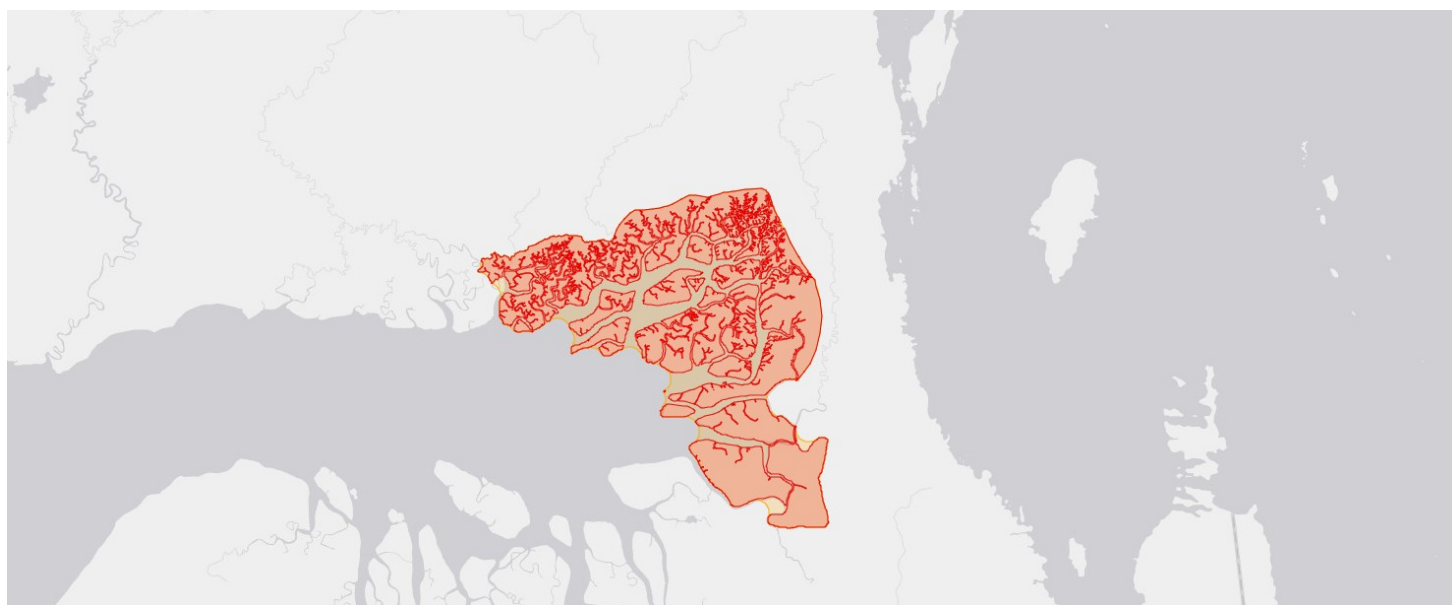


Bintuni mangroves

NGUTIPA015



Country: **New Guinea**

Administrative region: **Papua (Province)**

Central co-ordinates: **-2.28318 N, 133.95267 E**

Area: **1248km²**

Qualifying IPA criteria

C(i)

IPA assessment rationale

Mangrove forests within Bintuni bay, West Papua comprise 8.4% of Indonesia's total mangrove resource, and 1.9% of the world's mangrove cover, so they are a globally significant area of this habitat type as well a huge store of 'blue' carbon. Bintuni Bay has one of the five largest and most intact mangrove sites in Indonesia, along with South Papua, the Aru islands, North Kalimantan and Riau (Arifianti et al. 2025).

Site description

The mangrove ecosystems within Bintuni Bay are of global significance, and those within the Teluk Bintuni Nature Reserve are an intact primary example of this habitat type. The Nature Reserve covers 1248 square km and is located on the eastern side of Bintuni Bay in north-west New Guinea. It is bordered on the northern side by the town of Bintuni, and to the south and east by logging concessions (Global Forest Watch 2025). The ecosystem is semi-terrestrial and the protected area includes islands, peninsulas and

estuaries.

Botanical significance

West Papua has about 8-10% of the total world's mangrove area (Sasmito et al. 2020), with 1.9% of the world's mangrove cover is within Bintuni Bay (Sillanpaa et al. 2017). Mangroves are important for carbon storage ('blue carbon') because, although the quantity of carbon stored varies considerably across the different parts of the mangrove system (Sasmito et al. 2020), they store more carbon than terrestrial forests (Arifianti et al. 2022). Mangroves act as mitigation against coastal erosion, storms and natural disasters as well as being a distinct vegetation type with a unique assemblage of species. The timber of *Rhizophora* species is valued for bridges and buildings due to its resistance to rot and termites (Samal et al., 2023).

Habitat and geology

The mangroves in Bintuni Bay are dominated by *Rhizophora apiculata* and *R. mucronata*, along with other common species *Bruguiera gymnorhiza*, *Bruguiera parviflora* and *Ceriops tagal* (Wahyudi et al. 2013). A total of thirty species of mangrove trees are documented in this ecosystem (Yudha et al. 2024).

Conservation issues

The primary causes of the loss and degradation of mangroves in Papua include timber extraction, conversion from mangrove forests

into aquaculture ponds, and infrastructure development, such as for settlements and the oil industry. The Teluk Bintuni Nature Reserve is legally protected, but to the north of the area where it adjoins the town of Bintuni, forest loss is visible at the edges of the protected area (Global Forest Watch 2025), most likely due to agricultural conversion and demand for timber. Mangroves are also threatened due to climate change, due to sea level rise beyond their adapted capacity and increased severity of tropical cyclones (Hülßen et al. 2025)

Site assessor(s)

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Date of first assessment:

21st Dec 2025

IPA criterion A species

SPECIES	QUALIFYING SUB-CRITERION	≥ 1% OF GLOBAL POPULATION	≥ 5% OF NATIONAL POPULATION	1 OF 5 BEST SITES NATIONALLY	ENTIRE GLOBAL POPULATION	SOCIO-ECONOMICALLY IMPORTANT	ABUNDANCE AT SITE
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IPA criterion C qualifying habitats

HABITAT	QUALIFYING SUB-CRITERION	≥ 5% OF NATIONAL RESOURCE	≥ 10% OF NATIONAL RESOURCE	1 OF 5 BEST SITES NATIONALLY	AREAL COVERAGE AT SITE
Mangrove	C(i)	✓	—	✓	

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Mangrove Forest Vegetation Above High Tide Level	—	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	—	

Threats

THREAT	SEVERITY	TIMING
Climate change & severe weather - Storms & flooding	Unknown	Ongoing - increasing

Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Bintuni Bay Nature Reserve	National Nature Reserve	protected/conservation area matches IPA	—

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