

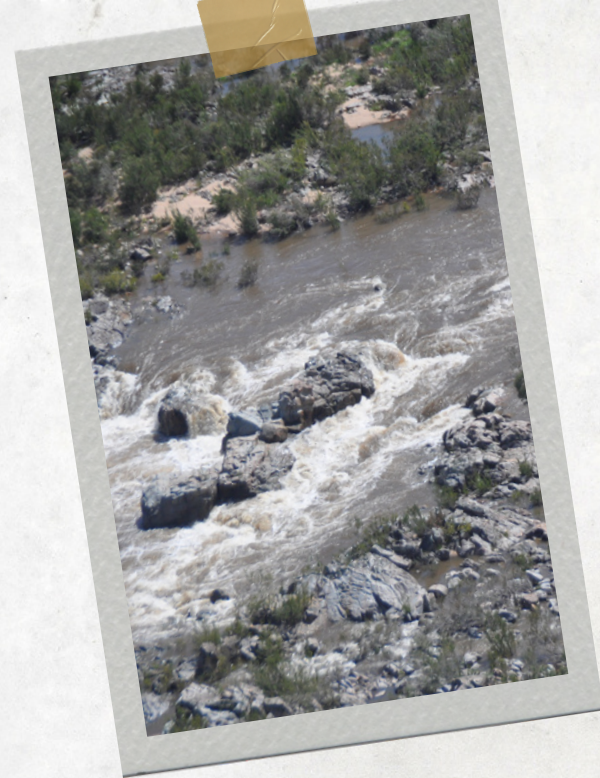
# From University to working on the restoration of the Snowy River

By

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My career began with an undergraduate degree and honours in Marine Ecology at the University of Wollongong. After graduation, I transitioned to a temporary role working in an elite team of hydrologists, ecologists and geomorphologists. Our primary focus? Monitoring the recovery of the severely degraded Snowy River. To give some context, the Snowy River was dammed between 1955 and 1967 by four major storages and multiple smaller storages to form the Snowy Mountains Hydro-electric Scheme. This slashed the river's mean annual flow to a mere 1% of its natural flow. Fast forward to 2002, the NSW and Victorian governments pledged to reinstate up to 21% of these natural flows. However, the river had to wait until 2010 to receive its first substantial environmental release. Coincidentally, this was also when I joined the multidisciplinary team working on the Snowy River.



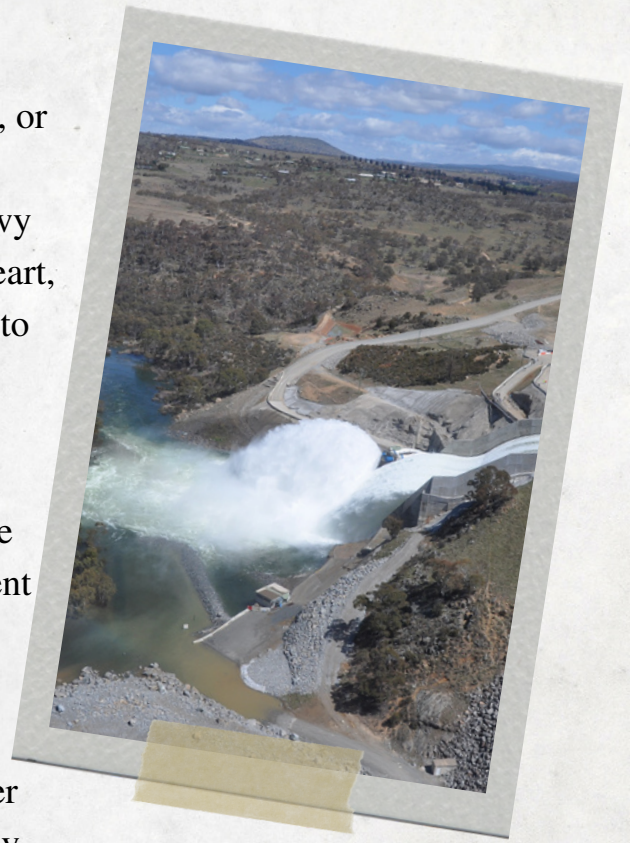
My time working on this project was a treasure trove of learning. I gained skills that included aquatic invertebrates taxonomy, water quality sampling techniques, habitat mapping, hydrological analysis, and ecological analysis. This set me up with some foundational skills that have shaped my career over the last 13 years. But nothing will replace the first-hand experience of seeing a once stagnant river regain its heart rhythm and turn into a true snowmelt system, its powerful spring snowmelt events churning through the Snowy gorge. The first major release was a spectacle, with media, Victorian and NSW ministers, and an enthusiastic crowd.

The team of scientists I was working with were lucky enough to monitor the environmental improvements in the Snowy River, and provide guidance on how flow management could be improved. My involvement varied from investigating flow strategies to flush out the sediment in



the river channel, identifying issues with stream water temperature and documenting the ecological consequences, or monitoring the slow recovery of aquatic invertebrates after flows returned to the Snowy River. The river, and the Snowy Mountains region will always hold a special place in my heart, and the achievements of all involved in restoring this river to part of its former glory is something the people of NSW should be proud of.

Today, I work on a variety of projects which aim to provide sound scientific advice for environmental water management by linking river flow to ecological responses in river and floodplain environments. One of the newest, and more exciting projects is a collaboration with Associate Professor Deborah Bower and her team; tracking freshwater turtle movement in response to river flow within the Murray-Darling Basin.



Daniel Coleman is a senior ecohydrologist with the NSW Department of Planning, Environment, pictured here with an *Emydura macquarii* turtle, also known as the Macquarie River turtle.