



BASIN PLAN RESPONSE PAPER

The Basin Plan is our first attempt, and our last chance to halt and hopefully reverse the degradation of the rivers of the Murray Darling Basin.

The unsustainable extraction of water from the rivers of the Murray Darling Basin is a direct result of failed administration by successive Colonial, State and Federal Governments. We need a system of water allocation and distribution that is transparent, equitable and sustainable, without political and jurisdictional interference. The current system appears to allocate water opportunistically and on political whim with no thought to equity, sustainability or even availability.

The stated aim of flushing two million tones of salt “out the mouth” annually is laudable. The volume of the end of river flow needed to achieve this must be known and should be stated. Fresh water discharged to the ocean is not wasted. It helps support a marine ecosystem.

The Sustainable Diversion Limits are an obvious means of returning the basin’s rivers to a healthy state. The reductions in the consumptive take from the rivers are therefore inevitable if we are to achieve ecological sustainability. The reductions in “consumptive take” for each river system, and the basin as a whole must be equitable, not necessarily equal.

The methodology used to determine from where the reductions will come, and how large they will be, needs to recognize delivery efficiencies and previously completed Infrastructure upgrades.

- South Australia, unlike the other Basin states, capped its water allocation from the Murray Darling Basin, (except for the Eastern Mount Lofty Ranges) in 1973. *No new irrigation licenses have been issued.*
- South Australia, unlike the other Basin states measures water taken from the river and measures water delivered to the “farm gate”. South Australia can account accurately for all its irrigation water, and delivers water to the “farm gate” with minimal losses.
- South Australia irrigators generally use the most efficient on farm delivery and distribution systems available – minimizing loss and waste
- The Basin Water that flows into South Australia is measured at Lock # 6 at the Victorian/South Australian border. All the water from the Murray River that is used in South Australia is delivered from the river via metered closed conduits.
- South Australia, unlike the other basin states, can account accurately for water taken from the Murray River whether it is for urban, agricultural, horticultural, industrial or environmental uses and can therefore account for any losses.
- Through all recorded and remembered history, Lake Albert and Lake Alexandrina have been viable, predominately fresh water, ecosystems.

Historical data indicates that the lakes have been fresh for approximately 5,000 years and the Murray River Mouth was permanently open for approximately 8,000 years.

- In the late 1800's, early 1900's we European immigrants caused the lakes to become estuarine. Then in 1981 we caused the mouth to close.
- Water delivery infrastructure in most of Queensland, New South Wales and Victoria is wasteful. As a minimum standard open channels should be lined. Closed conduits would be better. Accurate metering of water into the delivery system and out at the farm gate is essential. The accuracy of this metering must be standardized basin wide.

The preceding nine points, as a minimum, need to be considered when making the cuts to consumptive take to achieve the optimum Sustainable Diversion Limits.

THE COORONG

The Coorong Drainage Basin, which is comprised of much of the south east of South Australia and a part of western Victoria, should by definition be part of the Murray Darling Basin. It is from this drainage basin that South Australia could make a major contribution to the health and viability of the river system. A brief study of the reports of G.W. Goyder (Surveyor-General) on draining the south east; circa 1860, and the minutes and records of the South East Drainage Board circa 1910 indicate prior to the drainage works taking place, a substantial quantity of water flowed from this region into the south lagoon of the Coorong.

Conservative estimates suggest that 200 GI p.a. long term median flows to the southern lagoon of the Coorong via Salt Creek and the southern ephemeral swamps is achievable, should some of the natural flows of water be restored.

The infrastructure and works necessary to capture, contain and redirect these waters would cause minimal disruption to population centres and disturbance to agricultural land. The works, if carried out with the ecology of the area to the fore could actually be used to enhance environmental outcomes. 200GI p.a. long term median flows delivered to the southern end of the Coorong would start to restore this iconic Ramsar listed wetland. The 200GI p.a. flow would also add significantly to the flow “out the mouth” of the Murray River. Restoration of the Coorong would allow us, as a nation to be more honest in our compliance with the Ramsar Convention and the various international migratory bird treaties, to which we as a nation are a signatory.

THE LOWER RIVER

From Lock#1 to the barrages, the river channel, Lake Albert and Lake Alexandrina constitute the largest, accessible fresh water storage in South Australia. This water body, apart from being a major source of urban, industrial and irrigation water for South Australia also contains several Ramsar listed wetlands and supports international migratory bird treaties.

Artificially high lake levels, lack of flushing flows and general poor management of water for the past seventy years has resulted in considerable silting of the lake beds.

Silting causes a loss of aquatic habitat, and silting adds considerably to the residual acid sulphate soils, and reduces the storage capacity of the lakes. Silting is a problem we have caused, which probably has no solution.

LOCAL ISSUES

- The Basin Plan must be fair and equitable, and it must be seen to be fair and equitable.
- Achieving the second part of this statement is far more difficult than achieving the first.
- The terminology used to describe water needs to be standardized and defined, for the whole basin.
- Reporting on the percentage of Consumptive Take used or allocated to compare between states is misleading at best, and more often simply political dishonesty and inflammatory.
- The use of Water Efficiencies in any context is usually meaningless rhetoric. The term does not have a mathematical base or a scientific definition. It is just a statement along the lines of “Mine is Bigger than Yours.”
- Is the use of long term average flows the most reliable measure of flow events/requirements? Would not median flow measurements be more

applicable, given the control we can now exercise over flow events. The use of median flows would help to reduce the effects of flow variability and the distortions caused by extractions.

COMMUNITY CONCERNS

Lake Albert, Lake Alexandrina and the Coorong have supported prosperous agriculture, horticulture and fishing enterprises for more than 150 years. In 2006, an artificially created disaster caused by over allocation and exacerbated by the worst drought in 100 years, severely disrupted, and in some instances, crippled these industries.

The water we have access to is the poorest quality in the basin. This is not a complaint, it is a fact we accept because of our position at the end of the system. Our community has learned to use this poor quality resource to produce top quality products and develop an internationally recognized, sustainable fishery. For the past four years irrigation water from Lake Albert has been inaccessible. During this time approximately 73% of the irrigation allocation from the shores of Lake Albert has been sold out of the region. The sale of the water was essential for the survival of many family farming enterprises.

The building of structures, first the Narrung ferry causeway, then more recently the bund, now partially removed, has caused the narrows to become heavily silt

contaminated. To ensure the future viability of Lake Albert both as a fresh water resource and an environmental asset the structures, both of them, need to be removed and the narrows dredged. This would once again allow unrestricted wind driven flow in both directions between Lake Albert and Lake Alexandrina. It was this water interchange that freshened and oxygenated the water in both lakes. If the ferry causeway is necessary infrastructure it should be rebuilt incorporating culverts, so as not to impede water flow.

The river systems that make up the Murray Darling Basin are in a parlous state. Fortunately for the short term health of the rivers we have had desperately needed rain. Unfortunately for the long term health of the rivers the desperately needed rain has given our politicians time. This time will, and is already allowing them to equivocate, vacillate, and obfuscate and make no decisions.

Submitted by

William Henshall