

Submission

Performance Audit of Commonwealth Environmental Watering Activities

120913

Stefanie Schulte
Economic Policy Analyst

INTRODUCTION

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

This submission represents the views of the Members of NSWIC with respect to the Performance Audit of *Commonwealth Environmental Watering Activities*. However each Member reserves the right to independent policy on issues that directly relate to their areas of operation, or expertise, or any other issues that they may deem relevant.

CONTENTS

Introduction.....	2
General Comments.....	3
Specific Comments.....	5
Current Frameworks.....	5
Current Operation.....	11
Information & Stakeholder Engagement.....	12
Improvements.....	13
Environmental Use Strategy.....	13
Risk Mitigation Strategy.....	13
Financial Management Plan.....	13
Market Dominance.....	14
Additional Comments.....	14
Appendix:.....	15

GENERAL COMMENTS

NSW Irrigators' Council (NSWIC) appreciates the opportunity to make a submission to the Australian National Audit Office (ANAO) on the *Performance Audit of the Commonwealth Environmental Watering Activities*. Given NSWIC's ongoing engagements with the Commonwealth Environmental Water Holder (CEWH) and our observation of its activities, we welcome this opportunities to outline some of our concerns with the current operational framework and provide recommendations for a progressive improvement in the Commonwealth environmental watering activities.

While NSWIC acknowledges that the CEWH is only one of several environmental water holders and managers across the Murray Darling Basin (MDB), its importance and market dominance should not be ignored - especially in light of \$1.8 billion worth of environmental water assets currently held with significant further volumes still to be acquired. The held environmental entitlements have placed the CEWH in a dominant market position and have created risks and potential costs for other water entitlement holders. Furthermore, the complexity of the CEWH's portfolio - with entitlement holdings across 23 water sources, each with different legislative restrictions and obligations - should also be seen as a further constraint for the efficient operations of the CEWH.

NSWIC understand that the primary objective of this audit is to assess the effectiveness of the CEWH in administering and managing the Commonwealth held environmental water entitlements, however we would like to emphasize that the magnitude of the entitlement holdings have severely constrained the activities of the CEWH and have therefore created explicit management problems.

Given the magnitude of the environmental water holdings to date, NSWIC would like to raise the following concerns;

- The lack of an explicit and clearly defined use strategy for the current environmental water holdings that are able to achieve the objectives of;

*"protecting or restoring the environmental assets of the Basin, so as to give effect to relevant international agreements"*¹.

- The deficiencies in creating an appropriate risk mitigation framework that addresses third party impacts on other water entitlement holders and landholders who may be subject to flooding from mismanaged water.
- The absence of a financial management plan that assesses the financial obligations imposed on the CEWH and strategies to optimally address these issues.
- The market dominance of the CEWH and the potential impact on prices and allocation announcements, together with insufficient detail on how insider trading risk will be avoided.

As the 2012/13 priorities² indicate, there is a lack of direction and clarity in the targets and objectives of the CEWH. A point raised during the CEWH Advisory Panel meeting indicated this clearly;

*"The CEWH will continue to align the planning and management of Commonwealth environmental water with the environmental watering plan, having regard to Basin-wide annual priorities and to local community and catchment identified needs."*³

¹ Water Act 2007

² Presentation from CEWH staff to the CEWH Advisory Panel (16.08.2012)

³ Ibid.

As the Environmental Watering Plans (EWP) have not yet been finalised and the annual priorities have not been clearly articulated, there remains considerable uncertainties over the direction of the CEWH.

As for the frameworks proposed by the CEWH, NSWIC continues to hold the opinion that they remain incomplete and subject to change due to potential amendments in relevant domestic legislation (i.e. Amended Proposed Basin Plan). This ambiguity will continue to exist until such time that all legislative arrangements for the CEWH have been finalised. However while those operational constraints remain in flux, NSWIC considers it difficult to fully comment on the accuracy, effectiveness and efficiency of the administrative and management activities of the CEWH.

Additionally, it remains a considerable disappointment that the CEWH's management activities and operational procedures are solely focused on environmental outcomes without adequate consideration on the impact on other water entitlement holders and landowners. The market position of the CEWH should necessitate a thorough analysis of the impact on third parties and should obligate the CEWH to put in place appropriate risk mitigation strategies.

Overall, NSWIC would like to reiterate that the legislative framework that constrains and guides the activities of the CEWH must be finalised and implemented before operational procedures for the CEWH can be drafted. The current reversed process is unlikely to assist in the operational activities of the CEWH's portfolio and will not lead to an efficient and effective management of the Commonwealth environmental water portfolio.

SPECIFIC COMMENTS

CURRENT FRAMEWORKS

NSWIC has reviewed the operational frameworks proposed by the CEWH and provides the following comments to the individual documents;

A Framework for determining Commonwealth Environmental Water Use

One of the deficiencies of the framework is the absence of clearly defined environmental targets that need to be achieved through the use of the Commonwealth environmental water holdings. NSWIC points to two particular section in this document to highlight this point;

"Water is used for the diversity of ecological outcomes throughout the Basin."⁴

And furthermore;

"The aim of this approach is to add a significant amount of water to the environment over and above what is currently available and with the same security of property right as consumptive users."⁵

These statements confirm that there is yet insufficient consensus on how the environmental water holdings are intended to be used and what outcomes are to be achieved.

Two further comments should be noted to the above quoted paragraphs;

The Commonwealth environmental water use framework provides insufficient analysis of the impact the CEWH's activities will have on other water entitlement holders. As NSWIC has highlighted previously, the large scale water holdings and the market dominance of the CEWH will have the potential to significantly impact other water licence holders through price distortions and potential late allocation announcements.

The Commonwealth environmental water use framework also does not provide any detail on how the CEWH intends to manage its financial obligations with respect to its environmental water holdings. As it is stated in the above quote, the environmental water holdings will have the same security of property rights as other water access licence holders; however this will also mean that the CEWH will be under the same obligations to pay charges for the use and storage of its water allocations. An optimal environmental water use strategy should incorporate clearly defined environmental targets, an adequate risk management strategy and a prudent financial management plan that assesses the costs of using the environmental water allocations for the purpose of the environmental objectives.

⁴ Framework for determining Commonwealth Environmental Water Use (p.7)

⁵ Ibid. (p.3)

The framework continues further;

*"In this way, the Commonwealth is treated no better or worse than any other entitlement holder."*⁶

NSWIC cannot concur with such an assessment, especially since the magnitude of Commonwealth water holding places the CEWH in a clearly dominant market position. Hence any actions taken by the CEWH will impact other water access licence holders through water market price or allocations announcements. NSWIC considers it important that the CEWH acknowledges this fact and incorporates an appropriate risk mitigation strategy into its framework that addresses any potential third party impacts.

An example of the adverse impact the CEWH might have on other water access licence holders is carry over decisions by the CEWH which have raised great concern for Members of NSWIC. The potential large scale carry-overs of the CEWH could impact other consumptive water users through delays in their allocations announcements, which would be detrimental for some agricultural industries.

Furthermore, the framework claims that;

*" a healthy working Basin supports the people and communities who live there."*⁷

Basin communities depend first and foremost on the availability of productive water for food and fibre production. It should not be ignored that the large scale transfer of productive water towards environmental use has already impacted on irrigators and communities in the Basin on multiple levels. The decrease in productive water available and the potential delay in water allocation announcements are only two of many additional constraints imposed on food and fibre producers in the Basin. Additionally, in times of low water availability the large scale transfer of productive water to the environment will put severe capacity constraints on industry to sustain viable and productive food and fibre production in the Murray Darling Basin.

Additionally, the framework indicates that,

*"Commonwealth environmental water must be managed in accordance with the Environmental Watering Plan. The Environmental Water Plan is expected to be implemented from 2012."*⁸

As the environmental watering plans are not yet available, this environmental water use framework can only be regarded as preliminary and hence subject to change. This leaves considerable ambiguity over the effectiveness and efficiency of the current environmental use strategy given that the operational constraints are not yet defined.

NSWIC would also like to highlight the following;

*"...the dependent flora and fauna have adapted to, and are often dependent on, the highly variable flows which result from the region's variable and unpredictable climate."*⁹

As such, NSWIC considers it difficult to determine whether the current use of environmental water allocations complementary to natural events, optimally benefit the environmental assets in the Basin. Without clearly defined targets and quantifiable outcomes, the current environmental water use strategy could potentially contradict the environmental objectives of the *Water Act*.

⁶ Framework for determining Commonwealth Environmental Water Use (p.3)

⁷ Ibid p.3

⁸ Ibid. p.4

⁹ Ibid. p.6

In this context, NSWIC would like to point out a specific section of the framework - the use of environmental water in wet and very wet conditions. It appears that there is little direction given for the use of environmental water in wet and very wet conditions - i.e. comments in the framework indicate that the objectives in the wet and very wet scenarios do not differ substantially. Given the current water conditions in the Basin, NSWIC would like to raise its concern whether the current environmental water holdings have been optimally used to achieved the desired (while yet undefined) environmental outcomes. Furthermore, questions remain over how the environmental benefits can be distinguished between environmental water use and natural flow events. As appropriate scientific methods that would allow for an identification of environmental benefits and or ranking of ecological priorities are still lacking, doubts on this matter will remain.

Conclusively, the environmental water use strategy is incomplete and requires further work in the opinion of NSWIC.

Monitoring, Evaluation, Reporting and Improvement (MERI) Framework

The updated Commonwealth Environmental Water: *Monitoring, Evaluation, Reporting and Improvement Framework May 2012* has highlighted that there continues to be insufficient detail on how monitoring, evaluation and reporting will be conducted by the CEWH. More scoping work will be necessary to clarify how the management, evaluation, reporting and improvement framework will operate and in which way it will have to be adjusted should changes in the three levels of planning associated with Commonwealth Environmental Water materialise - the Basin Plan, the long term portfolio management and annual water use. Amendments to any level of planning will necessitate amendments in the MERI framework and hence this creates questions in how far the current framework is applicable.

Similar to our comments to *the Commonwealth environmental water use framework* the MERI framework is delivered in high level language and provides little guidance on the development and implementation of the actual monitoring, evaluation and reporting of the CEWH. Given the second iteration of this document, stakeholders (including NSWIC) had expected more detailed information and tangible examples on how the framework would operate and what focus it would have in a wider Basin context.

In particular, there are insufficient information on the short and long term ecological response monitoring from the CEWH. This response monitoring would show the effectiveness of the Commonwealth watering actions and provide feedback that would enable an adaptive management of the Commonwealth environmental water holdings. Without adequate monitoring by the Commonwealth, the effectiveness of the CEWH water actions cannot be determined.

Furthermore, NSWIC is concerned that the MERI framework is narrowly focusing on ecological outcomes while expecting other water access licence holders to exert time and financial resources to assist the CEWH in monitoring environmental sites. The effort and financial resources exerted by other water entitlement holders should be credited and consideration should given as to the impact the activities of the CEWH has on third parties. To expect others to assist without considering the impact on them is an unrealistic expectation of the CEWH.

NSWIC is also greatly concerned about the fact that the CEWH does not intend to monitor all of its environmental sites. If the relevant environmental sites are not regularly monitored, NSWIC has to question how the ecological health of each site can be assessed and how an adaptive management and improvement framework can be implemented that is ultimately based on environmental outcomes. To extrapolate information from selected indicator sites will not be sufficient in NSWIC point of view. Given that the CEWH will aggregate the results of monitoring and where appropriate

incorporation contextual information provided at a catchment and Basin scale, the improvement and adjustment framework resonate in a trial and error process.

NSWIC would also like to make specific comments with respect to the principle guiding the MERI framework;

Principle 2:

*Best available knowledge, evidence and analysis should be used where practicable to ensure credibility, transparency and usefulness of monitoring and evaluation findings.*¹⁰

While such aims are desirable, NSWIC remains doubtful of what constitutes 'best available science'.

Principle 3:

Basin states and Commonwealth should collaborate on the technical and operational elements of monitoring and evaluation in order to build engagement and ownership.

NSWIC considers such ambitions desirable; however doubts that such collaboration can be enforced as it might necessitate additional time and financial resources from other departments that would have to be ultimately sourced from somewhere.

Principle 4:

*A risk based approach should be used for investment in monitoring and evaluation.*¹¹

NSWIC is concerned that such a risk based approach is again primarily focused on environmental and ecological outcomes whilst ignoring impacts on other water entitlement holders. An appropriate risk based approach would include a wider perspective that incorporates impacts on all consumptive water users and not just the environment.

Principle 8:

*Monitoring, evaluation and reporting program will be based on shared responsibilities with partners in areas of common interest.*¹²

NSWIC remains concerns that the shared responsibilities will result in additional time and financial resource that needs to be exerted by partners. As it is indicated in the document;

*"Like the delivery of Commonwealth environmental water itself, operational level monitoring is generally best implemented by local delivery partners."*¹³

No information is provided on what the cost are involved will be for those involved.

¹⁰ Commonwealth Environmental Water: Monitoring, Evaluation, Reporting and Improvement Framework (p.10)

¹¹ Ibid.

¹² Ibid.

¹³ Ibid. (p.17)

As stated in the paper, the MERI framework will inform criteria and methods by which Commonwealth environmental water use is prioritized, developed and refined, i.e. this framework remains a work in progress.

Commonwealth Environmental Water - Trading Arrangements

While NSWIC has welcomed the initial proposition for an environmental water trading framework for the CEWH, we are yet to receive feedback on the comments provided in May 2012¹⁴. In our submission to the CEWH we have raised several concerns that we hope will be addressed in the second iteration of the document. Our primary concerns related to;

- The absence of environmental watering plans;
- The lack of consideration of third party impacts;
- The legislative restrictions imposed on the CEWH.

The absence of detailed Environmental Watering Plans (EWP) remains a considerable disappointment for NSWIC. Without a finalised EWP, it will be difficult for NSWIC to comment on all aspects of the water trading frameworks proposed by the CEWH. It continues to puzzle NSWIC how a trading framework for the CEWH can be devised whilst vital key inputs on environmental targets remain uncertain. These uncertainties will also leave considerable doubts over the trading capacity of the CEWH.

NSWIC has further highlighted that the *Water Act 2007* and the *Proposed Basin Plan* (now the amended Proposed Basin Plan) will severely constrain the trading capabilities of the CEWH. Trading and carry-over requirements as determined by Section 106(1) and 106(2) of the Water Act 2007 will likely hinder an optional allocation of water resources to consumptive water users that have the highest marginal benefit of use. The carry-over requirements in particular are able to cause substantial difficulties for other water entitlement holders in that large quantities of carried over environmental water by the CEWH might cause delays in the allocation announcements in particular valleys. Given the dependence of certain industries on timely allocation announcements, the prospect of late allocation announcements is a significant concern.

The optimal management of environmental water will furthermore be complicated by the Proposed Basin Plan's (now Amended Proposed Basin Plan) proposed adjustment mechanisms. The total holdings of environmental entitlements by the CEWH appear to be in flux and hence trading capacity still have to be defined. NSWIC would like to point out at this instance that if trading of environmental water was considered at the onset of the debate to the Amended Proposed Basin Plan, then the amount and location of environmental water recovered through both purchases and infrastructure investment could have resulted in significantly less economic costs for all remaining water entitlement holders in the Murray Darling Basin. It remains disappointing that such obvious benefits from trading have been ignored in that process.

NSWIC has furthermore voiced its doubts over the legal capabilities of the CEWH to engage in trading activities of its environmental water portfolio. The first constraint arises in that the CEWH has to comply with the rules and regulations set out in the Financial Management and Accountability Act 1997 (FMAA) if it wishes to use public funds and manage public assets. Before a potential water trading framework can be assessed, a careful consideration should be given as to whether the CEWH is able to comply with all the requirements of the FMAA which would allow it to trade both water entitlements and allocations in the water market.

¹⁴ NSWIC's submission to the Department of Sustainability, Environment, Water, Population and Communities can be found in the appendix.

Additional to the FMAA requirement, a second constraint arises in that the CEWH needs to obtain further licences if it intends to offer water related derivative products and trade them in the water market. To deal in water related derivative products, the CEWH will require an Australian Financial Services Licence which is widely accessible. To establish new water related derivative products (i.e. to provide a market in such products) the CEWH will require an Australian Market Licence or access to an exchange that holds one. Since most of the water related derivative products discussed in the paper are currently not in existence, NSWIC has to assume that the CEWH seeks to acquire such licence. Given that there are currently only 12 such Australian Market Licences in existence, NSWIC highly questions whether the CEWH will be able to obtain such a licence.

NSWIC also voiced its concern that the discussion paper only focuses on ecological outcomes whilst little or no consideration is given to potential third party impacts on other water entitlement holders. This lack of consideration for other market participants is a severe limitation and cannot be regarded as an optimal outcome from NSWIC's point of view. The involvement of the CEWH in the water market will likely have large and far reaching impacts on other productive water users. Potential distortions of water market prices and delays in allocation announcements are just two areas where the CEWH will likely impact other water entitlement holders. In order to assess the degree of third party risk caused by the CEWH, a diligent valley by valley risk matrix should be devised and potential mitigation strategies should be formulated to minimise the negative externalities on other water entitlement holders.

Given that there has been no progress on the proposed trading framework and since no trading of water entitlement and/or allocation has yet taken place, NSWIC is unable to comment further on the trading framework of the CEWH.

CEWH's environmental water delivery documents

Similar to the proposed operational frameworks, the current environmental water delivery documents lack detail and should only be regarded as preliminary work in the discussion on an optimal environmental water use strategy. Without a clear defined legislative framework to guide the operation of the CEWH and without specific environmental targets, it is difficult to determine whether the outcomes stated in the environmental water delivery documents have achieved their objectives.

A descriptive outline on where and when environmental water is used is only partially useful as no reference is available on the outcomes achieved. Without finalised Environmental Watering Plans (EWP) that determine the environmental targets, the water delivery documents provide only little value to stakeholder's understanding of the CEWH's activities.

Furthermore, the documents state that;

"Information provided in this document is intended to help establish an operational planning framework that provides scalable strategies for environmental water use based on the demand profile for selected assets."¹⁵

NSWIC questions the scalable strategies for environmental water use based on demand profiles of selected assets - given that demand profiles are based on the difference between SDL and CDL. NSWIC would like to point out that environmental targets and water demand should be explicitly specified in the Environmental Watering Plans, however as outlined previously, such plans are not yet finalised.

¹⁵ Environmental Water Delivery - River Murray - Coorong, Lower Lakes and main channel below Lock 1 (p.2)

Additionally, the documents only provide a listing of the environmental water use in particular areas without providing a detailed description on the marginal benefits achieved through its use. As ecosystem response modelling is still scarce, it will be difficult to determine the change environmental health in respect to environmental water application.

CURRENT OPERATION

Annual outcome reports

With respect to the current operation of the CEWH, NSWIC would like to make the following comments;

Given the absence of clear defined Environmental Watering Plans (EWP) and explicit environmental targets, an assessment of the efficiency and effectiveness of current operations of the CEWH remain difficult.

"In combination with an increased size of Commonwealth environmental water holdings, (the current water allocations) provide for a larger increase in the amount of Commonwealth environmental water available for use."¹⁶

Such an assessment is provided without a clear defined strategy as to how to use the water that is currently available. Furthermore, the following statement indicates, that the environmental benefits from the use of environmental water are difficult to determine;

"Given the very wet conditions, Commonwealth environmental water was only a small proportion of total river flows. In many cases this makes it difficult to directly attribute outcomes to the additional water."¹⁷

If the outcomes cannot be quantified, and the environmental targets have not yet been explicitly defined, NSWIC questions whether the current operations of the CEWH are optimal and effective. The clear lack of guidance can also be exerted from the following comment;

"A lot of the environmental water in 2011 was used for Blackwater events - however Commonwealth environmental water will not always be able to be used to respond to backwater events. Blackwater to some degree is a natural part of the ecological process and in major floods or droughts there will be a limit to what can be achieved."¹⁸

This passage highlights that the current operations of the CEWH are not consistent, nor necessarily guided by a clear understanding of the environmental needs. Should Blackwater events be part of a natural reoccurring process, the use of environmental water in this instance would deliberately change the natural conditions that contravenes the objectives of the *Water Act* to;

"protecting or restoring the environmental assets of the Basin, so as to give effect to relevant international agreements"¹⁹.

NSWIC would also like to highlight that the environmental water allocations have in no year been used to their full capacity - even in the absence of trade. The rapidly changing conditions between below to above average water availability seriously puts in question the optional use and acquisition strategy of the Commonwealth to achieve their desired environmental outcomes.

¹⁶ Commonwealth Environmental Water 2010-11 Outcome Report (p.2)

¹⁷ Ibid.

¹⁸ Ibid. (p.18)

¹⁹ Water Act 2007

Finally, NSWIC would also like to raise the point that the current operation of the CEWH is still a work in progress as the following statement indicated;

"The approach to the use of Commonwealth environmental water had to adapt during the year to provide the best possible environmental outcomes under rapidly changing circumstances."²⁰

Without clearly defined targets, an effective operation of the CEWH will be difficult .

Overall, the current reporting lacks useful, quantifiable information. NSWIC recommends the inclusion of additional information on local rainfall quantities and river flow values that would contribute to a better understanding of the value added by the use of Commonwealth environmental water.

INFORMATION & STAKEHOLDER ENGAGEMENT

NSWIC would like to highlight that necessary information on frameworks and operational procedures are still not available and hence it is difficult for NSWIC to adequately comment on the information provision and stakeholder engagement with the CEWH.

Furthermore, as NSWIC pointed out earlier, the current information available is subject to change due to potential amendments in legislative requirements. Hence to comment on the adequacy and effectiveness of the information provided would be inappropriate.

Whilst some of these constraints are outside the control of the CEWH, NSWIC would like to highlight that progress on several framework is considerably behind schedule. As the information on the CEWH's website indicates, a second iteration of the proposed CEWH trading framework is due to be released in mid-2012. As far as NSWIC can assess, no progress on this matter has been achieved. Given the importance of such a framework for the optimal use of environmental water, NSWIC had hoped that further effort would have been exerted to complete this framework.

With respect to stakeholder engagement, NSWIC acknowledges that the CEWH has provided opportunities for stakeholders to comment on the frameworks and operational procedures. However, we would like to point out that we have received little response from the CEWH on potential changes as a result of the comments provided. Such outcome is clearly disappointing from NSWIC's point of view.

Furthermore, as the current legislative environment for the CEWH is constantly changing, stakeholders, including NSWIC, feel there is considerable uncertainty over the intention and objectives of the CEWH. Given the insufficient detail and unclear direction provided, stakeholders have continuously voiced their concern about the impact on other productive water users.

It is also undesirable that the activities and intentions of the CEWH are only progressively published and subsequently revised due to changes in legislative requirements. Such a reversed approach cannot be regarded as optimal and efficient for the operation of the CEWH. NSWIC therefore stresses the need to implement a coherent and conclusive framework that has as its underlying basis clear defined environmental targets and objectives.

²⁰ Commonwealth Environmental Water 2010-11 Outcome Report (p.2)

IMPROVEMENTS

Given the current lack of direction and the uncertainty over the intentions and operations of the CEWH, NSWIC recommends the following improvements.

ENVIRONMENTAL USE STRATGY

As outlined previously, NSWIC is concerned that the current framework for environmental water use is inadequate for the optimal management of the current CEWH water holdings. With insufficient detail on the targets and intention of the CEWH, the achievements of the CEWH's activities cannot be quantified.

As the CEWH has indicated, it is aiming to manage its environmental water holding to efficiently and effectively maximise the environmental benefits, however little information is yet available on what constitute environmental benefits and how they are planned to be achieved.

NSWIC therefore recommends that clear defined and measurable environmental targets are devised on which to build an optimal environmental water use framework. The current framework will have to be revised to incorporate measurable environmental targets and performance indicators that are able to quantify the environmental benefits from the use of environmental water.

RISK MITIGATION STRATEGY

As NSWIC has indicated in this submission, there remains considerable concern about third party impacts associated with activities undertaken by the CEWH and how the CEWH intends to address these issues. It is simply not sufficient to focus exclusively on environmental and ecological outcomes whilst ignoring the impact on other water entitlement holders.

An optimal administration and management framework would assess the impact on third parties and include appropriate risk mitigation strategies that will ensure the dominant market position of the CEWH is not exploited at the cost of other water access licence holders.

FINANCIAL MANAGEMENT PLAN

As NSWIC has indicated in this submission, there are considerable concerns over the lack of detail on an adequate financial management plan that outlines the financial obligations of the CEWH and strategies to address these. Given the large environmental water holdings, substantial costs will have to be incurred by the CEWH, and hence those costs need to be addressed.

NSWIC recommends that a thorough evaluation of the CEWH's financial obligations is conducted and an appropriate financial management plan is put in place to assess the costs of operations for the CEWH and provide an adequate strategy to address these financial issues.

MARKET DOMINANCE

As NSWIC has highlighted in this submission, there is considerable concern about the market dominance of the CEWH. The magnitude of the environmental water holdings place the CEWH in a dominant market position which creates conditions that could impact market prices and allocation announcements.

An optimal administration and management framework would address the issue of market dominance and ensure that the CEWH is not placed in a position of possible risk of insider trading.

ADDITIONAL COMMENTS

NSWIC would also like to comment on the development of a water shepherding framework for the CEWH as part of its management and administration activities. As the following comment indicates, the CEWH has taken active steps to change the beneficial use characteristics of its environmental water holdings;

*"Implement water shepherding arrangements that provide for legal protection, effective use and accurate accounting of Commonwealth environmental water used in unregulated rivers, including implementing arrangements under NSW and Queensland water shepherding arrangements."*²¹

This activity clearly contradicts with the previous comment of the CEWH, in that;

*"... the Commonwealth is treated no better or worse than any other entitlement holder."*²²

By changing the beneficial use characteristics of the environmental water entitlements, it is evident that the CEWH is treated differently to other water entitlement holders - such a condition cannot be supported by NSWIC. Together with its large entitlement holding, such favoritism, clearly places environmental objectives above social and economic objectives. As such favoritism contravenes with NSWIC principle of 'balance', we cannot support such developments.

²¹ Commonwealth Environmental Water - 2011-12 Business Plan September 2011 (p.6)

²² Framework for determining Commonwealth Environmental Water Use (p.3)



PO Box R1437
Royal Exchange NSW 1225
Tel: 02 9251 8466
Fax: 02 9251 8477
info@nswic.org.au
www.nswic.org.au
ABN: 49 087 281 746

Submission to Department of Sustainability, Environment, Water, Population and Communities

Commonwealth Environmental Water - Trading Arrangements

120426

Stefanie Schulte
Economic Policy Analyst
NSW Irrigator's Council

Member Organisations: Bega Cheese Limited, Border Rivers Food & Fibre, Coleambally Irrigation Co-Op Ltd, Cotton Australia, Gwydir Valley Irrigators' Association Inc., High Security Irrigators Inc, Hunter Valley Water Users' Association, Lachlan Valley Water, Macquarie River Food & Fibre, Mid Coast Dairy Advancement Group, Mungindi-Menindee Advisory Council, Murray Irrigation Limited, Murray Valley Water Diverters' Association, Murrumbidgee Groundwater Inc., Murrumbidgee Irrigation Ltd, Murrumbidgee Private Irrigators' Inc., Murrumbidgee Valley Food and Fibre Association, Namoi Water, NSW Farmers' Association, Ricegrowers' Association of Australia, Richmond Wilson Combined Water Users Association, Riverina Citrus, Southern Riverina Irrigators, South Western Water Users', West Corugan Private Irrigation District, Wine Grapes Marketing Board.

Introduction

NSW Irrigators' Council (NSWIC) represents more than 12,000 irrigation farmers across NSW. These irrigators access regulated, unregulated and groundwater systems. Our members include valley water user associations, food and fibre groups, irrigation corporations and community groups from the rice, cotton, dairy and horticulture industries.

This document represents the views of the members of NSWIC. However each member reserves the right to independent policy on issues that directly relate to their areas of operation, or expertise, or any other issues that they may deem relevant.

General Comments

NSW Irrigators' Council welcomes the proposal of a water trading framework for the Commonwealth Environmental Water Holder (CEWH). NSWIC understands that the legislative constraints imposed by the *Water Act 2007* have created a complex task for the CEWH to manage its large environmental water portfolio and we therefore support the design of an optimal inter-temporal trading framework.

While the trading of environmental water entitlements and/or allocations by the CEWH is by and large desirable, it is a concern of NSWIC that the market position of the CEWH and the size of the environmental water portfolio could create severe third party impacts on other water market participants and entitlement holders. NSWIC continues to hold the position that the *Water Act 2007* and the assumptions imbedded into the *Proposed Basin Plan* have caused the CEWH to hold a significantly larger environmental water portfolio than necessary to restore and manage key environmental assets within the Murray Darling Basin. Given the size of the environmental water portfolio, a careful management of these assets will be crucial to reach an optimal outcome for all consumptive water users.

Environmental Watering Plans

It remains a considerable disappointment that details on the Environmental Watering Plans are not yet finalised and as such it will be difficult for NSWIC to comment on all aspects of the portfolio management and water trading framework of the CEWH. It continues to puzzle NSWIC how a trading framework for the CEWH can be devised whilst vital key inputs like the intensity and duration of water supply to particular environmental assets remain uncertain. The uncertainty about environmental water requirements will leave considerable doubt over the trading capacity of the CEWH.

Water Act 2007 & Proposed Basin Plan

It is evident that the *Water Act 2007* and the *Proposed Basin Plan* will severely constrain the trading capacity of the CEWH. Trading and carry-over requirements as determined by Section 106(1) and 106(2) of the *Water Act 2007* will likely hinder an optimal allocation of water resources to consumptive water users that have the highest marginal benefit of use. The carry-over requirements in particular, are able to cause substantial problems for other water entitlement holders in that large quantities over carried over environmental water by the CEWH might cause delays in the allocation announcements in particular valleys. Given the dependence of certain industries on timely allocation announcements, the prospects of late allocation announcement could be detrimental.

The optimal management of environmental water will furthermore be complicated by the *Proposed Basin Plan's* assumption on the required amount of environmental water. If trading by the CEWH was considered at the onset of the debate to the *Proposed Basin Plan*, then the amount and location of environmental water recovered through both purchases and infrastructure investments would have resulted in significantly less economic costs for all remaining water entitlement holders in the Murray Darling Basin. It is disappointing that such obvious benefits from trading have previously been ignored in the *Proposed Basin Plan*.

Water Trade Licenses

There remains considerable doubt over the legal capabilities of the CEWH to engage in trading activities of its environmental water portfolio. The first constraint arises in that the CEWH has to comply with the rules and regulations set out in the *Financial Management and Accountability Act 1997* (FMAA) if it wishes to use public funds and manage public assets. Before a potential water trading framework can be assessed, a careful consideration should be given as to whether the CEWH is able to comply with all the requirements of the FMAA which would allow it to trade both water entitlements and allocations in the water market.

Additional to the FMAA requirement, a second constraint arises in that the CEWH needs to obtain further licenses if it intends to offer water related derivative products and trade them in the water market. To deal in water related derivative products, the CEWH will require an Australian Financial Services License which is widely accessible. To establish new water related derivative products however (i.e. to provide a market in such products), the CEWH will require an Australian Market License. Since most of the water related derivative products discussed in the paper are currently not in existence, NSWIC has to assume that the CEWH seeks to acquire an Australian Market License in order to offer such products. Given that there are currently only 12 such licenses in existence, NSWIC highly questions whether the CEWH will be able to obtain such a license. Any comments on potential approaches to trading these water related derivative products should be delayed until firm evidence is provided that such actions are legally possible. Before such confirmation is given a detailed discussion over the benefits of these derivative products is not necessary.

Third party Impacts

The trading framework outlined in the discussion paper appears to be exclusively concerned with the optimal allocation of water to key environmental sites whilst no consideration is given to potential third party impacts on other water entitlement holders. This lack of consideration of other market participants is a severe limitation and cannot be regarded as an optimal outcome from NSWIC's point of view. The involvement of the CEWH in the water market will likely have large and far reaching impacts on other water license holders. Potential distortions of water market prices and delays in allocation announcements are just two areas where the CEWH will impact other water entitlement holders. In order to assess the degree of third party risk caused by the CEWH, a diligent valley by valley risk matrix should be devised and potential mitigation strategies should be formulated in order to minimise the negative externalities on other water entitlement holders.

Answers to Specific Questions

1. *What are your views on the portfolio management options which are outlined? Do you think that there are other issues which should be considered?*

In light of insufficient detail on the Environmental Watering Plans, it will be difficult to comment on the portfolio management options outlined in the discussion paper. As the timeframe is unknown for when specific environmental targets have to be met, key parameters that determine the trading behaviour and portfolio management of the CEWH are missing and hence an objective evaluation of the efficiency and effectiveness of the trading framework is limited and third party risk will be impossible to be determined. The lack of consideration of third party impacts is evident in Section 3;

Portfolio management options need to be considered in the context of improving the capacity of the portfolio to meet environmental objectives over the long-term and across the Basin.

As this statement suggests, there is little to no information provided on how the CEWH intends to identify and manage the risk posed to third parties. Given the substantive size of the Commonwealth Environmental Water Portfolio, it is not difficult to envision that the market power held by CEWH will cause substantial negative impacts on other water entitlement holders.

Questions that need to be addressed by the CEWH are;

1. What will be the impact on allocations of other entitlement holders given the carry-over strategies of the CEWH?
2. Will the trading behaviour of the Commonwealth Environmental Water Holder distort market prices and therefore lead to strategic trading by other water market participants?

In case trading of environmental water is possible under Section 106(1) and 106(2) of the *Water Act 2007*, NSWIC proposes that the trading of entitlements and/or allocations by the CEWH should only be granted if a careful third party risk assessment has been conducted and any risk on other water entitlement holders have found to be insignificant. This will ensure that the involvement of the CEWH will not harm or deter other potential water market participants. It is therefore suggested that an additional trading constraint is being imposed on the CEWH that enables trading of environmental water if and only if third party risk is minimised.

In order to assess any third party risks, a detailed valley by valley risk assessment matrix should be constructed that provides necessary and sufficient conditions for trading by the CEWH. In order to establish a useful and reliable risk matrix, greater engagement with local stakeholder should be sought in order to obtain imperative local knowledge on the water market, water needs and trading behaviour of individual water entitlement holders in each valley.

The financial viability of the CEWH should also be clearly discussed in the portfolio management options.

The discussion paper so far does not provide in-depth detail as to whether the CEWH will be able to use its trading proceeds to manage its large environmental water portfolio. As it is stated in Section 2;

The limit in the legislation are intended to ensure that the trading arrangements operate to meet environmental objectives and not with the objective of being a profit-making enterprise.

NSWIC does not believe that this statement provides sufficient evidence that the financial viability of the CEWH is covered in the portfolio management options. It should be made a requirement that additional to meeting the environmental objectives, the CEWH should be financially self-sustainable and hence achieve a break-even target (NPV = 0). This will ensure that no other government funds will have to be sourced in the future for the management and operation of the Commonwealth Environmental Water Portfolio. Since the acquired water entitlement will retain the same characteristics as before the acquisition by the CEWH, a significant budget constraint will materialise for the CEWH as fees and charges will be required for both State Water Corporation and NSW Office of Water. The portfolio management strategies should therefore require the CEWH to be at least self-sustainable, in that those fees and charges can be recovered through trading of its portfolio assets. To cross subsidise the portfolio management expenses through funds dedicated to other government programs will not incentivise the CEWH to use its funds most efficiently.

NSWIC stresses that the portfolio management options should clearly state that all charges (fixed and variable) are covered through the trading proceeds.

2. *What other trade scenarios could be considered to improve the overall capacity of the Commonwealth Environmental Water Portfolio?*

NSWIC would like to highlight that there are several further trading scenarios that should be considered but legislative constraints will prevent their consideration (i.e. trading of environmental water even if carry-over is available).

NSWIC emphasises that it will be of crucial importance that the CEWH has a clear defined plan that outlines when and under which circumstances environmental water - entitlements and/or allocations - will be traded in the water market. This information needs to be publically accessible so that all water entitlement holders have full information and are aware of the CEWH's intentions. Such a portfolio management plan has to be transparent yet dynamic, so that it can be adjusted in case of changing Basin conditions. Without such a plan, other water entitlement holders will be exposed to greater risk given the increased uncertainty.

- *Establishing capacity to meet future environmental needs*

NSWIC understands that changes in environmental needs within the Murray Darling Basin (MDB) are likely to create a need to trade portions of the Commonwealth Environmental Water Portfolio in order to comply with the objectives of *Water Act 2007*.

In order to establish capacity, a comprehensive environmental watering plan needs to be formulated and implemented. Without this crucial information, the CEWH will not be able to build its capacity optimally.

It is a great concern of NSWIC that future environmental needs might necessitate the acquisition of further environmental water. Should such requirements materialise, it should be made a necessary requirement that no further acquisition of water entitlements beyond the Basin Plan target are possible and any further environmental needs have to be met through additional water saving infrastructure investments (i.e. indirect water recovery processes). This will provide the necessary constraints for the CEWH to use its water allocation as efficiently as possible rather than being able to simply purchase further water to meet environmental needs.

It is a further concern of NSWIC that the trading scenario could cause strategic trading and hence distort water market prices. If other market participants are aware that the CEWH will soon enter the market, then current trade might diminish which is likely to cause an adverse change in water market prices. This strategic trading might then lead to severe distortions of water market prices with overall negative results for certain water entitlement holders.

- *Variance in conditions across the Basin*

NSWIC stresses that such a trading scenario requires the portfolio management plan to be dynamic and flexible in order to accommodate changes in Basin conditions.

NSWIC would like to point out that a discussion about water acquisition and disposal due to different environmental requirements highlights the fact that environmental watering plans are not yet finalised. The purchase of water entitlements without such plans have already caused significant economic costs to other water entitlement holders in the MDB. A detailed outline of the water requirements of key environmental assets are needed before a discussion of trading behaviour under these circumstances can be made. It appears that a consideration for trade due to variance in conditions is used as a mean to rectify previous non-strategic purchases of water entitlements.

- *Changing circumstances and information*

NSWIC is concerned that 'changing circumstances and information' could lead to further acquisition of environmental water.

As the discussion paper states;

The strategy used for acquisition of entitlements will change so as to continue to acquire a portfolio of entitlements that provide the greatest environmental benefit. Changing information may warrant the rebalancing of the existing portfolio.

Since no further detail on *rebalancing* is provided, NSWIC has to assume that the act of rebalancing the environmental water portfolio could also include an increase in water allocations and/ or entitlements beyond the currently specified amounts in the *Proposed Basin Plan*. Under such circumstances, the trading framework of the CEWH should clearly outline restrictions that exclude further water entitlement purchases. Should further environmental water be required for identified environmental sites,

NSWIC suggests that additional water should be sourced through water saving infrastructure investments rather than through further outright purchases. This should be feasible as information on changes in environmental needs will become progressively available over time.

- *Dealing with delivery constraints/opportunities*

NSWIC welcomes the suggestions that the construction of new environmental infrastructure may increase the number of watering actions in the MDB, however it should be highlighted that there are no details on what type of infrastructure projects are proposed. Before any details on the environmental infrastructure are provided, a further discussion of this particular trading scenario is not justified.

- *Immediate environmental water requirements - carryover not available.*

NSWIC is disappointed that trade of environmental water is being rejected on the grounds that the obtained returns are too low. Should environmental needs be met and carry-over capacities not be available, then trade should always been seen as an option in order to benefit other consumptive water users. Should an optimal trading framework be developed then the associated transaction and administrative costs would be minimised and hence trade could proceed with the benefit for all water entitlement holders.

In summary, the trading framework of the CEWH has to be in line with well defined environmental watering plans and comprehensive and publicly available information about the trading intentions. The trading framework needs to be clear, but also flexible to accommodate for changing Basin conditions.

Adding to the previous discussion, the following trade scenarios should be considered;

- *Third party impacts*

An important trading scenario that has so far received insufficient attention is the restriction of trade in case there exist severe third party impacts on other water entitlement holders. Should trading of the CEWH negatively impact the allocations of other water entitlement holders, then trade should be limited in order to minimise the economic costs on other entitlement holders.

3. *What are your views on the capacity building example?*

In order to comment in detail on the capacity building example outlined in the discussion paper, further details need to be provided on the classification criteria for a very dry/dry/average conditions. Without such vital information it will be difficult to comment on the capacity building strategy to meet future environmental needs, as the trading intentions cannot be accurately determined. The diagram provided on page 10, does not provide sufficient enough detail on the cut-offs between very dry and dry water availability. Furthermore, it is disappointing that no reference is provided for both the diagram and the average inflow data proceeding it. NSWIC proposes that such information should be provided in addition to further information on average river inflows, outflows and rainfall patterns.

Whilst the capacity building example provides a useful foundation for assessing the actions taken by the CEWH in order to meet environmental needs within the MDB, it does not take into consideration that the involvement of the CEWH can and likely will distort water prices if trade is only permissible within particular threshold bands and in accordance with obtained yields. In order to assess the capacity building of the CEWH, the threshold values that prohibit trade for the CEWH should be clearly specified. It should be realised that any barriers to trade (i.e. in extreme situations) will have distortionary effects on the water market and prices of water allocations and/or entitlements.

In an example, very wet conditions could establish legislative constraints for trading behaviour of the CEWH (i.e. due to insufficient yields). In very wet years where associated allocation for the CEWH will be high and trading prohibitive given low sustained yields, a detailed evaluation on what should be done with the large quantities of environmental water should be conducted. In any event, trade should always take place in case any other consumptive water users are in demand for water.

NSWIC questions the argument made in relation to the scope of water trading water from one area of the Basin to another area in the Basin. Whilst such conditions might be possible in dry years, it is questionable whether such an approach can be taken during wet years as all water entitlement holders already would have substantial water allocations.

NSWIC furthermore doubts that the CEWH will be able to fulfill its trading role as outlined in Section 4;

The likely role of trade within a given year will be influenced by conditions in previous years and future year forecast.

This statement incorporates two potential difficulties; one in that it will be difficult to forecast future climate conditions and rain patterns and thereby making it difficult to establish well define boundaries for when trade is permissible for the CEWH. Secondly the knowledge of when the CEWH will likely enter into the market could cause strategic trading of other market participants and thereby create more volatility and uncertainty. This strategic trading behaviour is especially prominent given the large entitlement holdings of the CEWH. It has already been observed that water market prices have been influence through the involvement of the CEWH. Increased growth in the size of the environmental water portfolio will only increase this volatility in the market.

4. *Do you agree with the proposed elements of the operating rules? What other issues may be covered by the operating rules?*

As outlined previously, the proposed water trading framework suggests that;

Any trading decision by any market participant has the potential to affect prices, but market participants generally have an incentive to ensure that their actions do not shift the market substantially.

While it is desirable that the involvement of the CEWH will not affect the water market adversely, it is likely that it will have an impact on prices and conditions in the current market unless the intentions and the trading framework are clearly defined.

Transparency and greater assurance of how trade is being conducted is seen as a positive step towards an achievable and optimal water trading framework for the CEWH. As mentioned previously, as long as the trading framework is clearly defined and the environmental objectives are set then the market will automatically adjust to these new information. It will be important however that these information are available at the beginning of the water year so that other water entitlement holders have sufficient time to plan.

In relation to the four points outlined in the approach to operating rule requirements of the CEWH, the following should be noted;

- The public provision of information on the *objectives* of the proposed trade will be necessary together with detailed and up-to-date Environmental Watering Plans.
- Any information on the *price, volume* and *location* does not outline that a third party risk evaluation and associated mitigation strategies should be included as an assessment criteria.
- Any information on the accounting and use of the trading proceeds are necessary to establish a transparent trading process.
- Any information needs to be continuously updated so that other market participants are aware of the trading intentions of the CEWH.

NSWIC would like to stress that details need to be made available on how the CEWH operating strategies will meet specific trading objectives. This will include a detailed outline on who evaluates the achieved benefits from trade and what the underlying trading objectives are. The need to include an independent auditing process should be considered so that usage of the CEWH's resources is assessed under a strict optimisation criteria.

5. *Do you agree with the proposed approach to developing a portfolio management strategy that will be publicly released? What other issues do you think could be dealt with in the strategy?*

NSWIC encourages the public release of information relating to the portfolio management strategy of the CEWH but warns that such information are complex to define accurately as conditions in the MBD are constantly changing. As outlined in the discussion paper, the implicit portfolio optimisation task is complicated by the inherent uncertainties related to key parameters including future water availability and the risk/opportunity to carry over water and hence questions remain as to how far the provision of public information on the portfolio management strategy is useful on a year on year basis. Alternative to a year on year evaluation of the portfolio management strategy, information on the trading behaviour and management strategy should continuously be updated so that the trading behaviour of the CEWH is transparent for all market participants.

As outlined on page 13, the portfolio management strategy of the CEWH needs to incorporate a thorough assessment of any anticipated benefits of trade in future years. Given the multi-year time horizon and the complexity of the task, this bears the following problems;

- An assessment of expected environmental watering demands across the MDB over the next few years will be complex given that the conditions within the Basin are constantly changing. Furthermore, it will be difficult to include information about expected environmental watering requirements until the environmental watering policies are developed by the Basin States.
- To anticipate future water availability it will be necessary to accurately predict future climate conditions which is a process unlikely to be achievable as the recent two years have clearly shown. If these key parameters are not determined then an optimal Portfolio Management Strategy is difficult to establish.

If the CEWH intends to make the information on the portfolio management strategy publically available, then it will be necessary to provide stakeholders with more detailed explanations on the operations of the *Independent External Advice* and the *science* behind those who determine water use and reporting results. Such an external advise should be independently audited in order to assess whether the members of this committee have the relevant skills and experiences and do not experience any personal conflict of interest in providing advice to the CEWH. Currently insufficient information is provided that would indicate how the selection process takes place.

6. *Do you agree with the mechanism for trade that have been identified and the relative advantages of each? Do you have any other suggestions about other mechanisms that could be used to engage with the water market?*

To determine an optimal market engagement for the CEWH, greater engagement with local stakeholder should be sought to draw on local market knowledge and establish a smooth and adaptable trading mechanism that suits the particular region (i.e. valley) and all associated water entitlement holders.

The three approaches outlined in the discussion paper are all likely to hold both benefits and costs for the trading of environmental water, however it should be emphasised that it will be less important which mechanism is used than which approach has been used in the past and found to be successful.

Whilst NSWIC recognises that the CEWH has identified several benefits associated with each trading mechanism, insignificant attention has been paid to the associated costs of each approach. The following discussion will outline some of the drawbacks with each approach and highlight the importance that no single trading mechanism will be suitable for every valley.

All trading arrangements have to be assessed for their feasibility in temporary and permanent trade.

- Tender

As the discussion paper indicates, a tender process is likely to be an expensive and timely process that is only justified if large quantities of environmental water are being traded or if entitlements rather than allocations are being transferred. As mentioned previously, the trading of large environmental water allocations might cause severe third party impacts for other water entitlement holders as water market prices might be distorted. Such negative impacts should be avoided.

- Expression of Interest

Whilst an expression of interest approach might be a cost effective way to engage in water trading, this form of market engagement could substantially alter the market efficiency since the allocations and/or entitlements are offered outside the normal market mechanism and hence are able to distort market prices. Furthermore, this form of market engagement might also necessitate the use of other forms of market engagements should an insufficient quantity of buyers and sellers engage in direct trade with the CEWH through an expression of interest.

- Use of water brokers

The discussion paper indicates that there might be situations (i.e. urgent environmental watering) where water brokers can be advantageous. However the resources required to engage water brokers might outweigh the benefits since other more cost effective trading mechanisms are available (i.e. online water trading platforms). To encourage the further development of online water trading platforms, additional funds should be made available that will help foster this particular type of trading mechanism. Furthermore, NSWIC would like to highlight that in case the management of the CEWH is sufficiently forward looking, then the need for urgent environmental watering will not materialise.

In order to establish an optimal market engagement process, trials should be conducted that assess the effectiveness of each possible trading mechanism in each valley. An appropriate evaluation of the timeframe required to engage and settle individual trades should be conducted. NSWIC would like to emphasise that a shorter settlement timeframe will be desirable for all water entitlement holders as delays could diminish the benefits of trade.

NSWIC agrees that it will be necessary to advise market participants prior to engaging in trade which method will be used for the trading process, however it is questionable whether different approaches for the acquisition and disposal of water entitlements and/or allocations are required. If one method of market engagement is found to be optimal in one area, then this approach should be used for both acquisition and disposal of allocations and/or entitlements.

7. *Do you think that there are other potential approaches or trade products that could be put in place to assist in achieving the objectives for the Commonwealth environmental water portfolio?*

Independent of the existence of other potential water trade products, NSWIC would like to stress that a discussion of water related derivative products can only be hypothetical in the current context as several legal requirements have to be met before trading in these products is feasible.

Aside from a compliance requirement to the *Financial Management and Accountability Act 1997*, the CEWH will have to acquire two further licenses if it intends to establish a water related derivative market and offer associated trade products. The primary license required is an Australian Financial Services License that will allow the CEWH to deal in water related derivative products. A further license will be needed for the creation of a water related derivative market, since those products are currently not in existence or have only achieved sufficient market depth. The license required for such undertaking is an Australian Market License of which only 12 are currently in existence.

Should the CEWH seek to create such a market, a discussion over the capacity of the CEWH to acquire the necessary licenses should precede any evaluation over the effectiveness or benefits of these water related derivative products. The arising added complexity in considering these water related derivative products will only be justified if it can be proven beyond doubt that the CEWH is able to acquire the essential licenses.

NSWIC would further like to highlight that the current insufficient market depth for these water related derivative products could add to the complications since a substantial public and private support will be required to establish these products in the market. Should such widespread support not be available, then the result could less overall stability in the water market. This increased volatility might attract damaging speculative behaviour which could unnecessarily increase the risk for other market participants. This risk factor together with the substantial market power held by the CEWH has the ability to cause significant negative impacts on other market participants. NSWIC advocates that the protection of all market participants is of utmost importance and hence additional volatility should avoided in the market.

Finally, NSW Irrigators' Council is concerned that the introduction of water related derivative products could change the inherent structure and characteristics of the water market and the therein traded water entitlements. Products like Covenants have the potential to change the characteristics of the related underlying water entitlements as they restrict the use of the associated water resources. It should be re-emphasised that none of the water related derivative products should change the characteristics of the underlying water entitlements and a definite insurance should be given to ensure this.

8. *Do you have any other suggestions or comments about the issues raised in this discussion paper.*

It is evident that the water trading framework was designed under a different set of assumptions to the *Proposed Basin Plan*. The suggested sustainable diversion limit in the *Proposed Basin Plan* treat environmental water primarily as a resource stock that is made available to the environment rather than a tradable commodity whose quantity can be adjusted to meet environmental needs. This assumption has led to the acquisition of a larger than necessary portfolio of environmental water whose management has been further complicated by the trading constraints of the *Water Act 2007*. The limitations of the *Water Act 2007* are unlikely to meet the requirement of an optimal allocation of water resources between all consumptive water users as benefit of trade are severely restricted and in some cases sacrificed in favour of unnecessary additional carry-over requirements. It bears emphasis that if trade was initially considered in the *Proposed Basin Plan*, then the proposed SDL limits could not only have been substantially lower but the management of the acquired environmental water could have been more flexible.

Related to the large quantities of environmental water holdings by the CEWH, NSWIC has highlighted in its previous press releases that the current high water inflows into the Basin will necessitate a reconsideration of the required environmental water quantity. As the latest two years of data have shown, the mean calculations conducted by the MDBA are biased and should be adjusted to give a more accurate and up-to-date picture of the water requirements for the environmental assets. Should the data from 2010 and 2011 be included into the analysis, then the calculations suggest, that the necessary water holdings by the CEWH should be substantially lower.

The large environmental water holdings have raised further concerns by NSWIC over interstate competition. As is suggested in the discussion paper,

beneficial watering may be forgone if the water allows for more beneficial watering to occur elsewhere.

Given the lack of detail on where such beneficial watering will likely occur and who will decide over which environmental site will get priority over available water resources, there are justified concerns that the environmental water resources might be used as a political tool to foster interstate competition. Such misappropriation for public funds and assets should be avoided at all costs.