

LAKE MACDONALD DAM SAFETY UPGRADE

RESPONSIBLE AGENCY

Seqwater

PROPOSAL STAGE OF DEVELOPMENT

Detailed business case underway

PLANNED STAGE END DATE

Q2 2018

ESTIMATED COST OF DELIVERY

\$90 million*

BUILDING QUEENSLAND'S ROLE

Assisting with detailed business case



NEED

Lake Macdonald Dam on Six Mile Creek on the Sunshine Coast requires an upgrade to meet modern standards and the performance requirements of the Queensland dam safety regulations into the future. The drivers for the upgrade include:

- » population growth downstream of the dam
- » advances in dam design and development of consistent methodologies for assessment of dam safety
- » the latest estimates of extreme rainfall
- » data from recent major weather events and updated modelling
- » improved understanding of earthquake probabilities and loads.

PROPOSAL

The proposal is to upgrade the existing dam to meet the requirements of the Queensland dam safety guidelines. The current project is to develop the detailed design for the preferred option and gain the necessary project approvals to enable construction of the upgrade. The proposed upgrade will reduce dam safety risks by increasing the spillway capacity and the earthquake stability of the dam, while maintaining water supply security.

Studies have considered a range of options including decommissioning of the dam, retrofit of strengthening works and new build options.

BENEFITS

The project will ensure the dam meets performance standards outlined in the Queensland dam safety regulations into the future.

NEXT STEPS

Complete detailed business case.