

# Illawarra Water Security Project

November 2019



**As New South Wales continues to experience one of the worst droughts on record, WaterNSW has been progressing investigations on a range of infrastructure options to secure water supply across the Sydney Basin and the Illawarra.**

The NSW Government's Metropolitan Water Plan 2017 requires WaterNSW to investigate drought supply options when Greater Sydney total dam storage reaches 60%.

Since February 2019, when dam storage levels declined to 60%, the Illawarra Water Security project has been investigating options to access 67 gigalitre (GL) of deep water stored in Lake Avon. The project will extend the available water supply by up to two years for the Illawarra region and will increase long term yield by 5 GL (or 5 billion litres) per year.

The project involves a deep water pumping station at Avon Dam and a pipeline to transfer water to the existing Illawarra Water Filtration Plant.

The project will undergo planning and environmental assessment to meet statutory requirements.

## **What is 'deep water access'**

Deep water is water which is currently inaccessible to the water supply system. Usually, it is below the lowest outlet point in a dam from where water can be extracted, or below the level where gravity can draw the water out of the dam.

For example, approximately 31 per cent of Avon's water is below this level. The deep water is not calculated as part of the current storage level of the dam.

## **Key benefits**

- Extending water supply by up to two years for the Illawarra region under drought conditions
- Improve the performance of Avon Dam and increase the active storage by up to 67 gigalitres (GL) for the Illawarra region
- Increase resilience in our water supply network.

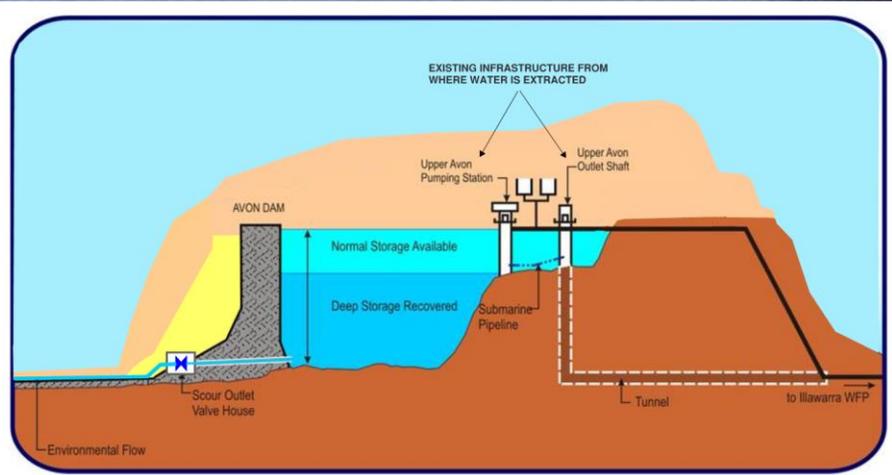


Diagram outlining deep water storage



### Background

Avon Dam is located 100 kilometres south of Sydney and is one of ten major dams in the Sydney Metropolitan Water Supply Scheme.

Avon Dam is the second largest water storage dam in the Greater Sydney Region with a total storage of 214.4 gigalitres (GL) and is the only source of water supply to over 310,000 residents and businesses in the Illawarra region.

Accessing the deep water in Avon Dam was first considered during the Millennium drought.

Deep water access projects have already been completed at Warragamba and Nepean dams.

### Water Quality

Water quality at lower levels will be monitored to ensure it meets the water filtration plant requirements.

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