

The background is a light blue gradient with stylized coral reef elements. On the left, there is a large teal coral branch. On the right, there is a large orange coral branch. At the bottom left, there is a yellow coral branch. At the bottom right, there is a teal sea anemone. In the upper center, there is an orange starfish. Several light blue circles of varying sizes are scattered throughout the background, representing bubbles.

# Threats to Marine Life

# Climate Change

What is it?

- A long term change in temperature and weather due to natural and unnatural causes

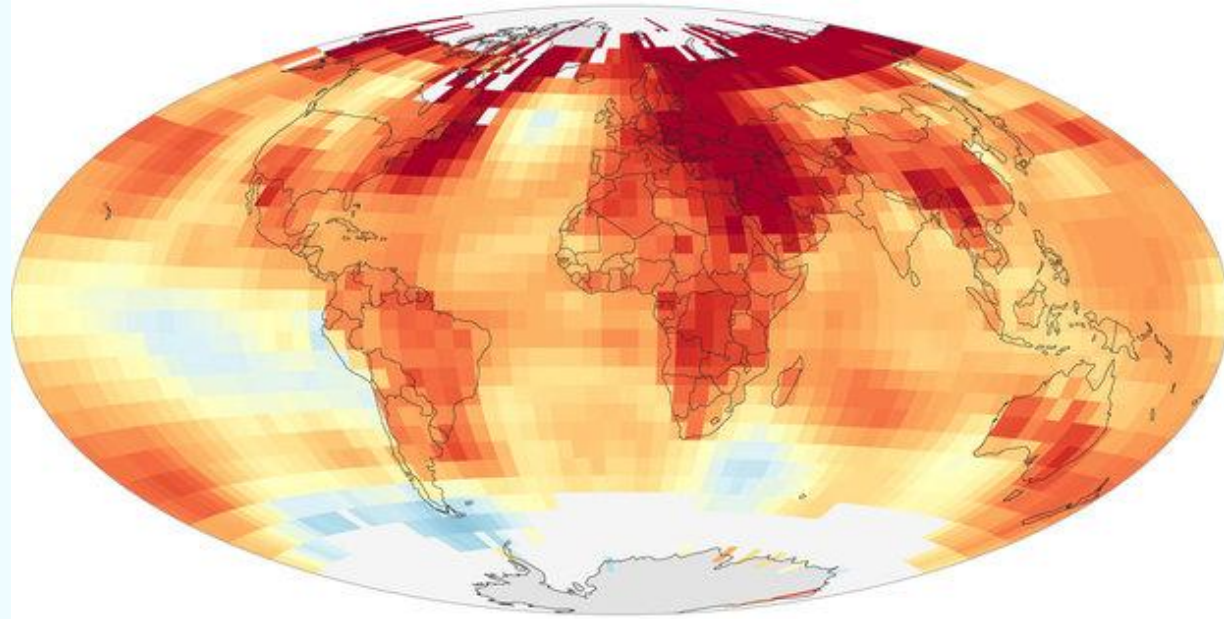
How does it affect oceans?

- Storms
- Ocean Warming
- Ice Melting/Rising Sea Levels
- Changing Currents
- Coral Bleaching



# Climate Change Chart:

## RECENT TEMPERATURE TRENDS (1990-2020)



Change in temperature ( $^{\circ}\text{F}/\text{decade}$ )



NOAA Climate.gov  
Data: NCEI

# Coral Bleaching

What is it?

- Coral have symbiotic algae living in their tissues, and when the coral experiences a change in conditions- temp, light, nutrients- they expel the algae

Specific Causes

- Warming ocean temps
- Storm runoff and pollution
- Sunlight exposure
- Low tides



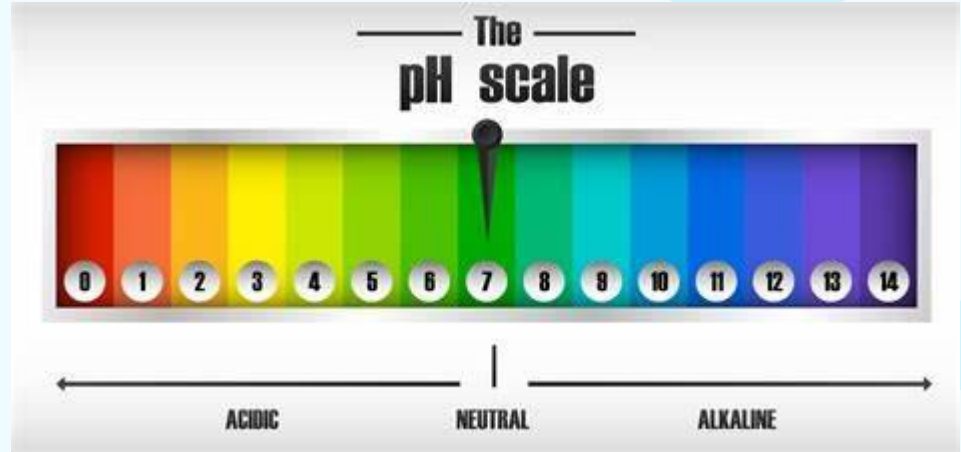
# Ocean acidification

What is it?

- The ocean becoming more acidic due to an increase in CO<sub>2</sub>

Why do we care?

- Dissolving shell builders
- Effects on food web



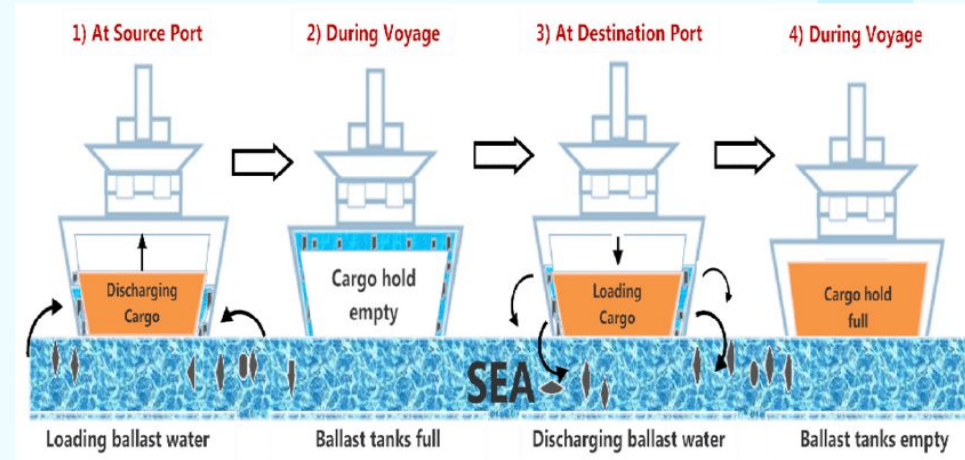
# Invasive species

What is it?

- An invasive species is an organism that is not indigenous, or native, to a particular area. Invasive species can cause great economic and environmental harm to the new area.

Effects of invasive species:

- Outcompete native species
- Destroy habitat
- Become predator to a native species





# Overfishing

What is it?

- Overfishing is the practice of catching more fish faster than they can replenish their population.

Effects of overfishing

- Disrupting food chain
- Algae growth
- Coral reef destruction
- Bycatch
- Species going extinct



# Pollution

## Types of pollution

- Marine debris
- Plastic pollution
  - Microplastic
  - Pacific Garbage Patch
- Oil spills
- Eutrophication





# Plastic pollution

Types:

- Plastic
- Microplastics
- Pacific Garbage Patch

Effects:

- On marine life
- On humans



# Oil Spills

When we think of pollution we don't think of oil spills being a part of that, but it is a major part!

Why it happens:

- Human accidents, equipment malfunction, purposeful, nature

Effects:

- Insulation of animal fur
- Trap animals
- Swallowing oil



# How We Can Help

- **Conserve Water**
  - Help limit runoff into the ocean
- **Use plastic alternatives**
  - Single-use plastics end up in the ocean
- **Choose sustainable seafood**
  - Stop overfishing practices
- **Leave no trace**
  - Even on land- clean up after yourself
- **Reduce carbon footprint**
  - Turn off lights! Ride your bike!
- **Educate others**
  - Speak out about these issues to others

