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SUBMISSION TO THE SENATE STANDING COMMITTEE ON RURAL AND REGIONAL AFFAIRS AND TRANSPORT

INQUIRY INTO WATER SUPPLIES FOR SOUTH EAST QUEENSLAND

INTRODUCTION

The Clarence Valley Conservation Coalition Inc (CVCC)

The CVCC is a Grafton-based community group which has members throughout the Clarence Valley. Since its formation in 1988 it has been actively involved in a wide range of environmental matters in the Clarence Valley and beyond.

Re-opening of calls for submissions

The CVCC is very concerned that Clarence Valley residents, who have a great deal at stake in relation to any proposal to divert flows from the Clarence River to SE Queensland - or anywhere else, were not advised of the new opportunity to make submissions through their local newspaper, *The Daily Examiner*. Indeed, most members of the Clarence community (including CVCC members) only became aware of the opportunity to put their views on the Snowy Mountains Engineering Corporation desk-top study *Integrated water supply options for North East New South Wales and South East Queensland* (hereafter referred to as the *SMEC Report*) to the Senate Committee on 29 May, ten days after the Committee's advertisement in the Lismore-based paper, *The Northern Star*.

The CVCC's response has been governed by the very limited time available for preparation of this submission.

I. THE SMEC REPORT

1. GENERAL COMMENTS

The SMEC Report is a very poorly constructed, rushed, error-filled and woefully inadequate document. It claims justification for presenting a number of diversion options for further investigation despite major omissions which invalidate the authors' conclusions.

It admits to some of its own inadequacies (e.g. in relation to streamflow modelling) due to the short timeframe in which it was prepared. This means it should not be used for decision making.

Although the title of the SMEC Report indicates it seeks to address the issue of future water supply for the NSW North Coast as well as SE Queensland, it merely pays lip service to the needs of northern NSW and is in reality about providing water to fuel further unsustainable growth in SE Queensland.

The CVCC opposes the options presented in the SMEC Report

2. ADEQUACY OF DATA USED

Streamflow Data

Table 3.1.does not provide salient details of the key hydrologic statistics in the study area - the minimum and median (rather than average) flows are directly relevant to this issue. Anyone with a basic level of statistical training knows that averages are largely irrelevant for non-normal data (and stream flow is an example of non-normal data).

The Notion of 15% Diversion

The authors of the Report appeared to have plucked a figure of 15% "regulation" – diversion of flows – as being acceptable. They state: "There is a level of community opinion that the percentage regulation limit in coastal systems should not exceed about 10% to 15%." (p.31) There is no indication which community decided this was acceptable. Was it perhaps a community of engineers working for SMEC?

There is a need for an explanation of how this notion was arrived at.

Climate Change

A major omission in the study is its failure to take into account the likely impact of climate change.

According to the SMEC representative at the Committee hearing in Canberra on 11 May consideration of greenhouse implications was outside the study's terms of reference.

It is astounding that a government instrumentality could commission a study on water supply options - which obviously relate to water availability - without considering the likely impacts of climate change on that water supply. The report refers to historical drought patterns. Making predictions based on the past seems pointless when the climate is changing and the rate of change seems likely to increase- unless that is taken into consideration when interpreting the historical data.

Climatic changes may result in reduced rainfall leading to reduced flows in the rivers SMEC has identified as options.

This is just one of a series of omissions which invalidates the findings of the study.

3. ENVIRONMENTAL ISSUES

According to the Report Foreword the National Water Initiative "requires that such infrastructure investments" (as the options proposed) "be ecologically sustainable and economically viable". The Report has attempted to make a case for economic viability (based on incomplete information which is further discussed below) but makes no case for the ecological sustainability of any of the options. Given the environmental damage that each of these options would do to its river system, there is no possibility that a proponent could realistically claim that any of the options was "ecologically sustainable" – unless of course the

National Water Initiative has an extremely flabby definition of the term "ecologically sustainable".

Moreover, the Report states "all options...can be expected to have significant impact on the environment." (p.1) If that is the case, none of the options are ecologically sustainable and SMEC should not have recommended wasting public money on further investigation of the options.

The Report's conclusion on p.78 that the options offered were subject to scrutiny for environmental impacts is clearly misleading because the Report does not consider potential impacts on national parks or the iconic eastern freshwater cod.

The issues of national parks, the cod and other matters are discussed in more detail below.

Eastern Freshwater Cod

The Report does not consider the iconic Eastern Freshwater Cod (*Maccullochella ikei*) which is likely to be severely affected if either a weir or dam is built on the Mann River.

The Mann River and Nymboida River system upstream of Jackadgery is identified in the National Recovery Plan as the species' only remaining wild breeding population. The species is listed under the EPBC Act as well as NSW legislation. Barriers such as weirs and dams built across watercourses can prevent fish reaching spawning and feeding areas as well as interrupting gene flow and causing fish populations to fragment. This population is already suffering due to the presence of the weir at Nymboida. The identification and protection of key eastern cod habitat in the Mann-Nymboida River sub-catchment area and the long-term viability of the existing wild population are the highest priorities of the National Recovery Plan, which was approved in 2004.

Effect on National Parks/Wilderness Areas

In Table 4.7 of SMEC's report, it is admitted that the Mann River dam proposal is likely to cause inundation of 40 kilometres of Mann and Nymboida Rivers regarded as likely 'wild and scenic'. This would impact on Nymboida National Park, and the declared Bindery-Mann Wilderness. This is unacceptable. There is no mention of the park or wilderness impacts in the report.

Key Threatening Processes

Two NSW Acts recognize damming of rivers (including construction of weirs) as key threatening processes. This obviously has implications for the SMEC proposals.

- a) The NSW Scientific Committee has listed "Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands" as a Key Threatening Process on Schedule 3 of the Threatened Species Conservation Act
- b) Key Threatening Processes listed under Schedule 6 of the NSW Fisheries Management Act 1994 include: Installation and operation of instream structures and other mechanisms that alter natural flow regimes of rivers and streams.

The Notion of "Surplus" Flows

Any proposal to divert water from the Clarence is based on the assumption that there is "spare" water that is available for use wherever some decision-maker decides it might be needed. This is the kind of thinking that produced the degradation of the Snowy and Murray-

Darling Rivers. What has happened to these rivers shows the folly of interfering with natural systems. It is well past the time when we should have learnt this lesson.

The water belongs in the catchment where it flows naturally and where it performs a valuable ecological function

Clarence Estuary

Any reduction of flows, especially in flood time, will affect the natural functioning of the river system which will have a deleterious effect on the flora and fauna. The ecological significance of the Clarence estuary is attested to below in the conclusion of <u>The Clarence Estuary Natural Heritage Study North East NSW</u>, Report by J P Clancy to NSW National Parks and Wildlife Service (unpublished), August 1992.

The Clarence Estuary was found to support populations of a large proportion of Australia's bird species (approx. 1/3), 29 of the state's Endangered (Threatened) Fauna Species, the largest species diversity of wading birds (shorebirds) of any NSW estuary, the second largest population of wading birds in coastal NSW, 22% of the state's breeding population of the Osprey, significant numbers of breeding pairs of the White-bellied Sea-Eagle, Whistling Kite and Brahminy Kite, as well as large breeding colonies of egrets, cormorants, darters and ibis. Important daytime roosts of cormorants and night herons, significant night roosts of ibis, herons and cormorants, and large concentrations of Black Swans and various duck species are also found.

The fourth largest area of mangrove forest in the state (5% of total area) occurs here. Four (now five) of the five mangrove species found in NSW occur, with one species, the Black Mangrove, being at its southern limit of distribution.

The Clarence Estuary also contains the second largest area of seagrass and the eighth largest area of saltmarsh in New South Wales.

The Estuary's significance for fisheries has been identified previously (West et. al. 1985) with the largest permanent fishing fleet on the east coast of Australia based on the Clarence River.

The findings of the Clarence Estuary Natural Heritage Study indicate that the Estuary is one of the most ecologically diverse and productive systems on the east coast of NSW. This is due to the extensive catchment of the Clarence River and the existence of some still undisturbed elements of the estuarine ecosystem. These factors, along with its geographic location within the Macleay/McPhersons overlap contribute to its high productivity. The Macleay/McPhersons Overlap is biogeographical area of northern New South Wales and southern Queensland where two Bio-regions, the Bassian and Torresian, overlap. This overlap results in a very high species diversity of plants and animals as southern and northern floras and faunas mix.

Water Quality Issues

The report admits (p.21) that the catchment of Toonumbar Dam is in close proximity to catchments above Grevillia in the upper Richmond Basin and to Tooloom Creek in the upper Clarence Basin. These dam sites are therefore highly likely to share the same problems as Toonumbar Dam, including frequent blue-green algal blooms.

4. SOCIAL

Community Attitudes

The Report recognizes the importance of community attitudes and seems to realize that community opposition in the Clarence could be a problem if diversion proposals were to go ahead. They are correct in this assumption. There is widespread community opposition to any interference with the Clarence River and its tributaries.

When the SMEC Report was first released both the Prime Minister and his Minister for Water attempted to brush aside the objections of the Clarence community, indicating that we had to consider the national interest and the importance of SE Queensland as an "engine-room of growth". It was suggested that the Clarence opponents were parochial and hooked on the idea of the water in the Clarence "being NSW water". While some people may have felt that it was NSW or Clarence Valley water, many more felt that the issue was the river's health and that the water belonged in the Clarence catchment. The river is very important to the Clarence community and they are determined to protect it.

The ill-advised comments of some politicians on this matter are resented and regarded as arrogant.

The comment made by the SMEC representative in the Committee hearing of 11 May was also ill-advised and showed a lack of understanding of the communities in the Northern Rivers or the Healthy Rivers Commission Report he claims to have read. ("The major comment that seemed to come out of a lot of these reports was that people in certain valleys seemed to believe that the water belonged to them and should not be sent to anyone else. That seemed to be the broad issue there. The people upstream were not interested in the impacts on the people downstream. Similarly the downstream people were not interested in the upstream impacts. So the issues seemed local." – in response to a question on social impacts from Senator Siewert)

Aboriginal Heritage Issues

The Taloom area is of great cultural significance to local Aboriginal people.

The Githabul People's native claim for land in Tooloom Creek and Duck Creek areas has been accepted. This would affect public land in this area.

5. ECONOMICS

Economic Viability

The last conclusion (that the results of the financial analysis demonstrate the viability of the options – p.68) is extremely worrying, as a decision on viability can only be made following full consideration of environmental and social matters – not just economic matters.

Potential alternatives, such as buying out the irrigation licences in Iron Pot Creek and then diverting water from the existing Toonumbar Dam were not costed.

Economic Impacts on Existing Industries

The Report fails to consider the impacts of dams/weirs on important industries such as the Clarence fishing industry and the tourist industry.

II. WATER SUPPLY IN SE QUEENSLAND

1. Development/Population Growth in SE Queensland

South-East Queensland, along with many other urban areas in Australia, faces problems with its water supply because of unsustainable development. Before decision-makers look at how they will solve the current water shortage problem in SE Queensland, they should be looking at growth rates and considering what the ecologically sustainable human carrying capacity of the area is. They should be considering slowing the rate of development and/or putting a cap on development.

2. Addressing Water Shortages in SE Queensland

Solving this problem in water shortage must be looked at in a more holistic fashion than the jumping at the quick-fix big engineering solution which seemed to serve us well in the fifties and sixties and which we now know had severe long-term environmental impacts that were not taken into account at the time. The plight of both the Snowy River and the Murray-Darling Basin should remind us that we cannot rely on supplying human needs by continually pulling more and more water from already stressed rivers. Fixing damaged rivers up later (or trying to fix them) is both extremely expensive and a chancy business.

The CVCC is concerned that politicians often look for the quick fix, the simple solution. This is often the most expensive as well as the most environmentally damaging.

Before even thinking about large engineering works such as long pipelines and dams, decision-makers should be looking at current water supply management and how it can be improved.

- 1) We believe they should be promoting a mix of measures such as:
 - Improving water efficiency using a variety of methods such as education, conducting household/business audits, provision of water-efficient hardware
 - Encouraging the use of rainwater tanks in commercial and industrial as well as residential buildings
 - Recycling wastewater (large-scale schemes and individual household/business operations)
 - Storm-water harvesting

These measures could include the providing of incentives or subsidies to encourage uptake.

- 2) They should be considering how best to use the price mechanism to restrict demand. This could include the adoption of drought pricing in some situations.
- 3) They should be encouraging innovation in water-saving and re-use technologies and assisting in the development and adoption of promising technologies.
- 4) They should be encouraging those industries using large quantities of water (e.g. coal-fired power stations, mining operations) to reduce their consumption. Incentives (including increased charges for water) could be used to encourage the development of new low water use technologies or use of alternative water sources such as recycled water or saline water.

5) Decision-makers could also be considering how much water is "lost" in the bulk supply and reticulation system and minimising these losses.

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