

NO SUCH THING AS A FREE DRINK

Mary Lush & Colin Leitch

On a global scale, we often hear that water scarcity has contributed to serious problems in both human societies and in ecosystems. In Australia, the Murray-Darling river system is a case in point. And so too, in microcosm, is Lorne's water supply system.

Lorne's water comes from the Allen Reservoir (Allen Dam) on the St George River, just upstream of the Phantom Falls. Every year the town uses more water than the reservoir has the capacity to store. Nonetheless, supply is maintained because rainfall in our region is very reliable by Australian standards and keeps topping up the reservoir – except when it doesn't.

Lorne's most recent experience with water restrictions followed the last strong El Niño in 2015-16. During that event our reservoir started to drop below full in September 2015, and by April 2016 was reduced to 33% of capacity. That level was critically low and water cartage commenced to ensure we didn't run out of water. Yes ... tanker loads of water were trucked into Lorne! Fortunately changes in the Indian Ocean Dipole, another determinant of our weather, triggered rain in May which quickly filled the reservoir.

In September 2023, the Bureau of Meteorology declared that we have again entered an El Niño phase. Typically (but not always), El Niño's are associated with reduced rainfall in winter and spring. So far this year, rainfall in the catchment of the Allen reservoir is following just that pattern, as you can see in the graph below. It follows three years of La Niña and high rainfall. The data come from the BOM weather stations at Mt Cowley and Benwerrin. We'll keep you posted on rainfall in the months to come.

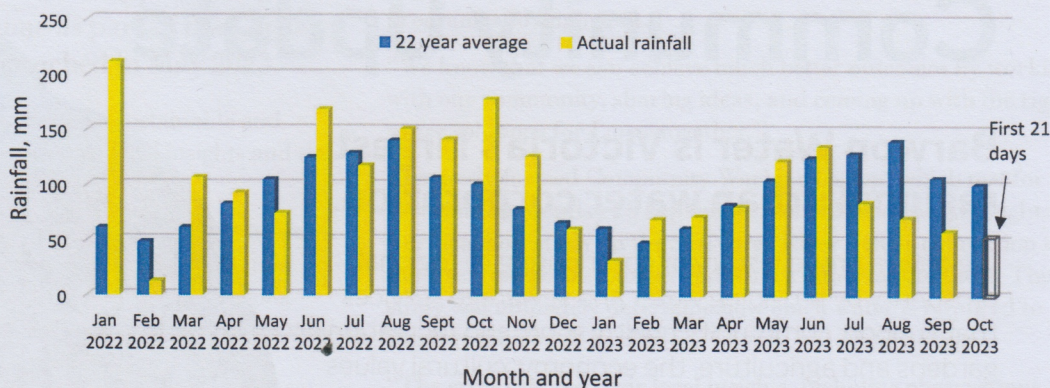
So what?

The possibility of a water shortage brings into focus questions of how we should allocate water between its myriad uses. These questions are unlikely to go away, because as global warming advances, it is predicted that rainfall will decrease. These recent rainfall deficits and those of 2015/16, therefore, may be portents of the future.

Barwon Water manages Lorne's water supply. At the end of 2021 it called for comment on a draft of a document called 'Water for our Future Strategy'. Its bold aim is to ensure that Lorne's water supply is 'sustainable' within a planning horizon of 50 years.

But sustainable for whom or what? We not only have the prospect of a water supply that may fall short of human desires, but we have a biodiversity crisis too. Water harvesting always comes at a cost to ecosystems.

Catchment rainfall, Lorne



Barwon Water followed up its final version of Water for our Future Strategy with a series of community consultations and by establishing a Community Working Group which has met once. Disclosure: both of us are members of the group, Colin represents the Friends of Lorne and LorneCare, and Mary represents the Lorne platypus monitors.

The first issue brought to the working group's attention is the question of how much water the St George River needs in order to support the human activities and natural systems that we associate with it. The tourist who likes to lounge in a personal hot tub, may also be planning to walk along the river and hoping to see a platypus. Do we have enough water to fill hot tubs and still have a river healthy enough for platypus, or do we have to choose between them?



Jess Bolden (Alluvium) and Melody Serena (Australian Platypus Conservancy) assessing part of the St George River during a walk with some of Lorne's platypus monitors. Image: Katie Cummings.

Historically there has been no requirement for Barwon Water to release environmental flows from our reservoir to maintain river health, but to their credit they have commissioned a consultant, Alluvium, which will identify ecosystems along the river as well as other things we value about it. Alluvium will recommend whether water releases are necessary to maintain a functional river system.

This study will bring the St George River system into line with systems such as the Barham (Apollo Bay), Anglesea, Barwon and Moorabool Rivers, in which environmental concerns are a component of water management by Barwon Water.