

# Surface water

## Rous County Council

Rous's role is to deliver high-quality drinking water for the Northern Rivers that supports the region's health and prosperity. We are securing a sustainable and resilient water supply that will meet the community's needs to 2060 and beyond through water saving initiatives and an expanded range of water supply sources.

### What is surface water?

Surface water is any freshwater above ground in our rivers, creeks, streams, lakes, floodplains, wetlands and reservoirs. Rainfall, runoff, and in some cases groundwater, feed surface water. Rous currently has three surface water sources: Rocky Creek Dam, Emigrant Creek Dam and the Wilsons River (upstream of Lismore).

### Rocky Creek Dam

The Northern Rivers has traditionally benefitted from plentiful surface water due to the region's historically high and reliable annual rainfall. Despite its relatively modest capacity, Rocky Creek Dam has served our community well as our primary water source since 1953. This water source has a capacity of 14GL (gigalitres) at full supply level, which is enough to supply the region with water for about a year based on current consumption.

A small portion of Rocky Creek Dam's water is stored below the dam's pump intakes. We are currently assessing the best way to access this water, which is sometimes referred to as 'dead storage'. It typically accounts for a small percentage of a dam's capacity and so does not meaningfully contribute to water security; however, it does have the potential to supplement our supply during dry weather.

### Supplementary sources

Emigrant Creek Dam and the Wilsons River are used to supplement the supply from Rocky Creek Dam. Emigrant Creek Dam is used to supply drinking water to the Ballina and Lennox Head areas. The Wilsons River Source, upstream from Lismore, pumps water from the river to the Nightcap Water Treatment Plant at Rocky Creek Dam for treatment and distribution.

### Additional surface water option

An additional dam for the region west of the village of Dunoon was first proposed in the early 1990s. The site is located on Rocky Creek, downstream of Rocky Creek Dam. As part of Rous's previous water planning activities, 20GL and 50GL capacity dams have been identified as technically feasible options at the location. In February 2022, Rous Councillors voted in favour of commissioning an independent cultural heritage and biodiversity assessment of the proposed area.

Surface water supply options have very long leadtimes. It is therefore important that any investigations into surface water options start early in the planning cycle and are done at the same time as investigations into other supply options.

### Key points:

Responsible water planning means investigating all the reasonably feasible options that are available to us including groundwater, purified recycled water, desalination and surface water.

Each option presents a complex mix of social, cultural, environmental and economic impacts that need to be investigated, considered, assessed and balanced.