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Looking forward: considering climate change and variability in managing the Great Barrier Reef

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Biography:

Lisa is a water resources engineer from Alluvium Consulting in Brisbane, passionate about restoring and protecting natural systems, and supporting current and future communities that depend on and enjoy them.

This presentation has been developed as a result of Lisa's Master of Integrated Water Management thesis research, a review of the incorporation of climate change into QLD water modelling through the QWMN, and Alluvium's work looking at Investment Pathways with the GBRF.

Abstract:

It is widely acknowledged that climate change is one of the greatest threat to the Great Barrier Reef (GBR). In response, the primary focus of plans, strategies and actions to date has been to increase system resilience to shocks and pressures that may be exacerbated by climate change, such as improving water quality and managing invasive species. But is this enough?

Following recent, unprecedented coral bleaching and extreme runoff events, the need for action which considers the future climatic state, rather than managing the system as a static state, has become apparent and the management response is beginning to reflect this need with a new sense of urgency.

This presentation explores the outcomes of an evaluation of the current GBR management response at the strategic and operational level, and opportunities for targeted management responses which better reflect the future climate state and the multiple dimensions through which climate events threaten the condition of the reef. It will also reflect on outcomes of the Great Barrier Reef Foundation investment pathways prioritisation process, and the QWMN review of how climate change and climate variability is being represented in water models across Queensland to support decision making which considers a range of future climate states.