

# Commission of Inquiry

## PARADISE DAM

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### Chairperson's Opening Remarks

By Order-in-Council dated 5 December 2019, Emeritus Professor John Carter AM and I have been appointed as the Commissioners to conduct an inquiry under the Commissions of Inquiry Act 1950 into certain structural and stability issues relating to Paradise Dam. I also chair the Commission.

Paradise Dam was built between 2003 and 2005.

The Dam sustained some damage through flooding in late 2010 and early 2011.

In January 2013, heavy rainfall associated with ex-tropical Cyclone Oswald created a major flood event for the Dam.

The primary spillway was overtopped by about 8.6 m at its peak. The peak outflow was a 0.5% AEP event: that is, a 1 in 200 Annual Exceedance Probability flood event.

The flooding caused substantial damage to the Dam, mainly to its spillway apron. There was also significant downstream scouring of the river bed.

The considerable extent of the 2013 damage to the Dam and of erosion of rock immediately downstream from the apron had not been anticipated: the Dam had been designed to pass, safely, a 1 in 30,000 Annual Exceedance Probability flood event.

Investigations and studies since 2013 have raised questions about the Dam's safety.

Against that background, this Commission was established.

The Terms of Reference within the Order-in-Council direct us:

3. [...] to make full and careful inquiry in an independent manner with respect to the following matters:
  - a) the root cause of structural and stability issues identified in engineering and technical studies conducted on the Paradise Dam between 30 January 2013 and 30 November 2019;
  - b) where the root cause is attributable, or attributable in part, to the design, construction and/or commissioning stages of the Paradise Dam, the facts and circumstances that contributed to the structural and stability issues having regard to:



- i. the governance arrangements in place including expert third party review and response to any issues raised;
  - ii. the scope and effectiveness of processes and systems to ensure quality in design, construction and/or commissioning, adopted by individuals, entities and government bodies involved in the design, construction or commissioning of Paradise Dam; and individuals, entities and government bodies involved in giving the necessary approvals required for the Dam;
  - iii. the reporting arrangements and obligations in place during design, construction and commissioning;
  - iv. remedial measures taken during design, construction and commissioning;
  - v. any other matter relevant to the Inquiry.
4. [to] make any recommendations arising out of the evidence, considerations or findings of the inquiry in relation to the matters set out in paragraphs 3a) and b) above that the Commissioners consider appropriate to ensure future Queensland dam projects are designed, constructed and commissioned to acceptable standards, as defined in Queensland Government legislation and regulation, Australian National Committee on Large Dams guidelines and engineering good practice.

It is not for us to propose what should happen with the Dam. Others are considering what works ought to be done to improve the Dam to protect life, property and economic interests. This Commission must conduct its Inquiry within the Terms of Reference. So we shall examine the structural and stability issues identified in those “studies” referred to in the Terms of Reference to discover their “root cause” (or causes).

Those “structural and stability issues...” will soon be the subject of comment by senior counsel appointed to assist the Commission, Jonathan Horton QC. The identification of those issues is something upon which others may make submissions.

Since the Commission began its investigations, it has collected, collated and made progress in analysing more than 30,000 documents and photographs. Some documents are of considerable length. Many deal with complex geotechnical, hydrological and engineering matters. Counsel assisting the Commission have interviewed more than a dozen potential witnesses. Using its website as well as advertisements in national and regional newspapers, the Commission has sought to gather more information.

Professor Carter and I recognize that the Dam and its future are important to communities in the Wide Bay – Burnett region, especially for those who rely on the Bundaberg Irrigation Scheme for their livelihoods. We visited the Dam last December. Lawyers assisting the Commission have



inspected it too. They have also spent time in Bundaberg, speaking with people interested in the Commission's work.

But much remains to be done; and quickly. The Commission is to complete its investigations and report to the Honourable the Premier and Minister for Trade and the Honourable the Minister for Natural Resources, Mines and Energy by 30 April this year.

The first witnesses will give their evidence in Bundaberg. The Commission returns to Brisbane for hearings over the following fortnight. We plan to return to Bundaberg in April for final submissions.

To facilitate public access to our work, the hearings will be live streamed through the Commission's website.

Finally, I encourage anyone with relevant information to send it to the Commission Secretary, Ms Suzanne Stone, preferably by 3 March 2020.

