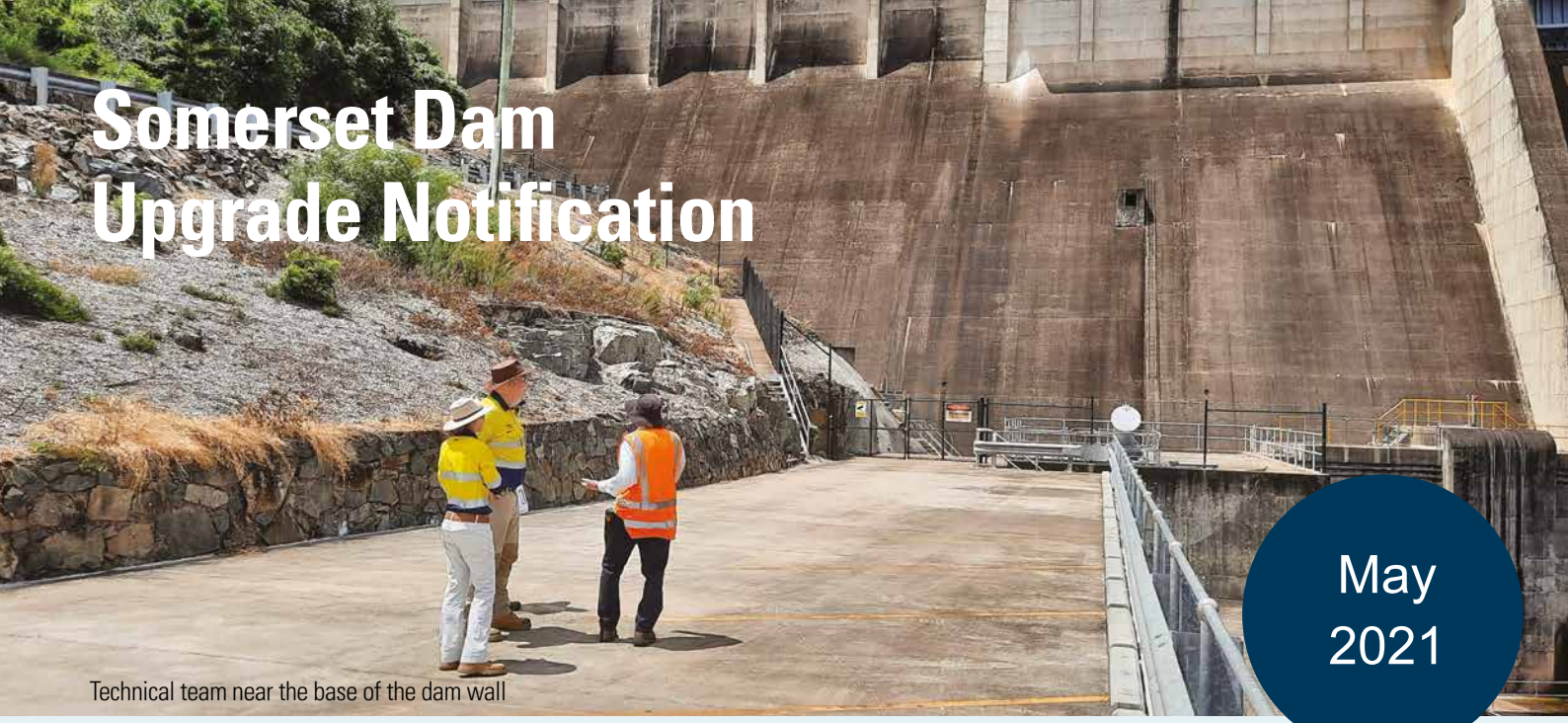
Somerset Dam Upgrade Notification



Technical team near the base of the dam wall

May 2021

Technical surveys to occur in coming months

What is happening?

The Somerset Dam Upgrade project involves improving the current design to meet the Queensland Dam Safety Guidelines.Over the coming months Seqwater will have technical teams doing surveys for the upgrade project.

You can expect to see an increasing number of workers in high-vis vests and personal protective equipment moving around the village in the weeks ahead.

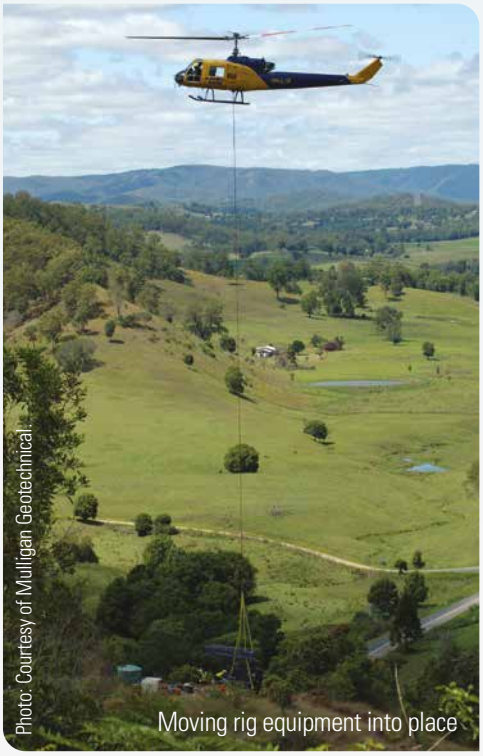


Photo: Courtesy of Mulligan Geotechnical.

Moving rig equipment into place

What surveys are being undertaken and when?

The surveys taking place during May, June, and July in and around Somerset Dam Village include:

- 3D scanning of the dam wall (internally and externally)
- Geotechnical investigations
- Lidar aerial survey.

What to expect

3D scanning

Internal and external three-dimensional (3D) laser scanning of the Somerset Dam wall will occur in May, within the dam's operational precinct. The 3D data is used to construct digital 3D models that will assist future design work and on-going operations.

Geotechnical investigations

Geotechnical surveys are planned from late-May to mid-July 2021 in several locations.

The surveys are being done to understand the type and strength of ground conditions (soil and rock). This information will assist Seqwater in refining the design to upgrade the dam.

Geotechnical investigations are scheduled to occur in several locations and will be undertaken during daylight hours.

The locations are:

- Riverbed – downstream of the dam wall
- Quarry – immediately north of village
- Left and right dam abutments (if required)

Several medium size bore holes of 20 metres in depth will be drilled at each location.

Site permits

Depending on the location and extent of drilling, permits from Government agencies may be required for vegetation clearing, potential disturbance of animals and working in a waterway. Seqwater's contractors will obtain all necessary permits, if required, prior to beginning geotechnical investigations.

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Upstream view of Somerset Dam

What is involved?

A truck with a drilling rig, a support vehicle which is usually a 4WD ute with a 1,500 – 2,000L water tank and a support truck will be on-site during daylight hours.

Some borehole locations that are difficult to access may require additional equipment. This equipment might include an excavator, ramps, a smaller portable rig, cranes or even helicopter lifts. We are working with the design consultant to confirm the methodology.

The work area for drilling a borehole is approximately 15m x 10m, but this will vary according to the site geography.

The anticipated time to drill each 150mm hole at a depth of 20 metres is approximately two days, depending on access and ground conditions.

Water used during drilling will be contained within a purpose-built tank and recirculated until the hole is completed. This prevents any spill into surrounding waterways.

Safety measures will be put in place at the conclusion of daily works to protect each borehole and prevent small animals inadvertently being trapped.

Core samples will be logged and sampled by the geologist. In addition, a televiewer will be used to record digital footage and photographs of the conditions within each hole.

On completion of works each hole is filled with grout.

The personnel doing the work include a lead driller, a drilling hand, an engineering geologist and a Seqwater supervisor.

Lidar aerial survey

A Lidar aerial survey by plane is scheduled to occur in late-May.

The survey is a remote sensing method using laser pulses to examine the surface of the earth. It provides a higher level of topographic detail required for the design.

The Lidar aerial survey will occur over a couple of days.

CONTACT US

For information about the technical studies contact the project team.

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seqwater.com.au/project/somerset-dam-upgrade


Drilling rig in operation

Photo: Courtesy of Mulligan Geotechnical


Technical team doing site inspection

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