WE LIVE ON A BLUE PLANET. CONSIDER SOME OF THE FACTS:

- The ocean is a continuous body of water that makes up about 70% of the Earths surface, although with rising sea levels this number is expected to increase.
- The oceans hold about 1.35 billion cubic kilometers of water. This is about 97% of Earth's water.
- The water in the ocean is 3.5% salt and contains traces of all chemical elements found on Earth. The remaining 3% of water on Earth is freshwater. 69% of this is held in glaciers, 30% is underground, and less than 1% is located in lakes, rivers and swamps. It is this 1% that is usable by humans for drinking.
- Humans have explored nearly every corner of land on Earth. However, we have explored less than 5% of the ocean. Nearly half of the ocean is more than 3,000 meters deep, making it both difficult for humans to explore and for life to thrive.
- There are about 238,681 different species in the ocean, ranging in size from minuscule single-celled organisms all the way to Earth's largest living animal, the blue whale.

And yet the ocean is in trouble: ocean change, acidification, overfishing and marine pollution all pose significant threats to ocean ecosystems and the organisms that live there.



MARINE PARKS AND RESERVES

It stands to reason that we need to protect the ocean. However, given its scale, how can we do this? Marine parks and reserves offer a way of protecting parts of the ocean; in particular some of the parts that are most important to the health of all ecosystems, such as important breeding or feeding sites, such as coral reefs or coastal zones.

And because marine and coastal ecosystems also provide various goods and services to communities and economies – including food security, clean water, recreational opportunities and other benefits – protecting these areas also serves to protect social and economic development.

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In Australia we have a range of different marine reserves that have been established and managed primarily for the conservation of their ecosystems, habitats and organisms they support. The use of marine parks can vary: many are open to different activities including recreational fishing, diving, snorkelling, whale watching, commercial fishing, ports development, shipping, and oil and gas exploration.

Within many marine parks there is often highly protected areas called sanctuary zones, marine national parks or no-take zones. In these areas marine organisms and habitats are fully protected from activities such as fishing and exploration for oil and gas, however activities such as swimming and snorkelling are permitted.



What are the benefits of marine sanctuaries?

When established in the best areas and managed appropriately, marine parks and reserves can:

- Help conserve marine ecosystems and biodiversity
- Protect critical breeding, spawning and nursery habitats
- Help marine ecosystems recover from stresses related to human impact
- Help to increase the quality of life and reduce poverty in surrounding communities
- Offer opportunities for education, sensitive tourism activities, and quality research sites for scientists

TWO YEARS AFTER SANCTUARY ZONES WERE EXPANDED ON THE GREAT BARRIER REEF IN 2004, SCIENTISTS FOUND THAT CORAL TROUT HAD INCREASED BY 60% IN THE PROTECTED AREAS.

What is the current marine reserve system in Australia like?

Around the world, marine protected areas cover less than 5% of the ocean, while fully protected marine reserves cover less than 1%.

However, in Australia a network of marine protected areas has ben proposed, that will cover about one third of Australian waters. This is the world's largest network of marine protected areas.



This image from Marine Reserves Coalition shows the scale and distribution of Australia's proposed network of marine protected areas.

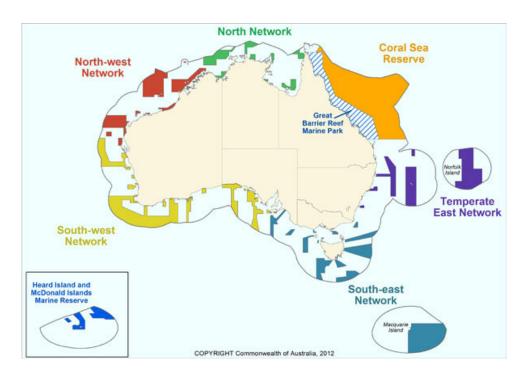


Image source: <u>http://www.marinereservescoalition.org/resources/marine-reserves-around-the-world/australias-marine-protected-area-network/</u>

Notes about Australia's national representative network of marine protected areas:

- Due to its significant physical, ecological and heritage values, the Coral Sea is protected by a large no-take marine reserve.
- The temperate east network includes important habitats for the critically endangered east coast population of Grey Nurse sharks.
- In the south-east area 85% of fish and 62% of seafloor fauna are endemic to the area, making this an important area to the continuation of evolutionary processes.
- In the south west, 90% of species found in this area are not found anywhere else on earth.
- The location of the north west region includes important calving habitats for the world's largest population of humpback whales.
- The north region includes important foraging areas for large numbers of dugongs.
- A no-take classification applies to 30% of the network.



WHAT CAN YOU DO?

Support the creation of more marine sanctuaries. Write to your local member of parliament calling for greater protection of marine areas in your area or of those that you love

Buy sustainable seafood. Look for the blue Marine Stewardship Council logo when purchasing wild-caught seafood and the green Aquaculture Stewardship Council logo when purchasing farmed seafood. Make a commitment to only buy and eat seafood that has been harvested and produced to the highest sustainability standards. You can also use the Australian Marine Conservation Society's sustainable seafood guide app: <u>http://www.sustainableseafood.org.au/pages/download-the-free-app.</u><u>html</u>.



If you go fishing don't be a fool with fish. Only catch what you can eat and release the rest.

Help keep marine ecosystems healthy by keeping waste out of our oceans. Cut down on packaging and products with toxic ingredients that end up in our waterways.

BECOME AN OCEAN GUARDIAN AND JOIN THE GLOBAL MOVEMENT NOW!

Go to the Blue website to become an ocean guardian and take action for our ocean (https://bluethefilm.org/take-action/)



REFERENCE LIST:

- Ocean overview http://ocean.nationalgeographic.com/ocean/explore/ocean-overview/
- Distribution of Water on the Earth's Surface https://www.e-education.psu.edu/earth103/node/701
- How much of the ocean have we explored? http://oceanservice.noaa.gov/facts/exploration.html
- World register of marine species http://www.marinespecies.org/
- Establishing Resilient Marine Protected Area Networks Making It Happen, 2008, The World Conservation Union (IUCN)
- Australia's Marine Protected Area Network
- Explore the issues https://bluethefilm.org/explore/



