# Inquiry Into Future Water Supplies For Australia's Rural Industries and Communities

# **Submission**

## Lower Hawkesbury Nepean Water Users Association

### **Background**

Water is a critical resource for food growing in the Hawkesbury Valley and security of water supply is vital for farm business stability and future confidence in food farming in this Valley.

Without it farmers will <u>not/cannot</u> invest in modern methods, equipment, varieties and technologies NOR will the *younger* generations take up the challenges of farming the land. This then becomes a <u>food security</u> issue for Sydney and the Nation.

The Hawkesbury Valley has some, if not most, of the most fertile and productive river flat soils in Australia in very close proximity to Sydney's 4 million plus people. These soils are vital and must be preserved for food growing yet they are quickly becoming less productive because of water licence and farm dam restrictions.

The latest round of water allocations to food farmers under the State Water Management ACT 2000 left <u>vegetable</u> growers with less than 50% of the water needed to grow their crops and no certainty of supply.

Instead of allocating all farmers an equitable supply of secure water to continue their farm businesses certain classes of farmers in the Hawkesbury Valley were allocated more water than others in the recent conversion process eg turf farmers received 11 ML/Ha/pa whereas vegetable farmers got 7.5ML/Ha/pa and orchard farmers got 6ML/Ha/pa. Our business case argued that <u>all</u> farmers should receive the same amount of water that we calculated at 14ML/Ha/pa.

The counter argument was that there was <u>insufficient water flowing</u> in the river for such an allocation and different crops needed different amounts of water to grow? Also, the environment needs a flow allocation to return it to health.

Our argument against this was that we have no long run data sets to say for certain that there is insufficient water in the river, and yes we all want a healthier river system, and yes crops require different amounts of water to grow but if a farmer wants to convert to a different crop he is forced to buy extra water if that crop needs more water.

This is not equitable as turf farmers were once vegetable farmers and vice versa. Hence the initial new conversion framework should have set a survivable amount of water supply and then let the market take its course.

Moreover, the so called 'shortage' of water in the H-N system is brought about by some very inefficient and wasteful water management practices. The following facts make this point clearer.

#### Specific Hawkesbury-Nepean Catchment Issues Relevant to the Inquiry

The Committee may not be aware of the following facts:

• Over 90% of the river water is diverted (or 'borrowed') for Sydney's use (drinking, industrial and commercial) leaving less than 10% for the local communities, food farmers and the environment. There are currently no strategic plans or works for *returning* this volume of water, after treatment, to the river system. That huge amount of water taken from the Hawkesbury catchment is dumped after use in the ocean?

A commonwealth initiative, with assistance from the State, calling for a strategic management objective such as:

<u>Strategic Objective</u>: By 2020 more than 50% of the diverted H-N river water will be cleaned to environmentally <u>safe</u> standards and *returned* to the river at the appropriate point.

(<u>Note:</u> This action would not only *dramatically improve river flow* and therefore river health, but also ensure that food farmers had plenty of water available for crop and food growing)

- A river <u>flow</u> and total <u>water availability</u> data collection model is not available for the H-N catchment I our view such a data collection model should have been started long ago so that by now we would have the long run data sets on these crucial river parameters enabling informed decisions on river management. However, we can't go for another 20 years without starting this river data collection/research/analysis process. We <u>must</u> have the correct river water/flow data to inform our management plans and strategic solutions.
- Much emphasis is placed on returning the river flow to 'natural' conditions. Given the largely engineered river system has been with us since the Warragamba dam (retains over 90% of the water behind the wall for Sydney's use) was built in the early 1960s what is a 'natural flow regime' (NFR) for the Hawkesbury river North of Penrith? Is it pre-settlement

flow? Or pre-dam flow? If we try and implement this with the remaining 10% now flowing down the Hawkesbury will that mean a lot less water allocation to farmers and food growing in the Hawkesbury Valley? And if so, how is that consistent with food security for Sydney and equity for food farmers in the Hawkesbury Valley?

- Good data exists to inform us that blue green algal blooms occurred in the Hawkesbury river during the 1940s north of Sackville, ie pre Warragamba dam days. This could lead to a possible conclusion that such blooms might have a 'natural' origin/basis especially given that much of the Hawkesbury is tidal up as far as Windsor bridge. A simplistic observation and statement that the Hawkesbury suffers from poor water quality as indicated by 'high incidence of algal blooms' might be too simple. Many would agree that water quality in the Hawkesbury would/could certainly improve <u>dramatically</u> if a large percentage of the 90% of water now diverted to Sydney was cleaned and returned to the river environment.
- Many so called strategic documents about the catchment (eg H-N Blueprint recently released) posits that fertile soils for agriculture be <u>maintained</u>. But if farm water allocations to this agricultural land is not maintained or sufficient to enable food production how is this achievable?
- <u>Many enquiries</u> focus on the smaller picture of the 10% of water now flowing down the Hawkesbury river. But what about the 90% of the water flow which is diverted? Why NOT concentrate on the BIG picture? Maybe this is too difficult, but from a Commonwealth perspective this enquiry MUST focus very sharply on the 90% element of the problem – solve that and we have a good long term solution. 'Restore the Hawkesbury river flow' <u>project</u> would generate huge river health benefits, generate massive jobs, kick start a major environmental management industry, create water supply certainty for food farmers and give the river amenity back to the people of Sydney. Nobody loses in this project.
- It greatly concerns us that there does not seem to be any recognition of the fact that the Hawkesbury river system is now an 'engineered' system and will need to remain as such unless the dam is removed, and that is not very likely any time soon. Nor of the fact that it is tidal for 95% of its length. The underlying assumption seems to be that we can establish a NFR which could be (but is undefined) pre-settlement or near that standard. If this is correct then we will forever have *conflict* between Sydney's needs, agricultural needs, environmental needs etc. making 'partnerships' and finding good workable solutions extremely difficult. If we accept as given that the Hawkesbury is an 'engineered' system and has been since the dam was built then as Professor Riely of UWS Nepean says we can find sensible solutions because we will seek 'engineering' solutions (eg such as returning most of the water diverted after proper treatment back to the river system).

I sincerely hope this Commonwealth Committee can find its way around the obstacles so besetting this critical issue of water security for food farmers in the Hawkesbury-Nepean Valleys.

Cheers & Kindest Regards,

Paul Rasmussen Chairman, Lower Nepean/Hawkesbury Water Users Association