Our ocean is warming. This impacts marine ecosystems in complex ways. These include coral bleaching and causing fish to migrate to cooler, deeper waters.

Warmer water holds less oxygen. Fish migrate away from their current habitats in response to lower oxygen levels. Many types of fish and shellfish will struggle to survive in reduced oxygen conditions.

Climate change may affect local ocean currents. Many marine animals rely on these to disperse eggs and larvae, while others rely on them for food. Changes to ocean currents may alter the distribution and dominance of fish species.

Upwelling supplies nutrients from deeper water, fertilising the surface ocean.

Climate change is likely to alter upwelling patterns, impacting productivity.
Climate change is causing sea levels to rise. Sea level rise increases the risk of coastal flooding and wave erosion along the coast. This damages mangrove forests and seagrass meadows.

When climate change impacts occur simultaneously, they can amplify each other. This may lead to greater negative impacts for the environment.

Increased carbon dioxide levels in the atmosphere make the ocean more acidic. This is detrimental to the growth of coral, shellfish and fish.

Healthy and sustainably managed ecosystems and fisheries will support coastal communities into the future.

Sharing knowledge of environmental change will help recognise and adapt to changing ecosystems.

The development of climate change adaptation plans requires local knowledge and cooperation between scientists, communities, managers and politicians.