

Great Barrier Reef Water Science Taskforce

Communique 29 July 2019

- The Great Barrier Reef Water Science Taskforce reconvened for a one-day review workshop in Brisbane on 29 July.
- The Taskforce had been established in May 2015 to provide the Queensland Government with advice on how its ambitious water quality targets could be achieved and the priority areas for investing an additional \$90 million over five years.
- The Taskforce consisted of experts in science, industry, government and the community and was chaired by the then Queensland Chief Scientist Dr Geoff Garrett AO.
- It reported to the Queensland Government in May 2016. The government accepted all 10 recommendations and the Office of the Great Barrier Reef has been implementing them in partnership with a range of stakeholders and organisations.
- The workshop was an opportunity for the Taskforce to review progress with implementing the recommendations and provide advice on future priorities and potential investment.
- Aligned to specific recommendations, a range of project partners briefed the Taskforce on their work which, cumulatively, aims to deliver nitrogen and sediment reductions, improved land management practices, enhanced extension services and regional job creation, improved data management and increased monitoring.
- Taskforce members acknowledged the ongoing size and complexity of the task. There had been solid progress with implementing each recommendation, generally meeting expectations. The Taskforce agreed that all recommendations were still valid.
- Taskforce members were pleased to hear, in particular, about the early success of some of the projects, and appreciated seeing that these projects are being scaled up and expanded into other areas and industries. For example:
 - In partnership with Greening Australia, the Innovative Gully Erosion project on Strathalbyn in the Burdekin region has reduced over 4000 tonnes of sediment loss per year from the first two phases of the project starting from a baseline of 7600 tonnes of sediment loss per year. This reduction is expected to increase to over 6000 tonnes per year once project works are completed later in 2019.
 - The 'Cane Changer' behaviour change project in the Wet Tropics, in partnership with CANEGROWERS, has contributed to a 316% increase in the number of farms accredited in the Smartcane Best Management Practice program, with over 650 cane farmers and industry stakeholders engaged in the project over two years.
 - The farmer-led Burdekin nitrogen project RP161 has demonstrated substantial financial savings for farmers through reduced nitrogen application and improved productivity. There are 210 farmers now engaged in that region, up from 51 in the early days. A further 164 farmers have been engaged across the Mackay and Herbert areas.
- The Taskforce noted considerable strides in monitoring had been made, and particularly in making available catchment monitoring data in real time. While the cost of sensors remained a real challenge, Taskforce members were keen to see efforts to develop affordable water quality monitoring devices continue as more widespread on-farm measurement is crucial to stakeholders understanding their potential impacts on the Reef.
- The Taskforce also welcomed the extensive level of local consultation, and the high level of engagement and focus on developing partnerships, capacity building, planning and innovative approaches.
- Despite the good work undertaken, measurable improvements in water quality would not be seen for some time. This is to be expected given the lags between taking action and improving water quality, and underscores the urgency of the ongoing work plan.
- Land management practices are not changing fast enough and the Taskforce reiterated its support, as per its original Report, for the staged introduction of regulations as part of a broad approach.
- Longer term continuity of funding is considered critical given that some of the key recommendations such as the

large-scale, collaborative Major Integrated Projects (MIPs) in the Burdekin and Wet Tropics are still only in the relatively early stages of implementation (18 months into a three-year project). Given the relatively short funding window that remains, the Taskforce recommended greater focus here on the aspects which were showing most promise. While the MIPs were creating strong place-based (coordinating efforts to improve the well-being of a defined geographical location) delivery frameworks, measurable water quality impacts will only be seen over the longer-term (greater than five years). Consideration must also be given to extending the project end date within the existing funding envelope.

- Long-standing practices are being challenged and there needs to be ongoing frank debate about cultural and behaviour change and the impact that changing embedded agricultural practices has on people's livelihoods.
- Different landholders will respond to different projects and incentives and there needs to be more project integration at a regional level. This integration is critical given the nature and scale of initiatives being pursued in parallel.
- The Taskforce supported the increasing conversation around human dimensions in the Reef space and looks forward to future reporting on social attitudes. As such, Taskforce members were impressed by the increasing levels of trust and flourishing working relationships, involving landholders, extension staff and scientists, that are being developed. These relationships are critical to meeting our challenging, longer-term water quality targets.
- The Taskforce continues to support the overwhelming scientific evidence and science review processes that indicate that all threats to the Great Barrier Reef need to be actively managed, with a particular focus on improving water quality to build the Reef's resilience and protect it for future generations. Relatedly, the introduction of annual Synthesis Workshops as recommended by the Taskforce has achieved substantially increased collaboration and provided a regular forum to address emerging catchment water quality issues.
- Finally, the Taskforce also acknowledged the noticeable increase in collaboration between the Australian and Queensland governments since they last met.

Background

The members who attended Monday's workshop were:

- **Dr Geoff Garrett AO**, Taskforce Chair and former Queensland Chief Scientist.
- **Steve Banney**, Consultant, Grazing land management (Grazing industry)
- **Dr Rebecca Bartley**, Research Scientist, CSIRO (Sediment movement)
- **Professor Mike Bell**, Chair in Tropical Agronomy, Gatton Campus, The University of Queensland (Cane industry)
- **A/Professor Colin Creighton AM**, James Cook University; Fisheries Research and Development Corporation, Fisheries Habitat and Climate Adaptation; and farmer (Natural resources management)
- **Professor Allan Dale**, Professor of Tropical Regional Development, Cairns Institute, James Cook University (Regional community expert)
- **Dr Rob Fearon**, Director, Innovation Partnerships, qldwater, Manager Queensland Water Regional Alliances Program (Local government)
- **Professor Ove Hoegh-Guldberg**, Director of the Global Change Institute, Professor of Marine Science, The University of Queensland (Tropical marine science)
- **Euan Morton**, Principal, Synergies Economic Consulting (Economics)
- **Dr Roger Shaw**, Independent consultant, Chair of the Reef Water Quality Improvement Plan Independent Science Panel (Reef water quality science)
- **Dr Stuart Whitten**, Principal Institutional and Environmental Economist, CSIRO Land and Water (Economics)
- **Dr Frederieke Kroon**, Team Leader, Tropical Marine Water Quality and Impacts, Australian Institute of Marine Science (proxy for Dr Britta Schaffelke) (Water quality and research)
- **Professor Paul Greenfield AO**, Chair of the Taskforce Review Group