



**MACQUARIE MARSHES ENVIRONMENTAL
LANDHOLDERS ASSOCIATION**

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LANDHOLDERS ASSOCIATION**

SUBMISSION

TO THE

**MURRAY DARLING BASIN
AUTHORITY**

NORTHERN BASIN REVIEW

Position:

The Macquarie Marshes Environmental Landholders Association cannot and does not support the Murray Darling Basin Authority's proposed amendments to the Northern Basin Plan.

Introduction :

The Macquarie Marshes Environmental Landholders Association (MMELA) was formed in 1995 when there was increasing pressure to further reduce water flows to the Macquarie Marshes. Its members are local landholders, many of whom are third and fourth generation landholders in the area, and all are dedicated to ensuring a healthy and productive marsh for future generations.

The aim of MMELA is:

The Macquarie Marshes Environmental Landholders Association (MMELA) aims to ensure the social, economic and environmental sustainability of the internationally recognised Macquarie Marshes.

The Macquarie Marshes is a large semi permanent, **flow through** wetland on the lower end of the Macquarie River in central western NSW. It covers an area of approximately 200,000ha of which 12% is a Nature Reserve managed by the NSW National Parks & Wildlife Service (NPWS). The remaining 88% is privately owned freehold land which supports an extensive agricultural industry. Much of the land has been held in families for generations and the property owners have an extraordinary knowledge and understanding of all aspects of the Marshes and its management.

The Macquarie Marshes Nature Reserve, “Wilgara” Wetland and U Block are listed on the Ramsar Convention of Wetlands of International Importance. The Nature Reserve is also listed on the Japan - Australia Migratory Bird Agreement (JAMBA) and the China - Australia Migratory Bird Agreement (CAMBA) along with several other agreements. It is the responsibility of the whole community, including State and Federal Governments, to ensure management of the wetland does not comprise values and/or obligations set out in the above mentioned agreements.

The Macquarie Marshes is unique both environmentally and economically. Research indicates it is the most important colonial nesting waterbird breeding site in Australia for species diversity and nesting density (*Kingsford and Thomas 1995*). The majority of the breeding colonies are situated on privately owned land where landholders have managed and protected them since settlement. The Marshes also support an extensive cattle grazing industry which is its main economic focus. Sustainable grazing is encouraged by MMELA and the majority of landholders are acutely aware of the environmental needs of the wetland and undertake congruent management practices.

Government policy and decision making relating to natural resource management has in the past had devastating impacts on the Marshes, particularly water management, which has severely reduced water flows through river regulation and other such legislation. The proposed amendments contained in the Murray Darling Basin Authority’s (MDBA) Northern Basin Review is another example of a proposal that will have devastating impacts on the internationally recognised Macquarie Marshes and its community.

When Burrendong Dam was completed and irrigation was established throughout the Macquarie Valley scientific research showed flows to the internationally recognised Macquarie Marshes were greatly decreased. MMELA brought this to the attention of many governments and fought for water to be recovered for this diverse and unique wetland and its associated floodplain. As a result both the NSW and Federal Governments introduced ‘buy back’ programs and improved efficiency schemes in an effort to halt the ongoing destruction of the Macquarie Marshes. It must be remembered that these programs only returned a small portion of the water originally taken from the Macquarie Marshes and the landholders who depend on its health and vitality to make their living. Now for the MDBA to propose taking water from the Marshes and its community again, with no evidence, merely assumptions, to prove allegations of over recovery, is extremely irresponsible and indefensible. It is obvious to MMELA that floodplain graziers and other sectors of the community are expected to continue subsidising the irrigation industry as they have in the past, and it seems, will do so for the foreseeable future.

MMELA objects strongly to the MDBA's proposed amendments to the Northern Basin plan and any reduction in any of the environmental water accounts (Planned Environmental Water, NSW Government Water Account and the Commonwealth Environmental Water Account) for the Macquarie Castlereagh system.

Consultation Process:

MMELA does not believe the consultation process regarding the proposed amendments has been adequate, equitable or fair. The time taken for the Hydrological Modelling Report to be made available to all relevant parties was unacceptable. No one could be expected to prepare a detailed submission when they do not have all the pertinent information. Admittedly the report was finally made public, however it is so convoluted you would need a degree in hydrology to decipher it. The MDBA should have made this report public prior to its community engagement meetings held throughout the Northern Basin so it could be explained and those present could have any questions answered. As it is, there is no time to properly analyse and question the Hydrological Modelling Report.

It has also come to MMELA's attention, through reviewing information gained under the Freedom of Information (FOI) Act and passed on to MMELA, that the irrigation industry had access to this crucial report in July 2016. This information also states that the MDBA has consulted and negotiated almost exclusively with the irrigation industry, or 'super users' as they refer to them. This emphasises the MDBA's backing of one group of stakeholders (this also being the smallest stakeholder group) at the expenses of all others. MMELA cannot understand why the MDBA would operate this way when the environment is the largest licence holder on the Macquarie. At no time did senior staff of the MDBA make an official visit to the Macquarie Marshes to speak with graziers and again this is very disappointing considering it is an internationally recognised wetland for which the Government has specific obligations and responsibilities. The Marshes are also one of the key environmental assets within the Basin. The entire consultation process has been inequitable, inadequate and insulting to many involved in this process.

Floodplain Graziers:

It is extremely concerning to MMELA that throughout this entire process there has been no recognition of the dependence floodplain graziers have on healthy and functioning wetlands and floodplains. They are not acknowledged as legitimate water users regardless of the fact that they are not extractive users, and do not remove water from the system. They are however totally reliant on flows through the system which promote pasture growth and supply stock and domestic water for use on their properties. There has been no assessment (social or economic) of the impacts of taking water from floodplain graziers in the Macquarie Marshes area. It must be assumed the MDBA does not believe or understand the dependence of floodplain graziers on healthy functioning wetlands and floodplains for their livelihoods. They are dependent on all size of flows from the smallest in channel flows to the large and uncontrolled floods. All flows play a different but essential role in the ecology of the Macquarie Marshes. To reduce any of these in size or frequency will have negative impacts to production and the environment. MMELA has seen the report compiled by the MDBA on floodplain graziers on the Lower Balonne Floodplain. This report cannot simply be overlaid on the Macquarie as a means of assessing grazing outcomes. The land and water flows in the Macquarie system are vastly different to those on the Lower Balonne and as such a separate study needs to be conducted for Macquarie floodplain graziers. Please see Appendix 1 for grazing information related to the Macquarie Marshes.

When water was taken in the past (Burrendong Dam was completed) and irrigation licences were sold there was no compensation for the loss of that water for floodplain graziers. Again it seems they are to have water 'taken' from them and again, with no compensation. They have been expected, and made to, absorb the resultant losses of production. They have all paid a premium for their land as it historically had regular flooding to ensure pasture growth,

particularly at times when the local area was experiencing dry times. Floodplain graziers are one of the only groups in agriculture who are treated in such a discriminatory manner when government decisions and policies directly reduce their earning capacity.

When research indicated the Macquarie was over allocated and the recovery programs began water was only recovered from irrigators **willing** to sell and at full market value. There was no 'taking' water from them. In fact at one point when the irrigation industry did not want the Government in the water market and an embargo was placed on the NSW Government buying licences, a group of irrigators in the Macquarie took up a class action against the embargo as they wanted to sell their licences and were happy to sell to any buyer including the Government. Now it seems some have decided they want the water back but do not want to pay for it. As the old saying goes "you cannot have your cake and eat it to".

There has been no social or economic study completed by any government or government agency to properly assess the impact of these proposed amendments on the landholders in the Macquarie Marshes. There seem to be a number of 'assumptions' made throughout all of the documents detailing the amendments and this is totally unacceptable to MMELA and its members. These are real people and real livelihoods and 'assumptions' are just not acceptable. We need real and robust data so we can have some trust in any predicted impacts and so we can confidently assess if they are economically and environmentally justified. Assumptions are simply unacceptable. Floodplain graziers are tired of being treated as second class citizens and being expected to continually prop up the irrigation industry.

Environment:

As you are aware the internationally recognised Macquarie Marshes is situated between Warren and Carinda. The Macquarie Marshes is unique both environmentally and economically. Research indicates it is the most important colonial nesting waterbird breeding site in Australia for species diversity and nesting density (*Kingsford and Thomas 1995*). The majority of the breeding colonies are situated on privately owned land where landholders have looked after and protected them since settlement. The Macquarie Marshes Nature Reserve, "Wilgara" Wetland and U Block are listed on the Ramsar Convention of Wetlands of International Importance. The Nature Reserve is also listed on the Japan - Australia Migratory Bird Agreement (JAMBA) and the China - Australia Migratory Bird Agreement (CAMBA) along with several other agreements. It is the responsibility of the whole community, including State and Federal Governments to ensure management of the wetland does not compromise values set out in the above mentioned agreements.

Continued water flows are the lifeblood of this unique wetland and its associated floodplain and any decrease in these flows without proper research and assessment could compromise the integrity of this vibrant area.

In the supporting documents the MDBA states that all four (4) environmental outcomes or specific flow indicators were met when modelling environmental outcomes, in fact in reality none of the indicators were met in the observed data. Again, this highlights the dangers of working with 'assumptions'.

The NSW Government states in its Northern Basin Review Synopsis (November 2016) that it considers assumptions underpinning the Tool Kit as being 'not fit for purpose' and 'both unrealistic and unachievable'. MMELA supports this view. Given that the NSW Government will be responsible for implementing these measures, this position destroys the Tool Kit's credibility and usefulness.

Stakeholders in the Macquarie valley have been at the forefront of environmental flow management as there has been an Environmental Water Account of some sort managed in the Macquarie since 1967 when 15,000 acre feet (18,500ML) was set aside to be used for the health of the Macquarie Marshes. This was put in place when Burrendong Dam was completed and the government of the day accepted there would be reduced water flows the Macquarie Marshes. MMELA cannot understand why the MDBA did not seek advice and information from the environmental managers in the Macquarie instead of taking advice from

other groups, in particular Macquarie River Food and Fibre, resulting in incorrect assumptions being made about the success or otherwise of environmental management water in this valley. One of the biggest threats to the ecology of the Macquarie Marshes is the reduced frequency of large floods as it is only on these large floods that the colonial nesting waterbirds breed. These key species such as egrets and ibis are not long lived birds, 7 to 8 years. Where they previously nested in the marshes in hundreds of thousands every two to three years, we are lucky to see them breed every 6 to 8 years, numbers are declining and will continue to do so until we have no birds left to breed. One breeding event in a bird's lifetime is not enough to ensure these species' survival. Even worse, if we accept the MDBA's 114 year model it predicts periods of "NON BREEDING" greater than bird life expectancies. This is government sanctioned extinction of many fauna species.

Reduced water availability will place constraints on flows for habitat maintenance at crucial times such as extended dry periods as experienced in the 2002/2009 drought. The ability to provide even small in channel flows in times of drought are vital for vegetation health and wildlife survival.

Cap Factors:

The MDBA's proposed amendments suggest a reduction in recovered water of 12GL on the Macquarie, however depending on what Cap Factor or Conversion Factor is used, this will be anywhere from 29GL to 60GL. This is totally unacceptable to MMELA.

How conversions are determined has been a concern for stakeholders on the Macquarie since 1980, when licences were converted from area based licences to volumetric based licences. At this time all valleys in NSW were converted at a factor 6ML/ha, however the Macquarie irrigators convinced the government of the day to allow them to convert at 8ML/ha (*WJ Johnson 2005*). As a consequence the NSW Water Resources Commission in 1981 admitted that the regulated flow in the Macquarie was 'overcommitted.' Since 1981 commitments in the Macquarie River have doubled casting doubt on Macquarie River Food and Fibre's claim that the conversion factor in the Macquarie is 53%. This allocation of water has been over generous and has never been properly addressed. It is particularly galling to hear the recent demands from Macquarie irrigators for water to be 'returned.'

Conversions have a long and murky history in the Macquarie. The current debate about Conversion Factors is confusing and secretive, excluding many stakeholders who are materially affected by such decisions. MMELA remains fearful that allocations can be manipulated to favour any one group of water users over others. The entire process needs to be simplified and made clearer so all water users can have confidence in the numbers.

MMELA presumes the approach to calculations of Cap Factors used for determining licence volumes in the Northern Basin will also be used in the same way in the Southern Basin. If not then this again becomes an equity issue.

Another concern of MMELA's is who will have responsibility for calculating and negotiating Cap Factors, particularly should the proposed amendments not be approved. It is the opinion of this organisation that the role of setting Cap Factors should rest with the MDBA to ensure fairness across state boundaries and throughout the Basin.

Flow Assessment:

Using averages to assess, model or guess river flows in the Northern Basin (NB) has always been fraught with dangers. Because the NB, including the Macquarie, historically experiences such variation in flows from large floods to prolonged low flows to no flow, it is impossible to rely on averages to model flows with any degree of accuracy.

The Macquarie also has a responsibility to supply flows to the Barwon Darling system. Including supplementing the town water supplies for Brewarrina, Bourke and Wilcannia. Bourke Shire Council has acknowledged that when water from the Macquarie arrives at Bourke the cost of filtration of the town water supply is greatly reduced. This is a result of the natural filtration as water flows through the Macquarie Marshes' vast phragmites reed beds and other aquatic vegetation. Historically the Macquarie was the largest contributor to the

Barwon Darling however flows reaching Brewarrina and Bourke have significantly reduced since the advent of river regulation. This is according to the MDBA's Hydrological Modelling Report. Any additional reduction to Environmental Water Accounts will further compromise the Macquarie's ability to achieve its obligations to downstream systems. Documents received by MMELA question the concept of Specific Flow Indicators (SFIs) and their usefulness in assessing environmental outcomes, particularly in the unregulated north. They also suggest that SFIs are not fit for purpose in the NB and given much of the lower Macquarie is unregulated the use and effectiveness of SFIs here must be questioned. It is also unclear how the hydrological modelling is linked to SFIs.

Inaccuracies in the Review:

The inaccuracies in both the *Environmental Outcomes of the Northern Basin Review* and *The Northern Basin Review* are shocking and indefensible for an organisation such as the MDBA.

1. When talking about flows in the Macquarie and the amount of environmental water flowing to the Macquarie Marshes and downstream the documents state water is measured at Marebone Break. This is not where environmental water is measured. It is measured at the gauge upstream of Marebone Weir not the gauge on Marebone Break. They are two completely different and separate gauges.
2. When modelling environmental outcomes (or SFIs) for the Macquarie the model assumes all four (4) outcomes are met under all flow scenarios. In fact none have been observed to be met in the field. They all failed under actual observations. This should mean that all the modelled data is corrupted.
3. Page 63, Table 12 states 100GL volume "over 5 successive months", June to April was reached 80 -85 per cent of years. This should read "over 3 successive months". This error was pointed out to MDBA staff when draft documents were released but the figures were not rectified in the final report. This is just another example of how inaccurate and misleading data has been used to justify taking water from other users and the community.
4. Connectivity for native fish was also modelled as being met and again fails real observations. There are a number factors impacting on fish connectivity including flow release times, temperature pollution and flow rates. To think these issues can be addressed using the proposed Tool Box strategies is extremely naive.
5. When comparing the impacts of water recovery on local communities the documents state Coonabarabran is not affected as much as Warren because it is closer to Dubbo than Warren. Coonabarabran is 160KM from Dubbo and Warren is 125KM from Dubbo. How can anyone have any degree of confidence in the data supplied by the MDBA when it contains such rudimentary mistakes?
6. Coonamble which is on the Castlereagh and has approximately one quarter of the Macquarie Marshes within its shire boundary was completely left out of the assessment process. Again this shows ignorance by the MDBA as the proposed amendments will have a direct impact on the Coonamble Shire Council and its rate payers through reduced productivity and reduced water flows for tourism.

Warren Employment Figures:

Information provided to MMELA relating to employment figures for the Warren Shire (Please see Appendix 2 employment data) indicates the NSW and Federal Governments' recovery programs have had little, if any, impact on irrigation farm employment for this area. The figures show that while there was a small decrease from the date of the announcement of the Federal Government Recovery Program, 18th August 2006, numbers have now increased. There were 57 employed in 2006, this has increased to 63 employed in 2012. There are no figures available to MMELA from 2012 on. Ginning jobs went from 7 in 2006 to 34 in 2012.

At the same time non irrigation farm jobs fell from 293 in 2006 to 254 in 2012.

This information was given to the MDBA and irrigation groups throughout the Northern Basin, including Macquarie River Food and Fibre (MRFF) on 4th September 2016.

Is MMELA therefore to assume the media blitz blaming water recovery for jobs losses is nothing more than a propaganda campaign and an easy out for councils who do not want to work to address the issue of job losses in their shires.

Other Influencing Factors:

Supplementary Access and Floodplain Harvesting are two factors that greatly impact downstream water users and until these are looked at in more depth MMELA cannot even entertain any reduction in current environmental water accounts.

FLOODPLAIN HARVESTING -

The whole concept of Floodplain Harvesting beggars belief. How can a Government allow one group of water users to take water (even under licence) when it has absolutely no capacity to measure or even assess the amount of water being taken. It does not know the impact on downstream users and communities. It does not know the impact on the ecology of the rivers, wetlands floodplains, and it does not know the impact on the internationally recognised Macquarie Marshes. One could even go a step further and assume it does not care. Until there is accurate metering of floodplain harvesting licences and meticulous monitoring when water is being taken, there can be no consideration of reducing environmental water accounts.

SUPPLEMENTARY ACCESS -

Supplementary Access licenses also impact the wetlands, floodplains and effluent creeks of the Macquarie. The original intent of providing Supplementary Water Access Licences was to grant opportunistic access to water in times of 'plenty' and when there would be no adverse impact on the environment or downstream users and communities. However access to water under these licences is now being granted every time the trigger point is reached regardless of the environmental health of the river, creeks and in particular the Macquarie Marshes.

Tributary flows and Dam spills are the life blood of the effluent creeks and the lower Macquarie system. By allowing access every time the 5,000ML per day at Warren trigger occurs you severely impact these areas, as this is the height most effluent creeks begin to flow. The creeks just start to flow then supplementary access is announced and the flow in the river retracts thus dropping levels and stopping flows to these creeks and the lower river.

One measure the MDBA should be looking at is lifting the Supplementary Access trigger for the health of the effluent creeks and the lower Macquarie River.

IMPROVEMENTS TO TECHNOLOGY -

During the years since water recovery programs were introduced there have been enormous advances in technology for farmers. These include, self steer technology for tractors, automatic weed sprayers such as 'Weed Seeker', cotton pickers that bale as they go and computerised irrigation systems. All of these innovations have resulted in less jobs on irrigation farms. How has the use of this new technology been considered in the process of determining the so called impacts of water recovery on farms and communities or in the socio economic assessments?

LAND REMAINS IN PRODUCTION -

Another issue that has not been mentioned during all the debate around water recovery is the fact that when willing irrigators sold their water licences, at full market value, (whether it be to the government or another buyer in the market) they still retained the land. This land is still being used for primary production. It was not removed in any way. The respective landholders continue to use it for either livestock production or dry land farming so there is still a monetary return from that piece of land. Selling the irrigation licences did not remove the land's ability to produce.

In many cases irrigators who sold licences remain on their properties and the very large sums they received from those licences came back to the local area. Whether or not these people

choose to spend that money in their local community is another matter, but cannot be considered a negative against the concept of water recovery.

EFFICIENCY PROGRAMS -

An anomaly that needs addressing is the so called Water Efficiency Programs for irrigators. These are 100% taxpayer subsidised. It appears irrigators have become totally reliant on government subsidies every time they experience a hardship, big or small. The protection afforded this group astounds all other agricultural industries. Rarely have other farmers experienced such generosity and this includes programs such as the Great Artesian Basin Cap and Pipe Scheme. This scheme while generous never covered 100% of all costs.

Other Key Points:

- ◆ The MDBA has been negligent in pursuing such a discriminatory proposal. To consider taking water from highly dependent users where impacts will be extremely detrimental and giving it to another group of users who will gain very little is incomprehensible. Also the consultation has been biased and inequitable favouring the irrigation industry to the detriment of other agricultural and non agricultural stakeholders. This has incited splits within communities and is pitting various agricultural industries against each other. For the MDBA to be party to such community unrest is unacceptable. If all stakeholders had been treated equally and fairly communities would not be so fractured.
- ◆ There has been no recognition or acknowledgement of floodplain graziers as affected water users and no attempt to gauge the impact of reduced flows on floodplain graziers. Therefore no hint of compensation for the decline in production should these amendments be accepted.
- ◆ The MDBA has proposed these amendments without any scientific justification. This includes both environmental research and/or rigorous social and economic studies that include all dependent water users.
- ◆ The MDBA must remember that water is the key ecological driver in all wetlands and floodplains. It is foolish and reckless to think you can reduce water availability and not have negative impacts.
- ◆ MMELA can, under no circumstances, support a reduction of recovered water to 320GL. The only number this organisation would support is a recovery target of 415GL or greater!

- ◆ ***The Macquarie Marshes Environmental Landholders Association cannot and does not support the Murray Darling Basin Authority's proposed amendments to the Northern Basin Plan.***

Prepared by
Macquarie Marshes Environmental Landholders Association