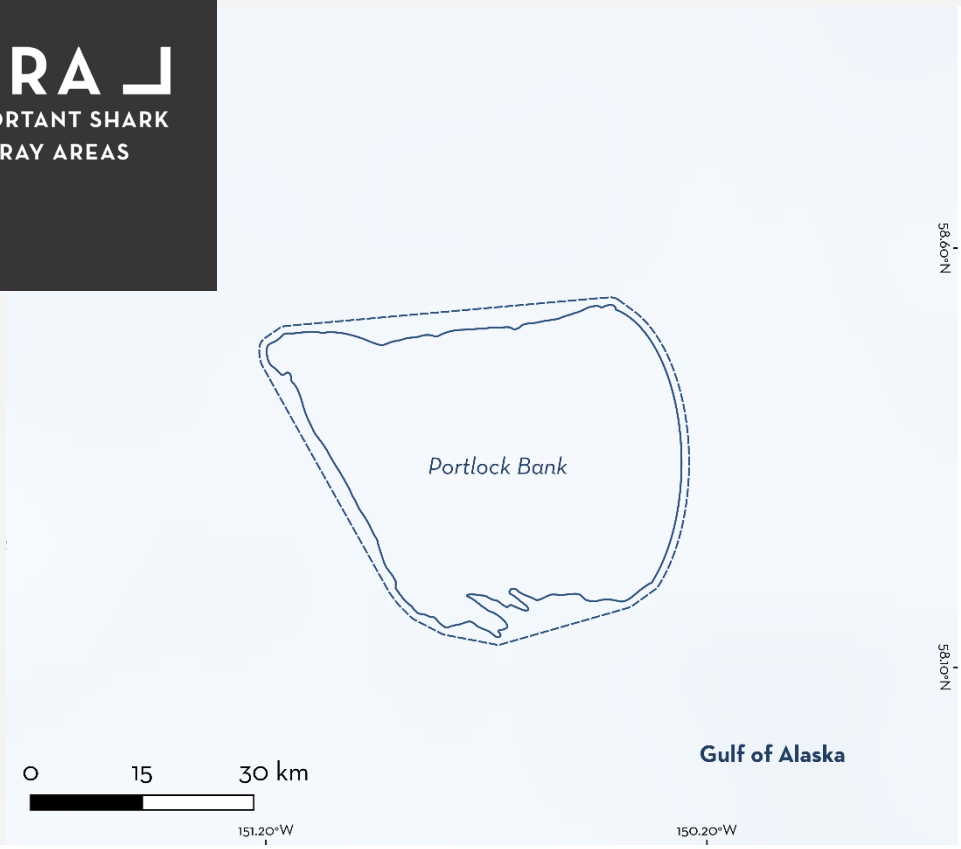
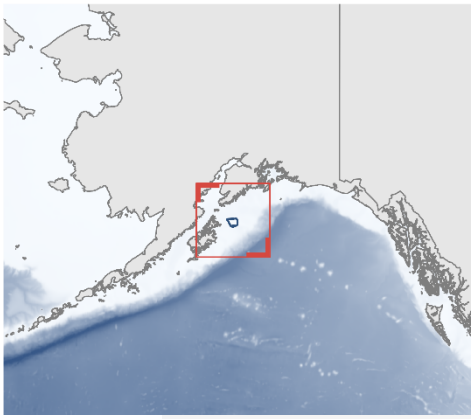
ISRA
IMPORTANT SHARK AND RAY AREAS





Blue lines indicate the area meeting the ISRA Criteria; dashed lines indicate the suggested buffer for use in the development of appropriate place-based conservation measures

PORTLOCK BANK ISRA

North American Pacific Region

UNITED STATES OF AMERICA

0–100 metres

1,628.8 km²

SUMMARY

Portlock Bank is located in Alaskan waters of the United States of America. It is situated in the Gulf of Alaska and is a shallow bank surrounded by deep channels and troughs. It is characterised by sandy, muddy, and gravel substrates. Strong currents and bathymetry around the area transport nutrient-rich waters to the surface that enhance productivity. Within this area there are: **undefined aggregations** (North Pacific Spiny Dogfish *Squalus suckleyi*).

CRITERIA

Sub-criterion C5 – Undefined Aggregations

DESCRIPTION OF HABITAT

Portlock Bank is located in Alaskan waters of the United States of America. The area is situated in the Gulf of Alaska, northeast of Marmot Island and is surrounded by Amatuli Trough to the north and Stevenson Trough to the south. The position of this shallow bank isolates it from the bank complex south of Kodiak Island by deep channels. It is characterised by sandy, muddy, and gravel substrates (Rooney 2008).

The area is influenced by strong ocean currents from the Alaska Stream that flows along the continental shelf break. This current interacts with the troughs and bathymetry around the area to transport nutrient-rich waters that enhance productivity year-round. Intense phytoplankton blooms occur across the shelf in the boreal spring and in the area during summer (Cheng et al. 2012).

This Important Shark and Ray Area is benthic and pelagic and is delineated from surface waters (0 m) to 100 m based on the bathymetry of the area.

ISRA CRITERIA

SUB-CRITERION C5 – UNDEFINED AGGREGATIONS

Portlock Bank is an important area for undefined aggregations of one shark species.

Between 1982–2025, the Alaska Fisheries Science Center (AFSC) - National Oceanic and Atmospheric Administration (NOAA) conducted trawl surveys during late spring and summer in the Bering Sea, the Aleutian Islands, and the Gulf of Alaska (NOAA-AFSC 2026). Temporal coverage of the surveys varies per region with most conducted annually (e.g., continental shelf surveys in the Bering Sea), or biennially (e.g., Gulf of Alaska) since 1999 (Hoff 2016; Siple et al. 2024; Markowitz et al. 2025; Dowlin et al. 2026). The continental slope survey in the Bering Sea stopped in 2016 (Markowitz et al. 2025). Surveys were conducted at fixed stations or following a stratified random survey design and covering depths from 0–1,000 m divided in multiple depth strata across 300–500 stations per region. In general, otter trawls of ~25 m headrope and ~34 m footrope were used and tows lasted between 15–30 minutes at a speed of ~3 knots. Catch-per-unit-effort (CPUE) was estimated as the number of individuals or number of egg cases per square kilometre (no./km^2) and the area swept (km^2) as the linear distance towed, multiplied by the mean net width (Hoff 2016; Siple et al. 2024; Markowitz et al. 2025; Dowlin et al. 2026).

In addition, between 1998–2025, the International Pacific Halibut Commission conducted annual longline surveys during summer across nearshore and offshore waters from Southern California to Alaskan waters (Gulf of Alaska, Aleutian Islands, and Bering Sea; IPHC 2026a). Surveys are conducted in ~1,200 stations each year at depths 15–503 m. Longlines consist of 4–8 skates (longline units) with 96–104 hooks per skate with soak times between 5–24 hours (IPHC 2026b). Non-halibut species are counted either as subsample counts (20% observations, the majority for sharks) and whole-set counts (100% observations). Nominal CPUE was estimated as the number of individuals caught per 100 hooks per hour.

Between 1998–2025, aggregations of North Pacific Spiny Dogfish were regularly recorded in this area. During this period, North Pacific Spiny Dogfish were recorded in 2,039 tows during trawl surveys across the whole region, 99 (4.9%) of which were recorded inside this area in June–August of all surveyed years and at depths of 20–357 m (NOAA-AFSC 2026). The highest mean CPUE of North Pacific Spiny Dogfish in the region was reported from this area (mean = 770.5 individuals/km^2; 25.3–16,563.2) compared to adjacent areas in the region (mean CPUE outside the area = 253.9 individuals/km^2; 17.5–26,737.2). Multiple individuals (>10) were recorded in 32 tows (32.3% of the tows

with the species captured inside this area) with 420 individuals being the maximum number recorded in a single tow (mean = 19.1 individuals/haul).

Between 1998–2025, North Pacific Spiny Dogfish were also recorded in 15,525 sets during longline surveys across the whole region, 571 (3.7%) of which were recorded inside this area in June–September (IPHC 2026a). For this species, individuals were counted in subsamples (20% of the observations) in 12,132 sets (78.1% of total). Aggregations of between 10–74 individuals were recorded in 251 sets (43.9% of the total sets in the area). This area has also been highlighted as important since 2013 due to catches of North Pacific Spiny Dogfish according to commercial fisheries data, especially from non-pelagic trawls (Tribuzio et al. 2022). High abundances for North Pacific Spiny Dogfish have been associated with aggregations and are mostly related to seasonal increases in abundance of prey species (Beamish et al. 1992). Additional information is required to understand the nature and function of these aggregations.

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QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
SHARKS												
Squalus suckleyi	North Pacific Spiny Dogfish	LC	0–1,236							X		

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Lamna ditropis	Salmon Shark	LC
RAYS		
Bathyraja interrupta	Bering Skate	LC
Beringraja binoculata	Big Skate	LC
Caliraja rhina	Longnose Skate	LC

IUCN Red List of Threatened Species Categories are available by searching species names at www.iucnredlist.org Abbreviations refer to: CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.

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