

***Finniss Catchment Group Incorporated
Submission to the Parliament of South Australia,
Natural Resources Committee
Inquiry into the Draft Murray-Darling Basin Plan***

The Finniss catchment is in the Eastern Mt Lofty Ranges and is part of the Murray Darling Basin. The Finniss River provides the greatest volume of water from South Australia into the river system.

The Finniss Catchment Group is a well-established community organisation with a diverse membership working to restore the health of the Finniss River catchment.

Impacts on South Australia

1. The environmental impacts of proposed environmental flows in the River Murray system, in particular the Coorong, Lower Lakes and Murray Mouth and whether proposals provide sufficient flows to ensure the long-term ecological viability of the River Murray.

It is clear on reading the proposed plan that the Murray Darling Basin Authority has difficulty with adequately addressing all of the objects of the Water Act which establishes the Authority as the body responsible for developing and overseeing a framework for the management of the Basin's water resources in the national interest.

The Authority is required to:

“give effect to relevant international agreements,
protect, restore and provide for the ecological values and ecosystems services of the Basin,
promote the use and management of Basin water resources in a way that optimises economic, social and environmental outcomes,
ensure the return to environmentally sustainable levels of extraction for water resources that are over-allocated or overused,
maximise net economic returns to the Australian community from the use and management of Basin water resources while protecting, restoring and providing for the ecological values and ecosystems services of the Basin.” p.xii Guide to the proposed Basin Plan.

Our catchment group feels that not enough weight is being given to the requirement to “protect, restore and provide for the ecological values and ecosystems services of the Basin”. We note that not only is the MDBA required by the Act to “protect...and provide for “the environment of the Basin but also, and very importantly, the MDBA are required to “**restore**” it. The local communities (eg Milang, Meningie) have already been devastated from the recent drought exacerbated by over-allocation. Any restoration seems to have gone out the window when the MDBA considered economic and social outcomes and yet it should be obvious to all, that the economy, agriculture and a functioning society are all totally dependent on a healthy environment. We see it as important that the plan deals with restoration specifically and allocates water for this purpose, rendering communities in the future more resilient to variations in the weather.

Our catchment group also feels that not enough weight is being given to the requirement “to give effect to relevant international agreements” . Where the Finniss River flows into the Lower Murray is covered by the Ramsar Agreement but our experience so far with both

state and federal governments is that little or no notice is taken of this commitment or of the other agreements with Japan, China and Korea. It would be useful for the MDBA plan to chart the expected affects on birds, fish and animals that are covered by these treaties with the scenario of 2750 Gigalitres returned to the environment. It is important to show this so it is clear exactly what the MDBA and the government are choosing and its impact on the environment and our relationships with other countries.

We note the MDBA requirement to “maximise net economic returns to the Australian community”. Long-term maximum economic returns are totally dependent on a healthy Basin. Short-sighted ventures may be able to grab a few extra dollars while the environment declines. The MDBA and federal and state government are responsible for the long-term health of future communities. One of our concerns is the increasing ownership of water in the Murray Darling Basin by large corporations like supermarkets, banks and multinational companies. As their ownership increases, economic returns to the Australian community decrease. We believe that the best option for “maximising economic returns to the Australian community” would be to support sustainable farming across the Basin. When farms are sustainable, then communities are sustained also. And for the long term.

It would make the situation clearer if there was information in the plan or its appendices or publicly available elsewhere, showing who actually owns the water, how much they own as well as who trades it, the volume they trade and when.

The Water Act requires that the MDBA will “ensure the return to environmentally sustainable levels of extraction for water resources that are overallocated or overused”. The Finnis Catchment Group is concerned that in the Guide to the draft plan our region, the Eastern Mount Lofty Ranges, is described as in “good” health (see Guide, page 112) with regards to end of system flow. We find this astonishing given that the Rivers Angas and Bremer rarely flow at all, Currency Creek has so little flow that acid has eaten away the shells of the fresh water mussels there, and the Finnis River has been operating in recent years at a minor percentage of its natural capacity. It is obvious to us that water in our area is over-extracted.

While averages and means and computer models have their place, they should always be tested against reality. And our reality is that, in our region, more water is extracted from the system than is sustainable. As part of the Waterwatch program our group has been monitoring water at seven sites in our catchment for eight years.

As a consequence of our knowledge that more work needs to be done on the figures for the EMLR, we are worried that this may mean that the calculations on the other catchments are similarly overly optimistic. We suspect that the same or similar methodology was used to calculate their water availability. This leads us to the conclusion that the Plan as a whole is probably too conservative, that the condition of the Basin as a whole is worse than shown and that the choice of 2750 Gigalitres returned to the environment is totally unsustainable.

We are particularly concerned about the plan’s use of **long-term averages**. The past may well be wetter than the future and is therefore not a reliable base-line. We think that the rare wet years should be excluded from the data (e.g. 1956) to generate an average that is closer to reality. Ours is the land of droughts and flooding rains and averages have limited meaning when you farm or fish or look after the environment.

Modeling. At the moment both state and federal governments are using modeling enthusiastically. However, modeling of environmental systems is problematic as there are so many variables to be taken into consideration. Added to this is the paucity of accurate and reliable data to put in to the modeling. The number of measuring sites and the way it is measured need to improve (eg the way that water volume is measured as it comes into the state is a stick with numbers on it). Much data is rough at best. This modeling needs to be backed up by ground truthing and accurate data.

For South Australia, since we are at the end of the Murray Darling system, it is important that we ensure that time and effort is spent on monitoring and measuring and evaluating. What happens at the end of the system is a measure of the health of the system. We need good data to argue our case. Currently we believe that there is a reduction in the number of monitoring stations by the SA government at the Lakes and Coorong to save money. This is a mistake.

In the plan itself it is not clear how monitoring will be carried out and paid for, let alone acted on.

Environmental Assets. The Finnis Catchment Group suggests the plan should show which environmental assets out of the priority list are going to be retained. It is clear that with the 2750 Gigalitre scenario only a limited number of sites, if any, may remain alive. This needs to be made public so that it is clear what will be lost. It also needs to be made clear that the plan only considers what it sees as “priority environmental sites”. The Basin’s ecology is not maintained by priority sites but by the whole interconnected system, both above and below ground. The more that is left out of consideration the more likely it is that we will kill the whole system.

Time before environmental flows. We are concerned about the length of time for the phase-in period - up to 5 years. And we are concerned about waiting until 2019 to do the work. The last few years of living with the effects of overallocation and drought here at the end of the MDB system has shown us that there is no time to lose. The return of water to the environment has to be very soon otherwise the Murray River and eventually the Basin will be dead. We have a moment of reprieve with the present good flows but this will not last.

International agreements. In the Guide to the Draft Plan it says that with a long term average reduction of 7,600 GL/y, this will “achieve the objects of the Water Act, *including giving effect to relevant international agreements*”. But according to the Guide 3000GL/y will not give effect to international agreements.

Yet now we have a likely 2750 Gigalitres for the environment.

International agreements are not only important for Australia’s standing in the world but are crucial because of our unique responsibility for biodiversity of the Southern Hemisphere. It seems that water can only be obtained for the sites covered by international agreements if water is removed from all other sites, thereby destroying the whole system.

The adoption of the 2750 GL/y target will create considerable political problems. As environmental water will not be available for all sites there will be trade-offs as it says in the Guide “in many regions”. This is where the politics comes in. It is unlikely that environmental assets in SA will be seen as important as assets in NSW or Victoria and therefore South Australia will miss out as has happened before. There is no guarantee that there will be any level of environmental benefit. In fact, there is no guarantee of any benefit for anyone. Irrigators will not have any certainty in dry years, insecurity and risks to

communities will continue. If the 2750 GL/yr scenario is put in place then it will simply not meet the requirements of the Water Act.

In summary, in the plan occasional mention is made of rare and endangered species and icon sites. But it is not sufficient to only consider these in order to make decisions about the health of the Basin. All species need to be taken into consideration. And all sites.

The Finnis Catchment Group firmly believes that the long term viability of the river system should be paramount in government decision-making.

Numbers v outcomes. We believe that the best course of action regarding the MDBA plan is to focus on outcomes rather than the numbers as the modeling and the politics make all the numbers suspect.

The outcomes we would like are that the Mouth stays open all the time, there is sufficient flow out of the mouth to flush the salt load and toxin load out to sea, that the salinity in the Lake Alexandrina is no greater than 1000EC and Lake Albert 1200 EC and that if any of these things look like changing that water allocations are reduced in the same water year, or water is found from public or private storages. In addition we want there to be sufficient flows so that all the wetlands are kept alive.

2. The impact of proposals on the social, cultural, environmental needs of the South Australian community. Consideration to include the water market, stranded assets, structural adjustment and changes to regional economic and social indicators.

Crisis situation. One of the issues that the catchment group has been concerned about from the very beginning of this debate is that none of the documents produced in recent years have made it sufficiently clear to the readers that the Murray Darling Basin is in crisis and immediate action is imperative. There is an assumption that all Australians understand that all catchments within the MDB have been in decline over recent years, particularly since the 1980s.

Cultural flows. The plan becomes very vague when it talks about Aboriginal interests. It seems that Aboriginal cultural rights over water are mentioned because it is politically necessary, rather than that the plan is actually paying the issue any real attention. There are nice motherhood statements, an attempt at "consultation" etc., but there is no actual water.

This is when it becomes clear that the plan is discriminatory.

For every use or potential use of water you need to have figures. But there are no figures detailing the water needed to fulfill the requirements of the Aboriginal groups that live in the Basin. Their needs and uses need to be quantified in the same way as irrigators and miners.

For example, the timing and amount of water required in the system for the Ngarrindjeri to go swan eggging, or for the correct reeds to grow in the lakes for basketry can be quantified. Even if the water requirements for the Aboriginal groups are more than what the authorities are comfortable with, it still needs to be said.

In a democracy, we need to have all the information to make decisions or to see whether our government has made the right ones. And there is no point in leaving some figures out because it all seems a bit hard or difficult to understand or makes it obvious how much we have destroyed our country.

Impact of overallocation in times of drought. We do not want to repeat the situation of overallocation during the next drought. The trauma felt by the locals was overwhelming. The loss of jobs and farms and resulting social impacts like suicide, was dreadful. In addition there was the extra damage caused by the fact that this trauma was because of the actions of our fellow Australians. Leadership and better management is essential next time around.

When the environment breaks down, communities fall apart. We experienced directly that we are totally dependent on a functioning river system.

Mining. We are concerned that the impacts of mining in the Basin are not properly quantified. It is not sufficient to simply look at current use. At the moment, there are thousands of bore holes being dug in the Basin with the potential to destroy aquifers and pollute rivers and streams as well as make some land no longer useable for food production. Some effort must be made at quantifying this for the Plan, both in terms of volume but also water quality. As well, the social and economic impact of mining needs to be taken into consideration. To safeguard the Basin and its potential for future food production, the Plan needs to set limits on mining activities.

The state government needs to be more vigilant in holding mining companies to account. The recent situation in Strathalbyn where the zinc mining company continued for two years without meeting the agreed commitments on water extraction, should never occur again. It was not acceptable that their excuse was a fault in their modeling.

The current low 2750 GL/y. The argument for limiting environmental return to 2750 GL/yr because of damage to rural communities is too simplistic. It is hardly surprising that there are some communities that would be affected very negatively by sustainable limits on water use. However, the Plan does not reveal the social and economic impacts of not applying sustainable limits. The economic and social cost of killing the Basin is far greater than the short-term cost to these communities. In the Guide to the plan the MDBA say that to consider greater than 4000GL/y would be “beyond the range of acceptable reductions”. Would our grandchildren agree? How do you define “acceptable”? The plan mentions the reduction of the gross value of irrigated agricultural production of up to \$1.1 billion per year. Have the reduced production levels in the lower part of the Basin, resulting from unsustainable current practices upstream, been factored in? The problem with putting an observable dollar value as a priority is that other equally important factors (levels of pollution, health, morale, community cohesion, sense of security for the future of your business) are ignored.

All of us who farm consciously take a business risk with regard to water availability, yet, in this instance, it seems the MDBA and government are prepared to prop up bad business practice. We all knew the water was going to run out. But what about all the other Australian businesses that are taking equivalent risks in the city - is the government going to prop them up too? There needs to be some equity here. And what about the communities that will benefit from a greater than 2750GL/y reduction? What about the economic and other benefits for them?

We suspect that the 2750Gig figure is not the result of proper scientific work but it is a politically defensible amount with the plan being reverse engineered to make it look good.

Water Quality and Salinity Management It seems that the MDBA is generally leaving decisions about quality to the state governments. However, salinity levels are critical in all aspects of water management and salt does not respect state boundaries. Being at the

end of the river system, we are acutely aware of the importance of the occasional large flows needed to flush the system.

Water Trading Rules. The MDBA say “a central tenet of water reform in Australia over recent years has been the use of water markets to facilitate the movement of water to its most productive use”. But what does this mean? If a person sells water that would have been used for growing wheat and now it is used for growing truffles, because truffles are more expensive does that mean it is a more productive use? How is production or value measured? How does this help the nation, or communities? Our group is concerned that the increasing privatisation and commodification of water is being used to undermine small farmers, make sustainability harder to achieve and destroy the environment’s potential to service communities in the future. We would be more comfortable with a water trading scheme that is restricted to landholders within the Basin and only allows trading downstream, thereby benefiting the environment.

If the environment was a real participant in this water trading game, it would use its money wisely and target water that is flowing from a location where it is likely to provide maximum benefit to the environment. Where are these locations? Which waters would the environment most value for the whole system to become healthy?

It is disconcerting to see that Environmental Water Holders can trade water as well. This seems to be a recipe for corruption and politically driven decisions. The MDBA says “An efficient and effective water market will move water to more efficient water uses.” This is not what has happened overseas, where water markets have disabled agriculture, created environmental disasters and merely made the well-off richer.

We also need to consider that water is not just a commodity but is the basis for life.

Structural adjustment. During the last drought there was a great deal of adjustment happening but it was all of our own doing, with no assistance of any kind from state, federal or local government. It is important that governments at all levels take action to assist rural people to change towards sustainable working and living. Many farmers aspire to sustainable farming but need help to get there. It is important that the government assists family farmers to survive and keep producing food. Less emphasis should be given to levels of export of our food and water than to the survival and employment of small farmers and communities.

3. *Whether sustainable diversion limits have been fairly and equitably devised and applied across the Murray-Darling Basin, including whether South Australia’s early actions to cap water use and improve irrigation efficiency have been properly taken into account.*

The cap and irrigation efficiency. While it is true that SA Murray irrigators had the cap and became more efficient, the irrigators in the EMLR had no such thing and used whatever water they liked, how they liked. SA should not be the pot calling the kettle black. We need to clean up our own act.

Surface water - groundwater connection. In the Finniss catchment there are a variety of ways in which ground water and surface water are connected. There are multiple places where river water flows into the ground and ground water flows into the river. There are also many instances where bores are extracting from old aquifers which take many years to replenish. There seems to be a lack of knowledge of the details of the

interconnectedness of ground and surface water even in our small catchment. We suspect that there is some ignorance throughout the MDB as to exactly how underground water and surface water interact. If surface and ground water are considered together as resources, fewer mistakes are likely to be made.

The MDBA itself talks about the connection between surface water and ground water. However the plan, and government action, still essentially treats them separately. Recently when an extra 2600Gigalitres was allocated in NSW, the MDBA stated that it was just ground water and it was a bit salty and nothing to worry about. They did not understand our outrage that another 2600 Gigalitres had been removed from the environment. And they did not understand that the removal of salty ground water will have consequences that will affect other water resources. All governments at all levels need to be fully aware of the complex interconnections between surface and groundwater systems.

And no more allocations can be made!

Environmental Water requirements. The tables in the plan show that the MDBA think that there is little need to change water extraction from the Eastern Mt Lofty Ranges. However, our on ground experience is different. For example, there is a short section of the Finnis River that is home to several genetically unique species of native fish. In the summer of 2008, there was so much pumping from the local aquifers that the river simply sank into the ground. This was in an area of the river where there has previously always been permanent water. Fortunately, we were able to rescue some of the native fish but it was just luck that we got there in time. Without a reduction in ground water usage, how are these fish supposed to survive? How many species of fish will be made extinct by the current plan, particularly if monitoring is not in place?

Reductions are necessary for the protection of key environmental assets and functions.

Critical Human Needs water. The Finnis Catchment Group is concerned about water for industry being included in Critical Human Needs water. How do you exactly define “non-human consumption needs which if unmet, would cause prohibitively high social, economic or national security costs”? This seems to allow industry too much leeway. Who is “essential”? What businesses are required to maintain “the social fabric of community”? Coca -Cola? Industry should be like sustainable agriculture and learn how to operate within the limits set by the weather. We suggest that Critical Human Needs water should be drinking water plus water needed for the maintenance of public health and emergency services.

Unassigned Water. The Finnis Catchment Group is opposed to the notion that there could be water in the EMLR that is “unassigned” and still to be exploited. It is clear to us that the EMLR is already over- allocated and there should be no water made available to be sold to the highest bidder.

4. Proposed transition arrangements such as water purchase and investment in infrastructure and adjustment to a future with lower water availability.

Climate change. We cannot understand why the MDBA is not prepared to incorporate in the Plan the full effect of the 10% predicted decline in average annual water availability. Surely, the situation will only get worse and this is setting up a circumstance where water users will find it hard to adapt to a sudden large decrease in water availability.

Water supply for Adelaide. The state government needs to aim to take the city of Adelaide off water from the Murray River. More efforts need to be made in the areas of water recycling.

Plan review and amendment.

To review plans every ten years is bad practice when there are so many variables and so little certainty. Reviews should occur much more often. This will also allow for the effects of climate change.

5. Other related matters.

Equity. It is important to our catchment group that water is distributed equitably through the system. Firstly, the environment needs to be made healthy so agriculture and economic and social requirements can be met. Secondly, the water that is then available for human use needs to be managed and distributed in a fair way. We question the plan's assumption about the method of water sharing. Although on the surface a percentage reduction in catchments across the board seems fair, in fact, it may not be so. Water users do not come to the table in an equal way. Because of the privatisation of water since 1994 and the historical course of economic activity in Australian rural areas, there are large corporations like supermarkets and banks and multinational companies that have a disproportionate political and economic power and a disproportionate control over many aspects of Australian agriculture. Since this is the case, we think it is important to publish in the MDBA plan data that makes this situation clear - who owns the water, how much do they own, who trades it. We are concerned that the changes in the Plan may disproportionately benefit large corporations and agribusinesses and disadvantage indigenous people, family or small farmers, other small landholders and tourism operators who benefit the community and contribute to the nation.

The MDBA also needs to bear in mind that family farmers and other small landholders are the ones who do the bulk of the work in revegetation, fencing off watercourses and environmental care generally while the large corporations are mostly concerned with profits rather than caring for country. If the MDBA plan benefits mainly large corporations then not only will a good deal of invaluable agricultural knowledge move to the city when farmers are pushed out but also the people who do most of the community and environmental work and care will be lost to the Basin. This will have a devastating effect on the Basin's environment.

Stock and Domestic Water. In line with our views on equity we believe that stock and domestic water should be included in the Plan. All water users need to take responsibility for what we all do and the system needs to be transparent.

Water Quality. We support the MDBA statements about water quality and would like the MDBA to emphasise this a bit more in the Plan. As a result of our water monitoring of seven sites across our catchment and it is obvious to us that water quality is in decline. Prescription in our area has done nothing to stem the continuing reduction in water quantity or quality. We are concerned about whether all water that comes to the Lakes and Coorong will be good quality water or not.

Parallel Government Action. We are concerned that there seems to be little in the way of action by government departments to assist farmers to work out what to do given the effect of the MDBA Plan. It would be helpful if the government saw the Plan as an opportunity to push strongly for sustainable farming. Irrigators need pathways to be able to shift practice and focus, and help from the government to do so. This could be in the form of tax concessions for existing sustainable activities and infrastructure and crop changes. Currently, it is difficult for any rural person to get a loan, so it would be helpful if the government set up a low or no interest loan system so farmers can shift to sustainable farming.

Greed. The MDBA plan should have been a plan to help manage and control human greed but instead it reads as a plan to manage and control the environment. As such it is destined to fail. We compare it to the experience of the catchment group with the government regarding the construction of the weirs at the Narrows, at Clayton and Currency Creek. Rather than dealing with the problem of overallocation the government focused on trying to resolve the problem by controlling the environment and building barriers. Modelling was done and the government argued that a haven for wildlife would be created, the wishes and knowledge of local people were ignored. After the Clayton Weir was constructed and the flow from the Finniss River was cut off from the lake, the water in the channel became progressively more salty and every fresh water fish died, every fresh water crab and mussel died and we were left with a disaster. Similarly the notion in the MDBA plan of artificially watering (some) iconic sites to save water for irrigation is destined to be an environmental nightmare.

Action now. We would like to emphasize that we think that action to save the Basin is urgent. The River cannot live through another over-allocation drought. We are particularly concerned by resignations from the MDBA, calls by Victorian Ministers and others for a delay, and the withdrawal of the Wentworth Group of Concerned Scientists. We have been granted a small reprieve with the recent weather conditions but it is imperative that the moves towards change are taken NOW.

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