

# CHAFFEY DAM SAFETY UPGRADE AND AUGMENTATION

*A project to increase the storage capacity of Chaffey Dam and ensure it is fully compliant with the NSW Dams Safety Committee standards for extreme floods.*



*Completed auxiliary spillway for stage one works  
March 2011*

## ABOUT THE DAM

**Location:** Peel River, 43km south-east of Tamworth in northern NSW

**Year dam completed:** 1979

**Current storage capacity:** 61,830 megalitres

**Storage capacity after augmentation:** 100,000 megalitres

**Project cost:** Upgrade stage 1: \$13 million funded by the NSW Government

Upgrade stage 2: \$18.03 million funded by the NSW Government

Augmentation: \$31.781 million (Contributions of \$18.145M Australian Government National Water Security Plan for Cities and Towns, \$9.668M NSW Government and \$3.968M Tamworth Regional Council).

## PROJECT OVERVIEW

### Upgrade stage one

Chaffey Dam is one of seven dams throughout regional NSW included in State Water's dam safety upgrade program. Stage one of the Chaffey Dam safety upgrade was completed on time and on budget in February 2011 and involved construction of a 35-metre-wide auxiliary spillway with a 4.5-metre-high fuse plug.

### Upgrade stage two and augmentation

Stage two of the upgrade will be incorporated into augmentation, involving raising the dam wall by 8 metres and subsequent works to raise the morning glory spillway. These works will increase the full supply level of the dam by 6.5 metres.

Stage two and augmentation will increase the

dam's capacity from 62,000 megalitres to 100,000 megalitres and ensure it is fully compliant with NSW Dams Safety Committee standards for extreme floods.

## DAM OPERATIONS DURING WORKS

Normal dam operations will continue throughout the project. Access to recreational areas will be maintained during the works.

## TIMELINE OF WORK

### Upgrade stage one

June 2010 Commence construction  
February 2011 Complete construction

### Upgrade stage two and augmentation

February 2011 Funding announced  
December 2011 Contract awarded for detailed design  
April 2012 Commence environmental impact assessment  
July 2012 Detailed design completed  
April 2014 Final environmental approval  
Mid 2014 Commence construction  
2016 Complete construction

## PROJECT BENEFITS

- Ensure the dam can withstand extreme flooding
- Securing Tamworth's water supply
- Economic benefits to region through use of local suppliers and subcontractors
- Bringing new, unique and specialised skills to the area

## ENVIRONMENTAL APPROVALS

The environmental impact assessment for the project was carried out under the *NSW Environmental Planning and Assessment Act 1979* and *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approval was granted by the NSW and Australian Governments for the project to proceed.

The increased full supply level of the augmented dam will mean some roads, bridges and recreation facilities may need to be relocated or realigned. This has been considered and discussed with key stakeholders as part of the environmental assessment process.

## COMMUNITY CONSULTATION

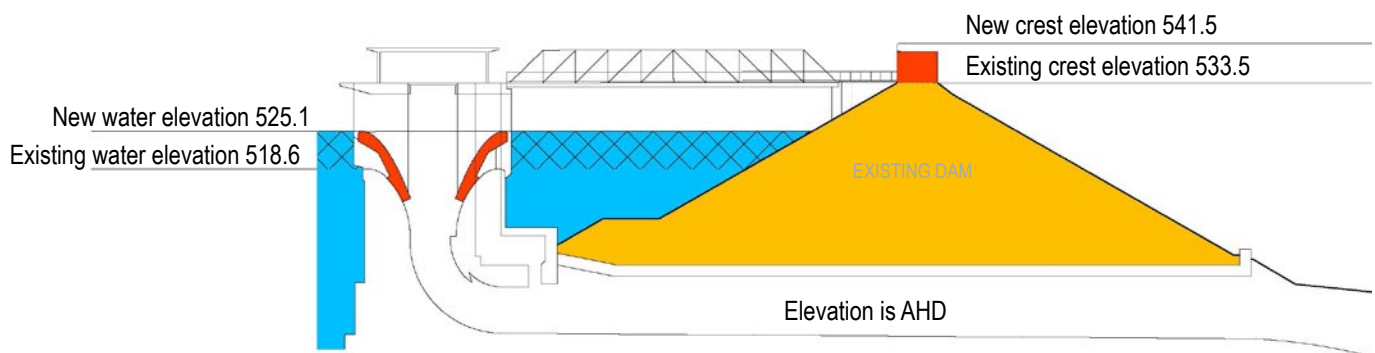
State Water will coordinate a community construction liaison group consisting of key stakeholders to provide a mechanism for updates and issue resolution.

The general community will be kept up-to-date as construction progresses through local media and the State Water website.

## SCOPE OF WORKS

- Raising the dam wall with a reinforced earth embankment and 1.8 metre parapet wall
- Raising the morning glory spillway
- Creation of a T-junction at Nundle and River roads

## CROSS SECTION OF WORKS



## IMPRESSION OF UPGRADE AND AUGMENTATION WORKS

