Seqwater Dam Improvement Program

Ewen Maddock Dam

Overview August 19

Ewen Maddock Dam is one of a number of dams in South East Queensland scheduled to be upgraded as part of Seqwater's ongoing Dam Improvement Program. The upgrade will strengthen the existing embankment, raise the dam wall to increase its floodwater capacity and make sure it continues operating safely, well into the future.

Changes to the current design of the dam wall will affect the layout of the existing Maddock Park recreation area. During construction, on-water recreation, including the designated swimming and beach area will be closed.

Timing

The dam was originally earmarked for upgrade work to begin from August this year but has now been rescheduled.

This was as a result of Seqwater receiving no viable tender during the tender process.

As a result, on-water recreation, including a designated swimming and beach area, will remain open until Seqwater finalises the new project timeline. The revised construction schedule will not increase any risks to dam safety.

Segwater will keep the community updated as the project progresses.

Seqwater is continuing to progress planning and approvals for the project while reviewing the tender process. The review will help inform a new tender which Segwater expects to release before the end of the year.



Upgrade scope

The planned work at Ewen Maddock Dam will include:

- upgrading the existing earthfill embankment with sand filters
- raising the existing earthfill embankment, with a parapet wall, to increase flood capacity.
- strengthening the concrete spillway
- raising the training walls of the spillway
- installing emergency outlets in the spillway to enable reservoir drawdown in the event of a dam safety incident.

Preparing for dry conditions

In South East Queensland, we live in a climate of extremes. And part of living here means being ready to adapt our water use in times of drought and flood. Right now, we're getting ready for the possibility of drought. We call this a drought readiness phase. It doesn't mean a drought is inevitable - but it could be on the horizon. You can read more about drought readiness here.

Ewen Maddock Dam is part of the SEQ Water Grid – a connected network of dams, treatment plants, reservoirs and pipelines supplying drinking water across the region. The combined Water Grid dam levels have continued to decrease during winter (currently 66%).

While the volume of water in Ewen Maddock Dam is small in comparison to larger dams like Wivenhoe and Somerset Dam, Seqwater is working to balance the needs of water supply and dam safety upgrades in response to our changing weather conditions. We can do this by transporting water north from Brisbane using the Northern Interconnector Pipeline (NPI) when required.

Maddock Park

Currently, the water level within the lake is at about 95 per cent of the Full Supply Level. During the upgrade we will need to lower the water level of the lake to about 60 per cent of the Full Supply Level.

For public safety, all on-water recreation, access to the designated swimming area, entrance to multi-use trails from Maddock Park, and the use of Maddock Park recreation area will be closed for the duration of the upgrade work.

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 Maddock Park will be re-instated once the upgrade is complete and on-water recreation will re-open when the lake returns to its normal water level. We will also build a parapet wall, as part of the dam safety requirement, extending into Maddock Park from the dam wall which will change the layout of the park. Seqwater has been collaborating with the dam design engineers to reduce impact on the recreation area.

Seqwater and our community



In March 2019, Seqwater set up an information stand, held dam tours and provided a free sausage sizzle to discuss the project with our community. The event was catered by the Mooloolah Valley Lions Club.

We received lots of feedback and questions about the upgrade and had some helpful discussions about the impacts of the safety upgrade on the recreation area.

We have taken feedback and concerns on board and adjusted our design to reduce impacts to the beach area and Maddock Park where possible. We have also engaged with a landscape design team to identify the landscaping options available to align with Seqwater standards at the site.

Detailed designs for Ewen Maddock Park will be made available following the procurement of a contractor. We will seek to incorporate the required safety upgrades and also make access improvements for the beach area.

The design is still subject to change, but we will strive to make sure the approved changes are a win-win for both dam safety and those who enjoy using the beach area.

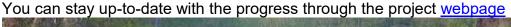
Recreation Upgrades

At our community information day earlier this year, feedback we received indicated that the Mooloolah community were active users of the multi-use trails surrounding the lake. With this feedback, Seqwater has taken steps to make sure continued access to the multi-use trails remains available.

We have recently installed another entrance point to the trail network, so that during the upgrade walkers, horse riders and mountain bike riders can bypass Maddock Park for continued access to the trails. We have constructed a new horse float parking and unloading area to continue to facilitate horse riders at Maddock Park during the upgrade.

We also responded to concerns about the closure of the Maddock Park area during the upgrade by significantly investing to rejuvenating the wetlands picnic area, on Steve Irwin Way. We have recently installed pumps for the wetlands, upgraded picnic tables, resurfaced the access and parking facilities and installed a new toilet block near to the Brew haha Café to significantly enhance this area and make the wetlands a fantastic, new picnic destination.

Once the new timeline for the project is finalised Seqwater will host a community event at the newly renovated wetlands area to update the local community.





Did you know?

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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