Ocean water reflects our choices

Saving Oceans begins on land: protect native trees, change our habits.

Ocean acidification is the 'other' effect of carbon dioxide (CO_2) emissions. CO_2 combines with seawater to produce carbonic acid, acidifying the seawater and depleting the seawater of carbonate that many forms of sea life need to build their shells.

Is it actually serious? Here's what the Intergovernmental Panel on Climate Change has to say in their 2022 report on climate change impacts: "In the 21st century, ocean and coastal ecosystems are projected to face conditions unprecedented over the past seven centuries to millennia (high confidence)", and the "detrimental impacts of acidification include decreased growth and survival, and altered development, especially in early life stages (high confidence), along with lowered recruitment and altered behaviour in animals".

Carbon dioxide, like other gases and elements, is always moving around the planet. The difference is that human activity has caused a sudden increase in the amount of carbon dioxide in the atmosphere… and that ends up in our ocean.

So we know that ocean acidification is caused by the carbon dioxide emitted by humans. Our use of fossil fuels, to run the car you might be hearing right now, is a huge source. But we also emit greenhouse gases when we damage the carbon-storing function of nature. For example, when we clear a salt marsh to extend a city, cut down a forest to build a road, or till up soil, we release the carbon stored in living biomass and soils.

By contrast, when we protect that salt marsh, we help carbon stay in place. When we use restorative agriculture including native species and no-till systems, or when we protect native trees, we boost carbon storage. We can also reduce the carbon emissions in our daily lives when we use less energy, when we waste less and compost our plant wastes, when we buy less and buy sustainably, and when we eat a plant-based diet.

Coastal wetlands are some of the most efficient natural carbon sinks on the planet. Seagrasses, mangroves, marshes, and the mud underneath them are important allies in our fight against climate change and ocean acidification. They're also sensitive to pollution and disturbance.

We have work to do, and we all have a part to play. Protecting marine environments and species starts on land. Reducing carbon dioxide emissions and restoring carbon-storing ecosystems is something we can all do where we live, on our plantations, and in our community spaces.

When you choose to keep carbon in the ground, you are saving the ocean – and saving us too.

Help give voice to this Pacific Conversation – learn more about **marine and coastal biodiversity in the Pacific islands.**

Join in the Pacific Conversation: #SaveOurOcean #ResilientPacific

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