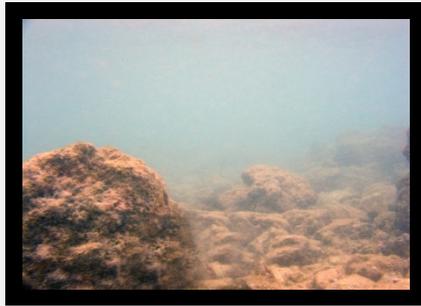


Human Impacts on Our Coral Reefs



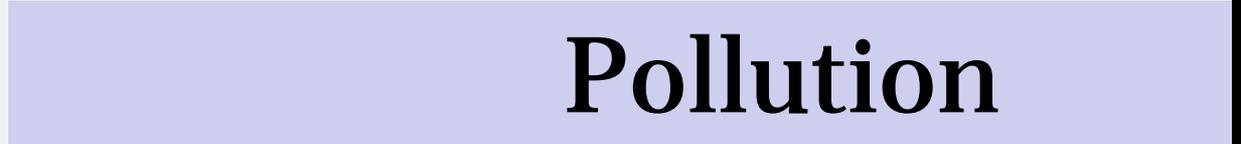
Sedimentation



Over-Fishing



Careless Recreation



Pollution



Climate Change

Sedimentation

What is sedimentation?



Photo credit: Steve Spring - Palm Beach County Reef Rescue

Sedimentation occurs when sediments found on land (soil, silt, & sand) enter the ocean and cause the water to become very murky

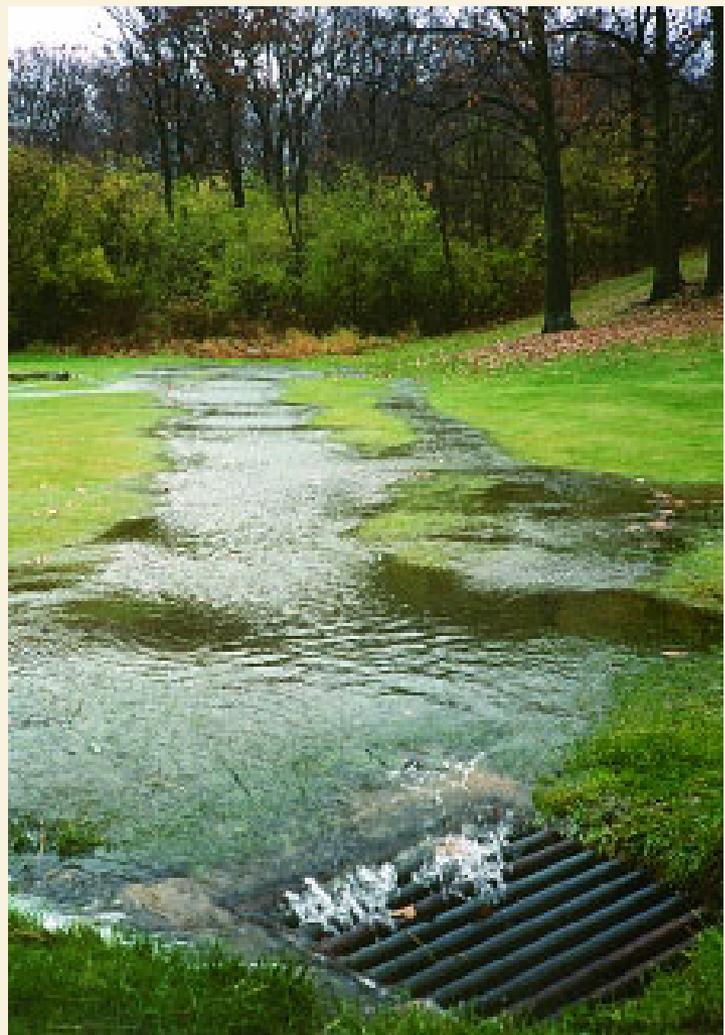


Sedimentation

How does sediment travel?



Wind



Runoff

Natural Impacts

What are human causes of sedimentation?

- Clearing land for homes, resorts, & other buildings
- Harbor construction
- Agriculture
- Dredging

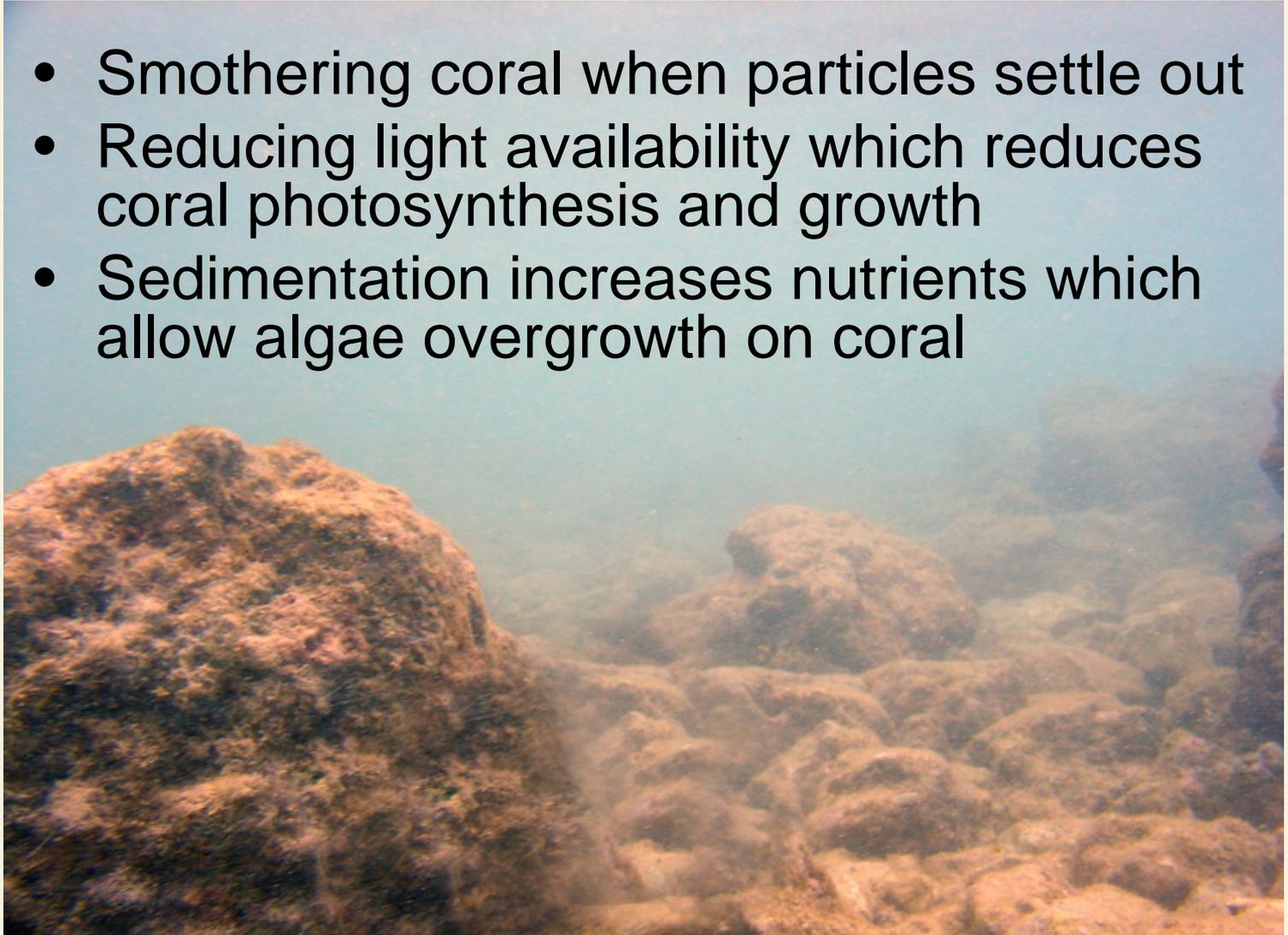




Sedimentation

How does sedimentation threaten the coral reef habitat?

- Smothering coral when particles settle out
- Reducing light availability which reduces coral photosynthesis and growth
- Sedimentation increases nutrients which allow algae overgrowth on coral



Over-fishing is when people take more fish from the ocean than the ocean can produce

Over-Fishing



Why do people over-fish?



Food



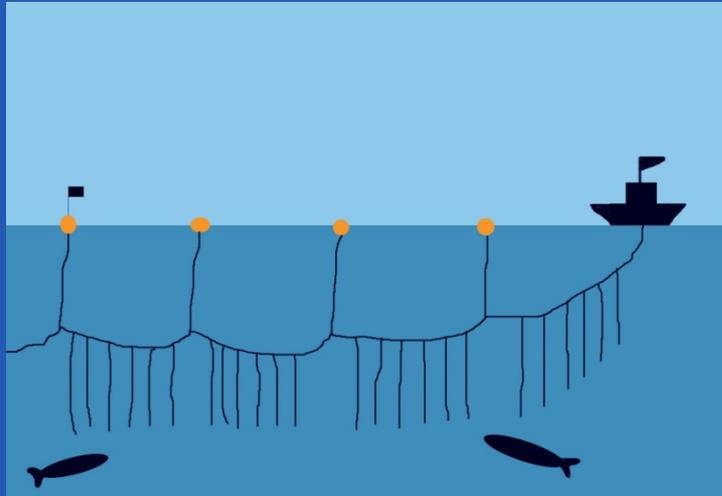
Entertainment & Sport



Aquariums

Over-Fishing

How do people over-fish?

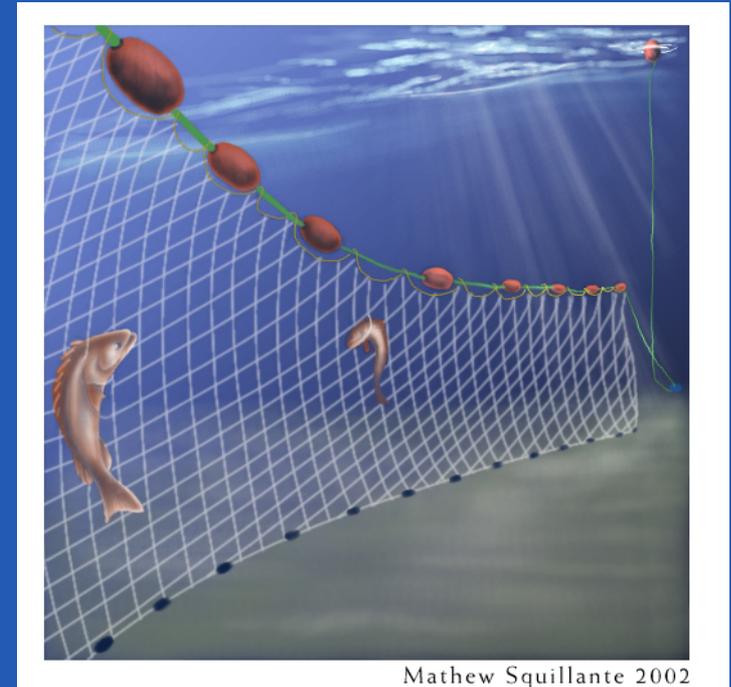


longlines



(c) Lynn Funkhauser 2005 Marine Photobank

dynamite & poisons



Mathew Squillante 2002

gillnets

Photo courtesy of Monterey Bay Aquarium Foundation

Over-fishing threatens the coral reef habitat

- Fish caught too young cannot grow old to reproduce and contribute to fish population
- Fewer fish are available to provide food for other marine organisms
- Some fish eat algae and where there are less of these fish, algae grows too thick and smothers the reef

Careless Recreation

How do people use the reef for recreation?



boating



diving



snorkeling



fishing



surfing

Careless Recreation

How are people careless with the reef?

- Kicking, touching, or standing on coral
- Boats can drop anchor or drive across shallow coral
- Abandoning fishing gear



Careless Recreation

What can you do to protect the reef?

- Don't touch the coral or any other animals
- Do not drive your boat over coral
- Only drop anchors in sand or other non-coral sediment
- Educate others!



Pollution

Raw sewage



Trash that settles on coral will kill it



Human's cause many forms of pollution that harms or kills coral.



Lost fishing gear (ghost gear)

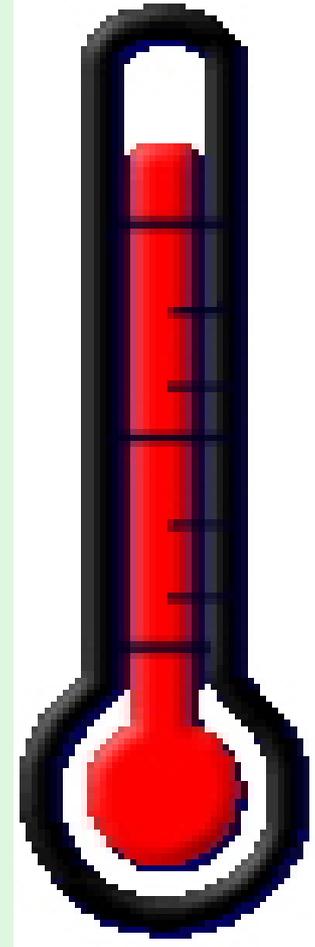


Oil can kill all forms of sea life



What is climate change?

Climate Change

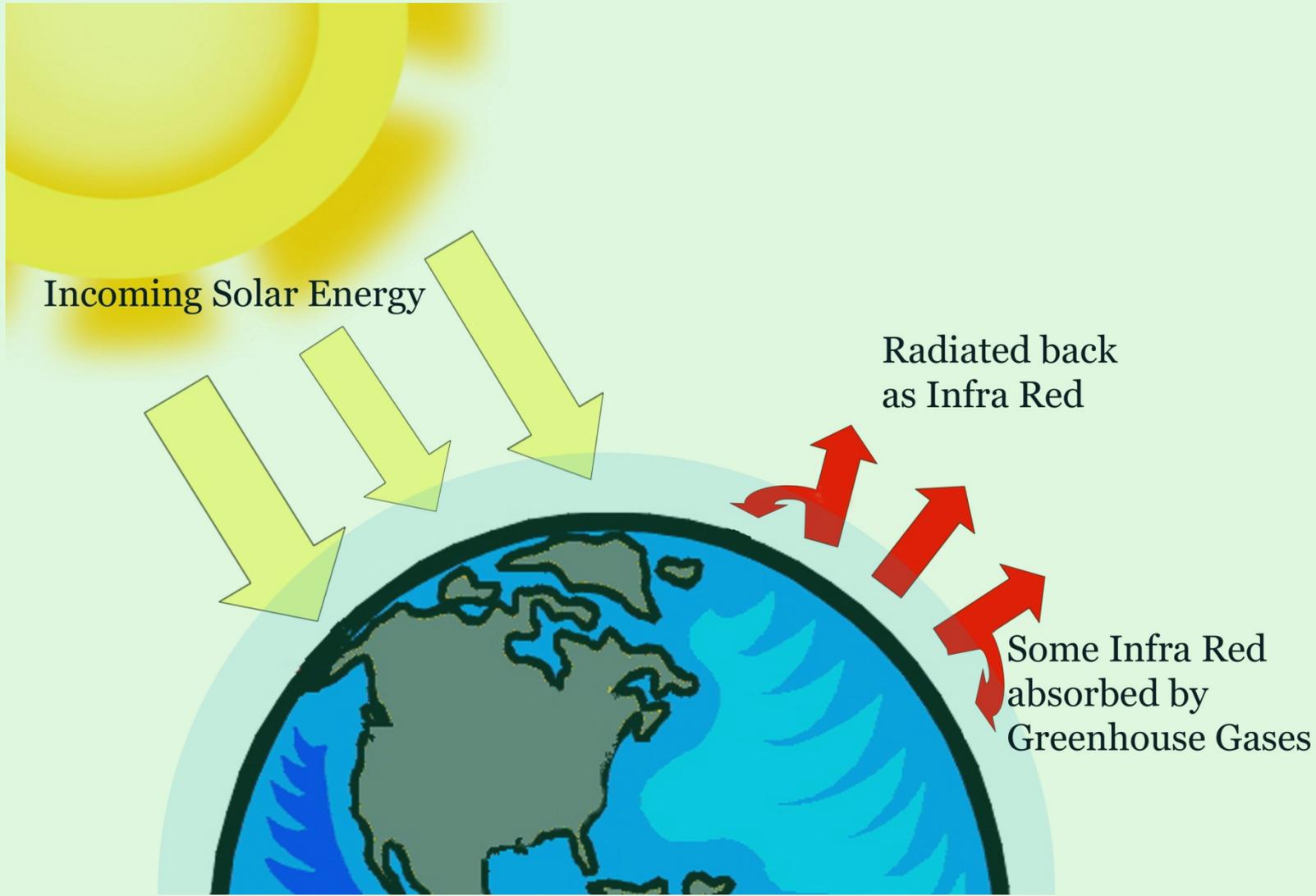


Climate change is the increase in the temperature of the Earth's air and oceans.



What causes climate change?

Climate Change



Climate Change happens when more carbon dioxide enters the atmosphere than can be removed by plants



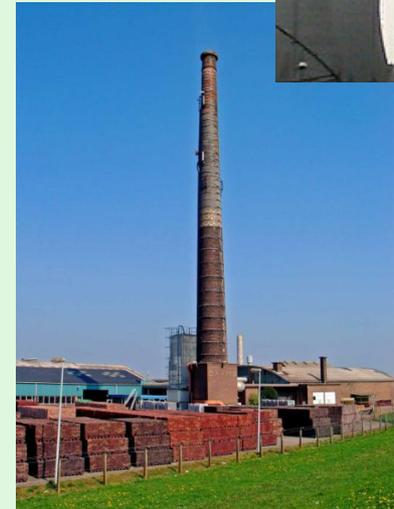
Human sources of climate change

Climate Change

many types of transportation



deforestation



factories

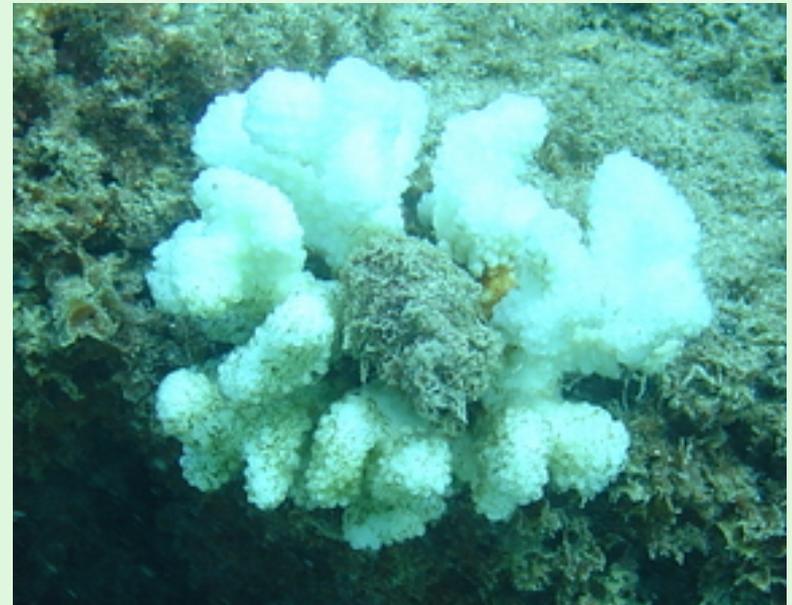
anything that uses fossil fuels!

How does climate change affect the coral reef habitat?

Bleaching is a result of warm sea-surface temperatures



healthy coral



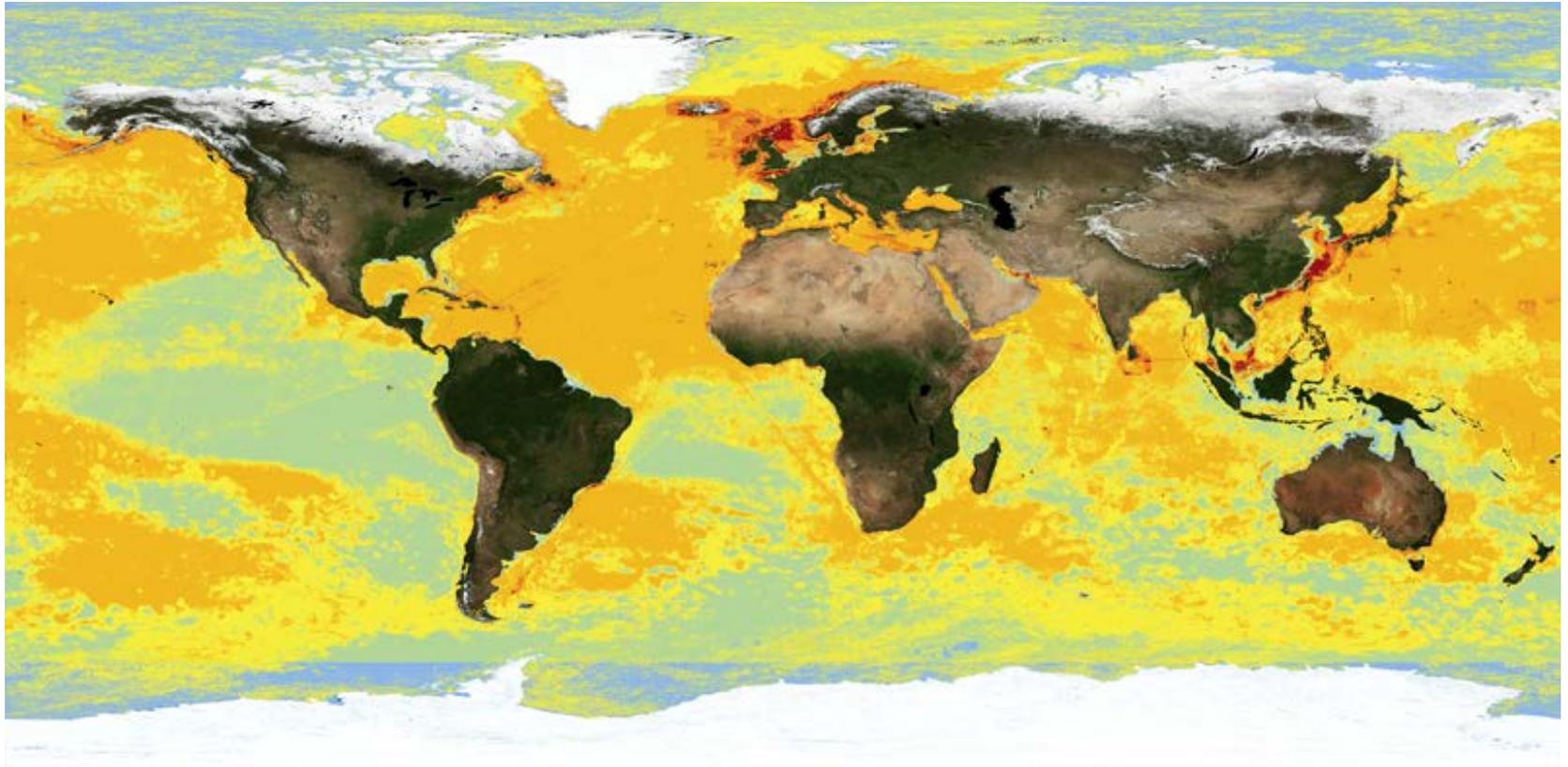
bleached coral

Increases in water temperature can kill marine organisms not adapted to the warmer temperatures



The Big Picture

Human Impacts on the Ocean



The End