## INQUIRY INTO ADEQUACY OF WATER STORAGES IN NSW

Organisation: Lachlan Shire Council

**Date received**: 2/08/2012



# Submission to Standing Committee on State Development

Inquiry into the adequacy of water storages in NSW

Lachlan Shire Council is making this submission in response to the 'Inquiry into the adequacy of water storages in NSW'. It particularly addresses point (d) of the Terms of Reference that states, 'That the Standing Committee on State Development inquire into and report on the adequacy of water storages in NSW, and in particular:

(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.

#### **Proposal Summary**

Augmentation of an existing weir located 6 kilometres west of Condobolin on the Lachlan River. The augmentation involves raising the weir crest level by 3 to 4 metres and construction of a flow regulating structure and approved fish way. The capacity of the weir pool is proposed to be similar to that of the existing Jemalong Weir of approximately 6,000 ML.

#### **Proposal**

Council proposes the reconstruction and augmentation of a minor weir located just west of Condobolin on the Lachlan River as shown on the location plan. A photograph showing the existing weir is attached.

In order to define the project Council is negotiating with the NSW Public Works Department to undertake a preliminary investigation to define the type of structure needed, storage capacity, extent of inundation and order of cost.

Council has already received a report indentifying:

- The key legislation likely to be triggered by the proposal, as well as a justification as to why it applies to the proposal
- Government and stakeholder agencies which are recommended to be consulted
- The key environment issues are likely to require further investigation





• The main technical investigations which are likely to be required

Our residents support the proposal and it was identified as a key project in Council's Community Strategic Plan. Council has created a West Weir Committee consisting of Councillors and civic leaders to progress the project.

In a letter dated 29 September 2011 the State Water Lachlan Customer Service Committee stated that it 'supports a feasibility study of the west Condobolin weir proposal'. A copy is attached.

#### **Benefits**

Council is of the view that there would be direct economic and environmental benefits from the proposal, including:

- Provide increased water security for the town of Condobolin which was under severe threat during the recent drought
- Increased water storage
- More refined management of the river for the operators of the river system
- Improved water management practices for irrigators with the availability of water and the faster delivery of ordered water for farmers downstream of the weir
- Because of the location the storage would benefit Nerathong and Goobang creek systems
  helping to alleviate some of the major problems encountered by property owners on those
  creeks during the drought
- Support delivery of economic and tourism benefits to the community
- Improve the fish habitat
- Improve the environment for river species
- Provide increased control of river operation under extreme drought allows pulsed river operation to provide water for essential hum requirements

#### **Policy Alignment**

The project aligns with the policy of:

- NSW Government State Plan increase business investment and support jobs, drive innovation and grow productivity, secure sustainable supplies of water and wise use of water, climate change
- Regional Plan diversify the economic base and training opportunities, rural and regional water supplies and river health priorities





- Commonwealth Water Act 2007 by promoting the use and management of the basin water supplies in a way that optimises economic, social and environmental outcomes, and in assisting farmers in the basin diversify and make the transition to more efficient techniques
- Guide to the MDB Plan which emphasises the importance of sustaining the social fabric of the basin communities during transition
- Centroc Water Security study improved water security

#### **Background**

The Lachlan Valley, located in central western NSW, covers an area of approximately 84,700 square kms. The Lachlan Valley runs from Crookwell and Gunning in the east to Oxley and Ivanhoe in the west. The Lachlan River is approximately 1,450 kilometres long stretching near Yass to the Great Cumbung Swamp, north west of Hay.

The Lachlan River is essentially a closed catchment, with flows rarely reaching past the Great Cumbung Swamp. This is a significant feature of the Lachlan Valley catchment as the urban population and industries, and key environmental assets are reliant on the one water supply.

There are six major water storages in the Lachlan Valley which provide water storage for the Lachlan River System. These storages are;

Wyangala Dam 1,217,000 ML

Carcoar Dam 35,800 ML

Lake Cargelligo Storage 36,000 ML

Lake Brewster Storage 153,400 ML

Lake Brewster Weir 5,600 ML

Jemalong Weir 6,900 ML

Jemalong Weir and Lake Brewster Weir are reregulation structures which allow a small weir pool of water to be stored and a controlled release made to supply water to consumers further downstream.

There are no storage structures between Jemalong and Lake Cargelligo, a distance of approximately 80 kilometres. The Condobolin west weir storage proposal is located halfway between these storages.





#### **Lachlan Irrigation Statistics**

Average annual surface water flow is estimated at 1,212,000 ML (Water Sharing Plan for Lachlan Regulated River 2003). The Water Sharing Plan limits average annual usage to 305,000 ML = 25% of long term average annual surface flow.

Total water usage for both surface water and groundwater is around 450,000 ML per year, depending on water availability and seasonal conditions.

Around 1% of the total catchment area is irrigated and in 2001 irrigated production had a farm gate value of \$270 million, or 21% of the total agricultural production from the catchment. The Lachlan is well known for high quality lucerne hay production, and also grows a diverse range of crops including winter and summer cereals, cotton, canola, grapes, potatoes, citrus, vegetables and other horticultural crops.

#### **Lachlan River Entitlements**

TOTAL	654,987 ML
Conveyance	17,911 ML
General Security Irrigation	580,816 ML
High Security Irrigation	26,685 ML
Stock & Domestic	14,030 ML
Local Water Utilities	15,545 ML

#### **Belubula River Entitlements**

High Security Regulated	1,290 ML
General Security Regulated	22,219 ML
High Security Unregulated	3,125 ML

#### **Groundwater Entitlements**

Upper Lachlan	183,000 ML
Lower Lachlan	108,000 ML

#### **Irrigation Infrastructure**

The majority of the surface water irrigation is by licensed diverters directly from the Lachlan River. The only exception is Jemalong Irrigation District, which diverts water from the Jemalong weir downstream of Forbes. Wyangala Dam, which has a capacity of





1,220 GL, is the major water storage on the Lachlan River and is located at the junction of the Lachlan and Abercrombie rivers approximately 50km upstream of Cowra. Irrigation development occurred more slowly in the Lachlan valley than in most southern valleys within the Murray Darling Basin. Irrigation commenced in the now Jemalong Irrigation area in the 1940s following the construction of the Jemalong Weir in 1936, 30 km south of Forbes. Jemalong Irrigation supplies surface water to 100 farms, with most farms holding an entitlement of 970 ML General Security water entitlements. All surface irrigation diversion infrastructure is privately owned, either by individual private diverters or Jemalong Irrigation Ltd.

#### **Commodities**

There are around 98,000 ha of irrigated agriculture in the Lachlan valley producing a diverse range of crops. The value of irrigated agricultural production for the catchment was around \$270 million pre-drought, which contributed around 20% of the total agricultural production within the region. In the eastern highlands, irrigation is primarily used for horticulture, viticulture, lucerne production and grazing enterprises. In the central part of the catchment, winter cereal and oilseed crops, lucerne, horticulture, and summer crops, such as maize and soybean, are the predominant irrigated enterprises. The lower reaches were dominated by cotton production prior to the drought. More recently there have been increases in the areas of annual and permanent horticultural crops in the Hillston area.

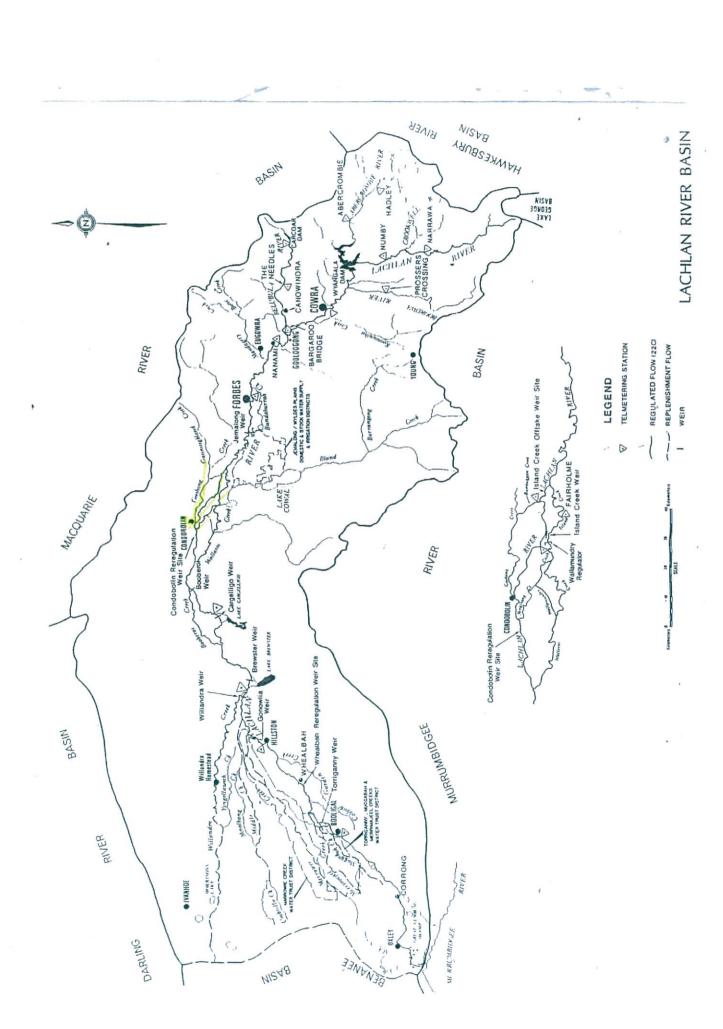
#### Changes to commodities over the past 10 years

The drought has resulted in a substantial reduction in irrigated agricultural production, particularly winter and summer (cotton and maize) broad acre crop production and lucerne production. The total surface water allocation over the past seven years has been 22% with 19% being allocated in 2005-06. A large proportion of this water was suspended due to insufficient river flows to transfer the stored water to the points of diversion. As such the only significant irrigated agricultural production since 2002-03 has been from use of groundwater, which has increased significantly.

#### **Murray Darling Basin Plan**

The plan does not require any existing entitlements to be reduced.







### Lachlan Customer Service Committee

Mr George Cowan General Manager Lachlan Shire Council PO Box 216 CONDOBOLIN NSW 2877 RECEIVED
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REFERRED TO PT3

29 September 2011

Dear George

#### West Condobolin Weir

I'd like to thank you and the Lachlan Shire Council for your recent presentation to the Lachlan Customer Service Committee on a proposal to upgrade the west Condobolin weir.

The Committee understands that this project is at the concept stage and believes that additional investigation of the proposal is required, including scoping of the benefits and costs of the proposed weir, in order to make an informed decision on the project.

The Lachlan Customer Service Committee supports a feasibility study of the west Condobolin weir proposal in order to provide the necessary information.

Yours sincerely

Dennis Moxey Chair Lachlan Customer Service Committee