

Climate change poses significant challenges to coastal ecosystems, with rising global temperatures affecting these regions in various ways. According to recent studies, the impacts of climate change on coastal areas include increased erosion, loss of biodiversity, and disruptions to the delicate balance of marine ecosystems. Furthermore, climate change exacerbates the frequency and severity of extreme weather events, such as hurricanes and storm surges, which can devastate coastal communities and infrastructure. Given the magnitude of these impacts, it is essential to develop and implement effective adaptation and mitigation strategies to address the effects of climate change on coastal ecosystems. By exploring these strategies, we can better understand the complex interactions between climate change and coastal regions, ultimately informing policies and actions to address this pressing global challenge. Rising sea levels and ocean acidification further threaten the resilience of coastal ecosystems, with potentially catastrophic consequences for human societies and the environment.