



Improving Reef water quality

Report on the Reactive Monitoring Mission to the Great Barrier Reef

The *Report on the Joint World Heritage Centre and International Union for Conservation of Nature's (IUCN) Reactive Monitoring Mission to the Great Barrier Reef* recommends increased investment and accelerated actions to improve Great Barrier Reef (Reef) water quality.

The Report found that poor water quality is compromising the resilience of the Reef to recover from climate change impacts.

The Australian and Queensland governments have had constructive and fruitful dialogue with both the IUCN and World Heritage Centre over the past few months to discuss issues relating to water quality identified in the report.

The report also recognises the significant effort and investment that Australia has devoted to Reef water quality management to date.



Photo: Russell River, North Queensland which flows into the coastal areas of the Great Barrier Reef.



Australia's actions and investments to improve water quality

Improving water quality is one of the most important things we can do to protect the Great Barrier Reef and its ecosystems and help it build resilience against other threats, like climate change. The recently elected Australian Government has supercharged this work to protect the Reef.

The Report recognises the Australian and Queensland governments' current efforts to improve Reef water quality. It also recommends increased investment and accelerated actions including upscaling of restoration and remediation activities and continuing to advance and increase the uptake of best practice land management within the agricultural industry.

The Australian and Queensland governments are committed to delivering increased action and investment to improve water quality in the Reef catchment and ocean waters. This includes reducing nutrient and sediment loads in catchment areas by supporting more efficient fertiliser use by farmers, boosting precision agriculture, installing real-time water quality sensors, and creating and advancing on-farm and land restoration jobs and projects.

The Australian and Queensland governments have committed more than A\$4.4 billion, from 2014-15 to 2029-30 to build Reef resilience through management, protection, and restoration. Of this, more than A\$3.2 billion is from the Australian Government, including, A\$579.9 million for projects to improve Reef water quality and accelerate action towards meeting set targets for all Reef catchments. In October this year, the Australian Government also committed an additional A\$91.8 million to deliver shovel-ready catchment and reef restoration projects and programs that will improve water quality across the Reef, including through:

- Ecosystem restoration: to help slow the movement of water across the landscape, which will assist in removing nutrients and sediment from land-based run-off before it enters the Great Barrier Reef lagoon.
- Upscaling activities focused on catchment-level activities such as the construction of wetlands, naturalisation of water channels and other actions, to reinstate or mimic elements of the natural hydrology including restoring and expanding mangroves and seagrass beds.
- Supporting seagrass restoration and building on small-scale pilot studies trialling site-specific restoration methods, to be delivered by Traditional Owners, researchers, and community groups.



Photo: Example of a before and after photo of a degraded gully remediation to reduce erosion and sediment run-off.



Photo: Example of a before and after photo of a riverbank that has been stabilised to reduce future sediment and run-off reaching the Reef.

Progress towards water quality targets

The Australian and Queensland governments' Reef water quality programs support the best possible outcomes for the Reef. They are regularly reviewed, are adaptive, and are based on the latest science and data – this all contributes to helping ensure the Reef's Outstanding Universal Value remains intact.

The *Reef 2050 Water Quality Improvement Plan* underpins the Australian and Queensland governments' actions to improve water quality. It includes:

- clear and measurable water quality targets
- a system for prioritising investment
- a monitoring and evaluation program
- public reporting through the Reef Water Quality Report Card, and
- a process to review and update the Plan based on the latest science, with processes underway for the next review.

As outlined in the *2022 State Party Report on the State of Conservation of the Great Barrier Reef*, Australia's approach to water quality improvements is delivering progress towards the 2025 water quality targets in the *Reef 2050 Water Quality Improvement Plan*:

- we are more than halfway towards meeting the 2025 sediment, particulate nitrogen, and particulate phosphorus targets
- we are almost halfway towards the 2025 dissolved inorganic nitrogen targets.

The Mission Report acknowledges the sheer scale of the challenge, that the trajectory towards the targets is not linear, but we are continuing in the right direction, and that water quality is improving across Reef catchments.

The Australian and Queensland governments are actively investing in improvements to water quality with demonstrated results. These improvements are achieved through advanced science and research, improved land use management, engagement with stakeholders and land users, improved assessment and tracking of water quality, and effective adaptive management. Both governments want to see current water quality parameters meet threshold targets.



Both governments' increased investments in Reef water quality, and the collective action it supports, will continue to improve water quality and protect the Reef.

For more information please visit: [Reef 2050 Water Quality Improvement Plan \(reefplan.qld.gov.au\)](https://reefplan.qld.gov.au)