

The Role of Wetlands in Climate Change Mitigation

Alex Wilson

PhD

Wageningen University & Research
Droevendaalsesteeg 4, 6708 PB Wageningen, Netherlands

Skyler Young

Dr.

Chulalongkorn University
254 Phayathai Rd, Pathum Wan, Bangkok 10330, Thailand

Drew Smith

Prof.

University of Auckland
Auckland 1010, New Zealand

Abstract. Wetlands are crucial ecosystems that play a significant role in climate change mitigation. This article explores the carbon sequestration potential of wetlands and their importance in regulating greenhouse gases. It also addresses the threats to these ecosystems and the need for conservation and restoration efforts.

Keywords: Wetlands, Climate change, Carbon sequestration, Conservation, Ecosystem services

Introduction

Wetlands are among the most productive ecosystems on Earth, providing a wide range of ecological services, including water filtration, flood regulation, and carbon sequestration. They act as natural buffers against climate change by storing large amounts of carbon dioxide and other greenhouse gases. However, wetlands are increasingly threatened by human activities such as drainage for agriculture, urban development, and pollution. The degradation of wetlands not only reduces their capacity to mitigate climate change but also threatens biodiversity and water quality. This article delves into the vital role of wetlands in climate change mitigation and emphasizes the need for conservation and restoration initiatives. The discussion highlights the importance of protecting these ecosystems to enhance their ecological functions.

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References

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