

Supplement to the Interim report: 2016 coral bleaching event on the Great Barrier Reef

November 2016

This supplement by the Great Barrier Reef Marine Park Authority (GBRMPA) to the [interim report](#)¹ provides an update on current Reef-wide surveys being conducted by GBRMPA and the Queensland Parks and Wildlife Service. This second round of in-water reef health and impact surveys commenced in October, and is due to be completed by the end of November 2016.

The surveys will provide an updated assessment of bleaching-related mortality and reef health and resilience following the 2016 mass coral bleaching event in the Great Barrier Reef Marine Park.

The structured survey plan covers the same 63 reefs across seven transects examined earlier this year, as detailed in the interim report, to allow for comparisons and representation of Reef-wide patterns. The transects (reef groupings) are located at latitudes centred on Cape Grenville, Princess Charlotte Bay, Lizard Island, Cairns–Port Douglas, Townsville, Whitsunday Islands and Rockhampton. Some additional reefs were also surveyed where possible, giving further information on bleaching-related mortality over time.

It will take several months to complete analyses and reporting, however preliminary findings provided here confirm general spatial patterns of bleaching impacts as described in the interim report. These findings do not yet include information for the Townsville transect. Impacts remain highly variable within and among reefs and regions.

From the Cairns–Port Douglas transect north, coral mortality is greater now than in June 2016, as expected, and more reefs now have greater than 50 per cent bleaching-related mortality. While it appears coral mortality is in line with expectations, it is at the upper end of expectations in areas that experienced the most severe bleaching.

In the Cape Grenville and Princess Charlotte Bay regions (in the Far North), outer-shelf reefs surveyed remain in relatively good condition and have significantly lower mortality than mid-shelf and inshore reefs in these regions. Surveyed outer-shelf reefs in the Lizard region have greater than 50 per cent mortality, as do many other surveyed reefs across the shelf in this region.

The Cairns–Port Douglas region continues to display the greatest variability in mortality levels — some reefs have had substantial mortality of corals and other reefs remain in relatively good condition.

There is already evidence of initial recovery of previously bleached corals on some reefs in the Marine Park. In the southern half, reefs show minimal bleaching-related mortality.

¹ [Great Barrier Reef Marine Park Authority 2016, Interim report: 2016 coral bleaching event on the Great Barrier Reef, GBRMPA, Townsville.](#)

The field assessments are being conducted through the Great Barrier Reef Marine Park Field Management Program (jointly funded by the Australian and Queensland governments) with funding support from the Great Barrier Reef Foundation (through the Australian Government's Resilient Reefs program), and personnel and vessel support from the Association of Marine Park Tourism Operators.

Detailed findings from these latest surveys will be available in early 2017. These will include updated estimates of bleaching-related impacts and information on the early stages of coral recovery.

Science partners are also conducting further assessments throughout 2016. All information is being used to build a comprehensive picture of reef health and condition, and bleaching impacts. Full analyses are ongoing and will be reported on in future joint publications.