

**Submission
No 19**

INQUIRY INTO ADEQUACY OF WATER STORAGES IN NSW

Organisation: Griffith City Council

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1st August 2012

Standing Committee on State Development
Inquiry into the adequacy of water storage in NSW
Parliament House
Macquarie St
Sydney, NSW, 2000

Dear Sir/Madam

SUBMISSION TO THE INQUIRY INTO THE ADEQUACY OF WATER STORAGE IN NSW

Attached, please find a submission for the above on behalf of Griffith City Council.

If you have any further questions regarding this submission please contact Councillor Dino Zappacosta, Chairman of the Water Infrastructure Advisory Committee, Griffith City Council on 0418 401 817 or email dzappacosta@griffith.com.au

Yours faithfully

CLR DINO ZAPPACOSTA

per

1st August 2012

Standing Committee on State Development
Inquiry into the adequacy of water storage in NSW
Parliament House
Macquarie St
Sydney, NSW, 2000

Dear Sirs,

Griffith City Council welcomes the opportunity to provide a submission for the Inquiry into the Adequacy of Water Storages in New South Wales (NSW). Council has recently established a Water Infrastructure Advisory Committee which aims to increase awareness and understanding in the economic and social benefits of increasing New South Wales water storage capacity, primarily via the construction of dams. The Committee seeks to advocate to all levels of Government for increased funding into water infrastructure and programmes which are targeted at securing water supplies for the future.

Griffith, a major community within the Murrumbidgee Valley, is situated in one of the State's most vibrant regional economies. This region has the capacity to generate in excess of \$3 Billion annually in agriculturally related output. It possesses a large export sector and mature and developing enterprises in value-added food and wine production, manufacturing, horticulture and general agriculture.

All of this development and growth has been built on the back of visionary pioneers with the foresight to invest in major water infrastructure that provided dams, weirs and channels so that irrigated agriculture could flourish.

Unfortunately, in some sections of the community, dam storages are viewed to have excessive, negative environmental impacts. This view has not been balanced against the various economic and social benefits that can be derived which include:

- Flood mitigation;
- Source of environmental flows in dry times
- Food security;
- Hydropower;
- Recreation and Tourism.

It seems somewhat short-sighted in perspective that we are not encouraging the construction of storages for a non-substitutable and critical natural resource that delivers a host of benefits that ripple across all industries within the State. Some of the key factors we need to accept are;

- Recent floods in QLD, NSW and & VIC have cost Australia's economy and communities severely
- Global food production will be required to increase by 70% by 2050 to satisfy demand and global water usage will increase by 42% over the next 18 years
- Australia has a history of highly variable weather patterns and it is vitally important that we manage abundant water sources when they are available.

If NSW is to be the future food bowl to Asia it cannot be done without irrigated agriculture. This can surely not be achieved without the foresight and funding required to invest in the infrastructure that supports NSW's economy.

The Committee understands an infrastructure fund is to be created with the expected \$6 billion proceeds from the sale of our power generators, approximately 30% of which it has been suggested will be targeted at regional NSW.

We believe this is an opportune time to allocate a portion of these funds to thoroughly investigate and evaluate the benefits of water storage infrastructure development in our State.

The emergence of this Inquiry is seen as a catalyst to drive our vision of further well positioned water storages within NSW which will generate income from the water they capture and cater to the future urban, industrial and agricultural demand for generations to come.

The NSW Government of today needs to target infrastructure dollars in a sustainable and visionary manner looking beyond the initial construction costs. The future income/benefits generated from commercially managed productive water resources will outweigh the expense of building new water storages in NSW.

The overwhelming support from regional communities will offer a strong platform on which the State Government can deliver a legacy that will benefit the people of NSW for generations to come.

The following comments address the relevant Terms of Reference of the Inquiry

a. THE CAPACITY OF EXISTING WATER STORAGES TO MEET AGRICULTURAL, URBAN, INDUSTRIAL & ENVIRONMENTAL NEEDS

Due to the highly variable nature of our climate, the capacity of existing water storages to meet demand is not adequate. This is further intensified by the fact that drier conditions prevail more than wetter conditions in Australia's longer term weather cycles. The capacity of existing storages was proven insufficient during the recent millennium drought (2000 to 2010) leading to:

- Environmental flows throughout the Murray Darling Basin reaching a level that forced the drafting of the Murray Darling Basin Plan (which to date has not contributed to

adding any significant amount of water to the system, but rather remove 1200 (GL) by way of voluntary buy-back).

- Urban centres throughout the Murray Darling Basin being placed on severe water restrictions, with critical town water needing to be topped up forcing seasonal available water prices to sky rocket;

The irrigated agricultural sector was basically stopped in its tracks, with little to no water availability for cereal, rice and fibre production;

- Farmers with permanent plantings (grapes, citrus and stone fruits, etc) were forced to pay excessive prices for water to ensure the survival of their trees and vines. This is not commercially sustainable in the long term.

During the last 35 years, Australia has not built any dams of significance except Wivenhoe in QLD.

The ACT Government has recently invested in increasing its' water storage capacity as they obviously see value in this strategy. Unfortunately, it has come at the expense of availability of water to NSW.

Our forefathers had the vision to drought proof the Basin – we need to continue this.

b. MODELS FOR DETERMINING WATER REQUIREMENTS FOR THE AGRICULTURAL, URBAN, INDUSTRIAL & ENVIRONMENTAL SECTORS

The Integrated Quantity Quality Models (IQQMs) need to be recalibrated to ensure they are as accurate as possible. Minimal updating has been done since the Water Sharing Plans were commenced.

It's is critical to the entire population of NSW (especially regional NSW) that a comprehensive State audit/study is done on the actual true productive water usage needs of NSW under various climatic conditions and recalibrated to account for increased population and economic activity.

c. STORAGE MANAGEMENT PRACTICES TO OPTIMISE WATER SUPPLY TO THE AGRICULTURAL, URBAN, INDUSTRIAL & ENVIRONMENTAL SECTORS

Funding is required to support on route storage construction, combined with management practices that incorporate flexibility and communication between relevant corporations and government departments. This will ensure the left hand knows what the right hand is doing and is critical in ensuring optimal outcomes of such a valuable resource. To have water released into already flooded rivers to meet set rules is not good enough. The recent fiasco where environmental water was released from Eucumbene into a flooded system was not wise water management. Eucumbene was only 28% full at the time.

A combined approach by all stake-holders across regional areas that are dependent on a productive water resource needs to be fostered by Local and State government. This will allow the combined skills and knowledge of stakeholders to address problems when we again come to face the next drought period.

d. PROPOSALS FOR THE CONSTRUCTION AND/OR AUGMENTATION OF WATER STORAGEES IN NSW WITH REGARD TO STORAGE EFFICIENCY, ENGINEERING FEASIBILITY, SAFETY, COMMUNITY SUPPORT AND COST BENEFIT

There is already considerable research and detailed plans completed in the past decades investigating sites for the sighting of new storages. These include:

- Construction of the Gateway Dam on the Murray River
- Lake Mejum storage
- By 1975 some 14 dam sites had been examined on the Murrumbidgee River and its major tributaries, 13 of these were located above Gundagai
- Appropriate sites for dams on the Murray, Clarence, Kiewa and Buffalo Rivers
- Transfer excess flows from Clarence Catchment west to Darling River (The 80m Contour Dam)

- Increased capacity of existing storages

We implore the State Government to carry out a feasibility study for the implementation of these dams and any other related schemes, as well as an audit/review of all historical studies, including the additional storages planned as part of the Snowy Scheme. This review should be made available to the public.

As well as new dams we need on route storages to manage water more efficiently, for example, when Murrumbidgee Irrigation puts in its order for water it which takes 5-6 days to reach farms in the Murrumbidgee Irrigation Area. Following a rain event some farmers will cancel their order as it is no longer needed. If there was adequate on-route storage this excess water could be held over and then sent down the river at a later time. Strategic on-route storages will provide flexibility in the delivery system.

e. WATER STORAGES & MANAGEMENT PRACTICES IN OTHER AUSTRALIAN & INTERNATIONAL JURISDICTIONS

The committee acknowledges significant advances in global technology in regard to dam building and hydro electric power generation. Clean green energy and safe food production is of the highest priority to most forward thinking nations.

During the last 30 years the World Bank has funded over 500 large dams across 92 countries.

Governments around the world have recognised that while their populations have been growing they must increase water storage and the production of power.

The ExternE project by the Paul Scherrer Institute and the University of Stuttgart, which was funded by the European Commission, found that hydroelectricity produces the least amount of greenhouse gases and externality of any energy source, ahead of wind, nuclear and solar.

**f. ANY OTHER MATTER RELATING TO THE ADEQUACY OF WATER STORAGES
IN NSW**

The money that governments spend on drought and flood relief, and later on structural adjustment, could be better used by funding 'high flow storages' and creating greater security for existing irrigation and environmental health.