



**Conservation Council
of South Australia Inc**

**Response to the
SA Murray Darling Basin Regional
Draft Natural Regional
Management Plan**

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Introduction

The **Conservation Council of South Australia Inc (CCSA)** is the peak conservation body for South Australia, representing over 55 of the State's environment and conservation organisations.

CCSA is an independent non-profit, non party-political, community based organisation which provides resources, advice and representation for the SA environment movement, and which leads many of the key conservation campaigns in SA.

CCSA is known for its success in developing long term community development, education, and on-ground environmental restoration programs.

CCSA regularly liaises with Local, State and Federal Governments, Government agencies, media, educational institutions, NGOs, unions, industry, business and other groups on matters relating to the environment and social justice.

CCSA is recognised as a Peak Body and Partner for delivering the goals of the State NRM Plan under the *Natural Resources Management Act 2004* (NRM Act). CCSA is represented on the State NRM Council, established by the NRM Act (Section 13) alongside South Australia's Farmers Federation, the Local Government Association and Aboriginal Landholding bodies.

As a community organisation, much of what CCSA achieves is through a large network of skilled volunteers from all walks of life – for its office, on-ground, governance and campaign activities.

CCSA is committed to a healthy environment for South Australia.

CCSA's submission

CCSA is pleased to make a submission on this Draft NRM Plan and commends the SA Murray Darling Basin NRM Board's efforts.

This submission provides general comments on the Plan as well as specific comments in relation to the 4 volumes. CCSA sees the community as a key driver of NRM and believes NRM Plans should be drafted through a process of genuine community engagement. Therefore specific comments are also provided on the consultation process that has occurred in the preparation of the plan and whether the plan is written and structured in a manner that is accessible to a diverse range of stakeholders.

General Comments

Alignment with NRM Act, State Plan and environmental legislation

CCSA's believes the Draft NRM Plan is generally consistent with the NRM Act, State NRM Plan and other environmental legislation.

In relation to the NRM Act it is felt that the Plan could better address sections [75][3][a][iii] which requires the inclusion of information (as prescribed by the regulations) on the 'environmental, social, economic and practical considerations relating to the use, management, conservation, protection, improvement'.

In particular the environmental considerations of natural resource use generally lacks specific detail, such as the need for integrated management of assets and how management of one asset may have environmental impacts upon another asset. There is very little information on how management of natural assets can be in conflict with each other and how this can be dealt with. For example there appears to be no mention of short term reductions in biodiversity or increased soil erosion risk from mass pest plant eradication and no mention of biodiversity risks from the planting of some perennial species for salinity control.

In addition CCSA is concerned that the Plan inadequately meets the requirements in the NRM Act in relation to S.75 (b) (iv), in that it does not include "information as to the arrangements to ensure the proper management of wetlands and estuaries, and marine resources". This comment is based on the following observations.

The Plan does not:

- mention the commercial fisheries operating in the region's marine waters (or the Lakes). There should be information provided as to the status of those fisheries. For example, whether they are fully-fished or over-fished, whether there are any arrangements to ensure fisheries are sustainable, what the impacts of fisheries are on regional environments and vice versa and so on;
- address the impacts of recreational fishing;
- address marine pests;
- address threatened marine mammals and fish;
- address the issue of the need for the co-ordination of the research, planning and actions being undertaken in relation to the Coorong and Lower Lakes – and who is/will undertake this;
- mention the state Marine Protected Area (MPA) program or the pilot Encounter MPA, partly in the SAMDB region. This omission means that information on how the Board might engage in and support the community to engage in the MPA establishment and management processes is absent;
- identify and links between the regional Plan and the Living Coast Strategy and/or the Marine planning Framework.

Cross regional issues and implementation

Cross regional issues are given due consideration in this draft plan and the issues and programs overlapping regional boundaries are adequately described.

Deficiencies in the NRM Act which affect this Plan

There is a lack of clarification on the community's legal obligation to protect terrestrial biodiversity. Part of this is due to the lack of guidelines in the NRM Act to provide guidance on the management and protection of natural resources as required under general statutory duty, but the NRM Plan could assist by at least mentioning the Native Vegetation Act and stating that land managers have a duty of care. This could be included in section 6.7 Volume 2.

The targets of this plan are ambitious and commended. Some concerns exist surrounding the level of authority and powers the Board has outside of the issues of soil erosion, proclaimed agricultural pests and water allocation. Many of the targets and actions in this plan will require more than capacity building, education and incentives to achieve. Many targets will require the ability to seriously influence state and federal government policy and planning.

Specific Comments

Community engagement

Genuine community consultation

- The timing of the NRM Plan release during summer holidays may have hampered landholder's ability to make informed submissions and take notice of the advertisements regarding the Plan's release. It should also be noted that a number of community members may have been making other submissions on several projects of environmental concern in the SAMDB which may have reduced their ability to be comprehensively engaged in this planning process.
- The provision of only electronic copies of the draft may have limited the ability for certain demographics (e.g. those without computers) to read and make comments on this document. It is understood the SAMDB were willing to provide hard copies upon request, but it should have been advertised that hard copies were available if needed.
- The length of the plan (over 400 pages) may have also limited people's ability to read and comment on this plan. Whilst issues in the SAMDB are complex and the comprehensive information presented here is commended, the wording in some parts could have been made more succinct or a summary document highlighting the key points from each volume would have proved useful.
- CCSA commends the consultation efforts of the SA Murray Darling Basin NRM Board to engage with the community during the NRM Planning process. The consultation process adopted has demonstrated an improvement of genuine community consultation compared to other plans. Obtaining input at various stages of the plan's development (and not just the statutory requirement for a concept statement) is commended and the issues based focus groups are a positive step towards improved community engagement.

NRM Plan structure and readability

It is vital that the regional NRM Plan is a community tool and as such the language, structure and format facilitate community ownership and comprehension.

- Generally the language used in the Plan is straight forward and not laden with technical jargon which is commended.
- There are a number of references to other documents (such as Community Action plans) which are not defined in any detail and no references or weblinks for these are provided in the text. It should not be assumed that the community has read these plans. Important information from these external plans should be included in the document.
- The plan's structure is logical and information follows in a sequential manner. Information, such as linkages with other legislation and policy context is contained as separate sections at the end of each volume which doesn't bog the crux of the plan down with bureaucratic information inserted merely to show conformity to the requirements of the NRM Act. This is commended and means those people interested in the practical side of NRM and what it means to them, can simply skip these policy sections.

Facilitate understanding of NRM

It is important that the community have a clear understanding of what NRM is its role and the role of the Plan in order to understand how they can contribute and participate. It is also of primary importance to ensure the Plan clearly articulates what role the Board plays (under the NRM Act) in NRM. For example, it is still not clear to the community the Board's role as an enforcement body, as an assessment body and as an educator.

- The description of the NRM Plan's intent and the individual volumes is commended and provides a clear overview of the Plan.
- It is beneficial that the plan describes what 'natural resources' actually exist in the region. This is something which some other plans have often neglected to do. It may be useful to also mention other natural resources (such as oil, minerals etc..) and why they are not covered by this plan or alternatively state that the natural resources mentioned in the plan is not an exhaustive list. Considering NRM as an approach is justified, but CCSA would still like to see better differentiation of NRM in practice (including statements that everyone is a natural resource manager and NRM is about the use, management and development and natural resources) versus the neologistic use of NRM terminology to mean the policies, bodies and strategies surrounding the NRM Act and Boards. Alternatively it would help to include a statement such as "in the context of this plan NRM is considered to be..."

Determination of Asset Targets: Biodiversity

- CCSA is concerned with how the biological assets in the southern part of the region were considered. The 'Biota' Technical Group consisted of a range of DEH/NRWS staff based in Berri and there is concern that consideration of the biological assets in the southern part of the region was inadequate.

Other general comments

- It would be helpful if documents referred to in the text of this plan include citations or weblinks for easy reference (only some have links).
- Fact sheets: The fact sheets included with the Draft Regional NRM Plan draft are useful and covered important aspects. It is good to see a specific fact sheet set up on how to provide feedback and how this feedback will be considered.
- Feedback form: The feedback form is to be commended and a recommended template for all other draft plans that are prepared. This feedback prompts provide more direction for community than asking them to comment on what they like and what they didn't like. Specific questions on each volume may also help the communities understanding of the intent of the plan.

Volume 1: Strategic Plan

- The ambitious targets in this plan are commended and at the same time it is believed they are achievable. It may however be advisable to set some interim targets before the 2014 MATs to help reach the regional goals considering the ambitious nature of these and to provide to the community an indication how the Board is tracking against this plan's targets.
- It would be useful to highlight some of the cross linkages between assets and MATs.
- Page 3, paragraph 1: The definition of viable population could be included in the glossary to aid in community understanding of the terminology.
- Page 3, paragraph 1: There is no mention of the conservation status for fish as there is for birds, mammals and amphibians.
- Page 3, paragraph 1, sentence 5: Consider changing "...marine fish occur..." to "...marine fish move between..." as the former makes it appear like salt water species permanently reside in the lakes which is generally not the case.
- Page 4: It is good to see specific cross regional programs mentioned.
- Page 5, 1.5, last paragraph: Although the SAMDB consultation process is commended and perceived as one of the best processes adopted to date, it is inaccurate to say that 'all' stakeholders have been consulted. That is impossible, as it would require consulting with every single individual. It would be fair to say the Board has aimed to consult comprehensively with all stakeholders during the development of the Strategic Plan.
- Chapter 2, Page 9: The vision and guiding principles are comprehensive.
- Chapter 2, Page 15, Figure 5: Clearly delineates linkages between plans and policies. It may also be beneficial to include information and a diagram on the interrelationships and linkages between the NRM Board and other agencies. It would also be useful to include information on the linkages with other schemes such as the Federal buy-back scheme of water licences as many of these linkages aren't specified clearly in the plan.dwl

- Chapter 2, Page 17: Provides a good explanation of the relationships with funding through *Caring for Country* and State funding as some confusion exists in the community on this aspect.
- Chapter 3, Page 21: The explanation of the intent of each chapter is beneficial.

Chapter 3.1 People

- It is good to see people as the first asset described in the plan and state that they underpin other natural resources and are the key to successful NRM.
- Page 23: Good to see population growth and tourism pressures on NRM mentioned.
- Page 23: Good to see the need to reward and encourage volunteers.
- RCT P1: It should be noted that increasing community awareness, skills and knowledge will not necessarily achieve RCT P1. The vision of 'people living sustainably' is also a bit simplistic. Having communities equipped with knowledge and skills doesn't necessarily mean they will adopt altruistic views to implement sustainable practices. It is not entirely clear how this vision will be measured as the MATs don't directly measure progress towards this vision or the RCTs?
- MAT 3.2: This MAT is commended but it is not clear how the Board expects to achieve this as the actions listed all focus on influencing local government development planning. How does the Board hope to align the State Government's planning policies and decisions with regional priorities? Perhaps some specific actions aimed at educating State Government on regional priorities and threats is required and trying to collaborate more with State Government to ensure planning decisions at the State level to not conflict with this regional plan.

Chapter 3.2 Water

- Very little attention is given to the marine environment (other than the Coorong). RCTs W1, W2 and W3 all appear to focus upon the River, Lakes and Coorong, except a small mention on marinas. Pollution also affects the marine environment. This chapter although suggesting it includes marine waters seldom refers to waters beyond the boundary of the Coorong. In particular W2.5 should emphasise the catchment to continuum philosophy and marine impacts.
- Environmental water requirements tend to just look at the lower reaches of the Murray. Whilst this is obviously a priority, little attention is given to the rehabilitation needs of the upper Murray.
- Page 32 Major threats: Would be good in dot point 2 to specify the threat of over allocation to both surface and ground water so this is clear to the community.
- Page 33, W1: Change first sentence to read "...threat to fresh water resources ..." If marine water resources are include with freshwater resources there needs to be a distinction what water resources are referred to with each RCT, MAT and action. It should not be assumed that all MATs and action relate to the River.
- Page 35: It would be beneficial to mention specific examples of ground water extractions (such as bores and some inappropriate plantations and revegetation)

- Page 36: A map of the boundaries of prescribed water resources would be helpful.
- MAT W3.4: It is strongly supported to reduce salinity levels to the Lower Lakes and it is good to see the need for improved access to freshwater flows is highlighted.
- W1.3 and W2.3: are strongly supported.
- W2.1: Is it possible to include under this MAT an action to optimise use of the waters from the salt interception scheme for the benefit of the SAMDB?
- W2.6: Good to see inclusion of urban threats and management and it will be an interesting case study to follow.
- W2.7: It would be good if this MAT extended to Adelaide to try and get them to adopt 'fit-for-purpose' water use philosophies to reduce pressure on the River, which would therefore require additional actions to collaborate with State Government and the AMLR NRM regional bodies.
- W3.1: Good to see emphasis on need for fish passage from mouth to upstream systems.
- W3.3: The SAMDB are to be commended in taking an advocacy role, having a voice and not shying away from taking a stance of regional water issues, however it would also be good for the Board to state its position on some of the other current water related issues.
- W3.7: The intent of this action is unclear and would benefit from further explanation. Are the weirs referred to here like those on Chowilla floodplains that allow natural wetting and drying periods? If so this would be supported for some floodplain/wetland sites, but not weirs along the main river channel or tributaries where altered flows regimes and salinity levels would have negative impacts.

Chapter 3.3 Biodiversity

- All RCTs and MATs are specific and ambitious which is commended, however it would be good to emphasise the need to concentrate on priority high value areas and spell out where these are.
- There are few actions regarding marine biodiversity. Even though much of the marine habitat is bare sand there are still marine biodiversity assets and some minor nearshore reefs in the SAMDB region which should be given due consideration.
- Page 54, Paragraph 2: The asset description makes no mention of marine species.
- Page 56: MAT B1.2: It would be helpful to specify what 'priority areas' will be based upon for this MAT. For example will it focus on connectivity through corridors, buffers and stepping stones based around priority biodiversity hotspots or will priority areas for revegetation be based upon other factors?
- Page 57, MAT B1.3: Plans referred to in this NRM regional plan (such as 'Conservation Action Plans') should be cited and referred to in the text or if possible include key

points about these plans so that the MAT has some context for those reading it who are not familiar with these plans.

- MAT 2.4: It is unclear why the Board is not investing in this area as it would appear to be a priority; also the target level of 10% seems a bit low. The Board could have much more influence on this area and also in preventing new incursions.
- Page 58: Conservation NGOs should be included as delivery partners for MATs B2.1, B2.2 and B2.3.

Chapter 3.4 Land

- Page 58, MAT L1.4: A reference is needed for the 'Regional Pest Strategy'
- Page 59, MAT L2.3: The inclusion of the word 'appropriate' in this MAT is strongly supported, but this MAT would benefit from expanding on its meaning. It is assumed that 'appropriate' refers to perennials species that will not become weedy in native terrestrial and aquatic ecosystems, but this should be mentioned somewhere in the text.

Chapter 3.5 Atmosphere

- The inclusion of atmosphere as a separate asset in the regional plan is strongly supported and emphasises the connectedness between this asset and the status of other natural resources in the region.
- Page 62, RCT A1: The inclusion of region specific targets for greenhouse gas emissions is both innovative and the 60% target is commended and certainly more appropriate than national targets. Conservation NGOs could be a beneficial delivery partner to address many of these MATs due to their broad networks and political influence.
- Page 65, MAT A2.1: It would be good to emphasise the need to incorporate climate change scenarios into water allocation and other water related planning.
- It would be good to include more emphasis and some specific targets on educating the regional and broader community about issues and management related to this asset (e.g. demonstration sites and information on research disseminated to the community).

Chapter 4 Research and development

- The inclusion of this as a chapter by itself is commended and highlights the need for increased knowledge to support the planning, monitoring and implementation of natural resource management. The high priority research areas are supported and appropriate for the region. Whilst the Board has stated it will work with research institutions, it might be beneficial to mention some of the potential delivery partners the Board are looking to collaborate with.
- It would be beneficial to include information on how such research would be copyrighted and how it will be made available to the public to use.
- There are several places in the plan where baseline information seems to be lacking and some mention of the research required to fill these gaps should also be made in

this section and under specific sections in the state of the region volume.

Chapter 5 Monitoring and evaluation

- The process suggested for monitoring and evaluation is supported and it is good to see the Board hasn't determined specific monitoring activities before the regional NRM plan has been adopted.

Chapter 6 Policy context

- References or web links to the other documents and legislation mentioned here would be beneficial.

Chapter 7 Linkages

- Page 83: Whilst it is required that the regional plan be consistent with other legislation there is also scope to point out inconsistencies. It would be appropriate to mention here some of the inconsistencies that potentially exist between delivering the SAMDB RCTs (especially those related to water) and the 'SA Strategic Plan' targets in relation to Adelaide's population growth.
- The tabular forms showing the relationships between plans is easy to read.

Volume 2: State of the Region

- Chapter 2, Looking forward: The upfront appraisal of climate change implications is good. It is also good to see the statement on page 12 that climate change should not overshadow or replace other NRM issues and that other NRM issues will be exacerbated or compounded by climate change.
- Chapter 3, Page 15, dot point 2: It appears that any marine ecology beyond the Coorong has been discounted and seldom receives a mention in this plan. The SAMDB boundary extends south beyond the boundary of the Coorong. Although this marine section of the SAMDB is only a small stretch and the benthic habitat predominately sandy, the marine environment and ecology still needs to be protected and considered in this plan.
- Page 18 – 22, Asset interaction: Whilst the flow charts are beneficial they only point out positive interactions. There are also negative interactions which are not discussed in this document in any detail.

Chapter 4 People

- Page 28: The map is confusing to read and it doesn't make logical sense as to why the hot spots for urban growth are placed on the same map as the LAP boundaries. It may be more appropriate to split the two attributes onto separate maps. Also the LAP boundaries should be placed closer to the section discussing LAPs. The role of the Local Action Planning groups is unclear in the business plan and in this document. Somewhere a distinction between the functions of the NRM Groups and the role the LAPs will need to be made to reduce confusion in the community on where they should go for support. Some information on whether there is duplication in roles and whether there is scope for collaboration would also be helpful.
- Page 36: The case studies here and elsewhere are good and it is beneficial to include one from the community perspective.

- Page 41: The key issues regarding community and volunteer engagement are possibly over-simplified. The statement that there is a 'risk of over-consulting leading to disillusionment' could have been more appropriately phrased. It is not so much over-consulting, but that when the community are consulted it is (often) perceived as not being genuine or sincere from the community perspective. For example, the community can feel that ideas are not listened to, volunteer's wealth of knowledge is not appreciated, or the consultation focuses on bureaucratic matters rather than the consulting bodies understanding what volunteers and community really want to have input into.

Chapter 5, Water

- The introduction to this chapter would benefit from the inclusion of statistics on water use of the River for Adelaide domestic vs. regional irrigation vs. regional industry etc.... Water consumption between the different regional industries would be useful to include as background information here as it would highlight where capacity building and incentives might need to be focused. It is also felt that the impact of irrigation water extraction on the River Murray in the SAMDB region is under-stated in this plan.
- It would also be useful to include information on the historical trends of water resource sharing and extraction and projections into the future.
- This chapter provides much superfluous data on water. It is understood that the water section is quite complex but it would be useful if this section is structured so that it is easier to read, it seems to jump around from topic to topic.
- Page 47, paragraph 1: The Lower Lakes should be discussed along with other freshwater systems rather than Murray Mouth and Coorong. The justification provided for this in the plan doesn't provide much logic. The ecological processes are more similar to the upstream freshwaters in the River and the Lower Lake's management interaction is as reliant on the upper reaches as the interaction between the Coorong and Murray Mouth.
- The plan also needs to address the issue of the need for the co-ordination of the research, planning and actions being undertaken in relation to the Coorong and Lower Lakes and who is/will undertake it.
- Page 49, 5.2.3 and table 5.3: Is the limited inflow into the River Murray from SA due to the extensive developments and extraction in the EMLR or have flows from SA always low? Some statistics on past flows from these catchments would be beneficial and Table 5.3 would benefit from more explanation – e.g. does this modelling reflect surface and ground water extractions or is the modelling just based on runoff and sub-catchment area.
- Page 54: Figures 5.2, 5.3 and 5.4 are barely legible and require a legend.
- Page 61: This chapter would benefit from a discussion on whether other water resource areas or wells are suggested or required for prescription.
- Page 67: The focus on reuse of wastewater and stormwater is strongly supported.

- Page 71 paragraph 4: the wording of 'healthy' should be 'heathy'
- Page 71, paragraph 4: The last sentence is incorrect. Fleurieu Peninsula Swamps are not the only habitat for the MLR Southern Emu Wren. They also occur in dry-heath habitats.
- Page 77-78: There is much information on water quality and quantity in this chapter, but limited information on the impacts. There is a small section on fish impacts, but this chapter fails to mention linkages between the state of the water resource and other biodiversity such as macroinvertebrates and macrophytes. If aquatic biodiversity isn't included in the biodiversity section then it needs to be expanded upon here and specific linkages drawn between the quality of the natural resources and the impact upon biodiversity.
- Page 79: The Plan does not address marine pests and threatened marine animals and fish, nor trends or management. The section on the marine environment merely seems to be an asset description.
- Page 83, paragraph 1: This chapter mentions the increases in salinity in the Lower Lakes over the past 18 months, but there needs to be information on the significant biodiversity impacts of this increase.
- Page 83, Lake Albert: There is mention of nitrogen and chlorophyll level increases in the system but no explanation of what this means in terms of biodiversity.
- Page 84, paragraph 1: There is mention of turbidity but the text only mentions social impacts of this, it could also discuss impacts on submerged aquatic vegetation and benthic organisms.
- Page 86, paragraph 4: Need to provide a reference or link to the 'red alert weeds'. It would be appropriate to include a list of these in the plan.
- Page 86, paragraph 7: This chapter generally needs to be specific about biodiversity impacts. There is a plethora of information about the resource status but little on what this means in practical terms. The threat of Sea Wheat Grass is mentioned but some specific information such as the impacts on bird nesting could be mentioned.
- Section 5.7 Threats: Given the level of over-extraction would it be appropriate for the strategic plan to include actions to investigate alternative industries and promote non-irrigated crops and pastures? Would it also be appropriate to highlight the issue of some plantation forestry in terms of its impact as a water affecting activity?
- Management initiatives: It would be good to highlight some of the issues surrounding these initiatives, such as the health of disconnected wetlands.

General Comments

- Absence of mention of the commercial fisheries operating in the region's marine waters (or the Lakes). There should be information provided as to the status of those fisheries. For example, whether they are fully-fished or over-fished, whether there are any arrangements to ensure fisheries are sustainable, what the impacts of fisheries are on regional environments and vice versa and so on.

- The Plan also does not address the impacts of recreational fishing.
- The Plan does not mention the state Marine Protected Area (MPA) program or the pilot Encounter MPA, partly in the SAMDB region. This omission means that information on how the Board might engage in and support the community to engage in the MPA establishment and management processes is absent.

Chapter 6 Biodiversity

- Page 114, Table 6.10: There is no mention of marine fish in this chapter. There are a number of EPBC listed Pipefish and Sharks in the SAMDB coastal waters which should be included.
- Page 121: It would be appropriate to include *Gambusia* as a major aquatic pest as the impacts are potentially greater than Redfin Perch.
- Page 121: This section should include other pests such as *Phytophthora* which are not mentioned in the land chapter under pests.
- Page 123, 6.6.11: It would be good to specifically mention 4WD impacts, especially in relation to coastal systems and the Coorong.
- Page 128: The prescribed burning section could be expanded to include biodiversity benefits and implications.
- It would be useful to include some specific information on how the Board hopes to support the rehabilitation of reserves in the region.

Chapter 7 Land

- Page 143, paragraph 2: As well as 'appropriately-placed' forest plantations there should be mention of appropriate species selection that will not become weedy or extract excess water to the detriment of surrounding water dependent ecosystems
- Page 159: It would be appropriate for the pest section to mention the need for strategic removal that does not impact on loss of native habitat or increased erosion risk through blanket removal without revegetation and rehabilitation.
- Page 160: It would be appropriate to include information on the need to analyse the weed risk status of any vegetation used for salinity control.

Chapter 8 Atmosphere

- Energy emissions contribute by quantity about 64% to total greenhouse gas emissions but in terms of potency as greenhouse gas methane is worse and methane emissions have been understated in this plan.
- Page 170 - 171: It is good that the plan emphasises the need to address threats other than climate change and that solving climate change will not ensure protection of our natural resources. It is also good to reinforce that management of natural resources will be the same but the urgency to act is higher.

- Page 175, paragraph 11: It states that it 'may be justified' for policy incentives to improve irrigation. It would be through this is essential and it is not clear how the SAMDB would expect to achieve the goals of this plan without consolidating irrigation and increasing irrigation efficiency.
- Page 178, Securing water supplies: It should be noted that none of these activities will 'guarantee' Adelaide's water supply (for example the very environmentally and economically costly desalinisation proposal is only likely to supply about one fifth of Adelaide's water requirements at current population predications) and are less secure than other environmentally sensitive suggestions for stormwater harvesting, ASR and wastewater reuse.
- Page 179, paragraph 3: This paragraph fails to consider the role of liming and bioremediation in reducing impact and exposure to acid sulphate soils. Also the term 'normal' is misleading as the lakes would have potentially undergone some natural wetting and drying cycles historically before intervention.
- It would be good to include a comment regarding emissions from burning off and bushfire.

Volume 3: Regulatory and Policy Framework

- Page 10 & 11: Figure numbers are not sequential e.g. figure 3 occurs before figure 2. Should figure 2 actually be called figure 4.
- Information could be included here as to whether prescription and Water Allocation Plans are planned or needed for other areas now or in the future.
- Chapter 2: There doesn't appear to be any mention the principles for dealing with noncompliant landholders as do regulatory matters for pests and land.
- Chapter 3, page 30: It would seem appropriate to list principles of pest removal, such as removal that does not cause erosion or does not reduce biodiversity habitat (e.g. need for strategic weed incorporating staged processes and revegetation control as opposed to blanket eradication).
- Chapter 3: It may be appropriate to include in this chapter information on whether the Board will petition the minister to declare other species, in particular environmental weeds that have significant impacts on SAMDB biodiversity.
- Page 51, 52: The SAMDB analysis of gaps in Council Development Plans is comprehensive. Mention of the need for councils to include impacts on neighbouring marine parks and cumulative impacts of developments is commended.
- Page 53: It would be good for the Board to spell out a specific action to help educate councils on the philosophy of addressing developments at a regional level (not solely within council boundaries) and to promote cumulative impacts of developments.

General Comments

- There are no links identified between the regional plan and the Living Coast Strategy and/or the Marine Planning Framework.

Volume 4: Business Plan 2009 - 2012

- It would be useful here or in the strategic plan to document the process adopted in determining the regional priorities.
- It would be good to clarify the actions and strategies for which 'no board investment' is being made (i.e. if other agencies are contributing towards this it needs to be mentioned)
- Page 19, Table 1: The distribution of funding across program areas is generally supported. It is understood there is a lot of overlap between program areas, however investment in biodiversity seems to be proportionally low and inadequate to achieve the targets set out. The budget overall also seems quite low considering the actions required to meet the Board's vision and targets. It appears the Board have tried to fit the budget around what they expect to receive rather than what it will actually cost to implement? If this is the case it would be more appropriate to show how much achieving sustainable natural resource management actually costs for this region and then show the expected shortfall and highlight the issues surrounding the available investment in NRM activities at state and federal level.
- It would also be appropriate to include any investment that the Board might make towards research as in the Strategic Plan it was stated the board will collaborate with research institutions and funding sources. It is presumed the Board will need to make some investment towards this as well, rather than solely rely on external funding.
- It would be good to further highlight the need to seek outside investments and what some of the grants the Board might target will be.
- It would be good to invest in priority pest plant and animal management in other ecosystems besides water dependent ones.
- Page 22, Table 2: It would be useful to provide a further breakdown of action costs.
- Page 22, P1.1: It is assumed that these actions address awareness raising of NRM in practice (e.g. what natural resources are, the threats and their management) as opposed to solely awareness raising of NRM the framework (i.e. who the Board is and what they do). Whilst public appreciation of who the NRM Board are and what they do is vital, if the investment in P1.1 is solely related to self promotion then it appears proportionally high especially when compared to the amount to maintain volunteer numbers (P1.3) and the amount to increase knowledge of cultural values (P2.1). It is also confusing as to the differences between actions for P1.1 and P1.2.
- Page 22, P1.3: The small amount set aside for P1.3 is viewed as inadequate in order to maintain volunteer numbers given the increasing threats of ageing volunteers and other financial pressures currently experienced by the volunteering community.
- Page 23, P3.4: An explanation of what natural disasters are (e.g. fire, earthquake, and drought) would assist the understanding of this action.

- Page 23, P 4: The amount designated to Monitoring and Evaluation (M&E) should be increased. There must be a robust M&E framework in place that encourages transparency in results, value for money and adaptive management.
- Page 30, Table 4: It is unclear whether B1 includes investment for on ground work incentive programs. B2 specifically mentions implementation of an on ground works program in relation to water-dependent ecosystems (which is assumed to be an market based instrument program such as landholder incentive payments), but B1 makes no mention of similar actions to improve native ecosystem extent and sustain ecosystem function. The Board is unlikely to protect and manage an additional 10,000 of priority remnant native ecosystems through capacity and knowledge building and general support alone. Likewise B3 specifically doesn't mention incentives, however market based instruments such as incentives are generally incorporated into existing recovery plans which are mentioned under B3.
- Page 41: The role of the NRM Groups could possibly be emphasised and further delineated as they will have a key role in delivery of the business plan and yet there is limited information provided.
- Page 42, Table 8: Some of the employee resources do not seem to align with the investment made in each program area, for example it is dubious you could hire 5.5 FTE positions for under \$200,000 for monitoring and evaluation. Is this accounted for by some people working across program areas? Land also seems to have a disproportionate number of staff given the number of actions, especially compared with the priority program area of 'water' which has fewer staff. Is this because the Board has to retain its old APCB staff? If so then perhaps there is a need to retrain these staff in other program areas so that staffing matches priorities.
- It would be beneficial to include an analysis of the proposed expenditure divided to show how much will be spent on admin vs. education vs. on ground works vs. landholder incentives vs. salaries etc...
- It would be beneficial if a rough analysis of the proposed expenditure could be shown geographically across the NRM group areas or the 'landscape units'.
- It would be useful to mention whether there will be any discretionary funding available. Many of the issues addressed may change over the course of the business plan due to the dynamic nature of the region and the regional climate. It is important to ensure flexibility in case priorities change within that time. Some flexibility would also allow innovative solutions from community to be funded.