

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

Question No: 162
Hearing: Supplementary Estimates
Outcome: Agency
Programme: Great Barrier Reef Marine Park Authority
Topic: Marine Monitoring System
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Question Type: Spoken

Senator Waters asked:

Senator WATERS: Can you take on notice the changes you have made to those marine monitoring systems and provide those for me?

Dr Reichelt: Yes.

Answer:

In 2013, Reef Plan was reviewed and the goal for the marine environment was updated as follows: “to ensure that by 2020 the quality of water entering the Reef from board-scale land use has no detrimental impact on the health and resilience of the Great Barrier Reef.”

In 2013-2014, the Marine Monitoring Program (established in 2005) was reviewed to improve its alignment with other Reef Plan programs that were established in 2009 and to set the foundation of a Reef-wide integrated monitoring program.

The review of the Marine Monitoring Program drew on multiple lines of evidence, including outcomes from the 2013 review of Reef Plan and an independent assessment of the program by CSIRO, to present 39 options for design changes to an Independent Science Panel for evaluation and prioritisation.

High priority recommendations from the review were incorporated into the Marine Monitoring Program operationally from 2014-2015 in line with the process identified for an Integrated Monitoring Program and as part of the adaptive management cycle. For example, the program’s objectives were revised to improve its alignment with Reef Plan; explicit linkages were established with pressures within the Driver-Pressure-State-Impact-Response (DPSIR) framework; the spatial and temporal sampling of water quality was expanded in four focus areas to improve the effectiveness of the program to detect change; and monitoring outputs were aligned with requirements for e-Reefs modelling. These changes are also being implemented as part of the Marine Monitoring Program for 2015-2016.

As outlined above, the greatest changes to the Marine Monitoring Program have been to the water quality monitoring sub-programs in order to improve alignment with the Great Barrier Reef Catchment Loads Monitoring Program. Water quality monitoring has been targeted in four focus areas to align with the outcomes of the 2013 Reef Plan risk assessment. The four focus areas capture discharge from the Russell-Mulgrave and Tully Rivers (Wet Tropics), Burdekin River and the O’Connell River (Mackay Whitsundays). Other key changes to the Marine Monitoring Program include the integration of related data from other monitoring programs to provide a more holistic and broader assessment of ecosystem health.