

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

#### OGEA AND FULAGA ISLANDS ISRA

#### New Zealand & Pacific Islands Region

#### SUMMARY

Ogea and Fulaga Islands is located in the southeast of the Lau group of islands in Fiji. This area is characterised by lagoons, large barrier reef systems, reef passes, shallow reef crests, steep reef drop-offs, and pelagic waters. It overlaps with the Kadavu and the Southern Lau Region Ecologically or Biologically Significant Marine Area. Within this area there are: **threatened species, feeding areas**, and **undefined aggregations** (Reef Manta Ray *Mobula alfredi*).

#### CRITERIA

Criterion A – Vulnerability; Sub-criterion C2 – Feeding Areas; Sub-criterion C5 – Undefined Aggregations

-	_
FIJI	
-	-
0-711 metro	es
-	-
<b>44.49</b> km <sup>2</sup>	
-	-



## DESCRIPTION OF HABITAT

Ogea and Fulaga Islands is located in the Lau group of islands in Fiji. This split area includes one part around Ogea Island and another part around Fulaga Island. Ogea Island is surrounded by a large lagoon enclosed by barrier reef systems and connected to the ocean by several channels. Fulaga Island also has a lagoon with a single main channel connecting it to the ocean. This area includes parts of the lagoons, the channels, and pelagic waters outside of the channel at both islands. Habitats are characterised by shallow lagoons, reef flats, shallow reef crests, forereef slopes, coral pinnacles, deep wall drop-offs, and pelagic waters (L Gordon pers. obs. 2024). Steep drop-offs rapidly reach depths of >1,000 m which causes strong currents to run along the reef system (L Gordon pers. obs. 2024). Currents are also influenced by the tidal cycle.

This area overlaps with the Kadavu and the Southern Lau Region 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 711 m based on the global depth range of the Qualifying Species.

#### **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 Reef Manta Ray (Marshall et al. 2022).

#### SUB-CRITERION C2 - FEEDING AREAS

Ogea and Fulaga Islands is an important feeding area for one ray species.

Between 2017-2024, drone surveys comprising of 10-15 flights (25 min duration) per annual visit were conducted at Fulaga Island. These recorded Reef Manta Rays feeding in the area (MV Erdmann pers. obs. 2024). Surveys were conducted in March (2023, 2024), July (2018, 2019), and September (2017, 2020, 2022). Feeding Reef Manta Rays were recorded on every flight within the lagoon, the channel, and around the seaward side of the channel entrance (MV Erdmann & S Meo pers. obs. 2024). Between 3-9 individuals were recorded per flight, with an average of 3-6 individuals per survey per year. Community consultations during surveys revealed that aggregations of >5 Reef Manta Rays are regularly observed feeding in this area between March-November (MV Erdmann & S Meo pers. obs. 2024). Feeding Reef Manta Rays were also recorded during nine of 11 drone flights at Ogea Island. Additionally, two satellite tags on Reef Manta Rays recorded data between August and November 2023 before detaching. These satellite tags only transmit a location when the tag breaches the surface, which typically only occurs when Reef Manta Rays surface feed (MV Erdmann pers. obs. 2024). Most tag locations were within the area, with additional transmissions on the southwest of Fulaga Island, outside the area, which could not be visually surveyed due to heavy southeasterly swells (M VErdmann pers. obs. 2024).

## SUB-CRITERION C5 - UNDEFINED AGGREGATIONS

Ogea and Fulaga Island is an important area for undefined aggregations of one ray species.

Between 2022-2024, a total of 13 Reef Manta Ray sightings were recorded of 11 individuals on six different survey days at Ogea Island (Gordon 2023; Manta Project Fiji unpubl. data 2024). Reef Manta Rays were sighted on 100% of survey days. Local ecological knowledge indicates that Reef Manta Rays have long been present in the area before sporadic surveys began (MV Erdmann pers. obs. 2024). Reef Manta Rays aggregate in the area to visit cleaning stations. Annual surveys from 2017-2024 conducted 2-4 dives per visit at Ogea Island in the area (MV Erdmann pers. obs. 2024). Divers recorded between 1-6 Reef Manta Rays at the cleaning stations on every dive (MV Erdmann & S Meo pers. obs. 2024). On 11 drone flights (25-minute duration each) over the Ogea Lagoon during six visits in 2017, 2022, and 2023, 3-10 Reef Manta Rays were observed on every flight. Cleaning activity at cleaning stations on the reef crest on Ogea was observed on seven of 11 flights. At cleaning stations, small reef fishes remove parasites and dead tissue from Reef Manta Rays (Armstrong et al. 2021). In this area, there are four main species which clean Reef Manta Rays: Bluestreak Cleaner Wrasse Labroides dimidiatus, Bicolor Cleaner Wrasse Labroides bicolor, Moon Wrasse Thalassoma lunare, and Blunthead Wrasse Thalassoma amblycephalum (L Gordon pers. obs. 2023).

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# 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
RAYS												
Mobula alfredi	Reef Manta Ray	VU	0-711	Х			Х			Х		



### SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
SHARKS		
Carcharhinus melanopterus	Blacktip Reef Shark	VU
Triaenodon obesus	Whitetip Reef Shark	VU
RAYS		
Taeniura lessoni	Oceania Fantail Ray	DD
Taeniurops meyeni	Blotched Fantail Ray	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

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