

Seqwater Dam Improvement Program

Ewen Maddock Dam

Overview

March 19

Ewen Maddock Dam is one of several dams in South East Queensland scheduled to be upgraded as part of our ongoing Dam Improvement Program. The upgrade work is set to begin from July 2019 and will include strengthening the existing embankment and raising the dam wall to increase its floodwater capacity.

Work is expected to take up to 18 months, subject to weather conditions and other unexpected delays.

About the Dam

Ewen Maddock Dam is part of the SEQ Water Grid – a connected network of dams, treatment plants, reservoirs and pipelines supplying drinking water to the region. The dam was constructed across Addlington Creek, a tributary of the Mooloolah River.

Construction of the dam was completed in 1976 and the full supply level (FSL) was raised in 1982. Following the independent dam safety review in 2010, a number of improvements were identified at Ewen Maddock Dam and approved for delivery in two stages.

In 2012, the stage one upgrade of the dam involved the installation of pressure relief wells into the foundation materials, and construction of a sand filter buttress and overlying weighting berm made of clay along the downstream embankment toe.

In 2016, Seqwater engaged an engineering consultant to develop the second stage of the upgrade design. More than twenty-one options were identified during this process.



About the Dam Safety Upgrade

On 1 February 2019, the Minister for Natural Resources, Mines and Energy, Dr Anthony Lynham, announced the project will begin in 2019. The media release can be read here. <http://statements.qld.gov.au/Statement/2019/2/1/20m-upgrade-work-for-ewen-maddock-dam>

The 2019 - 2020 stage two upgrade option will:

- add sand filters to the existing earthfill embankment
- raise the embankment height with a parapet wall, to increase flood capacity
- strengthen the concrete spillway
- raise the training walls of the spillway
- install emergency outlets in the spillway to enable reservoir drawdown in the case of a dam safety incident.

Recreation changes

For the safety of the public, all on-water recreation, access to the designated swimming area, access to the multi-use trails from Maddock Park, and the recreational use of Maddock Park will be closed for the duration of the upgrade work. Access to the multi-use trails from alternate locations will be maintained where possible. During the construction work, noise and traffic will increase within the surrounding areas.

Currently, the water level within the lake is at about 90 per cent of the Full Supply Level. During the upgrade we will need to lower the water level of the lake to about 50 per cent of the Full Supply Level.

Lowering water levels is an industry accepted practice to manage dam safety and bank stability during upgrades. The lake will return to the current Full Supply Level following project completion and adequate rainfall. Access to the recreation areas will be re – instated once the upgrade is complete and on water recreation will re-open when the lake returns to it's normal water level.

Timing

The detailed design is nearing completion and we are now moving into the project planning phase.

We plan to start construction from mid - 2019 and expect that the work will take up to 18 months, subject to weather and onsite conditions. Seqwater's Dam Improvement Program is also subject to water supply security assessments which may impact on the timing.

More information about what to expect during construction will be available once a contractor is appointed in June 2019

2011-2014	DAM SAFETY REVIEW	✓
2014	OPTION ANALYSIS & CONCEPT DESIGN	✓
2015-16	PRELIMINARY DESIGN & APPROVALS	✓
2017-19	DETAILED DESIGN & APPROVALS	←
2019	PROJECT PLANNING	🔍
2019-20	CONSTRUCTION	🔍

Further information

Seqwater will host a free community BBQ, information day and dam wall tour at:

- Maddock Park, Connection Road on Saturday 2 March 2019 from 12 – 4pm.

Neighbours and interested members of the community are invited to join the BBQ and attend the dam tour to discuss the upgrade with the project team. The event will be catered by the Mooloolah Valley Lions Club. If you would like to join in on a dam tour you will need to register, please contact the team by email at communications@seqwater.com.au

You can stay up-to-date with the progress through the project webpage

<https://www.seqwater.com.au/ewen-maddock-dam-upgrade>

If you are interested in learning more about dam upgrades check out our short video explaining the six stages of a dam upgrade:



<https://www.youtube.com/watch?v=q4cVsOk9L-4&t=6s>

Background – Dam Improvement Program

In Queensland, dam owners are responsible for the safety of their dams under the Water Supply (Safety and Reliability) Act 2008 (the Act). The Department of Energy and Water Supply requires Seqwater to comply with the Queensland Dam Safety Management Guidelines under the Act. Like all dam operators across the country, we also seek to meet the national guidelines set by the Australian National Committee on Large Dams (ANCOLD). Our Dam Improvement Program considers all of these factors, so our dams can operate as they should, now and into the future. There are some key changes since Ewen Maddock Dam was built, which impact on its compliance with the dam safety guidelines, including:

- the latest estimates of extreme rainfall
- data from flood events and updated flood modelling
- improved understanding of earthquake probabilities and loads
- significant population growth downstream
- advances in dam design and development of consistent methodologies for assessment of dam condition

Sign up for e-updates

We will be sending regular e-updates on the progress of this project to keep you informed. This is the best way to get the latest information, so if you know someone who might be interested in this project encourage them to subscribe by clicking [here](#).

Sign up for free dam release alerts

Sign up to our dam release notification service to be notified when Ewen Maddock Dam is spilling. This free service provides subscribers with notifications by email, SMS or recorded messages to telephone landlines when gated dams are releasing water or un-gated dams are spilling. [Register now](#) to get dam alerts or download the Seqwater app from the App Store or Google Play on your device.

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