



© Erling Svensen



© Erling Svensen



# Marine Protected Areas

Examples and Effects of No-Take-Zones  
from different Parts of the World

Hallig Langeneß, April 13, 2025

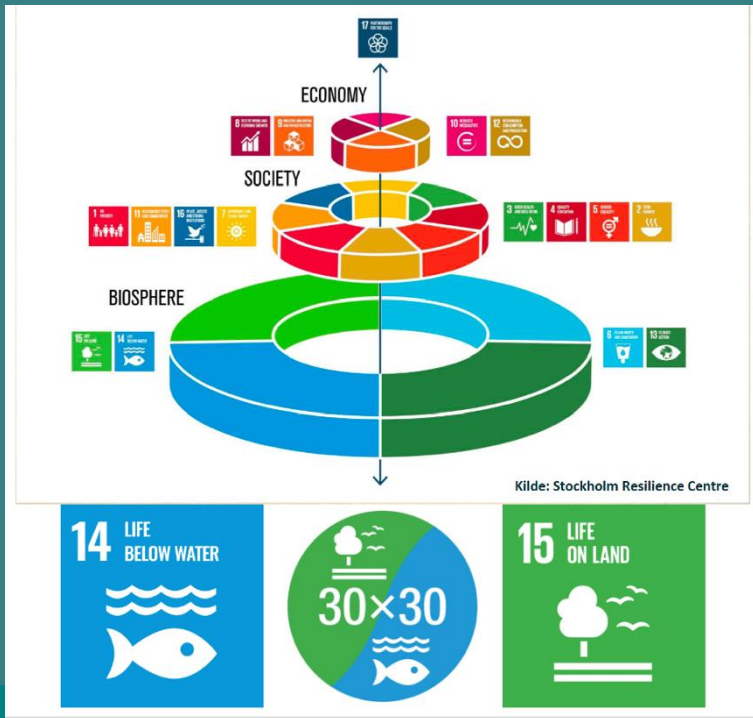
Peter Prokosch



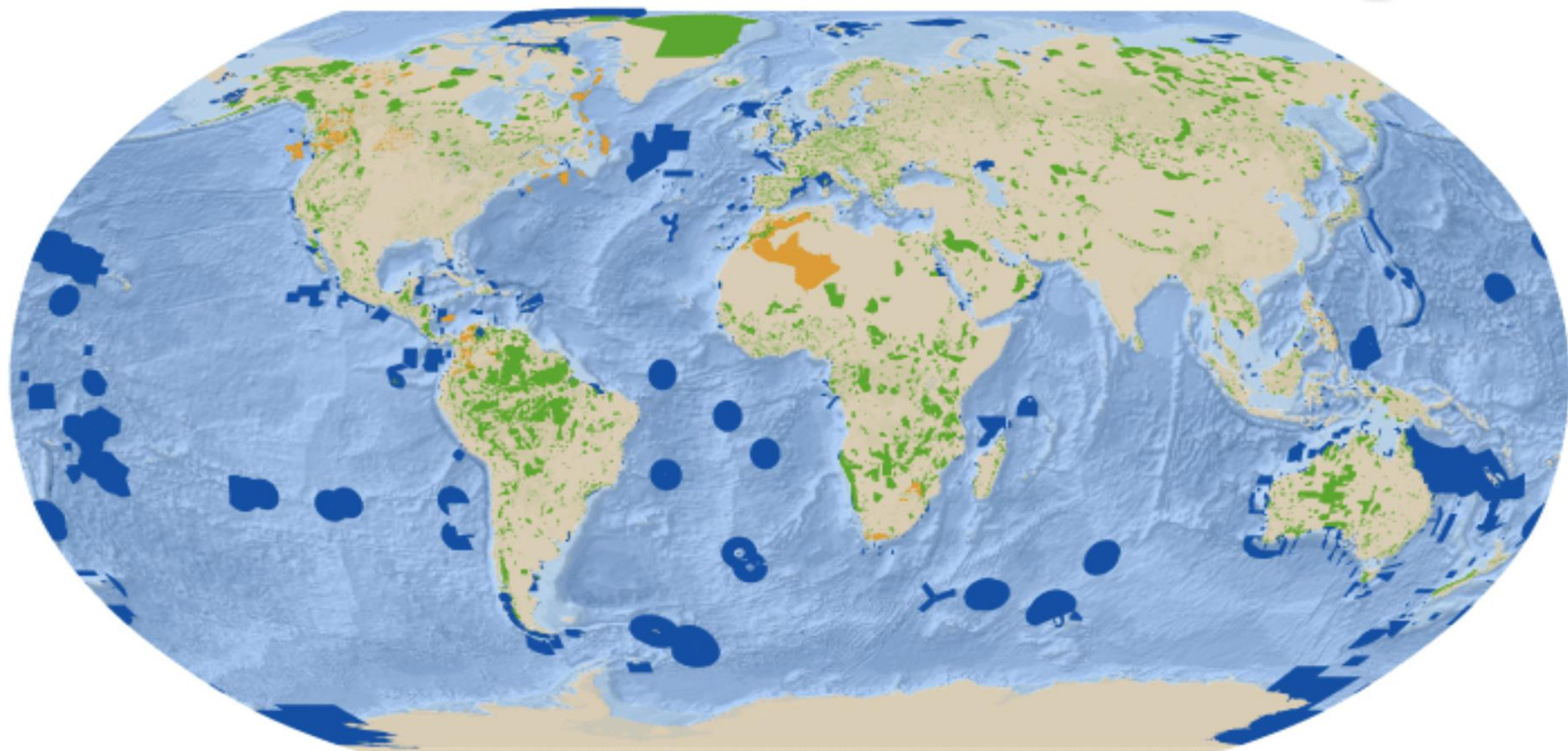


# The Global Goals (SDGs) and 30x30

By 2030: 30% of the global seas protected



# Protected areas and OECMs of the world



Source: UNEP-WCMC and IUCN (2024). Protected Planet: The World Database on Protected Areas (WDPA) and World Database on Other Effective Area-Based Conservation Measures (WD-OECM) [On-line], July 2024, Cambridge, UK: UNEP-WCMC. Available at [www.protectedplanet.net](http://www.protectedplanet.net)





# defines an effective **Marine National Park**

- A **large natural or near-natural area** set aside to protect large-scale ecological processes, species, and ecosystems.
- Managed primarily for **ecosystem protection and recreation**.
- Ensures **long-term conservation** of biodiversity, ecosystem services, and cultural values.

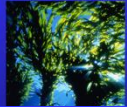
## Global Changes for Life in Oceans

Jane Lubchenco

Religion, Science and Environment VII

The Arctic: Mirror of Life

Greenland, 8 September 2007



## Marine Reserves can benefit Conservation, Fishery Management and resilience as climate changes

- 1) Protect Habitats, Species and Ecosystem Functioning (Protect Biodiversity) = providing insurance in the face of change
- 2) Provide Spill over of juveniles & adults
- 3) Provide Export of larvae
- 4) Protect big old fat female fish (BOFFF)

### Size matters:

A 40 cm vermilion rockfish produces 150,000 young,  
whereas a 60cm one produces 1.7 million young





- 1. Increased Fish Populations and “Spillover” Effect (Example: Cabo Pulmo, Mexico)**
- 2. Larger and Older Fish for Reproduction (Example: Great Barrier Reef, Australia)**
- 3. Enhanced Biodiversity and Robust Ecosystems (Example: Medes Islands, Spain)**
- 4. Economic Benefits for Local Communities (LT&C Example: Apo Island, Philippines)**
- 5. Stronger Populations of Economically Valuable Species (Example: California Channel Islands, USA)**
- 6. Increased Resilience to Climate Change (Belize Barrier Reef)**

## Change of Attitude

Asking ChatGPT and OCTO's MPAHelp, I collected the following examples, which clearly illustrate situations where local fishing communities initially protested against the introduction of no-fishing zones, but later changed their minds and became advocates after experiencing the benefits:

## 1. Cabo Pulmo, Mexico



**Initial resistance:** Local fishers strongly opposed the idea of closing fishing grounds in the early 1990s, fearing economic losses.

**Change in attitude:** After the establishment of Cabo Pulmo Marine Park in 1995, fish biomass increased by over **400%** within a decade. The spillover effect led to larger catches outside the reserve, and the once-resistant fishing community now actively promotes similar protected areas in Mexico and beyond.

(ChatGPT)



## 2. Apo Island, Philippines



Apo Island Protected  
Landscape & Seascape

**101399**

WDPA ID

**6.91 km<sup>2</sup>**

Reported Area



- **Initial Resistance:** In the 1980s, fishers on Apo Island initially resisted the idea of closing any part of their fishing grounds.
- **Outcome and Support:** Fish stocks rebounded significantly, benefiting both biodiversity and the local fishing economy. Today, the Apo Island community has become an advocate for marine protected areas in the Philippines, with local fishers actively encouraging other communities to adopt similar conservation practices. (ChatGPT)

# 3. Medes Islands, Spain

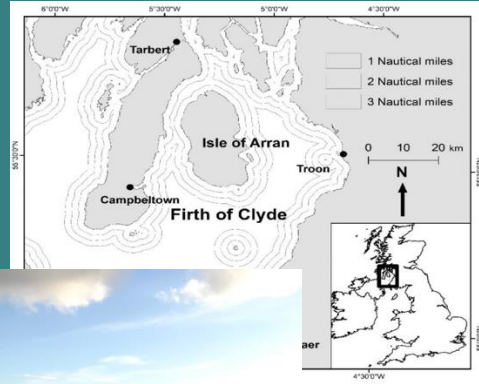
## Offshore Costa Brava:

Protection of the marine area dates back to a decree of 1983, which prohibits fisheries and the extraction of live marine resources in a zone of 75 metres around the islands.



- **Initial Resistance:** Local fishing communities initially strongly opposed, fearing the loss of traditional fishing areas.
- **Outcome and Support:** There was a dramatic increase in fish abundance. Fishers experienced higher yields in areas close to the protected zone. Today, the success of the Medes Islands no-fishing zone is celebrated, and the local fishing communities actively recommend similar protections in other Mediterranean regions. (ChatGPT)

# 4. Lamlash Bay No Take Zone, Scotland

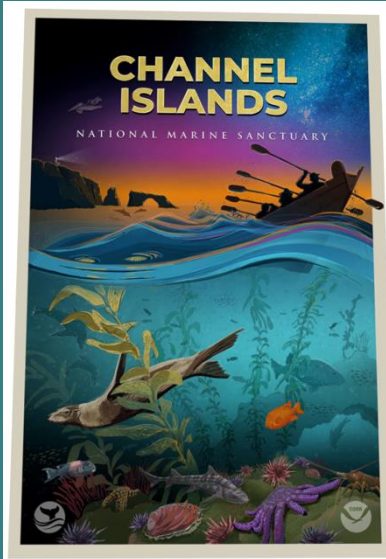
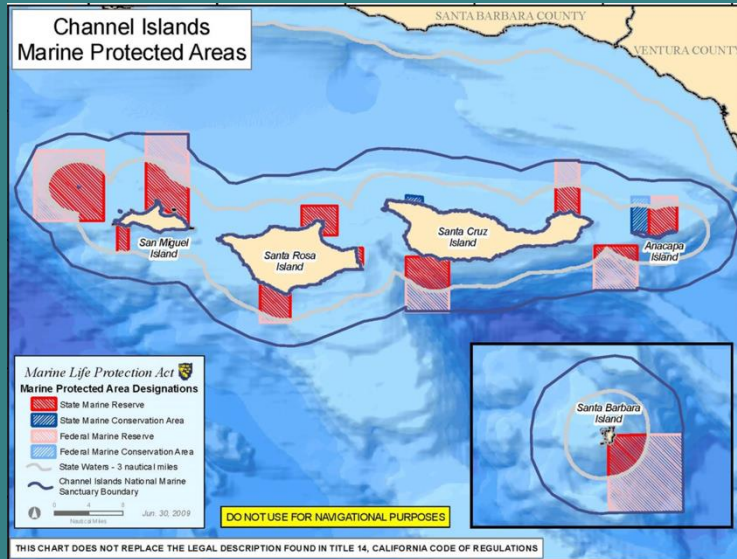


- **Strong Public Approval:** Nearly all respondents (97.3%) aware of the NTZ believe it is beneficial, a significant increase from just under 80% in 2011.  
which can be attributed to
- **Economic Shift & Tourism Growth:** The region's transition to a service-based economy, particularly tourism, has contributed to higher acceptance levels. Business owners have shown strong awareness of the Marine Protected Area (82.4%).
- **Effective Community Engagement:** Continuous outreach efforts by COAST (Community of Arran Seabed Trust) have played a crucial role in fostering awareness and support.
- **Gradual Acceptance Over Time:** Awareness and acceptance of the NTZ follow a steady, linear trend, emphasizing the need for time and sustained engagement to fully realize community backing.

Nader Gebril (gebrilnader@gmail.com)

## 5. Cannel Islands MPAs, California, USA

Channel Islands National Marine Sanctuary protects 1,470 square miles (3807 km<sup>2</sup>) of ocean waters around the Northern Channel Islands: Anacapa, Santa Cruz, Santa Rosa, San Miguel, and Santa Barbara islands.

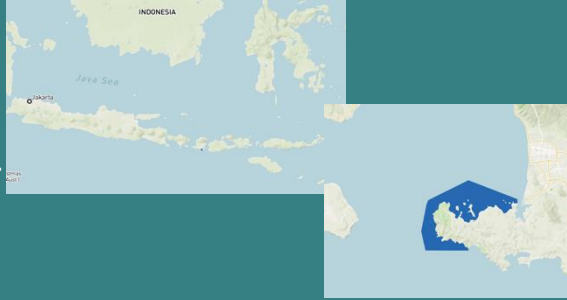


- **Initial resistance:** Fishers in the region protested against no-fishing zones, concerned about losing access to fishing grounds.
- **Change in attitude:** As fish stocks increased in surrounding waters, commercial fishers changed their stance and now support MPAs as a tool for sustainable fisheries.



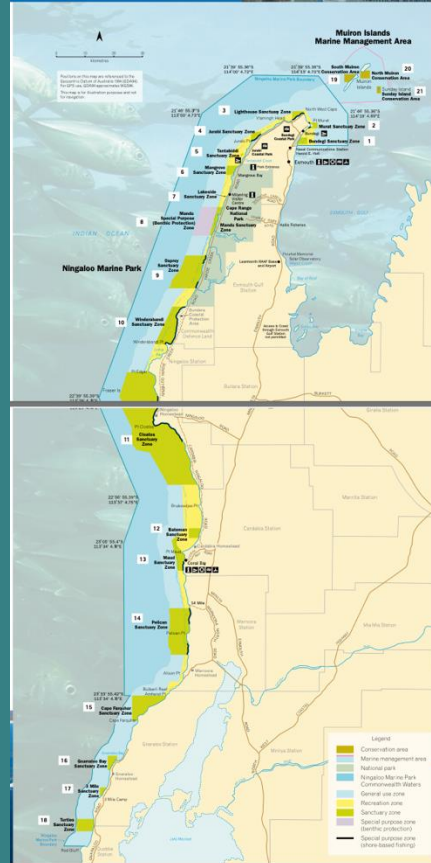
## 6. Lombok, Indonesia

Gili Matra Marine Recreation Park covers approximately 30 km<sup>2</sup>. The size of no-take-zone is not reported.



- Initial Resistance:** In Lombok, fishers initially resisted the establishment of no-fishing zones, as they were heavily dependent on fishing for their livelihoods. **Outcome and Support:** Fish populations increased, and local fishers noticed improved catches in adjacent areas. This experience changed the local perception, with many fishers now advocating for expanded protected areas to ensure long-term fishing sustainability. (ChatGPT)

# 7. Ningaloo Marine Park, Australia



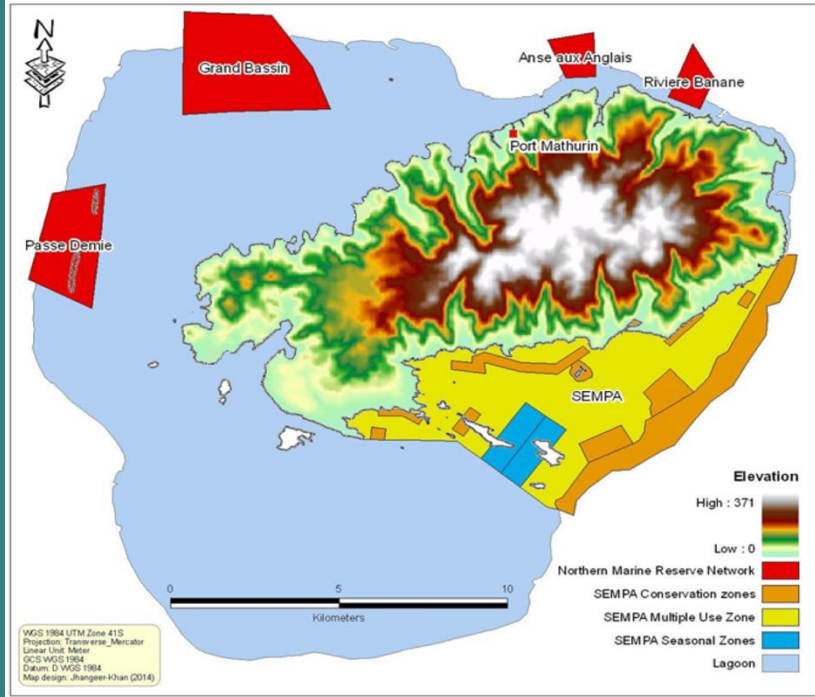
“...The original proposal was extremely poorly received by local fishers, but now it is difficult to find anyone who doesn't think zoning is a good thing (recreational fishers included). Ningaloo consistently has the highest levels of support in my surveys.”

matthew.navarro@uwa.edu.au

|                                   | General use | Recreation | Sanctuary | Special purpose<br>(benthic protection) | Special purpose<br>(shore-based fishing) |
|-----------------------------------|-------------|------------|-----------|-----------------------------------------|------------------------------------------|
| Commercial fishing                | Yes         | No         | No        | No                                      | No                                       |
| Recreational fishing <sup>a</sup> | Yes         | Yes        | No        | Troll fishing only                      | Finfish only                             |
| Observation                       | Yes         | Yes        | Yes       | Yes                                     | Yes                                      |
| Research                          | Permit      | Permit     | Permit    | Permit                                  | Permit                                   |



## 9. Rodrigues, Mauritius



“...An example I know of is in Rodrigues, Mauritius, where the establishment of no-take seasons led to a rapid increase in the size and abundance of octopus.”

Dr. Frauke Fleischer-Dogley (ceo@sif.sc)

[https://blueventures.org/wp-content/uploads/2021/03/Jhangeer-Khan\\_et\\_al\\_2015\\_Managing\\_Octopus\\_Fisheries\\_Through\\_Seasonal\\_Closures\\_Rodrigues.pdf](https://blueventures.org/wp-content/uploads/2021/03/Jhangeer-Khan_et_al_2015_Managing_Octopus_Fisheries_Through_Seasonal_Closures_Rodrigues.pdf)

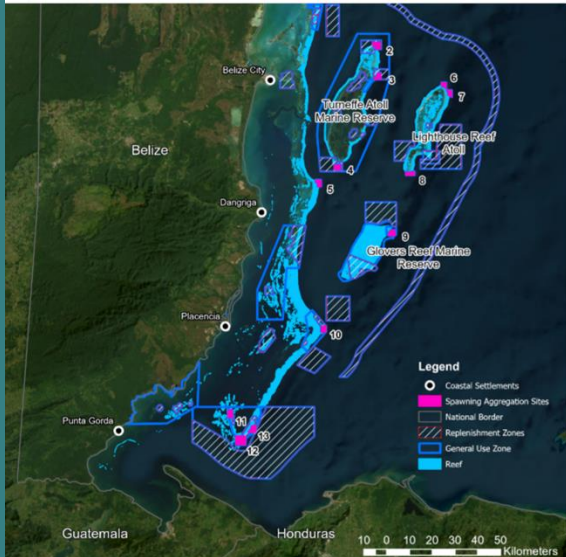


# 10. Belize's Replenishment Zones

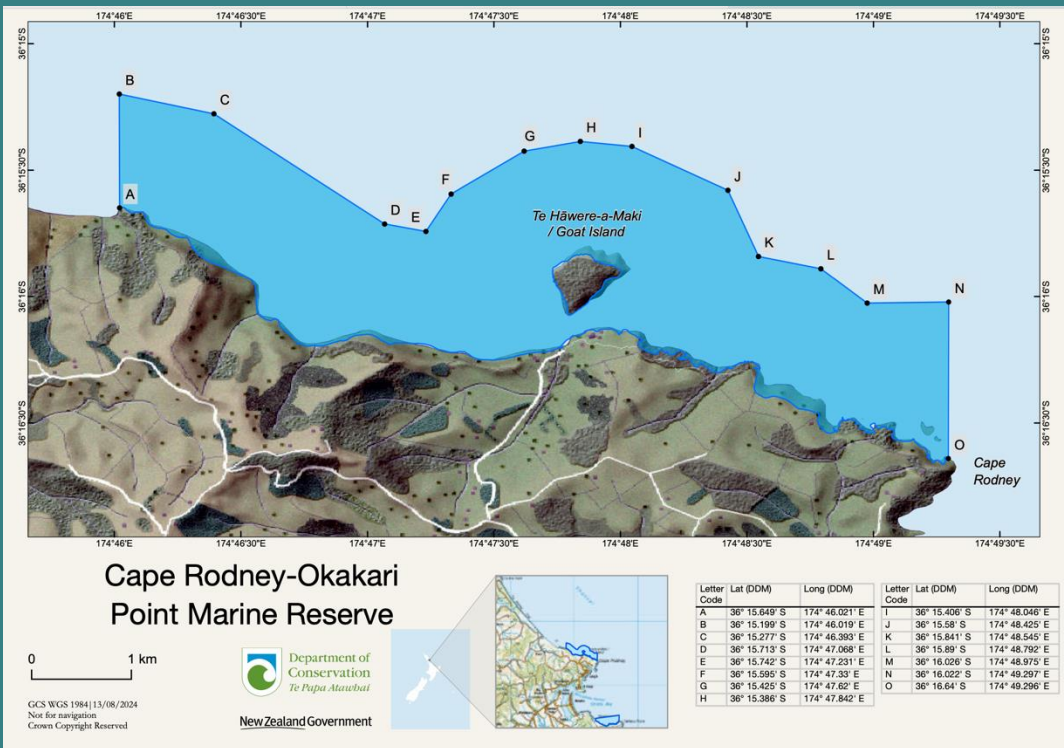


In Belize, “replenishment zones” are intended to provide places where fish populations can increase to ensure continued stock for adjacent fishing areas. Currently, no-take, or replenishment zones represent approximately **11.6% of Belize’s territorial sea**. These areas restrict most commercial fishing activities but may permit recreational or sport fishing. “General use zones” are the areas where commercial fishing activities are permitted under certain conditions.

[www.belize.wcs.org](http://www.belize.wcs.org)



# 11. Cape Rodney to Okakari Point Marine Reserve, NZ



“...it was the first no-take marine reserve in NZ, established in 1975, and there has been much written about it. Reputedly fishers were opposed initially but came to be fierce guardians of it due to the spill over effect.”

(Hamish.Rennie@lincoln.ac.nz)

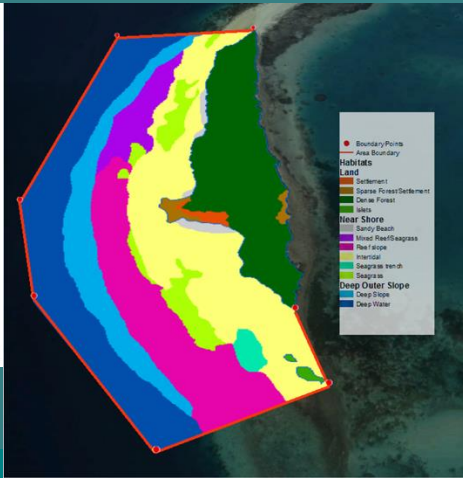
<https://www.doc.govt.nz/parks-and-recreation/places-to-go/auckland/places/cape-rodney-okakari-point-marine-reserve-goat-island/>

# 12. Chumbe Island Coral Park, Tanzania



“...More than 30 years ago, when Chumbe Island was declared a Marine Protected Area, ... fishers accused us of taking away their traditional fishing grounds ... The turning point came when research provided undeniable evidence of the spill-over effect... The same fishers who once opposed the MPA now recognize its value... What was once seen as a restriction is now understood as a lifeline for future generations of fishers....”

*Omari Nyange, Head Ranger, Chumbe Island MPA*



**Chumbe MPA is fully gazetted with its boundaries marked with buoys, it covers 33ha along the Western side of the island, 300m from the high water mark, and ALL of this is a No-Take area**



# Some of the largest No-take-Zones worldwide

Some of the largest NTZs worldwide include:

**1.Chagos Marine Reserve:** Established in 2010, this reserve encompasses approximately 640,000 square kilometers in the Indian Ocean, making it one of the largest no-take marine protected areas globally.

**2.Ross Sea Region Marine Protected Area:** Designated in 2017, it covers 1.55 million square kilometers in the Southern Ocean. A significant portion of this MPA is a no-take zone, while other sections permit limited fishing for research purposes.

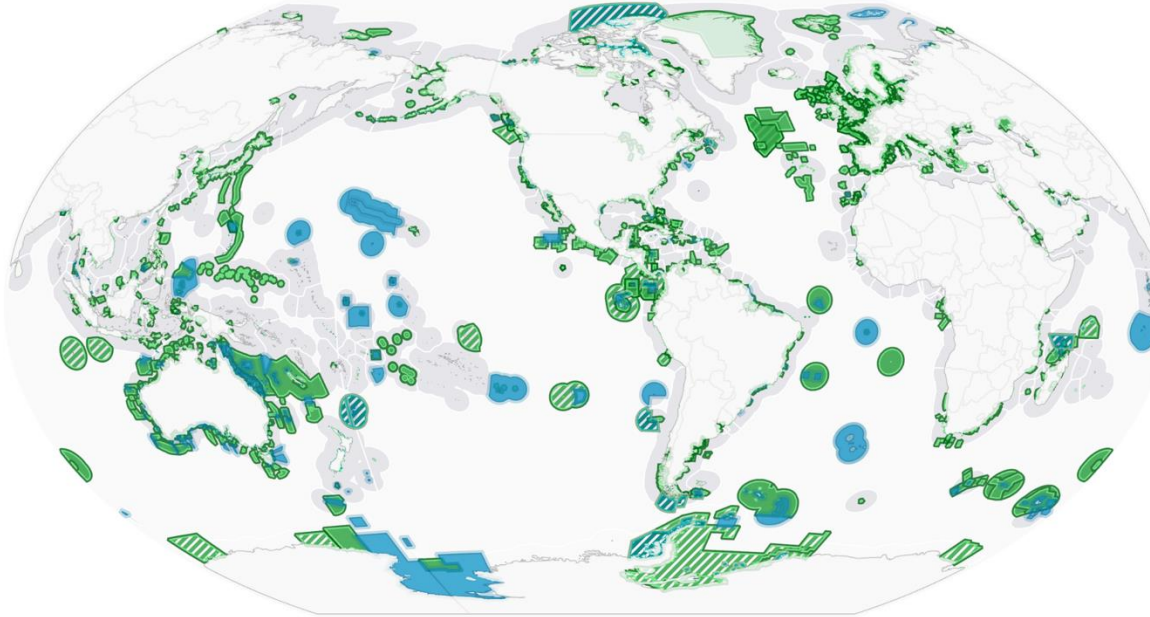
**3.Papahānaumokuākea Marine National Monument:** Located in the Pacific Ocean, this monument was expanded in 2016 to encompass over 1.5 million square kilometers, with substantial areas designated as no-take zones.

**4.Pitcairn Islands Marine Reserve:** Established in 2015, this reserve covers about 830,000 square kilometers in the South Pacific Ocean, functioning as a no-take zone to protect its unique biodiversity.

**5.Tristan da Cunha Marine Protection Zone:** Declared in 2020, this zone encompasses 687,247 square kilometers in the South Atlantic Ocean, making it the largest no-take zone in the Atlantic and the fourth largest globally.

These extensive no-take zones play a crucial role in preserving marine biodiversity by allowing ecosystems to function without human interference.





## Marine Protected Areas

### Level of Protection

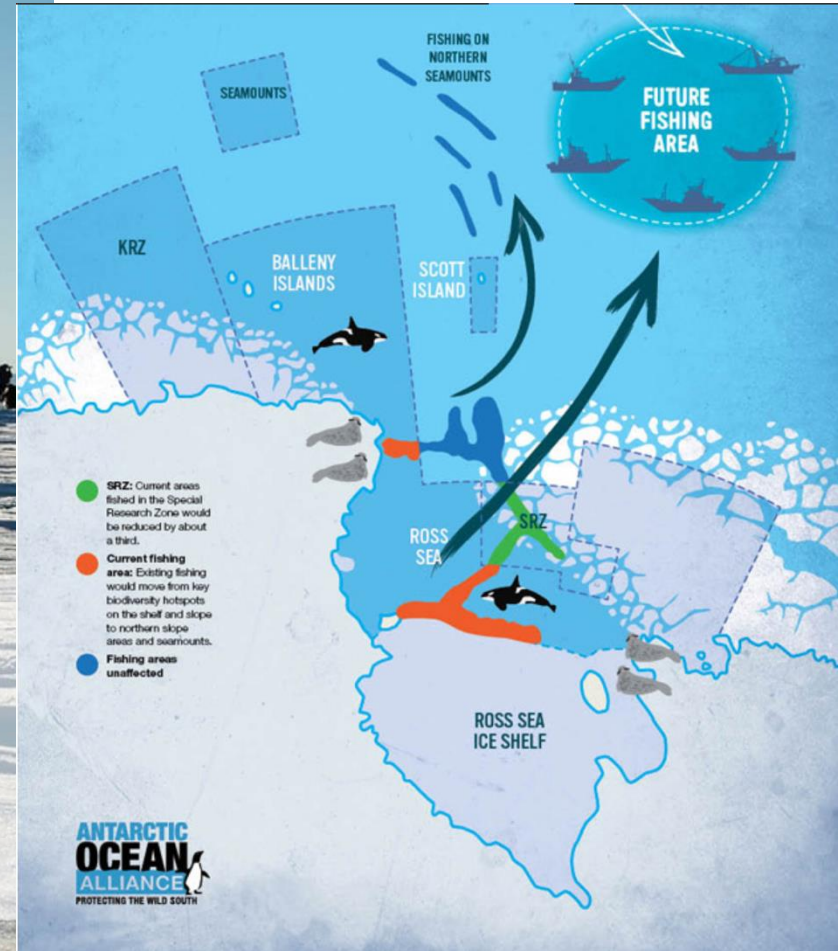
- Highly-Fully Protected Zones
- Less Protected Zones / Unknown
- ▨ Pending Implementation / Proposed

With its **Blue Parks** initiative, the **Marine Conservation Institute** seeks creating standards to ensure that marine protected areas (MPAs) truly protect marine biodiversity.

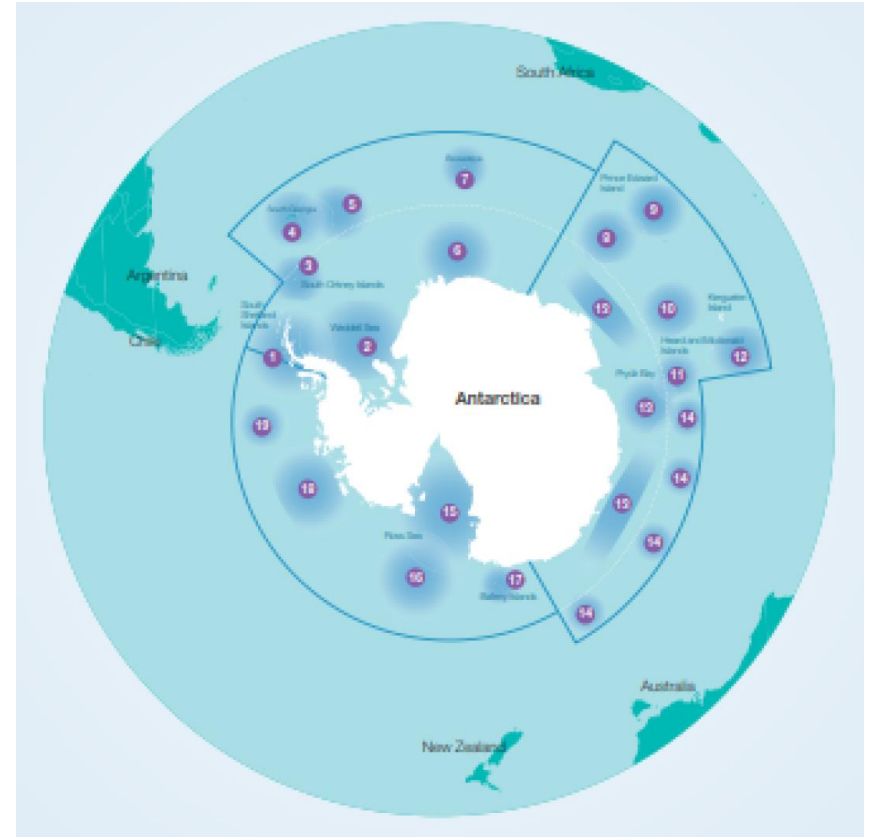
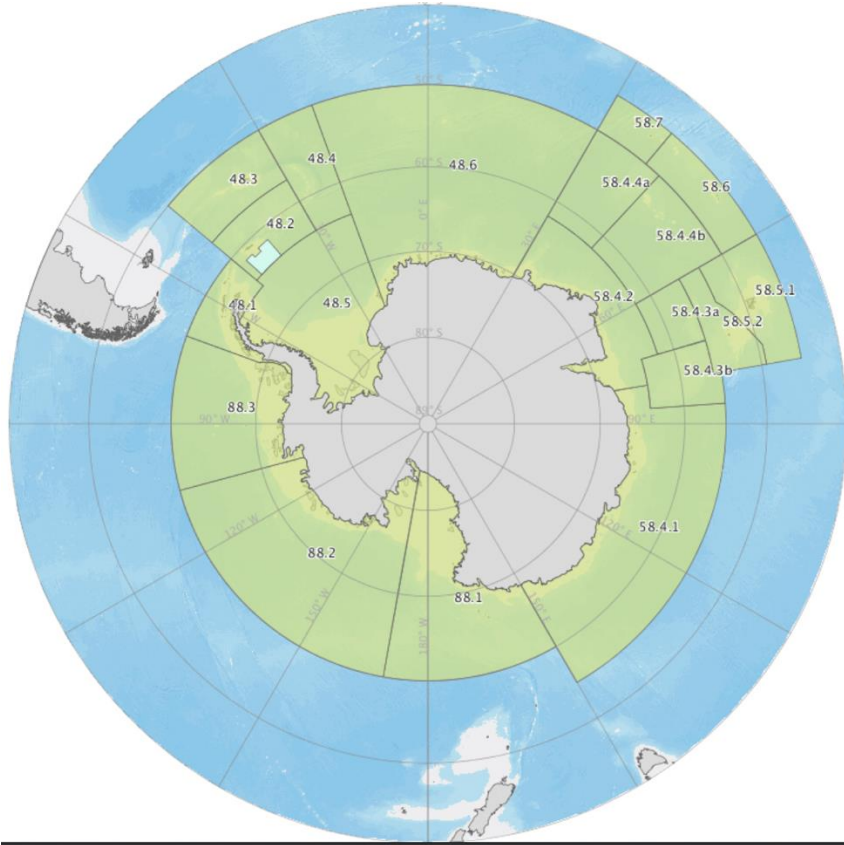
# Antarctic Marine Protected Areas



THE WORLD HAS FINALLY  
UNITED TO PROTECT THE  
ROSS SEA



# Antarctic Marine Protected Areas



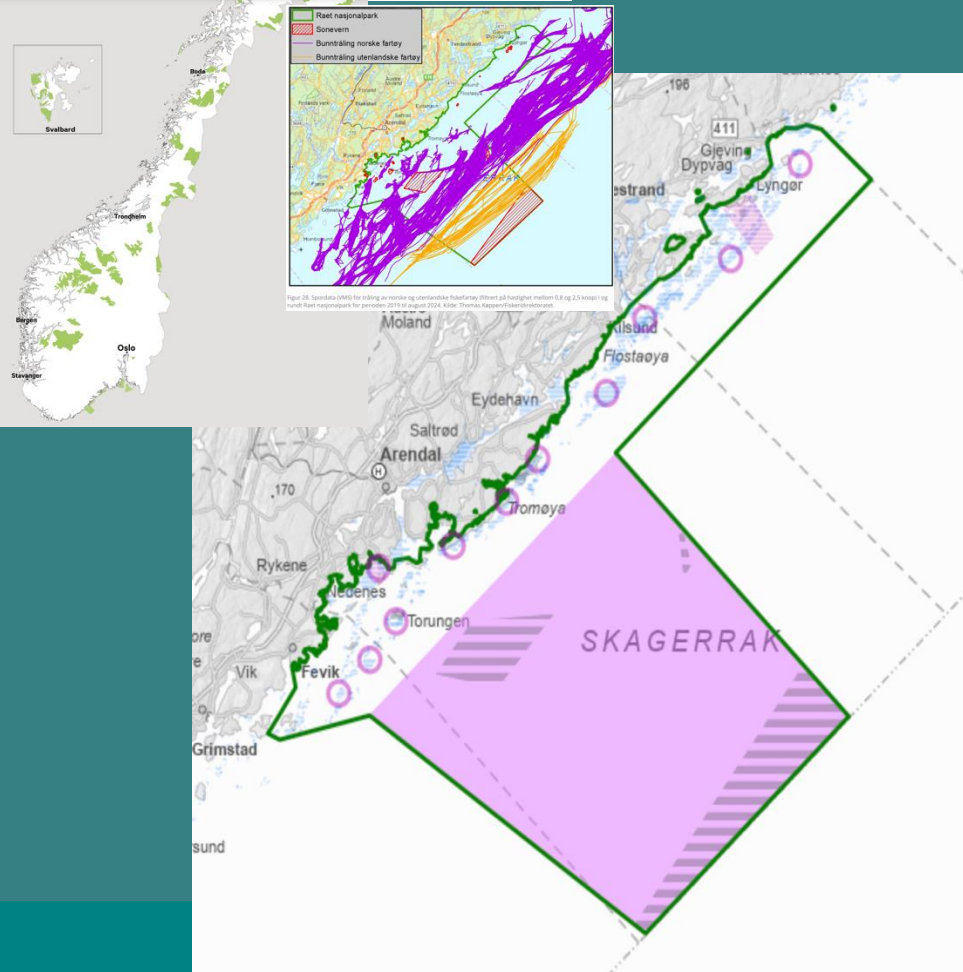




**Zone 1 (Core Zone):** This area covers approximately one-third of the national park, encompassing about 162,000 ha. In this zone, all forms of recreational fishing are prohibited to preserve sensitive habitats and species.



## Can Raet NP become Norway's first «real» National Park ?



The »National Parks» of the Norwegian mainland are de facto only Landscape- or Seascape Protected areas (IUCN category V). «Raet» is the largest norwegian marine NP. Large NTZs and a ban of all hunting could make it the first National Park meeting IUCN criteria.