



Reef Trust Supporting Science and Evidence-Base

Expert Scientific Advice

Reef Trust investment is informed by the Reef 2050 Plan Independent Expert Panel chaired by Professor Ian Chubb. Panel members represent a broad cross-section of scientific expertise in areas relevant to managing key threats to the Great Barrier Reef.

The Panel provides independent scientific advice to the Australian and Queensland Governments, including advice on the implementation of the *Reef 2050 Plan*, *Reef Water Quality Protection Plan* and the Reef Trust.

The Great Barrier Reef Water Science Taskforce provided advice to the Queensland Government on prioritisation of investment to achieve its ambitious water quality targets. The key objective of the taskforce was to ensure clean water flows from rivers to the sea to protect the Great Barrier Reef for future generations. Membership of the Independent Expert Panel and the Water Science Taskforce overlap, assisting with ongoing collaboration between governments.

Supporting Evidence-Base

Reef Trust investment is also guided by world-class biodiversity and climate science coming out of programs such as the Queensland Government's Reef Water Quality Science Program and the National Environmental Science Programme.

Considerable work has been undertaken to determine high priority catchments and high priority pollutants to target investment towards specific areas of the catchment where significant reductions in key pollutants can be made. This research is amongst several mechanisms that directly inform the locality and regions where Reef Trust investments are implemented.

Australian and Queensland Government investment in Reef research and monitoring including the Reef Plan Paddock to Reef Integrated Monitoring, Modelling and Reporting Programme and the Reef Water Quality Science Program has helped to improve the knowledge base across a range of reef issues over the past five years. Building the most recent science and research into Reef Trust decisions ensures each phase of investment targets the highest priority threats to the Reef.

The Great Barrier Reef Foundation's eReefs project uses the latest technologies to collate data and new integrated modelling to produce powerful visualisation, communication and reporting tools for the Great Barrier Reef. It draws on the expertise of the Great Barrier Reef Foundation, Bureau of Meteorology, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australian Institute of Marine Science and Queensland Government. The project will help provide a better understanding of the link between management actions at the catchment level and water quality and the health of the marine environment.

The Australian Government has also provided funding for the development of six regional Water Quality Improvement Plans that will, for the first time, give coverage of the entire Great Barrier Reef catchment. Information from these plans will continue to inform Reef Trust investment at a regional level. They will also help identify the main issues impacting waterways and the marine environment from land-based activities in each region, and prioritise management actions to meet water quality objectives and targets.

The Reef Trust has drawn heavily on information about current and potential threats, and the status of Reef values provided in the *Great Barrier Reef Outlook Report 2014*. These five yearly reports are prepared by the Great Barrier Reef Marine Park Authority and provide a regular, reliable and scientifically based means of assessing overall performance of all measures to protect and manage the Reef.

Likewise, information from the Great Barrier Reef Marine Park Authority's strategic assessment of the Great Barrier Reef World Heritage Area and the Queensland Government's strategic assessment of the adjacent coastal zone provide an understanding of the connectivity of the terrestrial and marine environments and how natural and heritage values can be protected into the future.

Further, the Scientific Consensus Statement on Water Quality in the Great Barrier Reef 2013 and the Reef Water Quality Protection Plan 2013 Prioritisation project report have also informed the process to identify priority threats, regions and industries, and the design of potential Reef Trust interventions.