



## Carbon Dioxide a Potential Threat to Marine Life

Oceans worldwide are changing dramatically due to the amount of carbon dioxide in our air. This carbon dioxide results from burning fossil fuels such as gas, coal, and oil. Some scientists say that the ocean will absorb carbon dioxide from the atmosphere, acting as a 'sink', or storage place, for carbon dioxide. However, a recent report explores the effects of atmospheric carbon dioxide on ocean life. "Our oceans will change in ways that will affect marine life" says the lead author.

The new report warns that oceans have already absorbed 118 billion metric tonnes of carbon in the last 180 years. As the oceans absorb carbon, they become more and more acidic. "This is the most dramatic change in marine chemistry in at least the past 650,000 years" said another scientist.

Studies show that as the ocean becomes more acidic, it is harder and harder for corals and coral reefs to form. Also, the existing corals become thinner, and corals may not be able to build their protective shells fast enough to keep up with erosion. However, these effects have not yet been observed.

As the ocean becomes more acidic it will also affect plankton, which are a food source for fish such as salmon, mackerel, herring, and cod. If these fish are affected, many other species may also be affected. Other ecosystems that are threatened include cold-water reefs, home to many species of fish on the coast of British Columbia and Alaska.

Scientists are still trying to understand the effects of climate change. This report outlines a new, previously unknown, consequence. Scientists still do not know exactly how the acidity will affect ocean life. Some even argue that the oceans may be the best way to store our current high levels of atmospheric carbon dioxide.

*ST*



*Courtesy of Florida Keys National Marine Sanctuary*

