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21 July 2017

Jim Bentley Opinion Piece

Continuing the Spirit of Innovation after 125 Years

Hunter Water's 125th anniversary has sparked an interest in local water history. What's especially fascinating is how bold and innovative decisions have shaped the region, and how they relate to the challenges we face today.

In the 1870s the Hunter was in the midst of a water and sanitation crisis, with a death rate three times the natural level due to locals having no other option but to drink disease-ridden creek and well water. The absence of a drinking water supply was at odds with the city's bustling local economy.

Finding a water supply for the Hunter wasn't simple. The Hunter River had been discounted as an option due to its high turbidity and perceived low water quality. The first proposal for a water supply was instead to divert water from Redhead Lagoon through old mine workings on the coastline to Newcastle.

After much deliberation, the Redhead Lagoon solution was rejected by the Hunter's municipal decision makers, given the scheme ignored Newcastle's outlying townships like Maitland, Minmi and Wallsend. They instead demanded a comprehensive, region wide water supply scheme.

It was in 1878 that William Clark, the father of the Hunter's initial water supply, put forward one of the most significant innovative solutions in our local water history.

It was to overcome the turbidity of the river water with Australia's first sand filtration system. Clark proposed fresh water could be drawn from the Hunter River near Maitland, then once filtered, be pumped a short distance to a reservoir on Buttai Hill. From there, gravity could do the work of transporting water 25 kilometres through a pipeline to Newcastle, while filling reservoirs in its outlying townships on the way.

This pioneering project, today known as the Walka Water Supply Scheme, was completed in 1887 and sparked a chain reaction of growth and development in the Hunter, only made possible by a steady supply of clean water.

A reliable water supply allowed the Hunter to become the beating industrial heart of New South Wales, and consequently a hotbed of innovative ideas over the following century. In the post-BHP era, institutions like the CSIRO Energy Centre, Hunter Research Foundation, and University of Newcastle drive local innovation. We're incredibly fortunate to have organisations like this in the Hunter, and are starting to realise the opportunities for collaboration, such as through Hunter Water's recently established University of Newcastle research partnership.

With the Hunter's population expected to exceed 860,000 by 2036, we must approach the challenges and opportunities of our growing region with the same spirit that led to our first water supply.

Sustainable water security remains one of our greatest challenges. The Lower Hunter Water Plan was released by the NSW Government in 2014. It's a 20 year blueprint for the local water supply which found our current storages were, for the time being, sufficient. We are fast approaching the next revision of this plan.

In light of this we ask, how do we secure a sustainable water supply for the next generation? Can we do more with less? And can we find better, rather than bigger solutions?

The headway we've made in water efficiency over recent decades has bought us a great deal of time between water sources thus far, with our last major water supply, Grahamstown Dam, built 52 years ago. Water usage per person in the Hunter has dropped to historically low levels thanks to water wise behaviours and the uptake of efficient appliances. There is however much more do to, including reducing leaks in Hunter Water's network and encouraging our residents to match Australia's most efficient water users, who consume 16,000 litres less per property than we do each year.

History tells us innovative ideas made with the community at heart are those that bring the best long term benefits. While it's too early to say exactly what our water future looks like, it will be one of partnerships with Councils and government agencies like the Department of Planning and Environment, and Hunter Development Corporation. These partnerships, a big conversation with our communities, and the spirit of innovation, will shape the next chapter of our water history.

JIM BENTLEY
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