

INQUIRY INTO WATER AUGMENTATION

Organisation: NSW Irrigators' Council

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Submission

Inquiry into the Augmentation of Water Supply for Rural and Regional NSW

18 August 2016

Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 water access licence holders across NSW. These licence holders access regulated, unregulated and groundwater systems. Our Members include valley water user associations, food and fibre producers, irrigation corporations and commodity groups from the rice, cotton, dairy and horticultural industries.

This submission represents the views of NSWIC with respect to the NSW Legislative Council Special Purpose Standing Committee No 5 *Inquiry into the Augmentation of Water Supply for Rural and Regional NSW*. However, each NSWIC Member reserves its right to independent policy on issues that directly relate to their areas of operation, expertise, or any other issues that they may deem relevant.

SUBMISSION OVERVIEW

NSWIC does not seek to provide responses to the Inquiry Terms of Reference where these lie outside the scope of existing Council policies – including:

- TOR d) on the flood history of NSW.
- TOR e) the investigation of flood mitigation technologies and the diversion of floodwaters for augmentation of NSW stored water.

SPECIFIC RESPONSES TO THE INQUIRY TERMS OF REFERENCE

TOR a) The requirement for a water equation on supply and demand out to the middle of the century for rural and regional NSW

NSWIC supports the continuation of the water supply planning functions of WaterNSW and DPI Water as the appropriate Government agencies in determining the long term water needs of rural and regional NSW.

TOR b) The suitability of existing NSW water storages, and any future schemes for water supply augmentation in NSW, including the potential for aquifer recharge.

NSWIC provided an overview of the potential for augmentation of existing water storages in NSW in its letter of Submission to the Federal Agriculture Minister, Barnaby Joyce, regarding projects for further consideration by the Federal Government's Dams Taskforce - in June 2014 (*refer Appendix 1*). The Council tenders that Submission letter for the reference of the Inquiry - noting a number of matters contained in that Submission letter that have subsequently been amended to reflect further investigation of storage options:

Water Supply Augmentation Projects

- NSWIC remains supportive in principle of the Government's ongoing investigation of the Kranky Rock Dam on the Belubula River in the Lachlan Catchment because the reliability of water supply to irrigators in the Lachlan Valley was very seriously impacted during the Millennium drought. However, NSWIC would not support the building of the dam unless it was supported by Lachlan Valley Water and a rigorous cost-benefit analysis showed it could significantly improve future water supply reliability for irrigators at acceptable additional cost, and without negative impacts on downstream irrigators.
- NSWIC notes that a new storage on the Mole River in the Border Rivers region has been nominated by Infrastructure NSW as a potential new dam project for investigation. NSWIC also supports the investigation of the proposed Mole River Dam but favours the Border Rivers Food & Fibre position that other potential dam sites in the region should also be assessed for greatest suitability. Once again NSWIC would only support a new dam in the Border Rivers on the proviso that a cost-benefit analysis was supported by Border Rivers Food & Fibre as beneficial to irrigators at acceptable additional cost, and without negative 3rd party impacts.
- As a general principle NSWIC supports the investigation of augmentation of the capacity of existing dams as a more cost effective measure where this proves viable - including the potential augmentation of Burrendong Dam on the Macquarie River. However, as a change in the rules around flood mitigation airspace levels impacting on the storage capacity of Burrendong may allow more water to be stored for productive future use instead, this may reduce the need for upgraded dam infrastructure for that dam.
- NSWIC supports the investigation of the potential for the surcharging of the Menindee Lakes storages to capture greater volumes of water when the Darling River is in flood - as a means of achieving greater offsets against the NSW share of water recovery targets and end-of-system volume commitments under the Murray Darling Basin Plan.
- NSWIC does not support the further investigation of the proposed Lake Coolah storage on the Murrumbidgee system - as the costs, including water pumping costs, high evaporative losses, and negative impacts on water supply reliability on downstream irrigators in the Lowbidgee, negate the value of this proposed mid-river storage.
- Regarding coastal valley storages in NSW, NSWIC brings to the Committee's attention that current costs of providing stored water from the Toonumbar Dam on the Richmond - Wilson river system on the North Coast and the Brogo Dam on the Brogo River near Bega on the South Coast are already considered unsustainable and in need of urgent review. Irrigators in the Hunter may also be impacted by higher costs of maintaining storages once the coal fired power stations that currently hold 30% of the Hunter River water entitlements are shut. NSWIC has called on the NSW Government to urgently review the cost of irrigation water in coastal districts and in the interim to request IPART to freeze further regulated price rises for Coastal Valleys until a thorough assessment of the current cost basis and future cost

mitigation options is undertaken. The maintenance of existing cost sharing support from the NSW Government in providing financial contributions on behalf of the broader community to offset the cost of productive water for coastal irrigators and to spread operational costs of these storages across all beneficiaries is absolutely essential and the announcement of this by the Government is paramount.

Aquifer Recharge

In regard to exploration of aquifer recharge as a potential storage option for NSW, this would require individual feasibility studies, and technical and cost - benefit analysis on an aquifer-by-aquifer basis - particularly in light of sharp increases in energy costs that would impact pumping costs to bring recharged water back into productive use.

NSWIC notes the significant concerns within the irrigation sector over the potential impacts on aquifer water quality of proposals currently under consideration by the NSW Government to licence the reinjection of produced water by mining companies and credit reinjected volumes to the company's water licences. NSWIC urges extreme caution in consideration of aquifer recharge or reinjection where there is limited knowledge of the hydrology of aquifers and potential for aquifer spoilage or interference.

TOR c) Review the NSW Government's response to the recommendations of the June 2013 report by the Standing Committee on State Development on the adequacy of water storages in NSW.

NSWIC welcomes the Inquiry review of the NSW Government's responses to the recommendations of the 2013 Report into the Adequacy of Water Storages in NSW.

TOR f) Examine social, economic and environmental aspects of water management practices in NSW and international jurisdictions, including:

- ***Broken Hill town water supply / Menindee Lakes system***
- ***South Western NSW water management practices***
- ***North Western NSW water management practices***

Broken Hill Water Supply / Menindee Lakes System

In regard to the Broken Hill town water supply / Menindee Lakes system, NSWIC has welcomed the NSW Government's announcement of a pipeline from the Murray to Broken Hill that removes the absolute reliance of Broken Hill on surface water storage in the Menindee Lakes to supply its urban and industrial water needs. Nevertheless, NSWIC would urge the NSW Government to explore an alternative pipeline route option that could draw water from the Murray weir pool in the Darling at Ellerslie (30kms north of Wentworth); then through a pipeline following the Darling River north on its eastern bank to provide water to the Lower Darling townships of Pooncarie and Menindee, as well as stock and domestic water to Lower Darling landholders at times of low or no flow in the Lower Darling, as recently experienced. This alternative route would utilise a refurbished Menindee

– Broken Hill pipeline and provide a short term water security back-up with water from the Menindee Lakes when pipeline pumps or other pipeline infrastructure require maintenance.

Whichever pipeline route the Government settles on, NSWIC remains strongly in favour of the initiative to take Broken Hill off a sole reliance on water from the Menindee Lakes. Annual evaporation losses from the Menindee Lakes are on average 460GL or the equivalent of 2.5 metres of stored water per year. NSWIC has strongly supported an alternative water supply system for Broken Hill to significantly reduce the evaporative losses from the 320GL of surface water required to be maintained in the Menindee Lakes to underwrite 17GL of forward water supply for the city. These heavy loss levels to underwrite such a modest urban water supply volume to Broken Hill over a 22-month forward demand period are profligate.

NSWIC also supports planned management changes to the Menindee Lakes storages that will move water through the system more rapidly to avoid such high evaporative losses and provide a significant supply offset against the NSW water recovery target under the Murray Darling Basin Plan - noting that under the Plan's environmental water recovery in the Northern Basin, up to 150GL per year of additional water volume is likely to flow into the Menindee Lakes on average. This means, despite the concerns of the community in Menindee and Broken Hill that the Lakes are being decommissioned, there will in fact be more water in the Menindee system on an average annual basis – continuing to support community amenity, the environment, and tourism in Western NSW.

With environmental water recovery offsets from evaporative savings of an estimated minimum of 180GL to be credited against the NSW targets under the Basin Plan, the alternative management of the Menindee Lakes will provide widespread economic and social benefits to southern NSW by reducing the requirement for the Commonwealth to recover additional water from productive agriculture or call on water as often from Murrumbidgee and Murray storages to meet end-of-system requirements in South Australia.

Water Management Practices in Western NSW

In regard to water management practices in South Western and North Western NSW, NSWIC submits that the Water Sharing Plans for the Barwon Darling, Lower Darling and Murray river systems have worked well in establishing a sustainable management framework for sharing of water resources between users and the environment in Western NSW.

While NSWIC has been critical of recent delays by DPI Water in initiating its scheduled review of Water Sharing Plans across Inland NSW, these reviews are now underway and will provide an opportunity for amendment of the Plans to better deal with anomalies that have become evident over the first 14 years of their operation.

NSWIC does not believe that beyond the amendment of the current Water Sharing Plans to avoid negative impacts on water supply and supply reliability to irrigators, any further review of water management practices in Western NSW is warranted.

NSWIC has also welcomed the recent announcement of the Minister for Primary Industries, Lands and Water, Niall Blair, that the Government will undertake a review of the management of

Translucent Flows for the environment in the Murrumbidgee, but has urged the Government to extend this review to both Translucent and Transparent Flows for the environment in the Lachlan and Murrumbidgee, and Dilution Flows in the Murray. While NSWIC does not seek to reduce the volumes of water released to the environment under Translucent and Transparent Flow events under existing Water Sharing Plan rules per se, the recent release of a Translucent Flow in the Murrumbidgee and a similar event in the Lachlan last year – at times of low storage levels in Burrinjuck and Wyangala dams - requires review of the flow trigger levels and their resetting at higher thresholds. In regard to Dilution Flows from the Hume Dam to help manage salinity or other water quality issues downstream in the Murray, NSWIC believes the much higher baseline flows now in the Southern Connected Basin due to the deployment of large volumes of recovered water for the environment recovered by the Commonwealth and Basin States means the release of dilution flows into the Murray is less necessary and Dilution Flow reserves in the Murray could instead be used as a water recovery offset under the Basin Plan.

TOR g) The efficiency and sustainability of environmental water being managed by different State and Federal Government departments and agencies.

NSWIC's views on the management of environmental water by State and Federal departments and agencies are covered under the Council's Submission to the Senate Select Committee Inquiry into the Murray Darling Basin Plan (*refer Appendix 2*) and the NSWIC Policy Platform on the Murray Darling Basin Plan (*refer Appendix 3*).

However, for the benefit of the Inquiry NSWIC restates this fundamental principle regarding environmental watering – *that environmental water must be managed as efficiently and targeted as effectively as possible to optimise environmental outcomes from the deployment of that water. The irrigation sector believes that environmental watering agencies must apply the same imperative to manage environmental water efficiently and at minimum cost – in line with the expectation that irrigators will be efficient managers of water.*

TOR h) The management, appropriateness, efficiency and reporting of:

- ***inter-valley transfers***
- ***conveyance and loss water***
- ***carryover***
- ***The managing and reporting of the water market***

Inter Valley Transfers

NSWIC supports the current system for Inter Valley Transfers as part of an open water market in which inter valley trade can occur to the extent that traded water can be supplied or credited between valleys. To the extent that there could be significant imbalances in valley water accounts if there was uncapped trade between connected valleys, NSWIC supports those caps. NSWIC supports the initiative announced in 2015 by DPI Water to improve the timeliness of its reporting of

inter valley transfers against the valley by valley caps – to aid in timely decision making by water access licence holders on trade or transfers between valleys.

Conveyance and Loss Water

NSWIC is comfortable with the system for calculating conveyance and loss water in the river systems and has not had cause to request a change in current methodology. However, NSWIC supports the adoption of new scientific assessment methodology on the river conveyance allowances and estimations of water losses in transmission of water, as and when changes are proven necessary through new data.

Carryover

NSWIC strongly favours the continuation of the present carryover system as a significant management tool available to irrigators to mitigate the impact of drought and low allocation seasons, and to allow greater certainty about the volumes of water an irrigator might reasonably expect to have available for productive use in each water year.

NSWIC is aware of calls for the harmonisation of carryover caps between the Murray and Murrumbidgee, but supports the setting of valley transfer caps that reflect the size of the total available resource in each valley and the balance between each – rather than an arbitrary cap across all.

The Management and Reporting of the Water Market

NSWIC responds to this issue with the background of a plethora of Government agencies conducting data gathering or investigations into the water market in Australia - including the Bureau of Metrology, National Water Commission, the Murray Darling Basin Authority, ABARES, Productivity Commission and Australian Competition & Consumer Commission. Government agencies have clamoured to play a role in market development, reporting and regulation with a propensity of Government to seek to regulate the market or to coordinate data collection and information for the water market – without need or justification.

NSWIC believes that the water market is well developed and continuing to mature very rapidly. There are numerous options for water access licence holders to access water broking services at reasonable cost, and numerous sources of water market information. In short, the water market is working well and does not need heavy handed intervention by Government, including the regulation of water brokers who are currently working under a self-regulation system. NSWIC continues to favour the approach that Government should not interfere in the natural development of the Australian water market unless there is market failure – clearly not the case at the moment.

NSWIC does not favour heavy regulation of the water market because the cost of regulation ultimately is borne by irrigators via water broking charges and the passing on of Government administrative cost burden, and the over-regulation of brokers will tend to make small transactions more expensive – potentially disadvantaging smaller water brokers who provide a valuable additional choice of broker to water traders in the market.

NSWIC is not convinced that, despite recent accusations from some quarters within the irrigation sector that Government needs to regulate the water market to prevent price speculation and market manipulation, there is sufficient evidence yet provided to prove such allegations. NSWIC maintains its view that there must be clear evidence of market manipulation to justify heavier regulation of the Australian water market.

APPENDICES

The following Appendices are provided in support and further explanation of the background for the positions stated by NSWIC in this submission:

Appendix 1: Letter of Submission to Federal Minister for Agriculture, Barnaby Joyce, Regarding Potential Projects for Consideration by the Dams Task Force, June 2014.

Appendix 2: Submission to the Senate Select Committee Inquiry into the Murray Darling Basin Plan, September 2015.

Appendix 3: NSWIC Policy Positions on the Murray Darling Basin Plan and Associated Matters, August 2016