# Submission to Murray Darling Basin Royal Commission

At request of Commissioner conducting Community Consultation Mildura May  $25^{th}$ 

Name James (Jim) Wilton

# **Background**

- Member of Lower Murray Darling Catchment Committee 1993 to 2000,
- Chair person for last two terms of this organisation before it became a CMA
- Member during period as Chairperson of CMC of the Murray Darling Advisory Committee,
- Member of various NSW Water sub-committees including State Algal Control Committee during 1993 to 2000
- **Career** School Principal, and Life Member of NSWPPA **Education**, Degree in Arts with majors in Education and Environmental subjects (UNE)
- **-Life Experience in MDB**, lived and worked in areas such as Southern Riverina, (Berrigan, Wentworth), Snowy Mountains (Khancoban) and Macquarie River (Nevertire)

# Reasons for addressing S.A. MDBRC

- 1/ Felt my experiences during the initial phases of unbundling water and land, the commencement of water trading, the actions on sleeper licences, and the changes in operation of Lake Victoria and the Menindee Lakes; bundled with my continued involvement with local agricultural based friends; gave me a perspective worth sharing.
- 2/ My strong belief that we are currently involved in "water wars" in which States, the Commonwealth and interested lobby groups are acting to secure economic gain in the immediate future with little regard for the environment and long term social and economic health of the communities, industries and agricultural producers dependent on the river system.
- 3/ My belief that the sacrifice of the viability of the Lower Darling in terms of its:
  - Environmental health
  - Economic output
  - Community and individual health,

will be repeated in other downstream sections of the Murray Darling Basin.

#### **Structure this Submission**

- 1/ I intend to make three main points, two having to do with current impacts on the MDB, and the final point being a proposed means of meeting the Environmental International Agreements to which the Commonwealth is a signatory, and which would also ensure a predictable, sustainable and healthy river system.
- 2/ will refer to studies and findings, but the Royal Commission has more resources than I do, and can link my remarks to the relevant documents.3/ I will be brief; Royal Commission Staff are welcome to communicate with me for any added detail.

### Guidance Notes for Presentation to Royal Commission 25th May; Mildura

- 1/ Loss of water in transmission due to environmental and mismanagement factors unfairly skews commercial and environmental benefits of water to upstream use.
  - Under International agreements the Australian Government has to first ensure the environmental and biodiversity health of the entire river system and its dependent environment (wetlands etc).
    - Governments by their choice of environmental projects are not in practice maintaining river system health as an integrated and mutually dependent system, but rather as individual ecosystems.
      - Examples:
        - the Hattah Lakes are a supported project, but the NSW Government has just legalised the harvesting of overland flows on the Macquarie River, thus threatening the Maquarie Marshes and eliminating any chance of these Marshes feeding water into the Darling.
        - Menindee Lakes are a key bio diversity nursery
          of the system, but Queensland's harvesting of
          overland flows, and NSW's complicity in
          supporting illegal water extraction upstream, has
          led to the probable increase of drying out of
          those lakes in both their pre water storage, and
          present condition.
        - Studies done of Red Gum growth rings showed that the Darling had an over bank flood event every 7 to 9 years, and the Murray every 2 years prior to system regulation. Over bank flood events (high river events) are now controlled and areas such as the Merbein Common, the Red Gum forests adjacent to Swan Hill etc, are not receiving that environmental benefit, and regeneration is not occurring as it should.
  - Economic and community demands force peak water delivery into the planting and growing seasons. The river needs a **flow capacity** to deliver this water and hence environmental flows are frequently mistimed, and wasted as they flow into wetlands at low biodiversity productivity times.
    - o Water extracted from channels and piped systems is measured
    - Water entering creeks, billabongs, and wetlands at peak flow periods but low bio diversity productive times is generally only estimated. However it is frequently identified as environmental flows, and being estimated rather than measured it can unfairly skew the availability of environmental water at peak bio diversity productive times.
    - Peak Demand periods mean that weir pools and dams must hold sufficient storage at this time. This means weir

maintenance and drainage takes place in low demand periods. This timing works against the natural bio diversity of the river and negates the effectiveness of such practices as pulsing of pool levels. Studies of bio diversity in weir pools are negative, especially in the loss of such traditional Aboriginal foods as fresh water mussels from the Darling delta as it enters the Murray.

- The harvesting of overland flows effectively reduces the carrying capacity of the river. These overland flows usually occur at times when the river's bio diversity productivity is high. Thus the river loses carrying capacity and effective environmental flows. Negative environmental factors such as the growth of algal blooms and salinity increases; thus diminishing community viability and downstream productivity.
- The recent increases in water diversions do not mandate that the identified water saving infrastructure projects are completed before the increases take effect, thereby exacerbating water lost to the river system; especially downstream.
  - Water loss is compounded by the increase that will be required in carrying capacity, and hence mistiming of environmental flows to sustain the delivery of that water.
  - O Large high return, low operating cost water users, such as permanent plantings (almonds), rice and cotton are geographically located either upstream of Mildura, or in the Northern Basin of the Darling. Because the recent increases in water extraction levels are not allocated to any section of either the northern or southern basin, it follows that more high return low cost water users will obtain this water, and use it on the river systems which are least effected by transmission losses, and lack of carrying capacity.
- 2016 to 2017 water trade was marked by large trades into almond and cotton plantings in areas such as the MIA and upstream of Mildura. It was also marked by Webster's Tandou sale of water to the Commonwealth, and the Commonwealth's purchase of Border River water. Both factors work against down stream water availability.

These facts reinforce that commercial interest in water use is moving to areas of high water supply certainty and low water transmission loss.

# 2/ That inter-valley and water trading rules need increased transparency and control to minimise the risks of monopoly ownership and hence pricing of water to unfairly impact smaller water uses and downstream communities and states.

- Increasingly as water comes on the market it is sold quickly in large trades. (See 2016-2017 data) Such sales require investors and industries with a large capital base, and characterised in their desire for a high return on that investment.
  - With water increasingly leaving the control of small traditional water uses, its price, especially on the temporary market is

- open to upward manipulation, which forces more small water users to become uneconomic, and sell. It's a compounding present reality.
- The complexity of the market with increasing involvement of brokers, new products, and the involvement of foreign and domestic large investors; has led to a lack of clarity as to availability, ownership and pricing.
  - O A water sale can be a confidential transaction as to price, timing of availability, and intended end use location. In addition with the high involvement of brokers, and the types of sales, (loans, duration of sales and hedging of purchases on the futures market] it's extremely difficult to state with certainty who owns what water and where, when and how it will be utilised. The Murray Darling Commission in a 2016 to 2017 report sited this as a potential problem
- It's apparent that low return crop producers are being priced out of the market by higher return alternatives. Since 1992 the World Bank has tied numerous loans to the private ownership of water, promoting the concept that a higher price of water will lead to higher productivity in its use. In Australia NSW was a leader in separating water from land in support of this concept, and the Commonwealth and states have unified this in legislation. In doing so policy was created in haste' and the social and economic impacts not fully explored.
  - O It was argued that an open water market leads to job creation. Indeed it does in the short term, as many of the high return industries are labour initially intensive such as in permanent plantings. However lower return, labour consistent industries essential to the nation's interests such as dairying, horticulture, family farms and associated value adding industries become marginal, and many small communities lose population, and viability becoming a cost to the nation, as imports of what was locally produced is now imported. Some examples are, fruit juice concentrates, vegetables and fruit, flowers, pork etc.
  - o In rural areas water prices have been a highly significant factor in driving the diminishing of small communities and labour consistent small industries and producers and hence the growth of sponge rural cities; often characterised by high levels of youth unemployment (Shepparton, Mildura etc).
    - Lobby groups representing the major high return investors and industries have blamed this on by-backs for environmental flows, conveniently ignoring the fact that environmental flows are essential for the carrying capacity of the river.
    - Small producers have also argued that environmental flows are raising water prices due to water availability, (and indeed this was in part initially a factor) but ignoring the fact that increasingly water trades since 2000 are done as soon as water appears on the market

and purchased by investors and owners of large area high return crops.

- Investors in water are on a "Win Win". They are gaining a high rate of capital return, which can only over time increase due to the effects of climate change, and the demands of a growing population.
  - At present the return of trading permanent water on the temporary market runs between 9% and 12%
  - Downstream communities are trying to future proof their water supply by buying on the permanent market (South Australia recently, Mildura for its parks and gardens during the drought for example)
- Australian water ownership and trading rules encourage large investors to control the market, and hence water supply. With their links to large high return water using industries their ability to demonstrate to government their positive effect in export figures, they can effectively demand changes to Government policy. This is evident in the Northern and Southern Basin adjusted extraction levels. These plans lack:
  - o Transparency as to where the increased water allocations can be used in the system.
  - o Transparency as to the effectiveness as to the timing and regional effect of environmental flows
  - A connection between water returned to the system through infrastructure and management being in place before allocations increase.
  - Commitment to improved environmental conditions on a whole of system basis.
  - A business case which reflects the economic and social impact on downstream areas such as the Lower Darling, labour consistent industries, environmental bio diversity loss and the impact on downstream consistent multifaceted industries such as tourism.
  - o Impact of foreign ownership on water trade and productivity.
    - If company earnings go largely overseas, and company directed productivity benefits their country and not Australia, then this is of concern.

3/ Both the Northern and Southern Basin proposed changes to water extraction and environmental allowances need guarantees as to minimum flows at key downstream points to ensure the benefits are fairly shared throughout the system.

If a system of minimum flow targets based on environmental factors was in place upstream at key points (for instance upstream and downstream of each irrigation area); and independently set, taking into account system wide river health, current environmental factors (drought, flood etc.), then:

- Each irrigation district would know its extraction entitlements

- Transmission losses to the system would be quickly identified and industry and government would have an interest in rectifying such losses.
- As Minimum flow targets would take into account the MDB System in its entirety, the interests of both upstream and downstream water uses would get equal weight.
- Water prices would be better controlled, as large investors and water uses could not concentrate ownership to a few high return crops, but would need to cope with water allocation over the full length of the river, and resulting diversity of uses.
- Commonwealth agreements on the environmental sustainability of the river system as a whole would be met.

Recent disclosures of water mismanagement and lack of compliance monitoring and enforcement in the Northern Basin indicate that commercial gain has more impact on Government than river health. Had there been a system of maintaining minimum river flows at key locations and at most productive environmental times on the Darling (consistent with environmental factors {such as rainfall}] then illegal water diversion and extraction would be controlled.

It's clear from the announcements as to overland flows on the Macquarie River, the granting of increases to cotton planting in the MIA, the Level of water harvesting in Queensland' and permanent plantings in areas upstream of Swan Hill; that the States are entering a "Water War," each intent on consolidating their hold on a finite and diminishing resource – WATER.

The Murray Darling System needs a new means of setting and controlling water availability to the environment and communities and industries:

- Mandatory Minimum River flows past key locations, ties together the need for such flows to have high environmental benefit and would drive the need for appropriate river infrastructure and management.
- Failure to study historical and environmental data and set minimum flow targets tied to peak environmental benefit would seem to break Australia's environmental international agreements, and ultimately lead to a much degraded river system.
- Irrigators, Industry and urban demands would be better off in the long term, as such a system would drive infrastructure investment, minimise water transmission loss and lead to higher economic benefits through improved certainty of supply and tourism and recreational income.
- Government responsibilities in providing potable water through the control of salinity, algal growth and black water would benefit urban and industry users.

#### CONCLUDING STATEMENT

The Royal Commission has correctly identified the disconnect between present practices and Australia's International Agreements.

It's clear that what is written in the agreements between states and between the Commonwealth and States needs to be clarified

The Commission needs to identify the need for Government to commit to their responsibilities in provision of such necessities as potable water and a useable resource (by control of black water and Algal blooms etc).

A measurable and controlled system wide flow of water subject to environmental factors, such as minimum flow targets at key points is essential.

Three things are clear:

Governments may need to be prompted by the High Court as to their International and Internal Agreements as to their responsibilities for the environment of the whole river system, and parts of the System.

Lack of a whole of river system approach will have a devastating impact on lower river communities, and in the process, such human rights as access to potable and healthy water may be threatened.

There is a clear need for a centralised independent body to control the Murray Darling System and thereby ensuring the health and sustainability of the System.

Jim Wilton