

THE QUEENSLAND GOVERNMENT PROPOSAL TO DAM THE MARY RIVER IS SERIOUSLY FLAWED

It must be abandoned in favour of less destructive, more economical and more reliable water supply options for South East Queensland.

POOR CHOICE OF DAM SITE

The proposed dam would not be located in mountainous terrain with a pristine water catchment and solid rock foundations but rather, mid stream in a river system and on an alluvial flood plain, a most unsuitable location for a dam.

INTER BASIN TRANSFER OF WATER IS COMPARATIVELY HIGH RISK

The proposed damming of the Mary River is to facilitate an inter basin transfer of water; a political decision designed to meet the escalating water demands in South East Queensland. In this case the Mary Basin catchment is the donor and the Moreton Bay catchment is the recipient. Due to the higher environmental, economic and social costs, inter basin transfers should be only considered as the option of last choice.

SCIENTIFIC RISK ANALYSIS OF EXTINCTIONS HAS NOT BEEN CARRIED OUT

The proposal poses a significant risk to the survival of a number of unique species of global scientific importance. The EIS fails to quantify the level of risk posed or the likely effectiveness of the mitigation strategies

END OF SYSTEM IMPACTS HAVE NOT BEEN CONSIDERED

The proponent has failed to demonstrate that the RAMSAR wetlands of the Great Sandy Strait, Hervey Bay and Fraser Island would not be affected by the proposal.

2006-7 SIMULATED PERFORMANCE HIGHLIGHTS MAJOR DRY YEARS PROBLEM

If the dam had operated as planned during the 2006/2007 water year it would have reduced the total flows from the main stream of the Mary to the Great Sandy Strait to less than 25% of the natural state.

UNPROVEN FISH TRANSFER DEVICES ARE PROPOSED

Fishways for the passage of Lungfish constructed on a number of water infrastructures in Queensland have not been proven to be effective and to date, no turtle ramps have ever been constructed. Impractical "catch and carry" methods as proposed in the EIS and research centres are not mitigation strategies.

EMISSIONS & ENERGY COSTS ARE UNDERSTATED

The proposal would result in a huge and unacceptable energy and green house gas cost of treating low quality water and pumping it long distances to its end use. The financial, energy, and greenhouse gas impacts of pumping water from the dam site to Brisbane via the Northern pipeline Interconnector are significant and have not been considered in the EIS.

GHG & OTHER SERIOUS EMISSIONS WILL OCCUR

Recent work done by researchers from Brazil's National Institute for Space Research (INPE) estimate that dams in general are serious emitters of methane gas and that emissions from warm tropical dams are one or more orders of magnitude greater than those elsewhere. Water stored in the proposed dam will suffer high residence times, low oxygen and high nutrient loads. The combination of these factors will result in significant Methane production, poor water quality, and unacceptably high levels of Methyl Mercury which will remain in the food chain.

AQUATIC WEEDS ARE A MAJOR PROBLEM

Aquatic weeds including Water Hyacinth and Salvinia are already a significant problem in the Mary River. These thrive in shallow, nutrient rich dams with reduced downstream flows and have proven to be almost unmanageable in some other rivers. There are major cost impacts in the control of these weeds which have not been accounted for in the operating costs of the proposed dam.

CURRENT ENVIRONMENTAL FLOW REQUIREMENTS ARE NOT BEING MET

The current level of water allocation in the river does not meet the environmental flow requirements of the Mary Basin Water Resource Plan, and in 3 of the 6 years that Sunwater has operated the Mary River scheme irrigators have been unable to access their full allocations from the Mary River.

SALINITY ISSUES ALREADY EXIST

The Mary River is a Priority Catchment in the National Action Plan for Salinity and Water Quality. Measurements of the existing river system during the dry months of the year and without a dam are showing water quality levels outside the EPA recommended guidelines.

PERFORMANCE & OTHER RISKS EXIST

Big dam projects around the world tend to share three things in common. Costs that are greater than estimated, construction times that are longer than estimated, and yields that are lower than estimated. (Source: International Rivers Network) The cost of the proposal is not justifiable for the relatively small amount of unreliable water it may possibly provide.

DROUGHT PERFORMANCE COMPARES POORLY WITH SOMERSET / WIVENHOE

In times of extended drought, the proposed Traveston Crossing dam would be at dead storage level at least 24 months before the primary water supply storages of the Somerset/Wivenhoe system.

CLIMATE CHANGE IMPACTS HAVE NOT BEEN ADEQUATELY ADDRESSED

A predicted change of only 10% decline in rainfall would result in a decline of about 30% in stream flow and a significant and unacceptable reduction in environmental flows. The likely impacts of future climate change are not taken into account in the yield modeling of the proposed dam, or in the assessment of future irreversible environmental impacts.

QWC DRAFT WATER STRATEGY OVERSTATES DROUGHT RESILIENT YIELDS

The QWC Drought Response Plan uses the lowest ever yield year for supply sources to establish a baseline water availability position. It includes a forecast yield for Stage 1 of the proposed dam of 46,000 ML/A. In contrast, in the 2006-7 water year total stream flow at Dagon Pocket just downstream of the proposed dam wall was 26,000 ML.

MAJOR FLOW REDUCTIONS IN DRY YEARS & DRY MONTHS OF ALL YEARS

In drought years, and in the dry months of every year, planned extraction would severely reduce flows throughout the entire Mary River. For example, average flows in August and September would reduce to below 50% of the 110 year average natural state, without even accounting for effects of future climate change.

CLIMATE CHANGE IMPACTS ARE ALREADY EVIDENT

The last decade has seen flows in the Mary River down to about half of what was previously considered normal. This is a similar trend to the trend that has occurred in the Murray River system.

CLAIMED SUSTAINABLE YIELD IS LESS THAN 10% OF BRISBANE'S WATER REQUIREMENTS

The designed yield of the proposed Traveston Crossing Dam Stage 1 can, at best, supply less than 10% of South East Queensland's future water needs.

WORRYING UPSTREAM FLOOD RISKS EXISTS

As planned, the crest of the dam wall would be built to its final 89 metres Australian Height Datum Stage 2 height in Stage 1. Many houses in the dam footprint that will be occupied until Stage 2 is operational (estimated 2035) are below this height and are at risk if a major rain event occurs and unless the flood gates fail-safe mechanisms perform faultlessly.

BETTER ALTERNATIVES ARE AVAILABLE

There are viable alternatives to this proposal which would ensure that South East Queensland would have a truly secure and ecologically sustainable water supply with significantly lower triple bottom line impacts. These have not been adequately considered in the economic analysis in the EIS or in the Queensland Water Commission's draft SEQ Water Strategy.

REMOVAL OF AGRICULTURAL PRODUCTION & IMPACTS ON FUTURE FOOD BOWL

At a time when the supply of prime agricultural land is in decline and when the fuel cost impacts of getting food to markets is rapidly increasing, the proposal would remove from production a large area of strategically located highly productive land close to Brisbane and the Sunshine Coast. This would completely disrupt farming communities and townships of the area and create even more devastating impacts than those already occurring on Mary Valley residents.

PROPONENT HAS IGNORED APPROVAL REQUIREMENTS IN THE PAST

The proponent, effectively the Queensland Government, commissioned in 2005 and currently operates the poorly performing Paradise Dam outside the Federal Government EPBC Act Conditions of Approval.