

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

BANDA ARC ISRA

Asia Region

SUMMARY

Banda Arc is located in the Banda Sea of eastern Indonesia. The area includes island groups and is influenced by monsoon trade winds. These produce large-scale upwellings on the eastern side during the southeast monsoon (June to September). The area overlaps with the Raja Ampat and Northern Bird's Head Ecologically or Biologically Significant Marine Area and with six marine protected areas. Within this area there are: **threatened species** and **movement areas** (Whale Shark *Rhincodon typus*).

CRITERIA

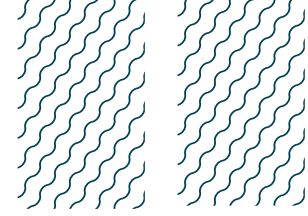
Criterion A - Vulnerability; Sub-criterion C4 - Movement

INDONESIA

0-1,928 metres

105,729 km²





DESCRIPTION OF HABITAT

Banda Arc is located in the Banda Sea of eastern Indonesia. It is spread across three provinces: Maluku, West Papua, and Southwest Papua. The area includes several islands (e.g., southern Maluku Islands) and bays (e.g., Kaimana).

The area is highly influenced by monsoon winds (Moore et al. 2003). The southeast monsoon (June to September) produces lower sea surface temperatures and large-scale upwelling in the eastern Banda Sea, with upwelling occurring year-round in Kaimana. The northwest monsoon (December to March) produces higher temperatures and a depression of the thermocline (Moore et al. 2003; Iskandar 2010). Sea surface temperatures range from 26.5 to 29.5°C year-round in this area (Iskandar 2010).

The area overlaps with the Raja Ampat and Northern Bird's Head Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024). It also overlaps with six protected areas: Maluku Tenggara, Kaimana Locally Managed Marine Area, Pulau Sabuda dan Pulau Tataruga Wildlife Reserve, KKPD Kabupaten Kepulauan Raja Ampat Marine Recreational Park, Teluk Lelintah Wildlife Sanctuary, and KKPD Pulau Kei Kecil, Pulau-Pulau, Dan Perairan Sekitarnya.

This Important Shark and Ray Area is pelagic and is delineated from inshore and surface waters (0 m) to 1,928 m based on the global depth range of the Qualifying Species in the area.

ISRA CRITERIA

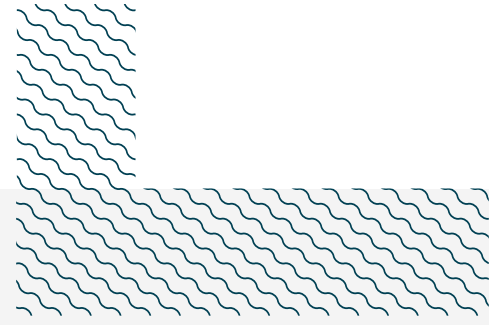
CRITERION A - VULNERABILITY

One Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species. The Whale Shark is assessed as Endangered (Pierce & Norman 2016).

SUB-CRITERION C4 - MOVEMENT AREAS

Northern Papua is an important movement area for one shark species.

Between 2016–2023, eight Whale Sharks, with an average size of 460 cm total length (TL), were tagged in Kaimana (n = 7) and Raja Ampat (n = 1) (Konservasi Indonesia unpubl. data 2023). All tagged individuals moved back and forth from coastal aggregation and feeding sites in Papua to other aggregation sites in the Banda Sea with no seasonality associated with the movements (Mayers et al. 2020; Konservasi Indonesia unpubl. data 2023). Two individuals moved to the Flores Sea and to areas within the Exclusive Economic Zone of East Timor and Papua New Guinea, but these movements were not regular nor predictable (Konservasi Indonesia unpubl. data 2023).



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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>Rhincodon typus</i>	Whale Shark	EN	0-1,928	X						X			

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Moore ST, Marra J, Alkatiri A. 2003. Response of the Banda Sea to the southeast monsoon. *Marine Ecology Progress Series* 261: 41-49. <https://doi.org/10.3354/meps261041>

Pierce SJ, Norman B. 2016. *Rhincodon typus*. *The IUCN Red List of Threatened Species* 2016: e.T19488A2365291. <https://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T19488A2365291.en>