

Senate Standing Committee on Environment and Communications
Legislation Committee
Answers to questions on notice
Environment portfolio

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Hearing: Additional Estimates
Outcome: Outcome 1
Programme: Science
Topic: Potential National Coral Bleaching
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Senator Siewert asked:

Senator SIEWERT: ... But I am aware of the report that came out about a month ago that said that north-west WA was potentially going to be significantly affected. The inference was that it would probably be the hardest hit around Australia. So do you have any, and, if you do not, what is the process for finding out?

Ms Barnes: I can definitely find out if we have any baseline information on the area in the north-west.

Mr Thompson: It is something that we could ask our Marine Biodiversity Hub under the National Environmental Science Programme, NICNAS's hub based in Hobart. It has a remit across all marine ecosystems. I could take that on notice.

Senator SIEWERT: Thank you, it would be appreciated. But you have not had an update today?

Mr Thompson: No.

Answer:

NESP research in north-west Western Australia

The National Environmental Science Programme Marine Biodiversity Hub does not have current research directed specifically at determining the likely extent of coral bleaching in north-west Western Australia. The Hub has three current projects that are likely to contribute knowledge that will further our understanding of coral bleaching.

- A project lead by researchers at CSIRO aims to improve our understanding of marine pressures, including sea surface temperatures, and will collate information on a national scale for Australian waters. This information will assist our understanding of why particular coral reefs are more susceptible to bleaching and the factors that influence rates of recovery following a bleaching event.
- A second project lead by researchers at University of Tasmania is aimed at tracking threats to shallow reef ecosystems around Australia to investigate the impacts of a range of pressures (including climate change) on shallow water reefs. This project utilises data from the national Reef Life Survey which have already conducted baseline surveys of coral reefs in north-western Australia.

- The Marine Biodiversity Hub also has a research project lead by the Australian Institute of Marine Sciences that is focused on collating existing physical and biological data to enhance our understanding of the north-west continental shelf of Australia. While this project does not focus specifically on coastal reef systems, it will contribute to the important baseline understanding of the marine ecosystems in the north-west.

Research under the National Environmental Science Programme Tropical Water Quality Hub is addressing components of coral bleaching risk in relation to cumulative impacts and the validity and effectiveness of zoning and reef restoration. Lead by researchers from James Cook University and the University of Queensland, this research is directed to understanding the effectiveness of marine reserves in supporting reef restoration following disturbance events such as coral bleaching and examining how water quality influences susceptibility to coral bleaching.

Specific research including baseline surveys designed to measure the impact of coral bleaching on West Australian coral reefs has been carried out by the Australian Institute of Marine Sciences, which is a portfolio agency under the Department of Industry, Innovation and Science (http://www.aims.gov.au/waypoint/summer-2016/-/asset_publisher/M3eC2XMXcZpL/content/coral-bleaching-update)