

# 海平面上升的威胁与沿海生态保护

海平面上升是全球气候变化带来的直接后果之一，对沿海城市和生态系统构成巨大威胁。据科学预测，如果全球气温继续上升，到2100年全球平均海平面可能上升0.5至1米。沿海地区将面临严重的洪水风险，低洼地区可能被迫迁移数百万人。

除了人类居住安全，海平面上升还对沿海生态系统造成深远影响。湿地、红树林和珊瑚礁等生态系统不仅提供生物栖息地，还能有效缓冲风暴和海浪的冲击。然而，随着海水侵入和盐碱化加剧，许多生态系统面临退化甚至消失的风险，这将直接影响生物多样性和渔业资源。

为了应对海平面上升，科学家和政策制定者提出了多种适应策略。人工海堤和防洪工程能够在短期内保护沿海居民安全，但长期来看，更加可持续的策略是恢复和保护自然生态系统。例如，通过红树林种植、湿地恢复以及海洋保护区建设，可以增强沿海地区的自然防御能力，同时维护生态平衡。此外，城市规划也需纳入气候适应考虑，控制沿海开发，提升基础设施韧性。

未来，国际合作在应对海平面上升方面尤为重要。气候变化是全球性挑战，沿海风险管理不仅是个别国家的责任，而是整个国际社会的共同任务。通过技术支持、经验分享和资金投入，沿海地区可以有效减轻海平面上升带来的生态和社会风险，为人类与自然和谐共生提供可能。

## Threats of Sea Level Rise and Coastal Ecosystem Protection

Sea level rise is one of the direct consequences of global climate change and poses a significant threat to coastal cities and ecosystems. Scientific predictions suggest that if global temperatures continue to rise, the average global sea level could increase by 0.5 to 1 meter by 2100. Coastal areas will face severe flood risks, and millions of people in low-lying regions may be forced to relocate.

Beyond human safety, sea level rise has profound impacts on coastal ecosystems. Wetlands, mangroves, and coral reefs not only provide habitats for various species but also buffer against storms and waves. However, with increased seawater intrusion and salinization, many ecosystems are at risk of degradation or disappearance, directly affecting biodiversity and fisheries.

To address sea level rise, scientists and policymakers have proposed various adaptation strategies. Artificial sea walls and flood defenses can protect residents in the short term, but more sustainable strategies focus on restoring and protecting natural ecosystems. For example, mangrove planting, wetland restoration, and marine protected areas can enhance natural defenses and maintain ecological balance. Urban planning should also incorporate climate adaptation, controlling coastal development and improving infrastructure resilience.

In the future, international cooperation is particularly crucial in managing sea

level rise. Climate change is a global challenge, and coastal risk management is a shared responsibility. Through technology support, knowledge sharing, and funding, coastal regions can effectively mitigate ecological and social risks posed by rising seas, providing opportunities for harmonious coexistence between humans and nature.