By email only

231 Thornside Road Widgee Qld 4570

27 Mar 07

The Secretary Senate Rural and Regional Affairs and Transport Parliament House Canberra ACT 2600

Dear Sir/Madam,

<u>INQUIRY INTO ADDITIONAL WATER SUPPLIES FOR SOUTH EAST QUEENSLAND –</u> <u>TRAVESTON CROSSING DAM</u>

Thank you for the opportunity to inform you of our deep concern about the proposed dam at Traveston Crossing.

My wife and I were residents of the area near the dam site for eleven years, and are very familiar with it and the local area affected by the proposal. We had 800 metres of Mary River frontage and we drew water from the river for irrigation purposes. We are thus well aware of the physical, climatic and sociological factors which are relevant to the dam proposal. We have many concerns and some are listed in this letter.

Environmental flows in the Mary River will be severely impacted by the proposed dam, with large impacts on the communities along the 200km of river downstream of the dam and surrounding the Great Sandy Straits. References in State Government reports to the maintenance of 85% of mean flows at the river mouth are deliberately misleading, as the Mary River is characterized by occasional and extreme flood events which provide most of this flow. Most of the time the river has low flow rates that will be severely affected by the dam. The State Government hydrological modelling of the dam proposal that produced this figure also predicts that with the dam in place the Mary River will cease to flow to the sea for considerable periods of time, something which has occurred in its natural state only once in the 110 years of data used to formulate the Water Resource Plan. In addition, the WRP now allows for discretionary interim licences, which could allow the dam operator to stop all flows in the Mary River for arbitrary periods of time as the perceived need arises.

A comprehensive economic analysis of the Traveston Crossing proposal by Professor Stuart White of the Sydney University of Technology and Cardnos Consultants clearly shows that the proposal is, by a large margin, the least cost-effective means of providing urban water security for SE Qld of all the options considered. It also pointed out that the water resource planning process has resulted in an outcome where approximately half the strategic reserve identified in nearby catchments in SE Qld (where the urban demand used to justify the project is located) would be preserved, while the entire strategic reserve of the Mary catchment would be utilized and transferred out of the catchment. Analysis of the IQQM modelling used to formulate the Water Resource Plan for the Mary suggests that the total amount of water that would be removed from the Mary catchment by the proposal far exceeds the 150GL/year strategic reserve identified in the WRP.

The impacts of climate change on streamflows have not been taken into account in the water planning used to justify this dam. If a conservative approach is used, such as suggested to the Federal Government by the Marsden and Jacobs report to the Federal Government in November 2006, then it becomes clear that the proposed dam would not provide anything like the yields used to justify the proposal economically. In fact, analysis of recorded stream flows suggests that if a dam with the full stage two storage capacity had been built in 1997, it would have failed by late 2006, and if a stage one dam had been built in 1997, it would have failed in the 2002 drought.

The huge social impacts of inundating such a large amount of Class 1 agricultural land and the thousands of people and businesses that it supports have yet to be to be fully assessed, but will be disastrous in social terms. The proposal will leave three entire townships upstream of the dam wall living lower than the crest height of the dam. A very significant area of prime agricultural and horticultural land will be lost. Most of the proposed inundated area is Class 1 agricultural land, in a favourable climate, currently with access to irrigation and in close proximity to transport and markets. The soils of the valley floor and most of the adjacent slopes are extremely deep and fertile. The massive impact of the land use change over such a large area to a periodically inundated swamp is a significant loss of an extremely valuable resource, particularly in the context of future societal requirements for a viable national agricultural production base under future climate change scenarios.

In addition, the change that this will bring about to the carbon and nitrogen cycling in the ecosystem will potentially have significant greenhouse impacts on a national scale, because of the sheer amount of organic carbon and nitrogen tied up in this massive soil volume and associated surface vegetation. This is a depositional landscape, where soil and associated nutrients in the inflow will be continuously added to a eutrophic, fluctuating anaerobic/aerobic soil/water biomass system. The greenhouse implications of this gross land use change need to be investigated, as specifically outlined under the NACCAP. This work has not been conducted by the State Government.

There is a body of informed opinion suggesting that the geological formation of the land in the area of the dam site will not always be capable of sustaining the stresses of a dam and retained water with the dam full. Should this be the case, a disaster of appalling magnitude could occur, with death, injury and damage on a scale never experienced in Australia.

The above concerns are outlines only. Some others are the lack of proper planning by the State Government, its biased reporting, its decision to ignore several possibly better alternative options, and its decision making apparently based on political factors rather than on scientific ones.

We hope that you will find the proposed dam to be an improper and incorrect idea, poorly conceived and formulated, with unacceptable outcomes, and will reject it.

Yours sincerely,

Brian Hanson