

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

EASTERN BAY OF PLENTY ISRA

New Zealand & Pacific Islands Region

SUMMARY

Eastern Bay of Plenty is located in northeast New Zealand. The area is characterised by inner and outer shelf benthic habitats dominated by sands and gravels. It includes Ōhiwa Harbour, a large estuarine system as well as rocky reef habitats. The area overlaps the North Eastern North Island (offshore) Key Biodiversity Area. Within this area there are: **threatened species** and **reproductive areas** (Smooth Hammerhead *Sphyrna zygaena*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas

NEW ZEALAND

0-100 metres

2,263.6 km²





DESCRIPTION OF HABITAT

Eastern Bay of Plenty is located on the northeast side of New Zealand's North Island. The area is characterised by a largely sandy coastline west of Opape and mainly rocky coastline east of it. It includes Ōhiwa Harbour, a large estuarine system. The harbour is shallow (<11 m) and is characterised by extensive intertidal flats with a large portion of it drying at low tides. Inner and outer shelf habitats in Eastern Bay of Plenty are predominantly sands, interspersed with patchy gravels. Offshore rocky reef habitat is largely confined to the area around Moutohora (Whale Island) and Rurima Island. Shallow rocky reefs occur as a band along the coastline (Haggitt et al. 2008).

The major oceanographic influence on the Eastern Bay of Plenty is the East Auckland Current (Chapell 2013; Stevens et al. 2021). This is a western boundary current formed by the reattachment of an extension of the East Australian Current to the New Zealand continental margin off North Cape. The East Auckland Current flows southward as a series of warm core eddies and then turns east across the Bay of Plenty, before flowing south again at East Cape. For most of the year, it is located beyond the 1,000 m isobath but during austral summer northeast winds push oceanic water onto the shelf. Average sea surface temperatures range from ~14°C in August (winter) up to 21°C in February (summer) (Chappell 2013).

The area overlaps with the North Eastern North Island (offshore) Key Biodiversity Area (KBA 2024).

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

ISRA CRITERIA

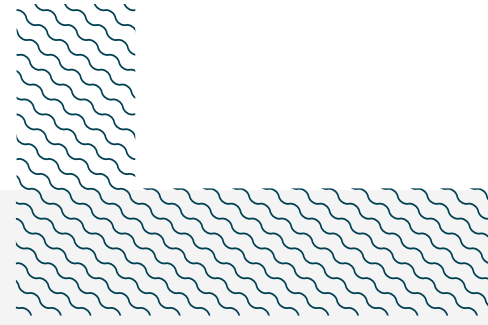
CRITERION A - VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Vulnerable Smooth Hammerhead (Rigby et al. 2019).

SUB-CRITERION C1 - REPRODUCTIVE AREAS

Eastern Bay of Plenty is an important reproductive area for one shark species.

Based on commercial catch data (mostly set nets, bottom longlines and bottom trawls) from 2005-2014 and trawl surveys between 1961-2014 from New Zealand's North Island, neonates and young-of-the-year (YOY) Smooth Hammerheads are regularly caught in Eastern Bay of Plenty (Francis 2016; CAJ Duffy pers. obs. 2024). Of 208 individuals recorded in trawl surveys, 55.3% (n = 115) were <60 cm total length (TL), with smaller sharks observed in summer and early autumn (January-March; Francis 2016). The reported size-at-birth for the species is 49-63 cm TL (Ebert et al. 2021) confirming these were neonates or YOY. Eastern Bay of Plenty and Firth of Thames were the areas with the largest number of these life stages recorded during the trawl surveys. In addition, juveniles (~100 cm TL) were also common in Eastern Bay of Plenty, especially in the eastern side of the area, around Whakatane (Francis 2016). Historical research trawl surveys conducted between 1961-1997 also suggested that Eastern Bay of Plenty was one of the areas with higher catches of Smooth Hammerheads in all New Zealand waters, along with the Firth of Thames (Anderson et al. 1998). YOY individuals are still observed in the area by recreational anglers (iNaturalist 2024; CAJ Duffy pers. obs. 2024).



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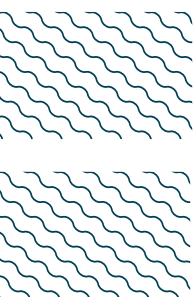
QUALIFYING SPECIES

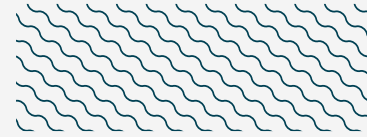
Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met									
				A	B	C1	C2	C3	C4	C5	D1	D2	
SHARKS													
<i>Sphyrna zygaena</i>	Smooth Hammerhead	VU	0-200	X		X							

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
<i>Alopias vulpinus</i>	Common Thresher	VU
<i>Carcharhinus brachyurus</i>	Copper Shark	VU
<i>Carcharodon carcharias</i>	White Shark	VU
<i>Cephaloscyllium isabellum</i>	Carpet Shark	LC
<i>Galeorhinus galeus</i>	Tope	EN
<i>Isurus oxyrinchus</i>	Shortfin Mako	EN
<i>Mustelus lenticulatus</i>	Rig	LC
<i>Notorynchus cepedianus</i>	Broadnose Sevengill Shark	VU
<i>Prionace glauca</i>	Blue Shark	NT
<i>Rhincodon typus</i>	Whale Shark	EN
RAYS		
<i>Bathytoshia brevicaudata</i>	Smooth Stingray	LC
<i>Bathytoshia lata</i>	Brown Stingray	VU
<i>Mobula birostris</i>	Oceanic Manta Ray	EN
<i>Myliobatis brevicaudatus</i>	Southern Eagle Ray	LC
<i>Tetronarce nobiliana</i>	Great Torpedo Ray	LC
<i>Zearaja nasuta</i>	Rough 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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