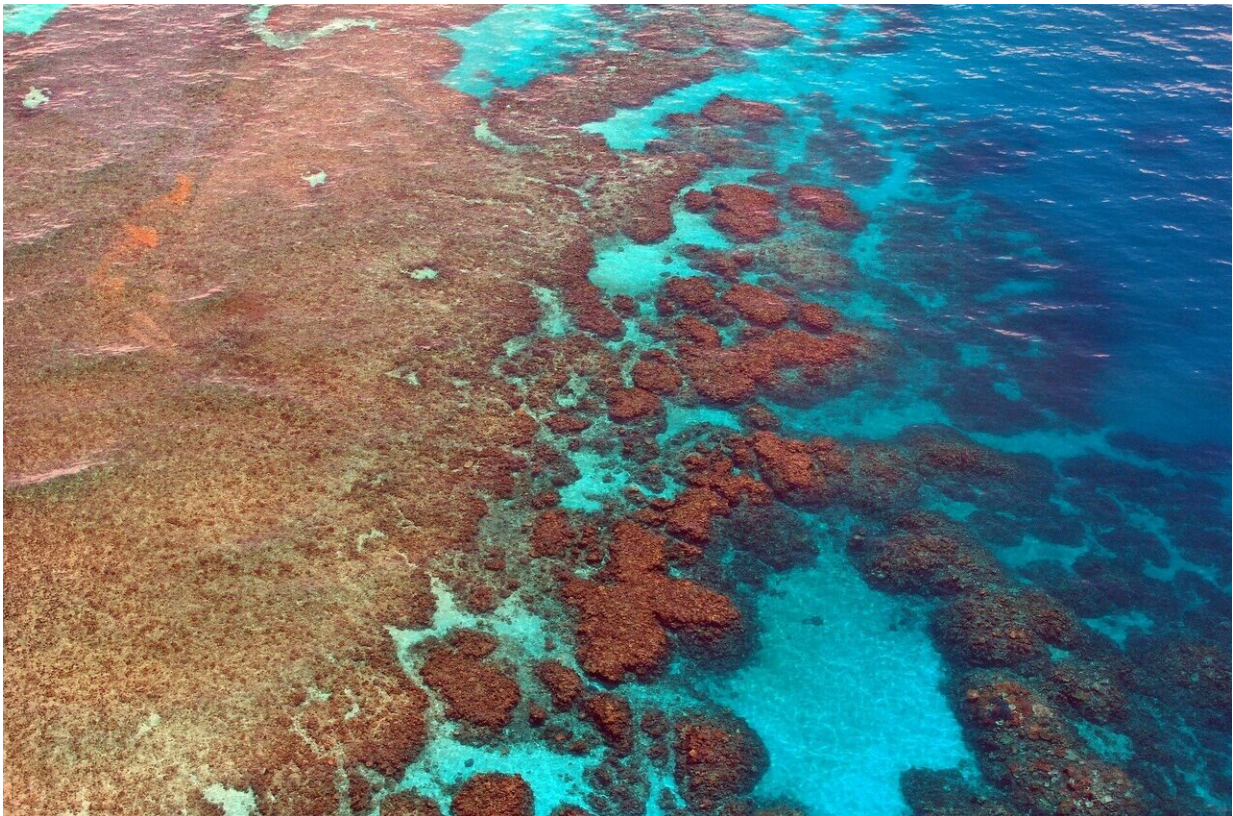


# Great Barrier Reef management methods at odds with climate change threats

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A study into the management and attitudes of key stakeholders operating in the Great Barrier Reef region has found that past and current approaches do not adequately address climate change threats to the reef

or likely losses of species, habitats and processes.

Dr. Wade Hadwen from Griffith University's Australian Rivers Institute and Climate Action Beacon and Lisa Walpole from Alluvium Consulting published the results in *Ecology and Society*.

The study provides a critical evaluation of management plans and actions with respect to the Great Barrier Reef over the past 30 years, focusing on the degree to which climate change threats have been incorporated into those plans and actions.

With another mass bleaching event impacting the Great Barrier Reef and a United Nations push to list the reef as 'in danger,' Dr. Hadwen said current management approaches fell short of what was needed to provide the reef with any chance of remaining in good condition.

"In this study, we were able to review the management plans of key stakeholders in the GBR region and explore evidence of the willingness to accept [environmental change](#)—and the scientific evidence which has been talking about climate threats for almost five decades—through the lenses of environmental grief and resilience thinking concepts," he said.

"Despite the huge ongoing investment in reef protection, few components of the reef management program have fully incorporated climate change and recognized that changes in the ecosystem are occurring now and are inevitable.

"This analysis highlights how the strategic planning environment for the GBR is lagging behind the state of knowledge."

The researchers found that management efforts for the GBR had focused on "resilience as recovery" and fell short of "resilience as adaptation" and the opportunities created by "resilience as

transformation."

Despite the state of scientific understanding, Dr. Hadwen said the study revealed how the prevailing individual or collective mindset could support or suppress a "resilience as transformation" approach to management of the GBR.

"Over the past five years, the GBR has been exposed to several unprecedented climate-related events, including three coral bleaching events and impacts from severe tropical cyclones, [poor water quality](#) from catchment run-off, [population increase](#) and urbanization, port expansion, fishing, and habitat loss," he said.

"Acceptance of a future change in state in terms of system structure and function, and related changes in environmental, social, and economic values, would lead to a significant shift in the way the GBR is managed, liberating agencies and stakeholders to let go of the past and plan for the future."

The study, "Extreme events, loss, and grief—an evaluation of the evolving management of [climate change](#) threats on the Great Barrier Reef," has been published in *Ecology and Society*.

**More information:** Lisa C. Walpole et al, Extreme events, loss, and grief—an evaluation of the evolving management of climate change threats on the Great Barrier Reef, *Ecology and Society* (2022). [DOI: 10.5751/ES-12964-270137](https://doi.org/10.5751/ES-12964-270137)

Provided by Griffith University

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