# WHAT IS OCEAN ACIDIFICATION?

**Ocean acidification (OA) is a climate-ocean impact.**

Carbon dioxide emissions are being absorbed by the ocean and altering the chemical balance of seawater which marine life depends upon for survival.

**We must dramatically reduce carbon dioxide emissions.**

Multiple impacts of climate change to our ocean:

- Ocean warming
- More frequent and intense storms
- Loss of marine and shoreline habitat
- Sea-level rise
- Sea ice melt
- Climate variability
- Changing ocean circulation
- Hypoxia

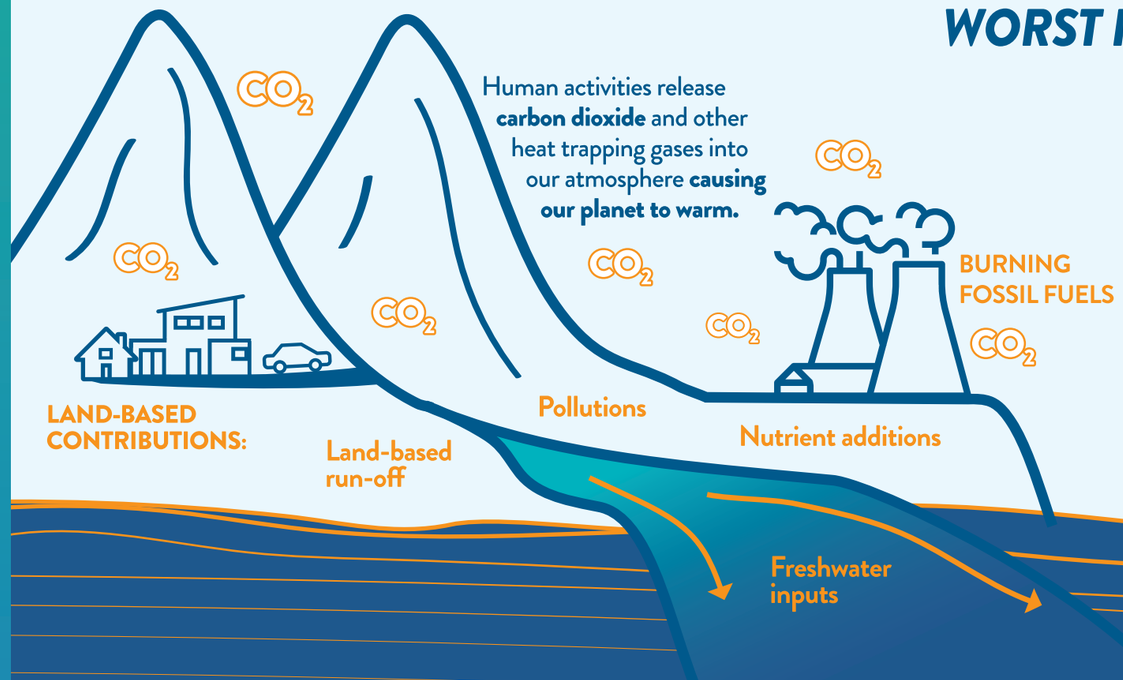
**Together, these impacts are causing harm by displacing people, damaging coastal communities and property, decreasing food security and impacting jobs.**

OA ALLIANCE

INTERNATIONAL ALLIANCE TO COMBAT OCEAN ACIDIFICATION

Learn more at: www.OAAlliance.org

## THE OCEAN HAS BUFFERED US FROM THE *WORST IMPACTS* OF CLIMATE CHANGE BY:




ABSORBING **93%** EXCESS HEAT

ABSORBING **30%** CARBON EMISSIONS

RESULTING IN A

# MORE ACIDIFIED + WARMER + LESS OXYGENATED OCEAN

THESE CHANGING OCEAN CONDITIONS HAVE COMBINED IMPACTS

- MARINE HEAT WAVES
- HARMFUL ALGAL BLOOMS
- CORAL BLEACHING
- INCREASED STRATIFICATION

WE ARE SEEING HARMFUL IMPACTS

- Weakening and reduced growth of **SHELL FORMING SPECIES**
- Impacts to **BEHAVIOUR AND SURVIVAL**
- Changes to natural **FOOD WEBS**
- Weakening and slower growth of **CORAL REEF**

OA IS THREATENING **ECOSYSTEM SERVICES** THAT HUMANS DEPEND ON

- **Fisheries & aquaculture**
- **Food Security**
- **Economies & Livelihoods**
- **Cultural Practices & Traditions**