

# Coral Harbour, ۲۰۵۰٬۲۰٬ Salliq, "Large flat island in front of the mainland"

### Introduction

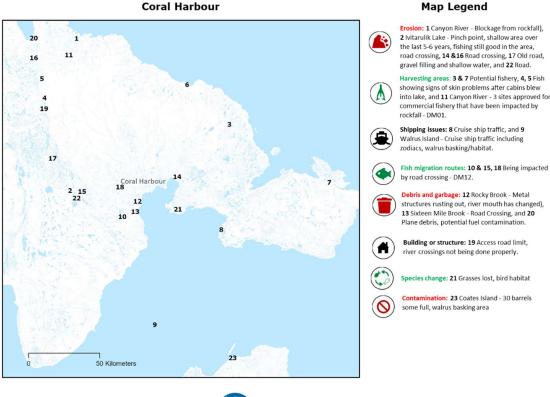
Coral Harbour is located on Southampton Island in Hudson Bay. In 2016 the population was 891. The economy in Coral Harbour comprises of traditional subsistence harvesting and hunting, and wage-based activities. The community's hunting and fishing area includes 250km north, 220km east, 170km west, and150km south, which includes the Roes Welcome Sound, Fisher Strait, and the northern coast of Coats Island<sup>1</sup>. The area is an important migration pathway for marine mammals such as narwhals, belugas and potentially bowheads, contains haul-out sites for walrus, is used by polar bears, and provides habitat for seabird colonies. Coral Harbour has one territorial park (Fossile Creek Trial) and two wildlife sanctuaries (Harry Gibbons Migratory Bird Sanctuary East Bay Migratory Bird Sanctuary)<sup>2</sup>.

# **Community Restoration Priorities**

**1.** The establishment of mandatory shipping lanes - should go south of Coates Island rather than between Walrus Island and Coates Island; **2.** Water level monitoring for tides and major lakes with commercial fisheries or char spawning; **3.** Investigate the impact of road crossings (due to silt buildup, chemicals, etc.), which may hamper and/or delay fish migration; and **4.** The removal of a rockslide on Canyon River.

# **Community Map and Workshop Highlights**

The CRN research team visited the community in March 2018. According to residents, Coates Island rivers are drying up and getting too shallow to dock. In the past 10 years the harbour in Coates Island has been covered with seaweed, so access is impossible at low tide. Other members noted that the sea ice is thinner in recent years, and that Coast Guard icebreakers impact ice melt speeds by accelerating the melt. The community is pursuing a new bridge to address the increased use of ATV crossings (roads bisecting rivers), which may have a negative impact on fish habitat.





# Literature Review

Streams are seasonal and only flow for a short period in summer, remaining dry or frozen for the remainder of the year<sup>1</sup>. Residents are worried about the environmental impacts of mining on the land and species that they hunt/fish. Fuel spills in the area could impact marine filter feeders such as clams and mussels<sup>1</sup>. Communities have ongoing concerns with the increase in marine traffic, specifically around Native Point, Walrus Island, and Coats Island<sup>3</sup>. Ships associated with mining come from Baker Lake and move through the channel between Southampton Island and Coats Island<sup>1</sup>.

Attributes	Examples of Environmental Changes and Observations
Sea ice	• The ice floe edge has become more hazardous <sup>1</sup> .
Seasonal events	<ul> <li>Spring seemed to be occurring earlier in the year, while fall seemed to be occurring later<sup>1</sup>.</li> <li>There had been very little snow during the winter of 2013-2014 compared with 2005 when snow accumulations restricted road access to the community airport resulting in delays for emergency medical evacuations<sup>1</sup>.</li> </ul>
Permafrost	• Slumping is occurring along the Canyon River, on the north end of the island <sup>4</sup> .
Localised erosion	• Residents have noted that three fishing lakes had rockslides in 2017, which caused a notable decline in Arctic char. Lakes closer to the ocean were not as badly affected. Residents would fish in the fall but because of the rockslides they can only go in April when there is enough snow. Hunting for seals, beluga, and narwhale in the inlet could also be impacted by the rockslides <sup>4</sup> .
Attributes Examples of Ecosystem Changes and Observations	
Polar bears	<ul> <li>Polar bears appear thinner than in previous years<sup>1</sup>. From the community's perspective, polar bears captured for research purposes were thinner, more aggressive, and their meat did not taste good<sup>5</sup>. Residents were confident that polar bears could adapt to current and future environmental changes<sup>5</sup>.</li> </ul>
Walrus	<ul> <li>In addition to Walrus, Bencas and Coats islands, a small population of walruses lives year-round in Roes Welcome Sound. Variable currents usually prevent extensive land fast ice formation in winter, and ice floes persist throughout summer allowing the walruses to haul out during the entire year<sup>1</sup>.</li> </ul>
Seals	<ul> <li>Ringed seals are found year-round on the land fast ice that forms along the coastline of Southampton Island. Bearded seals are found further offshore in the moving pack and pan ice<sup>1</sup>.</li> </ul>
Whales	• Previously bowhead whales were rarely seen at the floe edge but now they are abundant in May/June <sup>6</sup> .
Fisheries	<ul> <li>Landlocked or lake dwelling Arctic char are caught in the Cleveland and Sutton rivers, and the mouths of Bursting Brook and Sixteen Mile Brook between late June to the end of August or September<sup>1</sup>.</li> <li>Least cisco fish are caught at Salmon Pond, and lake trout in the Cleveland River and lakes on the Boa and Sutton rivers. Coats Island does not support char habitats as the lakes are generally shallow and freeze to the bottom in winter<sup>1</sup>.</li> </ul>
Birds	• Between 2004 and 2007 several common eiders deaths were reported <sup>7</sup> . These incidents coincided with an avian cholera outbreak in the northeastern Hudson Bay, Hudson Strait, and Ungava Bay area <sup>7</sup> .

#### Based on the Current Gaps in the Literature, Research Needs Include:

- Harvesting access restoration: The permafrost slumps along the Canyon river is an issue for Artic fish migrations. There is an urgent need for river enhancements so that fish will be able to travel upstream to the lakes to spawn<sup>4</sup>.
- Shipping route changes: Residents would prefer that ships go on the south side of Coats island to prevent disruptions to animals on islands closer to the shore<sup>4</sup>.
- Community engagement: In August 2019, the Minster of Fisheries, Oceans, and the Canadian Coast Guard, noted • that progress was being made on the Southampton Island Area of Interest. Working in partnership with the Kivallig Inuit Association, Fisheries and Oceans Canada identified the area as a priority for protection through community consultations, a peer-reviewed science advisory process and Indigenous knowledge<sup>8</sup>.

#### Selected references

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