



## Fight on to save coastal ecosystems

### Key points:

- The UN has declared the 2020s to be the **Decade of Ecosystem Restoration**
- Coastal ecosystems have been **damaged over many decades** and **even centuries** in some cases
- Restoring **coastal ecosystems** is vital, but almost impossible at present because they face a **triple whammy** of industrialisation, resource loss and climate change
- Scientists, government and industry need concerted action to **build strong partnerships, define clear goals** and **unlock private funding** to meet the UN's challenge

A James Cook University scientist says centuries of damage will have to be undone if a UN push to save crucial coastal ecosystems is to succeed.

Dr Nathan Waltham from JCU, funded through the Australian Government National Environmental Science Program's Tropical Water Quality Hub, led a group of 18 eminent coastal scientists from eight countries that warned of the challenges facing coastal restoration and how they can be overcome.

Dr Waltham said coastal ecosystems, including wetlands and coral reefs, are vitally important in providing habitats for many species, protecting coastlines from erosion and capturing significant amounts of carbon.

"However, coastal ecosystems face increasing industrialisation, loss of resources and climate change impacts. This has led to steep declines of coastal ecosystems worldwide - for example, about 40 per cent of the world's mangroves have been lost since the 1950s," he said.

"This means restoration projects need to be effective on a large scale to bring them back to health," he said.

The UN has declared 2021-2030 as the Decade of Ecosystem Restoration and the scientists are urging those involved in restoration to clearly define requirements and goals for their proposed projects, to help them win private and public funding.

The team said building strong partnerships not just between disciplines but between science, government, industry, philanthropy and the public are also vital.

"We are trying to undo environmental damage spanning back centuries in some places," said Dr Waltham.

"However, now we know that environmental problems are global. So we need coordinated and well-funded global action, and just maybe this declaration is the wakeup call needed."

Professor Catherine Lovelock from the University of Queensland said restoring coastal wetlands could help efforts to both slow and adapt to climate change.

"Restoring coastal wetlands can simultaneously address climate change mitigation through blue carbon (carbon captured by the world's ocean and coastal ecosystems) projects as well as helping with adaptation to climate change," she said.

"There is the potential for blue carbon projects to enhance the resilience of coastal communities, but everyone, from community groups to industry and government, have to get on board to make it happen."

Professor Mike Elliott from the University of Hull in the United Kingdom said effective restoration projects could counter the 'triple whammy' facing coastal ecosystems.

"Coasts worldwide are having to cope with increased industrialisation and urbanisation, increased use of resources such as water, space and energy, and the decreased resistance and resilience to climate change," he said.

“Environmental restoration is an integral part of dealing with the 'triple whammy!”

Dr Chris Gillies, Program Director, Oceans at The Nature Conservancy, Australia, said relying on public funding as the sole source of investment for large scale restoration efforts will be very challenging.

“The private sector and investors can also play a big role in financing restoration efforts through sustainable finance models such as green or blue bonds, impact investment and offsets,” he said.

“Applying these market-based mechanisms allows investors and companies to contribute to restoration and UN Sustainable Development Goals whilst also making a financial return.”

Dr Waltham said the restoration declaration from the UN is welcomed.

“It aligns with the stewardship of emerging movements toward the development of sustainable ‘blue economies,’ ‘blue growth,’ and ‘blue resources.

“In the run-up to the Decade, we need to identify strong governance, and support from governments, beneficiary industries, corporations and communities. Strong financial business cases are needed, to incentivise and build confidence in restoration as we start to open the pipeline to government and private capital investment.”

The article can be accessed here -

<https://www.frontiersin.org/articles/10.3389/fmars.2020.00071/full>

For more information contact Dr Nathan Waltham – [Nathan.waltham@jcu.edu.au](mailto:Nathan.waltham@jcu.edu.au)

**ENDS**

**Media contact:**

Boyd Robertson: (07) 4050 7400 / 04 5814 4909 / [boyd.robertson@rrrc.org.au](mailto:boyd.robertson@rrrc.org.au)