

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

## CAYENNE ESTUARY ISRA

### South American Atlantic Region

## SUMMARY

Cayenne Estuary is located at the mouth of the Cayenne River in French Guiana. This shallow estuarine area is influenced by seasonally higher river discharge during the rainy season from December–June and by the tides. The habitat is characterised by mangroves, muddy substrates, and turbid waters. Within this area there are: **threatened species** and **reproductive areas** (Smalltail Shark *Carcharhinus porosus*).

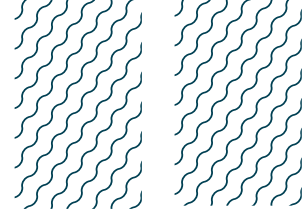
FRENCH  
GUIANA

0-10 metres

26.87 km<sup>2</sup>

## CRITERIA

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



## DESCRIPTION OF HABITAT

Cayenne Estuary is located at the mouth of the Cayenne River on the central coast of French Guiana. It is an estuarine area influenced by river discharge and tides. The habitat is characterised by mangroves and muddy substrates. The area experiences a dry season from July–November and a wet season from December–June, with maximum rainfall generally in May and June (de Morais & de Morais 1994). The tidal range is up to 3 m, with ocean water influencing the river up to 30 km upstream (Sottolichio et al. 2023). Turbidity is high, influenced by coastal mud resuspension and river discharge (Sottolichio et al. 2023).

This Important Shark and Ray Area is benthic and pelagic and is delineated from inshore and surface waters (0 m) to a depth of 10 m based on the bathymetry of the area.

## ISRA CRITERIA

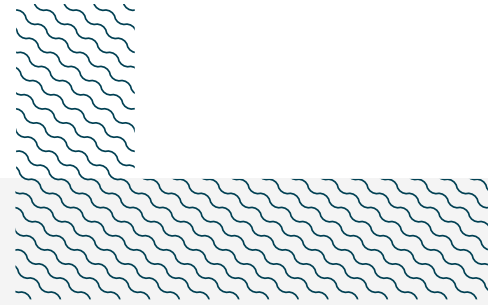
### CRITERION A – VULNERABILITY

One Qualifying Species considered threatened with extinction according to the IUCN Red List of Threatened Species regularly occurs in the area. This is the Critically Endangered Smalltail Shark (Pollom et al. 2020).

### SUB-CRITERION C1 – REPRODUCTIVE AREAS

Cayenne Estuary is an important reproductive area for one shark species.

Scientific fishing surveys in 2023 and 2024, conducted monthly (one survey per month), regularly captured neonates and young-of-the-year (YOY) Smalltail Sharks in this area (M Rous et al. unpubl. data 2025). Surveys were part of a study funded by the Direction Générale des Territoires et de la Mer in relation to the construction of the new Larivot Bridge and lasted ~4h each trip using two fishing rods with circle hooks. In 2023, surveys were limited to the dry season between May and November and were exploratory over the lower Cayenne River and its estuary. Smalltail Sharks were regularly reported from this area and were only captured in this location across the study sites. In 2024, surveys focused on this area. In total, sharks were caught on seven of 13 surveys, during June, July, August, September, and October with none being recorded during the wet season in 2024. This indicates that this reproductive area is only being utilised during the dry season. Twenty-nine of the 35 individuals captured were measured, with six classified as neonates (21%) with a size of  $\leq 40$  cm total length (TL) and the remaining 23 representing YOY (79%) with a size of 40–47 cm TL (M Rous et al. unpubl. data 2025). The size-at-birth for the species is 30–40 cm TL (Ebert et al. 2021). No larger juveniles or adults were captured in this area, but recreational fishers regularly report adults from within the nearby Mahury River estuary (M Rous pers. obs. 2025). This indicates that this area is particularly important for the early life stages of the species. Additionally, recreational fishers have reported catches of small Smalltail Sharks from the bridge inside the area, and a beam trawl survey in 2023 recorded a neonate (31 cm TL) in the river channel, further supporting their regular presence (M Rous & HYDRECO pers. obs. 2025).



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Marion Rous (Groupe d'Étude et de Protection des Oiseaux en Guyane) 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 2025 ISRA Region 05 - South American Atlantic workshop for their contributions to this process.

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### **Suggested citation**

**IUCN SSC Shark Specialist Group. 2025.** Cayenne Estuary ISRA Factsheet. Dubai: IUCN SSC Shark Specialist Group.

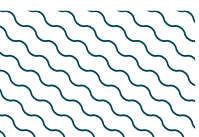
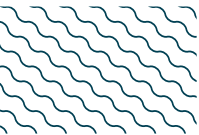
## QUALIFYING SPECIES

Scientific Name	Common Name	IUCN Red List Category	Global Depth Range (m)	ISRA Criteria/Sub-criteria Met								
				A	B	C1	C2	C3	C4	C5	D1	D2
SHARKS												
<i>Carcharhinus porosus</i>	Smalltail Shark	CR	0-84	X		X						

## SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
<b>SHARKS</b>		
<i>Carcharhinus limbatus</i>	Blacktip Shark	VU
<b>RAYS</b>		
<i>Fontitrygon geijskesi</i>	Wingfin Stingray	CR
<i>Hypanus guttatus</i>	Longnose Stingray	NT
<i>Styracura schmardae</i>	Atlantic Chupare	EN

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





## REFERENCES

**de Morais AT, de Morais LT. 1994.** The abundance and diversity of larval and juvenile fish in a tropical estuary. *Estuaries* 17: 216–225. <https://doi.org/10.2307/1352571>

**Ebert DA, Dando M, Fowler S. 2021.** *Sharks of the world: A complete guide*. Princeton: Princeton University Press.

**Pollom R, Charvet P, Carlson J, Derrick D, Faria V, Lasso-Alcalá OM, Marcante F, Mejía-Falla PA, Navia AF, Nunes J, et al. 2020.** *Carcharhinus porosus*. *The IUCN Red List of Threatened Species* 2020: e.T144136822A3094594. <https://dx.doi.org/10.2305/IUCN.UK.20203.RLTS.T144136822A3094594.en>

**Sottolichio A, Roche N, Gardel A, Maury T, Brunier G, Lesourd S. 2023.** Seasonal hydro-sedimentary dynamics of a small tropical estuary under Amazone influence (the Cayenne River estuary, French Guiana). Vienna: EGU General Assembly. <https://doi.org/10.5194/egusphere-egu23-14705>