



**Government  
of South Australia**

## **APPENDIX 2**

**DETAILED CHAPTER COMMENTS ON THE DRAFT BASIN PLAN LEGAL INSTRUMENT**

## Detailed Chapter Comments on the draft Basin Plan legal instrument

### General

Page	Section	Issue	Recommended change
-	General	Many of the chapters require the development of more detailed plans or guidelines. Where this is to occur there should be a specific reference that the Authority will develop the guidelines and jurisdictions must have regard to them.	<p>For all chapters where guidelines or more detailed implementation plans are to be developed sections should be included to reference these and acknowledge consultation requirements.</p> <p>For example: The Authority will develop accreditation guidelines for chapter 9 in consultation with jurisdictions; and Basin States must have regard to the guidelines when developing water resource plans and the Authority must have regard to guidelines when considering accreditation.</p>

### Chapter 1

Page	Section	Issue	Recommended change
4	1.07	The definition of the Australian Drinking Water Guidelines (ADWG) refers to 2004, however there is a more recent version of the ADWG which was adopted in 2011.	Amend text to refer to the ADWG adopted in 2011.
195	Schedule 9 link to chapter 1	The definitions of riverine and non-riverine water types are not included in the legislative instrument or ANZECC guidelines.	Include definitions in Chapter 1 Part 3 to clarify what is a riverine and non-riverine water type with permanent water ( Is non-riverine with permanent water limited to storages and the Lower Lakes?)

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## Chapter 2 and Schedule 1

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122	Schedule 1 – 15 to 30	The discussion of the condition of the Basin's water resources must include more comprehensive text on the impacts of drought following long term altered flow regimes.	Include a paragraph about impacts of the recent drought following long term altered flow regimes.
126	25	Statement that no fish species have become extinct in the Murray-Darling Basin is not correct.	Yarra pygmy perch are now extinct in the wild as per best available knowledge (although breeding programs are in place to restock in South Australia).
126	28	Water quality issues should be addressed in a more comprehensive manner. For example, there is no mention about acid sulfate soils which cause water body acidification upon rewetting.	Include reference to water body acidification that occurred below Lock 1 and in the Lower Lakes in 2009 and 2010 and in other Basin water bodies.

## Chapter 4

Page	Section	Issue	Recommended change
17	4.02	<p>This section does not adequately identify risks at a level of specificity that enables a clear line of sight from the risks identified to the risk management strategies adopted.</p> <p>The matters listed in 4.02(1) are really a list of consequences rather than risks and the distinction between these statements and those under 4.02 (2) is unclear.</p> <p>There does not appear to have been an attempt to define risks at the Basin scale or if this has occurred it is not reflected in this section.</p>	This entire section needs redrafting to set out the key identified risks in a form and at a level of specificity that comprehensively identifies risks and allows for a clear line of sight from the risk to the risk management strategy.
17	4.02 (1)(a)	<p>Terminology is vague and confused, for example use of terms like 'poor health' rather than more concrete terms related back the Water Act/chapter 7 objectives.</p> <p>The risks and consequences of risks do not appear to relate to</p>	<p>Redraft this section as per comment here and in main body of submission.</p> <p>Given actual meaning of (1)(a), as clarified by (2), it would be clearer for (1)(a) to say, "insufficient water available for environment and consumptive use;" – at the moment, it appears to use the term "environment" to include consumptive uses,</p>

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		the underpinning international agreements	which is not how it is normally used
	4.02(2)	The consequences of the materialisation of the risks identified in subsection (1) do not include reference to detrimental effects on the environment.	The recommendation is for redrafting. However, if this section remains in any form it should include reference to environmental consequences, for example: “(a) that insufficient water is available, or water is not off sufficient quality, to protect and restore water dependent ecosystems and conserve declared Ramsar wetlands.
18	4.03	<p>Roles and responsibilities for risk management strategies are not clear.</p> <p>The Authority must ‘have regard to’ the strategies when undertaking its functions. There are some strategies listed that the Authority is clearly responsible for – this section needs to be clear about roles and responsibilities.</p> <p>Water resource plans must be prepared having regard to the strategies. It is very unclear exactly what States’ responsibilities are in having regard to these strategies and hence what should appear in water resource plans. Are plans meant to adopt such strategies?</p> <p>The strategies list “to develop water resource plans based on best available knowledge...” Development of water resource plans is a State responsibility. It is the Authority’s role to accredit plans and only develop plans if a State fails to do so. Who is responsible for this strategy?</p>	<p>This entire section must be redrafted to list specific strategies and to more clearly identify roles and responsibilities.</p> <p>It should also be restructured to clearly outline those strategies that the Authority is responsible for implementing or coordinating and to develop a separate section where strategies are those which should be considered /implemented by States in developing water resource plans. In doing so the responsibilities of States needs to be much clearer.</p> <p>For example:</p> <p>‘...the Authority will develop a Basin Plan compliance and enforcement strategy, in consultation with the States ( to address risks of non-compliance)’.</p> <p>‘The Authority will develop a detailed monitoring and evaluation plan to ensure effective monitoring and evaluation...’</p> <p>‘Basin states must develop water resource plans...The Authority will accredit water resource plans and may develop...’</p>
18	4.03 (3)	The strategies listed are a series of broad outcome statements rather than a list of strategies. Many have no apparent purpose i.e. it is not possible to understand what the strategy will do (and therefore will be difficult to report on whether it has been implemented and whether as a result risk has reduced). For example: ‘To improve knowledge of groundwater and surface water resources is an extremely	<p>Redraft to include strategies clearly linked to identified risks. For example:</p> <p>The Authority will in consultation with states develop an environmental watering implementation plan to manage flows to optimise outcomes...</p> <p>The Authority will in consultation with states develop a science and knowledge strategy to improve knowledge of ...</p>

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		broad statement – it does not clearly articulate what sort of knowledge (i.e. levels of use?; groundwater-surface water interaction?; SDL compliance?, water quality?) and how it relates to identified risks.	
18 & 19	4.03 (3) (g) & (h)	To improve knowledge of water requirements... Improve knowledge of groundwater and surface water resources including through improved measurements should be more specific.	Improving the knowledge of how groundwater and surface water interact and how groundwater extractions affect surface water flows must be included as a risk management strategy.
	4.03 (3)	Additional strategies required.	<ul style="list-style-type: none"> <li>• Add an additional 'strategy', which requires a new section "...to partake in Environmental Impact Assessments for any significant development project that has the potential to impact the Basin's Water Resources" under 4.03(3) (or similar). This would inform the obligations outlined in the Agreement Schedule B for the Commonwealth and Basin States in relation to decisions that may have a 'significant effect' on salinity, and how to account for those effects, as well as any other potential impacts.</li> </ul> <p>Other strategies to be added include:</p> <ul style="list-style-type: none"> <li>• development of a strategy to assess climate change risks and incorporate into reviews of SDLs and Basin Plan;</li> <li>• a strategy to improve modeling and decision support to inform river management and environmental water delivery;</li> <li>• a strategy to identify and address physical, operational and policy constraints that impede delivery of environmental water;</li> <li>• a strategy to assist drought-affected key environmental assets and functions to recover;</li> <li>• a strategy to improve the understanding of groundwater connections to surface water and the impact of groundwater use on meeting environmental water requirements; and</li> <li>• a strategy to address storage access issues relating to water supply security and environmental watering;</li> <li>• a strategy to coordinate the delivery of environmental water;</li> </ul>

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			<ul style="list-style-type: none"> <li>The poor level of measurement for some types of take should be identified as a risk and a management strategy included to work with States to improve measurement and monitoring.</li> </ul>
19	4.04	<p>The Authority may publish guidelines setting out actions that <b>may</b> be taken...</p> <p>This should refer to the MDBA publishing a 'risk management plan' rather than guidelines.</p> <p>There must be a consultation/collaborative process with the Basin States to develop guidelines related to risk assessment/strategies. As states need to have regard to the guidelines when developing water resource plans (as per sections 9.45 (3) (b) and 9.47 (3)).</p>	<p>Change so that the MDBA "must develop guidelines" is added to 4.04 (1) &amp; consider calling these a 'risk management plan'.</p> <p>Add to section 4.04 provisions that the guidelines must be developed in collaboration with jurisdictions and jurisdictions and the MDBA must have regard to the guidelines.</p>

## Chapter 5

Page	Section	Issue	Recommended change
20 – 22	Ch 5.	<p>Management objectives and outcomes do not reflect the purposes and objects under the Water Act in particular the relative hierarchy of requirements to achieve environmental outcomes vis a vis social and economic outcomes. Sections 3, 19, 20 and 21 of the Act are particularly relevant.</p> <p>The management outcomes are not currently expressed in a manner that can be easily measured or used to guide management. Often the outcomes restate the objectives rather than providing for clear and measurable outcomes that can effectively guide the policies and activities in implementation of the Plan.</p>	<p>Redraft to correctly reflect the purposes and objects under the Water Act and to include more concrete and measurable outcomes.</p> <p>Include objectives and outcomes that address the risks to Basin water resources identified in chapter 4.</p>
21	5.03(2)	<p>The SDLs do not consider climate change yet an outcome is that ecosystems remain healthy in a changing climate.</p> <p>Little is known about the environmental water requirements</p>	<p>The SDLs must reflect climate change risks.</p> <p>Identify the need to assess feasibility of retaining healthy ecosystems in current locations under climate change scenarios before next review of Basin Plan. This</p>

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		under a changing climate and the feasibility due to other factors to retain ecosystems in current locations, in particular where they are already at the extremity of their natural occurrence.	could be a risk management strategy.
	5.03: Note 1	This note (which is repeated in various other chapters) implies delivery constraints are fixed and not subject to review of options and opportunities to overcome them - to expand the 'zone of potential management' to enable more effective environmental water delivery to key environmental assets requiring flooding on higher areas of the floodplain.	This must not preclude or constrain the need and the ability to undertake action to increase the capacity to actively manage all water dependent ecosystems by overcoming constraints (i.e. purchase of easements). The analysis of the environmentally sustainable level of take for surface water requires the Plan to identify what water the environment needs in the first instance and then to determine how it can be delivered. The modeling assessment must be redone with system constraints removed or relaxed.
20	5.03	What is the meaning of "within the context of a working Murray-Darling Basin" in this section? It is a broad statement that is not clearly defined.	Remove 'within the context of a working Murray-Darling Basin' unless it can be better defined including a clear relationship to requirements of the Water Act.
21	5.05	This section confuses the objectives related to SDLs which is to achieve an environmentally sustainable level of take and environmental and productive base outcomes with objectives related to how the MDB seeks to implement the SDLs. That is they reference transitional arrangements rather than longer-term objectives. The broader objective is to implement SDLs in a way that optimizes economic, social and environmental outcomes.	Redraft to two sections – one on the objectives and outcomes of SDLs and one on implementation of SDLs/transitional arrangements as relevant consistent with the requirements of the Water Act. Implementation objectives should make to reference to optimizing economic, social and environmental outcomes (Water Act 2007 (20)) in order to ensure that there is an adequate decision making framework (rather than the more general reference in section 5.02) A management outcome under subsection (2) could then stipulate: "increased net social benefit of water resource use".
21	5.05	This section should reference climate change given that it deals with long-term, sustainable diversion limits and section 5.03(2) refers to protecting ecosystems "in a changing climate".	Add a management objective 'Provide for the impacts of climate change' Management outcome is covered by 5.03 (2)

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**Chapter 6 and schedules 2, 3 and 4**

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-	Chapter 6 and 1.07 & Sched.3	The baseline diversion limits are set out in schedule 3 for surface water as a description with estimates included as notes. This allows for changes as new information becomes available however there is no process outlined in the Basin Plan for how this will be done.	Amend the draft Basin Plan to include provision for a process for updating estimates of baseline diversion limits that must include consultation with the relevant jurisdiction.
26	6.06	Authority may 'express its view'. This seems a strange formulation and it is unclear why there is not a stronger relationship to the risk management chapter. Should also include reference to policy constraints, eg MDB Agreement and/or water resource plan rules, groundwater extraction impacts, and climate change impacts.	Redraft this section to include clearer links to the risk management chapter. Include reference to policy, physical and operating system constraints, e.g. MDB Agreement and/or water resource plan rules, groundwater extraction impacts, and climate change impacts.
	6.07	Whether a robust and evidence based review of SDLs in 2015 can occur is questionable given the potentially short timeframe between Plan adoption and the proposed review. For a review to be based on best available science and evidence it requires a commitment to a specific program of investigations to underpin the review.	See relevant part in main body of the submission. A 2015 review of SDLs is not supported.
30	Section 6.13	<u>SDL Compliance</u> The draft Basin Plan proposes a limit on debits in the same manner as the current Cap system limits debits to 20% before a special audit is triggered for the offending Cap valley. However, the plan is silent on the notion of a limit on the accumulation of credits. The South Australian Government is concerned about the potential implications of having no limit on credits. An independent annual auditing process similar to the IAG on Cap is recommended.	Include provisions to set a limit on SDL credits and manage the issues associated with ongoing accumulation of credits. The proposed 20% debit limit for compliance is not explained or justified. The technical justification supporting this proposal should be outlined. Amend the draft Basin Plan to require the MDBA to undertake an annual water audit process, and to prepare and publish a water audit monitoring report which includes information about governments' compliance with the annual permitted take. The Plan should refer to the development of SDL compliance guidelines and require jurisdictions to observe them.

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			The Basin Plan should establish a role for an independent body of experts to advise and audit SDL compliance and to advise on the development of SDL compliance policy and the associated compliance and monitoring guidelines.
30	6.13 (1)(b)	In regard to non-compliance this sub section refers to States having a “reasonable excuse” for excess use	Elaboration on what is defined as a ‘reasonable excuse’ is required.
30	6.13 (1)(a) & links to 9.20	<p>Trade/Transfer of water between the Environmental and Consumptive (SDL) pools is not adequately accounted or provided for.</p> <p>Current provisions for adjustment to the SDL that account for selling or purchase of entitlements for environmental water use are not considered to adequately address the situation where the use may switch to consumptive use. As a result states will potentially be non-compliant due to this type of trade, which is not appropriate.</p> <p>Adequate provisions need to be included in chapter 6 and in chapter 9 to deal with allocation and permanent trade where entitlements used for the environment become used for consumptive use. See further discussion in chapter 9.</p> <p>Section 6.13 provides for an adjustment to the cumulative balance for any disposal or acquisition of held environmental water. It is assumed, though it is unclear, that this adjustment is for trade of (i.e. disposal or acquisition) of entitlements or allocations that are then used for environmental use. What is not clear is what occurs when an entitlement that was used for environmental use is traded via permanent or allocation trade and then used for consumptive use. If this occurs it should not become a State compliance issue.</p>	<p>Redraft provisions to provide for more robust and transparent accounting for the transfer of water used for environmental purposes by CEWH and other environmental water holders into and out of the consumptive use pool.</p> <p>Include specific mechanisms in the Plan to deal with these transfers, including mechanisms to avoid States being put in a position of being non-compliant due to the transfer of held environmental water in and out of the consumptive pool.</p>
31	6.15	6.15 refers to a change in reliability; however reliability is a term that is not defined. Any definition should be consistent with the National Water Initiative definition.	Include a definition of reliability in chapter 1.

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170	Schedule 3 item 26	A specific change is required to the BDL description for the South Australian Non-Prescribed Areas (Schedule 3, Item 26) to allow for take from watercourses. It is recognised there is some level of take from watercourses, predominantly for stock and domestic purposes within the SDL resource unit. The BDL description needs to be amended to recognise this take as it currently only refers to run-off dams.	Amend the BDL description for the South Australian Non-Prescribed Areas to allow for take from watercourses in addition to run-off dams.
170	Schedule 3 item 27	A specific change is required to the BDL description for the EMLR (Schedule 3, Item 27) to ensure the correct water management policies are referenced.  The date of the State water management law used to determine the BDL for the EMLR needs to be changed. The law as of 30 June 2009 is for the regional NRM Plan only (which relates to dam capacity limits only i.e. does not include forestry or watercourse diversions, or any of the more recent work to determine limits for the EMLR WAP). The date needs to be the date of adoption of the EMLR WAP, or else the MDBA needs to take the position that the BDL can be based on <u>proposed</u> State water resource plans – as has been done for groundwater (see page 87 of the summary – first dot point).  Also note that the draft EMLR WAP is still being finalised based on the outcomes of consultation; it is possible that the limits may change as a result.	Amend the BDL description for the EMLR to reflect the correct water management policies.  Amend the definition of the EMLR BDL so that it refers to the date of adoption of the EMLR WAP (rather than 30 June 2009), or under “proposed” State water management law . Consultation with the South Australian Government on this issue is required.
	Schedule 2	The risk of error in the MDBA assessment of the component of BDLs attributable to non-watercourse diversions could potentially be large and needs to be detailed and tested. The same issue applies to assessing compliance against SDLs. This risk does not appear to be adequately addressed in the draft Plan apart from Part 10 of chapter 9.  This risk appears particularly high where the components of	The poor level of measurement for some types of take should be identified as a risk and a management strategy included to work with States to improve measurement and monitoring.  S9.49 (1) should be strengthened to state that ‘A water resource plan must as far as practicable specify measures for improving the proportion of take that is measured and the standard to which take is measured’.

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		estimated BDL attributable to interceptions by 'runoff dams' and 'commercial plantations' (e.g. forestry) is high. Across the southern MDB (excluding the Lachlan) the BDL total for runoff dams is 831 GL and for commercial plantations is 255 GL. Over half of the total non-watercourse diversions of around 1100 GL are in the Murrumbidgee.	

### Chapter 7 and schedules 5, 6 and 7

Page	Section	Issue	Recommended change
33	General	The overall structure of the chapter is very hard to follow, particularly for a practitioner attempting to develop a long term watering plan. There is a lack of a clear line of sight from the Part 2 objectives through planning, prioritisation to the application of environmental water. Many of the requirements appear duplicated and it is difficult to follow the purpose of long term plans versus annual priorities. A number of comments set out below raise issues that are related to this broader matter.	Restructure to make it easier to follow, simplify the provisions and ensure the provisions provide greater clarity about the purpose and what is addressed by State long term plans, annual priorities and Basin annual priorities.  This restructure could be informed by working through a process of mapping the planning and prioritisation framework and listing the matters that must be addressed at each stage.
	Guidelines	The environmental watering plan requires a set of comprehensive guidelines to be developed to guide implementation and coordination and cooperative arrangements.  Matters to be included in guidelines include: <ul style="list-style-type: none"> <li>• guidance for applying <i>Parts 5, 6 and 7</i>;</li> <li>• guidance for developing long term watering plans and annual priorities;</li> <li>• planning for resource availability scenarios;</li> <li>• guidance for the roles and responsibilities of the Authority, the Basin States and the environmental water holders;</li> </ul>	Amend the plan to make specific reference to the development of guidelines or an implementation plan in consultation with jurisdictions and clearly articulate the relative obligations of parties to these guidelines, for example words to the effect that:  <p style="text-align: center;">‘The Authority must develop guidelines for implementation of the environmental watering plan in consultation with jurisdictions and water holders and jurisdictions must have regard to the guidelines.’</p> Provide for guidelines that outline how environmental watering prioritization decisions will be made and how environmental water delivery, reporting, monitoring and evaluation will be coordinated.

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		<ul style="list-style-type: none"> <li>• criteria for determining Basin annual environmental watering priorities;</li> <li>• coordination and cooperative mechanisms including the EWCCs;</li> <li>• definition of key terms ('not compromise', 'managed with environmental water'; 'representative' etc);</li> <li>• dispute resolution processes;</li> <li>• annual adaptive management processes; and</li> <li>• monitoring and evaluation.</li> </ul>	
33	Part 2	<p>The objectives are comprehensive but aspirational. Revision to remove duplication and to remove reference to objectives that are not related to water management is recommended. As noted in the main body of the submission there is a need to include a process in the Basin Plan for developing SMART objectives and targets that can actually be measured etc.</p> <p>There are no clear links between these objectives and the planning and prioritisation framework i.e. a requirement to have regard to or develop plans and priorities consistent with the objectives.</p>	<p>Review and amend objectives.</p> <p>Delete or revise natural resource management type objectives, for example, 7.05 (4) refers to processes that shape landforms.</p> <p>Objectives 7.05 (6) and (8) (food webs and community/species structure) are very similar and could be combined into one objective.</p> <p>Include a requirement to develop plans and priorities consistent with the objectives.</p> <p>Require the MDBA to develop SMART objectives and targets and a detailed plan for assessing progress for achieving these objectives and targets.</p>
33	7.03	<p>"The overall environmental objectives for water dependent ecosystems ...are <u>within the context of a working Murray-Darling Basin...</u>" There is no 'external frame of reference' that links the objectives and targets in this chapter to other water objectives i.e. for economic and social outcomes. The draft Plan lacks a mechanism or process to guide decision making to optimise economic, social and environmental outcomes in a transparent fashion.</p> <p>See also 7.25 (h)</p>	<p>Include principles for long term watering plans, annual watering priorities and Basin annual watering priorities that can help to transparently guide consideration of how to optimise economic, social and environmental outcomes in planning and prioritisation processes. Any amendments must be consistent with the requirements of the Water Act.</p> <p>Include details on how this should be done in chapter 7 guidelines for implementation.</p>

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33	7.04 (2)	The use of the word 'subset'. It is unclear what this refers to, for example, does it cover including the ecosystems identified in the database referred to in 7.26 (1)?	How a 'sub-set' will be determined needs to be defined or outlined in a guideline. This should include consultation with Basin States.
34	7.04 (3) (b)	The objective is to ensure that 'representative populations and communities of native biota are protected...' however the term representative is not defined.	Include definition of 'representative' in chapter 1. Further define representative populations and communities in guidelines.
34	7.05 (3) (b)	This objective should include reference to vertical connectivity as well (i.e. between groundwater/hyporheic flow and surface water/surface). This is important for baseflow maintaining aquatic refuges in seasonally flowing systems, and for non-riverine groundwater-dependent ecosystems (e.g. vegetation that taps into groundwater).	Amend section 7.05 (3) (b) or add an additional objective. For example: Ecological processes dependent on hydrological connectivity longitudinally along rivers, and laterally, between rivers and their floodplains (and associated wetlands), and <u>vertically, from below the surface to at /above the surface</u> , are protected and restored.
34	7.05 (3) (d)	'...within the tolerance of the Coorong ecosystem's resilience' The use of the word resilience is inappropriate in this context, it infers higher than optimal salinity levels in the Coorong are alright on an ongoing basis.	Revise this objective. It should be changed to say something along the lines of 'maintain the Coorong's water quality (salinity) within the ranges that will prevent the occurrence of unhealthy ecosystem states'
35	7.05 (7)	This section states that to maintain populations the plan must ensure that flow events meet environmental water requirements, and habitat diversity is maintained. Other significant factors that impact on populations that should be included are habitat extent, condition and fragmentation. Although habitat fragmentation is an objective under risks (section 7.06 (6)) –it is more important than just a risk, it is essential for long term survival of populations.	Redraft to include reference to ensuring that habitat extent, condition and connectivity required to maintain populations is maintained.
35	7.06 (2)	A subsidiary objective is to promote resilience to climate change. The lack of specific provision for the impacts of climate change undermines this provision.	The Basin Plan and sustainable diversion limits must take into account the impacts of climate change on water availability.
36	7.08 (c)	Annual water availability (resource availability scenarios) should be a factor considered when assessing progress towards achieving the objectives.	Revise to 'climatic conditions and water availability'.

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36	7.07 & 7.08	<p>Poorly defined targets and lack of any clear process for developing the program for assessing progress towards achieving objectives. There is no adaptive management process. Other issues include:</p> <ul style="list-style-type: none"> <li>• Assessment of progress towards objectives in Part 2. This section could be considerably improved and requires further policy development and consideration of the underlying program logic.</li> <li>• A clear framework for assessing progress towards objectives is needed.</li> <li>• Currently, the targets in schedule 7 are more general than the objectives they are intended to measure and it is clear these require further explanation and development.</li> <li>• Assessment of progress towards objectives in Part 2 must have regard to an agreed baseline from which to the measure progress.</li> <li>• What is the process for Basin State/Commonwealth Government involvement?</li> <li>• The environmental watering plan objectives are very broad and work will be needed to define (and agree with jurisdictions) more specific criteria in order to be able to objectively state if they are being achieved or not.</li> </ul>	<p>Redraft to require the MDBA to develop SMART objectives and targets and a detailed plan for assessing progress towards achieving these targets and objectives and to provide for environmental monitoring and evaluation linked to States long term watering plans.</p> <p>This should include consultation with Basin States. This must include annual adaptive management processes as well as measuring targets and objectives.</p> <p>This plan could then determine more specific or subsidiary targets, indicator sites, measures and baseline conditions, how this relates to annual monitoring, Basin State/CEWH monitoring, the overall Basin Plan monitoring and evaluation framework and long term watering plans etc, and how the information will be used (including link to Basin Plan reviews).</p> <p>It is not considered an adequate response to refer these matters to chapter 12 and future development of an overall monitoring and evaluation framework.</p> <p>Consideration must be given to assessing how well environmental watering is meeting environmental water requirements and targets specified for the hydrological indicator sites used to determine the ecologically sustainable level of take and/or a further sub-set of assets and functions determined in consultation with the Basin States.</p>
36	7.08	Lack of any process for adaptive management.	Include a process for annual adaptive management. Include a reference in the Basin Plan with the detail provided in associated guidelines.
37	Division 2 and 3	<p>There is a need for 'fit for purpose' long term watering plans and annual environmental watering priorities i.e. more of a risk management approach.</p> <p>The preparation of comprehensive plans and priorities for surface water areas where there is held environmental water</p>	<p>Revise the relevant sections to allow for a 'fit for purpose' planning and annual prioritisation approach. As the Basin Plan legal instrument must be interpreted as written, these changes are required in the Plan itself not in associated guidelines.</p> <p>Improve the linkages with water resource plan requirements in chapter 9.</p>

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Page	Section	Issue	Recommended change
		<p>and/or active management of planned environmental water is supported. However it is considered this process is not needed and involves an unnecessary resource burden for unregulated resources at low risk where there is no active management of held or planned environmental water. There does not appear to be any flexibility in the current provision to allow for an alternative approach or a simpler planning and prioritization process to occur.</p> <p>For example, planned environmental water management could be incorporated in a water resource plan for areas where there is no held environmental water – this may require concurrent changes to chapter 9.</p>	
37	7.09 (2)	<p>Long term watering plans, annual priorities and Basin annual priorities must all <u>apply</u> the listed methods and principles in parts 5 and 6. It is difficult to understand the difference between long term plans and annual priorities.</p> <p>Are all the matters dealt with in parts 5 and 6 relevant to be applied in preparing both a long term watering plan and annual priorities? It makes it challenging to understand the requirements for a long term watering plan compared with annual priorities. This is an example of one of the challenges in practically applying this chapter.</p> <p>There is also an inconsistency - S7.25 indicates the MDBA must only have regard to parts 5 and 6 but s7.09 states that Basin annual environmental watering priorities must be prepared by applying part 5 and part 6.</p> <p>There is no clear link between the environmental watering plan objectives in part 2 and the planning and prioritisation process.</p>	<p>The Authority needs to work through a process of simplification, clarification and redrafting of the Basin Plan provisions for planning and prioritisation.</p> <p>This may be assisted by tabulating all the matters that must be addressed by a long term plan vis a vis annual priorities at a water resource plan and Basin scale and determining what is relevant to be addressed at what temporal and spatial scale.</p> <p>Amend S7.25 to reflect the wording on s7.09 that requires the MDBA to prepare Basin annual environmental watering priorities <u>by applying</u> parts 5 and 6.</p> <p>Add an additional section to state that a long term watering plans and annual watering priorities (state and basin) must contribute to the achievement of or be consistent with the objectives in part 2.</p>

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Page	Section	Issue	Recommended change
37	7.10	<p>Planning framework issues</p> <p>The purpose and content of long term watering plans is unclear. The planning framework seems to indicate the sole purpose is to inform annual watering priorities. While this is important there is no clear link to MDBA/CEWH long term planning including to inform additional water recovery and monitoring and evaluation or to the environmental watering plan objectives or objectives identified for assets and functions under s7.27 and s7.28.</p> <p>There is no reference to the MDBA or the Commonwealth Environmental Water Holder (CEWH) undertaking long term planning. Does this mean that the two parties will rely entirely on the Basin States' long term watering plans?</p> <p>It would appear there a risk of processes for long term planning and annual prioritisation being run separately and independently by the MDBA and CEWH.</p>	<p>Amend to make the purpose and content of State long term watering plans clearer including links to water recovery, water delivery and monitoring and evaluation.</p> <p>Plans must clearly indicate management objectives and be developed consistent with environmental watering plan objectives and more specific ecological objectives for assets and functions.</p> <p>Include provisions to give these plans and State annual watering priorities the first priority or greatest weighting in informing MDBA planning and prioritisation and the application of environmental water.</p> <p>Require the MDBA to coordinate development of long term watering plans for connected resources. Make stronger links between long term watering plans and MDBA/CEWH long term planning, including to inform additional water recovery and monitoring and evaluation</p> <p>The Basin Plan and associated guidelines must outline how the MDBA and CEWH will work together transparently with the Basin States in the development of objectives, long-term watering plans, annual watering environmental priorities, water recovery, actual water delivery and monitoring and evaluation.</p>
38	7.12	<p>When preparing a long-term environmental watering plan, it is not clear whether the consultation needs to include holders/managers of environmental water from that WRP area only, or whether it includes other holders/managers including those from connected water resources.</p>	<p>Amend sections 7.12 (a) and (b) to clarify that this refers to holders and managers of environmental water relevant to watering the assets and functions in that water resource plan area.</p>
38	7.13-7.19	<p>Gaps in relation to long term watering plans include identification of adaptive management processes, monitoring and evaluation elements (this could include reference to monitoring and evaluation determined in other documents e.g. icon site plans); knowledge gaps and relevant community values or objectives.</p>	<p>Include in list of long term watering plan requirements.</p>
39	7.16	<p>This sub-section should refer to operational and management constraints and include a requirement to identify</p>	<p>Amend to include 'management constraints' and that strategies to manage or overcome these constraints are identified, where practical.</p>

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Page	Section	Issue	Recommended change
		management strategies where possible.	
40	7.22	There is inconsistency and different levels of requirements for Basin States compared with the Authority. The preparation of annual environmental watering priorities must <u>use</u> the principles and methods set out in part 6. However the MDBA in setting Basin annual environmental watering priorities must only <u>have regard to</u> the principles and methods set out in part 6. Why are there different requirements?	Revise. The same requirements should apply to the Authority and Basin States.
42	7.24 (1) & 7.24 (2)	A holder of held environmental water <u>in</u> the water resource plan area must provide information. This would potentially exclude the CEWH or other holders who hold water that could be used in the water resource plan area but may not necessarily be water from that water resource plan area.  A similar issue applies to 7.24 (2) - there may be cases where planned environmental water can be used in another water resource plan area eg catchments which flow to the River Murray. Again this information may be needed to prepare annual priorities.	Change to 'a holder of held environmental water <i>that could be used</i> in the water resource plan area'  Make a similar change to 7.24 (2).
42	7.24	The requirement that holders/managers of environmental water "must" give information to a Basin State in relation to section 7.22 matters may impose an unnecessary reporting burden if the Basin State already holds this information.	Add "where relevant" or "unless it may be reasonably expected that the Basin State already holds this information" to the end of sections 7.24 (1) (a) and 7.24 (2) (a).
41 & 42	7.24 & 7.22	Will the Authority require access to similar information about holdings of held environmental water or will it rely on long term watering plans? If so there could be point in time issues.	Include a process for information to be provided to the MDBA (see suggestions above).
42 and 43	7.25	The process by which the Authority must prepare Basin annual environmental watering priorities is unclear and there is a lack of clarity about the nature and purpose of the priorities.	Revise the process for the Authority to determine Basin annual watering priorities. Requirements include: <ul style="list-style-type: none"> <li>• Clarity about purpose and scope of Basin annual priorities;</li> </ul>

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		<p>The process for identifying Basin annual watering priorities is not transparent and provides very little indication as to how the decisions will be made.</p> <p>State agencies should be the major source of information on annual watering priorities, through their long term watering plans and annual environmental watering priorities. Considerable resourcing, science, policy and community input will be applied to developing long term watering plans and annual watering priorities; yet these key planning documents are only one of a series of matters the Authority must have regard to.</p> <p>It is not clear what the Authority will take into consideration in making a decision on Basin scale priorities nor how it will make a decision where there are conflicting priorities from the different sources of information listed in 7.25 (3) and where there are conflicting priorities in Basin State long term watering plans and annual watering priorities.</p> <p>Matters that must be considered by the Authority are numerous and there is no indication of priority or weighting.</p> <p>There is no mandatory requirement for a consultative/collaborative process for resolving conflicts or competing requirements between WRP areas.</p> <p>Inefficient use of time and resources to prepare annual priorities for all water resource plan areas including those where there is no active management or delivery of water.</p>	<ul style="list-style-type: none"> <li>• Development of guidelines in consultation with jurisdictions to outline how environmental watering prioritisation decisions are made and how environmental water delivery, reporting, monitoring and evaluation will be coordinated. This may include criteria for decision including deciding amongst conflicting priorities and a transparent process for optimising outcomes;</li> <li>• A transparent process by which the priorities will be determined on a Basin scale – this may need to include a report that outlines how the decisions were made including where different from State priorities;</li> <li>• Must prepare the annual priorities based on the Basin State annual environmental watering priorities and taking into account long-term watering plans and give these documents first or greater weighting than other considerations;</li> <li>• The process must consider the advice of a relevant committee or committees (see comments about the need to enable the establishment of multi-lateral committees in the main body of this submission).</li> </ul>
43 & 44	7.26 & 7.28	<p>The plan lacks a useful definition and guidance on what constitutes priority environmental assets and functions. Given the implications for what States put into long term watering plans and annual priorities, it is critical this is addressed.</p>	<p>Develop a better definition of priority environmental assets and functions.</p>

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		For example, the Authority will develop a database of assets and functions that ' <i>require environmental watering</i> ' and States must further identify priority assets and functions which are defined at those that ' <i>can be managed with environmental water</i> '. This gives no guidance on what these are and what the difference is between assets and functions ' <i>requiring water</i> ' and those ' <i>that can be managed with environmental water</i> '.	
44	7.27	The method for identifying environmental assets and their water requirements is very broad and hence open to a wide range of interpretation. This may give rise to inconsistent outcomes.	Detailed guidelines are required to provide more guidance on scale and nature of environmental assets and functions and a more useful and practical definition of priority assets and functions that links to the subsidiary chapter 7 objectives.  The environmental watering plan should mandate the development of guidelines for the implementation of the environmental watering plan in consultation with jurisdictions.
44	7.27(c) & 7.28(c)	There should be a requirement to identify ecological objectives that are consistent/not inconsistent with the objectives in Part 2 of this chapter.	Revise sections to make clear the link to overall EWP objectives in Part 2.
45	7.29	For many assets, water requirements may be largely unknown - who will pay for this information to be collected?	Address in revision of the plan.
43-45	Part 5 General & also refers to Part 6	Section 7.27 does not include any process for making an evaluation of different levels of risk or trade-offs between social, economic and environmental water needs. This currently comes in to some extent when determining priorities for environmental water (e.g. section 7.31 (a), 7.35 (f)). However, this is done after all the work has been done to determine the environmental watering requirements, so may mean that time has been spent determining watering requirements that the prioritisation process determines will not be watered. The ecological objectives only need to reflect the nature of the criteria used to identify the asset/function	Include relevant principles and a process for consideration of the balance of social, economic and environmental outcomes noting changes must be consistent with the objects and purpose of the Water Act.  Provide flexibility/risk based approach in section 7.27 & 7.28 so that the method required to consider environmental watering requirements reflects the nature of the resource, water-dependent ecosystems and level of risk to the resources (i.e. less intensive method for low levels of risk).

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		<p>(section 7.27 (c)), and the WRP needs to provide water in a way that is consistent with the watering plan (section 9.31) – this does not seem to leave room for making triple bottom line considerations. This is particularly relevant in systems where the majority of water is planned environmental water with no “active” environmental watering, where the taking rules are set up front and the priorities don’t change from year to year.</p> <p>It also does not include flexibility to modify the process for areas that are under a low level of risk (e.g. much of the SA unprescribed area has a very low level of development and the risk to ecosystems is expected to be low). These areas will still need to go through the full process of determining quantitative watering requirements for priority assets and functions, which may not be the best investment of resources. Simple rules to manage development levels and water-taking impacts (e.g. dam capacity limits, well spacing rules etc) may be sufficient in such areas and may be able to be determined without detailed quantitative determination of environmental watering requirements.</p>	
46-52	Parts 6 &7	There appears to be a lot of overlap in the content of these Parts and a level of detail that seems unnecessary to be in the main body of the instrument	Simplify and reduce these sections and place some subsidiary material in schedules.
47	7.34	Parts (e) and (g) of this section are confusing. Is it the intention that condition of assets can only be considered if they support a function? Shouldn’t the consideration of long term sustainability and effect relate to an asset or ecosystem regardless of whether it supports a function?	Revise as the current wording is not logical.
47	7.35 (d)	This section refers to quantity of water to achieve the objectives in Part 2 but shouldn’t it also refer to the more detailed objectives in long term watering plans (developed in	Revise to make reference to ecological objectives identified for priority assets and functions.

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Page	Section	Issue	Recommended change
		accordance with 7.27 (c)?	
47	7.35 (d)	This section about weighing up different options for watering to achieve the EWP objectives does not seem relevant to States in determining annual watering priorities but would have more relevance to Basin wide annual priorities.	Review principles and methods parts of this chapter to ensure they are fit for purpose and have relevant application at the different scales of planning
48	7.36 (a)	Does not currently include a requirement to consider water quality risks. As environmental watering can have water quality and salinity impacts and the MDBA is required to have regard to these objectives and targets in setting Basin priorities, it seems appropriate that State level planning and prioritisation also considers water quality risk.	Add 'water quality risks' ie '...potential risks, including <i>water quality risks</i> and downstream risks'.
49	7:40	The operational and management considerations do not refer to the need to avoid (unintended) negative 3 <sup>rd</sup> party impacts or to consider water quality matters.	Include as a consideration.
49	Part 7	There is no requirement for State long term watering plans to be considered.	Include a requirement to 'have regard to' relevant long term watering plans.
50	7.42	The Water Act requires the CEWH to manage environmental water in accordance with the environmental watering plan. This section appears to reduce this requirement to only 'have regard to' the Basin annual watering priorities. While a broad principle may be appropriate for other water holders that have different obligations, this appears to represent a move away from the intent of the Water Act in regard to the activities of the CEWH.	Add a section requiring the 'CEWH to undertake environmental watering in accordance with the Basin annual environmental watering priorities and where relevant long term watering plans'
50 51	7.44 7.46	Guidelines must be developed to provide guidance to applying the principles in Part 7 (and generally other principles etc in this chapter). For example: this section states that environmental watering is to be undertaken in a way that (amongst other things) (v) '...having regard to social and	Guidelines must provide guidance on applying the principles in Part 7.

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		<p>economic outcomes.</p> <p>Principle 5: 'Environmental watering is to be undertaken having regard to the quantity of water and other resources required relative to the expected environmental benefits. These are too broad to provide guidance.</p>	
51	7.48	The requirement for consultation with local communities on application of environmental water may be overly onerous as consultation is already required for state and MDBA planning and prioritisation.	Review this requirement as it may not be necessary or practical.
51	7.49	Adaptive management should also inform the recovery of additional environmental water and inform changes to planning, priority setting and delivery of environmental water. There is currently no requirement for any change or action to arise as a result of adaptive management. Rather than covering adaptive management in a principle for environmental watering, it is considered this should be given more prominence as a section relevant to planning, prioritisation and delivery of water.	<p>Revise s7.49 to include 'inform the recovery of additional environmental water' and 'to inform changes to planning, prioritisation and delivery of water'.</p> <p>Add an additional section or sections in chapter 7 that will enable adaptive management to be considered in relation to planning and prioritisation not only delivery of water.</p>
53	7.53	This section could have unintended consequences for individuals wishing to undertake environmental watering with privately owned water on private land. This could potentially deter rather than redirect any altruistic or community investments because of the reporting arrangements if priorities are not followed. It is understood at a Basin scale this is most likely to apply to the CEWH.	<p>Revise to address unintended consequences.</p> <p>If the Authority publishes priorities it should also specify <u>who</u> should have regard to those priorities and/or circumstances where they do not apply.</p>
53	7.53(4)	Appears unnecessarily onerous especially at a small and or local scale. If SA for example decided it wanted to acquire additional water for the Lower Lakes or Coorong e.g. during a drought because there was insufficient water provided under the Plan, then it should be able to do so.	Revise to address unintended consequences.

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Page	Section	Issue	Recommended change
53	7.53(4)	This section should include a requirement for the Authority to have regard to long term watering plans in determining priorities for planning for recovery of additional environmental water.	Revise to include requirement to have regard to long term watering plans.
188	Schedule 5, Item 5	The criterion refers to an asset that is " <u>capable</u> of supporting <u>significant</u> biodiversity" This is an extremely vague and ill-defined criterion that could be used to prioritise almost any wet spot in the landscape.	Change criterion to be more specific or at least develop guidelines to provide a more objective / assessable definition of "capability" and "significance level".
189	Schedule 6	Does not include a criterion for vertical connectivity.	Revise to ensure the criteria address vertical connectivity i.e. between groundwater and surface water resources.
190	Schedule 7 (1) & (2)	Targets are general and represent a list of components to be monitored. <ul style="list-style-type: none"> <li>• What/when is the baseline against which the "no loss or degradation" or the "improvement" is measured against? Many sites do not have baselines established and will take time to establish a baseline.</li> <li>• No loss of wetland types is very vague – what is meant by types? What is the criteria or categorisation for types? It mentions condition but condition is not always used in determining 'types'. Does 'no loss of wetland type' mean that if there is still at least one example of a type then this is fine, or does it mean no loss of the area or percentage of the different types that exist?</li> <li>• A subset of indicator sites, measures will be needed and States must be consulted.</li> <li>• (e) - Condition and diversity is important for water-dependent vegetation, but extent and reduction in fragmentation is also and should be included. This target should include extent and reduction in fragmentation.</li> </ul>	Schedule 7 should be amended. A section should be added to Part 3 of chapter 7 to enable a process for developing the targets and monitoring process further in consultation with jurisdictions (see comments on s7.07 and s7.08). In addition, targets need to be revised to ensure that they are more concrete and adequately and comprehensively identify the areas/elements that must be monitored to be able to report accurately and robustly against achievement of the objectives. There do not seem to be corresponding targets for many of the objectives. See comments below. Condition and diversity is important for water-dependent vegetation, but extent and reduction in fragmentation is also and should be included. This target should include extent and reduction in fragmentation The objectives in chapter 7 part 2 that don't seem to have a target against them and should be reflected in the targets, include: <ul style="list-style-type: none"> <li>○ maintaining condition of Ramsar wetlands and listed waterbird sites;</li> <li>○ no threatened species loss;</li> <li>○ ecological processes, eg energy carbon and nutrient dynamics</li> <li>○ habitat diversity at range of scales, resilience to climate variation,</li> </ul>

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		<ul style="list-style-type: none"> <li>• These targets should be more closely linked to the objectives in chapter 7 part 2: 7.04 and 7.05 not just the overall objectives</li> </ul>	<p>maintaining refugia, not exceeding tolerance ranges and irreversible changes and monitoring human induced threats.</p>
	<p>Gap See also chapter 11</p>	<p>While the CEWH will be required to act consistently with legislated requirements, including the trading rules in the Basin Plan, a water trading framework must be put in place to ensure trade is undertaken in a transparent manner and consistently with requirements in the Water Act 2007.</p> <p>This framework should outline the circumstances in which trade of both allocation and entitlement may be considered and how trade will be undertaken.</p>	<p>Include provisions in the environmental watering plan that refer to the establishment of guidelines on the trade of environmental water holdings by the Commonwealth Environmental Water Holder in relation to the effect on the ability to meet the requirements of environmental watering plan or environmental watering schedules.</p> <p>The Commonwealth Government should develop a framework in consultation with Basin States to guide the trade of water held by the Commonwealth Environmental Water Holder.</p>

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## Chapter 8 and schedules 8 and 9

Page	Section	Issue	Recommended change
	Ch 8 General	The chapter does not specify what actions are to be taken when target levels are exceeded.	Include provisions setting out what occurs when targets are exceeded. This may be different for the different types of targets.
	Ch 8 General	Use of the term 'have regard to' should also include a requirement to demonstrate that regard was had.	Include a requirement to demonstrate that regard was had or if a target could not be met the reasons why.
	Ch 8 General	There is a general lack of targets for key raw water quality parameters	<p>Include targets for key water quality parameters (e.g. Cyanobacteria, Alkalinity/pH, dissolved organic carbon, turbidity). Whilst some targets are contained in the Chapter, they do not exist for most key parameters, or for a sufficient range of sites. Targets <u>for these are important for raw water for treatment for human consumption – ensuring that Australian Drinking Water Guidelines (ADWG) are met.</u></p> <p>While it may be reasonable that some targets should only apply once the water is treated, the lack of any reference to parameters such as alkalinity and dissolved organic carbon (other than as “objectives”) does not provide sufficient basis for managing water quality for all uses, let alone for human consumption.</p>
	Ch 8 General	Specific sections in chapter 8 should require annual reporting against the salt load target, the salinity operational targets, and the salinity targets for raw water for treatment for human consumption and irrigation water in line with existing BSMS processes.	<p>Amend these sections in chapter 8:</p> <ul style="list-style-type: none"> <li>• 8.13 and 8.14 – add a part “Reporting against these targets can occur annually to coincide with reporting provisions under Schedule B to the MDB Agreement”</li> <li>• 8.17 - add to part (4) “The Authority must assess annually the achievement...”</li> <li>• 8.18 - add a part (3) “Reporting against these targets can occur annually to coincide with reporting provisions under Schedule B to the MDB Agreement”.</li> </ul>
55	8.05	Raw water objectives should also refer to a quality of raw water that avoids relevant guidelines being exceeded in the water <u>once treated</u> .	Include a provision such that raw water taken for treatment for human consumption does not result in guidelines (as per ADWG 2011) being exceeded in treated water.

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56	8.06	Crop yield loss due to salinity doesn't start until a trigger level is reached, with the trigger level varying with crop species. There is then increasing yield loss with increasing salinity. The section currently, in effect, says zero crop yield loss, when it may be fine to grow lettuces with 10% yield loss, if returns for the product are high enough. Irrigation advice on water quality would normally talk about "unacceptable crop yield loss". The type of crop should also be constrained – if lettuces (a salt sensitive crop) are not normally grown, it is not valid to use the salinity response information for that crop to test if "crop yield loss" will occur.	Amend 8.06 to refer to 'Unacceptable crop yield loss for the range of crops normally produced' rather than 'zero crop loss'.
57	8.10	It is unclear how this section interacts with 8.12 (2). If an Ecological Character Description contains a limit of acceptable change for a water quality parameter and there is another target included in the Basin Plan that is more stringent, does the more stringent target apply? Is this intended?	The hierarchy of these sections needs to be clarified, ie which takes precedence when there is conflict between targets 8.10 or 8.12 (2) and the Plan amended if necessary.
57	8.11(5) & Division 6	There is nothing regarding target values to inform operational decisions for water for treatment for human consumption. South Australia requires that water quality targets for raw water for treatment for human consumption below Murray Bridge are included as target values to inform operational decisions.	Include water quality targets for raw water for treatment for human consumption as a target value to inform operational decisions.
57	8.11 & 8.18	Additional salinity/water quality operational targets are recommended in the main body of the submission.	Include additional operational targets as recommended.
58	8.12(2)	It is unclear as to why the ecological character description for a RAMSAR wetland needs to be published on the Department's website prior to the commencement of the Basin Plan. If a new or revised ecological character description is published after the Basin Plan with locally relevant targets, then surely we should adopt these targets as the best available science.	Remove the words "before the commencement of the Basin Plan" from 8.12 (2)(a). Where a date is required for the purpose of water resource planning it should refer to the ECD at the time development of a plan commenced.

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58	8.12 (2)	For RAMSAR wetlands with an ecological character description that includes limits of acceptable change for water quality; if the only targets are the values of the limits identified in the description, this may limit the effectiveness of other targets contained in chapter 8 for water dependant ecosystems (e.g. pesticide targets) ie the ecological character may only refers to salinity but other water quality parameters may be relevant.	Clarify if a ECD only refers to certain water quality parameters whether <u>only</u> these apply or whether the target values in schedule 9 could apply if not referred to in the ECD.  Redraft to make it clear that targets for water dependant ecosystems apply if the published limits of acceptable change contained within ecological character description do not include those parameters included in the WQSMP;  <u>or</u> Make it clear that the ECD target for a particular water quality parameter is the only one that applies to that <u>particular</u> parameter.
58	8.13	Water quality targets for raw water for treatment for human consumption do not include dissolved organic carbon levels, alkalinity or turbidity. The lack of any reference to these parameters does not provide a sufficient basis for managing water quality for human consumption.  Apart from algal toxins, odor and palatability (salinity), there is actually no reference in Division 3 specifically stating water quality targets for raw water, <i>so that once treated this does not result in guidelines for treated water</i> as set out in ADWG (2011) being exceeded.	Include targets for dissolved organic carbon, alkalinity and turbidity in 8.13.  The section should refer to guidelines for water quality parameters as set out in the ADWG (2011).
59	8.13(4)	The term “low risk” used in this clause is not defined, and the term does not provide adequate protection for drinking water supplies.	Amend 8.13(4) to read “The target values for cyanobacteria cell counts or biovolume are the values above which it is impracticable for the water supply authority to treat the water so that it meets the requirements of the ADWG”.
59	8.13(4) (b)	List of toxins does not include nodularin.	Include nodularin in the list of toxins.
59 & 61	8.14 & 8.18	Water quality targets are documented as 95% of the time, but a time frame is not provided. An annual water use year monitoring and reporting timeframe may be appropriate.	Include a time frame for the 95% to be measured against.

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60	8.17	<p>Salt load target – a 10 year rolling average is an inappropriate timeframe for the salt load target. For example, a ten year rolling average may have meant that despite the very severe salinity impacts we saw in the Lower Lakes, and River Murray wetlands and Floodplains during 2007–2009, the target may still have been met as very large flushing flows have occurred over 2011.</p> <p>In addition the current method used to estimate the salt load export target is inaccurate and significantly overestimates the achievement of the target.</p>	<p>A three year rolling average is the appropriate timeframe for this target as detailed in Heneker TM, 2010, Development of Flow Regimes to Manage Water Quality in the Lower Lakes, South Australia, DFW Technical Report 2010/05, Government of South Australia, through Department for Water, Adelaide.</p> <p>Adopt a more accurate method for estimating the salt load target that incorporates both salt and flow parameters.</p>
61	8.18	<p>A target at or just upstream of the border must be retained in the WQSMP. The WQSMP must also be strengthened through the inclusion of additional salinity operational targets upstream of South Australia to drive accountability for operational decision making by all jurisdictions in the connected southern system, enable the significant salt accessions to the River Murray from upstream locations to be managed and provide a recognizable basis for the assessment of water quality entering the State.</p>	<p>Include additional salinity operational targets upstream of South Australia including a target at or just upstream of the border – see also main body of the submission.</p>
	8.18	<p>There are no targets for salinity in the Lower Lakes or water levels below Lock 1 to manage both salinity and acidification issues. Additional salinity/water quality operational targets are recommended in the main body of the submission</p>	<p>Include additional targets as outlined in main body of this submission ie:</p> <ul style="list-style-type: none"> <li>• an additional salinity operational target that salinity levels in Lake Alexandrina are maintained below 600 mg/L (~1000 EC) for 95% of the time (lake average) and below 900 mg/L (~1500 EC) for 100% of the time.</li> <li>• a minimum water level target of 0.4 metres AHD for 95% of the time with an absolute minimum of 0 metres AHD for 100% of the time (measured as daily averages across Lake Alexandrina).</li> </ul>
191	Schedule 8 Item 1 (3)	<p>Sodic soils are not a key cause of water quality degradation; they are a consequence of using poor quality water for irrigation.</p>	<p>Remove item 1 (3) from schedule 8 as it is not a key cause of water quality degradation.</p>

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## Chapter 9

Page	Section	Issue	Recommended change
	Ch9 General	There is a need for a comprehensive set of guidelines for implementation of this chapter.	Include a section in the chapter that 'states and the Authority must have regard to implementation guidelines that will be developed by the Authority.
	Ch9 General	Chapter 9 should allow greater flexibility or 'fit for purpose' planning in water resource plans requirements to cater to a wide range of water resources with different levels of regulation and development.	Amend Chapter 9 to allow greater flexibility or 'fit for purpose' planning i.e. to allow flexibility to adapt accreditation requirements to reflect different situations as relevant based on management objectives and risk assessment for the water resource.
	Ch9 General	As a general rule where there is a requirement for a State to 'have regard to' something there should be a corresponding requirement to indicate what was done to comply with this requirement as per schema in s9.27.	Include a consistent requirement to demonstrate what was done to comply with relevant 'have regard to' requirements including the need for a risk assessment to be undertaken.
195	Schedule 9	The definitions of riverine and non-riverine water types are not included in the legislative instrument or ANZECC guidelines. Is non-riverine with permanent water limited to storages and the Lower Lakes?	Include definitions in Chapter 1 Part 3 to clarify what is a riverine and non-riverine water type with permanent water.
63	9.04	For practical reasons it should be possible to enable compliance with the water resource plan requirements for 2 or more instruments that are reviewed or updated at different times. For example the EMLR water resource plan area has two water allocation plans which are likely to be reviewed and updated at different timeframes.	Add to 9.04 'If a water resource plan is constituted by 2 or more instruments or texts and those instruments or texts have different planning timeframes, the water resource plan may be developed and accredited in stages that reflect these different timeframes.'
64	9.07	"having regard to other water resource" doesn't offer much guidance. A guideline on some minimum issues or standards would be useful.	Include a note that specifies minimum standards or basic considerations eg risk assessment that should be examined in applicable adjacent water resource plan areas. Provision should be made to assess adherence to this minimum standard.
64	9.09(2)	The literal wording of this section may have unintended consequences which amounts to the ability of jurisdictions to inappropriately 'opt out' of water resource plan requirements by claiming it would cause a change in reliability.	Amend this section to ensure that unintended consequences including inappropriate opting out of applying requirements by citing a 'change in reliability' and the limitations the clause places on state management approaches are addressed.

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		<p>Moreover there is no requirement for a standard of evidence and it is unclear how the Authority would determine if a change in reliability was likely.</p> <p>There is potential for “reliability” to be interpreted differently. Reliability should be specifically defined consistent with the NWC definition as: “The frequency with which water allocated under a water access entitlement is able to be supplied in full”, so that any conditions of take, eg specified times of take, do not constitute a change in reliability.</p> <p>The section as drafted would also preclude deliberate state actions (irrespective of the Basin Plan) to change reliability in consultation with communities, such as, for example to permit low flows at certain times, without effecting full implementation of the Basin Plan provisions.</p>	<p>It should not constrain management actions by states undertaken irrespective of the Basin Plan requirements.</p> <p>Include a requirement for a standard of evidence that implementing a requirement could affect reliability.</p> <p>Include a definition of reliability. It is recommended to use/build on the NWC definition.</p> <p>Further clarity may be required in guidelines.</p>
67	9.14 and 9.15	<p>“Annual quantity of water permitted to be taken” and “Annual quantity of water that can be taken” and the sections following them are too similar.</p>	<p>The definition in the plain English summary is marginally more explanatory than the Basin Plan, but it would be helpful if the terminology in the Plan served to incorporate more of a definition.</p>
66	9.12 – 9.15	<p>Sections 9.12 to 9.15 are confusing, unclear and lead to misinterpretation in what is a critical part of the chapter and the overall Basin Plan.</p> <p>It is not clear what the “objective method ... for calculating the predicted water system behavior in relation to the long-term annual diversion limit” [9.12(2)] is actually meant to do.</p> <p>A maximum long-term annual average quantity of water should per definition be higher or equal to the long term annual diversion limit, because the long term annual diversion limit allows for ‘overs’ and ‘unders’. Does 9.13 (2) imply that the maximum cannot exceed the long term annual diversion limit. Is it a maximum or is it an average?</p> <p>The distinction between plan provisions setting rules looking</p>	<p>Clarify these sections in the final version of the Plan. Revise the structure of Part 3, Division 2 to make it simpler to follow and interpret, considering the issues raised.</p> <p>s9.13 could re worded to be an exception section that only applies where a diversion limit is less than the SDL in a water resource plan. A similar approach could be taken for 9.15.</p> <p>9.13 reads as if prior to 1/7/19, the WRP can increase take for consumptive use. Amend to ensure even if current WRP exceeds long term historical annual diversion limit, that diversions for consumptive cannot increase between 2012 &amp; 2019.</p>

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Page	Section	Issue	Recommended change
		forward and provisions for end of year accounting needs to be much clearer.	
68	9.17 See also 9.20 and 6.13	<p>Policy provisions for trade in held environmental water are inadequate, particularly where this results in entitlements or allocations that were used for environmental purposes being used for consumption.</p> <p>There are two related issues which appear to be confused in the draft Basin Plan. One is adjusting SDLs to take account of selling and buying of entitlements used for environmental use. The second is allowing for accounting for entitlements used for environmental use where they are traded for consumptive use. Issues include:</p> <ul style="list-style-type: none"> <li>• no clear accounting and adjustment process;</li> <li>• under current drafting where entitlements used for environmental use where they are traded/used for consumptive use the mechanism to adjust the SDL is unclear; and</li> <li>• mechanisms for adjustment appear in both chapter 6 and chapter 9 and need to be consistent.</li> </ul> <p>The South Australian Government has requested on several occasions explanation and examples from the MDBA of how this accounting for environmental water trade will work in practice.</p>	<p>Redraft the policy provisions to ensure:</p> <ul style="list-style-type: none"> <li>• there is robust and transparent accounting for the movement of water allocations or entitlements between consumptive and environmental use pools; and</li> <li>• States are not placed in a position of being non-compliant for actions not in their control.</li> </ul>
68	9.17 & 9.16	There does not appear to be any requirement in this chapter or chapter 6 to measure or monitor or account for the quantity of water taken for environmental use under water entitlements used for environmental purposes.	Include policy provisions to measure, monitor, account and report on the quantity of water taken/used for environmental use.
68	9.18	This section seems to allow exchanges between different forms of take, including between well measured accurately	It is understood, and should be made clear in the legal instrument, that there will not be a requirement for WRPs to include estimates of every individual form of

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		known forms and 'guesstimates'. The assurance in subsection (c) does not seem strong enough to avoid downstream outcomes being undermined. Strengthen evidence base before allowing exchange of poorly understood forms of take and accurately measured forms of take.	take within a WRP area as per clause 9.18(1). To clarify this, section 9.18 should include the following "does not in total exceed the level specified.....". Include a requirement for more rigorous requirements when substituting from an accurately measured form of take to a form of take that is not measurable to prevent downstream outcomes being undermined. Include a note referring to guidelines that address this concern.
69	9.19	Query how this section might be applied in practice. MDBA has indicated they will issue a guideline for this.	Amend to include a note referring to a guideline to address this requirement.
70	Part 4	The requirement for WRPs to describe what has been done to comply with requirements is strongly supported.	To further support transparency and robust decision-making, the MDBA should be open and transparent in its accreditation process.
70	9.20(1)(b)	Determination of take should be done using the best available data, not necessarily best available method and enabling cost effectiveness and risk to be considered. There may be situations where the best available method would be to actually measure the volume taken, but in many cases this is not cost effective nor necessary based on a risk management approach (e.g. metering the small volume of use from thousands of stock and domestic dams).	Section 9.20 (1) (b) reference to best available 'method' should also refer to best available data. Redraft to ensure that cost effectiveness and risk can be taken into account i.e. best available and more cost effective method.
70	9.22	This section should be retained, and preferably strengthened in terms of the evidence base required before electing to not include such rules. In addition the effectiveness of this section can be undermined by the change in reliability section, because rules that set limits on times, places and rates at which water are taken could be interpreted as affecting reliability. The links to chapter 7 could be greatly improved and clarified for these sections s9.22 to s9.36.	This section is supported and should be strengthened by requiring that clear evidence is required before electing not to include rules. Further, it should be clear that conditions on location, rate and place of take and use do not impact on the reliability of allocations for the purpose of this Plan. See comments on changes needed to s9.09. The requirement that environmental assets/ecosystem functions "are not compromised" should be more specific and better cross-referenced with relevant sections of Chapter 7 e.g. chapter 7 objectives and any ecological objectives determined for environmental assets and functions (such as in long term watering plans).

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73	9.27	Section 9.27 should be redrafted to make it clear that a risk assessment is required as a minimum to comply.	Redraft this section to make it clear that a risk assessment is required as a minimum to comply.
74	9.28(1)	<p>There is no definition of what constitutes a 'significant' impact of interception activities on water resources.</p> <p>The Plan needs to be consistent in defining interception activities. Mining is classed as an interception activity and the Plan has comparatively limited detail on planning requirements compared to the NWI Policy Guidelines which treats mining as an extractive activity with detailed provisions for resource planning and management. Overall, the Plan's treatment of interception activities (Part 5) is limited to identifying, monitoring and identifying remedial actions, although there are other management provisions in the consumptive take and groundwater sections.</p>	<p>Include a definition of what constitutes a 'significant' impact of interception activities on water resources either in the legal instrument or in guidelines.</p> <p>Improve the consistency of the Basin Plan with the draft <i>NWI Policy Guidelines for Water Planning and Management</i> in defining interception activities.</p>
75	9.30	This section does not include a purpose for which the actions are to be taken.	Change to be clear that the plan must identify actions <i>to manage impacts</i> if monitoring indicated there will be impacts.
75	9.31	<p>Linkages between chapter 7 and chapter 9 could be significantly improved and clarified.</p> <p>Issues include:</p> <ul style="list-style-type: none"> <li>• some likelihood that the long-term environmental watering plans and WRPs will be developed simultaneously. Amend section to account for this;</li> <li>• need to allow for water resource plans to be accepted as long term watering plans for unregulated resources; and</li> <li>• consistency with relevant river management documents.</li> </ul>	<p>As mentioned in the response to chapter 7, the development of long-term environmental watering plans are likely to be highly resource intensive and there is some likelihood that these plans will be developed concurrently with the WRPs. To accommodate this scenario, section 9.31(2)(a) should be amended to add "the most recent, or currently developed, version of the long-term watering plan....".</p> <p>It is understood that for water resource plan areas that have no held environmental water, the water resource plan could serve as the long-term environmental watering plan. Make explicit within the legal instrument.</p> <p>Add a further requirement to 9.31 (2) (c) "any other Authority or State strategy, operating or planning documents relevant to environmental watering."</p>
76	9.32	It may not make sense for a WRP to provide for the coordination of environmental watering between 2 areas in all cases, but this section is stated as mandatory. For example, if all the environmental watering in an area is planned and	Amend this section to accommodate situations where there is no active environmental watering to be coordinated.

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		based on up-front rules with no active environmental watering, there may be no real coordination to be done.	
76	9.33	This section provides for no net reduction in the protection of planned environmental water which is supported.  There does not appear to be a corresponding requirement to safeguard the protection of held environmental water. For example there do not appear to be provision to measure or monitor the quantity of water taken for environmental use.	Include policy provisions relating to the protection of held environmental water. This should include a requirement to measure, monitor, account and report on the quantity of water taken for environmental use.
76	9.36(2) (e) & (4)	This section only refers to the end of valley targets not the Murray-Darling Basin target.	Amend to refer to the Murray-Darling Basin target in s8.16 (2).
76	9.36(3)	More detail is required to outline how an objective determination is made in regard to actual water quality characteristics (1 year of data or 5-10 years of data).  It is not clear what the “objectively determined” actual value of a water quality characteristic means. Does this mean some sort of measure of central tendency determined over a suitable length of record, given the large seasonal and annual variation in water quality characteristics.  In addition, it should be made clear that such an objectively measured value for a site would become the target value for that site, rather than for the WRP area as a whole given the large spatial variability within an area (e.g. fresher and saltier catchments within the EMLR).	Provide more information, preferably in a guideline to assist in the development of Water Quality and Salinity Management Plans rather than in the legislative instrument.  Define “objectively determined” actual value of a water quality characteristic to be something like an appropriate representative value from repeated robust measurements of the water quality characteristic over a period that represents the range of values for that characteristic or a method consistent with the ANZECC Guidelines.  Amend the last line of subsection 9.36 (3) to be “... subsection (2), then the target value for that site is that better value”.
77	9.37	This section does not provide for water resource plans to indicate what was done to comply with the requirements to have regard to causes and targets as per s9.37(2).	Include in the accreditation requirements that a water resource plan must indicate what was done to have regard to causes of water quality degradation and target values for water quality.
79	9.45, 9.46, 9.47	The risk management requirements are workable, but could benefit from a clearer alignment with the ISO standard terminology. The potential to have additional guidelines	The MDBA should note that jurisdictions have been involved in the development of planning guidelines that includes coverage of risk management .  The MDBA must consult with jurisdictions in the development of any additional

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		<p>developed that the WRPs must have regard to is concerning if Basin States are not adequately involved in development of these guidelines.</p> <p>To the extent that Climate Change is a material risk to the “condition and continued availability” all water resources in the Basin; and that this is not specifically accommodated by the Authority at this time, the ability to deal with this matter by State agencies is severely compromised.</p>	<p>guidelines on this issue.</p> <p>Reconsider and include the impact of climate change in the water accounting of the Plan.</p>
81	9.50	The accreditation requirements should refer to plans requiring a monitoring and evaluation framework.	Redraft to include provisions such that: A water resource plan must include a monitoring and evaluation framework; any monitoring and evaluation must be consistent with chapter 12 and have regard to any guidelines developed under chapter 12.
82	9.53	Guidance on timeframes used to determine ‘best available information’ would be helpful.	Develop guidelines to provide guidance on timeframes used to determine ‘best available information’.
83	Part 14	<p>The Basin Plan has not specified any objectives or outcomes based on Indigenous values and uses. Also unclear what the difference is between Indigenous values, Indigenous uses and cultural flows, which is mentioned in 9.58 but not defined.</p> <p>Part 14 treats cultural flows, values and uses as separate and distinct issues whereas past experience suggests that the Indigenous approach to these aspects are more ‘holistic’, e.g. ‘water’ is an integral part of ‘country’.</p>	<p>Complex concepts of ‘cultural flows’ and ‘cultural values’ among others should be defined before being assessed as an accreditation requirement in water resource plans.</p> <p>These concepts need to be further defined through a consultative process with Indigenous peoples.</p> <p>The requirement to ‘...have regard to’ is open-ended and difficult to interpret. Include requirement to adopt a risk management approach to meeting these requirements.</p>
	Part 14	The note should also give regard to the review of a water resources plan.	Amend Part 14 to read ‘If a water resource plan is prepared or reviewed by a Basin State, it is expected that the Basin State will consult with relevant Indigenous organisations to address the requirements of this Part, and that the Authority will consult with these organisations in relation to whether these requirements of this Part have been met, for the purposes of paragraph 63(3)(b) of the Act’.

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	9.56	Subsection 2 needs to clarify that consultation must occur with relevant Indigenous organizations and not limit this to the two confederations currently identified in the Plan.	Amend sub-section 2 to read 'as determined through the requirement to consult with relevant Indigenous organisations within the water resource plan area'.
	9.56	Sub-section 2 a and b should give regard to Indigenous economic values and uses.	Add: "the social, spiritual, cultural and economic values of ....."
	9.57	A water resource plan should be developed having regard to registered Aboriginal heritage related to water within the water resource plan area.	Inclusion of an additional paragraph to sub-section 1: 'heritage preservation and protection provided for by the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 and State Indigenous heritage legislation in relation to the water based heritage sites within the water resource plan area'

## Chapter 10

Page	Section	Issue	Recommended change
86	10.05 (2) (a)	This requirement should apply down to and including Wellington, not just upstream from Wellington.	Change wording in these sections to: "A water supply authority has taken raw water from the River Murray System, at any site <u>at or</u> upstream from Wellington, for the purpose of treatment and supply for human consumption."
86	10.05(3)(b)	It is always 'practicable' to treat water given infinite resourcing and technology.	Amend the section to: "The level of a human health related water quality characteristic of the water makes it impracticable for the water supply authority to treat the water, <u>using the facilities and technology of the water supply authority available at the time</u> , so that it meets the requirements of the ADWG. See also 8.13(4) where a similar change is required.
87	10.07(4)	10.07 now allows for monitoring and forecasting of water quality to inform management of risks to CHWN, however it should be made clearer that the risk management approach should be intended to avoid reaching the trigger points.	Add to 10.07(4): <i>The Authority must manage the risks to critical human water needs associated with inflow prediction by managing the operation of the River Murray System in accordance with the Agreement having regard to:</i> <i>(b) the need to operate the River Murray System so as to ensure that there is</i>

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			<i>water in the system that is of suitable quality to meet critical human water needs; and (c) the salinity and water quality trigger points in section 10.05 being reached;</i>
89	10.08(1)	The reference in earlier drafts to the MDBA's risk management approach for inter-annual planning being based on "(a) the reserves policy specified in Division 2 of Part 4 of this Chapter" has been deleted.	Reinstate <i>The reserves policy specified in Division 2 of Part 4 of this Chapter</i> as part of the factors to be considered in 10.08(1)
91	10.10(2)(b)	Wording is confusing.	Change 10.10(2)(b) to: <i>No advances under clause 7 of Schedule H to the Agreement are required to meet conveyance reserve requirements, and any previous advances approved by the Basin Officials Committee under clause 7 of Schedule H of the Agreement have been acquitted or actions under clause 8 of Schedule H to the Agreement have been completed.</i>
92	section 10.15(3)	The water quality triggers for moving into Tier 3 still exclude the salinity trigger.	Delete specific reference to 10.05(3) only and reference 10.05. Thus: <i>This subsection applies if, in circumstances of extreme and unprecedented poor water quality in the water available in the River Murray System to meet critical human water needs, a salinity and/or water quality trigger point specified in subsection 10.05 is reached.</i>

## Chapter 11

Page	Section	Issue	Recommended change
95	11.03 (1)(b)	Provision 11.03 only relates to the delivery of water pursuant to the right to divert the water from a natural watercourse – in the future there may be other forms of take that need to be considered and covered by the trade rules i.e. desalination or recycled water.	Consider whether there is a need to envisage the ability for irrigation infrastructure operators to distribute water to water right holders other than diversion from a watercourse (e.g. distribution network sourced from desalination or recycled water).
99 & 1	11.15 – 11.17 & 1.04	There is no sufficient reason why provisions 11.15 – 11.19 require a transition phase to 1 July 2014 as allowed under the draft Basin Plan. This view is supported by the ACCC's advice	Sections 11.15 to 11.19, which deal with trade restrictions for surface water, must commence as soon as practical upon adoption of the Basin Plan.

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		<p>on water trading rules to the MDBA (March 2010) which states that “the Basin Plan water trading rules should provide for the immediate and complete removal of the 4 per cent limit (and other, similar limits) upon commencement of the Basin Plan.” [Australian Competition and Consumer Commission, March 2010, Water trading rules final advice].</p>	
		<p>Free and unrestricted trade should underpin the efficient and effective operation of the water market. It is recognised however that some Basin management arrangements are causing trade restrictions to be necessary to protect the environment and third parties.</p> <p>For example, current carryover policies between jurisdictions, combined with arrangements for late season trade, have the potential to distort the market and have significant impacts on third parties, in particular the reliability of entitlements. Unfortunately in these situations trade restrictions are required to ensure that entitlement holders are not impacted by the adverse consequences of these policies in the following water year.</p> <p>These trade restrictions should not be considered as the preferable management tool and amendments to state policies should be pursued to avoid these situations in the future.</p>	<p>The Commonwealth Government must direct the Productivity Commission to undertake an investigation into current state water management policies trade arrangements that are causing market distortion.</p>
100	11.18 – 11.19	<p>The policies relating to the adoption of new trade restrictions need to be significantly strengthened. The current provision, which provides for a declaration by the Authority only after a restriction is already in place, increases the risk that an inappropriate restriction could be put in place. Any inappropriate restriction, regardless of whether it is eventually removed or not, has the potential to disrupt the market, impact on market confidence and have financial</p>	<p>Amend sections 11.18 – 11.19 to include provisions which require:</p> <ul style="list-style-type: none"> <li>• States to notify the MDBA of the intent to impose restrictions; and</li> <li>• the MDBA to make a declaration of whether the trade restriction is allowable prior to the restriction being put in place.</li> </ul>

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		<p>implications. The longer such a restriction is in place, the greater the potential impact.</p> <p>While it is noted that other jurisdictions have previously put forward concerns in regards to the ability to react in a timely manner to critical trading issues, a pre-emptive declaration process would not need to be particularly onerous.</p> <p>Jurisdictions will need to undertake their own due diligence in order to put a new restriction in place – a declaration by the MDBA could be considered concurrently to this.</p>	
108-109	11.37 (3)	<p>11.37 (3) states that subsection 1 does not apply if the interest in a trade arises solely from the fact that the approval authority is an agency of a Basin State. The South Australian Government requires clarification whether 'agency of a Basin State' would include both the relevant minister and any agency he might delegate his authority to.</p>	<p>Advise whether 'agency of a Basin State' includes both the relevant minister and any agency he might delegate his authority to. If it does not, revise this section to include provision for both.</p>
111	11.44(1)	<p>This provision states that trading rules to be made available to Authority – this information should also be made available to the market.</p>	<p>Add to text 'available to the Authority and the public'.</p>
-	General	<p>It is noted that water resource plans generally outline the trade rules that apply to that water resource. While the draft Basin Plan includes a range of trade rules, by which jurisdictions must comply, there is nothing within the draft Basin Plan that requires trade rules contained within water resource plans to be reviewed by the MDBA for consistency or accredited by the Commonwealth Minister.</p> <p>It is also concerning that under section 245 and 246 in the Water Act 2007, water trade rules contained in transitional or interim water resource plans would continue to be valid until a Basin Plan compliant water resource plan is accredited by the MDBA, even if these rules are inconsistent with the Basin Plan. Essentially this will mean that the full suite of water</p>	<p>Specify how compliance against trade rules will be managed to ensure that trading rules come into effect in the prescribed timeframes.</p>

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		trading rules may not be applied consistently across the Basin until 2019.	
	Gap See also chapter 7	While the CEWH will be required to act consistently with legislated requirements, including the trading rules in the Basin Plan, a water trading framework must be put in place to ensure trade is undertaken in a transparent manner and consistently with requirements in the Water Act 2007. This framework should outline the circumstances in which trade of both allocation and entitlement may be considered and how trade will be undertaken.	Include provisions under the environmental watering plan that refer to the establishment of guidelines or recommendations on the trade of environmental water holdings by the Commonwealth Environmental Water Holder in relation to effects on the ability to meet the requirements of environmental watering plan or environmental watering schedules. The Commonwealth Government should develop a framework in consultation with Basin States to guide the trade of water held by the Commonwealth Environmental Water Holder. Advice should be requested from the ACCC on this matter. Include provisions in the Basin Plan to require the CEWH to properly and comprehensively account (report annually) to the MDBA on all held environmental water it holds, uses and trade for the environment.
	Gap	Trade/Transfer of water between the Environmental and Consumptive (SDL) pools The transfer of water by CEWH and others into and out of an SDL pool has the potential to impact significantly on achievement or otherwise of SDLs.	There need to be specific mechanisms set in the Plan to deal with these transfers, including a requirement on the CEWH that it does not by its actions cause an SDL to be breached – see comments and recommendations in the section dealing with chapter 9.
	Gap	Requirements on the CEWH to properly and comprehensively account (report annually) to the MDBA on all water it holds for the environment, how it was deployed and <u>traded</u> . This ought to be irrespective of any Commonwealth governmental statutory or governance requirements. The MDBA's "delivering a Healthy Working Basin document highlights the importance of the behavior of CEWH in markets and the need for the CEWH to publish trading framework and forward business plan. If the MDBA sees the need to address such issues as important then it should include relevant provisions in the Basin Plan.	The Plan ought to require the CEWH to annually, account for all environmental water it holds, and how that water was deployed, and traded. This will require revision to schedule 10 to enable reporting against water traded.

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**Chapter 12 and schedule 10**

<b>Page</b>	<b>Section</b>	<b>Issue</b>	<b>Recommended change</b>
114	General	Chapter 12 provides a broad outline of the monitoring and evaluation (M&E) program for the Basin Plan however the real challenges will arise in the detail i.e. developing the mechanisms for its implementation and getting agreement amongst the key partners.  Provision of adequate resources for implementation is vital. Adequate resourcing is paramount to ensure an effective M&E program.	The Basin Plan should require the MDBA, in consultation with Basin States, to prepare and implement a Basin monitoring and evaluation plan, reviewed on an annual basis.  Monitoring and evaluation will be a significant implementation costs that needs to be factored into the Regulatory Impact Statement and considered by the Commonwealth Government – this will require the commitment to no additional net costs to be extended.
114	General	Effectiveness is only one term commonly used in evaluations, the monitoring and evaluation program should also consider appropriateness, impact and the efficiency of plan implementation.	Review chapter to ensure these elements are included. For example a key evaluation question may be needed to cover efficiency of implementation.
114	General	The framework should include monitoring and evaluation of social and economic impacts.	Revise to include a requirement for monitoring and evaluation of social and economic impacts.
114	General	Principle 2 in Part 2 of the monitoring and evaluation chapter (12) states that “monitoring and evaluation should be undertaken within the conceptual framework of program logic”. As the MDBA states in its plain English guide to the draft plan “program logic is an approach to planning and design. It uses diagrams or other methods to set out the steps in a program, linking assumptions, hypotheses, resources, activities, outputs, impacts and outcomes.” Unfortunately, the program logic used by the Authority in formulating the M&E chapter is not clear in the draft plan or supporting material.	Redraft the section to provide greater clarity around the linkages between chapter 12 and other chapters in relation to monitoring and evaluation activities. This would make it much easier to obtain an integrated picture of the M&E framework in the plan.
115-116	Principles	A principle that relates to ensuring there is an understanding of timescales involved - recognizing that interventions encompass a range of scales (temporal, institutional and spatial) is required. This is a gap.	Consider an additional principle that is about building an understanding of MERI and the timescales in detecting change. This is also then connected to reporting and what gets reported when.

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117	12.08	<p>Currently the chapter only references the Authority establishing guidelines for reporting and it is suggested that more detailed monitoring and evaluation guidelines, ie a monitoring and evaluation plan, are necessary. Without this it is difficult to see how the Authority will be able to monitor the effectiveness of the Basin Plan.</p> <p>The detailed plan will need to address how and when baselines for monitoring will be determined.</p> <p>A clear link must be made back to the water resource plan requirements in chapter 9 and to chapter 7. For example under s9.50 reference could be made to the need to have regard to any guidelines or monitoring and evaluation plan developed by the Authority.</p>	<p>Include provision that the Authority must develop in consultation with jurisdictions a monitoring and evaluation plan.</p> <p>Include a provision in chapter 9, s9.50 that states must have regard to this plan in developing water resource plans and in chapter 7 that the CEWH must have regard to this plan in any monitoring it does in relation to applying environmental water.</p> <p>The detailed plan would need to establish baselines for monitoring.</p>
118	12.10 – purpose of the reviews	Does the purpose of the reviews have two aims? In the short term it is to look at the progress being made towards the targets and objectives of the plans and in the longer term it is looking at the effectiveness of the water quality targets and environmental water plan.	Consider the use of timescales to help differentiate the process for review to provide more clarification.
118	12.12	What happens after the water quality and salinity and environmental watering plan is reviewed?	Include an additional section which requires follow up action as a result of the review of the environmental watering plan. This is part of the adaptive management principle that must operate throughout the plan.
207	Schedule 10 (6)	Reporting on social, environmental and economic outcomes may be too frequent –dependent on the availability of supporting (survey) data.	Change reporting frequency to every 5th year to align with the availability of census data in particular Agricultural data.
207	Schedule 10 (7-12)	<p>These reporting requirements will not support active adaptive management for environmental watering.</p> <p>More frequent (annual) review is needed to adapt and develop effective and co-ordinated e-water delivery in the Basin examining what worked well in the past water year to inform what needs to be improved for next year etc.</p>	Amend the Basin Plan to develop an integrated monitoring and evaluation approach for environmental watering linked to annual adaptive management processes. This needs to be explicitly linked to chapter 7 as specific provisions in this chapter. See further the comments on chapter 7.

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207	Schedule 10 (7-12)	The Plan ought to require the CEWH and other environmental water holders to annually, account for all environmental water it holds, and how that water was used, and <u>traded</u> .	Amend the reporting requirements in schedule 10 to require the CEWH and other environmental water holders to report against held environmental water release, used and traded including the movement of that water in and out of the consumptive pool.
208	Schedule 10 (9)(b)	Monitoring of the salinity impacts of environmental watering will be important and should be required in schedule 10. Section 7.25 (3)(e) requires the authority to have regard to water quality and salinity when developing the annual watering plan, however there is no monitoring requirement in schedule 10 to ensure that the actions undertaken do not significantly impact upon water quality or salinity.	Include a requirement to record and report on salinity levels prior to and following watering event as part of the annual reporting required in item 8 and 9.
209	Schedule 10 (13)	Reporting should be required annually, as part of an adaptive management framework to manage river operations for water quality and salinity outcomes. Annual reporting will enable the impacts and outcomes of river management decisions on water quality – i.e. how the jurisdictions “had regard to the targets” to be reviewed annually to assist in the development and review of operational strategies. A five yearly reporting timeframe for this outcome as proposed is inadequate as major changes to river operations under the Basin Plan are likely to affect water quality and salinity in the short term. A yearly reporting cycle would enable adaptive management to be utilised on an annual basis with the outcomes from last year’s operating decisions being used to guide operational decisions in the next year.	Amend monitoring and reporting timeframes for Schedule 10 items 13 from five yearly to annually or if inappropriate in this chapter include in chapter 8.
209	Schedule 10 (14) Also Items 13, 15 & 16	The requirement to ensure that water quality and salinity trigger points at which water in the River Murray System becomes unsuitable for critical human water needs are determined and emergency responses for managing events are in place, and report annually is supported; however there is no annual monitoring or reporting requirement for water	Amend to require an annual report on water quality and salinity levels in relation to the trigger points outlined in chapter 10.  Review the timeframes for reporting on water quality and salinity with a view to reducing timeframes outlined in items 13, 15 and 16.

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		quality and salinity to ensure that these trigger points are not breached.	
209	Schedule 10 (15)	First reporting in 2019 and then five yearly reporting is not adequate.	Increase the frequency of reporting to ensure that there is adequate feedback to enable an adaptive management framework to be developed. The reporting process may have significant overlap with BSMS reporting so potential for collaboration should be investigated.

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