

Climate Change Impacts on Coral Reef Ecosystems and Societal Implications

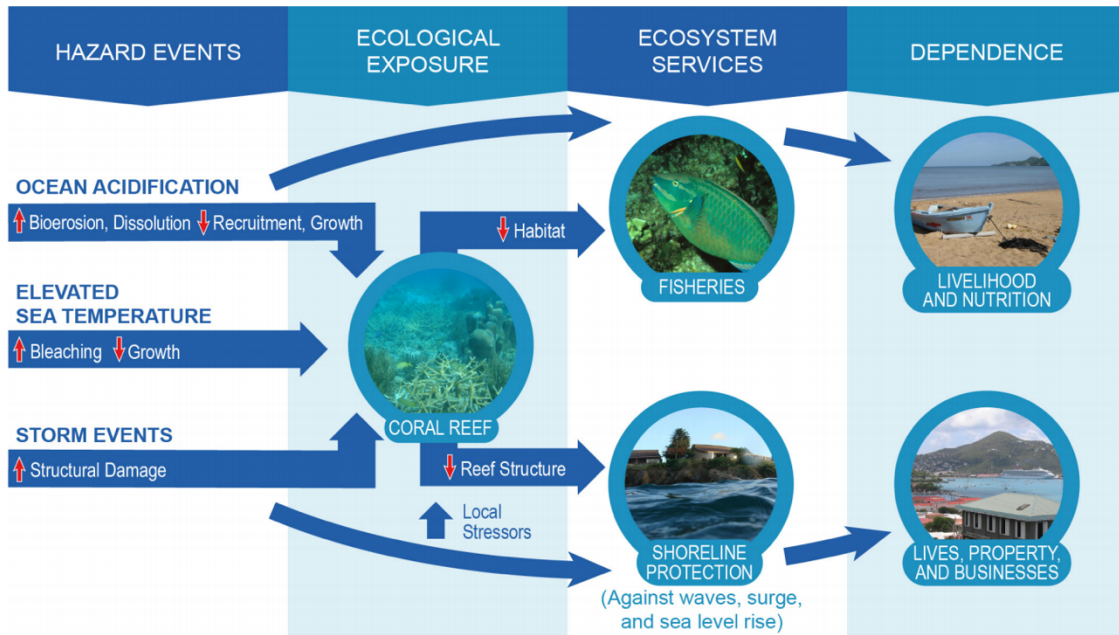


Figure 20.10: The figure shows the connections between climate-related impacts (ocean acidification and warming as well as severe storms), responses of marine habitats and species to these impacts, and, ultimately, the effects to ecosystem services (such as fisheries and shoreline protection) and, in turn, the human community. Specifically, the figure depicts how degradation of coral reefs due to climate change is expected to affect fisheries and the economies that depend on them as habitat is lost. The figure also shows how reef degradation decreases shoreline protection for local communities, which affects the economy and human populations more generally. Source: adapted from Pendleton et al. 2016.⁷⁸ Photo credits: NOAA.