

Exmouth Gulf next to World-Heritage-listed Ningaloo Reef needs protection from industry, scientists say

ABC Pilbara

<https://www.abc.net.au/news/2019-07-29/scientists-push-for-protection-of-exmouth-gulf-biodiversity/11322842>

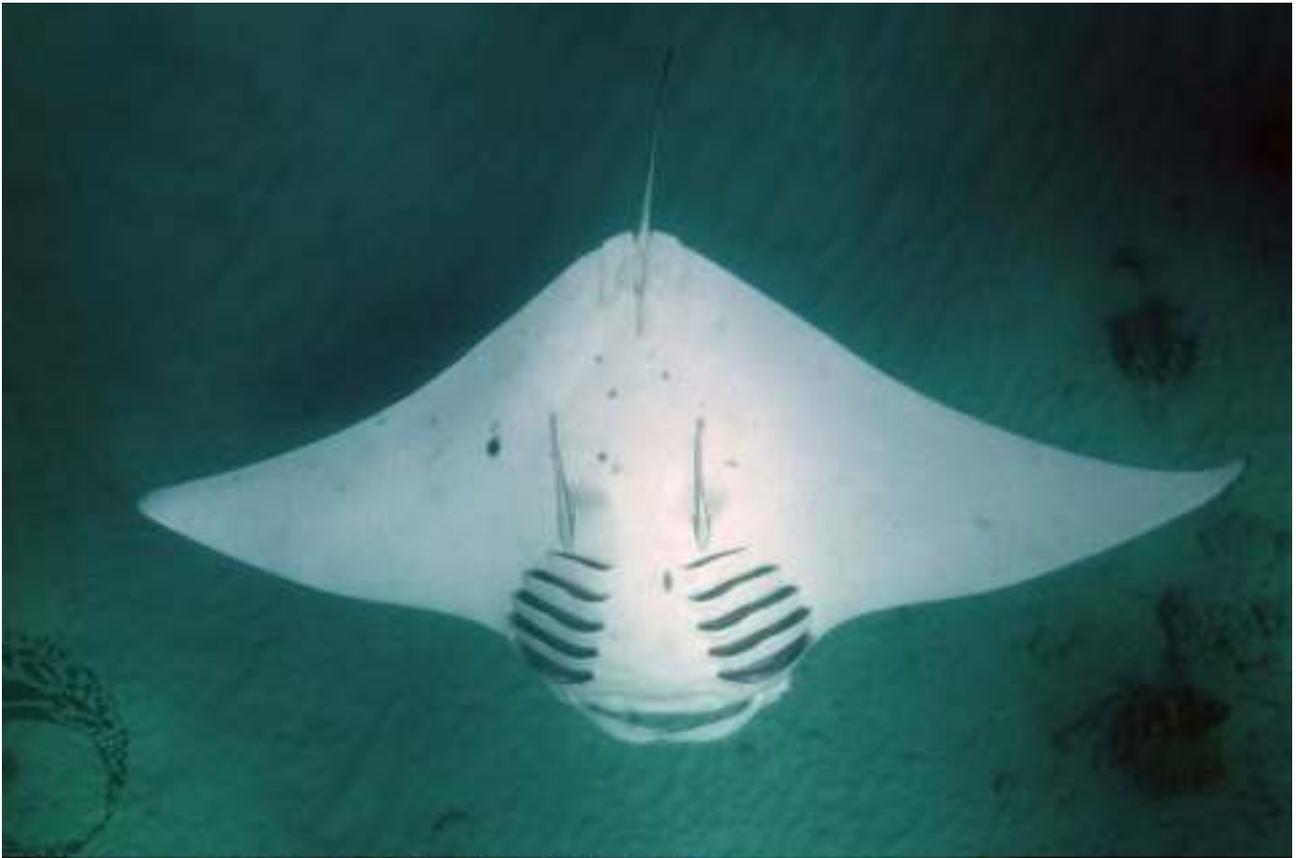


PHOTO: A manta ray in the Exmouth Gulf in north-west Western Australia. (Supplied: Ben Fitzpatrick)

by Susan Standen and Kendall O'Connor
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Western Australia's remote Ningaloo Reef is world-famous for its marine life including the world's biggest fish — whale sharks.

But right next door to the World Heritage-listed coral reef is a lesser-known area scientists say is also globally important for biodiversity, and needs to be protected from industry.

The Exmouth Gulf in north-west WA is home to extensive and unique arid mangrove ecosystems that provide ideal nurseries for critically endangered green sawfish, according to Ben Fitzpatrick, marine ecologist and director of conservation group Oceanwise Australia.

Dugongs, humpback whales, humpback dolphins and a number of rare or endangered marine species can be found there.

Key points:

- A report by 16 scientists is pushing for Exmouth Gulf in north-west WA to be protected from industry
- The area is home to 850 species of fish, sharks and rays, according to conservationists
- Scientists are concerned about the impact of a proposed pipe-building facility for the North West Shelf oil and gas industries



PHOTO: A humpback dolphin in the Exmouth Gulf. (Supplied: Jason Dickie)

A report compiled by Dr Fitzpatrick is pushing for Exmouth Gulf to be protected from industrialisation including a proposed pipe-building facility for the North West Shelf oil and gas industries.

Sixteen scientists from the University of Western Australia, Oceans Institute, James Cook University, Curtin University, Sharks and Rays Australia and Oceanwise Australia have contributed to the report that has been endorsed by the International Union for Conservation of Nature (IUCN).

The report says Exmouth Gulf is excluded from the World Heritage-listed Ningaloo Reef site, yet it has critically endangered and newly identified species, as well as globally important populations of marine life and birds, and habitat.

It says the gulf needs protection from developments such as the proposed Subsea 7 pipeline bundles, currently with the Environmental Protection Authority in WA for evaluation.



PHOTO: Sand flats in the Bay of Rest, Exmouth Gulf. (Supplied: Exmouth Gulf)

"The rebound of the endangered humpback whales is one of the greatest conservation stories in the world and key to that is the fact that Exmouth Gulf is a very important nursery area for those animals," Dr Fitzpatrick said.

"They stop over there and nurse their calves before migrating southwards back to Antarctica."

Dr Fitzpatrick said Exmouth Gulf's biodiversity was unique to WA's Pilbara and globally important for the conservation of some animals.



PHOTO: A reef fish in the Exmouth Gulf. (Supplied: Ryan Cooney)

It is the only known site where critically endangered sawfish have their pups, supported by the ideal habitat without net fishing or disturbed hydrology and geomorphology.

"Exmouth is quite important on a global scale for the conservation of those animals," Dr Fitzpatrick said.

He said 850 species of fish, sharks and rays had been recorded in the gulf, along with 15 marine reptiles.

A population of mantarays had been satellite-tracked from the gulf to eco-tourism hotspots along the Ningaloo coast, contributing directly to the tourism industry.



Mysteries to unravel

While there are newly described species of stingray, fish, crabs and sea snakes, Dr Fitzpatrick said urgent research was needed to properly understand the area's biodiversity and create a baseline before any new development occurred.

"Possibly the biggest thing that we don't know about Exmouth Gulf is where does all the energy, the primary productivity in the environment, come from and how does that get into the food chain and support the diversity of species that occur there?"

"That is one big question that still remains [unanswered]."

"We still know so little about the species that occur in the gulf, their critical habitats, their habitat usage, the food and the spatial importance of the Exmouth Gulf for maintaining many of these species."

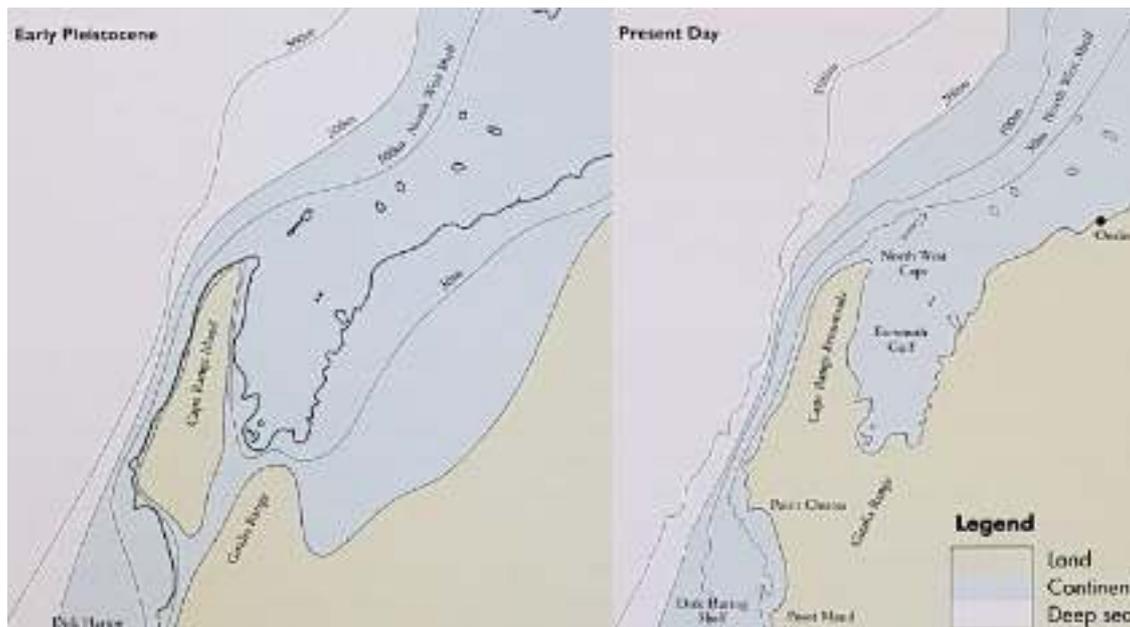


Photo: Geomorphological Maps over time in the Exmouth Gulf (Supplied: Ben Fitzpatrick)

Dr Fitzpatrick said the area was also important for understanding the evolutionary development of new species.

"Exmouth Gulf is exceedingly unique in its representation of the geo-evolutionary history of the earth's climate," he said.

The Cape Range area was once an island during interglacial periods in Earth's history, allowing marine migration to occur directly between Exmouth Gulf and Carnarvon to the south.

Since the polar ice caps remained intact, animals in the gulf had to travel around the cape, leading to evolutionary development of new species over time.



PHOTO: A fiddler crab in the Exmouth Gulf. (Supplied: Ben Fitzpatrick)

Gulf faces 'uncertain future': IUCN

While Exmouth Gulf supports sustainable industries such as prawn fisheries and ecotourism, industrially developed sites could impact on wildlife via shipping noise, light, water quality and sediment disturbances, Dr Fitzpatrick said.

"The fact that the majority of the Pilbara has been industrialised, and very rapidly, over the last couple of decades should give us cause for concern," he said.

"There are coastal areas that have been very heavily disturbed within the region and Exmouth Gulf is one of those places that if properly protected would be a very likely candidate for conserving [many] of these other values that elsewhere have already been quite heavily impacted."



PHOTO: A blind cave fish in the Exmouth Gulf.
(Supplied: Ben Fitzpatrick)

Dr Fitzpatrick said the gulf's values included unique species such as the blind eel and blind gudgeon, but also the habitats that supported the most stable dugong population in the world.

"It is their last stronghold where there has not been a decline in the abundance of those animals, whereas throughout the rest of the world they have declined severely, so it's important that we understand these movement patterns."

The IUCN agreed that the maintenance of those values was not likely to be compatible with industrialisation.

In a statement, it said:

[Exmouth Gulf's] ... unique geological evolution and prevailing environment has resulted in a diverse marine and coastal setting including the presence of globally unique fossilized pleistocene coral reefs.

These unique ecosystems and species contained within the Exmouth Gulf face an uncertain future because it is situated on a coastline that has experienced rapid industrialization due to its proximity to vast oil and gas reserves and mineral resources.

Proposed pipe-building facility

Subsea 7 has proposed to construct a pipe-building facility at Heron Point in the Exmouth Gulf.

The EPA has imposed the highest possible environmental assessment level on the project, a public environmental review.

The project is expected to have a life of 35 years, building two bundles per year for the offshore oil and gas industries on the North West Shelf, with no launches in the Exmouth Gulf during the peak whale migration period of three months from August to October.

In a statement, a company spokeswoman said it recognised the significance of the Exmouth Gulf and that it was committed to developing an environmentally safe and responsible project.



PHOTO: Grey-tailed tattlers in the Exmouth Gulf. (Supplied: Jason Dickie)

"The company welcomes the EPA's approach," she said.

"Subsea 7 will work with relevant groups to expand environmental knowledge and understanding of the area.

"This is consistent with the approach taken by the oil and gas industry in WA, where major companies have been involved in environmental projects and research involving the WA Museum, the Australian Institute of Marine Science and Murdoch University.

The company said, while bundles would be towed through the Ningaloo World Heritage Areas, they would be towed on the surface to avoid contact with the seabed.

A Department of Environment and Energy spokesperson said the natural and cultural heritage of the Exmouth Gulf had not been assessed for its potential as a World Heritage Area.

Updates to Australia's tentative World Heritage List require an agreement by State and Federal Environment Ministers.

Editor's Note (30/7/19): This story has been amended to clarify that Subsea 7's proposal is for a pipe-building facility, not a pipeline.