

Mary Basin Water Resource Plan – What does this mean for the river?

Factsheet

A draft Mary Basin Water Resource Plan (WRP) was released for public comment in November 2005. This draft plan was released before the Traveston Dam announcement was made in April 2006. The final Mary Basin Water Resource Plan has been recently released, announcing a ‘strategic reserve’ (or unallocated water) of 150 000 megalitres per year to provide urban water supplies to Brisbane (via Traveston Dam).

The most significant difference from the Draft WRP and the Final WRP is the inclusion of a few words scattered throughout the document. These few words will have a profound effect on the Mary River and the Great Sandy Strait. Where the draft WRP stated that something “must be adhered to”, the Final WRP is now considerably weakened through the constant use of “to minimise the extent”. This is akin to simply indicating what should happen, but “if we cant do it, we don’t have to”. This provides the State Government an “out clause” when downstream environmental flows cannot be met due to the operation of the Traveston Dam.

Within the schedules of the Mary Basin Water Resource Plan ‘nodes’ along the river are described for determining the level of compliance of environmental flows. The furthest upstream monitoring node on the Mary River is at Fishermans Pocket, near Gympie, which is approximately 40 km downstream of Traveston Dam. The environmental flow nodes are:

Node 1	Mary River mouth	Final WRP Schedule 5, Pg. 56
Node 2	Home Park (Tiaro)	Final WRP Schedule 5, Pg. 56
Node 3	Fishermans Pocket (Gympie)	Final WRP Schedule 5, Pg. 56

The Final WRP constantly uses the term “in the simulation period”. The simulation period is approximately 110 years – from 1890 until 1999. The Mary River has approximately 110 years of available data that has been used to analyse the characteristics of river flows.

By analysing the historical river flows the extent of ‘change from natural’ can be determined. It is then a question of how much change from natural condition is allowable before ecosystems cease to function properly. In particular how much freshwater flow does the estuary need for fish spawning?

The following shows the dramatic effect the Final WRP & the Traveston Dam will have on river flows:

	Explanation of Mary Basin Water Resource Plan	Page Number	Table	Node	Column
Low Flows	Up to 31% of the next 110 years (the simulation period) the legislation allows there to be less than 1 megalitre of flow at the Mary River mouth	57	1	1	2
	Up to 18% of the next 110 years (the simulation period) the legislation allows there to be less than 1 megalitre of flow at Fishermans Pocket (Gympie). Currently the driest month of the year (October) has on average 171 megalitres per day flow at Fishermans Pocket	57	1	3	2
	Up to 30 times during the next 110 years the legislation now allows 'no flow' at the Mary River mouth for 3 months. This has possibly occurred once in the last 110 years.	61	5	1	2
	In the next 110 years the legislation now allows there to be three times when there is 'no flow' in the river at Fishermans Pocket (Gympie) for 6 months. There are no records of this ever happening.	61	5	3	3
Medium – High Flows	The small freshes (floods every 2-3 years) will be cut by 58% at Fishermans Pocket, Gympie. These freshes are critical for fishing spawning in the estuary, and are obviously critical for its effective operation. This is dramatically less than the Draft WRP.	63	6	3	3
	The 1 in 5 year floods at Fishermans Pocket (Gympie) will be cut by 31%	63	6	3	4
	The 1 in 20 year floods at Fishermans Pocket (Gympie) will be cut by 31%	63	6	3	5
	The 1 in 20 year floods at the Mary River mouth will be cut by 31% - thus only allowing 69% of 1 in 20 floods to reach the mouth	63	6	1	5
	The 'Annual Proportional Flow Deviation' or the amount of flow 'alteration' from the river at Gympie has been estimated to be 2.1. A score of 0 (zero) is natural, and the highest score possible being 3.4 (severely altered). To put this into perspective, it is widely agreed that a score of 2 should be avoided, and certainly should not occur today knowing the major problems we have caused with river flow alteration in the past.	64	7	3	3