

H. Dam improvement programs

Figure H1
Significant Seqwater dam improvement programs

Project	Status
Ewen Maddock Dam Upgrade	<ul style="list-style-type: none"> The upgrade of Stage 2A began in April 2020. Practical completion was achieved in April 2021, three months ahead of schedule.
Lake MacDonald Dam Upgrade	<ul style="list-style-type: none"> This was originally scheduled to begin in 2021. During the procurement stage, issues arose that significantly increased the ministerial-approved budget. Seqwater made the decision to not award the contract and to reassess options for the project. Work is in progress on an options assessment, and a decision will be made by the board in 2021–22 as to which option to proceed with.
North Pine Dam	<ul style="list-style-type: none"> A strategic assessment business case is nearing completion. Development of technical risk mitigation options, including consideration of delivery options, will begin in 2022. Construction is not expected to start until 2025, subject to government approvals.
Somerset Dam	<ul style="list-style-type: none"> A detailed business case is in progress, and investigation, design, and planning work is set to continue through 2022. The detailed business case will recommend the final delivery methodology. Commencement of any works is subject to government approvals. Construction of the dam upgrade is expected to take four to five years.

Notes:

- A 'detailed business case' aims to provide evidence for investing in the projects.
- Options assessment—Previously referred to as a 'preliminary business case', it aims to progress the concept documented in the feasibility study by generating options and assessments for more detailed analysis.

Source: Compiled by the Queensland Audit Office from Seqwater information.



Figure H2
Significant Sunwater dam improvement programs

Project	Status
Burdekin Falls Dam	<ul style="list-style-type: none"> • A combined detailed business case is underway for the Burdekin Falls Dam Improvement Project and Burdekin Falls Dam Raising project. • Detailed planning for construction of the improvement works is scheduled to start when the detailed business case is completed, subject to government approvals. • The final terms of reference for the environmental impact statement (EIS) were received in April 2021. • Progressing with the draft EIS for the raising project, together with a range of field surveys and technical studies.
Coolmunda Dam	<ul style="list-style-type: none"> • A comprehensive risk assessment (CRA) is underway to inform dam safety improvements and is forecast to be finalised by mid-2021–22.
Fairbairn Dam	<ul style="list-style-type: none"> • Stage 1—the spillway upgrade was completed in December 2016. • Stage 2—the replication of Stage 1 on the next section of the spillway was completed in September 2020. • Stage 3—the construction of new concrete gravity sidewalls was completed in December 2019. • Final close-out of the project is expected in September 2021 following a 12-month defect testing period.
Fred Haigh Dam	<ul style="list-style-type: none"> • Stage 1A—repairing scour damage from previous flooding was completed in December 2019. • Stage 1B—installation of a mass concrete slab across the spillway channel and anchors was completed in January 2021. • Stage 2 is currently underway, with target completion date for the comprehensive risk assessment in October 2021.
Leslie Dam	<ul style="list-style-type: none"> • A CRA is underway, with a decision to complete a preliminary business case once the CRA is completed.
Paradise Dam Essential Works and Improvement Project	<ul style="list-style-type: none"> • Essential works to lower the primary spillway were completed in September 2020. • Essential works associated with strengthening the upper half of the dam by installing a temporary concrete crest were completed in January 2021. • An options assessment prepared for Paradise Dam by the former Building Queensland was completed in March 2020. • The Queensland Government is expected to make a decision about the long-term future of Paradise Dam by the end of 2021, informed by the options assessment and evaluation.
Teemburra Dam	<ul style="list-style-type: none"> • A CRA and geotechnical investigations are underway to assess options for any dam improvement works. • Geotechnical investigation works around Saddle Dam 2 were completed in March 2021. • The preliminary business case is expected to be completed by mid-2022.

Notes:

- Comprehensive risk assessment (CRA)—staged process of systematically reviewing dam data, updating models and conducting a quantitative risk assessment on each dam.
- Geotechnical investigations—comprehensive assessment of geological conditions of a particular area where construction or installation of any kind needs to be undertaken.

Source: Compiled by the Queensland Audit Office from Sunwater information.

