



Save the Mary River Coordinating Group

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Queensland Water Commission

PO Box 15087,
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31st July 2008.

Dear Sir/Madam,

Re: Submission on the SEQ Water Strategy Draft

The purpose of this submission is to provide feedback on the Draft SEQ Water Strategy dated March 2008.

The Save the Mary River Coordinating Group Inc (STMRCG) is a community based group formed two days after the Queensland Government's surprise announcement that it intended to dam the Mary River at Traveston Crossing. It has a committee comprising of landholders in the region of the dam footprint; a membership of over 300 members and demonstrated very substantial community support for its legitimacy and its actions. It has members from a wide range of professional backgrounds including expertise relevant to the issues required to be addressed in the draft Water Strategy.

STMRCG requests that it be considered a stakeholder in the ongoing consultation process concerning the Water Strategy. STMRCG strongly advocates that the draft SEQ Water Strategy be reviewed to include alternative plans should approvals not be granted for any proposed water infrastructure such as the Traveston Crossing Dam and Wyaralong Dam, and the public feedback period extended. There are other alternative strategies to inter basin water transfer and damming the Mary River that are more cost effective, more reliable and more sustainable. In the draft, there is no inclusion of maintenance or decommissioning considerations of pipes and dams, or what water will cost the consumer.

Finally, if any part of this submission is unclear, or for further information please contact the undersigned.
Yours Sincerely,

Glenda Pickersgill *on behalf of the Research Section of the Save the Mary River Coordinating Group Inc.*
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“Don’t Murray the Mary”. Steve Posselt, Brisbane Water Engineer, paddling the Mary River in May 2008 to raise awareness of the beauty of the river, it’s internationally recognized ecosystems and endangered species. Steve's four week canoe trip had huge support from the communities along the length of the Mary River.

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Many excellent supply alternatives and adaptive management proposals are available within the strategy framework. However, the major flaw is it assumes that the proposed Traveston Crossing Dam and Wyaralong Dam are approved and there are no alternative strategies given for when approvals are not granted. This is a huge oversight and does not give the public an opportunity to comment fully on all possible strategies.

The following summarizes the Save the Mary River Coordinating Group's concerns about the draft SEQ Water Strategy:

1. Supply exceeds demand:

Looking in detail at the supply demand graph (Figure E on p 21 -shown below) shows that when the Western Corridor recycling scheme and the Gold Coast Desalination facility come on line, yield from the proposed Traveston Crossing Dam would provide a surplus for the next 20-25 years. Why are alternatives to such a financially, socially and environmentally costly projects as Traveston Crossing Dam and Wyaralong not being investigated in the draft strategy? **What is this surplus water going to be used for?**

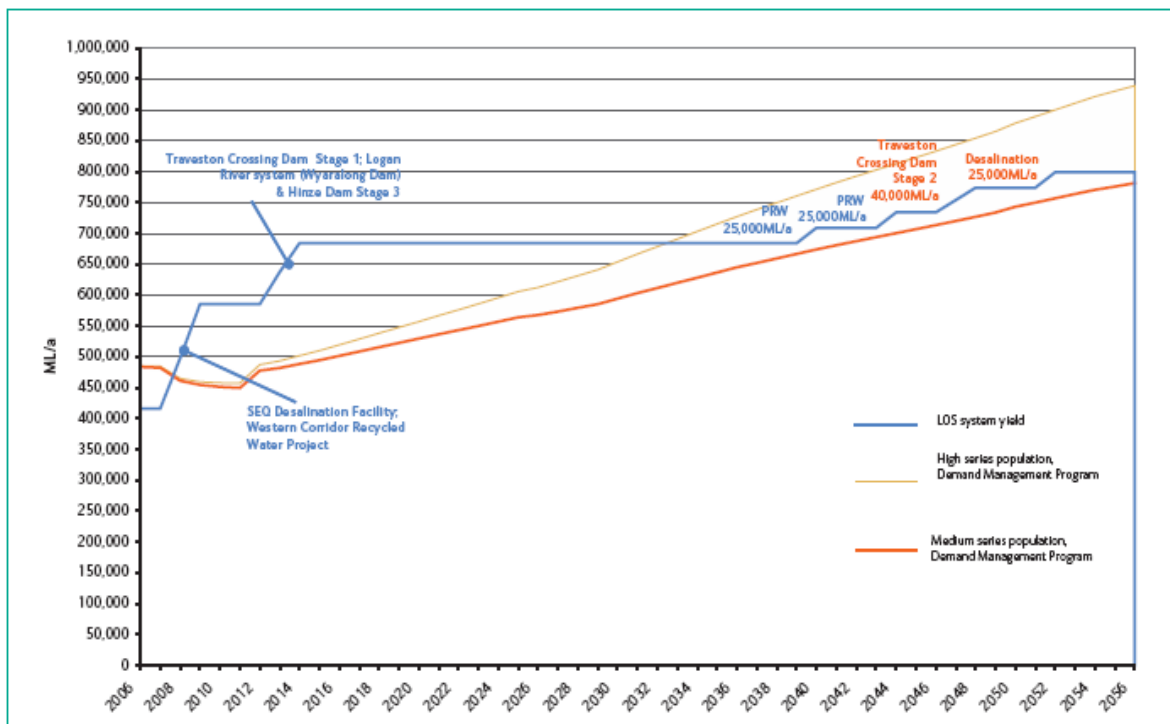


Figure E Projected infrastructure program: Climate resilient and surface supplies (medium series population growth and no allowance for climate change)

(Water Commission 2008)

2. Inter basin transfer inequity:

The draft strategy does not investigate any alternatives to the proposed inter basin transfer from the Mary Catchment, when the information available to the QWC throughout preparation of the strategy suggests many viable alternatives to this inherently risky and potentially destructive option.

It has failed to provide a truly sustainable and self-reliant strategy for the management of water resources within the Moreton basin itself. It should be used to produce an economically efficient and ecologically sustainable strategy for both the SEQ region and the Mary catchment

Inter-basin transfer of water resources is an option of last resort, only to be considered after all less risk-prone options have been fully implemented. This is in keeping with current international understanding of ecologically sustainable water development refer to the 2007 International Declaration on Environmental Flows (“the Brisbane Declaration”) and the WWF 2007 paper on Inter Basin transfers in support of this stance.

Even the first stage of this increased interbasin transfer, the extra extraction from Obi Obi Creek via Stage 1 of the Northern Pipeline Interconnector, is predicted to have major adverse environmental impacts on the nationally protected high environmental values of Obi Obi Creek (Technical Advisory Panel appointed to the Water Resource Plan).

3. Underestimation of climate change predictions:

The SEQ water strategy draft uses only a 10% reduction in surface water storage yields in response to climate change (p16). However recent predicted drop of 10% in rainfall for SEQ is more likely to result in a 30% decline in stream flow in the Mary over the 50 year life of the strategy (MRCCC 2008).

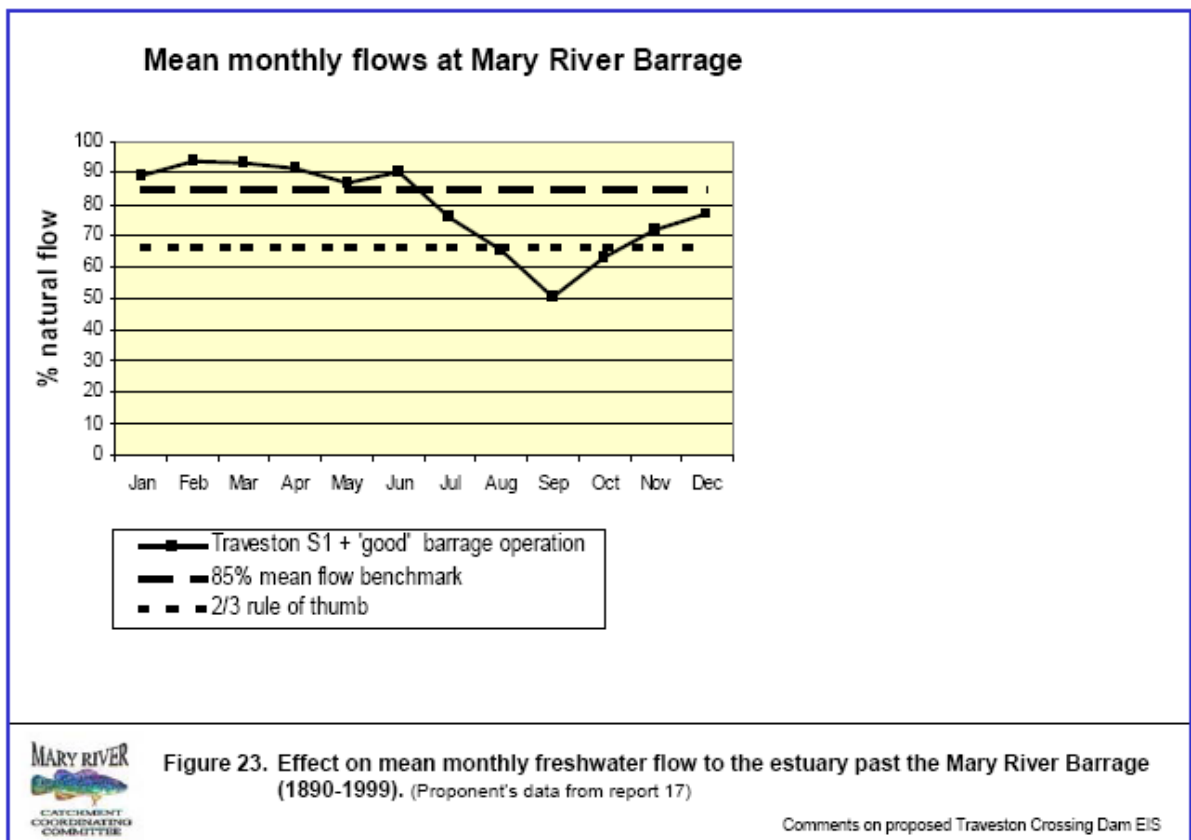
Already, measured stream flow at the Traveston Crossing dam site over the last decade (which includes major flood events) is less than 60% of the long-term averages used to develop the Mary Basin Water Resource Plan (STMRCG 2008).

The Queensland Climate Change Centre for Excellence (2008) findings that pan evaporation may increase by 40% over the next 70 years, (25% to 2050) would further exacerbate (by 10 GL/year), the evaporative losses already predicted of 40GL/year for the proposed Traveston Crossing Dam Stage 1 (MRCCC 2008). This potential would result in more than 50GL lost from the river system each year in addition to the projected 70GL yield of a dam.

4. Over allocation of the Mary River:

The Mary River is already over allocated, coming under extreme stress in most spring irrigation seasons and in dry years in general. One of the key objectives of the National Water Initiative is "to return all currently over-allocated or overused systems to environmentally sustainable levels of extraction." The 2 graphs and text (shown below) highlight this over allocation using data from the proposed Traveston Crossing Environmental Impact Statement (MRCCC 2008).

The current Mary Basin Water Resource Plan needs to be reworked to provide adequate scientifically based environmental flows to critical downstream locations at Dagon Pocket (an important breeding ground for the Australian Lungfish and Mary River Turtle) and at the Mary River Barrage to protect the RAMSAR wetlands. It is not endorsed by the Mary River community and there is no scientific basis of a 150,000 ML/yr strategic reserve that the inter basin transfer is based on.



The proponent's data shows that, even as far downstream from the damsite as the entrance to the estuary at the barrage, the proposal is predicted to reduce September flows to about half of their natural state and generally significantly reduce flows during the JASON months.

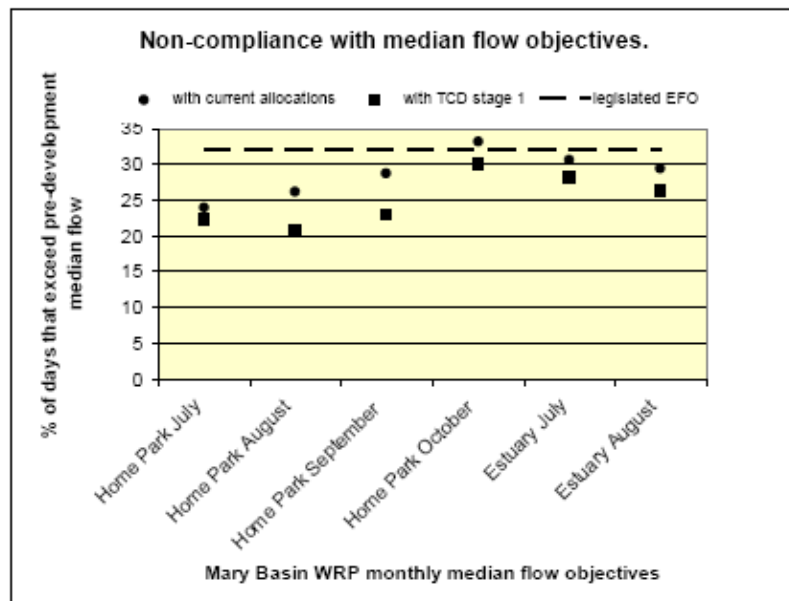


Figure 24. Illustration that flows do not comply with median flow objectives in the full allocation scenario, and that TCD stage 1 increases the level of non-compliance. (Proponent's data, EIS tables 6.37 & 6.38)

Comments on proposed Traveston Crossing Dam EIS

This figure illustrates the extent to which median ('typical') flows in the lower river would not comply with the environmental flow objectives in the Mary Basin Water Resource Plan if all existing water allocations were fully utilized. It also shows how much further outside compliance the flows would be if Stage 1 of the Traveston Crossing Dam came into operation. It is difficult to see how this intent to make matters worse than they currently are could be interpreted as 'minimizing' the extent to which flows don't meet the objectives, as required under the plan. It is also hard to see how current allocations can be supported and the operation of the dam optimized to bring these figures into compliance without reducing the stated yield of the dam by making specific environmental flow releases.

5. Inaccurate comparison of Alternatives:

Some comparisons of the energy and financial costs of the various water supply options in the strategy are biased towards underestimating the costs associated with the 'committed' infrastructure projects in the strategy, (like the proposed Traveston Crossing Dam) and overestimating the energy and financial costs associated with water supply options that could be viewed as alternatives to these 'committed' projects (such as additional desalination capacity). Greenhouse gas emissions should also be estimated for all Alternatives and be taken into consideration when evaluating.

6. Unacceptable environmental and social costs:

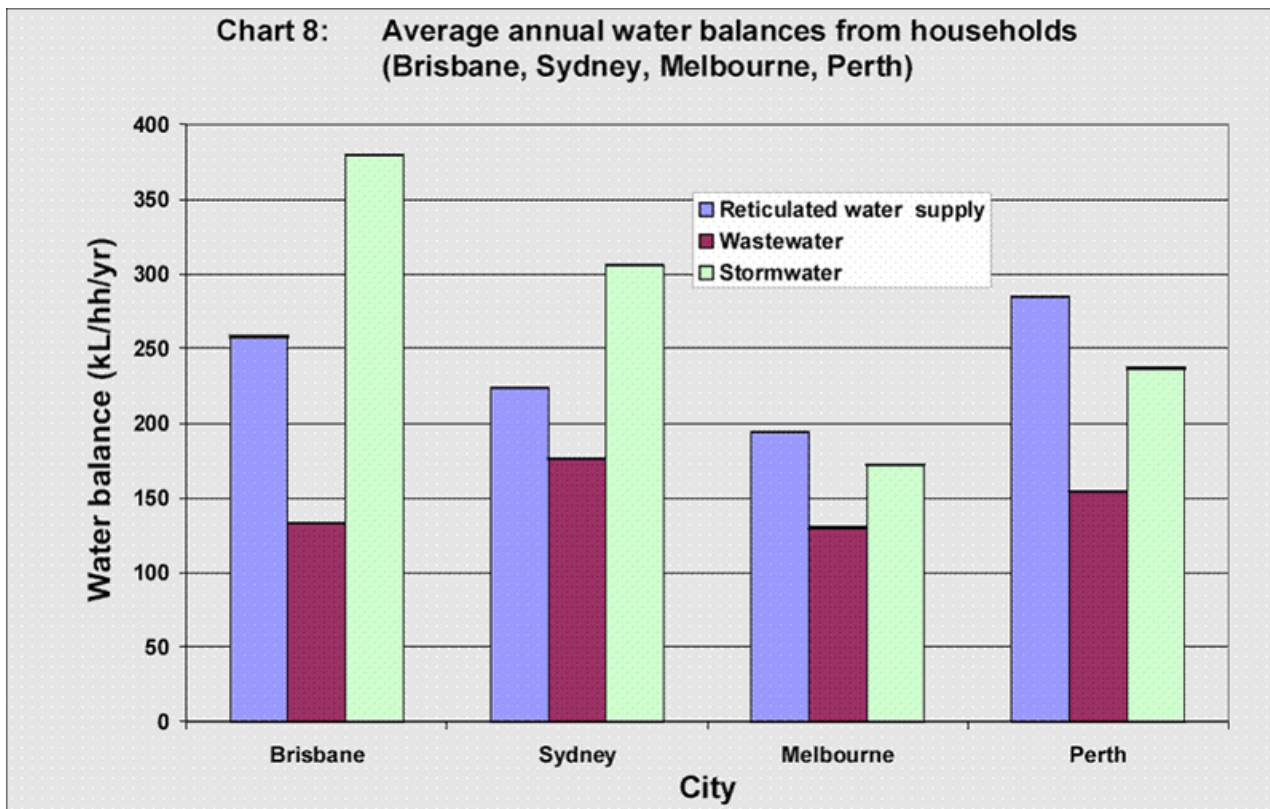
The draft SEQ Water Strategy as it is presented has shown no reference to considering environmental and social factors in a multiple-criterion comparison. Its commitment to building dams has unacceptable environmental and social costs. Water consumption is currently below 140 liters/person/day but the draft strategy plans for 230 liters/person/day. There is clearly a need to give more credit in the draft strategy to the people of SEQ who have changed their appliances to be more water efficient, put in rainwater tanks and changed their ways to be more sustainable for our planet.

Although the draft strategy recognizes a responsibility for maintaining waterway health in SEQ, it does not specifically recognize any responsibility for maintaining stream and estuarine health or water resource security in the Mary catchment. In the strategy it includes scenarios in which nearly 20% of SEQ's urban water supply could be sourced from the Mary River catchment.

7. Lost opportunities for rainwater harvesting:

It is recommended that the strategy should include more use of catching rainwater where it falls. The potential for storm water harvesting and roof rainwater collection in synergy with waste water recycling schemes in coastal urban areas is also not fully recognized in the draft strategy.

Work summarized by the Urban Water Security Research Alliance shows that for Brisbane, the size of this one water resource is far greater than the total water demand, yet only a very small amount of it is utilized. Considering that this is a resource which is available right at the site of demand, without needing to be pumped long distances, it is an obvious part of the Total Water Cycle which presents an enormous opportunity which does not seem to be fully recognized in the strategy. The size of this underutilized resource is illustrated in the graph below (International Water Centre 2008)



8. Wivenhoe Dam upgrade not included:

The 288 GL of additional drought contingency storage that will become available in Wivenhoe Dam when it is compulsorily upgraded to comply with ANCOLD guidelines is not accounted for in the draft strategy. This amount of additional storage is far greater than the 153 GL of total storage in the proposed Traveston Crossing Dam stage 1, and utilizing it has an estimated marginal cost of only \$5-10 million dollars (QWC 2007) – compared to a cost of at least \$1.7 billion for the proposed damming of the Mary River at Traveston Crossing.

9. No costs detailed for the consumer and privatisation:

Major infrastructure costs money therefore there will be a need to recoup cost through the newly formed SEQ Distribution Entity (Interim) Pty Ltd. There is no information of what it will actually cost the consumer. Demand management and decentralized supplies (storm water) won't generate money. These are harder to combine into one centralised money making entity but would produce far less greenhouse gas emissions than pumping water around a water grid.

10. Water security for the Mary Catchment:

Water security is a major concern for the Mary River catchment. There are many rural industries and towns on the Mary River that depend on reliable water. It is impossible to account for the effects on the relative reliability of high and medium priority water allocations in the Mary River system without knowing the water-sharing rules in the Resource Operating Plan for the Mary –

which has not yet been released.

11. More consideration needed about infrastructure getting old:

Maintaining and decommissioning for dams and pipelines is costly and internationally being recognized as an increasing issue that requires urgent attention (McCully 2008). All dam projects are engineered for a certain lifetime of service and no more. There are many factors that limit the operational lifetime of dams, including:

- The amount of silt buildup behind the dam -- eventually every reservoir will be filled in with silt and the reservoir nonfunctional.
- Basic construction materials simply wear out -- concrete cracks, berms leak, physical structures become obsolete and must eventually be replaced. Sometimes aging structures are also safety hazards.
- Obsolescence -- some dams are simply no longer cost effective. Energy and/or water conservation often makes more sense than maintaining the physical structures of dams that cost more and more money each year to maintain.

Thus dam decommissioning is nothing radical or new -- in fact dams were DESIGNED to be decommissioned at the end of their useful lives just little is said in the feasibility stage about who pays, how it will be done or what will be done with the sediments if there is contamination.

This is one reason why dams in some countries are licensed, some are on a 40 year cycle, some 70 years. At the end of that license cycle they have to be reevaluated and can then be decommissioned. It is recommended that costings of maintenance and decommissioning be factored into the comparison of Alternatives.

12. References:

International Water Centre (2008). Report of the Urban Water Security Research Alliance.

McCully, P (2008). International Forum presentation El Faro, Citizens Initiative Pavilion at World Expo 2008-Water and Sustainability, Zaragoza.Spain.

MRCCC (2008). Hydrological Analysis of the Flow and Storage Data Presented in the EIS for the proposed TCD. Mary River Catchment Coordinating Committee. Technical Report Jan 2008.
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Water Commission (2008). SEQ Water Strategy Draft. <http://www.qwc.qld.gov.au/SEQWS>