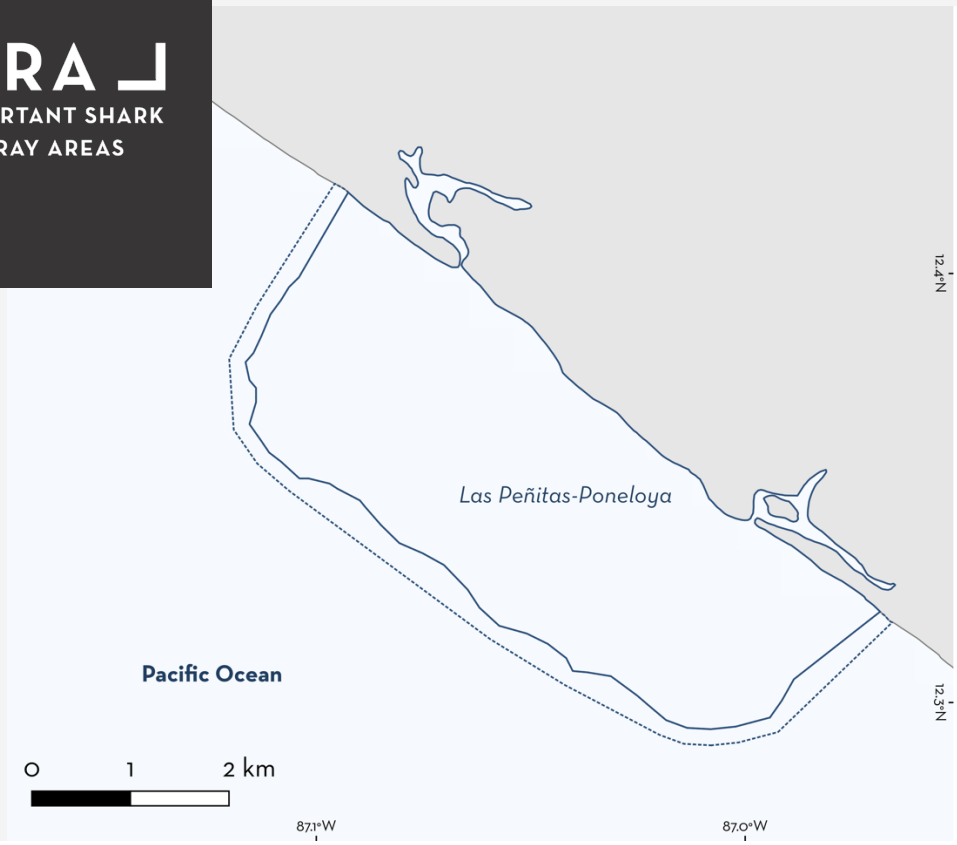
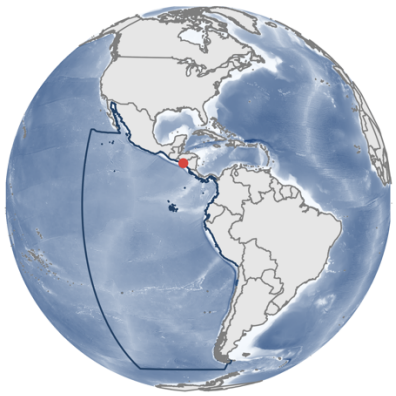
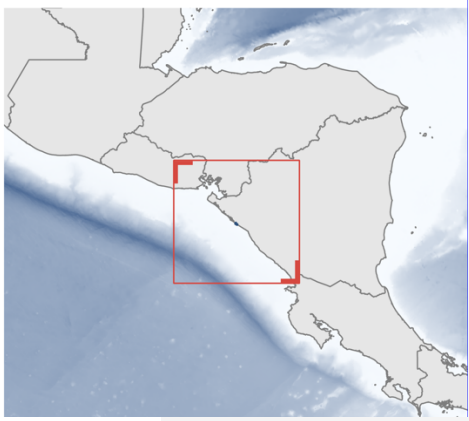
ISRA
IMPORTANT SHARK AND RAY AREAS







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

LAS PEÑITAS AND PONELOYA ISRA

Central and South American Pacific Region

NICARAGUA

0–25 metres

18.21 km²

SUMMARY

Las Peñitas and Poneloya is located in the Pacific coast of Nicaragua. The area includes the Juan Venado Island Nature Reserve and is characterised by diverse coastal and benthic habitats including sandy beaches, mangrove forests, estuaries, and river mouths. Within this area there are: threatened species and reproductive areas (Scalloped Hammerhead *Sphyrna lewini*).

CRITERIA

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

DESCRIPTION OF HABITAT

Las Peñitas and Poneloya is located in the Pacific coast of Nicaragua in the León Department. Situated in the Pacific Central-American Coastal Large Marine Ecosystem, it includes the Juan Venado Island Nature Reserve which is along the coastline of Las Peñitas. The area is characterised by a diversity of habitats that include sandy beaches, mangrove forests, estuaries, and river mouths. The estuarine systems and areas between flooded shores, dry shores, open areas, and branches of the main estuary form a rich and productive environment (Vallarta-Zárate et al. 2021).

This Important Shark and Ray Area is delineated from inshore and surface waters (0 m) to a depth of 25 m based on the maximum depth range of the habitat used by 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 this area. This is the Critically Endangered Scalloped Hammerhead (Rigby et al. 2019).

SUB-CRITERION C1 – REPRODUCTIVE AREAS

Las Peñitas and Poneloya is an important reproductive area for one shark species. Scalloped Hammerheads are regularly observed by local artisanal fishers. This is the most abundant shark species caught and landed within the area according to surveys of artisanal fisheries landing sites. One hundred and forty-six immature Scalloped Hammerheads (31–66 cm total length [TL]) were recorded from a survey conducted between May and July 2021 (Hernandez-Fernandez et al. 2021). Neonate and juvenile Scalloped Hammerheads measure between 45–160 cm TL in the Eastern Pacific (Bejarno Álvarez 2007) and its size-of-birth is 31–57 cm TL (Ebert et al. 2021). This timeframe coincides with the onset of the rainy season, resulting in high discharge of nutrients from rivers in this area, thus providing advantageous conditions for early life stages (Hearn et al. 2010; López-Garro & Zanella 2015). Also, this timeframe correlates with the time of maximum fecundity of the species (Campuzano 2002), and when females give birth within this region (Alejo-Plata 2007). This evidence supports this area being a nursery area for Scalloped Hammerheads.

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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
SHARKS												
Sphyrna lewini	Scalloped Hammerhead	CR	0–1,043	X		X						

SUPPORTING SPECIES

Scientific Name	Common Name	IUCN Red List Category
RAYS		
Aetobatus laticeps	Pacific Eagle Ray	VU
Gymnura marmorata	California Butterfly Ray	NT
Hypanus longus	Longtail Stingray	VU
Hypanus dipterurus	Diamond Stingray	VU
Pseudobatos leucorhynchus	Whitesnout Guitarfish	VU
Rhinoptera steindachneri	Pacific Cownose Ray	NT

IUCN Red List categories: *CR, Critically Endangered; EN, Endangered; VU, Vulnerable; NT, Near Threatened; LC, Least Concern; DD, Data Deficient.*

SUPPORTING INFORMATION

There are additional indications that this area is important as a reproductive area for other species. Artisanal fishers regularly catch juvenile Longtail Stingray (45–141 cm disc width [DW]; 77.7 cm DW average; neonate size has been reported at 40 cm DW [Villavicencio et al. 1994]), Diamond Stingray, Pacific Cownose Ray, California Butterfly Ray, and Whitesnout Guitarfish (Hernandez-Fernandez et al. 2021).

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