

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

#### **MARONI-KALI'NA ISRA**

#### South American Atlantic Region

### **SUMMARY**

Maroni-Kali'na is located at the border between French Guiana and Suriname. This area covers the large Maroni River estuary, its smaller tributary outflows, and the Mana River estuary. It is influenced by the river outflows and the habitat is characterised by turbid water, mangroves, sandy beaches, and sandy and muddy substrates. Within this area there are: **threatened species** (e.g., Largetooth Sawfish *Pristis pristis*) and **reproductive areas** (e.g., Bull Shark Carcharhinus leucas).

#### CRITERIA

Criterion A - Vulnerability; Sub-criterion C1 - Reproductive Areas

# FRENCH GUIANA, SURINAME

0-20 metres

427.8 km<sup>2</sup>

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#### **DESCRIPTION OF HABITAT**

Maroni-Kali'na is located on the border between French Guiana and Suriname. This coastal estuarine area covers the large estuary of the Maroni River, as well as smaller estuaries from the Mana River and Coswine River. It includes coastal parts of the Amana Nature Reserve near Awala-Yalimapo on the French Guiana side and parts of the Wanekreek Nature Reserve on the Suriname side. The habitat is characterised by mangroves and muddy and sandy substrates. The area is influenced by freshwater outflow from the rivers and by the tides with a daily amplitude of ~3 m (Chevallier et al. 2023).

Maroni-Kali'na experiences a dry season from August-December and a wet season from late December-July during which river outflow increases three- to fourfold (Chevalier et al. 2023). Its coastal waters are highly turbid with low salinity due to the influence of the Amazon River and other regional rivers, in combination with the coastal northwestward flowing North Brazil Current and the Guiana Current (Artigas et al. 2003). During the second half of the year, in the dry season, the North Brazil Current retroflection means that more saline and less turbid waters cover French Guiana's coastal waters (Artigas et al. 2003). Yalimapo Beach is located in the eastern part of the area and is an important nesting site for Green Turtle Chelonia mydas and Leatherback Turtle Dermochelys coriacea (Chevallier et al. 2023).

This area overlaps with the Amazonian-Orinoco Influence Zone Ecologically or Biologically Significant Marine Area (EBSA; CBD 2025) and with the Amana Key Biodiversity Area (KBA 2025).

This Important Shark and Ray Area is benthic and pelagic and is delineated from surface waters (O m) to 20 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 Largetooth Sawfish (Espinoza et al. 2022) and the Vulnerable Bull Shark (Rigby et al. 2021).

#### SUB-CRITERION C1 - REPRODUCTIVE AREAS

Maroni-Kali'na is an important reproductive area for one shark and one ray species.

Bull Shark pups and large adults are regularly reported by local fishers within the Maroni River estuary. A small number of Amerindian or Amerindian-descendent fishers from the Kali'na ethnic group live and fish regularly in the area. Fisher interviews were conducted in Awala-Yalimapo with seven local fishers over three days in 2022, and then repeated with four fishers in one day in 2023. Fishers reported captures of small-sized Bull Sharks mainly during the dry season in the second half of the year (P Charvet unpubl. data 2025). Large females often reaching >2.5 m total length (TL) were reportedly caught in the same period of the year in this area (P Charvet unpubl. data 2025). eDNA samples from the Maroni River estuary collected in 2023 confirm the presence of Bull Sharks (A Jung pers. comm. 2025). Although no precise measurements are available, the small individuals are likely to be young-of-the-year (YOY), considering the size range indicated by fishers (~70–80 cm TL). In addition, pregnant females of the species are known to pup in rivers and pups are found in rivers and estuaries (Glaus et al. 2019). The size-at-birth for the species is 31–57 cm TL (Ebert et al. 2021).

Largetooth Sawfish are reported from the area, including contemporary captures of small animals (Nalovich & Babb 2018). Individuals measuring 45 cm TL (in 2016), 110 cm TL (2013), and 200 cm TL (2015) were captured in this area (Nalovich & Babb 2018). The size-at-birth for the species is 72–90 cm TL (Last et al. 2016). This indicates that two of these captures were likely to be neonate/YOY, highlighting the importance of the area for the early life stages of the species. The only other contemporary reports of Largetooth Sawfish in the country were from Larivot River (in 2012 but unconfirmed; 75 cm TL) and Cayenne River (in 2016, confirmed; adult with a 113 cm long rostrum) which are outside this area (Nalovich & Babb 2018). Fishers interviewed in 2022 and 2023 within Maroni-Kali'na mentioned that although a rare occurrence, small-sized sawfish get entangled in fishing nets and are released (P Charvet & VV Faria unpubl. data 2025). Considering the significant population declines in Largetooth Sawfish across this region, these records confirm that this area has the highest concentration of Largetooth Sawfish in the country and highlights its importance for the early life stages of the species.

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# QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)		ISRA Criteria/Sub-criteria Met							
				A	В	Cı	C2	C3	C4	C <sub>5</sub>	D1	D2
SHARKS									•			
Carcharhinus leucas	Bull Shark	0-256	VU	X		Х						
RAYS												
Pristis pristis	Largetooth Sawfish	0-60	CR	Х		Χ						

# SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category						
SHARKS								
Carcharhinus porosus	Smalltail Shark	CR						
Galeocerdo cuvier	Tiger Shark	NT						
Ginglymostoma cirratum	Atlantic Nurse Shark	VU						
RAYS								
Fontitrygon geijskesi	Wingfin Stingray	CR						
Gymnura micrura	Smooth Butterfly Ray	NT						
Hypanus guttatus	Longnose Stingray	NT						

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



### SUPPORTING INFORMATION

There are additional indications that Maroni-Kali'na may be an important feeding area for Tiger Sharks. Tiger Sharks are reported to seasonally feed on sea turtles off Awala-Yalimapo's northern beach, in this area, preying on nesting females but also on hatchlings as they emerge from nests (P Charvet unpubl. data 2025). Fisher interviews conducted with seven local fishers over three days in 2022 suggest that Tiger Sharks are often seen in shallow water off the beach during the turtle nesting and hatching seasons (March-July and May-September; Chevallier et al. 2023). Accounts describe agitated waters (swirls and some splashing) when Tiger Sharks hunt for adult turtles and that predation events they had observed were so intense that only turtle scraps were left behind to be rapidly eaten by other (unspecified) fishes. Additional information is required to determine the regularity of this behaviour.

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