Human Impacts on Our Coral Reefs

Sedimentation

Over-Fishing

Careless Recreation

Pollution

Climate Change
What is sedimentation?

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

Sedimentation

Wind

Natural Impacts

Runoff
What are human causes of sedimentation?

- Clearing land for homes, resorts, & other buildings
- Harbor construction
- Agriculture
- Dredging
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.
Why do people over-fish?

Food

Entertainment & Sport

Aquariums
How do people over-fish?

- longlines
- gillnets
- dynamite & poisons
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
How do people use the reef for recreation?

- boating
- diving
- snorkeling
- fishing
- surfing
How are people careless with the reef?

Careless Recreation

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

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

- Raw sewage
- Trash that settles on coral will kill it
- Lost fishing gear (ghost gear)
- Oil can kill all forms of sea life
Climate change is the increase in the temperature of the Earth’s air and oceans.
What causes climate change?

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

Increases in water temperature can kill marine organisms not adapted to the warmer temperatures.
Human Impacts on the Ocean

The Big Picture

[Map showing human impact around the world with a color gradient from very low to very high]
The End