

**Submission
No 82**

INQUIRY INTO ADEQUACY OF WATER STORAGES IN NSW

Organisation: Australian Labor Party - Murwillumbah Branch

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Response to:

- The Standing Committee on State Development
- **Adequacy of water storages in NSW (Inquiry)**

Copy to:

- Thomas George MLA, Member for Lismore
- The Hon Mick Veitch MLC

From:

- Murwillumbah Branch, Australian Labor Party
- Pat Miller, Secretary

Date:

- August 02 2012

The Murwillumbah Branch of the Australian Labor Party is a grass-roots community group that works to improve our community. We participate actively in democratic political process and are keenly aware of our region's environmental heritage value.

This submission should be seen as originating from a group of concerned constituents rather than a party political statement. Members of our branch engage with their local communities. This submission was generated through thorough extensive background knowledge and the active participation of branch members.

Our submission will address the terms of reference individually.

a) the capacity of existing water storages to meet agricultural, urban, industrial and environmental needs

Urban

- Current water storages in the Tweed Shire are adequate. The Clarrie Hall Dam will adequately supply the Tweed Shire until 2035.
- The shortfall in the Tweed Shire was the result of inaccurate information generated by the Tweed Shire Council. In 2011 Geolink found that TSC figures overestimated future water consumption by between 5-15%.

Agricultural

- Current land management practices have resulted in salinisation, erosion and loss of soil fertility; increasing dam water storage will not solve these fundamental problems.
- Local property-specific water storage in this shire means much agriculture is water self-sufficient.

Industrial

- Potable water is used for industrial processes. The supply seems adequate because:
 - industrial infrastructure across the shire is largely stable
 - new infrastructure is governed by council development applications

b) models for determining water requirements for the agricultural, urban, industrial and environmental sectors

- The capacity to define models for determining future water supply requirements is not within our expertise base. However to do make the following points in relation to the data on which the proposal for the Byrrell Creek Dam is based:

- The Tweed Shire Council Demand Management Strategy contains the main justification for augmenting local water supplies.
- This water demand management overestimates future water demand by 5-15% because it assumes a too-large population growth. This assumption is not accurate with the latest population figures showing population growth is actually slowing. (Tweedlink 26/6/2012 No766)
- Tweed Shire Council has taken no proactive steps to reduce water consumption across the shire.

c) storage management practices to optimise water supply to the agricultural, urban, industrial and environmental sectors

“Optimising” water supply” is clearly dependent on what the term means. This has not been defined in the terms of reference or other documents backgrounding this inquiry.

Defining 'optimum water supply' should be the key objective of the committee so there is an empirical standard that will guide the evaluation of submissions to the inquiry. For example. In parts of the Murwillumbah area many properties are completely water self-sufficient and we have defined that 'optimal' water supply is for us. Our urban residents may disagree on what a water-self-sufficient householder may define as optimal.

For example, on the writer's property there are three 25000l tanks (two header tanks, one low tank that pumps up to the headers), a dam and three sink holes. Optimum water supply for this property means water for

- human consumption - potable
- bathing / general washing
- operate sewage system
- agricultural purposes
- fire fighting / emergency use – there is always a full 25000l tank isolated and on stand-by

General principles for storage management practices must include:

- local water collection and storage
- real incentive to install dual reticulation systems in all new developments state-wide
- real incentive for all residents to work towards water self-sufficiency
- recycled water incorporated into the water management strategy

With respect we note that the terms of reference are very biased towards water storage and seem to miss the point that a reduction in demand, better systems of modelling and water conservation awareness programs will largely eliminate the need for dams at all.

d) proposals for the construction and/or augmentation of water storages in NSW with regard to storage efficiency, engineering feasibility, safety, community support and cost benefit,

There are two current proposals in the Tweed Shire:

- Raising Clarrie Hall Dam (recommended by Council engineers)
- Constructing a new dam at Byrill Creek.

Both these proposals are based on what we believe to be a potentially disastrous combination of inaccurate data on which the projected water demand is based, together with a mentality that any dam is a good thing. We will comment further on this later in the submission.

Storage Efficiency

- A dam on Byrrill Creek is unlikely to be efficient due to the underlying porous geology and the fact it is located in the same catchment as the Clarrie Hall Dam
- The Clarrie Hall Dam is already established.

Engineering Feasibility

- A dam on Byrrill Creek is likely to have problems that will require prohibitively costly engineering solutions.
- Both solutions will involve extensive vegetation clearance.
- Both dams will be in the same catchment.

Safety

The proposed Byrrill Creek Dam is an unacceptable risk to the safety of residents downstream on the Tweed River, Uki and Murwillumbah.

Two dams in the same catchment double the risk of dam failure.

Community Support

- Neither option is entirely supported by the community, in fact the community is divided on the issue
- The Byrrill Creek Dam Community Working Group – a consultative committee set up by the council – did not believe the Tweed Shire Council had made genuine attempts to investigate and implement water saving technologies and strategies.

Cost benefit

The proposal to build dams in general is nonsense in terms of cost and benefit, based on a hugely outdated idea that storing enormous quantities of water without any form of demand moderation or management is a valid. The implication is, then, that 'optimal water supply' means 'as much as you want all the time to do whatever you like with'.

Australia has not rethought this yet.

That a dam is being considered implies connections to a huge engineering / construction . public works industry that has not considered that dams are no longer viable because of factors that include but are not limited to:

- initial cost
- environmental degradation and species threat
- necessary land resumption – who benefits and for what greater good?
- concerns around public health
- lack of environmental flows in waterways
- potential catastrophic failure

e) water storages and management practices in other Australian and international jurisdictions

Again this is outside our expertise. However we can comment on documented incidents and current local practice.

- Livestock have access to the Clarrie Hall Dam catchment.
- Farmers on the catchment above Clarrie Hall Dam use pesticide. There does not seem to be any restriction on agricultural chemical run-off.

Dams have unintended consequences and defy logic. The idea of locating water supply in huge dams is obsolete and ineffective. Human scale water storage close to its point of collection and use makes economic and environmental sense.

A cursory examination of the relevant information finds examples of these unintended adverse consequences, such as:

- 1998 Cryptosporidium and Giardia outbreak in Warragamba Dam, Sydney.
- The Brisbane floods inquiry found that operators had not followed procedures for the management of Wivenhoe dam during one of the worst flooding crises ever. Catastrophic dam failure was narrowly avoided.
- In the United States agricultural dams constructed in the twentieth century are being decommissioned to improve river flows, release sediment and restore indigenous fish stocks.

f) any other matter relating to the adequacy of water storages in NSW

Dams create a dependence on centralised infrastructure. With the emerging acceptance by water consumers that payment for water supply is appropriate and necessary, there is a financial factor to consider.

The capacity for financial gain is inherent in all discussions of dams as solutions to long-term water supply. The potential for gain is currently driving decisions that are not in the best interests of the community.

We ask that you reconsider some of the key premises around water storage:

- Is it really water storage or is it demand management that is the issue?
- What constitutes 'optimal' water supply and is it different for, say, a hospital and a cafe, a farmhouse and a townhouse? Are there statements and standards around this?
- The drive to build dams is a relic of last century and implies a monument rather than a resource. Its legitimacy is clouded by a huge industry whose sole aim is construct something that will have unintended adverse consequences.

Finally we urge the committee members to consider decentralised, smaller storage devices cleverly harnessing available local water. These include:

- tanks
- dual reticulation
- storm water harvesting
- water recycling

We commend the Standing Committee for investigating this matter and thank you for your consideration.

Pat Miller

Secretary

Murwillumbah Branch