



Save Alstonville Aquifer

Submission in Response to
Far North Coast Draft Regional Water Strategy



1. INTRODUCTION

Save Alstonville Aquifer

Save Alstonville Aquifer is an unincorporated community organisation formed in 2018 to protect what is called in the Draft Strategy the Alstonville Basalt Plateau Aquifer (abbreviated in this submission to Alstonville Aquifer). The impetus for convening Save Alstonville Aquifer was a development application lodged with Ballina Shire Council (DA 2018/597) to extract water from the aquifer for bottling. Save Alstonville Aquifer opposed the development in meetings with Commonwealth and state parliamentarians, in media statements and appearances and in postings on its Facebook page. Save Alstonville Aquifer made a submission to the Office of Chief Scientist and Engineer's Northern Rivers Bottled Water Review and met with the review team from the Office of Chief Scientist and Engineer when the team visited the Northern Rivers in January 2019.

About this submission

This submission largely confines its remarks to the Alstonville Aquifer. Its principal focus is to protect the integrity of the aquifer. In particular, Save Alstonville Aquifer is intent on ensuring no additional extraction from the aquifer occurs for the purpose of water bottling and that existing extraction for such purpose is phased-out. A further consideration is protection of existing streams on the Alstonville Plateau – especially from illegal pumping.

2. STRESSED NATURE OF ALSTONVILLE AQUIFER

The Draft Strategy recognises the stressed nature of fresh water sources on the Far North Coast:

Many parts of the Far North Coast region—particularly in the Richmond catchment—have been classified as being under high or medium hydrologic stress. While there is enough water in the region to meet demands on an annual basis, most extraction takes place in the drier seasons, when flows are low. This puts high stress on the flora and fauna that rely on the rivers, and also impacts the extraction potential and the quality of water used for agricultural purposes. Climate projections suggest that a decrease in dry season (winter) rainfall and an increase in the number of dry days is likely in the future, and that this could amplify these impacts.¹

The Draft Strategy's statement certainly applies to the Alstonville Aquifer. Evidence pointing to decline of the aquifer system as far back as the 1990s is noted in the following commentary in the Chief Scientist and Engineer's Report:

- Data from Bilge (2003) indicate that the total outflow between 1993-2001 from the deep aquifer exceeded inflows.
- Publications from Brodie & Green (2002) and Ballina Shire Council (2004) identified water decline and stress.

¹ Draft Strategy, p14

Anecdotal evidence from local residents reinforce the decline in aquifer and aquifer-connected creeks and springs. Such decline is particularly evident in prolonged periods of low rainfall. Youngman Creek has run dry twice in the comparatively recent past – in January 2019 and during the millennium drought. It is again under stress and close to zero flow at the time of preparing this submission (December 2020).

Adding to additional stress on the Alstonville Aquifer is expansion of high water demand agricultural industries including flower farms, nurseries and vegetable growing. Macadamia plantations on the Alstonville Plateau have increased substantially in recent times and there is a distinct possibility that more of these farmers will seek to irrigate their plantations. At the Macadamia Processing Company awards event in December 2018, it was announced that the highest prices for nuts were obtained from irrigated macadamia trees. Macadamias traditionally have not been irrigated. However anecdotal evidence suggests that irrigation is increasing. If allowed to continue, this will place considerable further demand on the aquifer.

While more long-term data is required on the state of the aquifer, Save Alstonville Aquifer contends that declining water reserves should, among other measures, preclude extraction for bottling purposes. At all costs the example of approval being given to a foreign-owned company to run a water mining operation near Stanthorpe in Queensland in 2019 must never be repeated on or adjacent to the Alstonville Plateau.

3. GROUNDWATER DEPENDENT ECOSYSTEMS

The NSW Department of Primary Industries has published a Rules Summary Sheet for the Alstonville Aquifer. The rules state that no water supply works (bores) are to be granted or amended within 200 metres of any high priority groundwater-dependent ecosystem, or a river or stream. It appears that there is no monitoring – hence no enforcement – of this rule. Indeed, it is the observation of landholders that there is little or no monitoring of privately-owned bores on the Alstonville plateau by any regulatory authority.

4. OPPOSITION OF LOCAL COMMUNITIES TO BOTTLED WATER EXTRACTION

The Draft Strategy acknowledges concern about water mining when it states:

Some people are concerned about increased groundwater take for water bottling in parts of the catchment and want to see groundwater supplies protected for residents, agricultural businesses and towns.²

The opposition of residents on the Alstonville plateau and immediate surrounds to bottled water extraction from the Alstonville Aquifer cannot be overstated. 881 submissions appeared on Ballina Shire Council's website opposing DA 2018/597 – an extraordinary number for a comparatively small rural area.³ All but a small handful opposed the development.

² *Draft Strategy*, p29

³ It is understood that submissions lodged with Ballina Shire Council opposing the development total more than 1,000; however, because of space limitations not all could be uploaded.

Both Ballina Shire Council and Rous Council have identified a shortfall in water supply beyond 2020 and additional sources will be required to meet this shortfall. Groundwater is part of the secure yield and the local community can be expected to strongly oppose the export of water for bottling when domestic supplies are threatened.

It is abundantly clear that the local community on and around the Alstonville Plateau is unequivocally opposed to water mining for bottling purposes. Unlike water extraction for irrigation and livestock, mining for bottling brings no economic or social benefit to local residents. On the contrary, its only socio-economic effects are negative in the form of damage to roads affected by heavy transport vehicles, additional costs incurred by Ballina Shire Council for road maintenance and loss of amenity for residents affected by heavy transport vehicles. Added to these are decreased water extraction yields experienced by local farmers.

Plastic is a massive worldwide pollutant. According to a factsheet from the 2017 UN Oceans Conference, more than 8 million tonnes of plastic enter the oceans each year, equal to dumping a garbage truck of plastic every minute.

The water bottling industry has indicated that there is no alternative to plastic bottles. Expanding – or even tolerating – an industry with such devastating consequences for the environment is irresponsible, particularly in a country such as Australia where the high quality of our drinking water supplies renders bottled water almost entirely unnecessary.

5. RU1 ZONED LAND

The Ballina Local Environmental Plan 2012 shows that much of the land above the Alstonville Aquifer is zoned RU1 – Primary Production. The objectives of land zoned RU1 include the following:

1. To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
2. To encourage diversity in primary industry enterprises and systems appropriate for the area.
3. To minimise the fragmentation and alienation of resource lands.
4. To minimise conflict between land uses within this zone and land uses within adjoining zones.
5. To maintain the rural, cultural and landscape character of the locality.
6. To enable development that is compatible with the rural and environmental nature of the land.
7. To ensure that there are not unreasonable or uneconomic demands for the provision of public infrastructure.

It is difficult to reconcile water mining of the Alstonville aquifer with any of these objectives. In particular:

- Bottled water extraction will only result in degrading the natural resource base by further depletion of the aquifer (objective 1)
- Bottled water extraction is incompatible with maintaining ‘the rural, cultural and landscape character of the locality’ and with ‘the rural and environmental nature of the land’ (objectives 5 and 6)
- Because of the significant weight of water transport vehicles, water mining for bottling purposes can only lead to unreasonable demands for upgrading and maintenance of

rural roads on the Alstonville Plateau (objective 7). Furthermore, these heavy vehicles can seriously degrade amenity for local residents.

In February 2019, the NSW Government confirmed that its default position was a prohibition on bottled water extraction on rural land. The advice was provided in a letter from the then Parliamentary Secretary for Planning to Ballina Shire Council. The letter states that while ‘there are no planning policies specifically covering water extraction and bottling in NSW... *such developments are generally prohibited in rural areas*’ (emphasis added).

Save Alstonville Aquifer supports Ballina Shire Council’s recent amendment of the broad definition of ‘Rural Industry’ in the 1987 Local Environment Plan to a narrower definition which restricts it to animal or plant products. In so doing water, which at one time was considered a primary product, is no longer encompassed by the Standard Instrument definition of rural industry.

Ballina Shire Council’s amendment effectively prevents new industrial extraction of water for bottling on rural land under its jurisdiction. However, this does not necessarily protect the Alstonville Aquifer from industrial extraction in other zoned areas. Nor does it protect the aquifer in areas outside Ballina’s jurisdiction – for example, in Lismore Shire. For these reasons Save Alstonville Aquifer recommends regulatory intervention to prohibit water extraction for bottling purposes from the entirety of the aquifer.

6. BORE METERING AND CEASE-TO-PUMP DIRECTIVES

To improve enforcement of extraction limits and water usage data, all bores should be metered. To ease the transition for small water users, it is recommended the requirement be applied in a graduated manner commencing with bores licensed to extract 30 ML or more a year.

Better community awareness is needed when cease-to-pump directives are issued. Just as there is considerable public awareness when urban water restrictions come into force, there should be a similar level of knowledge within rural communities when restrictions are imposed on pumping during dry periods. This will aid reporting of transgressions and act as a deterrent to those contemplating illegal extraction.

7. DUNOON DAM

While noting arguments against construction of the proposed Dunoon Dam, Save Alstonville Aquifer considers the dam to be vital in preventing further depletion of the aquifer. With a population on the Far North Coast expected to grow by 50 per cent over the next 40 years, enormous demands are likely to be placed on the Alstonville Aquifer by a growing urban population unless an alternative source of water is available.

8. RECOMMENDATIONS

1. No new extraction from the Alstonville Aquifer for bottling purposes be permitted.
2. Existing extraction of water from the Alstonville Aquifer for bottling purposes be phased-out within two years.

3. More resources be committed to enforcing limits from bores extracting water from the Alstonville Aquifer.
4. A graduated system of metering of all bores be implemented, commencing with those licensed to extract 30 ML or more per annum.
5. Community awareness of cease-to-pump directives be raised by promotion in popular media such as newspapers, radio and online social media.
6. Construction of Dunoon Dam proceed to alleviate further stress on the Alstonville Aquifer.