

Better Management of Environmental Water

1. What outcomes are we seeking?

The focus needs to be on outcomes, not rules and regulations.

Surely the outcome being sought here is real and measureable improvement in the riverine environment? Any notion that the outcome should be “better management of environmental water” is a partial concept and deals with only one of the means necessary in achieving the overall goal of environmental improvement.

Dealing with flow parameters alone will not significantly improve the environment. A holistic approach is called for with greater emphasis on “complimentary measures.” Such measures include managing the land use in the riparian zone, eradicating feral plant and animal and fish species, improving native fish habitat, dealing with river bank erosion and other well identified measures.

While the measures in the paper may be focused on an unregulated stream in the North of the Basin, it is critical to realise that irrigators and local communities seek environmental improvement as a high priority outcome for all streams across the State. It is also of note that in deference to the WRAP papers, the Draft Exposure Bill for the legislation appears to extend such measures across all NSW streams?

The Water Sharing Plans set out various environmental measures for specific catchments. Such measures have been operating for a number of years and have been accepted by water users as part of water management in the State. Any changes to environmental targets now proposed outside of the Water Sharing Plan processes by separate legislation will affect the reliability of existing users and have negative third party impacts.

2. Comments on the Objectives in the paper

Breaking extended cease to flow periods;

- The nominated 50 days at Bourke and 100 days at Wilcannia are arbitrary targets.
- The Barwon Darling stream flows are extraordinarily irregular and the river has been subject to significant periods of no flow before and after river regulation. This is the natural state of the stream. The river reportedly dried up on no fewer than forty-five occasions between 1885 and 1960. “During most summers, the Darling River would typically dry back to a series of deep waterholes. Similarly, the lakes at Menindee and on the Great Darling Anabranh would dry up for many years between floods. From 1890 to 1961, water flowed the complete length of the Great Darling Anabranh to the Murray River only nine times. The Darling River at Menindee ceased to flow 48 times between 1885 and 1960, and the river did not flow for 364

days in the 1902–3 drought.” “In the early 1940’s, the Darling River stopped running many times. The longest was around 114 days. One year it stopped for almost five months – 149 days.” Murray Darling Environmental Foundation

Whole of river connectivity

- The irregular nature of the stream and extended periods of dry river beds discounts the concept of “low flow connectivity.” The concept that a dribble can be maintained along the length of the Barwon-Darling during drought conditions is fanciful. Fish and invertebrate populations would be far better served concentrating on investing in connectivity of flow through weirs and strictures, when the river is flowing.

Flushing flows

- Flushing flows are important for the river environment but they are best provided by rainfall, not releases from headwater storages hundreds of kilometres way. Most of the held water in the Northern Basin resides in the Gwydir and Macquarie storages. Both streams have wet lands which under normal flows are considered “terminal.” The “contributing streams”, the Border Rivers and the Namoi storages contain insignificant amounts of held water.

Protection of held environmental water

- Held environmental water, stored in tributary headwater storages is the result of a change of government policy. All risks flowing from such a change should be managed by and paid for by government. Water Sharing Plans did not contemplate held water. River loss accounts did not contemplate held water. To shepherd held water into unregulated streams will have negative impacts on regulated river users, erode their reliability and impact their water property rights. Deal with these issues under the WSP processes, not disparate legislation.

3. How can we better manage environmental water?

Possible measures

- Well thought out and agreed IDELs could assist in better managing flow sharing. Success would be dependent on significant investment by government in whole stream flow management and monitoring systems. The current “network” of river gauges and resulting flow management systems are archaic.
- Flexible cease to flow benchmarks, related to catchment rainfall rather than arbitrary numbers
- Investment in complimentary measures, such as fencing riparian zones, piping stock and domestic water, cold water pollution mitigation in headwater storages, feral species control would enhance the outcomes from the use of current environmental water, both “held” and “planned.”