

Response to Senator Rennick question regarding the definition of poor quality and the baseline for poor water quality in the Reef.

Water quality guideline values are used as a general tool to help ensure that certain physical and chemical stressors in waterways do not exceed harmful levels. Water quality guidelines are technically-derived numerical measures (e.g. concentrations) or descriptive statements to protect aquatic ecosystems and human water uses and values (e.g. irrigation, stock watering, recreation). Water quality guidelines are derived for a range of physico-chemical, biological and habitat indicators based on best-available science.

The authoritative guidance and management framework for water quality in Australia is the ***Australian and New Zealand Guidelines for Fresh and Marine Water Quality***. The Water Quality Guidelines are a joint initiative of the Australian and New Zealand governments, in partnership with the Australian states and territories.

The National guidelines provides guidance on setting water quality objectives designed to sustain current, or likely future, community values for natural and semi-natural water resources. The National guidelines underpin the Great Barrier Reef Marine Park and Queensland local and state water quality guidelines and objectives that are developed to be more specific to the local and regional conditions and values:

- The Great Barrier Reef Marine Park Authority has **Water Quality Guidelines for the Great Barrier Reef Marine Park (2010)** with set levels for specific pollutants which when exceeded prompt managers to take action. Regional catchment-level objectives are being implemented under Queensland's *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* for the Reef catchment, which includes state coastal waters.
- **The Queensland's *Environmental Protection (Water and Wetland Biodiversity) Policy 2019 (EPP (Water and Wetland Biodiversity))***, sets to achieve the object of the *Environmental Protection Act 1994* (EP Act) to protect Queensland's waters while supporting ecologically sustainable development.

The joint Reef 2050 Water Quality Improvement Plan targets (based on an independent report by JCU) are set based on the Water Quality Guidelines for the Great Barrier Reef Marine Park (Great Barrier Reef Marine Park Authority, 2010).

The following links provide more information on these documents:

- **Australian and New Zealand guidelines for fresh and marine water quality**
<https://www.waterquality.gov.au/guidelines/anz-fresh-marine>
- **Water quality guidelines for the GBR (GBRMPA)** <http://www.gbrmpa.gov.au/our-work/threats-to-the-reef/declining-water-quality/water-quality-guidelines-for-the-great-barrier-reef>
- **Environmental Protection (Water and Wetland Biodiversity) Policy 2019 - Great Barrier Reef River Basins - End-of-Basin Load Water Quality Objectives**
https://environment.des.qld.gov.au/_data/assets/pdf_file/0023/99320/gbr-river-basins-eob-load-wqos.pdf
- **Queensland water quality guidelines:**
<https://environment.des.qld.gov.au/management/water/quality-guidelines>
- **The Reef 2050 Water Quality Improvement Plan targets:**
https://www.reefplan.qld.gov.au/_data/assets/pdf_file/0025/46096/gbr-water-quality-targets-june2017.pdf