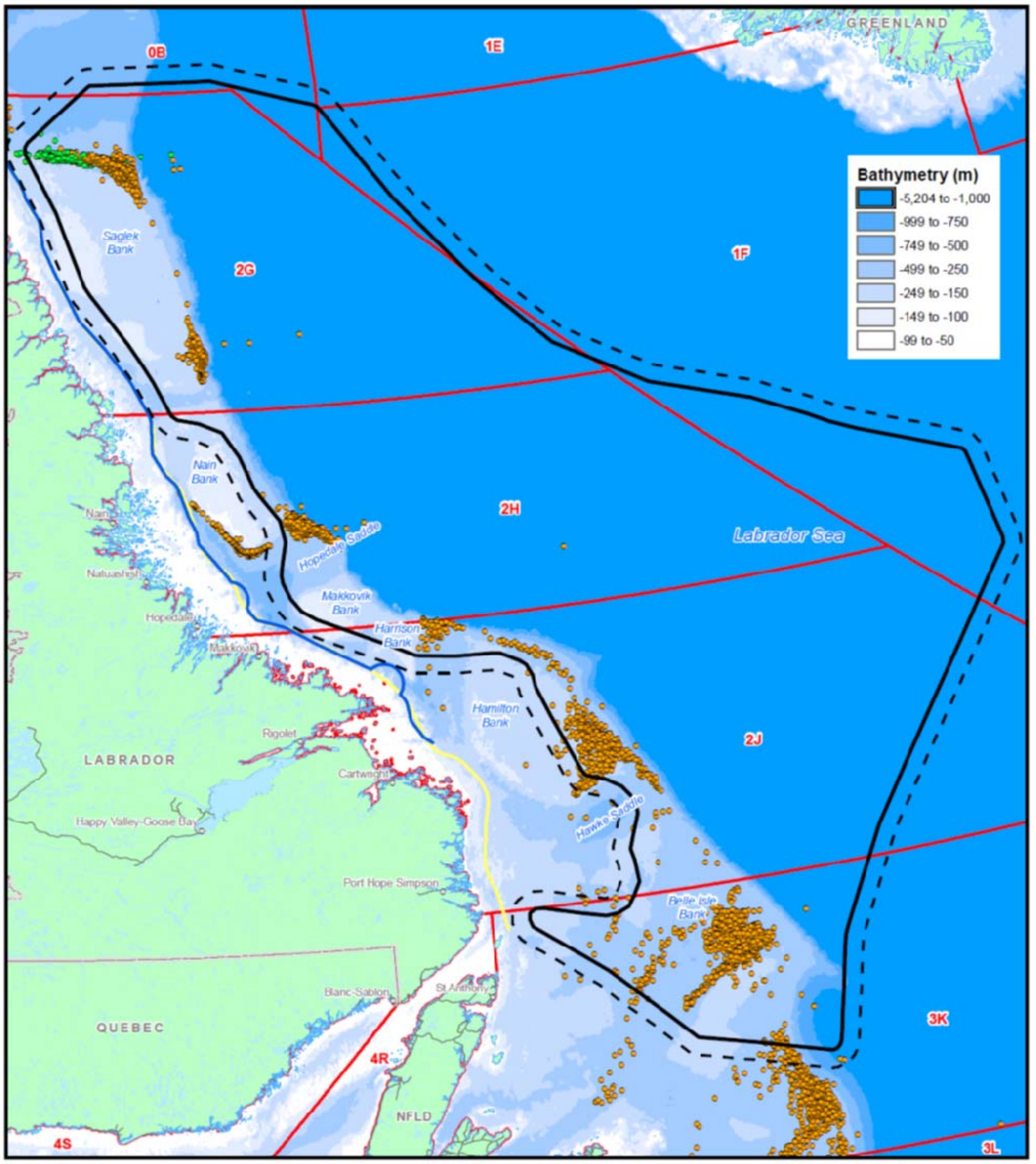

Figure 5.30: Harvesting Locations, Shrimp 2005 to 2009, October

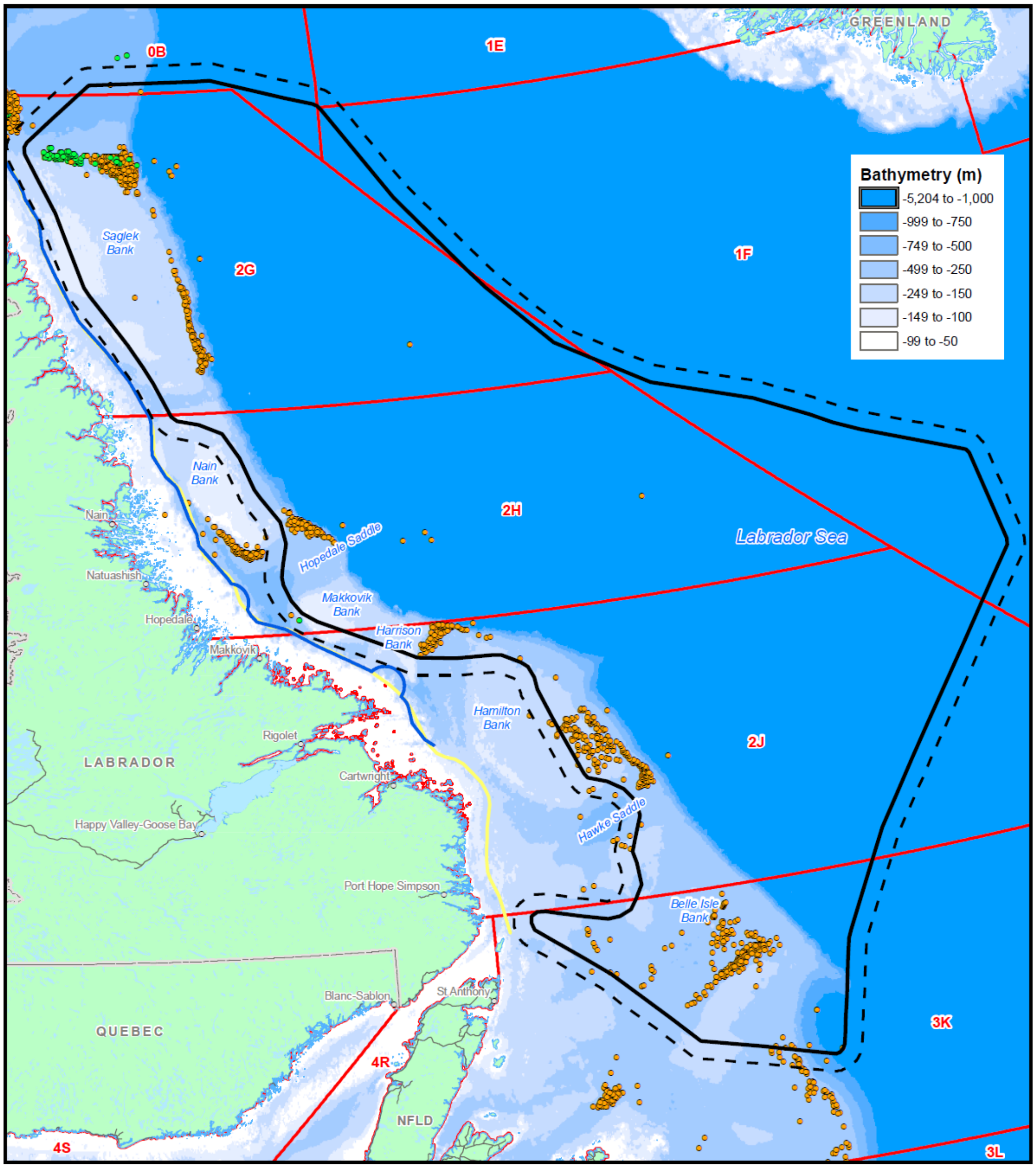

Figure 5.31: Harvesting Locations, Shrimp 2005 to 2009, November

As of June 16, 2011, the 2011 quota for SFA 4 is 4,700 t, 11,320 t for SFA5 and 52,387 t for SFA6. The SFA 6 quota, which was 85,725 t in 2009/10 (DFO 2010/018) was reduced to 52,387 t for 2010/11.

The following graph in Figure 5.32 shows the northern shrimp harvest by month (averaged) from the Study Area, for the period 2005 to 2009.

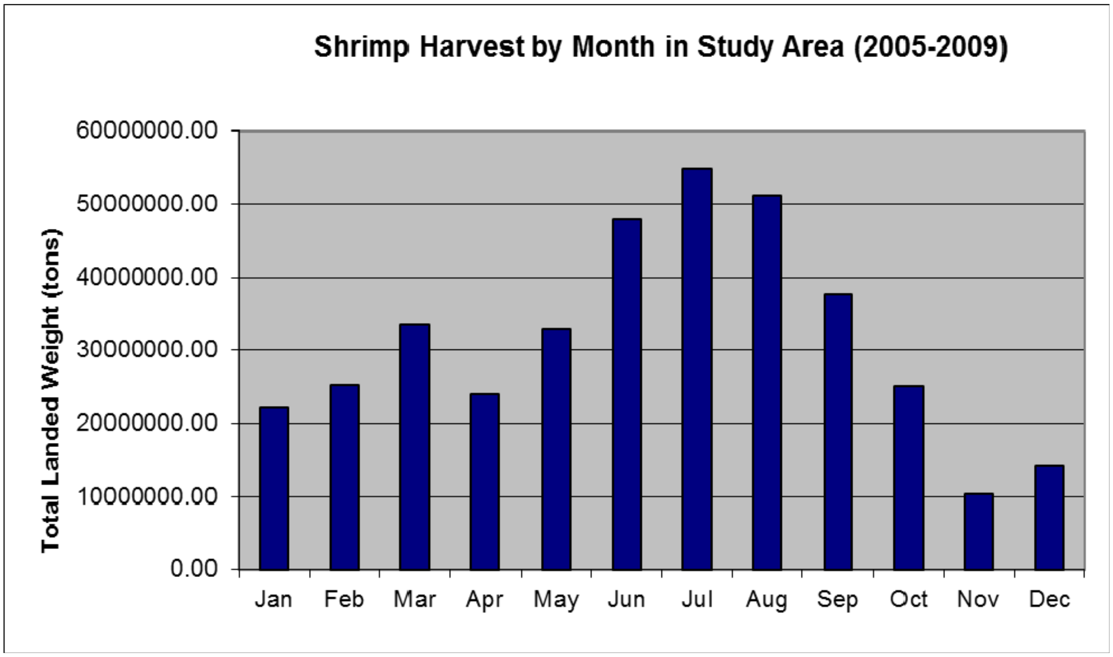

Figure 5.32: Monthly Northern Shrimp Harvesting From 2005 to 2009

5.11.5 SNOW CRAB (CHIONOECETES OPILIO)

Snow crab is of high importance in the Study Area's fisheries, averaging 7,504.4 tonnes from April to August and accounting for about 50% of the total harvest. The season is defined each year but typically runs in 2J north from June 15 to August 30 and in 2J south from May 1 to July 15, and in 3K from April to end of June. Because the fishery uses fixed gear (crab pots), the fishery poses a potential for seismic / fishing gear conflicts in those areas where the two marine activities might overlap. The Study Area overlaps with portions of crab fishing areas in 2H, 2J, and 3K.

The most recent DFO snow crab science advisory report (DFO 2010/020) notes that " landings in Div. 2H declined by 53% from 190 t in 2007 to 90 t in 2009, the effect of removal in 2010 in unknown. IN Div 2J landings increased by 60% from 2005-2008 and unchanged in 2009 but effort increased by 27%. In Div 3K offshore, landings decreased to 6,000 t in 2005, but doubled to 13,000 t in 2009. Landings returned to pre-2005 levels.

The FRCC's 2005 Strategic Conservation Framework for Atlantic Snow Crab (FRCC 2005) describes the general conduct of the offshore sector: "Vessels fishing up to and beyond 200 miles from the coast conduct voyages up to four and five days and greater depending on the vessel's holding system. Typically these vessels leave the traps for shorter periods, sometimes only a few hours, prior to retrieving the catch. Given that snow crab must be live at the time of landing and processing, the duration of fishing trips is limited, although some vessels are now able to keep crab live on board in tanks permitting them to extend the length of their trips." Quotas have been established in all management areas, the different fleets have trap and trip limits, and fish specified CFAs. Since the mid-2000s, electronic vessel monitoring systems (VMS) are required on all offshore vessels to ensure compliance (DFO 2010/020).

Figure 5.33 shows the annual snow crab quantity of harvest from the Study Area for 2005 to 2009. Figures 5.34 to 5.38 show the harvesting locations for the species (July to November, 2005 to 2009) in relation to the Study Area. The 2011 quotas for 2J (includes 2H) is 2,197 t, and 12,053 t for Div 3K.

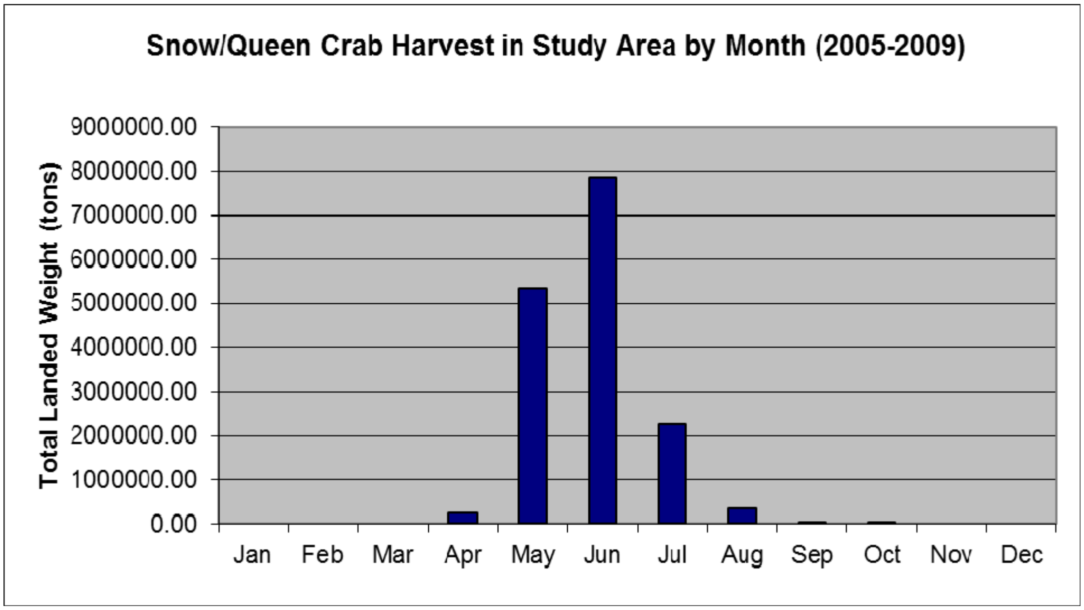

Figure 5.33: Yearly Snow Crab Harvest, 2005 to 2009

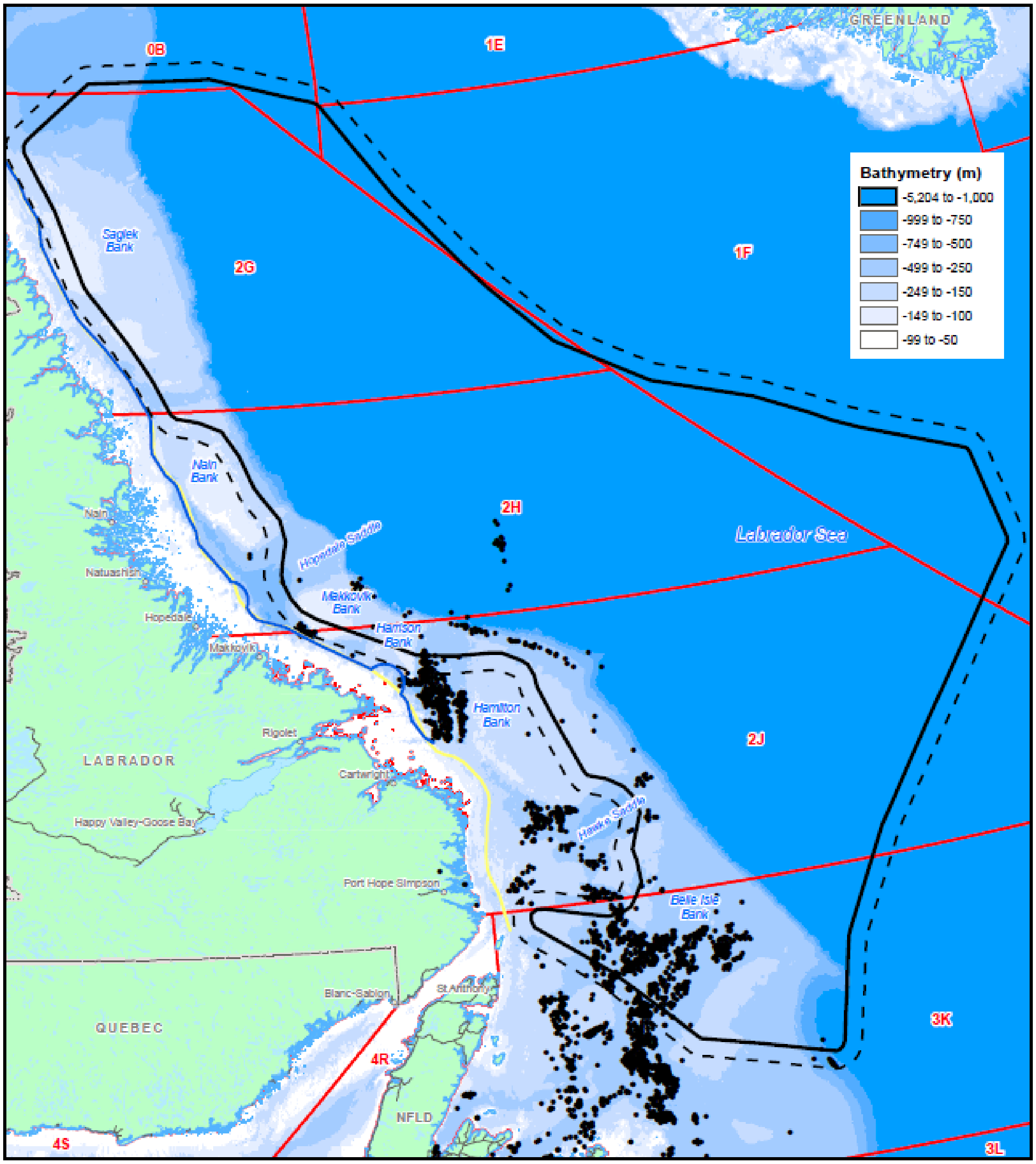

Figure 5.34: Harvesting Locations, Snow Crab, 2005 to 2009, July

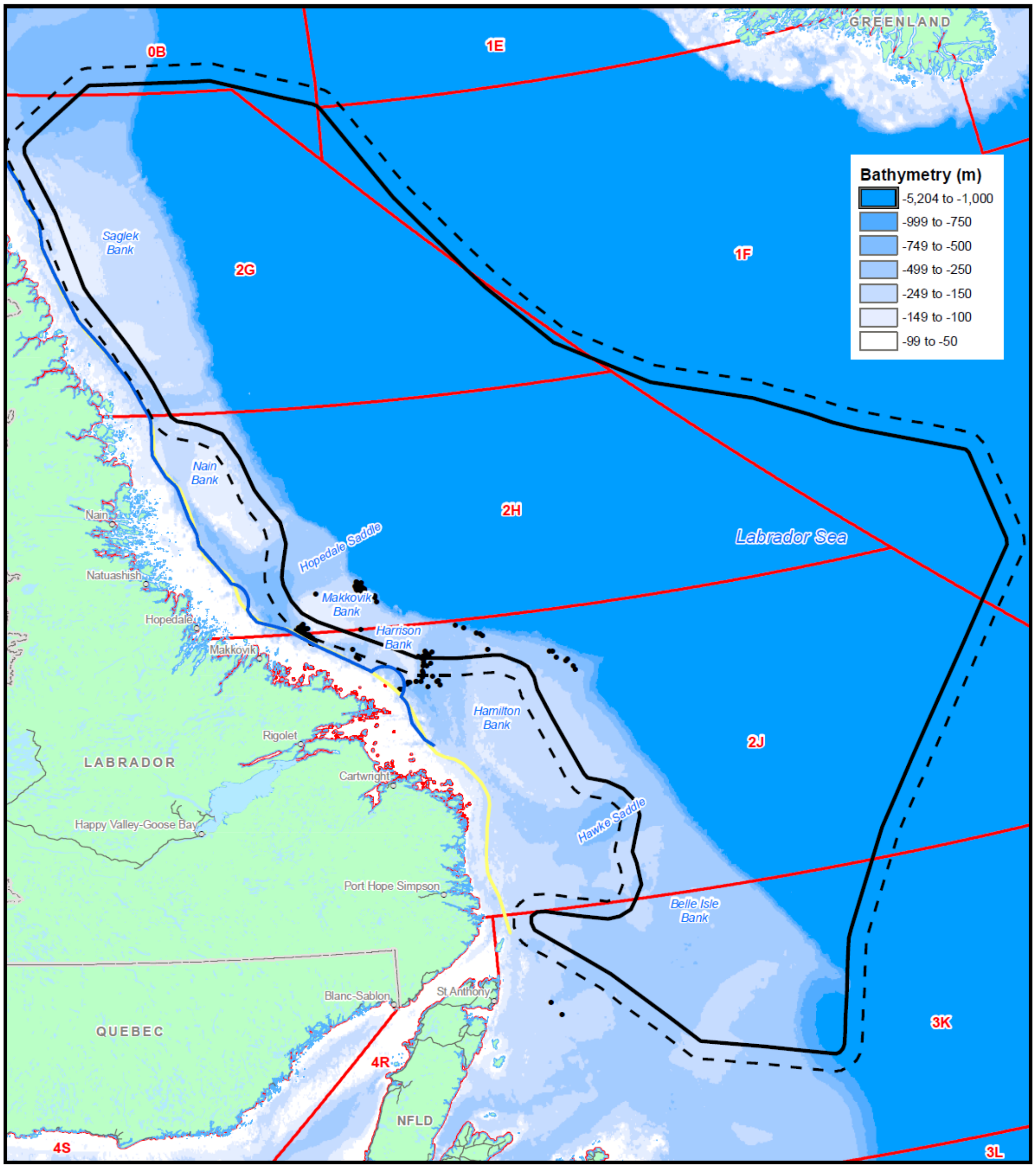

Figure 5.35: Harvesting Locations, Snow Crab, 2005 to 2009, August

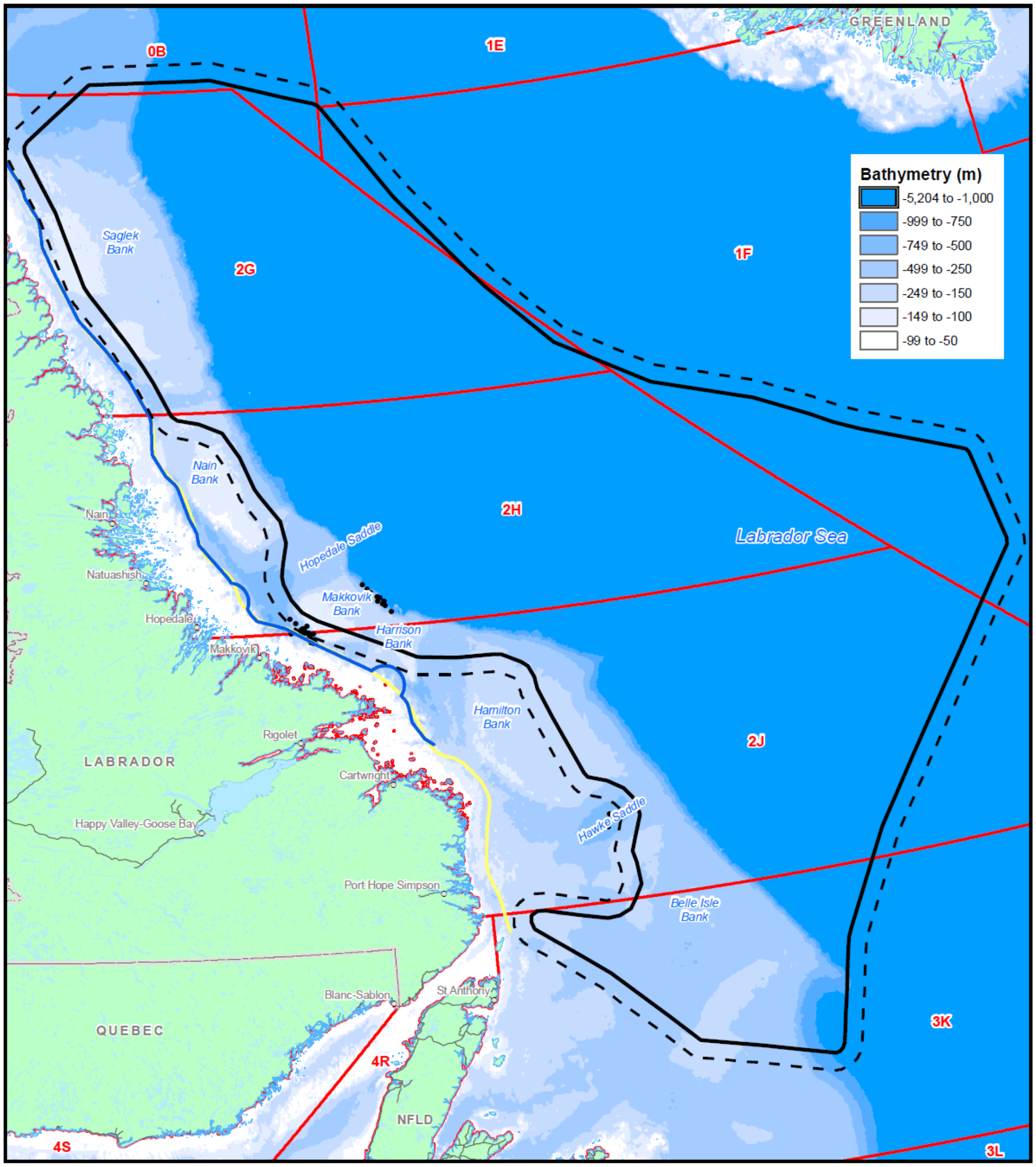

Figure 5.36: Harvesting Locations, Snow Crab, 2005 to 2009, September

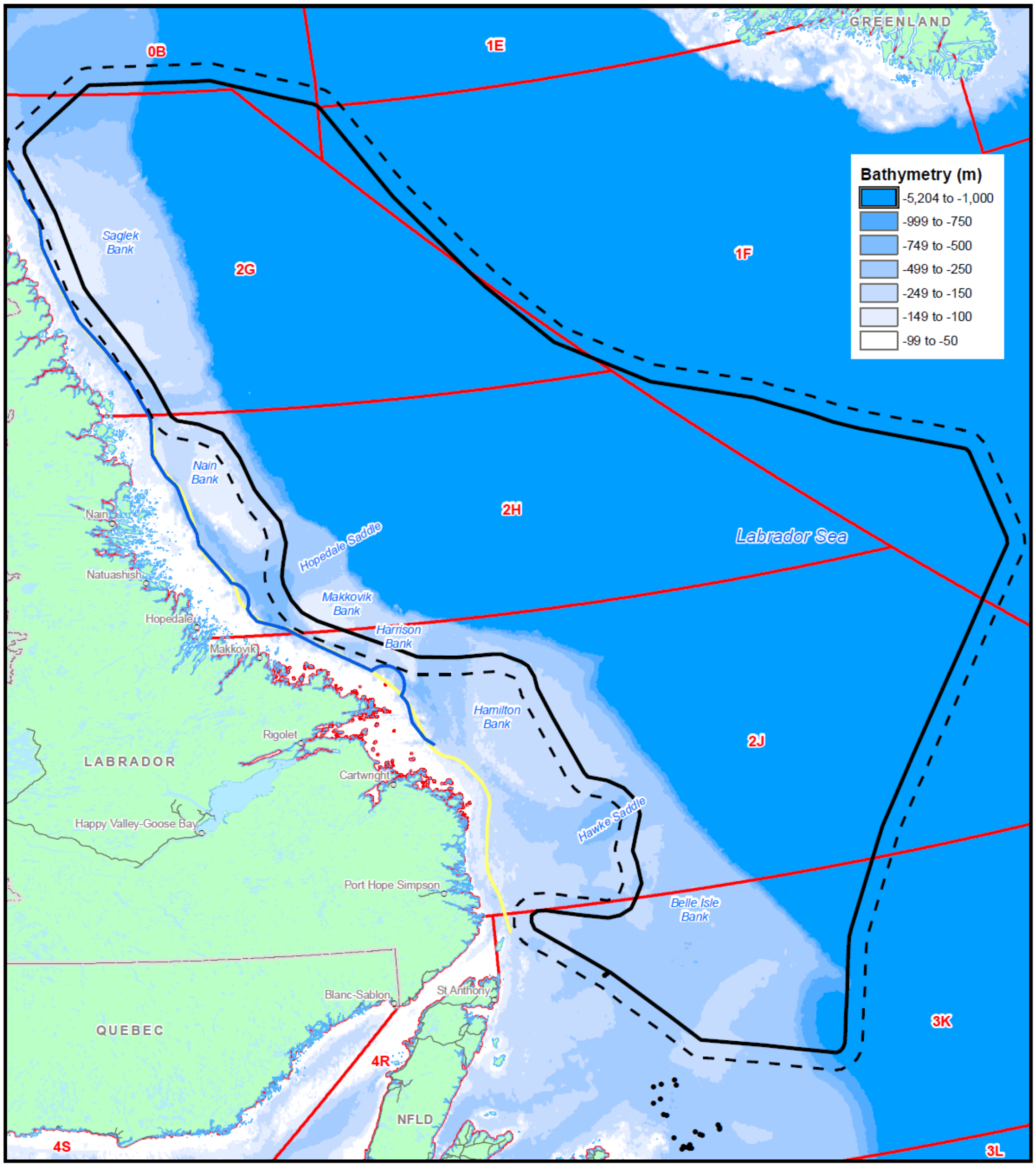

Figure 5.37: Harvesting Locations, Snow Crab, 2005 to 2009, October