

Somerset and Wivenhoe Dam Safety Upgrades – Business Case Stage

APRIL 2019



Somerset Dam was built between 1937 and 1959. Wivenhoe Dam was completed in 1985. Both dams were designed to the engineering standards of their time. We now know more about the risks of extreme floods to the Somerset and Wivenhoe Dam walls. Both dams will be upgraded so that they can withstand much larger floods.

What has changed since the dams were built?

Some things have changed since the dams were built or last upgraded. These include:

- significant population growth downstream
- advances in dam design and the development of consistent risk assessment methods
- improved estimates of extreme rainfall events
- data from recent floods and updated flood modelling.

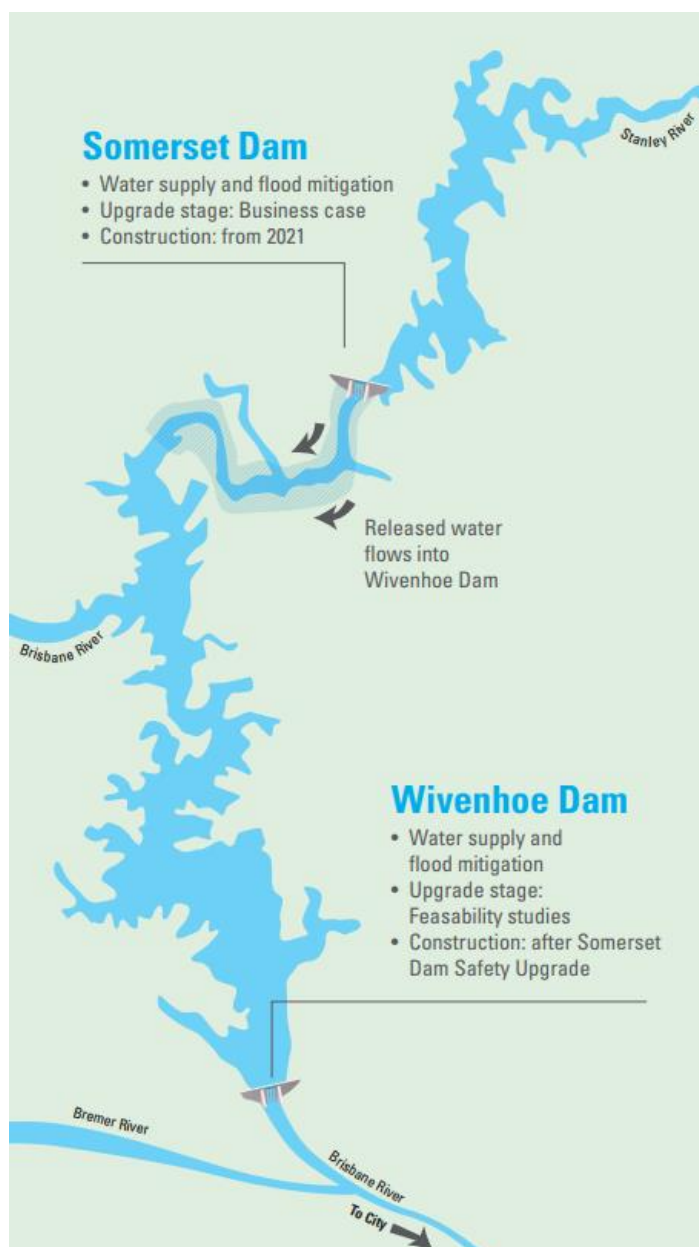
An independent assessment has found the dams do not meet modern Queensland Government dam safety guidelines. We now know extreme floods could exceed the design capacity of the dams. Under the *Water Supply (Safety and Reliability) Act 2008*, we need to upgrade both dams to meet the guidelines.

Lowering water levels in Somerset and Wivenhoe

In January 2016, Seqwater changed the way it manages both Somerset and Wivenhoe Dams. These changes immediately improved the ability of both dams to withstand extreme floods and maintain flood mitigation. Changes include:

- Changing the flood operations manual for both dams
- Lowering the water supply storage volume of Somerset Dam to 80% of its normal volume
- Lowering the water supply storage volume of Wivenhoe Dam to 90% of its normal volume.

Lowering the water supply storage volume increased the flood storage volume in the dams.



What to expect

The water supply storage levels in both dams will remain lowered during the design and construction of the Somerset Dam safety upgrade.

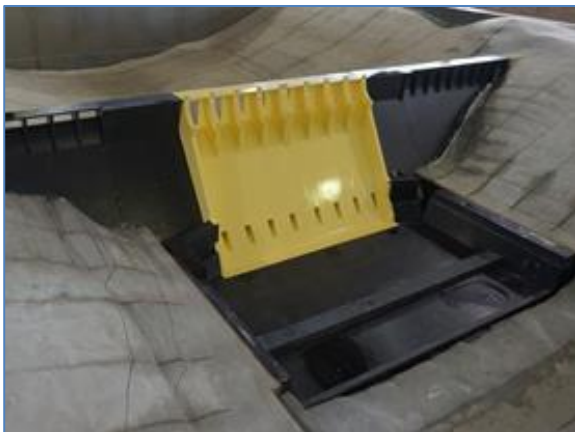
Seqwater and Building Queensland are working together to produce a Business Case for the Somerset Dam Safety Upgrade. The Business Case will consider the shortlisted design options, including the impact of each option on the community and environment. It will recommend the best design option for the upgrade.

A preliminary design for the upgrade to Somerset Dam will then be produced and shared it with the community. The design of the Somerset Dam upgrade will influence the Wivenhoe Dam upgrade design.

Dam Improvement Program

Dams are long-life assets and require continued maintenance. Our Dam Improvement Program will mean upgrading some South East Queensland dams or changing the way they are operated.

An independent assessment of Somerset and Wivenhoe Dams found improvements are needed to meet modern Queensland and Australian guidelines.



Get involved

Identifying the social, environmental and heritage impacts of the shortlisted upgrade options for Somerset Dam is part of developing the Business Case. Contact Seqwater if you have any information you would like to share.

Seqwater expects to complete the preliminary design for the Somerset Dam Safety Upgrade in 2020. The community will be asked to provide feedback on the preliminary design before the detailed design is completed.

The best way to stay informed about both projects is to subscribe to project e-updates. Visit the Dam Improvement Program website to subscribe.

2012-14	✓
DAM SAFETY REVIEW	
2017-18	✓
OPTIONS ANALYSIS AND CONCEPT DESIGN	
2019	←
BUSINESS CASE	
2020-21	🔍
DESIGN AND APPROVALS	
2021	🔍
PROJECT PLANNING	
FROM 2021	🔍
CONSTRUCTION START	

Keeping you informed

For more information or to subscribe to [project e-updates](#) visit the Dam Improvement Program webpage at www.seqwater.com.au/damimprovement
Call 1300 SEQWATER (1300 737 928)
Email communications@seqwater.com.au



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If you have a hearing or speech impairment contact us through the National Relay Service and give the number 07 3035 5500. Visit www.relayservice.gov.au for more information.

← Scale models of Somerset Dam at the University of NSW in Sydney are used to test different design options.