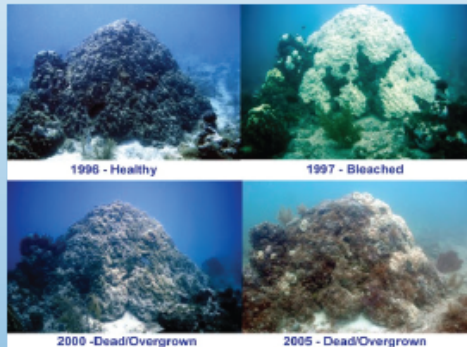


Ocean Acidification in the Great Barrier Reef

Runoff and increased levels of CO₂ have lowered pH levels in the ocean which has resulted in the bleaching of coral reefs. The health of the reef controls the survival of the ocean ecosystem.

We must seek to limit runoff and carbon emissions in order to keep pH levels stable so that coral reefs can survive there are many economic, social and ecological implications to the bleaching and death of coral.

CORAL BLEACHING EXPLAINED



The pH of the surface of the ocean has decreased by 0.1 pH units (the equivalent of a 30% increase in acidity) resulting in the death of over 50% of the world's coral reefs in the past 30 years and the prediction that up to 90% may die within the next century. Sadly, very few pristine coral reefs still exist.

\$ Value

Of the Great Barrier Reef for Australia

\$56 Billion

Annual national total economic, social and icon asset value

\$6.4 Billion

Annual national economic contribution

64,000

Jobs supported by the reef

2 Million

annual visitors

WHY CARE?

Coral reefs are among the most biologically diverse ecosystems on Earth and they offer natural coastal protection, a source for new medicinal remedies, and great economic and social contributions.

Economic, social and ecological implications of coral bleaching

Coral bleaching negatively impacts the economy through loss of tourism and the impact on fisheries leading to the loss of protection of coastal infrastructure and increased unemployment. The ecological implications include increased sea surface temperature, loss of marine biodiversity, the collapse of food webs and increased erosion and flooding.

Six Catchment Regions

And the Impact of Runoff



35 catchments within six regions all dump into the Pacific Ocean, polluting the areas around the great barrier reef. The influx of pollutants such as sediment, nutrients and pesticides cause higher algal growth, reduced light, smothered coral and the build up of pollution in sediments and marine species.

What You Can Do To Help

While Visiting the Reef:

- Practice responsible diving and snorkeling
- Many sunscreens contain harmful chemicals that will damage coral, therefore use reef friendly sunscreen or a rash guard
- Do not litter
- Practice safe boating
- Volunteer

Everyday Ways to Help:

Reduce Pollution:

- Dispose of trash properly and recycle
- Minimize the use of products that contain harsh chemicals
- Minimize the use of fertilizers, herbicides etc.
- Conserve water

Reduce Carbon Footprint:

- Use environmentally friendly modes of transport
- Save energy and use renewable energy such as solar panels
- Cut out single use plastics

Larger scale solutions:

- Government incentives for reducing carbon footprint (financial incentives for buying electric cars, switching to renewable energy etc.)
- End fossil fuel subsidies
- Transition from carbon pricing scheme to carbon taxing in Australia

The Great Barrier Reef Needs Your Help

Educate yourself and others and implement solutions!