

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

#### NATAVAKI REEF ISRA

#### New Zealand & Pacific Islands Region

#### SUMMARY

Natavaki Reef is located in the Koro Sea off the southern coast of Vanua Levu Island in Fiji. The area is characterised by steep coral reef slopes and walls, rocky plateaus, and a large, deep channel. It is influenced by strong currents. Natavaki Reef overlaps with the Vatu-i-Ra/Lomaiviti Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species** (e.g., Scalloped Hammerhead *Sphyrna lewini*) and **undefined aggregations** (e.g., Grey Reef Shark Carcharhinus amblyrhynchos).

#### CRITERIA

Criterion A – Vulnerability; Sub-criterion C5 – Undefined Aggregations

-	-
FIJI	
-	-
0-100 met	res
-	-
6.17 km²	
-	-





## DESCRIPTION OF HABITAT

Natavaki Reef is located off the southern coast of Vanua Levu Island in Fiji. The area is part of a large horseshoe-shaped barrier reef that surrounds a deep lagoon and encompasses Namenalala Island. In its northern and northeastern parts, including in this area, the barrier reef is broken up into smaller sections with channels between them, while in its southern and southwestern parts the barrier reef is continuous. The area consists of barrier reef sections and channels. Several popular dive sites are located within the area, including 'Grand Central Station', 'Schoolhouse', 'Kansas', and 'North Save-A-Tack Passage' (B Chaves pers. obs. 2024). The habitat is characterised by deep drop-offs, steep walls, reef slopes, and a large, exposed channel with strong currents influenced by the tides (L Gordon pers. obs. 2024).

This area overlaps with the Vatu-i-Ra/Lomaiviti Ecologically or Biologically Significant Marine Area (EBSA; CBD 2024).

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

### **ISRA CRITERIA**

## **CRITERION A - VULNERABILITY**

Two Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occur in the area. These are the Critically Endangered Scalloped Hammerhead (Rigby et al. 2019) and the Endangered Grey Reef Shark (Simpfendorfer et al. 2020).

## SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Natavaki Reef is an important area for undefined aggregations of two shark species.

Aggregations of Grey Reef Sharks are regularly reported from Natavaki Reef (G Koroi pers. comm. 2024). Dive operators visiting this area over the past 20 years (average 1–2 times per month) have observed aggregations on every dive, with aggregation size ranging from 5–7 individuals (G Koroi pers. comm. 2024). Another operator conducting ~100 dives per year between February-November in the area also reported aggregations of Grey Reef Sharks on every dive, with 10–15 individuals per aggregation (B Chaves pers. obs. 2024). Aggregations comprise mostly adults or large juveniles, with small individuals rarely seen. Aggregations are usually seen on the incoming tide, when most dives are conducted, compared to during the outgoing tide (B Chaves pers. obs. 2024). Additionally, baited remote underwater video station (BRUVS) surveys sampled the area in 2009 and 2016 and recorded the species in six of 11 deployments (55%) compared to 18% at other sites (n = 168) on the barrier reef outside the area (MacNeil et al. 2020). Further information is required to determine the nature and functions of these aggregations.

Aggregations of Scalloped Hammerheads are regularly reported from Natavaki Reef by dive operators (B Chaves pers. obs. 2024, G Koroi pers. comm. 2024). Aggregations comprising 3-50 individuals are observed on ~40% of dives, with 1-2 dives per month since 2014 (G Koroi pers. comm. 2024). Another operator conducting ~100 dives per year between February-November since 2013 recorded aggregations of up to 100 individuals (R Barrell et al. unpubl. data 2024). Larger schools of >10 Scalloped Hammerheads are seen 2-3 times each year (B Chaves pers. obs. 2024). Further information is required to determine the nature and functions of these aggregations.



#### Acknowledgments

Luke Gordon (The Manta Trust), Rob Barrel (NAI'A Fiji), Bel Chaves (NAI'A Fiji), Sam Campbell (HD Expeditions Fiji), Unaisi Nalasi (Ministry of Fisheries and Forestry Fiji), Kerstin Glaus (The University of the South Pacific), and Christoph A Rohner (IUCN SSC Shark Specialist Group – ISRA Project) contributed and consolidated information included in this factsheet. We thank all participants of the 2024 ISRA Region 10 – New Zealand and Pacific Islands 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. Natavaki Reef 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												
Carcharhinus amblyrhynchos	Grey Reef Shark	EN	0-280	Х						Х		
Sphyrna lewini	Scalloped Hammerhead	CR	0-1,043	Х						Х		



## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Triaenodon obesus	Whitetip Reef Shark	VU

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





### REFERENCES

**Convention on Biological Diversity (CBD). 2024.** Vatu-i-Ra/Lomaiviti. Ecologically or Biologically Significant Marine Areas (EBSAs). Available at: https://chm.cbd.int/database/record?documentID=200047 Accessed July 2024.

MacNeil MA, Chapman DD, Heupel H, Simpfendorfer CA, Heithaus M, Meekan M, Harvey E, Goetze J, Kiszka J, Bond ME, et al. 2020. Global status and conservation potential of reef sharks. *Nature* 583: 801-806. https://doi.org/10.1038/s41586-020-2519-y

**Rigby CL, Dulvy NK, Barreto R, Carlson J, Fernando D, Fordham S, Francis MP, Herman K, Jabado RW, Liu KM, et al. 2019.** Sphyrnα lewini. The IUCN Red List of Threatened Species 2019: e.T39385A2918526.

Simpfendorfer C, Fahmi, Bin Ali A, Dharmadi, Utzurrum JAT, Seyha L, Maung A, Bineesh KK, Yuneni RR, Sianipar A, et al. 2020. Carcharhinus amblyrhynchos. The IUCN Red List of Threatened Species 2020: e.T39365A173433550. https://dx.doi.org/10.2305/IUCN.UK.2020-3.RLTS.T39365A173433550.en