SOUTHERN RIVERINA IRRIGATORS

Peak body for five landholder associations and 1600 irrigators in the Murray Valley

**PUBLIC SUMISSION**

# Senate Environment, Communications and the Arts Committee

# Water (Crisis Power and Floodwater Diversion) Bill 2010

**7th June 2010**

**Louise Burge**
**Southern Riverina Irrigators**
**PO Box 1254**
**Deniliquin NSW 2710**

**SOUTHERN RIVERINA IRRIGATORS**

---

Southern Riverina Irrigators (SRI) is a representative body of Five Landholder Associations located within the Murray Irrigation Region of Southern NSW.

As a member of NSW Irrigators Council, SRI supports the NSW Irrigator Council submission to the Senate Environment, Communications and the Arts Committee. This submission seeks to add specific information that should be viewed in conjunction with the NSW Irrigator Council's submission.

This submission has three components:

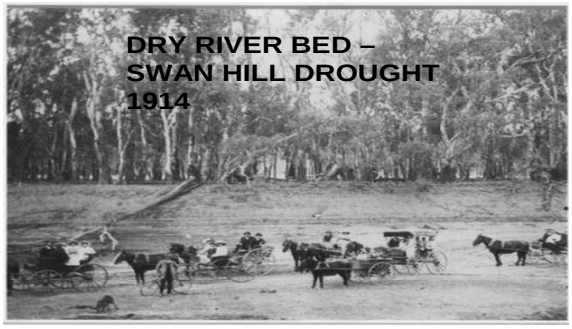
1) Southern Riverina Irrigators - Submission to the Senate Environment Committee, Communications and the Arts (Submission)
2) Southern Riverina Irrigators – Advice to the Murray Darling Basin Authority: Lower Lakes/Coorong Indicator Site (Attachment A)
3) NSW Irrigators Council – Submission to the Senate Environment Committee, Communications and the Arts (Attachment B)

**Souther Riverina Irrigators strongly reject the Water (Crisis Power and Floodwater Diversion) Bill 2010 – in its entirety and encourages politicians of all persuasion, to approach the environmental needs of the Murray Darling Basin, with sound science**

---

**Historic considerations**

Australia landscapes have historically experienced wet and dry cycles. These cycles can be short term or long term.




The Murray Darling Basin has been subject to a ten year extensive drought in this decade, of similar magnitude, to the Federation Drought of 1895-1903 and the extensive drought in the period, mid 1930's – mid 1940's.

The current drought therefore must be put into historical perspective. When the explorer Sturt 1st set eyes on the Murray in 1820 – it was a series of salty pools. Early explorers were unable to locate the end of the Murray because of shifting sand dunes.

Between 1885 – 1960, the Darling River stopped flowing at Menindee 48 times.
In the Federation drought of 1902 -03 the Darling stopped flowing for 364 days.

There is ample photographic and literature evidence that historic drought events in the Murray Darling Basin are a normal and regular feature, of Australian weather cycles.

It has been argued that the Murray Darling Basin and in particular the health of the Murray River, should be determined at the bottom of the system, notably the Murray Mouth, Lower Lakes and Coorong. This however, ignores the complexities of determining, environmental river health, for the whole 2225 km of the Murray River Channel and/or the Darling River systems, by measuring at only one point.

Government policies that support this approach, would be based on inadequate evaluation of the science and a complete disregard for South Australian Government policies, that have fundamentally re-shaped the natural ecosystem of the Lower Murray, Lower Lakes and the Coorong.

**In particular:**

- **The impact of 125 years of South East of South Australia drainage and land reclamation schemes, that redirected freshwater flows away from the Coorong, directly out to sea**
- **The ecological impact of building 5 concrete barrages within the natural tidal estuarine system of the Lower Lakes immediately adjacent to the Southern Ocean. This reduced the natural tidal prism by 90% and converted the Lakes to permanent freshwater water bodies, maintained at flood height for most years. On environmental grounds today, building these barrages would not be permitted.**

- **South Australian Government policies, that drained wetland and swamps of the Lower reaches of the Murray River, prior to waters entering Lake Alexandrina.**

This current and extensive drought has bought many hardships to the Murray Darling Basin environments, communities and industries.

In January 2010, 81% of NSW was still in the grip of this current major drought.

In prolonged drought, South Australia will, like many other regions in the Basin, have to rationalize decisions, on how it allocates its own water use, during these difficult times.

It is not feasible or realistic to expect that during one of Australia's most dire drought events, that the Lower Lakes can be maintained at 'flood height' or at high water levels.

The Darling system has been subject to an extensive 10 year drought. The flood event of 2010 saw large volumes of water moving down the Darling towards Menindee. The severity of the drought however, meant that rainfall inflows of 6700GL in the Northern Rivers, were soaked up in the extremely dry landscapes. Approximately 2100GL reached Menindee with 1500GL being extracted North of Bourke. The expectation that large volumes would reach the Lower Lakes ignored the extent of the drought in NSW and the behavior of flood flows, revitalizing parched landscapes.

Water that was subsequently stored in the Menindee Lakes, will continue to benefit all States, including benefits to South Australia, in 2010 and 2011.

If a subsequent flood event in the Darling System occurred, flood behavior would respond differently as they moved over a 'wetted up' landscape.

Prolonged drought in the Murray System were equally severe with storage inflows at historic lows. Many creeks and river systems dried up completely or were reduced to stagnant pools. The environmental impact of this drought was extensive and harsh in the Murray system. The cause was not due to 'over allocation' or poor water management. The drought proved beyond, reasonable water storage plans and physical capacities. Many communities across the basin were either without water supplies or subject to critical shortages. It is incorrect to presume that 'upstream states' were 'sucking the system dry'.

**Water Planning – Non Drought Periods**

Progressive Government policies, including the National Water Initiative (NWI), sought to reform Australia's water policies. Underlying that reform was an expectation that water trade could effectively resolve Australia's long term water needs and with reforms, there was an ability, to 'drought proof the nation'. A view also prevailed that water should move to 'high value crops'.

In conjunction with policies that led to the separation of land and water, the imaginary concept of 'high value crops' led to a concentration of permanent plantings, which further changed the notion of water security and availability. A foundation principle of the NWI was to encourage the more 'efficient' and 'better use' of water, in effect, to encourage water use via trade, from low value crops to high value crops. However this concept of a 'high value' crop is flawed. Australia's agricultural robustness, stems primarily, from its diversity and lack of reliance on one enterprise. Domestic and International Markets, World trade issues, Climatic events and Government policies, can all combine to ensure that a 'high value crop one day, will be a low value crop another'.[1]

In essence, Australia may well be more suited to a balance of both permanent and non permanent plantings and the mix may better reflect water supplies currently and into the future. This system is more in line with Australia's natural climate variances and recognizes the physical constraints of natural water delivery systems. (eg Barmah Choke) NWI policies that promoted separation of water entitlements from land, has led to the activation of water entitlements across all States. Prior to the separation of land & water, many entitlements or licenses, were termed 'inactive' or 'sleepers or dozers'. Increased activation of entitlements has placed increased demands on the river and supply systems.

As a result, expectations of previous **excess** historical flows may have to be modified to meet changed demands. This is particularly relevant in relation to 'pre drought' and pre 'activation of all licenses', water flows into South Australia, where excess water in the system has meant that South Australia's state share of the Murray Darling Basin resource of 1850GL, was regularly exceeded during average rainfall pattern periods.

[1] High & Dry

These additional flows above SA entitlement of 1850GL, have in effect, created the expectations that the Lower Lakes in SA, can be maintained at flood height, even in severe drought.

The Murray Darling Basin Plan is set to further reform water use in the Murray Darling Basin. It is worth noting that in assessing the needs of the environment at this point, existing water sharing plans developed under the NWI, have not been fully tested due to this current severe drought.

This is a disturbing aspect of new changes proposed under the Murray Darling Basin Plan. Environmental benefits achieved through 'Buy Back', or obtained as part of developing Water Sharing Plans (WSPs) have not had an opportunity to be measured for success, due to drought conditions. In spite of this unknown aspect, further claims for the environment are being obtained through the setting of new sustainable diversion limits.

---

**Conclusion:**

**The Water (Crisis Powers and Floodwater Diversion) Bill 2010**, is a premature and inappropriate action to address the specific needs of the South Australia Lower Lake system prior to the Basin Plan. The basis of this bill is unfounded and is intended to obtain a greater share of water resources of the Murray Darling Basin, regardless of drought conditions existing across the Murray Darling Basin.

The explanatory memorandum demonstrates a lack of understanding of the system and the drought conditions that have prevailed over much of Eastern Australia. The basis of this bill is to use trigger levels in South Australian Lower Lakes, to transfer power to the Murray Darling Basin Authority.

This Bill is designed to provide an advantage to one State and would create environmental, economic and social hardship without foundation, to other communities in the Basin. The entire Lower Lakes, Coorong and Murray Mouth region has been substantially modified from its previous estuarine historical conditions and a common sense approach to addressing the environmental needs of this region, should be developed.

**Southern Riverina Irrigators draws attention to Attachment (A). This document provides Advice to the Murray Darling Basin Authority in relation to the indicator site Lower Lakes/Coorong.**

---

## REFERENCES

**High & Dry – How free trade in water will cripple Australian Agriculture, Byrne, Eagle, O'Brien, McDonald (1)**

**Murray Darling Basin Commission**

**NSW Office of Water**