

Key Site 21: McKinley Bay–Phillips Island, Northwest Territories

Location: 70°07'23"N, 130°57'3"W

Size: 593 km²

Description: The McKinley Bay–Phillips Island area is located on the northern coast of the Tuktoyaktuk Peninsula, 120 km northeast of Tuktoyaktuk. It is an area of convoluted coastline, numerous sand barrier islands, and sheltered bays and lagoons. Inland from the Beaufort Sea coast, the relief is low and the landscape characterized by numerous ponds and lakes, abundant tundra polygons, extensive wetlands, and lowland tundra.

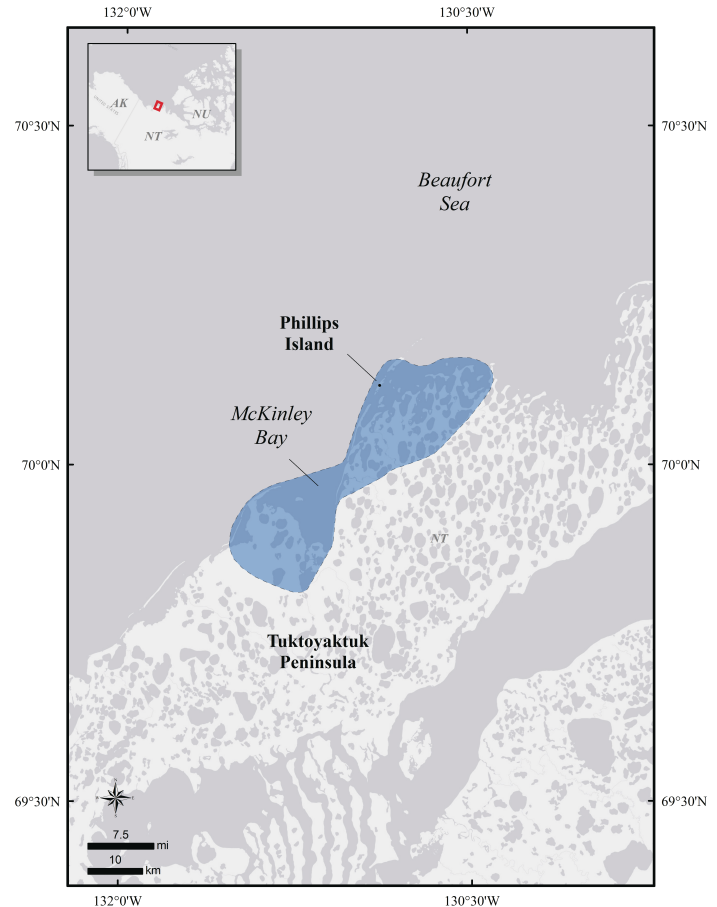
McKinley Bay is a large (>100 km²), shallow, and sheltered bay. Since 1979, the outer part of the bay has been used as a harbor and support base for offshore drilling operations in the Beaufort Sea. An entrance channel and mooring basin were dredged in the outer bay, and an artificial island (Phillips Island) was constructed to shelter ships. An airstrip, accommodations for crews, and a number of related facilities were constructed on the island as well. The use of McKinley Bay for harboring ships peaked in 1982 to 1985, and use of the area fell off greatly in the early 1990s. Some industry-related structures and facilities used by reindeer herders also occur on the northwestern side of McKinley Bay, near Atkinson Point.

The area near Phillips Island, like much of the northern coastline of the Tuktoyaktuk Peninsula, features a diversity of coastal landforms, including bays and lagoons of various sizes, offshore barrier beaches and sand bars, projecting and recurved sand spits, muddy tidal flats and marshes, numerous islands, and sandy/gravelly shoreline beaches. The lowlands near the coast contain numerous grass ponds and lakes and wetland communities dominated by grasses and sedges.

Precision and Correction of Abundance

Estimates Presented: Abundance estimates presented for this key habitat site have not been adjusted to account for incomplete detection or other biases. Abundance estimates should, therefore, be treated as minimum estimates.

Biological Value: McKinley Bay and the various bays and lagoons near the coast are heavily used by



molting and pre-molting ducks (Arner et al. 1985, Alexander et al. 1988, Cornish and Dickson 1994, Bartzen et al. 2017). Historically, well over 25,000 molting diving ducks (sea ducks and Scaup) have been present in the McKinley Bay–Phillips Island area during most years, including than 20,000 sea ducks—primarily Long-tailed Duck (*Clangula hyemalis*), Surf Scoter (*Melanitta perspicillata*) and White-winged Scoter (*M. deglandi*), which use the marine part of McKinley Bay during most years (Alexander et al. 1988a, 1988b, Cornish and Dickson 1994). Research conducted there in 2001–2002 (Bartzen et al. 2017) indicated fewer than 10,000 sea ducks.

Populations of many sea duck species have been in decline in the western Arctic since the 1970s (Dickson and Gilchrist 2002), making recognition and conservation of their habitat of even greater importance.

Approximately 7300 Western King Eiders (*Somateria spectabilis*) and Pacific Common Eiders (*S. mollissima v-nigra*) are found in this area in small colonies

(Alexander and Hawkings 1988, Alexander et al. 1988a, 1988b).

Sensitivities: Lowland habitats are susceptible to terrain disturbance through the disruption of natural drainage patterns and the melting of permafrost. Sea ducks are sensitive to disturbance during the nesting, brood-rearing, and molting periods.

Potential Conflicts: The general region has been subject to extensive seismic and exploratory drilling activity. Development of gas processing plants and a pipeline network is possible in the near future. Additional dredging of the harbor and/or development of facilities at McKinley Bay could have an impact on migratory birds and their habitat. In 2016 Canada designated the Arctic waters indefinitely off limits to new offshore oil and gas activities and in 2019 suspended the terms of all active oil and gas licenses in the western and eastern Arctic offshore areas. The moratorium will be in place until a review process for existing licenses is completed, which is expected in 2022.

Status: This key site has been identified as Class D (“lands and waters where cultural or renewable resources are of particular significance and sensitivity throughout the year”) in the Tuktoyaktuk Community Conservation Plan (WMAC 2016). McKinley Bay is part of a Key Terrestrial Habitat Site (Site 10; Latour et al. 2008). The terrestrial areas are under territorial jurisdiction while the marine waters are under federal jurisdiction.

Literature Cited

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