

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

## PAPUA-MICRONESIA CORRIDOR ISRA

#### **Asia Region**

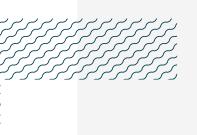
## SUMMARY

Papua-Micronesia Corridor is located within national waters of Indonesia, Federated States of Micronesia, and areas beyond national jurisdiction (ABNJ). It includes productive coastal waters in north Papua and oceanic waters in the Bismarck Sea and the North Pacific. The area overlaps with one Ecologically or Biologically Significant Marine Area, two Key Biodiversity Areas, and three marine protected areas. Within the area there are: **threatened species** and **areas important for movement** (Whale Shark *Rhincodon typus*).

#### CRITERIA

Criterion A - Vulnerability; Sub-criterion C4 - Movement

INDONESIA FEDERATED STATES OF MICRONESIA ABNJ - - -0-1,928 metres - - -420,817 km<sup>2</sup>



sharkrayareas.org



## DESCRIPTION OF HABITAT

Papua-Micronesia Corridor is located within the Exclusive Economic Zones (EEZ) of Indonesia and the Federated States of Micronesia and expands into areas beyond national jurisdiction (ABNJ). It spans coastal waters in north Papua, including Cenderawasih Bay, and is characterised by large river discharges that contribute to high productivity (Prentice & Hope 2007). Oceanic waters are within the Pacific Warm Pool which are characterised by sea surface temperatures (SST) >28°C.

The area is strongly influenced by monsoon seasons. During the northwest monsoon (November-March) warmer SST and intense precipitation are common, while during the southeast monsoon (May-October), SST in the area is colder, rainfall decreases, and strong winds are common (Prentice & Hope 2007).

The area overlaps with the Remetau group: South-West Caroline Islands and Northern New Guinea Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024). It also overlaps with two Key Biodiversity Areas (KBA): Pacific, Western Central 2 - Marine and Pacific, Western Central 4 -Marine (KBA 2024a, 2024b). In addition, it overlaps with three marine protected areas, Teluk Cendrawasih Marine National Park, KKPN Padaido Marine Recreational Park, and KKPD Biak Nimfor.

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

## **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

Papua-Micronesia Corridor is an important movement area for one shark species.

Between 2016-2023, 34 Whale Sharks measuring 300-700 cm total length (TL) were tagged at Cenderawasih Bay with satellite transmitters (Konservasi Indonesia unpubl. data 2023). Tagged individuals moved back and forth from coastal aggregation and feeding sites in Papua to areas in the Bismarck Sea and the North Pacific Ocean, with incursions into the EEZ of the Federated States of Micronesia and into international waters. A few individuals moved to areas within the EEZ of Palau and the Marshall Islands, but these movements were not regular or predictable (Meyers et al. 2020; Sianipar 2022; Meyers 2023; Konservasi Indonesia unpubl. data 2023).

Tagged sharks did not depart in a specific season to offshore areas but moved to eastern parts of the bay and Papua from November to March and to western parts of the bay from May to October (Meyers 2023; Konservasi Indonesia unpubl. data 2023). While in coastal areas, individuals stayed mostly in shallow waters (<50 m), whereas in oceanic waters they moved at greater depths (>250 m), probably related to feeding in mesopelagic waters at night (Sianipar 2022; Meyers 2023). Whale Sharks spend most of the time within coastal areas at temperatures >28°C while in offshore areas they are distributed at lower temperatures (18-28°C; Meyers 2023; Konservasi Indonesia unpubl. data 2023).

#### Acknowledgments

Mochamad Iqbal Herwata Putra (Konservasi Indonesia), Edy Setyawan (Independent Researcher), Abraham B Sianipar (Independent Researcher), Ismail Syakurachman (Konservasi Indonesia), Abdi W Hasan (Konservasi Indonesia), Mark V Erdmann (Conservation International), and Emiliano García Rodríguez (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 9 – Asia workshop for their contributions to this process.

This factsheet has undergone review by the ISRA Independent Review Panel prior to its publication.

This project was funded by the Shark Conservation Fund, a philanthropic collaborative pooling expertise and resources to meet the threats facing the world's sharks and rays. The Shark Conservation Fund is a project of Rockefeller Philanthropy Advisors.

#### Suggested citation

IUCN SSC Shark Specialist Group. 2024. Papua-Micronesia Corridor ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

# QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				Α	В	Cı	C2	C3	C4	C5	Dı	D2
SHARKS												
Rhincodon typus	Whale Shark	EN	0-1,928	Х					Х			



## REFERENCES



**Convention on Biological Diversity (CBD). 2024.** Remetau group: South-West Caroline Islands and Northern New Guinea. Ecologically or Biologically Significant Areas (EBSAs). Available at https://chm.cbd.int/database/record?documentID=200037 Accessed February 2024.

Key Biodiversity Areas (KBA). 2024a. Key Biodiversity Areas factsheet: Pacific, Western Central 2 – Marine. Available at: https://www.keybiodiversityareas.org/site/factsheet/30651 Accessed February 2024.

**Key Biodiversity Areas (KBA). 2024b.** Key Biodiversity Areas factsheet: Pacific, Western Central 4 – Marine. Available at: https://www.keybiodiversityareas.org/site/factsheet/30653 Accessed February 2024.

**Meyers MM**. **2023**. Investigating the horizontal and vertical movement patterns of whale sharks in Cenderawasih Bay, Indonesia. Unpublished PhD Thesis, The University of Western Australia, Perth.

Meyers MM, Francis MP, Erdmann M, Constantine R, Sianipar A. 2020. Movement patterns of whale sharks in Cenderawasih Bay, Indonesia, revealed through long-term satellite tagging. *Pacific Conservation Biology* 26: 353–364. https://doi.org/10.1071/PC19035

**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

**Prentice ML, Hope G. 2007.** Climate of Papua. In: Marshall AJ, Beehler BM, eds. *The ecology of Papua*. New York: Periplus Editions, 479-494.

**Sianipar AB. 2022.** Regionally contrasting movement behaviour of sub-adult whale sharks in Indonesia. Unpublished Master Thesis, Murdoch University, Perth.