

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

SERAM SEA ISRA

Asia Region

SUMMARY

Seram Sea is located in eastern Indonesia. The area is characterised by an extended slope with deep waters and the presence of submarine canyons, troughs, and seamounts. Within this area there are: **threatened species** and **movement areas** (Oceanic Manta Ray *Mobula birostris*).

CRITERIA

Criterion A - Vulnerability; Sub-criterion C4 - Movement

—	—
INDONESIA	—
—	—
0-1,246 metres	—
—	—
15,167 km²	—
—	—





DESCRIPTION OF HABITAT

Seram Sea is located in eastern Indonesia. It is situated between Misool Island, West Papua, and Seram Island and is part of the provinces of Maluku, West Papua, and Southwest Papua. The area is characterised by an extended slope with deep waters and the presence of submarine canyons, troughs, and seamounts.

The area is highly influenced by monsoon winds (Moore et al. 2003). The southeast monsoon (June–September) produces lower sea surface temperatures and large-scale upwelling while the northwest monsoon (December–March) produces higher temperatures and a depression of the thermocline (Moore et al. 2003; Iskandar 2010).

This Important Shark and Ray Area is pelagic and is delineated from surface waters (0 m) to 1,246 m based on the global depth range of the Qualifying Species.

ISRA CRITERIA

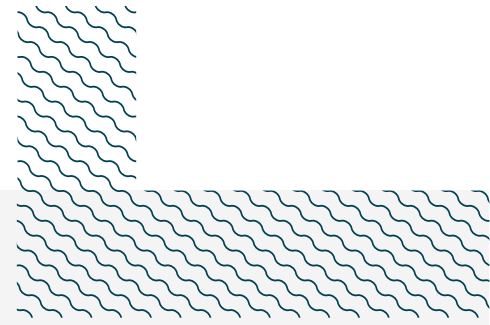
CRITERION A – VULNERABILITY

One Qualifying Species within the area is considered threatened with extinction according to the IUCN Red List of Threatened Species. The Oceanic Manta Ray is assessed as Endangered (Marshall et al. 2022).

SUB-CRITERION C₄ – MOVEMENT AREAS

Seram Sea is an important movement area for one ray species.

Between 2012–2016 and during 2022, 13 Oceanic Manta Rays were tagged with satellite transmitters at cleaning stations in southeast Misool (E Setyawan & CS Beale unpubl. data 2024). Tracking of tagged individuals lasted between 60–270 days (average, 164 days). Tagged rays moved back and forth to offshore areas in the Seram Sea, to coastal areas around Seram Island, and to coastal aggregation sites and cleaning stations in West Papua (E Setyawan & CS Beale unpubl. data 2024). No seasonality was found in these movements.



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

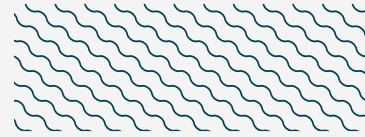
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Suggested citation

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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	
RAYS													
<i>Mobula birostris</i>	Oceanic Manta Ray	EN	0-1,246 m	X						X			



REFERENCES

Iskandar I. 2010. Seasonal and interannual patterns of sea surface temperature in Banda Sea as revealed by self-organizing map. *Continental Shelf Research* 30: 1136–1148. <http://dx.doi.org/10.1016/j.csr.2010.03.003>

Marshall A, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Derrick D, Herman K, Jabado RW, Liu KM et al. 2022. *Mobula birostris* (amended version of 2020 assessment). *The IUCN Red List of Threatened Species* 2022: e.T198921A214397182. <https://dx.doi.org/10.2305/IUCN.UK.2022-1.RLTS.T198921A214397182.en>

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>