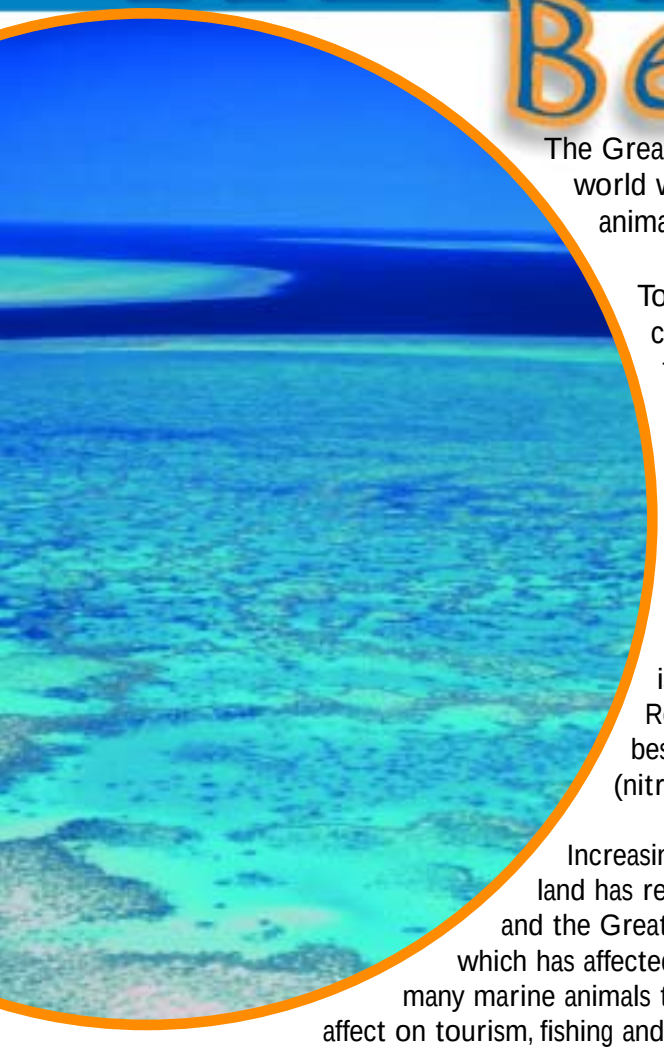
REEF Beat

Doing your bit to look after it!



The Great Barrier Reef is one of the most beautiful, diverse and complex ecosystems in the world with more than 2,900 reefs, 1,500 species of fish and many unique and threatened animals like dugong and turtles.

To help keep our waterways and the Great Barrier Reef healthy for generations to come, we all need to do our bit to protect them. Whether you live in a big city, small town or in the country, what you do at home and at school can affect the quality of water in your local rivers, estuaries and the Great Barrier Reef.

We can all do our bit to look after our Great Barrier Reef and help keep it great for future generations.

Water Quality

The quality of water entering the Great Barrier Reef Marine Park is declining and is impacting on the health of the Great Barrier Reef and the animals and plants that live within it. Reefs grow best in waters that have naturally low concentrations of nutrients (nitrogen and phosphorus) and sediments.

Increasing use of fertilisers, pesticides and other pollutants on the land has resulted in increased levels of these entering our waterways and the Great Barrier Reef. This has resulted in the decline in water quality, which has affected corals, seagrasses and other important habitats, as well as the many marine animals they support. Declining water quality can also have a harmful affect on tourism, fishing and other important industries that depend on a healthy reef.

Great Barrier Reef Catchment

The Great Barrier Reef Catchment is the land area that surrounds the rivers that drain into the Great Barrier Reef. This area is the main source of sediment, nutrients and other pollutants that enter the Reef. Within the Great Barrier Reef Catchment there are a number of smaller catchments that surround each of the larger rivers that drain into the Great Barrier Reef.

How we impact on water quality

The Great Barrier Reef Catchment links the land to the Reef, so what we do on the land affects the water quality in our rivers, estuaries and the Great Barrier Reef. As individuals, we all undertake everyday activities that may impact on the quality of water in local waterways and downstream marine environments.

Many major land uses and human activities may contribute to declining water quality in the Great Barrier Reef. Some of these activities include:

- coastal development
- agriculture
- aquaculture
- mining and industry
- shipping.

Doing your bit to look after it!

You can do your bit to help protect the Great Barrier Reef by implementing practices on the land and in your home or school that help minimise your impacts on water quality.

You can help to improve the quality of water in the Great Barrier Reef and other important marine environments by:

- keeping drains and gutters free of chemicals and rubbish, as what goes into drains, creeks and rivers may end up in the ocean
- putting all litter in the bin and recycling to keep the Great Barrier Reef clear and free of litter
- washing your car on the lawn instead of in your driveway or on the street, as detergents will wash into nearby drains and may end up in local waterways or the Great Barrier Reef
- composting and using garden beds or vegetation strips around your home to capture rainwater and minimise runoff
- sharing your knowledge about the affects of declining water quality with others
- joining a local community group that actively supports the protection of our coasts and oceans such as Waterwatch, Seagrass Watch, Landcare or a Catchment Management Group.

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It's all connected!

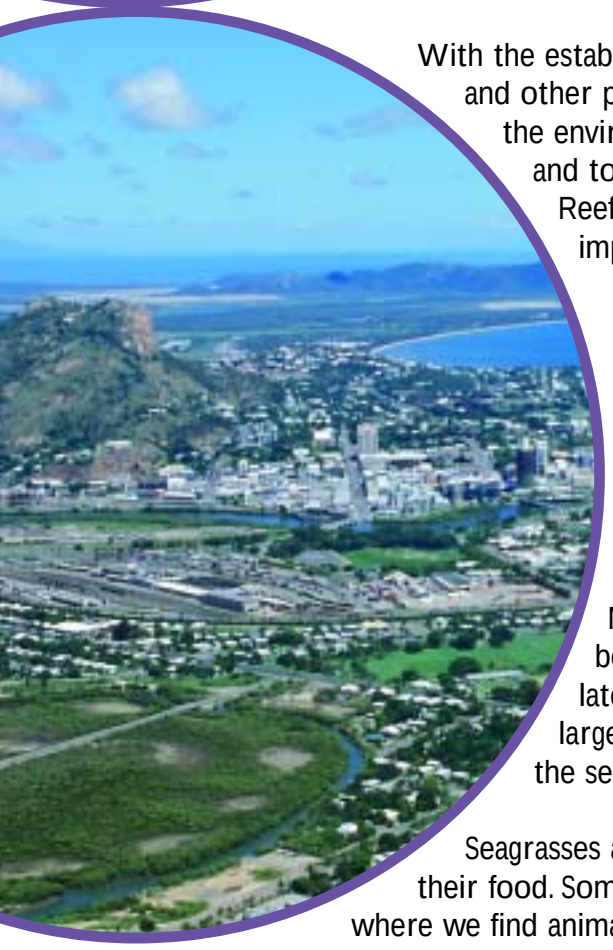
If you're a person on a cattle property on a hot dry day in inland Queensland, the last thing to enter your mind could very well be the beauty and health of the Great Barrier Reef. However, you may not realise that some of the things we do on the land, even in the outback, can impact on the Reef and its seagrass, coral and mangrove habitats.

All of our land and marine environments and habitats are linked, so what we do in one place can damage or help another place. That's why communities, industries, governments and scientists are working together on ways to reduce the effects of our activities on the Great Barrier Reef.

In the past

When European settlers came to Australia, they cleared large areas of the land to make room for towns to be built, for cattle to graze and for crops to grow.

When vegetation is removed and heavy rain falls, a lot of the good topsoil and its natural nutrients are washed away into rivers, creeks and out to sea. Without vegetation in these areas, there is nothing to hold the soil together, so more nutrients and sediments are discharged to our waterways and the Great Barrier Reef.



With the establishment of many towns and cities along the coast, more nutrients and other pollutants and rubbish including plastic bags have found their way into the environment. In some areas, chemicals and nutrients that are used in homes and to help grow crops also wash into the rivers and out into the Great Barrier Reef. Many farmers and city dwellers are now thinking of new ways to reduce their impacts on the Great Barrier Reef.

Protecting important habitats

If we want to protect our magnificent Great Barrier Reef, we need to look after all the habitats within and surrounding it. The primary habitats to think about are wetlands, mangroves, seagrass areas and soft bottom inter-reefal areas.

Mangroves are important to the life of the Great Barrier Reef because they can act as nurseries for baby fish and prawns that later grow up and move out to the reefs. They are also home to a large range of bird life and they act as a buffer between the land and the sea.

Seagrasses are also nursery areas and are where the endangered dugongs find their food. Some sea turtles also depend on seagrass for their meals. These areas are where we find animals like seahorses and pipefish.

Other habitats most people don't think about are the soft bottom inter-reefal areas. They're called soft bottomed because they have mud or sand on the seafloor. These areas are where fishers catch prawns. Inter-reefal areas are also home to an incredibly diverse group of animals and plants.

Doing your bit to look after it!

If we act carelessly and pollute our land and streams we can damage our Great Barrier Reef, seagrasses and mangroves beyond repair. We have to be very careful about how we dispose of rubbish and other toxic materials and how we use our land.

One of the things we can do is to always be mindful about what we put into our drains and sewers. Even washing your car in the street or driveway can result in detergents entering our waterways and every time you pour something down the sink, it may end up reaching the Great Barrier Reef.

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Wetlands - An oasis of life

Wetlands are amazing and complex waterways that occur in many different sizes and forms.

Wetlands are land areas either temporarily or permanently covered by water. Types of wetlands include swamps, marshes, billabongs, saltmarshes, mudflats, coral reefs, mangroves, lakes and peatlands.

Marine habitats like coral reefs, seagrass meadows, mudflats, mangrove estuaries, samphire salt marshes, rocky marine shores and sand or pebble beaches are common forms of marine wetlands found in and around the Great Barrier Reef.

Wetlands are often areas of great beauty where people enjoy the scenery and gather for recreation. In all their forms, wetlands are very special places.

Importance of wetlands

Wetlands in catchments along the coast next to the Great Barrier Reef Marine Park are vital for the long-term protection of the Great Barrier Reef. Wetlands support a diverse range of marine life and provide habitat, breeding and nursery areas for birds, mammals, reptiles, amphibians, insects and many fish species such as barramundi and mangrove jack.

Wetlands play an important role in protecting water quality in the Great Barrier Reef Marine Park by helping to filter the sediment, nutrients and other pollutants from the waters that enter the Great Barrier Reef. They are also important in:

- preventing erosion
- allowing sediments and nutrients to settle out before entering the Great Barrier Reef
- protecting the coastline from erosion and during destructive events such as cyclones.

Wetlands are significant habitats for Aboriginal and Torres Strait Islanders as part of their cultural heritage, spiritual values and day-to-day living. Wetlands also provide for recreational and tourism opportunities such as fishing and guided tours.

Wetlands on farms buffer the effects of floods by holding excess water for a short time, reducing the severity of flooding downstream. Wetlands provide diverse habitats for plants, birds and animals, many of which feed on agricultural pests. Wetlands also make a farm a more interesting and pleasant place for people to work and live and they provide for added recreational opportunities such as fishing.

Wetlands in danger

Over 50% of our wetlands have been significantly affected through degradation or loss since European settlement. Catchments adjacent to the Great Barrier Reef have been extensively cleared and modified for urban development, aquaculture development and agricultural activities such as cattle grazing and cropping.

Protecting wetlands

The protection of wetlands is critical to help ensure the survival of the Great Barrier Reef. The preservation and rehabilitation of wetland areas is a major environmental priority for the Australian and Queensland Government's Reef Water Quality Protection Plan.

Communities, industries and governments are working together to raise awareness of the effects of wetland clearing and to help protect wetland areas for the future. A number of community projects have been developed to help prevent the decline of these important environments. For information about how you can become involved in a wetland protection project in your area, contact your local Council or your local Regional Natural Resource Management Group at http://regionalnrm.qld.gov.au/about/regional.

Doing their bit to look after it!

Many communities and farmers are working together to rehabilitate and revegetate natural environments like wetlands. By revegetating riverbanks, wetlands and other areas around their farms, land managers are helping to decrease the amount of nutrients and sediments that are discharged into surrounding waterways and in turn are helping to improve the quality of water in the Great Barrier Reef. These actions will help to ensure the survival of the Great Barrier Reef and all of the habitats, plants, animals and industries it supports.

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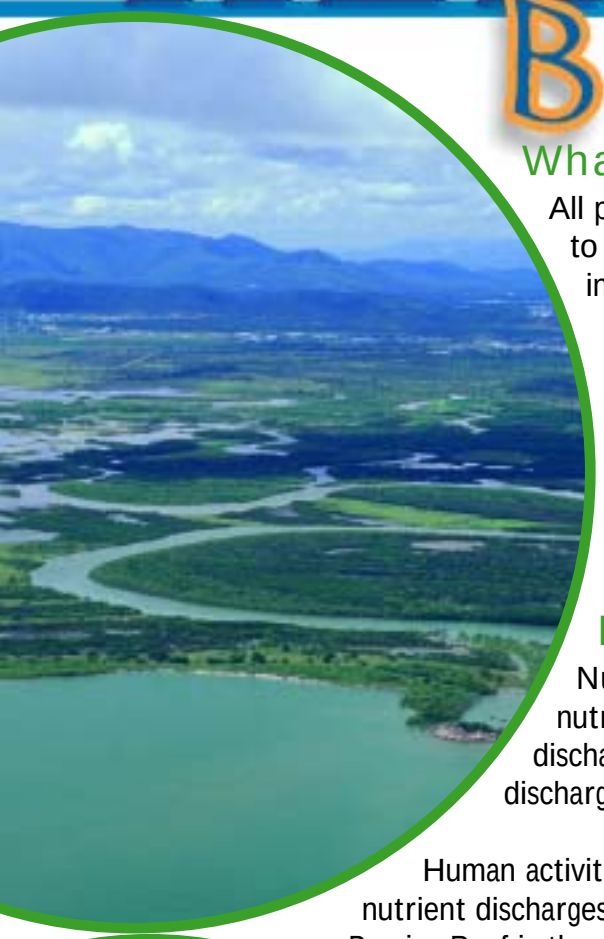
Nutrients and sediments



What are nutrients and sediments?

All plants and animals need nutrients to grow, however in excessive amounts nutrients can be harmful to marine life. There are two main types of nutrients – nitrogen and phosphorous – and these exist in several forms in marine waters. Other types of nutrients include potassium and sulphur.

Sediments are fine particles of soil, sand and other minerals or organic matter that is eroded from land and carried in surface waters. Sediment occurs naturally in the Great Barrier Reef, however human activities and land uses have caused excessive amounts of sediments to be discharged to the Reef. Around four times as much sediments and nutrients are now discharged to the Great Barrier Reef as occurred before settlement.

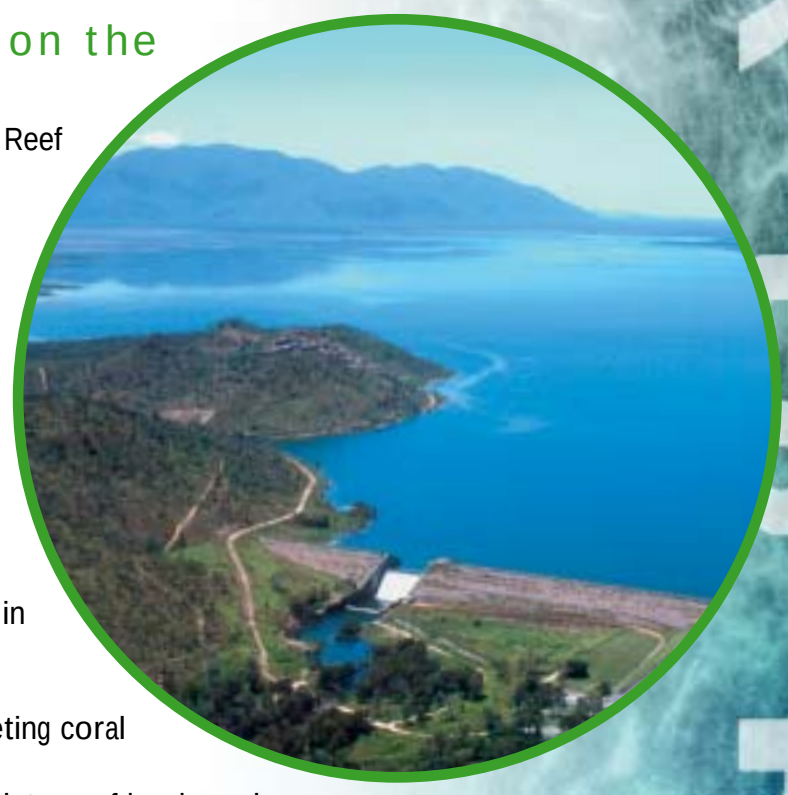
How do nutrients and sediments reach the Great Barrier Reef?

Nutrients enter the marine environment through creeks, rivers and estuaries. A large amount of nutrients are discharged to the Great Barrier Reef during flood events, but they can also be discharged to the Reef at all times of the year through run-off, wastewater, stormwater and sewage discharge.

Human activities such as urban development, agriculture and aquaculture are all contributors of sediment and nutrient discharges to the Great Barrier Reef. The most common way for sediment to reach the waters of the Great Barrier Reef is through run-off and soil erosion.

How do nutrients and sediments impact on the Great Barrier Reef?

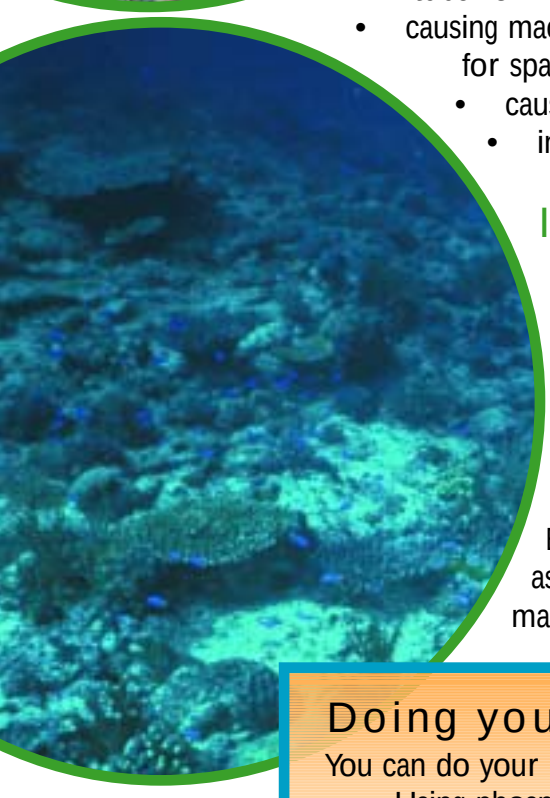
Prior to European settlement over 150 years ago, the Great Barrier Reef was not nutrient rich. Corals prefer to live in waters with low amounts of nutrients and sediments, as they need clear water and sunlight to survive. The excess nutrients and sediments running into our waterways and the Great Barrier Reef are impacting on the health of reefs and other important habitats.



Impacts of nutrients

High nutrient concentrations result in a range of impacts on coral communities and under extreme situations can cause coral reef communities to collapse. Excess nutrients in the Great Barrier Reef contribute to declining water quality and can severely harm corals by:

- promoting phytoplankton (microscopic floating plants) growth, which in turn supports increased numbers of filter feeding organisms such as tubeworms, sponges and bivalves that compete with coral for space
- causing macroalgal blooms, which may overgrow coral structures, out-competing coral for space and shading coral colonies from sunlight
- causing excessive phosphorus concentrations, which weakens the skeletons of hard corals
- inhibiting breeding in some coral species and reducing recruitment to the population.



Impacts of sediments

Excessive inputs of sediment from the land to the Great Barrier Reef can lead to reef destruction through burial, disruption of breeding habits and harmful shifts in coral communities. Sediment affects coral by:

- smothering them when particles settle out (sedimentation)
- reducing light availability (turbidity)
- potentially reducing coral photosynthesis and growth.

Elevated sediment and nutrient concentrations in severe floods can even be harmful to seagrass beds as they can cause a dramatic reduction of light availability, which limits the seagrasses ability to manufacture food.

Doing your bit to look after it!

You can do your bit to help decrease the amount of nutrients and sediments entering the Great Barrier Reef by:

- Using phosphate-free and biodegradable products
- Planting ground cover and trees over areas with exposed soil
- Planting garden beds and vegetation strips around your yard or school grounds to help minimise run off.

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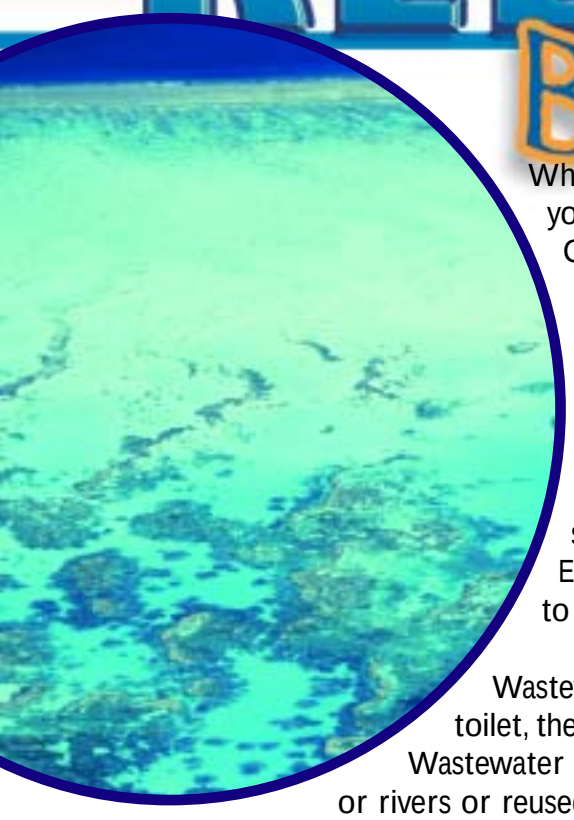
It all goes somewhere!



Whether you live in a major city, small town or in the country, what you do at home, work and school in the Great Barrier Reef Catchment can affect the quality of water in the Reef. Many of your daily activities may increase the levels of nutrients, sediments and chemicals being discharged to the Great Barrier Reef.

Compost and use garden beds or vegetation strips around your home to capture rainwater and minimise runoff

Use less water by fixing leaking taps, keeping showers to a minimum and washing your car with a bucket

From the city to the sea

Nutrients, sediments and other pollutants can reach our Great Barrier Reef through a number of sources. One of the main sources is through stormwater and wastewater that is discharged from our towns and cities. Everything we pour down the sink, drop on our streets and put in our drains has the potential to reach our waterways and the Great Barrier Reef.

Wastewater is the water that goes down the sinks and drains inside your home. Water from the toilet, the bath, the shower, the sink, the dishwasher and the laundry is known as wastewater. Wastewater from your home is treated at a treatment station before it is discharged to creeks or rivers or reused over land. At the treatment station, some (but not all) of the impurities are removed from the water so the health of the water is improved.

Stormwater is rainwater that ends up in a stormwater drain system after it has fallen on your roof, driveway, lawn or on the road. The water in the stormwater drain system is not treated, therefore any chemicals or rubbish left in a stormwater drain can flow into a creek or river, especially during heavy rainfall.

Wastewater and stormwater is often discharged through drains into creeks and rivers, which often flow directly into the Great Barrier Reef. The water quality in an estuary, river, stream or creek may impact on the quality of water in the Great Barrier Reef.

From the land to the Reef

Today, 80% of the land adjacent to the Great Barrier Reef Marine Park supports agriculture production such as beef cattle grazing and cropping.

To make space for these agricultural activities, large areas of native vegetation have been cleared. This, along with over-stocking on farms, has caused widespread soil erosion in some parts of the Great Barrier Reef Catchment. This has led to the increased discharge of eroded material such as nutrients and sediments to the Great Barrier Reef. The discharge of these pollutants occurs mainly during times of heavy rainfall.

Sweep your driveway and patio areas instead of hosing to prevent water from carrying pollutants to stormwater drains

Travel slowly in your boat near islands and the mainland to minimise bank erosion and sediment disturbance from boat wash

In areas where cropping occurs, the application of fertilisers and pesticides may be necessary. Fertilisers are taken up by the crop to help them grow, while pesticides help maintain crop health by minimising the impact of pests. However, a significant portion may also end up in nearby waterways and coastal waters, particularly if there is a creek or river close by.

On the water

Many activities take place in the Great Barrier Reef Marine Park including boating, fishing, diving, snorkelling and shipping. Every time we enter the waters of the Great Barrier Reef, we have the potential to impact on it. Some of the activities that take place on the water may contribute to the declining water quality of the Great Barrier Reef. For example, sewage disharged from vessels into the Reef's waters can contain large amounts of nutrients and sediments and litter thrown overboard can harm or even kill marine animals.

When snorkelling or diving, do not rest or stand on coral and avoid touching anything with your fins

When in the water try not to stir up sediment or disturb coral

Shipping can also impact on water quality especially during an oil or chemical spill from a ship. Shipping spills and groundings have the potential to cause serious environmental damage to the marine environment. However, waste products and garbage from the day-to-day operation of a ship can also pollute the waters of the Great Barrier Reef. These wastes may include oils, chemicals, sewage, garbage, and toxic compounds released from anti-fouling paints and ballast water.

When visiting islands, do not use detergents close to any waterways including the ocean

Whenever we use the Great Barrier Reef we need to be mindful of how our activities can affect this precious marine environment and take care to ensure we have as little impact as possible.

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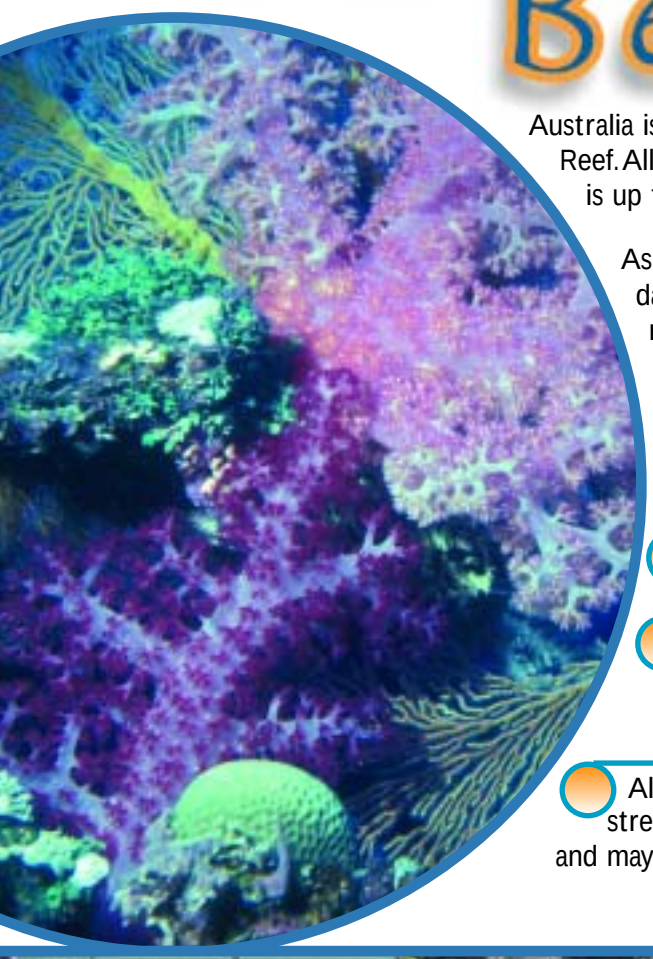
Sustainable living



Australia is made up of many amazing and diverse environments such as the world heritage listed Great Barrier Reef. All Australians play an important role in looking after our precious marine and land environments and it is up to you to do your bit to help look after our Great Barrier Reef.

As individuals, we all undertake everyday activities that may impact on the environment. Many of our daily activities can increase the amount of nutrients, sediments and other pollutants being discharged to rivers and creeks. However, by living in a sustainable way you and your family can make a difference to protect local waterways and help ensure the Reef's existence for generations to come.

Doing your bit to look after it!

Sustainable living in your home…

- It is important to keep your sinks and drains free of chemicals and rubbish. Never pour chemicals down the sink and always use a strain in your sink when washing the dishes.
- Water is a very precious resource. Using less water in your home and at school will help to decrease the amount of wastewater and stormwater entering local waterways. Make sure you fix leaking taps around your home and do not leave water running for longer than needed.
- Always make sure you wash your car on the lawn instead of in your driveway or on the street. When you wash your car on the street, the detergents can wash into nearby drains and may end up in local waterways.
- Make or buy a compost for your yard and put all of your food scraps in it. This will help to minimise the amount of waste in your bin and it is good for your gardens and lawn.
- Plant garden beds around your home to capture rainwater and minimise runoff.
- Try to reuse plastic bottles and other items and recycle as much as you can. This will help to decrease the amount of rubbish that ends up in our landfills and our oceans.
- Each year millions of plastic bags pollute the world's oceans, so always use calico or reusable bags when shopping instead of plastic bags.

Sustainable living in your community…

- Keep the drains and gutters in your local streets free of chemicals and rubbish by picking up litter and never pouring chemicals or detergents into or near drains. What goes into drains usually ends up being discharged into nearby creeks and rivers and may eventually end up in the ocean.
- Always put litter in the right place. Pick up litter around your neighbourhood and on your local beaches, as even the smallest piece of litter can harm the Great Barrier Reef and many of the animals that call it home.
- Learn about the wetlands in your area and teach others about how important they are to our waterways and the Great Barrier Reef. Wetlands store and filter water run-off, so it is important that they are protected.
- Participate in special environmental events such as Clean Up Australia Day, World Environment Day and Coastcare Week. Join a local community group that actively supports the protection of our coasts and oceans such as Waterwatch, Seagrass Watch and Landcare.

Sustainable living in business

Many businesses and industry groups are implementing best practices to ensure the impacts of their activities on important environments like the Great Barrier Reef are minimised. From small offices to large factories, businesses are doing many things to ensure they are working in an environmentally sustainable way.

Some of these best practices include:

- Installing renewable energy systems and conducting regular energy audits to help conserve energy.
- Implementing water recycling systems and practices that use less water.
- Reusing and recycling wastes. Many companies have put paper recycling bins in their offices and standard recycling bins in their staffrooms to encourage staff to recycle.

Businesses and industry groups are continually improving practices to minimise their impacts on the Great Barrier Reef and help ensure its existence for generations to come.

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Sustainable schools

More than 140 Reef Guardian Schools throughout Queensland are doing things in their school grounds and within their local communities that will help to protect the Great Barrier Reef and other important environments for the future.

Even if your school is thousands of kilometres from the Great Barrier Reef, learning to live, work and play in a sustainable way will help to protect and preserve many of our precious land and marine environments.

The activities below are some of the ways Reef Guardian Schools are helping to protect the environment and operate in a sustainable way. You can help your school do their bit to look after the Great Barrier Reef by implementing some of these in your school.

Doing your bit to look after it!

- Become a Reef Guardian School. Just encourage your teacher to phone the Great Barrier Reef Marine Park Authority for more information on (07) 4750 0850.
- Reduce, Reuse and Recycle - Ensure enough bins are placed around your school and set up recycling bins for cans, glass, plastics and paper and label these bins clearly. Millions of plastics and other pieces of rubbish enter Australia's oceans every year. We can all do our bit to prevent rubbish reaching the Great Barrier Reef by reducing and reusing items such as plastic bags and containers.
- Reduce plastic bags – implement a calico bag project in your school. Design and manufacture calico bags and sell or give them to members of your community and encourage your family, friends and community to use calico or reusable bags when shopping.
- Compost around the school grounds and collect food scraps and set up a worm farm for recycling organic waste. This will decrease the amount of rubbish your school discards every day.
- Keep your drains clean and free of chemicals by sweeping the drains and gutters around your school, reusing green waste (leaves, twigs etc) and never pouring chemicals or waste down the sinks. Everything that enters a stormwater drain has the potential to be discharged to local waterways and eventually the Great Barrier Reef.
- Keep your community's drains and gutters clear of litter and chemicals by stencilling your bins, drains and gutters with messages such as 'This drain leads to the Reef' to raise awareness in your community.

- Use less water by repairing leaking taps and putting mulch in your gardens. You could also design water conservation signs with messages like 'Don't be a sap, turn off the tap' and place them in outlets in and around school buildings. Water is a precious resource and the less water your school uses the less opportunity there is for nutrients and chemicals to be discharged to waterways through wastewater.
- Conduct an audit in your school to conserve water, reduce litter and waste, reduce green and organic waste, conserve energy or monitor stormwater. All of these audits will help your school to be more sustainable. Audit tools can be accessed at www.reefed.edu.au/guardians/ideas
- Encourage your principal and teachers to implement best practices in the school such as a water recycling system, an energy conservation strategy or a revegetation program. You can get more information on these practices from the Great Barrier Reef Marine Park Authority.
- Learn more about the Great Barrier Reef and ways that you can help to protect it and share these with your class by visiting the Reef Ed website at www.reefed.edu.au.

Does your school have what it takes to make a difference and keep the Reef great?
Do you want to help protect the Great Barrier Reef and other important marine environments for the future?

Visit www.reefed.edu.au/guardians
or phone (07) 4750 0850 to register to be a Reef Guardian School

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Sustainable farming

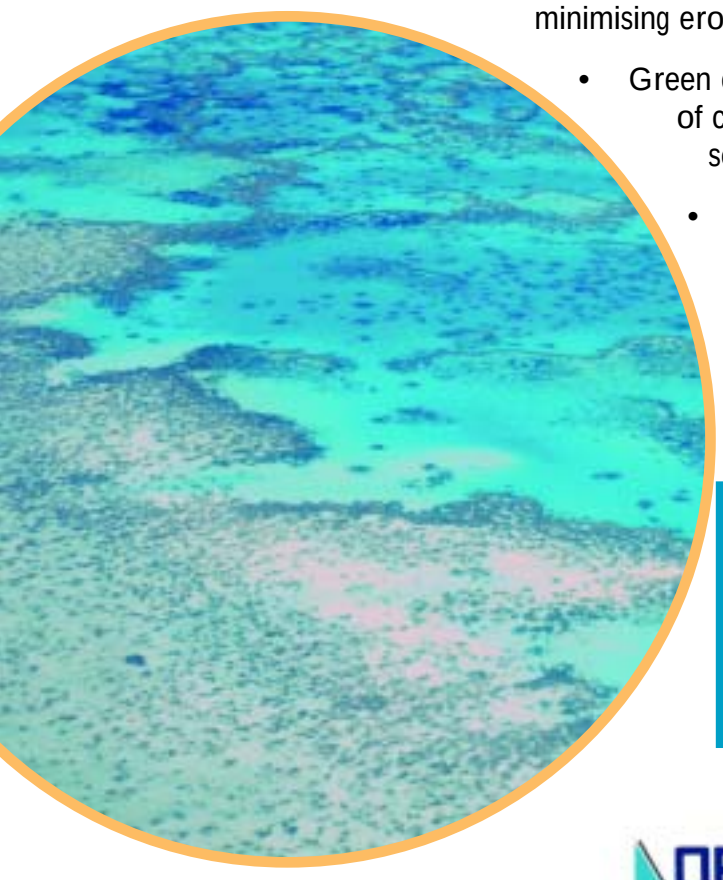
Agriculture is a major industry in the Great Barrier Reef Catchment with about 80% of the land adjacent to the Great Barrier Reef Marine Park supporting agricultural production. Agriculture in the Great Barrier Reef Catchment contributes over $2.4 billion to the Australian economy each year and provides thousands of jobs and supports many regional communities.

However, some agricultural activities may contribute to declining water quality in the Great Barrier Reef. Therefore, farmers, land owners and the agricultural industry are working together with governments and the community to implement practices, such as the Farm Management Systems program, on their land to help care for the environment.

Doing their bit to look after it!

Some of the actions people are taking to care for their land, nearby waterways and the Great Barrier Reef include:

- Revegetating and rehabilitating wetlands to help filter out excess nutrients and sediments before they enter local waterways and the Great Barrier Reef
- Planting vegetation and conserving native plants to help minimise the potential for run-off
- Preserving areas for wildlife habitat to avoid displacing native animals
- Using farming techniques such as minimum till to minimise soil erosion and improve soil fertility
- Implementing stock management to prevent overgrazing, particularly in areas adjacent to waterways
- Rotating crops by growing different types of crops in a field each year to help the control of pests and soil diseases and to help minimise the need for chemicals
- Building contour banks to help prevent soil erosion and conserve water. The contour banks are built along a slope and they help to catch water thus minimising erosion
- Green cane trash blanketing where the leaves and tops of cane stalks are left as a “blanket” on top of the soil after harvesting and so minimise soil erosion
- Building natural drain systems such as shallow swale drains and grassed retention basins. These systems slow water flows to allow for sediment or nutrients in the water to settle out and also prevent erosion of drain beds and banks.



For more information on sustainable farming and the agricultural industry Farm Management Systems program, visit the Queensland Farmers Federation website: www.qff.org.au

QFF QUEENSLAND FARMERS' FEDERATION

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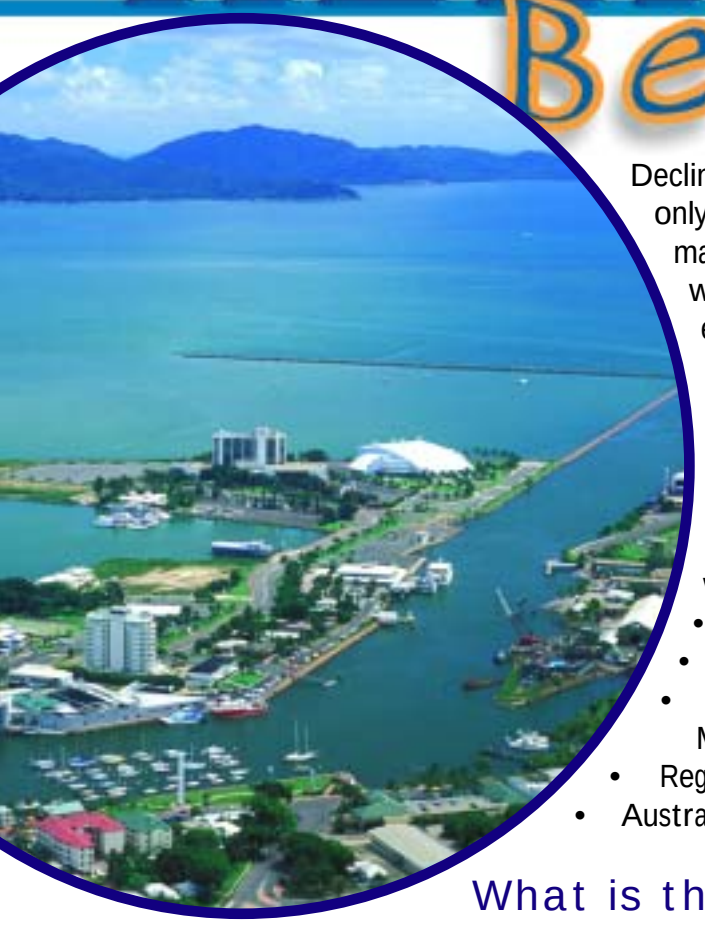
Managing water quality



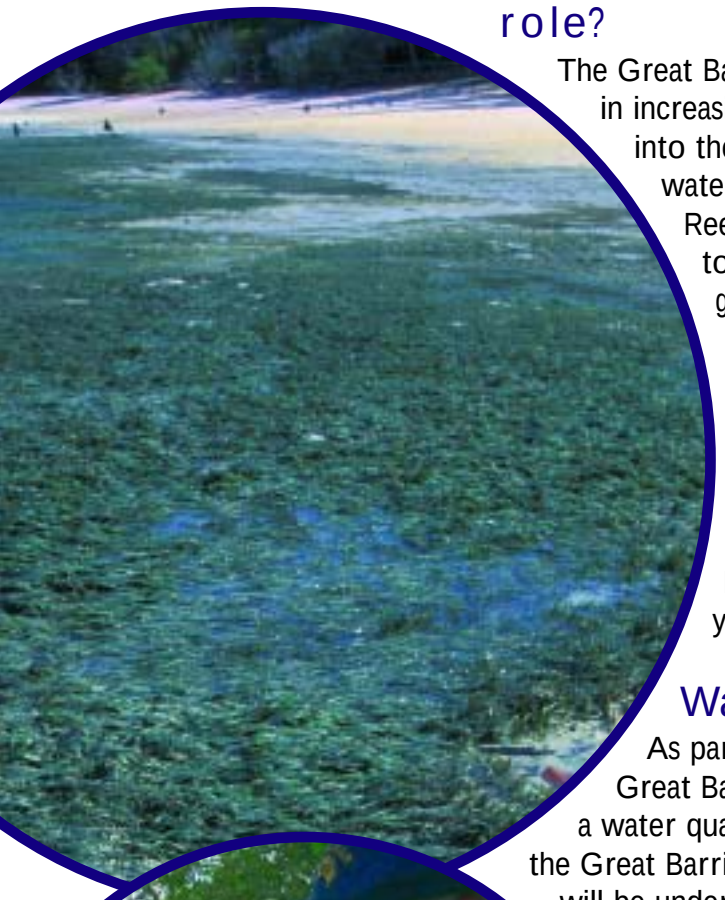
Declining water quality is one of the major threats affecting the Great Barrier Reef, so it's only natural that many different groups and individuals want to work together to help manage this issue. Together, governments, industries and the community are identifying water quality issues and implementing new ways to improve the quality of water entering the Great Barrier Reef.

Who manages water quality in the Great Barrier Reef?

Declining water quality in the Great Barrier Reef is an issue that affects all of us and is also one that we all have some affect on. A range of organisations and individuals are working together to help improve water quality in the Reef including:

- Landowners
- Industry groups that represent the farming sectors and other business sectors
- Community groups such as Landcare, Waterwatch, Seagrass Watch and Catchment Management Groups
- Regional Natural Resource Management Groups
- Australian, State and Local Governments

What is the Great Barrier Reef Marine Park Authority's role?



The Great Barrier Reef Marine Park Authority has identified that changes in land use have resulted in increasing loads of sediments, nutrients and chemicals being discharged from the Catchment into the waters of the Great Barrier Reef. The increased discharge of these materials affects water quality, which impacts on the health of the Great Barrier Reef. The Great Barrier Reef Marine Park Authority focuses on raising awareness of how people can take action to minimise their impacts on the Reef by working with communities, industries and governments. All people, no matter where they live, can do their bit to help reverse declining water quality and keep the Reef great for future generations to enjoy.

Reef Water Quality Protection Plan

The Queensland and Australian Governments are working together to improve the water quality entering the Great Barrier Reef Marine Park through the Great Barrier Reef Water Quality Protection Plan. The goal of the Reef Water Quality Protection Plan is to 'halt and reverse the decline in water quality entering the Reef within ten years'.

Water quality monitoring

As part of the Reef Water Quality Protection Plan, the Great Barrier Reef Marine Park Authority will implement a water quality and ecosystem monitoring program within the Great Barrier Reef Marine Park. The monitoring program will be undertaken by research bodies, government and universities with support from community monitoring programs such as SeagrassWatch.

Information collected by each of these groups will be analysed and interpreted to provide the basis for reporting on the status of water quality and ecosystem health of the Marine Park. The health of seagrass, corals and other marine species will be monitored, along with indicators such as sediments, chlorophyll a (nutrients) and pesticides.

Doing your bit to look after it!

By doing your bit to help reverse the declining water quality in the Great Barrier Reef, you are helping all of these groups to manage water quality. Please help us look after the Great Barrier Reef by becoming involved in groups that help to protect our coasts and oceans such as your local Catchment Management Group, Landcare, Waterwatch or Seagrass Watch.

Australian Government
Great Barrier Reef
Marine Park Authority

our great barrier reef
let's keep it great

REEF Beat

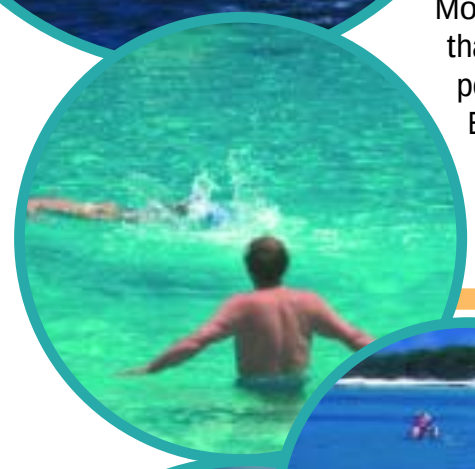
Our Reef's future

The Great Barrier Reef is home to more than 1,500 species of fish. The most common type of fish in the Great Barrier Reef is the Cryptobenthic, which are small fish that live mostly on the sea floor

The Reef is made up of more than 2,900 reefs, 600 continental islands and 300 coral cays. It also contains many important habitats such as seagrasses, mangroves, sponge gardens and muddy seabed communities

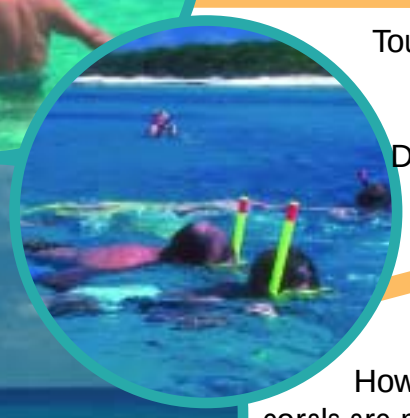
The Great Barrier Reef is one of the world's largest World Heritage Areas covering an area of more than 348,000km_ and stretching more than 2300km along the Queensland coast

The Great Barrier Reef is home to a number of threatened species including more than 30 species of marine mammals such as whales and dolphins, about 14,000 dugong and six species of marine turtles



More than two million people visit the Great Barrier Reef every year and the Reef supports many commercial and recreational activities, which are very important to Australia's economy

The Reef's future is up to you!



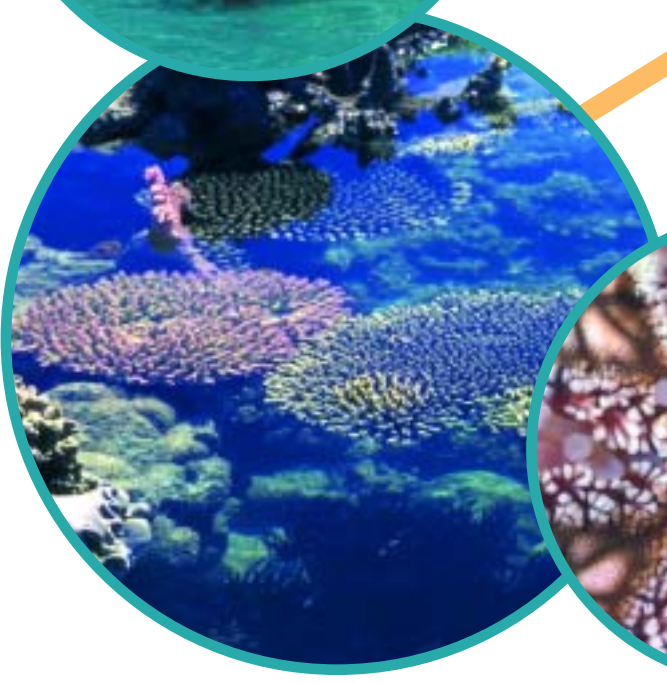
Tourism on the Great Barrier Reef generates over $1.4 billion each year. More than 85% of tourists access the Reef from Cairns, Port Douglas or the Whitsundays

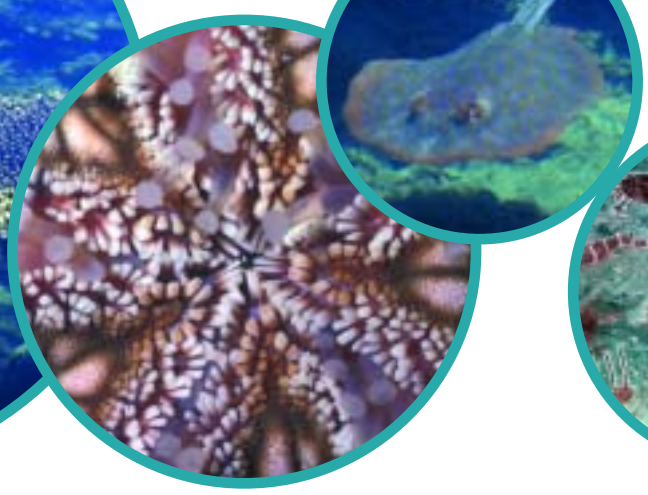
The coral rock that forms the base for the modern Great Barrier Reef is mostly about two million years old. However, most of today's living corals are much younger and have developed within the past 18,000 years since the end of the last Ice Age

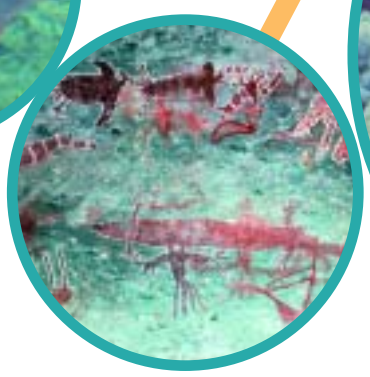
The Great Barrier Reef contains a diverse range of unique marine life including at least 4,000 species of molluscs and 800 species of echinoderms such as sea stars

Aboriginal and Torres Strait Islander people are the Traditional Owners of the Great Barrier Reef region and have lived adjacent to the Marine Park for more than 50,000 years

The Great Barrier Reef contains about 360 species of hard corals and more than one-third of the world's soft corals







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