Frequently asked questions

Chaffey Dam Pipeline

Environmental Impact Assessment – Future pipeline operations and maintenance





About the project

Q 1.1 Where is the Chaffey Dam Pipeline located?

A. The approximately 18-kilometre (km), underground Chaffey Dam Pipeline extends from Chaffey Dam, along West Bank and Back Woolomin Roads, and connects to an existing underground pipeline at Dungowan, which extends to Tamworth's Calala Water Treatment Plant

Chaffey Dam is approximately 400 km north of Sydney and 35 km south-east of Tamworth, in the New England region of NSW. Chaffey Dam is on the Peel River, which is a tributary of the Naomi River.

Q1.2 What is the purpose of the Chaffey Dam?

A. Chaffey Dam is Tamworth's primary town water source, with a capacity of about 100 gigalitres.

Water from the dam is released directly into the Peel River and treated at Tamworth's Calala Water Treatment Plant, to make it suitable for town water use.

The water from the dam is also used downstream for crop irrigation purposes (eg cotton, wheat, lucern, vegetables, fruit trees, oil seeds and fodders and pasture for sheep and cattle).

The dam is also used for recreational purposes, like swimming, sailing, boating and fishing.



Q1.3 When was the Chaffey Dam pipeline constructed?

A. The pipeline was completed in 2020 and became operational June 2020. It was constructed by WaterNSW and construction partner MPC Kinetic.

Q1.4 Why was the Chaffey Dam Pipeline constructed?

A. The pipeline delivers more efficient water transfer, than via water release into the Peel River. Around 50% of dam water released into the river is lost in transmission, through ground soaking and evaporation.

In November 2019 the NSW Government introduced the Water Supply (Critical Needs) Act 2019, in response to severe drought in parts of NSW. The purpose of this Act was to ensure water security for specific NSW towns and localities. Tamworth was one of the localities identified under this Act, requiring critical water supply support measures. At the time it was predicted, that without the pipeline and assuming no new inflows from rain, the residents of Tamworth would soon run out of water.

In 2020, WaterNSW constructed the Chaffey Dam Pipeline and obtained temporary Ministerial authorisation to operate the pipeline, as an emergency response to severe drought conditions. The Chaffey Dam Pipeline was used for approximately six weeks from 17 June 2020.

The authorisation to construct the pipeline was granted by the Minister for Water, Property and Housing, under the NSW Water Supply (Critical Needs) Act 2019. Temporary operations were approved under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (referral 2019/8590).

Q1.5 Why is an EIS being prepared for the pipeline post-construction?

A. The Chaffey Dam Pipeline operational management measures in place, are focused on mitigating short-term environmental impacts, under drought conditions.

The temporary authorisation to operate the pipeline expired on 31 September 2021. WaterNSW is now seeking permanent approval to operate the Chaffey Dam Pipeline, during drought periods (ie when Chaffey Dam falls below 20% capacity) to supply water to Tamworth, instead of using river water. Approval is also being sought to continue to undertake maintenance and testing works.

Longer-term operation of the Chaffey Dam Pipeline requires more detailed environmental impact studies to be undertaken and, the existing environmental management strategies to be reviewed.

The Chaffey Dam Pipeline infrastructure contributes to the long-term water security during drought conditions, for the residents and businesses of Tamworth and the region, including Moonbi and Kootingal.

Q1.6 Why is the proposed Dungowan Dam and Pipeline also needed, in addition to the Chaffey Dam Pipeline?

A. The Chaffey Dam Pipeline has been constructed to be used during emergency drought periods (ie when Chaffey Dam falls below 20% capacity) to supply water to Tamworth, instead of using river water.

Planning for the proposed New Dungowan Dam and Pipeline has been underway since 2020.

The proposed new dam is approximately 3.5 km downstream from an existing dam and to the east of Chaffey Dam. It will increase the overall water storage on Dungowan Creek. The proposed new 55 km pipeline will replace an existing 70-year-old pipeline, which connects to Tamworth's Calala Water Treatment Plant.

Together with the Chaffey Dam, the New Dungowan Dam and Pipeline will increase town water security for Tamworth and, maintain the reliability of water for agriculture across the Peel Valley as Tamworth grows.

An Environmental Impact Statement is being prepared for the New Dungowan Dam and Pipeline, which is expected to go on public display in late 2022.

The Environmental Impact Assessments for the projects will consider the potential cumulative impacts associated with both projects.

Contact us

For more information about the New Dungowan Dam and Pipeline:

t 1800 318 045 (freecall)

e dungowandamproject@dpie.nsw.gov.au

w https://water.dpie.nsw.gov.au/water-infrastructure-nsw/dam-projects/dungowan-dam