We thank you for the opportunity to comment on the Barwon-Darling Water Sharing Plan.

The Australian Floodplain Association has been established since 2006 and lobbies for healthy rivers and healthy communities within the Murray Darling and Lake Eyre Basins. It strives for equity and justice in the water debate and as most of its members are floodplain graziers it provides a different agricultural, economic, cultural and social view to that of the irrigation industry. As such it is seen by government as a peak body.

But the AFA membership also includes shire councils, Local Aboriginal Land Councils, tourist associations, water use groups and other community groups from the Northern Basin. This breadth of membership indicates the concern the general community feels about the plight of the Darling River system.
We hope you are able to address those concerns of our membership. The AFA asks you
recommend to government that the Barwon Darling Water Resource Plan and its
associated Water Sharing Plan address the following key points:

- Re-establishment and permanent protection of Low Flows
- Protection of Community (Environmental) Water.
- Effective connection to upstream and downstream water planning areas so end-of-
  system flow targets are achieved.
- Ensure floodplain harvesting does not adversely impact floodplain and in-channel
  ecosystems as well as downstream community sustainability and well-being.
- Native Title Rights and cultural flows
- Recognition of basic riparian rights, stock and domestic needs, essential human and
town water needs as a higher priority than extraction for irrigation

**Background**

Aboriginal members of the AFA from the Wilcannia area have lived on the river for about 50,000
years. AFA members running livestock have worked properties on the Darling River since 1864.
Droughts have come and gone and the river has persisted. These long standing inhabitants and
communities with a strong cultural, social and economic attachment to the Darling are convinced
that over-extraction for irrigation in the upper reaches of the Darling system will destroy both the
river and their communities unless the over-extraction is addressed. Some of this over-extraction
can be overcome by adjustments to the Barwon-Darling Water Sharing Plan. The current drought
is not the issue here. It is the over-extraction of water from within streams, groundwater sources
and particularly floodplain harvesting. The drought has tipped a highly stressed system over the
edge much more readily than would have happened otherwise.

The concerns of the AFA and its members are held by others. The Academy of Science report into
fish kills at Menindee¹ says in its "**Summary Findings:**

4. The root cause of the fish kills is that there is not enough water in the Darling system to avoid catastrophic
decline of condition through dry periods. This is despite a substantial body of scientific research that points to
the need for appropriate flow regimes. Similarly, engagement with local residents, Indigenous and non-
Indigenous, has been cursory at best, resulting in insufficient use of their knowledge and engagement around
how the system is best managed.

5. The panel strongly supports the objectives of the Water Act 2007 and the framework of the Murray-Darling
Basin Plan (2012), which were developed with bipartisan political support and intended to increase water for
the environment. However, the findings summarized above and detailed in the following sections point to
serious deficiencies in governance and management, which collectively have eroded the intent of the Water

The freshwater systems of the Darling are already listed as endangered (NSW, 2007) and include multiple fish
species listed as threatened by the Commonwealth. Failure to act resolutely and quickly on the fundamental
cause—insufficient flows—threatens the viability of the Darling, the fish, and the communities that depend on
it for their livelihoods and wellbeing including the traditional owners, who have recognised rights and
responsibilities."

The South Australia Royal Commissioner Brett Walker has a similar view when he says in his
report² of February 2019:

“But the true, single, bottom line is that no more water may be taken than at the level beyond which the key
environmental values would be compromised.”

“There are claims that the Water Act of 2007 was not an environmental act but one that mandated balance
between the environment and human uses. Digging deep into the turgid 236 pages of the Water Act for
confirmatory phrases, the Honorable Malcolm Turnbull claims, now, that the Act was all about balance.
To a disinterested reader this is poppycock. The National Productivity Commission’s interpretation of the Water Act (2007) is that “it requires the Murray-Darling basin Authority to determine environmental water needs based on scientific information, but precludes consideration of economic and social costs in deciding the extent to which these needs should be met”. Similarly, the High-Level Review Panel for the Murray Darling Basin Plan (of which I was a member) stated that “The driving value of the Act is that a triple-bottom-line approach (environment, economic, social) is replaced by one in which environment becomes the overriding objective, with the social and economic spheres required to “do the best they can” with whatever is left once environmental needs are addressed.”

This interpretation was also very clearly (and reasonably, in my view) the interpretation taken by the Board and Management of the MDBA in developing the Guide to the Basin Plan. This was transmitted unambiguously to the members of the High-Level Review Panel for the Murray Darling Basin Plan.”

Additionally the Productivity Commission³ says NSW must be given more time to properly prepare WRPs “
given the number of outstanding WRPs and the magnitude of proposed changes in some plans, including rules to protect environmental water in the Barwon-Darling and provisions to meet critical human water needs and address water quality issues in the Lower Darling.”

Finally the INDEPENDENT ASSESSMENT OF THE 2018-19 FISH DEATHS IN THE LOWER DARLING – INTERIM REPORT by Vertessey et al⁴ lists a number of findings which confirm there are serious deficiencies with the management of the Darling system. The relevant findings are listed below:

“4. Modelled data up to 2009 suggest that pre-development inflow volumes into the Menindee Lakes are of the order of two to three times greater than those under current developed conditions. The comparative effects of drought and development on lake inflows during 2017-18 could not be determined reliably, owing to the unavailability of an updated pre-development model.

5. The relative effects of diversions on flows within the Barwon–Darling tributaries are greatest in dry years.

6. Water extractions from the tributaries of the Barwon–Darling have a much greater impact on Menindee inflows than extractions directly from the Barwon–Darling River.

17. The current situation in the lower Darling remains critical. The prospect of more fish deaths exists due to persistent stratification in the remaining weir pools. Without significant flushing inflows, further deaths of surviving fish may also be expected in the future.

12. Accelerate and deepen efforts to move towards a more dynamic “active event-based management” approach to providing flows through the Darling system. Strategies should be implemented as soon as possible to protect first flushes, protect low flows, shepherd environmental releases, enhance system connectivity, and improve water quality.

Unlike other rivers across the Basin, the management arrangements in the Barwon–Darling are relatively passive — that is, extraction is governed by long-term rules, not by an actively engaged river operating framework. These long-term rules are embedded within water sharing plans (or equivalent) that stipulate the minimum flow thresholds above which particular licence holders can pump from the river. Historically there have been no provisions to prevent pumping once those minimum thresholds are reached, meaning that environmental flows are not adequately protected. This compromises environmental outcomes achievable through water recovery, particularly in providing downstream connectivity to the Darling system. There is a recognised need to modify existing arrangements to address these issues, in particular by (i) implementing more dynamic ‘active event-based’ management of extractions to protect releases of held environmental water, (ii) protecting ecologically important first flushes after prolonged dry spells, and (iii) implementing individual daily extraction limits (IDELs) to ensure that minimum in-channel flows are protected (NSW DPI, 2018).

In the case of Queensland, the interaction between the Border Rivers and the Barwon–Darling should be considered in water resource plans and long-term watering plans. This includes quantifying the volumes of environmental water crossing the border from Queensland to NSW. This would increase transparency and would help the CEWH with their planning, as well as clear the path to move to active management in Queensland.

Achieving full active event-based management in the Barwon–Darling with community support is a long-term endeavour, so it is also recommended that the NSW, Queensland and federal governments work together to address any policy conflicts and resourcing shortfalls required to overcome the active management challenges in this river system.
Active event-based management brings risks and uncertainties. Nonetheless governments should be encouraged to embrace this uncertainty within an adaptive management context as a means to achieving long-term improvements to flow regimes.

13. More sophisticated Basin management approaches will require much better measurement and reporting to increase public confidence in water reform and management arrangements.

Planning and operation of the Basin river systems depends on accurate accounting and reporting on water volumes, including volumes held in storage, flow rates, extractions, and system losses (seepage and evaporation). It is evident to the panel that in many instances there is a heavy reliance on dated or imprecise measurements and estimates, and there is a lack of confidence among some scientists and the community in how many of those estimates are derived. This lack of confidence in the underlying information base weakens confidence in management arrangements and the social license for water reform.

Increasing stakeholder confidence thus requires greater investment in the measurement and reporting on water information, including some forms of consumptive use that remain poorly characterised. For example, the bathymetry of the Menindee Lakes was last quantified in 2004, and is postulated by the local community to have changed over time due to sediment deposition, thereby decreasing storage volumes. Similarly, in the case of Menindee Lakes, losses that include seepage are often described only in terms of evaporative losses, creating considerable confusion. Whether or not such concerns are well founded, there is a significant perception issue to be addressed.

15. Improve monitoring of end-of-system tributary flows that contribute to connectivity in the Darling system.

Our investigations to date indicate that, due to the highly distributory nature of many of the tributaries that enter the Barwon–Darling, there are a number of locations where flows into the Barwon–Darling are not currently measured or where existing measurement methods are subject to a high degree of uncertainty.

In order to better support efforts to improve connectivity throughout the Basin, the panel recommends improving information about the relative contributions made by each tributary both on an event basis and over the longer term.


In the Barwon–Darling, we have found that even though time event metering exists, the technology has not allowed for a systematic assessment of compliance with licence conditions while a particular flow event is occurring.

18. Continuously update pre-development model runs developed for the Basin Plan with recent climate information to enable more rapid assessment of the effects of diversions and environmental water releases.

Scientists and catchment stakeholders have expressed significant concerns about the effects of upstream diversions on the health of the Darling River. Under the Basin Plan, governments are committed to reducing diversions over time but there remains significant argument about the pace and proposed magnitude of change. Sadly, much of the argument is poorly informed because of the weak information base available. Our panel sought to quantify the relative effects of drought and diversions on the current water availability crisis in the lower Darling but was stymied by the lack of availability of an up to date pre-development model run for the Barwon-Darling. We recommend that an updated pre-development model run is generated and refreshed on an annual basis.”

Improving the Plan

The new BD WSP can address this pressing issue by observing, complying with or adopting the following:

1. Conforming with the NSW Water Management Act (2002), the Commonwealth Water Act (2007) and the Basin Plan (2012) which identify that environmental needs take priority over irrigation. The information provided below is legal advice provided to the AFA by the Environmental Defenders Office NSW⁵ (points 24-46):

“The water management principles of the NSW Water Management Act in relation to water sharing are set out in section 5(3) of the Act and provide as follows:
 (1) sharing of water from a water source must protect the water source and its dependent ecosystems; and
 (2) sharing of water from a water source must protect basic landholder rights; and
 (3) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b)”

Basic landholder rights – including stock and domestic rights
24. The NSW Water Management Act creates a basic structure under which water required for the environment and water required to satisfy ‘basic landholder rights’ are to be satisfied before rights to take water are conferred by WALs.

25. The water management principles of the Water Management Act in relation to water sharing are set out in section 5(3) of the Act and provide as follows:
   (1) sharing of water from a water source must protect the water source and its dependent ecosystems; and
   (2) sharing of water from a water source must protect basic landholder rights; and
   (3) sharing or extraction of water under any other right must not prejudice the principles set out in paragraphs (a) and (b).

26. ‘Basic landholder rights’ are domestic and stock rights, harvestable rights or native title rights. These terms are further defined in ss52 to 55 of the Water Management Act.

27. ‘Domestic and stock rights’ is defined in s52 to mean that an owner or occupier of a landholding is entitled, without the need for a water access licence, water supply work approval or water use approval, to take water from a river, estuary or lake to which the land has frontage or from any aquifer underlying the land, to construct and use a water supply work for that purpose and to use the water so taken for domestic consumption and stock watering but not for any other purpose. ‘Domestic consumption’ is further defined to mean consumption for the normal household purposes of domestic premises on the relevant land and ‘stock watering’ is defined to mean watering of stock animals being raised on the land (with exclusions for intensive animal husbandry).

28. Overall, this means that the domestic and stock rights, to the extent that they are within the scope of basic landholder rights, are intended to be met (after environmental needs) as a priority under the Act.

29. Any person exercising a function under the Act (including the Minister in preparing a Minister’s plan and a management committee preparing a management plan) has a duty under section 9 to:
   (a) take all reasonable steps to exercise the function in accordance with, and so as to promote, the water management principles of this Act; and
   (b) as between the principles for water sharing set out in section 5(3), to give priority to those principles in the order in which they are set out in that subsection.

6 In Nature Conservation Council of NSW Inc v Minister Administering the Water Management Act 2000 [2005] NSWCA 9 at [54] the Court of Appeal held that s9(1)(b) placed a duty on the Minister in preparing a Minister’s plan to apply the hierarchy specified in s5(3); see also Murrumbidgee Groundwater Preservation Assn Inc v. Minister for Natural Resources [2005] NSWCA 10 at [16].

30. The water management principles discussed above are reflected in the requirements for drafting the water sharing provisions of a management plan.

31. Section 20(2) of the Water Management Act provides that the water sharing provisions must deal with:
   (a) Establishing environmental water rules;
   (b) Identification of requirements for water within the area, or from the water source, to satisfy basic landholder rights;
   (c) Identification of requirements for water for extraction under access licences;
   (d) Establishment of access licence dealing rules for the area or water course;
   (e) The establishment of a bulk access regime for the extraction of water under access licences, having regard to the rules referred to in paragraphs (a) and (d) and the requirements referred to in paragraphs (b) and (c).

32. Section 20(2)(f) goes on to provide that the bulk access regime must be consistent with the water management principles discussed above.

33. This is altered slightly during the suspension of a management plan due to severe water shortages under s49A or 49B. At such times, priority of access to water is determined by s60(3) which gives first priority to domestic take in the exercise of basic landholder rights and to take under a WAL for domestic and essential town services. Second priority is given to the needs of the environment and third priority is given equally to stock water taken in the exercise of basic landholder rights and a number of other forms of take under WALs.
34. The primacy of the water management principles in the preparation of a management plan is emphasised in s43 which provides that within five years after it was made, the Minister is to review each management plan for the purpose of ascertaining whether its provisions remain adequate and appropriate for ensuring the effective implementation of the water management principles.

35. In the recent decision of Arnold v Minister Administering the Water Management Act 2000 (No. 6) [2013] NSWLEC 73 (Arnold (No. 6)) the Land and Environment Court considered arguments that one of the general water management principles in s5(2)(g) dictated a particular approach to the preparation of a WSP. That particular principle states that social and economic benefits to the community should be maximised. The Land and Environment Court held that the Minister’s obligation is to take all reasonable steps to generally promote the water management principles as a whole, noting that the water management principles compete to some extent and needed to be balanced, with the result that the Minister was not bound to achieve any end to which the water management principles are directed.

36. In our view, this decision could not be extended to alter the priority established in s5(3) as between the environment, basic landholder rights and other water access rights. We have reached this conclusion for three reasons. Firstly, the Arnold (No. 6) decision was made in relation to one of the general water management principles set out in s5(2). That particular principle is not expressly integrated into the WSP content in the same way as the water sharing principles in s5(3).

37. Secondly, s9(1)(b) contains an express requirement that the priority order established in s5(3) be reflected in the exercise of functions under the Act. There is no similar obligation in relation to the general water management principles in s5(2).

38. Finally, the Court of Appeal has given a more authoritative interpretation of the effect of the water management principles in s5(3). In Harvey v Minister Administering the Water Management Act 2000; Tubbo v Minister Administering the Water Management Act 2000 [2008] NSWLEC 165, the Court at first instance (which was quoted with approval on appeal)7 made the following observations about the statutory scheme of the NSW Water Management Act:

> “every drop of water that is necessary to protect the water source is a drop not available for any other purpose. Every drop necessary to protect water dependent ecosystems is not available for basic landholder rights. Every drop available for basic landholder rights is not available for persons extracting under other rights. With respect to those other rights, every drop allocated to one person is a drop not available to any other person. An adjustment of any one interest through a plan will tend to adjust all other interests at least to some extent”.

7 Accepted by the Court of Appeal on appeal in Tubbo Pty Ltd v Minister Administering the Water Management Act 2000; Harvey v Minister Administering the Water Management Act 2000 [2008] NSWCA 356 per Spigelman CJ at [31]. Also accepted by the Land and Environment Court in NA & J Investments Pty Ltd v Minister Administering the Water Management Act 2000 [2011] NSWLEC 51.

39. The differences discussed above which will arise when a water sharing plan is being made by the Minister under s50 do not, in our view, alter the fundamental approach which must be taken in applying the principles in s5(3) to the preparation of a water sharing plan. As discussed above, we do not believe that the s50(2A) power to ‘dispense with’ particular requirements of Part 3 could be interpreted as an exception to these requirements, including because they arise from provisions outside of Part 3.

40. The basic approach of the water sharing provisions of a management plan under the Water Management Act are that they first establish the water needed for the environment and then for basic landholder rights (which include some take for stock and domestic purposes), and only then allow any additional water to be accessed under WALs.

Effect of Commonwealth Water Act

42. The plan currently being prepared for the Barwon Darling will be a water resource plan under the Commonwealth Water Act 2007, incorporating a water sharing plan made under the NSW Water Management Act8.
43. As a basic proposition, the Commonwealth Act is intended to operate concurrently with state water laws and does not descend to the level of detail of determining rights of priority over access to water between individual users.

44. This is reflected in s10.08 of the Basin Plan 2012 which requires water resource plans (WRP) made under the Commonwealth Act to identify each form of take in the plan areas, any classes of water access rights under State law that apply to that form of take and the characteristics of those rights. Section 10.08(2) goes on to provide that a WRP must require the holder of a water access right to comply with the conditions of that right.

45. There is nothing in the Commonwealth Water Act or the Basin Plan which would require that the priority order established under the NSW Water Management Act be altered.

46. As a consequence, the approach which must be taken to prioritising rights to water in drafting a water sharing plan is that the environment has first priority; second priority is basic landholder rights, followed by rights under WALs.

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9 See, for example, s250B of the Commonwealth Act: “The commonwealth water legislation is not intended to exclude or limit the concurrent operation of any law of the state”. 10 See s4 of the Commonwealth Act: ‘water access right’ is defined as a right conferred under State law to take or hold water.

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2. Ensuring Connectivity with other WRPs

The Barwon Darling Water Resource Plan/Water Sharing Plan must accommodate the environmental requirements of downstream planning areas and in turn must have its needs met by upstream water management planning areas.

The Water Act (2007) provides the head of power for making water resource plans, but is not particularly prescriptive about contents. However, s55 provides that the WRP must be consistent with the Basin Plan.

The AFA sought legal advice in relation to whether water resource plans (WRPs) prepared under the Commonwealth Water Act 2000 need to have ‘connectivity’ with other plans, in the sense that they need to have regard to water entering the WRP area from connected water sources and the amount of water that should exit the plan area downstream or into connected water sources.

The advice we were given is as follows (points 6-17):

“6. The approach being taken by the NSW government in the preparation of the WRP for the Barwon-Darling is that the plan will be a WRP for the purposes of the Commonwealth Water Act 2007 and a water sharing plan for the purposes of the NSW Water Management Act 2000 (Water Management Act).

NSW Water Management Act
1. Section 18(2) of the Water Management Act provides as follows:

“Due regard may also be had, in the formulation of the plan’s proposals, to the effect within each water management area or water source to which the plan applies of activities occurring, or likely to occur outside each such area or water source.”

8. This provision was inserted by the Water Management Amendment Act 2002, the explanatory notes to which state as follows:
“It is particularly important for the committees [in formulating management plans] to recognise conditions and impacts from upstream and downstream of their area. This is because the area covered by the plan will generally be part of a broader, interconnected water system. Specifically, under the Act as it existed prior to this amendment, a committee can not have regard to the effect within the plan area of activities occurring, or likely to occur, outside the plan area. For example, activities upstream could have an impact on the availability and quality of water.”

9. As a consequence, water sharing plans may be prepared with due regard to what is occurring under other water sharing plans. The use of the word ‘may’ in s18(2) (particularly in contrast to the use of the term ‘must’ in ss18(1) and (1A)), means that this is not a mandatory consideration.

10. What will constitute “due regard” will be determined on the basis of what is adequate regard in the circumstances of the case, including the scheme of the Act and the purpose of the decision being made. “Due regard” does not mean sole regard and this obligation must be reviewed in the context of the mandatory requirements of the plan, as well as the many other matters which must be considered in the process. Having due regard to connectivity considerations will not authorise the creation of a plan which fails to comply with the Act in other ways.

**Commonwealth Water Act and Basin Plan**

11. There are requirements for water resource plans in both the Water Act 2007 (Cth) itself and in the Basin Plan 2012.

12. While the Water Act itself provides the head of power for making water resource plans, it is not particularly prescriptive about contents. However, s55 provides that the WRP must be consistent with the Basin Plan.

13. At a very basic level, the Basin Plan should create a degree of coordination between water resource plans due to the requirements for such plans to accord with matters set in the Basin Plan (such as the SDLs for each WRP area).

14. The Basin Plan will also create a degree of coordination between WRPs in the matter of environmental watering through:

   (1) The Environmental Watering Plan in the Basin Plan, requires the production of an environmental watering strategy (s8.13) which is intended to guide the development of long term watering plans for each WRP area. Long term watering plans are, in turn, required to be reflected in each WRP by s10.17 of the Basin Plan 2012.

   (2) Section 10.27 (in relation to surface water connections) of the Basin Plan requires WRPs to provide for coordination of environmental watering between the two areas. Similarly, s10.19 (in relation to groundwater with significant hydrological connection to surface water) requires that consideration be given to whether rules are required to avoid compromising environmental watering requirements.

15. At a more fundamental level, section 10.05 of the Basin Plan provides that a water resource plan must be prepared having regard to the management and use of any water resources which have a significant hydrological connection to the water resources of the water resource plan area. A ‘water resource’ means surface water, groundwater, a watercourse, lake, wetland or aquifer.

16. As a consequence, the Basin Plan does require WRPs to have regard to way in which other water resources with ‘significant hydrological connection’ are being managed and used. This would include
upstream and downstream areas of a watercourse, as well as groundwater systems with significant connection to the watercourse.

17. The fact that the requirement includes having regard to ‘management’ of significantly connected water resources, we think necessarily means having regard to the consequences of the water resource plan and other instruments governing access to water in that area.

“At a very basic level, the Basin Plan should create a degree of coordination between water resource plans due to the requirements for such plans to accord with matters set in the Basin Plan (such as the SDLs for each WRP area).”

“Section 10.05 of the Basin Plan 2012 and s18(2) of the Water Management Act 2000 (NSW) will require water resource plans which incorporate water sharing plans under the NSW Act, to be prepared having regard to water resources with significant hydrological connection. Coordination for environmental watering purposes is also required by s10.27 and 10.19 of the Basin Plan, as well as by s10.17 and the long term watering plans which sit under the Environmental Watering Plan.”

“The Basin Plan does require WRPs to have regard to the way in which other water resources with ‘significant hydrological connection’ are being managed and used. This would include upstream and downstream areas of a watercourse, as well as groundwater systems with significant connection to the watercourse.”

3. The circumstances in which third party impacts/socio-economic impacts are relevant to the preparation of a water sharing plan.

The legal advice received by the AFA on this matter is (points 47-59):

47. “This issue arose in the context of assertions by the NSW government that a WRP cannot result in ‘third-party impacts’11. As you have previously discussed with Emma Carmody of this office, we can find no statutory basis for such an assertion.

48. The Department, in our meeting of 31 January 2019, tacitly conceded that these assertions are not correct and that it will now proceed in this space on the basis of the requirement in the Water Management Act 2000 (NSW) that socio-economic impacts be assessed.

49. This concession does not mean that the Department’s current approach can be maintained with a merely semantic shift from ‘third party impacts’ to ‘socio-economic impacts’. Any consideration of socio-economic impacts must proceed in accordance with the Water Management Act.

11 See, for example, the Status and Issues paper for the Barwon-Darling Water Resource Plan which makes the assertion that this is a principle guiding the Basin Plan 2012.

Socio-economic impacts

50. There is only one provision of the NSW Act which specifically refers to socio-economic impacts (other provisions calling up social and economic benefits and outcomes are discussed below). That express provision is section 18 which sets out matters to which ‘due regard’ should be had in the formulation of a management plan (which includes a water sharing plan).

51. Section 18(1) provides that in formulating a management plan, the management committee must ‘have due regard’ to the socio-economic impacts on the proposals considered for inclusion in a draft management plan.

52. A few points to note about this provision:

(1) It is a rule of statutory interpretation that the Act must be read as a whole. The obligation to have due regard to socio-economic impacts must be read in the context of the objects of the Act, the mandatory provisions of a water sharing plan and the rules for making water sharing plans, as well as the other matters to which due regard must be had under s18;

(2) “due regard” has been held to mean adequate regard in the circumstances of that particular case (Maritime Services Board (NSW) v Liquor Administration Board (1990) 21 NSWLR 180), with adequate regard to be judged by the scheme of the Act and the purpose of the particular provision;
(3) “due regard” does not mean sole regard;
(4) having regard to something does not mean complying with it (R v Police Complaints Board; Ex parte Madden [1983] 1 WLR 447);
(5) In the Arnold (No. 6) decision (discussed above) it was held by the Land and Environment Court that:
   (a) the statutory obligation to have due regard to socio-economic impacts did not include a mandatory requirement to conduct a formal socio-economic study or to consider individual impacts on a farm-by-farm basis;
   (b) the concept of socio-economic impacts in the Act is very broad and has “recognised that social and economic benefits may include environmental benefits” and that the Minister is entitled to consider that environmental benefits may also have a positive socio-economic impact.

53. In this case, having due regard to socio-economic impacts may mean modifying proposed inclusions in the management plan (including in the water sharing provisions) but only within the bounds permissible under the Act.

54. For example, section 16 of the Act provides that management plans must be consistent with a number of other documents and policies including the State Water Management Outcomes Plan. It would be unlawful for socio-economic impacts considered under s18 to lead to a management plan which created an inconsistency with one of the matters listed in s16.

55. Similarly, s20(f) has the effect that the bulk access regime in the management plan must be consistent with the water management principles identified in s5. This is a mandatory requirement and inconsistency with the water management principles could not be lawfully justified by having regard to ‘socio-economic impacts’.

56. It should, however, be acknowledged that ‘consistency’ can be a matter of degree and that judgments about when a management plan might become relevantly inconsistent under ss16 or 20 would rarely be clear cut.

57. Given that the Barwon-Darling WSP will be a Minister’s plan to which s50(2A)(b) applies, it may be arguable that the Minister could elect to dispense with the requirement to ‘have due regard’ to socio-economic impacts. However, in light of the department’s representations, this is unlikely to be the case.

Other relevance of economic impacts

58. Economic considerations may become relevant to the preparation of a management plan in a number of other places in the Act including:
   (1) The objects in section 3 of the Act include “to recognise and foster the significant social and economic benefits to the state that result from the sustainable and efficient use of water” including a number of specified benefits which specifically include “benefits to the Aboriginal people in relation to their spiritual, social, customary and economic use of land and water”;
   (2) The general water management principles in s5(2) of the Act include the principle that “the social and economic benefits to the community should be maximised”. This principle is part of a list which includes a number of environmental and cultural principles;
   (3) The water management principles specific to water use in s5(3) include, in addition to principles about avoiding land degradation and impacts of water use on other users, “water use should be consistent with the maintenance of productivity of land in the long term and should maximise the social and economic benefits to the community”;
   (4) Section 6(2) identifies the objectives of the State Water Management Outcomes Plan as “to set the overarching policy context, targets and strategic outcomes for the management of the State’s water sources, having regard to the results of relevant monitoring programs and relevant environmental, social and economic considerations”;
   (5) Section 43A, which allows the Minister to extend the life of a management plan which includes water sharing provisions, requires the Minister to consider a report of the Natural Resources Commission which addresses “the extent to which the water sharing provisions have materially contributed to the achievement of, or the failure to achieve, environmental, social and economic outcomes”
59. As discussed above, in each case the economic considerations are only one aspect of the plan or decision being made, or the relevant principles, and must be read in the context of the administrative action being taken and the other relevant considerations, requirements or principles.

60. While the economic and social benefits of the utilisation of water as a resource are among the objectives of the Act, that is not a licence to disregard the environmental protections and basic landholder rights also contained in the Act or to treat economic benefits as the overriding consideration in any decisions under the Act."

4. Do Stock and Domestic rights have priority over other water access rights under a water sharing plan? Legal advice provided to the AFA says (Points 13-23):

13. "While the Water Management Act envisions management plans (which include water sharing provisions) being made by a management committee for each "water management area"2, section 50 of the Act also allows the Minister to make a "Minister’s plan" for part or all of any water management area(s) or water source(s). There are some relevant differences between water sharing plans made by a management committee and those made by the Minister (including the current Barwon-Darling water sharing plan).

14. This section will discuss:
(1) the significant differences between Ministerial and other water sharing plans;
(2) the priority given to ‘basic landholder rights’ (which include stock and domestic rights) under the Water Management Act; and
(3) the effect of the Commonwealth Water Act.

2 Established by gazette notice under s11.
3 See s2(2) of the WSP.

Minister’s plans

15. The Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012 was made by the Minister under this provision3 and applies to two water sources across four management areas4. The new water sharing plan will also proceed as a Ministerial Plan5.

16. There are some differences between the requirements for management plans made by a committee and Minister’s plans.

17. The primary difference is that, section 50(2) provides that a Minister’s plan must ‘in general terms’ deal with any matters a management plan is required to deal with and may deal with any other matters a management plan is authorised to deal with.

18. The meaning of this provision has been considered by the Land and Environment Court, most recently in Arnold v Minister Administering the Water Management Act 2000 (No. 6) [2013] NSWLEC 73, and earlier by the Court of Appeal in Nature Conservation Council of New South Wales Inc v Minister Administering the Water Management Act 2000 [2005] NSWCA 9. Those decisions have the effect that ‘in general terms’ means that “a lesser degree of specificity is permissible in a Minister’s plan”.

19. As a consequence, while the content requirements are generally the same in a management plan and a Minister’s plan, the Minister can address the required content with less specificity.

20. A further difference is that s50(2A)(a) has the effect that “part 3 (except sections 15 and 36-41) applies to a Minister’s plan” but that the Minister may elect to adopt the excluded provisions. Sections 15 and 36-41 contain procedural requirements. This means that the procedural
requirements that apply to plans made by a management committee do not apply to the Minister, unless the Minister elects to adopt those requirements.

21. The final difference is in section 50(2A)(b), which is a curious provision that applies in relation to a Minister’s plan which is made for more than one (or parts of more than one) water management area or water source. It provides that the Minister “may dispense with a particular requirement of Part 3”.

22. It is arguable that this provision could create an exception to s50(2) and allow the Minister to dispense with content requirements of the plan. However, we do not think that this is the better view. This is because, among other reasons, the requirements of s20 (core provisions) are interrelated and create a requirement that other parts of the Act (including the objectives and principles of the overall Act) be reflected in the plan. If the Minister had the discretion to pick and choose which of the core provisions in s20 to incorporate in a WSP, it could create inconsistency with the broader scheme of the Act.

23. It is more likely that s50(2A)(a) would be read as a more general provision which does not override the more specific provision in s50(2) and that the power to dispense with requirements would be read as excluding content requirements.

5. Floodplain Harvesting and its Impact on Floodplain Production
The extent of floodplain harvesting within the Barwon-Darling planning area is not yet known despite it being used to extract water for the last 35 years or more. Nor is it known what volume is harvested from the NSW tributaries of the Barwon-Darling system. This is an alarming demonstration of mis-management and neglect by the NSW government.

The NSW Floodplain Harvesting Policy makes two key points which are relevant to the new Barwon-Darling Water Sharing Plan especially when you consider no reliable floodplain harvesting data currently exists in NSW.

- “Floodplain harvesting extractions will be managed within existing long-term average annual extraction limits. There will be no growth in overall extractions on a valley-wide basis as a result of the implementation of this policy.
- Incorporating floodplain harvesting in water sharing plans - Existing water sharing plans will be amended to establish rules for the management of floodplain harvesting and provide that floodplain harvesting access licences be exercised in accordance with those rules.”

When the harvest volumes are known and management systems agreed by government and community, floodplain harvesting will need to be accounted for within the Barwon-Darling Water Sharing Plan in such a way that the integrity of the natural environment and the economic, social and cultural values of stakeholders such as those belonging to the AFA are not compromised or diminished. This will be a huge challenge which may be incapable of being met.

There are few data available on reduced production from floodplains due to floodplain harvesting or extraction from in-stream. The MDBA produced a report titled Lower Balonne Floodplain Grazing model report November 2016 and its summary says:

- some graziers have been impacted by upstream development affecting business viability
- reductions in production have flow on effects on local communities, particularly Brewarrina
- across the floodplain water recovery of the scale considered in the review can return up to one third of lost stock productivity (31.9%) and earnings (34.9%)
- impacts vary over a range of property types and business models
generally more water recovery upstream results in greater productivity and earnings gains, however targeting water recovery and restoring particular flows can have greater impacts than non-targeted recovery.

Graziers in the Lower Balonne Floodplain rely on overbank flows from the Culgoa, Birrie, Bokhara, and Narran Rivers and local streams. As agricultural development has increased upstream, flows to the floodplain have decreased. As well as decreases to the size and scope of large overbank flows, smaller flows which allow for in-channel environmental benefits and stock and domestic water have also markedly decreased. This has resulted in a significant impact on both the environment as well as on existing grazing businesses in the Lower Balonne. Some properties may have lost up to one quarter of their carrying capacity and earnings due to lower flows. This will have impacted on the lasting health of the floodplain as well as the surrounding communities of Goodooga, Brewarrina and Weilmoringle. In returning water to the environment, some lost productivity of floodplain grazing systems can also be returned.

In 2010 the AFA contracted a study titled “Socio-economics of Floodplain Agriculture in the Murray-Darling Basin - A Scoping Study”\textsuperscript{10} by Arche Consulting August 2010. The key findings of this study which analysed production figures from three properties were:

### 5.3 SUMMARY OF CASE STUDIES

“The case studies developed with three landholders show:

- The three farms examined have a combined area of 148,500 ha;
- The estimated extent of the floodplain area is 34,333 ha;
- The combined capital value of land and improvements is in the order of $10.5 million;
- Income is highly variable with peaks in flood years;
- Trading enterprises are often used to fully utilise the opportunity afforded by pasture availability;
- There has been a move towards sheep for meat production to take advantage of increased prices and allow the rapid response to feed availability through breeding and growing out.
- Opportunistic cropping is profitable and is captured by a share farming agreement;
- Flooding has a significant effect on gross profit with a typical flooding regime adding an additional 59% of gross profit to the standard enterprises possible without significant flooding;
- Flooding adds approximately $11.8 million in gross income over 15 years;
- Flooding adds approximately $6.8 million in gross profit over 15 years;
- The additional annual gross income on floodplain area is approximately $12.50 per ha of floodplain country which lifts the value of this country significantly; and
- The asset value of floodplain country can be severely affected by changes in expected flooding regimes and security of floods is an important factor taken into account when assessing the value of floodplain land.”

### 6. Theoretical benefits to the Irrigation Industry from the changes to the “A” Class water access rules.

Traditionally this water was allocated to permanent plantings and not permitted to be stored.

Annual A-class extractions-Barwon-Darling (source: MDBA presentation by Russell James at Bourke Western Shires meeting - Data Source: NSW DPI (pre 2012); NSW Water Register (post 2012))
The theoretical return on the additional "A" class water removed from the Barwon-Darling water planning area under the new rules in the 2012 BD WSP is huge, even if all of the pumped water was not used for cotton production. Cotton is the most widely planted crop in the Barwon-Darling water planning area. The majority of entitlements are held by one company.

Assumptions:
1. Prior to 214-2015 the maximum annual take was 4,000ML/annum. This is the base.
2. The combined class "A" extraction for the years 2014-2015 to 2017-2018 is about 57000ML, over and above the 4000ML/annum that may have been used prior to the 2012 BD WSP.
3. All water is used for cotton production. This is unlikely but nevertheless shows the potential magnitude of return due to the new pumping rules.
6. All water is used quickly so there are no evaporation losses.

The combined "A" class extraction for the years 2014-2015 to 2017-2018 is about 57000ML.

This equates to **108,300 bales** of cotton (1.9 bales/ML) if it was all used on cotton production. This is unlikely but certainly most of it would have been used for cotton production.
Cotton varies in price but in 2016/17 it was yielding $650/bale.

The 108,300 bales produced over the four years would have theoretically grossed $70,395,000.

In 2016-2017 29,000ML would have produced 55100 bales (29,000 times 1.9) at $650 which is a gross of $35,815,000.

This demonstrates the magnitude of potential returns to irrigators growing cotton who held significant “A” class entitlements in the Barwon-Darling water planning area. The negative impact of this extraction of low flow water on downstream users and communities has to be balanced against the potential profits of upstream agriculture.

It also raises the question of compensation and the extent thereof if “A” class licences are bought or cancelled by government.

7. Aboriginal Cultural Flows and Native Title Rights
Governments have committed to involving Traditional Owners in water management but have yet to dedicate water for cultural purposes, despite much talk. The AFA contends that the Barwon-Darling Water Sharing Plan has an opportunity to lead this process by dedicating water as cultural flows for Traditional Owners. The Barkandji Nation has been granted significant Native Title Rights over much of the Darling/Barka River. This is a human rights issue for without water their Native Title loses its value. By not addressing this issue the government will leave itself exposed to compensation claims such as the recent Timber Creek High Court ruling in the Northern Territory.

8. Repairing the Barwon-Darling by utilising a mix of mechanisms that will protect low flows, community owned environmental water and cultural water, such as:

2. Individual Daily Extraction Limits and their Restricted Trading. Commonwealth provisions legally permit the creation of dealing rules in a water sharing plan to avoid assignment of IDELs occurring in inappropriate circumstances, based on environmental impacts and/or impacts on other access rights.

3. The return of A class licences to their original purpose i.e. for permanent plantings.

4. Pump size requirements be reinstated for “A” class licences to be re-instated at 150mm. WSP.

5. Pumping heights to be lifted to a level which will protect low flows e.g. no pumping below the 60th decile which is equivalent to 1820ML/day at Bourke.

6. Riparian rights to be reinstated and supported as per the second principle of the Water Management Act. i.e. sharing of a water source must protect basic landholder rights before water is extracted for irrigation.

7. a. The reversing of the 300% of access entitlement being extracted each year to a level consistent with the original community agreed consultation draft BD WSP.

7Clause 44 of the Consultation Draft sets out the individual access licence account management rules. 44(3) states that the maximum volume that may be taken in 3
consecutive years under an A, B or C Class licence is 1.5 times (that is, 450%) of the volume permitted under 44(2).

b. In the gazetted BD WSP, Cl 42 removed the 450% limit on take over three consecutive years.

The Australia Institute Discussion Paper March 2019 by Slattery, Johnson and Campbell8 (page 23) says “The rules under the 2012 Barwon-Darling Water Sharing Plan allow for 300% of the allocation to be extracted each year, indefinitely, plus anything traded onto an individual account. If there is insufficient water in the river to meet the 300% take, the water licence account will accrue a debt over time until it can be met by physical water. This is referred to as ‘carry over’.

8. In the Barwon-Darling carry over is a function of the difference between modelled long-term average flows and actual water in the river. The Barwon-Darling/Barka is the only NSW valley that provides for the water account to accrue (be carried over) indefinitely.”

9. first-flush rules to protect flows following a no-flow period of 60 days until end-of-system targets are achieved at Wilcannia and Menindee.

10. Total-daily-extraction limits

11. Adjusting commence-to-pump thresholds for A Class licences so that low flows are protected i.e. no pumping under a flow of 500ML/day at Bourke.

1. Initiating a government buyback of all “A” Class water in the Barwon Darling and intersecting Stream water management area except those who want to maintain 150mm pumps. The active water purchased can be re-classified as “B” class water and offered for resale to the original owner. All inactive purchases could be cancelled plus all active purchases if the owner does not want to re-purchase.

12. The minister can utilise powers under 78(b) of the NSW Water Act11 to:
“(b) amend the existing flow classes, establish new or additional flow classes and flow reference points and access rules after year five of this Plan for any management zone in the Barwon-Darling Unregulated River Water Source following a study that shows to the satisfaction of the Minister that the current access rules are having an adverse impact on an endangered aquatic ecological community in the Barwon-Darling Unregulated River Water Source, or an individual listed threatened fish species within that community, provided that such amendments:

- do not apply to domestic and stock access licences and local water utility access licences,
- in the Minister’s opinion, do not substantially alter the long-term average annual extractions under unregulated river (A Class) access licences, unregulated river (B Class) access licences and unregulated river (C Class) access licences in the Barwon-Darling Unregulated River Water Source,
- take into account the socio-economic impacts of the proposed rules, and
- the Minister has consulted with Government agencies and stakeholders,

Note. Amendments under paragraph (b) may be designed to protect refuge pools and connectivity between refuge pools, protect in-stream aquatic habitat values, maintain or improve water quality within pools and/or to allow longitudinal movement of native fish during key fish spawning and recruitment periods to support the recovery of an endangered aquatic ecological community in the Barwon-Darling Unregulated River Water Source, or an individual listed threatened fish species within that community.”

The implementation of an appropriate mix of these protection measures will eliminate excessive extraction of low flows which has occurred since the introduction of the current 2012 BD WSP.
Conclusion
The AFA thanks you for the opportunity to provide suggestions on how the Barwon-Darling Water Sharing Plan can be amended so that it conforms to the principles of the NSW Water Act, the federal Water Act and the Murray Darling Basin Plan. By so doing, low to medium flows will be restored and protected thus allowing the Darling River and all its supports to survive into the future. By not doing so the Darling River and its communities will die a slow human induced and very painful cultural, social, spiritual and economic death. As a civilised society with a conscience for human rights and equity this must not happen. We are better than that!

Terry Korn PSM
President
Australian Floodplain Association
29 March 2019

References:


5 Environmental Defenders Office NSW correspondence to the Australian Floodplain Association “Barwon-Darling water sharing plan – Various legal questions” 28 February 2019.

6 Environmental Defenders Office NSW correspondence to the Australian Floodplain Association “Connectivity of water resource plans and trade in IDELs” 28 February 2019.

7 Environmental Defenders Office NSW correspondence to the Australian Floodplain Association “Changes to the Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012” 5 February 2018.

8 http://www.tai.org.au/content/owing-down-river-0

9 Lower Balonne Floodplain grazing model report November 2016 Murray Darling Basin Authority

10 Socio-economics of Floodplain Agriculture in the Murray-Darling Basin - A Scoping Study by Arche Consulting August 2010 for the Australian Floodplain Association.

11 NSW Water Act 2000