# Rapid saltmarsh loss threatens global climate goals but restoration offers hope



The ongoing degradation of saltmarshes is emerging as a significant barrier to global climate objectives, according to a recent report presented at the United Nations Ocean Conference. This alarming analysis reveals that the extent of these essential tidal wetlands has diminished by more than 50% in recent decades, pointing to a catastrophic loss in ecosystems that provide critical carbon storage.

The partnership between WWF, Sky, the UK Centre for Ecology and Hydrology, and the Blue Marine Foundation underscores the urgent need for action. Their report highlights that these areas, once robust carbon sinks, are increasingly transforming into carbon sources, exacerbating the climate crisis. With saltmarshes disappearing at an annual rate of 0.28%, the pace of loss exceeds that of other blue carbon ecosystems, such as mangroves and peatlands, and is three times higher than global forest losses.

In sheer statistical terms, between 2000 and 2019 alone, approximately 1,435 square kilometres of saltmarsh—an area roughly double that of Singapore—was lost. The consequences are dire: coastal communities, which historically relied on these wetlands for natural flood protection, are now more vulnerable than ever. The impetus for immediate remediation is clear, as the report indicates that up to 2 million hectares of saltmarsh worldwide can potentially be restored. This restoration could unlock their far-reaching capabilities in flood defence and carbon sequestration, marking them as one of the most scalable nature-based solutions to the challenges posed by climate change.

Tom Brook, an oceans specialist at WWF-UK, emphasised the role of saltmarshes in climate mitigation efforts during discussions surrounding the report. He remarked that these wetlands "have been reduced to a fraction of their former range" yet possess immense potential for recovery. His optimism reflects a growing recognition among stakeholders about the importance of safeguarding these coastal habitats. Brook noted that “with the right support, we can turn the tide”, signalling an emerging momentum in restoration efforts.

Supporting this perspective, a recent study from Manchester Metropolitan University revealed that restored saltmarshes could sequester carbon at rates significantly higher than previously thought. Research conducted on the WWT Steart Marshes in Somerset found that over four years, the site buried more than 18,000 tonnes of carbon, a rate 18 times greater than what current estimates suggest for UK saltmarshes. This evidence further validates the potential of saltmarsh restoration as a critical component in reaching net-zero targets by 2050.

The importance of saltmarshes as biodiversity-rich ecosystems is echoed in statements from the Wildfowl & Wetlands Trust, which highlights their role in carbon capture and flood protection. Although these wetlands represent just 2% of ocean areas, they account for nearly 50% of carbon burial in marine sediments. However, the WWT notes that 85% of England’s saltmarshes have been lost since 1860 primarily due to land use changes and the phenomenon of coastal squeeze.

In conjunction with these findings, initiatives like the UK Saltmarsh Carbon Code, spearheaded by the UK Centre for Ecology and Hydrology, are gaining traction. This certification standard aims to stimulate private investment in saltmarsh carbon projects, allowing businesses to offset CO₂ emissions through verified credits derived from restored saltmarshes. The code is expected to be established by the summer of 2025, providing a framework for large-scale restoration activities.

Overall, the call to action is amplified not only by environmental organisations but also by detailed research that outlines the multifaceted benefits of preserving and restoring saltmarshes. These wetlands are positioned not just as important ecological assets, but as essential players in global efforts to combat climate change, protect coastal communities, and promote biodiversity.

### 📌 Reference Map:

* Paragraph 1 – [[1]](https://oceanographicmagazine.com/news/rapid-loss-of-world-s-saltmarshes-threaten-climate-change-action/), [[4]](https://www.wwt.org.uk/our-work/restoring-wetlands/restoring-saltmarsh)
* Paragraph 2 – [[1]](https://oceanographicmagazine.com/news/rapid-loss-of-world-s-saltmarshes-threaten-climate-change-action/), [[2]](https://www.ceh.ac.uk/our-science/projects/wwf-saltmarsh-accretion-monitoring-network), [[5]](https://www.ceh.ac.uk/our-science/projects/uk-saltmarsh-code)
* Paragraph 3 – [[3]](https://www.wwt.org.uk/news-and-stories/news/new-study-shows-allowing-the-sea-back-in-could-help-uk-meet-climate-goals/), [[6]](https://www.zsl.org/what-we-do/projects/marine-habitat-restoration)

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## Bibliography

1. <https://oceanographicmagazine.com/news/rapid-loss-of-world-s-saltmarshes-threaten-climate-change-action/> - Please view link - unable to able to access data
2. <https://www.ceh.ac.uk/our-science/projects/wwf-saltmarsh-accretion-monitoring-network> - The UK Centre for Ecology & Hydrology (UKCEH) is collaborating with WWF on the Saltmarsh Accretion Monitoring Network. This project aims to monitor sediment build-up and carbon burial in saltmarshes, which are vital carbon sinks. The initiative involves setting up research platforms across nine UK sites to quantify sediment accretion and elevation changes over two years, providing data essential for accurate models of greenhouse gas emissions and carbon storage. The findings will contribute to the development of the UK Saltmarsh Carbon Code and inform climate mitigation policies.
3. <https://www.wwt.org.uk/news-and-stories/news/new-study-shows-allowing-the-sea-back-in-could-help-uk-meet-climate-goals/> - A study by Manchester Metropolitan University, published by the Wildfowl & Wetlands Trust (WWT), demonstrates that restored coastal saltmarshes can store carbon more rapidly than forests. The research focused on the 250-hectare WWT Steart Marshes in Somerset, which buried over 18,000 tonnes of carbon over four years. This rate is 18 times higher than current estimates for UK saltmarsh carbon storage. The study highlights the potential of saltmarsh restoration in achieving net-zero targets by 2050.
4. <https://www.wwt.org.uk/our-work/restoring-wetlands/restoring-saltmarsh> - The Wildfowl & Wetlands Trust (WWT) emphasises the importance of saltmarshes as biodiversity-rich, carbon-capturing, and flood-protecting ecosystems. Despite covering less than 2% of ocean area, saltmarshes account for nearly 50% of carbon burial in marine sediments. However, 85% of England’s saltmarshes have disappeared since 1860 due to land use changes and coastal squeeze. WWT advocates for the restoration of these habitats to combat climate change and support biodiversity.
5. <https://www.ceh.ac.uk/our-science/projects/uk-saltmarsh-code> - The UK Centre for Ecology & Hydrology (UKCEH) is leading the development of the UK Saltmarsh Carbon Code, a voluntary certification standard for saltmarsh carbon. This initiative aims to unlock private finance for large-scale restoration projects by enabling businesses to offset CO₂ emissions through verified saltmarsh carbon credits. The project is being developed in collaboration with various partners and is expected to be operational by summer 2025.
6. <https://www.zsl.org/what-we-do/projects/marine-habitat-restoration> - The Zoological Society of London (ZSL) is involved in marine habitat restoration projects, including the protection and restoration of saltmarshes. These coastal wetlands provide essential services such as carbon sequestration, flood protection, and habitat for diverse wildlife. ZSL's efforts aim to address the threats facing saltmarshes, including climate change and sea-level rise, by implementing conservation and restoration strategies.
7. <https://www.wwf.panda.org/discover/oceans/ocean_habitats/blue_forests/> - WWF highlights the significance of 'blue forests'—mangroves, seagrass meadows, saltmarshes, and seaweeds—as vital carbon sinks and coastal protectors. These habitats store carbon at rates up to ten times higher per hectare than terrestrial ecosystems. However, human activities have led to the loss of significant portions of these habitats. WWF collaborates with partners to prioritise conservation and restoration efforts to protect these crucial ecosystems.