

REPORT

Review of the Lake Eyre Basin Intergovernmental Agreement



Prepared for

**Commonwealth Department of
Environment and Water Resources**

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Canberra ACT 2601

14 June 2007

43283283

URS

REVIEW OF THE LAKE EYRE BASIN INTERGOVERNMENTAL
AGREEMENT

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Date: 14 Jun 2007
Reference:
Status: Final


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Executive Summary

The Lake Eyre Basin Inter-Governmental Agreement (LEBA) came into effect in June, 2001 between the Australian, Queensland and South Australian governments (and the Northern Territory Government in 2004) to 'provide for the development or adoption, and implementation of Policies and Strategies concerning water and related natural resources in the Lake Eyre Basin (LEB) to avoid or eliminate so far as reasonably practicable adverse cross-border impacts' to conserve or promote the LEB's important social, environmental, economic and cultural values.

This review satisfies the requirement for the LEBA to be reviewed after five years. The terms of reference were to assess the extent to which the objectives set out in clause 2.2 of the Agreement have been achieved, and other related matters.

The LEBA is highly valued by stakeholders as a vehicle to safeguard the integrity of the Lake Eyre Basin against the threat of inappropriate land management. The LEBA has made good progress reducing adverse cross-border impacts, and it has created a whole-of-LEB, integrated NRM (INRM) mindset amongst governments and key land managers, and created a cooperative mindset between them that is providing an environment for the sustainable INRM within the Basin. The Community Advisory Committee has provided an effective forum for stakeholder input to LEBA matters. However it is too early for there to be measurable improvements in the condition of the Basin's natural resources as the result of the LEBA's activities. The LEBA has triggered some key planning and research activities to provide the foundation for future actions, the main ones being: the hydrology study, the Basin rivers assessment, and the socio-economic study. There has been good progress with achieving all ten of the LEBA's Objectives, mostly exceeding the expectations of the stakeholders.

Notwithstanding this positive assessment of the LEBA and its impact, several key issues emerged that need to be addressed.

- 1) **Integrated, sustainable NRM.** The focus in the LEBA on 'water and related natural resources' does not align with the present day principles of INRM which underpin, e.g., Australia's regional NRM model. Over the five years of the Agreement, the emphasis has moved to integrated NRM.
Recommendation: *that the Agreement be modified to emphasise integrated, sustainable natural resources management as compared to the present water and related natural resources.*
- 2) **Avoidance of adverse, cross-border impacts.** This focus falls short of integrated whole-of-catchment management which also underpins present day best practice. This focus on adverse cross-border impacts is the reason that the NSW part of the LEB and much of the SA part are excluded from the LEBA – land management in those parts have no cross-border impacts.
Recommendation: *that the boundary of the LEBA area be expanded to include all of the hydrological LEB.*
- 3) **Encompassing the regional NRM Groups.** Since the LEBA came into effect, the national regional NRM delivery model has been established giving rise to three regional NRM Groups who are responsive for INRM in the Queensland, South Australian and Northern Territory parts of the LEB. Thus these Groups do not come within the Agreement and this disconnect runs the risk of (inadvertently) undermining the Agreement as each Group operations are restricted to the jurisdictional borders.
Recommendation: *That the regional NRM Groups be brought within the ambit of the Agreement by: comprising the CAC from representatives of the regional NRM Boards; building in formal two-way communications between the LEBMF (and LEB secretariat) and the regional NRM Boards; by establishing the position of one or more LEB Regional Facilitator(s) to facilitate and harmonise the integrated NRM work in the LEB, and by aligning the programs of the regional groups with the priorities of the LEB as strongly is feasible.*
The regional NRM Groups are themselves representative of the spectrum of stakeholders, so this enables the stakeholder-representative nature of the CAC to continue.
- 4) **Role and operation of the Ministerial Forum.** The Ministerial Forum is seen as an important reflection of the significance that should be accorded the LEB and the LEBA, and stakeholders want it retained. However, the requirement that it meet in the Basin, whilst desired by community

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stakeholders as an opportunity to meet with them Ministers, is logistically impractical, and disconnects the LEBMF from Australia's main NRM decision making process, the NRM Ministerial Council.

Recommendation: *That the LEBMF be retained; and that it be brought within the aegis of the NRMMC and not be required to meet in the Basin.*

- 5) **Role of the Scientific Assessment Panel.** The SAP has been effective by virtue of the high scientific credibility (and commitment) of its members and its direct access to the LEBMF. It has initiated important research and monitoring activities. More could have been achieved if it had better organisational support. Over the past five years the technical capacities of the jurisdictions' agencies (including the regional NRM Groups) have increased, this should be drawn upon for addressing LEBA issues.

Recommendation: *That SAP be continued as constituted; that it have a strategic advisory role as well as to monitor the effectiveness of the work undertaken to underpin strategic INRM decision making in the Basin, and that the SAP be provided with sufficient support to undertake its work.*

- 6) **Relationship with the Great Artesian Basin Coordinating Committee.** The LEB overlaps the Great Artesian Basin, and the bore capping and piping work being undertaken by the GABCC is improving the condition of the natural resources of the Basin. Community stakeholders are confused between the two groups.

Recommendation: *Where appropriate, opportunities be pursued to hold CAC meetings in conjunction with GABCC meetings.*

The methodology used for this Review, which was pre-developed by a previous consultancy, incorporated Goal Attainment Scaling to obtain stakeholders' judgements about the performance of the LEBA within an on-line questionnaire, along with stakeholder consultations and document review. A total of 61 stakeholders were consulted. The Australian, Queensland and South Australian governments made formal submissions.

This report also examines various alternative models for the management of natural resources that span a number of jurisdictions. This analysis also informed our recommendations.

Section 1

Introduction

1.1 About the Lake Eyre Basin

The Lake Eyre Basin covers about 1.2 million square kilometres, almost one-sixth of Australia, and is among the world's largest internally draining river systems. Lake Eyre itself is the fifth largest terminal lake in the world.

The Basin includes large parts of South Australia, the Northern Territory, Queensland and some of western New South Wales. About 57,000 people live and work in the Basin. The Basin supports a range of nationally important natural, social and economic values.

The Basin is divided into five major drainage catchments, each defined by the biophysical limits to the natural direction of surface water flow. The major rivers of the Basin are the Georgina, Diamantina and Cooper. They are characterised by high variability and unpredictability in their flow with high transmission losses downstream and very low gradients. The Lake Eyre Basin is considered one of the world's last unregulated river systems.

The vegetation of the Basin reflects the patterns of arid and semi-arid regions that rely on variable water flows. As a consequence the Basin is an area of high conservation significance that supports wetlands such as the Ramsar listed Coongie lakes, grasslands (Astrebla Downs National Park) and deserts (such as the Simpson Desert National Park).

The Basin is also home to many rare and endangered species of plants and animals such as the Greater Bilby, the Kowari and Waddi Waddi trees (*Acacia peuce*). Mound springs, wetland areas of natural water seepage from the Great Artesian Basin also support a number of rare and highly restricted endemic species.

Mining and petroleum industries make up the largest economic sector in the Basin, and include natural gas, oil, opals, gypsum and uranium. Tourism in the Basin is growing in importance, especially eco-tourism to remote outback areas and cultural tourism to both Indigenous and non-Indigenous places of interest.

The Basin has a long history of Aboriginal settlement and many areas which have cultural significance. Aboriginal lands in the Basin include:

- approximately 7,240 km² in South Australia;
- over 8,504 km² held by Aboriginal land trusts in the Northern Territory with further areas held under freehold title; and
- smaller Aboriginal settlements in Queensland and a number of areas subject to native title claims.

1.2 About the Lake Eyre Basin Agreement

The Lake Eyre Basin Intergovernmental Agreement (the Agreement) is a joint undertaking of the Australian, Queensland, South Australian and Northern Territory Governments, in close communication with the Basin community and with the assistance of world-class scientific and technical advice.

The **purpose** of the Agreement is to 'provide for the development or adoption, and implementation of Policies and Strategies concerning water and related natural resources in the Agreement Area to avoid or eliminate so far as reasonably practicable adverse cross-border impacts'.

The Guiding Principles apply to the 'consideration of all issues and the making of all decisions under this Agreement'. They make it clear that this agreement is about conserving and promoting the 'important social, environmental, economic and cultural values' of the Basin.

The Agreement was signed by Ministers of the Australian, Queensland and South Australian governments in October 2000, and has been enacted in the Australian, Queensland and South Australian Parliaments. The Northern Territory signed in 2004.

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Introduction

The Lake Eyre Basin Agreement currently applies to:

- the Cooper Creek system (including the Thomson and Barcoo Rivers);
- the Georgina and Diamantina River systems within Queensland and South Australia, ending at Lake Eyre;
- the Northern Territory portion of the Basin; and
- the SA portion of the Basin (including the western catchments as a recent addition) but excluding the southern portion which has only weak hydrological connection to the lakes.

The LEBA area does not include the small part of the LEB that lies in NSW nor much of the South Australian part of the LEB – these have only weak hydrological connection into the lakes system.

Figure 1-1 shows the LEB Agreement Area (shaded) within the boundary of the total hydrological LEB.

Figure 1-1 The Lake Eyre Basin Agreement Area



Section 1

Introduction

1.3 Genesis of Lake Eyre Basin Intergovernmental Agreement

This section is taken from Appendix D to the Australian Government's submission to this review.

- World Heritage listing of the Lake Eyre Basin area was first proposed in 1984 by the South Australian Conservation Council and others. In 1990, the General Assembly of the World Conservation Union (the IUCN) called for protection of the Lake Eyre Basin wetlands, and requested that they be assessed for their World Heritage value. In 1993, the then Australian Government announced its intention to proceed with World Heritage listing of the Lake Eyre region. This resulted in significant concerns being expressed by local pastoralists, landowners and mining industry representatives who opposed the proposal on the basis it would threaten the viability of local properties and commercial activities. The proposal was strongly supported by conservation groups and others.
- A number of studies were carried out in order to determine whether World Heritage listing could be justified. These included an assessment of the area's natural values by CSIRO, an assessment of non-indigenous cultural values, and an assessment by the Australian Institute of Aboriginal and Torres Strait Islander Studies of the area's indigenous cultural values. The CSIRO study in particular concluded that areas of the South Australian section of Lake Eyre Basin - particularly the Cooper and Warburton Creek drainage systems, Coongie Lakes, Goyder Lagoon and Lake Eyre itself - qualified for World Heritage listing on account of their natural heritage values.
- The Australian Government decided not to pursue a nomination for World Heritage listing at that time 'due to a lack of community and State government support', and expressed the view that 'increased community efforts will deliver the best protection for the area's conservation values'.
- In 1995, a proposal to divert significant volumes of water from the Cooper Creek for cotton production generated deep community concerns and an interesting alliance between conservationists and local pastoralists. Following a public meeting at Birdsville in 1995, a Lake Eyre Basin Steering Group was formed comprising pastoralists, conservationists, indigenous people, local government, the mining and petroleum industries and government agencies. This Group held numerous public meetings around the Basin and published issues and options papers, which culminated in a decision at the end of 1997 to establish an integrated catchment management framework in the Basin.
- The Lake Eyre Basin Steering Group was subsequently replaced by a two-tiered framework comprising two cross-border catchment committees, the Cooper Creek and Georgina-Diamantina Catchment Committees, and a Coordinating Group. The Coordinating Group included a majority of catchment group representatives, a number of skills-based members and observers from the Australian, Queensland, South Australian and Northern Territory Governments. The Coordinating Group and the two Catchment Committees were funded under the Natural Heritage Trust to develop a number of cross-border catchment management strategies for the Basin.
- At the same time, the Australian, Queensland and South Australian Governments continued to work in partnership with the Basin community towards the development of a Heads of Agreement for the future sustainable management of the Basin. Australian, Queensland and South Australian Governments signed the Lake Eyre Basin Heads of Agreement in May 1997. This Heads of Agreement, amongst other things, provided for the development of a formal inter-governmental Agreement.
- Following community consultation, the Australian, Queensland and South Australian Governments signed the Lake Eyre Basin Inter-governmental Agreement on 21 October 2000. The Agreement came into effect in June 2001, on the passage of ratifying legislation through the Queensland and South Australian Parliaments. While not legally required, the Australian Government also passed legislation approving the Agreement to 'confirm its commitment to the future sustainable management of the Lake Eyre Basin and the protection of dependent environmental and heritage values'.
- The Northern Territory Government signed the Agreement in 2004.

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1.4 About this Review

This Review satisfies the requirement (Objective (i) and Part X of the Agreement) that the Agreement be reviewed after its first five years of operation. The Review's purpose was to measure the extent to which the objectives of the Lake Eyre Basin (LEB) Intergovernmental Agreement have been achieved, and report on this and some related matters.

Terms of Reference

The Terms of Reference were:

- 1) Conduct a review of the implementation of the LEB Agreement which measures the extent to which the objectives set out in clause 2.2 of the Agreement have been achieved, by utilising the methodology agreed by the LEB Ministerial Forum (Attachment H), and augmenting the methodology if necessary to thoroughly address the review objectives.
- 2) Consult with relevant stakeholders, including but not limited to, stakeholders located in:
 - Queensland (Longreach and one other city or town)
 - South Australia (Adelaide or Pt Augusta)
 - Northern Territory (Darwin or Alice Springs) and
 - The Australian Capital Territory (Canberra),
 travelling to each of these locations at least once.
- 3) Analyse the relevance and application of national and state water and natural resource management delivery frameworks in relation to the implementation of the LEB Intergovernmental Agreement, including, but not limited to:
 - the Murray Darling Basin Commission,
 - the Natural Heritage Trust, and
 - the Great Artesian Basin Strategic Management Plan
- 4) Write a clear and concise report outlining the review findings and recommendations in relation to:
 - whether the Agreement has provided for the sustainable management of water and related natural resources in the LEB area
 - whether the LEB Agreement is still the most appropriate mechanism to deliver the objectives of the Agreement
 - the operational policy and governance frameworks for implementing the Agreement and related policies and strategies
 - the consultation processes and mechanisms for raising public awareness under the Agreement
 - the mechanisms for obtaining expert scientific research and advice to support informed decision making in relation to the Agreement
 - any other matters of relevance to the objectives of the LEB Agreement.

Review team

The Review was undertaken by a team from URS Australia: Dr Martin Andrew, Lili Pechey and Dr Geraldine Gentle. They were assisted by a Steering Group comprising the Agreement Secretariat (initially Krista Hancy [replaced by Derek White at the draft report stage], and Amanda Morvell [replaced by

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Debbie Worner at the draft report stage], and Vol Norris) and Ania Karzek (SA), Ian Gordon (Qld) and John Childs (NT).

Section 2

Approach

2.1 Approach and methodology

The terms of reference required that the performance of the Objectives of the Lake Eyre Basin Agreement be examined in close detail, along with related matters.

Development of the Methodology

The methodology for this Review was developed as a separate project, by the same Review team. The terms of reference were analysed and deconstructed into their elements, from which the Evaluation Framework was developed and finalised with feedback from the Steering Committee. From this we developed a questionnaire for stakeholders to complete, to obtain the required information. The questionnaire incorporated Goal Attainment Scaling (GAS). The GAS scales were formed by describing how a stakeholder would recognise if the Agreement has achieved what it was expected to by the time of the Review (score = 3), then describing extremes of under-achievement (i.e. a 'worst case'; score =1) and achieving much better than was expected (score = 5). These descriptions were developed by us for the purposes of this Review. Other enabling material (e.g., lists of stakeholder groups) was added to comprise the Evaluation Plan.

Conducting the Review

This Review implemented the Evaluation Plan. The timeframe was relatively short, commencing in late October 2006 and extending to April 2007, allowing for the Christmas holiday period. The review was publicised variously via the Agreement website, the CAC Newsletter, press releases, and broadcast emails.

The questionnaire, including the GAS, was piloted in December 2006, then finalised (Appendix A). It was then made available in interactive web form, as well as in MS Word and hard copy.

Consultation workshops were conducted in the period 29th January to 7th February in Adelaide, Alice Springs (2 workshops), Brisbane and Longreach (2 workshops). The scheduled consultation session in Canberra was cancelled at the initiative of the Steering Committee; a tele-workshop with the SAP was held in lieu. Five tele-workshops were scheduled for stakeholders to join who were unable to attend the in-person workshops. At each workshop we first described our approach to the Review and the questionnaire, and then facilitated a collective conversation about the performance of the Agreement, which we minuted. A total of 61 stakeholders participated in the workshops, and 21 of these submitted questionnaires (Appendix A). Additional targeted telephone consultation was undertaken to clarify matters.

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Figure 2-1 Participants at the Longreach workshop, January 2007.



For yes/no questions, respondents also had the options of 'don't know', 'not applicable' or of not responding at all. Unless otherwise stated, when presenting these result, 'respondents' include only those who gave 'yes' or 'no' answers. Direct quotations from stakeholders are reported as " ".

Evidence was also obtained from formal submissions from the Australian, Queensland and South Australian Governments and the CAC, from reviewing relevant documents (minutes, reports etc, listed in Appendix C) and related resource management Agreements.

The collective evidence was brainstormed, from which we developed the Preliminary Draft Report on 5th March 2007; this was before all the submissions and questionnaires had been received. This Report was presented to a joint meeting of the Community Advisory Committee, the Scientific Assessment Panel and the Government Officers, and workshopped with the Government Officers afterwards; these two meetings formed part of our consultation and informed our recommendations.

The Parties submissions were delayed, extending the review timeline. The Final Draft Report was prepared on 1st June 2007, and incorporated the evidence from the Government submissions and the feedback from the Steering Group. The Final Report was submitted on 12th June 2007 with feedback from the Steering Committee on the Final Draft.

This report is structured thus:

- Section 3 examines the extent to which each of the Agreement Objectives are being achieved, and other key issues raised by stakeholders. It ends by summarising the key issues for which this Review should recommend solutions.
- Section 4 analyses alternative NRM delivery frameworks, with a focus on how to address the key issues.
- Section 5 presents our findings against the five Terms of Reference.
- Section 6 presents our recommendations.

Section 3

Achievement of the Agreement Objectives

3.1 About the Purpose of the LEBA

As a preamble to exploring the progress with each of the Objective, it is sensible to address the Purpose of the Agreement by reporting advice that addresses issues that overarch the Objectives.

We received unanimous advice that the idea of the Agreement is good, and that the Agreement should be retained. Community stakeholders felt that even though there are currently no threats to the integrity of the Basin such as those for water diversion that triggered the LEBA in the first place, the Agreement needs to remain in force as on-going protection for the integrity of the Basin, especially in the face of rising demands for water in southern Australia.

A number of stakeholders, including the Queensland government submission, suggested that the focus on 'water and related natural resources' is unduly restrictive and falls short of 'integrated natural resources management' in that the non-water natural resources are secondary to water. In fact, the management under the Agreement has evolved towards integrated NRM (INRM), which is consistent with the practices under the regional NRM arrangements, and the tenor of the advice we received (from stakeholders and governments) is that INRM should be formalised.

We also received some advice that the focus on 'avoid or eliminate ... adverse cross-border impacts' was too restrictive. It falls short of integrated, whole-of-catchment NRM. It is for this reason that the NSW and much of the SA parts of the Basin are excluded from the Agreement – because their management does not have cross-border impacts.

3.2 Progress towards the achievement of each Objective

3.2.1 (a) To provide a means for the Parties to come together in good faith to achieve the purposes of the Agreement

The 'Parties' are the Governments of Australia, Queensland, South Australia and Northern Territory. For the purpose of this Objective the Parties include the Ministers and Officers of the Parties who act on their behalf. For the purposes of this Objective, 'Parties' was interpreted to include the bodies created under the Agreement – the CAC and the SAP.

Discussion

There are numerous examples to suggest that the Agreement is achieving this objective. On balance, stakeholders considered that the Agreement is meeting expectations (mean GAS score = 2.9); i.e. it '... has enabled the Parties to meet and work together and cooperate, in good faith, to make progress in managing the water and related natural resources in the LEBA area such that adverse cross-border impacts have been substantially reduced or avoided'.

The means by which the Parties come together include through scheduled meetings of the Ministerial Forum, CAC, SAP, the Biennial conferences and Aboriginal Forums, and other government meetings. Review of minutes and communiqués suggests that there have been approximately 60 such meetings over the past five years. As one stakeholder responded in the questionnaire, "Scheduled meetings have provided opportunities for cross fertilisation of information and ideas."

Moreover it appears that these opportunities to come together are being used to resolve matters in good faith and to achieve the purposes of the Agreement; for example, at the November 2003 meeting of the CAC where principles and processes for working as a group were discussed. The minutes recorded that "Meeting procedures agreed by the group: *informal, non-voting, consensual, with articulation of minority views where they exist (today's meeting has been a good model)*" (Italics added for emphasis).

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Achievement of the Agreement Objectives

Opportunities for improvement

The operation of the Ministerial Forum

One area where there is opportunity for this objective to be more fully achieved relates to the meetings of the Ministerial Forum. The Ministerial Forum meets once per year to consider and decide a number of matters, including: reports from the CAC and the SAC; appointments to the CAC; progress reports from the Parties; budgets; and progress on the implementation of Policies and Strategies, as outlined in the Ministerial Forum Decision Register documents.

It has been the practice for the Ministerial Forum to meet in the Basin. Whilst this is not a requirement of the LEBA itself, many stakeholders think it is. Rather, the Ministerial Forum Operating Protocol states that: 'The Ministerial Forum will make every attempt to meet at a location within the LEB at least once every two years'.

Initially, the forum was closed to the Basin's community members; however Minister Kemp changed this arrangement at a Ministerial Forum in the Alice Springs when he answered questions from the community in an open session. This demonstration of willingness to meet with the Basin community is considered important to stakeholders. "The Ministerial Forums were much stronger and seemed to have more impacts, in earlier years...". In recent years, the LEBMF has become less open to community members. In addition, fewer LEBMF meetings have occurred within the Basin.

A number of views were expressed about the operation of the Ministerial Forum:

- LEB community stakeholders want there to be a LEB Ministerial Forum, to signify the importance accorded to both the LEB and the LEBA.
- LEB community stakeholders want the Ministerial Forum to meet in the Basin both because of the importance this accords to the Basin, and for the opportunity to interact with the Ministers.
- It is difficult to get four Ministers to meet specially in the Basin given competing priorities and the time required to travel to remote locations. The most recent Ministerial Forum meeting occurred by correspondence.
- Having the Ministerial Forum separate from the NRM Ministerial Council (and the NRM Standing Committee) disconnects it from the major NRM decision governance process in Australia.
- Since the members of the LEBMF are also members of the NRMMC, they could meet much more efficiently in association with NRMMC meetings (as happened for the GAB Strategic Management Plan matters).
- The current arrangements are resource intensive.

Collectively these views are incompatible. This dilemma is explored further in section 5.3.

Assessment: This objective is being achieved through the official meetings of the Parties and the various working groups established under the Agreement; however there is scope for improving the effectiveness with which parties come together.

3.2.2 (b) To define a process and context for raising and addressing water and related natural resource management issues in the Agreement Area that have cross-border impacts, particularly those related to water quantity and quality, and flow regimes

This objective refers to Agreement 'process and context'. In this review, 'process' refers to the mechanisms that make the Agreement work. 'Context' includes the geographical context, the institutional context (i.e. the mix of other institutions that co-exist with the Agreement – national, State, regional,

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Achievement of the Agreement Objectives

private and community), and the policy context (i.e. the mix of other policies within which the Agreement operates, both State and national).

Discussion

There are numerous examples to suggest that the Agreement is achieving this objective. The mean GAS score for the question 'To what extent has an effective process(es) and an effective context for raising and addressing water and related natural resource management issues been defined?' was 2.9, suggesting that most respondents find that the Agreement is meeting expectations. Table 3-1 outlines key provisions under the LEBA, including frequency of meetings.

Table 3-1 LEBA Agreement component requirements

Agreement component	Requirements
Ministerial Forum (s5.2, 5.4)	<ul style="list-style-type: none"> To consist of one Minister from each State and one Minister of the Commonwealth. To meet at least once in each year but otherwise at such times as it see fit and will determine its own procedure.
CAC (s5.9, 5.10, 5.12 9(b))	<ul style="list-style-type: none"> MF may adopt one or more independently formed groups, to provide community advice; or appoint members to a committee. No requirements for meeting May be replaced with an alternative source of community advice that comprehensively includes the main kinds of stakeholders.
SAP (s7.1, 7.2)	<ul style="list-style-type: none"> MF to seek scientific and technical advice as it thinks appropriate; or it may establish a panel of scientists for the purpose of providing advice.
Conference (s6.2)	<ul style="list-style-type: none"> To be a conference at least on a biennial basis

The 'process(es)' comprise the official meetings of the Ministerial Forum, CAC, SAP; the Biennial Conferences and Aboriginal Forums; and other government meetings. When asked about the clarity of the process, as defined by the Agreement and implemented by the Parties, one respondent commented that, "there are clearly defined processes for the forum and community conference".

The 'context' in which these processes occur also appears to be clear, and is illustrated by one respondent commenting "the spatial scale is clear". Another commented "the focus has clearly been on cross jurisdictional issues".

LEBA boundary

'Context' is also defined by the physical boundaries in which the Agreement operates, which are the boundaries of the LEB catchment, less any areas not included. The boundary of the Agreement is changing, due to administrative decisions (recent SA changes) and new hydrological knowledge (proposed changes to the NT).

A number of workshop participants mentioned the absence of NSW as an area of weakness in the current geographical context of the Agreement. Two respondents to the questionnaire also raised this matter in relation to the effectiveness of the Agreement. One commented, "In terms of governments, yes, it's effective but NSW is a significant omission". Another commented, "To be a totally effective approach, the whole of the LEB should be within the agreement (eg. NSW and the remainder of SA)".

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When discussed at the 27th March meeting with the Steering Group, it was commented that although surface water does not flow from the NSW portion of the Basin to other parts of the Basin, there is still the potential for cross border problems to arise through pest management strategies and policies adopted by NSW.

Within South Australia, the boundary of the Agreement area currently does not cover all of the area of the Basin that falls within SA borders – the very southern-most part of the Basin is excluded, including much of Lake Eyre. It was suggested that the reason for its exclusion from the Agreement area was that management of this resource is not considered to result in cross-border impacts; for example, an algal bloom in the lake will not affect water quality in Queensland.

These two examples suggest that the current context of the Agreement may need to be re-examined. If the scope of the Agreement is to truly reflect the integrated management of water and related natural resources, and not just the avoidance of cross-border water issues, it would seem important for the entire Basin be included in the Agreement area. If the focus is to remain on avoiding adverse cross-border issues, then the current boundary is appropriate.

A number of community stakeholders shared the view that there has been a trend towards integrated, whole-of-basin, sustainable management, and that should be formalised in the wording of the Agreement. If it is accepted that integrated whole-of-basin management is important, then it follows that the LEBA boundary should ideally include the entire Basin. This would allow for truly whole-of-basin management.

Regional NRM Groups

The 'institutional context' in which the Agreement was developed has changed with the regional NRM delivery model that has been rolled out nationally after the LEBA commenced. The key features are:

- Regional NRM Groups have a key role in integrated NRM in their regions.
- They are established under bilateral Agreements between each jurisdiction and the Australian Government.
- They are funded via the National Heritage Trust.
- They exist within jurisdictional boundaries. This means that the area of the LEB is managed by three regional groups: Desert Channels Queensland; NT NRM Board and SA Arid Lands Board.
- Each of these groups has been established on a slightly different basis. In both SA and NT, the regional NRM groups have statutory authority, whereas in Qld, Desert Channels Queensland is incorporated but it does not have statutory authority.
- They exist outside of the LEBA.

The network of NRM facilitators is also jurisdictionally based. There are four National NRM Facilitators per jurisdiction, and one or more Regional NRM Facilitators in each NRM Region. There are none for the Basin (apart from the CAC Facilitator who acts as a kind of NRM Facilitator for the Basin among many roles).

The problem of the formal disconnection between the regional NRM groups and the LEBA was a common theme of stakeholder feedback, with the concern being expressed that the regional NRM groups were (inadvertently) frustrating the work of the LEBA Agreement by making decisions on their basis of their individual boundaries (as required by their jurisdictional basis) and not with a Basin-wide mind-set.

One advice was that the Agreement's processes have to "work hard" to maintain dialogue with the regional bodies. Another view expressed by several stakeholders was that where there is good communication, it results from good personal relations, not because of some constitutional requirement that operates independently of individual office-bearers. It was claimed that it is for this reason, e.g., that the SAAL Board has sent copies of its draft Regional Investment Strategy to colleagues in Qld and NT.

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Doubtless the disconnection has been exacerbated by the effort required by the regional groups to become established and fully operational. The view of the community stakeholders is that the regional groups are not yet fully mature, and nor are their relationships with the Agreement. The view from the community is that collectively they are not yet able to replace the role of the Agreement (if they ever will be, given their jurisdictional set-up).

Indeed, several stakeholders suggested that there should be a single LEB integrated NRM Board covering the LEB as a whole. This would be a new model of a regional NRM Group that might be possible under the new (but not yet at the time announced) NHT3 arrangements. Another more achievable suggestion was to have one or more LEB Regional NRM Facilitators to complement the State and Regional NRM Facilitators what operate within the jurisdictions.

Opportunities for improvement

LEBA boundary

Review the boundary to make it consistent with a whole-of-Basin management approach.

Regional NRM Groups

The regional Groups need to be brought within the Agreement, as they have a primary role in delivery integrated NRM in the LEBA area. If the LEBA had post-dated the formation of the regional NRM groups, then it would (virtually certainly) have included them.

In principle, there are a number of ways in which regional NRM groups could be included more closely within the framework of the Agreement. These are fully explored in section 4.2.6.

Assessment: The Agreement is achieving this objective; however there is scope for improvement.

3.2.3 (c) To establish institutional arrangements for the development or adoption of Policies and Strategies and for the adoption of any relevant management plans established by a State

Discussion

The two elements of this objective (Policies and Strategies, and management plans) are discussed in the following sub-sections.

1. Policies and Strategies

The Agreement appears to be successfully achieving this objective in the following ways:

Development of policies and strategies

In 2002, the LEBMF agreed to five policies and later, in 2004, added an additional policy. These were:

- 1) River flows
- 2) Water quality
- 3) Water and related natural resources
- 4) Existing entitlements and water resource development
- 5) Research and monitoring
- 6) Whole-of-basin approach.

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At the same time the Ministerial Forum endorsed 29 draft strategies. These were subsequently put to public consultation. In 2005, the Ministerial Forum approved 12 of these strategies as being the highest priority for short-term implementation. These strategies were grouped into six overarching categories:

- 1) Invasive Species
- 2) Water flow and quality
- 3) Natural resource management planning
- 4) Infrastructure
- 5) Data
- 6) Communication

On the basis of this information, it would appear that the strategy development has taken a considerable length of time, with the remaining 17 Strategies still in draft form. From this we conclude that the development stage has been weak.

Appendix D provides information from the 'Lake Eyre Basin Agreement Strategy Implementation' report (July 2006). This report indicates that implementation working groups have been defined, resources have been allocated, and strategy actions have been completed.

Implementation

Despite having put in place arrangements to develop strategies and policies and despite having made progress towards these strategies, there is a perception from stakeholders that these arrangements are not being implemented as anticipated.

Comments that illustrate the tenor of the feedback we received are: "The current institutional arrangements rely on good-will from each jurisdiction for developing integrated or cooperative policies and strategies", and "still a problem in that most management plans are linked (i.e. constrained) to the jurisdictional level, not the catchment or LEB [level]."

The mean GAS score for the questions, 'To what extent are the institutional arrangements an effective means of developing or adopting policies and strategies? To what extent do the institutional arrangements help or hinder the adoption of any relevant management plans established by the Parties?' was 2.5. This suggests that most respondents find that although the institutional arrangements exist to develop policies and strategies, adoption has not been as comprehensive or effective as expected. In addition, a relatively large number of people (almost 40% of the respondents) responded 'not applicable' to this question, meaning that they considered someone with their experience could not be expected to assess this Objective.

2. Adoption of management plans developed by a Party

Under the Constitution, it is the States and NT who undertake management of rivers. This has developed into integrated natural resource management (INRM). Hence the States and NT develop action management plans for the areas of the LEB under their jurisdictions, within the constraint of the Agreement that there be no adverse cross-border impacts on the water and related natural resources. Examples of such plans include:

- Cooper Creek Water Resource Plan, and Georgina – Diamantina Water Resource Plan (Qld)
- North Wells Water Allocation Plan, and SAAL Catchment Management Plan

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The Ministerial Forum Decision Register records the decisions made at the meetings of the Ministerial Forum. At Meeting 4, individual jurisdiction reports were tabled for the Ministerial Forum's consideration. These reports included progress on the adoption of a number of surface and groundwater management plans as well as native vegetation management legislation. The Ministerial Forum noted all of these plans.

Appendix D provides information about the progress towards the implementation of the LEB Agreement policies and strategies at a jurisdictional level. This is based on the 'Activities in the Lake Eyre Basin A quick overview (audit)', April 2006.

Opportunities for improvement

The foregoing considerations raise the question of whether the Agreement should extend to the development of management plans. This would be a major departure from the current arrangements where NRM is the province of the States and NT, and we do not recommend changing this.

These matters are explored further in section 5.3.

Assessment: This objective is largely being achieved; however there are some changes that could be made to improve the effectiveness by which policies and strategies are adopted.

3.2.4 (d) To provide for each of the Parties, so far as they are able within their respective jurisdictions, to progress the implementation of Policies developed or adopted under this Agreement and to make management decisions and allocate resources accordingly

Discussion

To be effective, policies have to be implemented. The Policies and Strategies are presented in Appendix D. With a mean GAS of 2.6, stakeholders considered that the Parties have 'only partly implemented' or 'made good progress at implementing' the Agreement's Policies and Strategies.

Some community stakeholders expressed concern that the resource requirements for the LEB were not necessarily accorded the same priority as for other areas within the purview of State and Territory departments of environment and/or regional NRM groups. This is a consequence of the jurisdictional-based management of the areas within the Basin that was discussed in section 3.2.2.

However the Parties have provided funding to implement Policies and Strategies within the Agreement's own structures. As a result, important studies have been funded, such as the Rivers Assessment Study. The SAP advised that funding generally flowed once they had made a good case for it.

On balance, stakeholders strongly considered that the Agreement has helped the implementation of related policies and strategies [by the Parties], due to increased awareness and understanding about the need to treat the LEB as an integrated catchment (11 of 12 respondents; this was supported by the workshop discussions).

There are other programs in place that also implement NRM policies and programs that are aligned with the objectives of the LEBA. Some of these have come into play since the LEBA was established: e.g. the regional NRM Boards and their regional management plans, programs under the NHT, NAP, National Landcare Program and National Water Initiative, jurisdictional agency activities, and programs of community groups.

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Opportunities for improvement

The main opportunity is to more closely align the work of the regional NRM groups with the objectives of the LEBA. This is discussed in section 4.2.6.

Assessment: Overall this objective is nearly being achieved to the expected level.

3.2.5 (e) To provide a mechanism to review Policies and Strategies

This objective refers to review of Policies and Strategies adopted under the Agreement.

Discussion

The draft LEB Agreement Strategy Implementation report (July, 2006) reports, “a monitoring and review program has been developed to ensure that Strategy Implementation Actions remain relevant and progress toward strategy implementation has been reviewed annually and reported to each Ministerial Forum.” This annual review has occurred at least once and is recorded in the ‘Lake Eyre Basin Agreement Strategy Implementation’ report (July 2006).

Stakeholders found it difficult to provide advice about this; two-thirds or more of those who filled in questionnaires either did not know, or did not respond to the questions about whether a mechanism exists and whether it is effective; the rest considered progress to be slightly less than expected (mean GAS = 2.4 – the lowest mean score of all Objectives). This seemed to be due to the combination of:

- Uncertainty about the nature of the Policies and Strategies;
- A feeling that review mechanisms exist, but are not being utilised – “any number of mechanisms exist, but they are not being pursued with any real vigour”;
- A perceived absence of monitoring activities to measure the effectiveness of the Policies and Strategies; and
- Confusion with the current 5-year review of the Agreement itself.

Opportunities for improvement

The evidence from the Strategy Implementation report is that policies and strategies are being reviewed and this demonstrates good adaptive management; however community stakeholders are not necessarily aware that this is happening.

Considerable effort was spent developing the policies and strategies, including contributions from community stakeholders. Given this contribution, a commitment to keeping the community informed of the review process would seem important and would go some way towards ensuring the community’s continued engagement.

Assessment: The Agreement is meeting this objective to an extent; however the Policies and Strategies that have been formally adopted have not been in place long enough to warrant much review.

It is desirable that the community be kept better informed about the review of policies and strategies as this demonstrates good adaptive management on the part of the Ministerial Forum.

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3.2.6 (f) To provide for the Parties to jointly promote and support the management of water and related natural resources through a cooperative approach between community, industry and other stakeholders, and all levels of government in the sustainable management of the Agreement Area

This objective refers to 'related natural resources'. In this review, it is assumed that this refers to those natural resources whose use or management affects, might affect or is possibly affected by the quantity or quality of water systems (i.e. rivers, lakes and aquifers) in the LEB. The emphasis of this Objective is on having an inclusive cooperative approach to managing the water and related natural resources.

Discussion

The Agreement has made good progress with undertaking INRM on a cooperative basis. The Government submissions were unanimous that there is now a cooperative mindset between their Ministers and Officers which is an improvement from the situation before the Agreement. Other stakeholders agreed with this.

The clear advice from our enquiries is that consultation with stakeholders is now more inclusive, and stakeholders are better informed, than previously. The Agreement provides a range of mechanisms for involving stakeholders by which water and related natural resource management is promoted and supported, for example through CAC meetings, Indigenous forums, biennial conferences, research (see section 3.2.8), the newsletter and the website. Moreover such efforts appear to have been effective: "people are much more aware of issues outside their immediate area and there is much more focus on the value of floods and the landscape importance of the wetting and drying cycle".

The emphasis appears to have been on communication-type activities. This falls short of true collaboration and partnership, which is called for by this Objective. However, major resource users such as SANTOS and S Kidman & Co have worked cooperatively with State Governments to overcome knowledge gaps and to monitor impacts of resource use. Memoranda of Understanding have been signed between regional NRM groups and catchment committees. Both of these examples of stakeholders coming together illustrate that an effective mechanism exists for resolving potential sources of conflict.

Different respondents considered different groups to be less well engaged, for example Indigenous people, mining industry, agricultural sector, local government, and regional NRM Groups – whilst this diversity probably reflects individual experience, it indicates room for improvement. It also underscores a key challenge; namely that it is easy to communicate with some, perhaps most, of the key stakeholder groups, but to get all of them engaged is a major challenge.

Thirteen of 17 respondents agreed that NRM is being achieved through a cooperative approach, but fewer, only 7 of 13 respondents, considered that NRM was occurring on an integrated, Basin-wide basis. This reflects the dominant role the jurisdictions have in delivering NRM, including the jurisdictional focus of the regional NRM Groups. The mean GAS for this Objective was 2.9, i.e. 'the Parties have adopted an approach to managing the Agreement area's water and related natural resources which aims to cooperate with community, industry and other stakeholders, and all levels of government, but achieving an integrated Lake Eyre Basin-wide approach to management has been hampered by lack of cooperation from some other groups'.

The Agreement operates in an environment where there are other programs that promote INRM. These include the Great Artesian Basin cap and pipe program, the NHT, and regional NRM plans (albeit without a cross-border focus). However, only the LEB Agreement has pursued integrated NRM at a whole-of-Basin level. Thus, within the existing institutional context, it would appear that the LEB Agreement is unique in its INRM objectives within the Basin.

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Incorporating the regional NRM Groups into the LEB, and the composition of the CAC

Consistent with the cooperative intent of the LEBA, the Ministerial Forum is required to ensure that it has satisfactory access to community advice. To do so it may either:

- adopt one or more independently formed groups, committees or bodies to provide community advice representation and feedback, or
- appoint the members of a committee to perform that function.

The Ministerial Forum chose the latter. The CAC is the device established by the Ministerial Forum to provide community advice, where community is the broad spectrum of non-government stakeholders.

All Government submissions pointed out that since the LEBA came into effect, the regional NRM Groups have come into existence as bodies responsible for integrated NRM in the regions, and the current LEBA does not recognise them. The Government submissions stressed that the Boards of these bodies are all, with the possible exception of NT, representatively composed. They also observed that while there is no formal connection between the regional NRM Groups and the LEBA institutions, in fact there is good overlap between them: DCQ and SAAL have members in common, and all the NRM Boards have some overlap with the membership of the CAC.

The Ministerial Forum is free to change the community advisory arrangements at any time, and all three Government submissions suggested replacing the CAC with a new body drawn from the regional NRM Boards (members or nominees) as an effective and efficient way of bringing the NRM Boards within the ambit of the LEBA. The Australian Government submission suggested the CAC comprise: LEB NRM Facilitator, representatives from NRM Regional Bodies, Community/sectoral representatives, Signatory Jurisdictions and the Chair of the Scientific Advisory Panel.

Opportunities for improvement

The challenge for the next five years is to build on the strong foundation of cooperation established so far to develop truly collaborative, stakeholder-inclusive management of water and related natural resources in an integrated manner. Current impediments, such as the jurisdictional focus of INRM delivery institutions and the overlap between Agreement operations and the operation of the GAB constrain or complicate the Agreement's achievement of this objective.

The CAC recommendation regarding this was: "that improved coordination and consistency of approach to aquatic and terrestrial weed and feral animal management activities within the Agreement Area be pursued urgently under the Agreement."

The South Australian submission recommended that "annual forums with Aboriginal and non-Aboriginal people be instituted to improve community engagement (including visitors to the Basin) within LEB."

Reforming the CAC to incorporate the regional NRM Boards offers the potential to address a number of challenges:

- The NRM groups' disconnect with the LEBA
- Increased efficiency by reduced duplication of effort by the individuals involved.

Assessment: The Agreement appears to be achieving this objective through communication, education, research outputs and other areas of influence; however there is scope for improvements regarding the inclusion of regional NRM groups.

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3.2.7 (g) To encourage, promote and support water and related resource management practices which are compatible with the spirit and intent of the Agreement

As explained in section. 3.2.6, 'related natural resources' refers to those natural resources whose use or management affects, might affect or is possibly affected by the quantity or quality of water systems (i.e. rivers, lakes and aquifers) in the LEB.

Discussion

Work towards this objective has been a major focus of the implementation of the Agreement. Ways in which this has occurred are:

- The communications activities referred to in section 3.2.6
- Commissioning of studies, such as the Rivers Assessment, Social and Economic Review, the LEB Hydrology Atlas and the Best Practice Sustainable Water Management in the Rangelands report
- Consultation between Queensland and South Australia during the review of the Georgina-Diamantina Water Resource Plan, which occurred as a direct consequence of the Agreement
- The Arid Rivers Natural and Cultural Heritage Program
- Convening workshops on the management of feral animal and weed issues across the Basin
- Developing common protocols for monitoring natural resources.

The clear advice we received is that collectively these activities have raised the awareness of the need to manage the Basin in an integrated, whole-of-Basin manner and created a whole-of-basin mindset amongst many NRM decision makers consistent with the spirit and intent of the Agreement.

Thus, in the questionnaire feedback, 17 of the 18 respondents considered that the desirable water and related natural resource management practices are being effectively encouraged and promoted by the way the Agreement has been implemented, and this was supported by the mean GAS score of 3.1.

A number of respondents identified water management practices that have been promoted and supported under the Agreement. One respondent commented that many good land management practices were already being promoted before the Agreement came into existence, but noted that, "Work under the Agreement has given more support, or a base, to a number of practices. For example, through fencing off water holes, pumping water away from waterholes, demonstrations of recent innovations in water technology etc."

Opportunities for improvement

The Agreement is an enabling mechanism rather than an implementation mechanism, as we explore further in section 5.4. It would appear that there is potential to improve the perception of promotion and support by pursuing closer or more formal relationships with regional NRM groups, who are prominent 'delivery agents' in the Agreement Area. This is consistent with Recommendation 7 from the CAC submission, which endorses better assistance and facilitation of interactions both with and between the regional NRM groups in the Basin. This is further endorsed by all Parties to the Agreement.

Assessment: As with Objective (f), the Agreement appears to be achieving this objective through communication, education, research outputs and other areas of influence; however closer engagement with implementation agents such as regional NRM groups would enhance the achievement of this objective.

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3.2.8 (h) To encourage and promote research and monitoring to improve understanding and support informed decision making in the Agreement Area

*Discussion***Research**

The Ministerial Forum may seek scientific and technical advice relevant to this Agreement from such persons or bodies as it thinks appropriate. It chose to set up the Scientific Assessment Panel to advise it on planning research and monitoring needs. The SAP is composed of eminent scientists who bring credibility and influence, especially since they have direct access to the LEBMF. Stimulation of whole-of-Basin research has clearly been a success of the Agreement. Of the 20 respondents, 19 considered that research and monitoring is being encouraged, promoted and implemented by the Agreement and the Parties. "This is undoubtedly one of the successes of the Agreement. The SAP has a "high level of drive and commitment". Appendix E presents a list of the major products arising from this research and monitoring.

Clause 10.4 of the Agreement requires the Ministerial Forum "to cause a review of the condition of all watercourses and catchments within the Lake Eyre Basin Agreement Area to be undertaken without unnecessary delay after the effective date of this Agreement". This is being achieved through the State of the Rivers Assessment that is currently being undertaken under the oversight of the SAP.

Thirteen of 16 respondents considered that there has been increased awareness of the findings from these research activities, and 11 of 12 considered that decision making under the Agreement has drawn upon this research information. These views were supported by the workshop discussions.

The Australian Government suggested that "consolidation of the LEB research and publications completed could be undertaken, with particular emphasis on how this information can contribute to on-ground management outcomes in the Basin, and how it could be used by government and community stakeholders to better inform NRM and water policies, programs and projects".

A few stakeholders raised concern that the research and monitoring agenda is being driven by the passions of the researchers, rather than from an objective, top-down priority-driven planning.

The mechanisms implemented for obtaining expert scientific research and advice revolve around the SAP in conjunction with the Parties. These mechanisms have been 'reasonably effective' (GAS = 3.0). Certainly they are more effective than arrangements in place before the Agreement.

However there was a strong view, confirmed by the SAP, that their effectiveness was severely constrained by not having an Executive Officer to facilitate their work. Being eminent scientists, they have many calls on their time, and they personally do not have the time to implement their ideas, or do the necessary leg work. Lack of support was given as a key reason for relatively slow implementation of some initiatives – "the State of the Rivers Assessment has taken longer than the return of The Messiah to get moving". Hence the SAP has "lost momentum" in recent times; the Chair of the CAC advised that there are key issues that the CAC has placed before the SAP upon which the SAP has been unable to act. The SAP itself considered that it has been less effective than it could have been in communicating research needs into "clear, do-able" investments for the LEBMF to consider (and likely approve) – perhaps this too reflects the lack of an Executive Officer.

Comments that we received in our various consultations included:

- Queries regarding the necessity of a dedicated SAP, especially now there is high capacity to provide scientific advice within the jurisdictions' agencies and the regional NRM Groups
- The SAP could have a more strategic role - the SAP has been too "hands-on"; the actual work could be done by the jurisdictions' agencies and the regional NRM Groups, and the private sector, as suggested by the Commonwealth government submission.

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- Along with the strategic focus of the SAP, the SAP could provide independent assessment of the effectiveness of the research and monitoring work undertaken, as suggested by the Queensland government submission.

Monitoring

The foregoing commentary reflects mainly the research being undertaken under the Agreement. Monitoring activities need to follow. Monitoring will be conducted by the Parties themselves, all of whom have existing monitoring programs for natural resources. There seems to be a willingness to ensure consistency in monitoring across the Basin, and work has been undertaken to develop common monitoring protocols – the State of the Rivers Assessment being the most high profile.

To be effective, monitoring needs to be sustained into the future, yet the resourcing requirements to undertake monitoring are substantial – the LEB is 1/6th of Australia's land area. Resourcing is a particular challenge for the NT, which has a relatively small number of staff. Concern was raised that the required monitoring effort cannot be guaranteed because monitoring activity is dependent on the individual Parties' agencies.

Opportunities for improvement

Consistent with the idea that the SAP could take a more strategic role and that it could make better use of capacity within the jurisdictions and regional NRM groups, we suggest that the SAP could review scientific work undertaken by the Parties where this work affects that management of the LEB – a kind of 'science quality' reviewer to help prevent poor decisions being made. For example, concern was raised about the soundness of hydrological modelling undertaken to inform decisions on water allocation planning, but its opaqueness meant that it was not possible to properly assess whether these concerns were justified.

These issues are explored further in section 5.3

Assessment. This Agreement is being achieved to the level expected. The SAP's focus should be strategic and its operation should complement the technical capacities of the jurisdictions' agencies.

3.2.9 (i) To provide for the review and, if necessary, revision of the Agreement from time to time

Discussion

The LEB Secretariat and Steering Group have taken this Review most seriously. They have provided willing assistance to the Reviewers through feedback on the evaluation framework and the questionnaire, the provision of documentation to review, the organisation and promotion of the evaluation workshops, and feedback on draft versions of this Report to check for errors of fact or omission.

Although stakeholders were not formally asked to assess this Objective in the questionnaire, a number of observations about the current review were expressed during the workshops.

- 1) The first concern was the inability of the Reviewers to consult in-person throughout the Basin. The reviewers visited only Longreach and Alice Springs; nevertheless a few LEB residents were able to attend the consultation workshops in Brisbane and Adelaide. In the eyes of some stakeholders this continued an undesirable trend of holding important meetings outside the Basin – for example the LEBMF, and the recent Biennial Conference. This probably disenfranchised Indigenous people to the greatest extent, for whom telephone consultation workshops and filling out questionnaires are less appropriate.
- 2) Another concern was inherent in the nature of this Review – as a review of an Intergovernmental Agreement, its focus was necessarily on matters that are somewhat esoteric and not on the state of the Basin's resources, as such. Many stakeholders found it alienating that they were not sufficiently familiar with the operation of the Agreement to be able to provide much input to the Review. Inevitably

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there was some discussion in the workshops on matters that were not directly the province of this review, such as internal jurisdictional matters, and the operation of the GAB cap and pipe program.

- 3) A third concern stems from the second – the questionnaire was long, detailed, and with only subtle differences between some questions. We agree; with a brief to examine the achievement of each Objective, and other matters, there seemed to be no alternative. The poor response to the questionnaire (21 people), and the high percentage of 'don't know', 'not applicable' or 'no response' answers, reflect this point and also point 2 above.

Assessment: The Agreement is achieving this objective through its legislated five-yearly review – the current review, but there is concern amongst some stakeholders that it could have been conducted more inclusively.

Opportunities for improvement

To overcome the first concern would require a significantly greater investment in the next Review. The benefit of doing this will need to be decided at the time. In the present Review, most of those who have been closest to the operation of the Agreement (and hence who could respond to the issues in a most informed way) were able to meet with us effectively, in person or by telephone.

3.2.10 (j) To raise general public awareness of the special biodiversity and heritage values of the Agreement Area

In this review, "general public" refers to the people who live and work within the Basin, including those who work outside the Basin on Basin-related matters.

Discussion

Activities and awareness

Early in 2004 the LEB Knowledge Management Strategy was discussed. It was agreed that "the SAP and CAC has access to the majority of knowledge that exists in the Basin and a process is required to capture this knowledge and disseminate it to the Basin community. It was agreed that joint annual SAP/CAC meetings and the biennial conference are important for progressing knowledge management and communications issues and the CAC can be the SAP's interface with the rest of the Basin community on the ground" (Minutes, SAP meeting 22/04/04).

Awareness of the special biodiversity and heritage values of the Agreement Area has been created through a number of activities, including:

- LEB meetings, workshops, conferences or community forums
- Briefings on LEB issues at other meetings or workshops
- Copies of the Newsletter - 'News from the LEBACAC'
- Outcome summaries of LEBACAC meetings
- Community updates, brochures or information papers on LEB projects and issues
- Updates on LEB issues in other newsletters
- Newspaper items or media releases about LEB issues
- News items about LEB issues on the radio
- The Lake Eyre Basin Agreement web site (www.lebmf.gov.au)

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- Documents that are downloadable from the Lake Eyre Basin Agreement web site (www.lebmf.gov.au)
- Contact from the CAC Facilitator or the LEB Secretariat about future meetings
- Contact about LEB issues by Members or others involved in the LEB Agreement.

Fifteen of the 17 respondents agreed that this was a 'reasonable effort' and 15 of 18 respondents considered they have become personally more aware of the biodiversity and heritage values as the result; the relevant mean GAS score (3.0) supports this.

The LEB website provides the opportunity to subscribe to the LEB mailing list. In addition, the website provides information regarding biodiversity, drainage, environmental and heritage values, indigenous interests, pastoralism, mining and petroleum and tourism activities within the Agreement Area. In the period between 2004 and 2006 the average number of times the website has been accessed has increased from 46 to 268. (Much of this increase is attributed to information about the 2006 biennial forum being accessible from the website).

These activities provide a strong sense that stakeholders have gained an increased awareness of the biodiversity and heritage values within the Basin. On the whole, respondents agreed that a range of consultation processes and mechanisms employed to raise awareness of the special biodiversity and heritage values have been put in place, and that they have been reasonably effective (mean GAS = 3.0).

As one respondent commented, "The Agreement (enabling bodies) has been effective in raising the profile of LEB and communicating with and building relevant networks. It is a significant challenge given scale and diversity of interests and it is perhaps one of the greatest achievements of the Agreement etc."

The Biennial Conference

We received advice that queried whether the Biennial Conference is a cost-effective way of achieving the purpose of engaging with and informing the LEB stakeholders. Points raised were that:

- It is costly to run (estimated to be \$60,000, excluding the cost of sponsorship of community members' attendance and the time of the staff who organise it).
- There are other conferences that the LEBA could utilise (as happened with the Australian Rangelands Conference for the 2006 Conference)
- Other mechanisms exist, including more targeted meetings from time to time for specific purposes.

The Queensland Government submission questioned whether it remains appropriate and relevant to have this matter the subject of a special part (Part IV) of the Agreement. "Consideration should therefore be given to removing this Part from the content of the Agreement itself, as the conference could more simply be confirmed as a commitment by the Ministerial Forum from time to time, if its continuation is considered justified." This raises the idea that the Conference should be considered as part of a suite of activities that can be employed to raise public awareness and engage the public in the affairs of the Basin. The actual activities will vary from time to time according to need.

Expanding the 'general public'

The tenor of the stakeholder feedback and a review of the documentary evidence suggests that these activities and benefits are mainly confined to the Basin community, as per the definition of 'general public' adopted for this Review, and perhaps mainly to the converted within that community. Although we have no hard evidence, our impression is that people living and working in the Cooper and Georgina-Diamantina catchments strongly identify with the Basin; those the other parts of the LEB in SA, less so; and those in the NT hardly at all.

One of the challenges of the LEB is that it is not on the political radar within the Parties; there are few votes, and they are in safe seats. Decisions are determined by large population centres outside the Basin, which tend to have greater voting power. This suggests that there is merit in proactively engaging

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with this wider public to build 'good will' and to provide a stronger support base should the LEB come under threat in the future.

However, consultation did not occur outside of the Basin, so it is not possible to determine the extent to which the Agreement has raised awareness more broadly.

Assessment: The Agreement is meeting expectations in relation to this objective; however there is scope to enlarge the definition of general public to be more inclusive and for the Agreement to have a greater impact.

Opportunities for improvement

There is potential to get more effective use of the investment that goes into the Biennial Conferences, without changing the intent.

There appears to be potential for the Agreement to more comprehensively achieve this Objective by more actively engaging the broader public within the Basin community, and adopting a broader definition of 'general public'. This could potentially address concerns raised that the public profile of the LEB has diminished since the signing of the Agreement.

3.3 Other issues

3.3.1 Relationship with the Great Artesian Basin

There is widespread confusion in the minds of stakeholders between the GAB and LEB and their respective organisations. This confusion appeared in virtually all the workshops that we held. The 'cap and pipe' program of the GAB, which has had positive impacts on the LEB's natural resources through controlling grazing and weeds, was commonly cited as evidence of the good work of the LEB Agreement.

There is also a lack of objective information about the relative industry demands on the GAB's water and the costs to access it – the common view expressed that it is the mining industry that is taking most of the water, 'for free'.

There is interaction between the work of the GABCC and the Agreement – the biophysical interactions at the surface (e.g. the mound springs, and long-established free-flowing bores that now provide biodiversity benefits), the benefits to NRM from the capping of GAB bores, and expansion of activities in the Basin that draw on GAB water.

A number of stakeholders indicated that they thought that there should be a single body responsible for the management of both the GAB and the LEB; however the boundaries for both basins do not coincide and they address different water resources. We do not believe that there are strong grounds for combining the management of the two basins. We note that the secretariat of the LEBA and the GABSI occurs within a single section of the Commonwealth Department of Environment and Water Resources, and this seems to be a sensible arrangement.

We received advice that there needs to be better communication between these bodies – the Queensland government submission recommended that relevant operational and policy links between the LEB CAC and the GABCC should be explored. The meeting held in Alice Springs in April 2006 at the GABCC's instigation is an example of a positive initiative along these lines: the GABCC, CAC and regional NRM Groups meet together, with meetings of the GABCC and CAC being held around it.

Assessment: Where appropriate, opportunities to hold CAC meetings in conjunction with GABCC meetings be pursued.

Section 3**Achievement of the Agreement Objectives****3.3.2 Summary of main issues**

A few key issues emerge from the above analyses that need addressing in this review. We list them here and they will be the focus of the rest of this report.

- 1) The operational arrangements surrounding the meetings of the Ministerial Forum. How can these be made more effective and efficient without losing the spirit of the intent of the Agreement?
- 2) Bringing the regional NRM groups within the LEBA
- 3) Composition of the CAC that recognised the regional NRM Groups
- 4) The composition, role and functioning of the SAP, and linking with the science and research strengths of the jurisdictions
- 5) Operation of the Biennial Conference
- 6) Harmonisation with the GAB Strategic Initiative

Section 4

Analysis of Alternative NRM Delivery Frameworks

In assessing the LEB Agreement, it is important to examine alternative arrangements to understand the policy context in which it sits, and to determine whether other delivery models could improve management of the Basin's natural resources.

This section looks first at intergovernmental agreements relating to Australian natural resource management. It then compares the institutional structures of a number of these arrangements in terms of important elements. It concludes with an assessment of the issues raised by participants concerning the institutional arrangements for natural resource management in the LEB.

4.1 Intergovernmental Agreements

The governments that make up the Australian Federation have a long history of developing inter-jurisdictional agreements and associated institutional arrangements to deal with a wide range of common policy issues including natural resource management. Table 4.1 summarises key characteristics of a number of different types of intergovernmental agreement relating to natural resource management in Australia.

Across the many responsibilities of government the most common type of Commonwealth-State agreements relate to delivery of policies. Typically, an overarching intergovernmental agreement is implemented through individual Commonwealth-state/territory bilateral agreements tailored to the issues in each jurisdiction.

In the field of natural resource and environmental management, however, agreements may also deal with the management of particular geographically defined areas. Bilateral arrangements between adjoining States, or the Commonwealth and a State are the most common spatially defined agreements. There are a number of bilateral agreements between the Australian Government and a State or Territory to manage sensitive areas such as the Great Barrier Reef or the western Tasmanian wilderness.

The States and Territories have a long history of cooperating in environmental and resource management. Adjoining states and territories have management arrangements for rivers, water resources and environmental assets that straddle their boundaries, typically managed under memoranda of understanding or more formal bilateral agreements. Examples of areas covered by such spatial management arrangements include the Border Rivers in Queensland and New South Wales, and the Alpine and Culgoa floodplain national parks (NSW-Victoria-ACT and NSW-Queensland respectively). They also cooperate on infrastructure and resource management operations, such as water infrastructure, the wild dog- and rabbit-proof fences and joint operations on pest management.

Multilateral agreements between the Commonwealth and a number of States/Territories for cooperative management of areas covering more than one state or territory are comparatively rare. The Murray Darling-Basin (MDB) Agreement is the longest standing example of a multilateral agreement between the Commonwealth and State and Territory governments to manage a particular area collaboratively (although it is currently subject to proposals for change, considered below). The LEB Agreement is thus one of the few multilateral agreements for the co-operative management of the shared natural resources of an area, and if the current proposals for the Murray Darling Basin are implemented, it could become unique.

Area-based agreements like the Murray Darling Basin Agreement and the Emerald Agreement (Great Barrier Reef) first developed when the Commonwealth had relatively limited environmental programs, largely related to its then narrowly perceived Constitutional responsibilities, such as treaty obligations on RAMSAR wetlands or World Heritage. They provided a framework for the Commonwealth to contribute to the infrastructure, policies and funds available for an area's natural resource and environmental management. This spatially defined framework preceded the expansion of Commonwealth Constitutional powers under the Foreign Affairs/Treaties power and the Commonwealth's development of wider environmental and natural resource management policies and programs such as the Natural Heritage Trust (NHT), the National Action Plan on Salinity and Water Quality (NAP), and the National Water Initiative (NWI).

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Analysis of Alternative NRM Delivery Frameworks

Table 4-1 Summary of key characteristics of a number of different types of intergovernmental agreements relating to natural resource management in Australia

Agreement	Type	Time frame	Ministerial	Implementation	Community Involvement	Advisory Arrangements
LEB	Spatial multilateral C'wth/state	Indefinite	Dedicated Forum	Small Office working directly with regional groups	CAC— Close, informal and formal	Member agencies, SAP, CAC
MDB	Spatial multilateral C'wth/state*	Indefinite	Dedicated Council	Dedicated Office working independently and with member govts	Community Advisory Council structured, formal	Member agencies, SAP, CAC and specialised advisory committees
Commonwealth Proposal for Revised MDB*	States refer powers to C'wth	tba	C'wth Minister; Ministerial Council tba	Commonwealth Statutory Authority	tba	tba
GBRMP	Spatial bilateral C'wth/state	Indefinite	Dedicated Council	Dedicated Office working independently and with member govts	Consultative Committee	Member agencies, SAP, CAC and specialised advisory committees
Off-shore Fisheries	Multi-lateral; Offshore Constitutional Settlements delegate management to C'wth	Indefinite	Commonwealth Minister; under Primary Industries Min Council	AFMA, C'wth Statutory Authority; dedicated Office working independently and with member govts	Industry and other participation through Management Advisory Councils including relevant state governments	AFMA and individual fisheries advice lines
Border Rivers Commission	Spatial bilateral State/State	Indefinite	Dedicated Ministerial Council	Uses state agencies with no dedicated staff	No dedicated single body – Regional groups to state ministers/agencies	State agencies
NHT	Program multilateral C'wth/state	Limited	Program under NRM Min Council	Member govts and regional bodies	CAC to NRM Min Council, regional bodies plan and implement	Multiple by sub-program
NWI	Program multilateral C'wth/state	Limited	COAG & NRM Min Council	NWC, member govt agencies	No dedicated	NWC & its Commissioners; member govt agencies
GAB Sustainability Initiative	Spatial and policy multilateral C'wth/state	Limited	Plan under NRM Min Council	Member governments, landholders	GAB Coordinating Committee (formerly Consultative Council)	Member agencies, GAB Coordinating Committee, Technical Working Group

*Proposed changes to MDB management arrangements would convert to Commonwealth management under a Statutory Authority with States ceding Constitutional power, similar to fisheries.

Section 4**Analysis of Alternative NRM Delivery Frameworks**

All parties to the LEB Agreement are also parties to intergovernmental agreements for the Natural Heritage Trust and may be for its replacement program. The NHT has provided significant resources for activities in the Basin, and the LEB is also eligible for NWI funding. These Commonwealth funding programs are limited in time, whether they have spatial boundaries or not. The NHT2 is due to expire shortly and the extension of the NHT was announced in the Australian Government's 2007 – 08 Budget. It will be a new program, is likely to differ from the previous program and will require new bilateral agreements with the States and Territories.

The bilateral and multi-lateral spatial arrangements as outlined in Table 4-1, in contrast, are all of indefinite duration, usually with in-built provisions for reviews such as this. This reflects the ongoing need for neighbouring jurisdictions to work together on the ground on natural resource management, regardless of changes in funding arrangements or other policies.

The Great Artesian Basin Sustainability Initiative (GABSI) is also a spatially defined multi-jurisdiction program but it is limited in terms of its objectives and timeframe. Its primary objectives are the capping and management of the artesian water resources of the GAB, although the GABSI also covers other issues related to sustainable natural resource management. This program is outlined in the GAB Strategic Management Plan. It is a time-limited program that has had several phases already. As part of his National Water Plan, the Prime Minister announced that it would be extended to enable completion of the capping program. The geographic areas of the GAB and the LEB overlap to a considerable extent, and the people and industries of the LEB rely on artesian water supplies. While there is no close connection between the water resources of the artesian basin and the surface water resources of the LEB, use of the artesian water, particularly the remaining free flowing bores of the GAB, converts artesian water to surface and shallower ground-water systems. This water also sustains exotic plant and animal pests as well as native flora and fauna, so that from an integrated natural resource management perspective, they are also inter-related. These overlaps lead to confusion between them, and highlight the potential for greater administrative, program and operational consistency and integration,

A number of offshore fisheries management arrangements (e.g. Southern Shark, Southeast Trawl and Northern Prawn) involve the Commonwealth and a number of States/Territories. However, these particular fisheries are managed by the Commonwealth under Offshore Constitutional Settlements which allocate management responsibilities among Australian jurisdictions. Similarly, these Settlements allocate management responsibility for the inshore fisheries such as rock lobster and abalone to the States and Territories regardless of whether they extend beyond the State three nautical mile boundary. These arrangements provide a model for what might be done to establish Commonwealth management of the Murray Darling Basin and potentially also for the LEB if Commonwealth management were to be pursued.

4.2 Assessing potential changes to the Intergovernmental Agreement

All of these models of intergovernmental agreements for natural resource management reflect the varying purposes of the agreements and in some cases, Constitutional provisions. It is useful to consider whether and to what extent changes to the LEB Agreement could improve the achievement of the Agreement's objectives. A number of potential changes will be explored in turn.

4.2.1 Ministerial oversight

A key issue is the link between Ministers. The LEB Agreement provides for a dedicated Ministerial Forum consisting of a Minister from each jurisdiction, similar to the MDB Ministerial Council. However, there is no direct connection of this Ministerial Forum to the wider, policy-oriented NRM Ministerial Council. This may be considered an advantage in that LEB issues might get lost in a larger forum. However, if the LEB issues are not significant enough to get attention in this context, a dedicated Ministerial Forum is unlikely to be more successful in gaining Ministerial attention. Thus, the LEB Ministerial Forum may lose momentum if it is not brought under the aegis of the NRM Ministerial Council. It is possible that an alternative arrangement for Ministerial meetings as part of the NRM Ministerial Council process could result in as much, if not more, Ministerial attention than is provided under the current arrangements.

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Analysis of Alternative NRM Delivery Frameworks

Furthermore, there could be advantages in rolling the LEB Ministerial Forum under the aegis of the NRM Ministerial Council. It could help to align programs, funding and policies in the Basin with those in the rest of the country. This would help with alignment with the NHT, NWI and particular programs such as the GAB Sustainability Initiative. It could also increase understanding and knowledge of the LEB and its NRM issues by the rest of the Australian community.

4.2.2 Commonwealth management with referred Constitutional power

The closest parallel to the LEB Agreement is the Murray Darling Basin Agreement. This reflects the similarity in purpose, i.e. to facilitate coordinated management of the shared river resources of the Basin. This requires joint actions by the States as Section 100 of the Constitution specifically prohibits the Commonwealth from the management of the waters of rivers:

‘100. The Commonwealth shall not, by any law or regulation of trade or commerce, abridge the right of a State or of the residents therein to the reasonable use of the waters of rivers for conservation or irrigation.’
(<http://www.aph.gov.au/senate/general/constitution/chapter4.htm>)

The Commonwealth's current proposal to change the Murray Darling Agreement would involve the Commonwealth taking responsibility for management of the Basin's water resources once powers are referred by the States and Territories. Would a similar change make sense for the LEB? A similar reference of power for the rivers of the LEB would enable the Commonwealth to take over management of the waters of the LEB rivers and remove the current need for joint management arrangements.

Because of the prohibition in Section 100, any change to make the Commonwealth responsible for management of the LEB would require reference of this Constitutional power by the States of Queensland and South Australia (the Commonwealth can already make laws with respect to the Northern Territory). The LEB is of course the nation's second largest river basin involving several jurisdictions (the large Fitzroy and Burdekin Basins are all in Queensland). This would require special legislation in all jurisdictions concerned.

If the MDB states were to refer power to the Commonwealth to manage the rivers of the MDB, an option would be to make the reference generic to relate it to interstate rivers rather than limit it to the MDB. However, this would have implications for other rivers that straddle state boundaries and which now tend to be managed under bilateral arrangements. A generic referral would also tend to complicate the debate and could delay or prevent agreement to proceed with respect to the MDB.

However, such reference of Constitutional power would relate only to the management of the waters of the rivers and would not provide for integrated natural resource management of the kind currently practiced in the LEB and desired by LEB stakeholders. Integrated natural resource management would still require cooperation among the neighbouring jurisdictions. No evidence was presented to this Review to justify a Commonwealth takeover of management.

4.2.3 Replace the Agreement with national NRM programs

Australian natural resource management policy has moved substantially since the LEB Agreement was signed. Changes are continuing, particularly with the National Water Initiative and the extension of the Natural Heritage Trust.

The need for neighbouring jurisdictions to cooperate on the management of their shared natural resources is ongoing. Section 3 outlined the strong view that the Agreement had improved cooperation and led to a whole-of-basin approach and consciousness among those involved in NRM. The resources available from the NHT and NWI have probably reinforced these values. Nevertheless, the NWI and NHT are time-limited programs. They do not address the basic requirement which is for neighbouring jurisdictions to collaborate on a permanent basis in the interests of the Basin as a whole. This is the purpose of the Agreement. The existence of funding programs can reinforce this purpose, but not supplant it.

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Analysis of Alternative NRM Delivery Frameworks

4.2.4 Broadening the focus from water

Natural resource management has developed rapidly in Australia since the LEB Agreement was drafted. At that time, the focus was on managing water resources, as discussed in section 3. However since that time, integrated NRM based on a natural assets framework has replaced the reductionist approach that managed water, ecosystems, flora and fauna separately. There was considerable support for broadening the scope of the Agreement to reflect contemporary approaches to integrated NRM.

A question for this Review is how integrated management of the shared resources of the Basin can evolve to take advantage of new policy developments and arrangements. As long as the Parties to the Agreement take a liberal approach to interpreting 'water and related natural resources' of the Basin, the existing wording would not appear to be an impediment to more holistic NRM. This may be able to be accomplished through letters and MOUs that would interpret the words of the Agreement without the necessity for legislative change and changes to the words of the Agreement itself. Increased cooperation among the jurisdictions in their NRM planning and operations could also support a broader NRM focus in practice.

4.2.5 Expand the boundaries of the Agreement

This is addressed in section 3.2.

4.2.6 Incorporating regional NRM boards

There was a consensus that the regional NRM Groups should be brought within the framework of the Agreement, as they have a primary role in delivery of integrated NRM in the LEBA area. If the LEBA had post-dated the formation of the regional NRM groups, it is likely that it would have made some provision for them.

In principle, there are a number of ways in which regional NRM groups could be included more closely within the framework of the Agreement. The first three listed here are a gradation of weaker to stronger options to strengthen the alignment.

- 1) Alignment of the regional plans and targets between the regional groups and the LEBA via the Bilateral Agreements between the States and the Commonwealth Government under the new NHT3 arrangements.
- 2) Alignment of regional plans, targets via funding through the creation of a single line item for the LEB within the NHT3 via a new, single investment stream (as outlined in the Queensland Government submission). This would require increased administrative capacity within the LEB structures. However, this could expose the LEB to greater risk of losing funding with changes in Commonwealth fiscal priorities and policies. This option would require further work before it could be recommended.
- 3) Alignment of plans, funding and on-ground implementation on a whole-of-basin basis via a single new, regional NRM group operating across the Basin, perhaps via a single investment stream as per Option 2 above. This would be a 'radical' new model, and would require multi-lateral agreements. This is somewhat like the establishment of an inter-jurisdictional body like the Murray Darling Basin or Border Rivers Commission, although they have varying degrees of policy and operational responsibilities. It could also be an outcome of referral of power to the Commonwealth, as discussed above. It would be feasible if Option 2 were adopted for funding LEB activities, but is not consistent with continuation of the current model of implementing the NHT through bilateral agreements between the Commonwealth and the States.

The remainder could be implemented along with either of Options 1-3.

- 4) Through reform of the CAC so that it is made up of representatives from the three NRM regional bodies. This could be the simplest way of incorporating the regional NRM boards into the Agreement framework. Formally reconstituting the CAC so that it was made up of representatives from the three bodies would recognise them. Currently, there is considerable common membership anyway, so this

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Analysis of Alternative NRM Delivery Frameworks

would also have the advantage of reducing the burden on the community. All Parties supported such arrangements, although the details varied. The CAC is a creature of the Ministerial Forum, which is free to reconstitute it at any time.

- 5) Through formal recognition of the roles of the regional bodies in NRM planning processes within the LEB's own processes.
- 6) By creating one or more LEB Regional Facilitators who would operate across the whole region and help harmonise the efforts the regional NRM Groups.

Recognition of the regional bodies in current NRM planning processes (Option 5) could be a *de facto* method of bringing the groups within the framework of the Agreement. However, most of these processes utilise the legislative powers of the member jurisdictions (e.g. for water planning), and the status of the groups varies between the jurisdictions. While in South Australia they are statutory authorities, in Queensland they are incorporated entities based within the community. Relevant state and territory NRM legislation also varies in the ways that community consultation/advisory processes are required. As these arrangements are state-wide in their application and cover a variety of Acts, it is unlikely that they would be changed simply to provide a roundabout way of recognising the LEB regional groups. It would be more efficient and effective to amend the LEB Agreement itself.

4.3 Conclusion

The LEB Agreement, like all of the Agreements considered in this section, is a pragmatic response to the need for governments to cooperate within Australia's federal system of government. It reflects Constitutional constraints on the management of rivers. While it does not explicitly encompass the contemporary approach of natural asset-based integrated resource management, fundamental revision to the Agreement itself would not appear to be necessary to enable this to occur in practice. Side letters or MOUs, and changes to the composition of the CAC would go a long way to overcoming the deficiencies identified in this Review.

Section 5

Findings

This chapter presents our Findings as per TOR #4 (section. 1.3)

5.1 Overall assessment of the Agreement's effectiveness

Overall, the Agreement (and the way it is being implemented) is serving a useful purpose and is largely meeting its objectives. On balance stakeholders consider that adverse cross-border impacts (concerning water and related natural resources) have been avoided or eliminated by the operation of the Agreement (mean GAS = 3.2). This is the Purpose of the Agreement. Indeed all mean GAS scores were around 3 (range of mean scores from 2.4 – 3.4), indicating that on balance the Agreement Objectives are being achieved. The Agreement is highly valued by the stakeholders, who are keen to see it retained and strengthened as a strong process for ensuring that the integrity of the LEB is maintained into the future.

The LEBA has created a LEB-wide mindset and awareness. The interpretation of the Agreement has evolved to encompass an *integrated* natural resources management ethos; at the start the focus was more on the water resources alone consistent with the wording of the Purpose of the LEBA. .

Apart from requiring the Parties to avoid adverse cross-border impacts, the main achievement of the Agreement has been to create a forum and a focus for stakeholders of the LEB Area to come together for Basin-wide discussions. This dialogue is assisted by various communications activities which serve, to some extent, to overcome the physical difficulty of meeting face-to-face. This has created whole-of-basin awareness and ethos amongst some key LEB stakeholders. The Agreement and its enabling institutional structures are supported by government staff and volunteers who are highly motivated and committed to working cooperatively, and who have made a positive contribution to the Agreement's efficacy.

Another significant achievement of the Agreement has been to institute planning and research activities to provide a foundation for future actions, the main ones being: the hydrology study, the rivers assessment and the socio-economic study. The SAP appears to be an effective institution for providing scientific advice and commissioning research to enhance knowledge about the Basin's natural resources. This role is strengthened by the high scientific credibility of the SAP's members, and the SAP's direct access to the Ministerial Forum.

Despite these strengths, there are some areas of weakness in the Agreement as it is currently implemented. These areas include:

- 1) The integrated NRM ethos should to be more clearly articulated in the wording of the Agreement.
- 2) Inadequate connection with the regional NRM groups which operate in the LEB. Although they have been developed since the Agreement was effected, they are constrained within jurisdictional borders, and were not conceived with a Basin-wide mandate. Collectively they do not necessarily protect the Basin as a whole.
- 3) The exclusion of parts of the Basin that are regarded as not relevant to 'adverse cross-border impacts' detracts from integrated whole-of-catchment management, i.e. the NSW part of the Basin and much of the SA part of the Basin.
- 4) The absence of NSW as a signatory to the Agreement.
- 5) Lack of connection with the NRM Ministerial Council, including lack of involvement with the Standing Committee and subcommittees of the NRMMC. This tends to marginalise the Agreement and its work relative to mainstream NRM policy and programs.
- 6) Lack of real actions that make a difference on ground. The Agreement has given rise to good preparatory work; the next five years needs to see this translated into action.
- 7) Possibly inadequate resourcing to give full effect to the work of the Agreement. While the Agreement was conceived as providing for achievement of objectives at minimum administrative cost, with as much as possible of the resources allocated going to projects on the ground, the adequacy of current

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resourcing was questioned. The SAP appears to be constrained by not having an Executive Officer to facilitate its work.

- 8) Overlap with the work of the GAB Strategic Management Plan and the GAB Consultative Committee, and confusion in many community stakeholders' minds between the LEB and the GAB processes.

The currently cooperative relationships between stakeholders appear to rely on the goodwill and enthusiasm of those actively engaged in the Agreement's processes. It is not certain that this will persist in the future with different stakeholders.

The original drivers for the Agreement were the proposals for World Heritage listing of some areas of the Basin and the development of irrigated cotton in the Coopers Creek catchment. While these specific objectives are not currently issues, similar issues and others, such as the management of pest plants and animals, are likely to test the effectiveness of the Agreement.

The strengths listed above highlight the value of the LEBA and the positive difference it is making to the sustainable management of the LEB. The weaknesses suggest that it could be more effective.

5.2 (ToR 4a) Whether the Agreement has provided for the sustainable management of water and related natural resources in the LEB area

The Agreement has made good progress in providing the *foundation* for the sustainable management of water and related natural resources (INRM) in the LEB area, but has *not ensured* that this will happen.

Integrated, sustainable NRM

As mentioned several times before, one of the major achievements of the Agreement has been to enhance communication within LEB stakeholders about the Basin's natural resources and their management, to enhance Basin community networks, and to change mindsets of some key decision-makers to whole-of-Basin thinking. This is a key plank for enabling sustainable INRM.

Over the five years of the Agreement, the emphasis has moved from the management of surface water to the management of the natural resources on an integrated basis. This is another key plank for enabling sustainable INRM. This should be formalised in the wording of the Agreement, and there is wide support for this. As discussed in 4.2.4, this may be able to be accomplished through letters and MOUs that would interpret the words of the Agreement without the necessity for legislative change and changes to the words of the Agreement itself.

Recommendation: That the Agreement, or its interpretation, be modified to emphasise *integrated, sustainable natural resources management* as compared to the present *water and related natural resources*.

The Agreement has also generated much improved knowledge about the biophysical and socio-economic characteristics of the Basin. This is another key plank.

A further key plank is that the Agreement has reduced adverse cross-border impacts, including by increasing cross-border consistency in the way monitoring data are collected across the Basin. The most often referred to example was the proactive and genuine inclusion of the South Australians into the consultation process for the Georgina / Diamantina Water Resources Plan which resulted in the Plan accommodating some of SA's concerns. SA will also be consulted about the Cooper Creek Water Resource Plan (which is about to be revised). Three additional stream flow gauging stations have been installed in the Qld part of the Basin as the direct result of the Agreement.

It was noted that there is good consistency across the Basin in the management of weeds of national significance, but this is less a result of the Agreement than compliance with requirements of national funding sources from Canberra.

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However, cross-border inconsistencies still persist that constrain good INRM. Many examples were quoted: management of weeds other than those of national significance; management of feral animals (SA tends to operate independently; the poison '1080' can be used in Qld and NT but not in SA; different requirements for the training and licensing of aerial shooters in different jurisdictions); buffel and other introduced pasture grasses can be sown in Qld and NT but not in SA; inconsistencies in classifying species levels of rareness, because they are determined on a State not Basin-wide or National basis.

These are a drain on management resources because they require different management solutions in different jurisdictions to achieve the same outcomes, and importantly they make integrated Basin-wide management more difficult especially for resource managers who operate in several jurisdictions.

The Agreement and its institutions have only an enabling role; the delivery is done by the Parties themselves, including the regional NRM Groups, who are subject to other pressures that can conflict with the needs of the LEB. Whilst the delivery remains the responsibility of others, the Agreement cannot ensure the natural resources of the Basin will be managed in an integrated, sustainable manner. We make a recommendation about this in section 5.3.

This TOR focuses on the *LEB* area rather the *LEBA* area. Technically speaking, the *LEBA* area is a subset of the total *LEB* area (in that it excludes the small NSW portion and much of the SA portion). Thus the *LEBA* does not apply to the entire Basin. The current thinking in NRM is that sustainable integrated natural resources management requires a whole-of-catchment approach. It follows therefore that the *LEBA* should be expanded geographically to include the whole *LEB*. This would entail bringing NSW into the Agreement. Because NSW is not a Party to the Agreement, it is not part of the Agreement's scientific or decision making community and thus beyond the influence of the Agreement; thus it is unlikely to adopt protocols for monitoring and land use for its part of the *LEB* where they differ from NSW protocols.

Recommendation: That the boundary of the *LEBA* area be expanded to include all the hydrological *LEB*

Condition of the LEB's natural resources

It is not yet possible to detect any improvement in the status of the Basin's natural resources, for a number of reasons:

- Changes in management as the result of the Agreement are only recent.
- Monitoring programs are not yet sufficiently comprehensive or standardised – but good progress is being made with good baseline data being gathered.
- At least 10 years of comprehensive monitoring data would be needed to detect improvements in the state of the resources, because of the 'noise' in the data caused by the high variability in both space and especially time, because flooding and biological activity is driven by episodic weather events.
- Even so, it will be difficult to tease out the impact of the Agreement's initiatives from similar initiatives of other bodies such as:
 - the GAB bore capping and piping program (several stakeholders pointed out that this alone is having a dramatic impact on the state of the *LEB*'s resources), and
 - the regional NRM Groups where they undertake actions independently.

Yet, 11 of the 13 respondents considered that there been improvements in the condition of water and natural resources, and also less damage being caused, as the direct result of the Agreement.

Several stakeholders emphasised that on the whole the natural resources of the Basin are in good condition. This puts the emphasis on keeping them that way, in contrast to the rehabilitation emphasis in many other areas of Australia.

The preceding discussion is reflected in the questionnaire results: on balance, respondents considered that the Agreement is making good progress at achieving sustainable management of water and related

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natural resources in the LEBA area by significantly reducing or avoiding adverse cross-border impacts (mean GAS = 2.9).

5.3 (ToR 4b) Whether the LEB Agreement is still the most appropriate mechanism to deliver the objectives of the Agreement

The following discussion recognises that the Agreement needs to be retained – this has been well-established by the information received by this Review. The question is therefore not whether, but how best to deliver the objectives.

The Agreement needs modifying for it to be effective in ensuring that the water and related natural resources are managed on an integrated, whole-of-Basin basis, and that the governance processes that ensure this, are effective and efficient. There are several dimensions to this:

- Bringing the regional NRM Groups within the ambit of the Agreement;
- The composition and operation of the CAC with respect to the regional NRM Groups – this is explored under section 5.6;
- The arrangements for the Ministerial Forum, particularly the relationship between the Ministerial Forum and the NRM Ministerial Council system.

As discussed in section 4.2.6 there are options for going some way towards strengthening the effectiveness of the LEBA vis a vis the regional NRM groups that do not require amending the LEBA.

Bringing the regional NRM Groups within the ambit of the Agreement

The relevant issues were explored in section 4.2.6.

There are several ways to bring the regional NRM Groups into the Agreement without radically changing it or the structure of the regional Groups:

- 1) Form the CAC from the regional NRM Boards. Since the Boards of the regional Groups are representative of the NRM stakeholders in each region, a CAC so formed would deliver stakeholder representation and connect the regional NRM Boards into the LEB processes. A composition is proposed in section 5.5.
- 2) Build in formal two-way communications between the LEBMF (and LEB secretariat) and the regional NRM Boards
- 3) Establish the position of one or more LEB Regional Facilitator(s) to facilitate and harmonise the integrated NRM work in the LEB
- 4) Align the programs of the regional NRM Groups with the priorities of the LEB, by aligning the plans and targets, and/or by an integrated LEB investment stream, and/or by a new model of a cross-jurisdictional regional NRM group.

Recommendation: That the regional NRM Groups be brought within the ambit of the Agreement by: comprising the CAC from representatives of the regional NRM Boards; building in formal two-way communications between the LEBMF (and LEB secretariat) and the regional NRM Boards; by establishing the position of one or more LEB Regional Facilitator(s) to facilitate and harmonise the integrated NRM work in the LEB, and by aligning the programs of the regional groups with the priorities of the LEB as strongly is feasible.

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The arrangements for the Ministerial Forum

The issues surrounding this have been explored in sections 3.2.1 and 4.2.1. As pointed out these, the collective desires are incompatible. Our view is that:

- The LEBMF should be retained, to signify the importance of the LEB and the intent of the LEBA.
- The arrangements need to accept the reality that it is infeasible for the LEBMF to be required to meet frequently in the LEB, and that it is undesirable to be disconnected from the NRMMC processes.

Recommendation: That the LEBMF be retained; and that it be brought within the aegis of the NRMMC and *not* be required to meet in the Basin.

5.4 (ToR 4c) The operational policy and governance frameworks for implementing the Agreement and related policies and strategies

This objective is being partially achieved; however there are a number of areas where it seems possible that improvements could be made to support the implementation of policies and strategies.

This has been partly explored in section 5.3 above.

Internally, the LEBMF and its accompanying ministerial advisers, the SAP and the CAC define the governance framework for the Agreement. Official documents for these governance structures set out their roles, function and operating protocols for each of the structures. Externally, the Agreement is situated within a governance framework that incorporates the regional NRM delivery model and State-based jurisdictional power over natural resources.

It was suggested that the framework has been reasonably effective at the community level; however the bureaucratic level is not as effective as it could be, in part because the Agreement has not been able to position itself or effectively engage with the regional and State governance frameworks. Rather, the Agreement “floats above the action”. A number of stakeholders considered this lack of engagement was symptomatic of the lack of political impact made by the Agreement at the decision-making level.

Operationally, the Agreement is an enabling instrument, rather than an implementation instrument. Implementation is dependent on input from government agencies and “reflects rather than informs jurisdictional policy”. This feature of the Agreement is reflected in the resources made available to achieve the Agreement’s objectives (see section 3.2.4) and, to an extent, limits the implementation of policies and strategies, for example the communication of review and monitoring processes. As one stakeholder commented, “...It (the Agreement) has an advisory role with no real program or policy function. It is not seen as a critical forum for decision makers so it is very limited by the governance arrangements”.

Consistent with comments made in the workshops, respondents to the questionnaire gave a mean GAS score of 2.8 for the question “To what extent has the framework for governance been effective for implementing the Agreement and related policies and strategies?”. That is, the operational policy and governance frameworks have been only partly effective at enabling the Agreement and related policies and strategies to be implemented.

The proposals above to link the regional NRM Groups into the LEBA should significantly improve the situation.

Section 5

Findings

5.5 (ToR 4d) The consultation processes and mechanisms for raising public awareness under the Agreement

Section 3.2.10 refers to the mechanism by which the Agreement raises public awareness under the Agreement. The main finding relevant to this aspect of the Agreement relates to expansion of the definition of 'general public' to include those people who live beyond the Basin boundaries.

Although the questionnaire did not ask about consultation processes, a number of stakeholders at the workshops commented on the significant role of the CAC and Indigenous Forum in ensuring that stakeholder opinion is represented. The Agreement has strongly facilitated Basin-wide consultation and conversations. The role of the CAC Facilitator is acknowledged by many to be essential to the effectiveness of consultation throughout the LEB area.

One of the major outcomes from these consultation processes has been the increased aboriginal representation on the CAC, which was agreed to at the 2005 ministerial forum. This is considered be a positive step toward ensuring more comprehensive consultation with Basin stakeholders. As one stakeholder commented, "the Agreement has meant that there will be more communication between Indigenous groups across borders".

Another point to emerge from the consultation was that the CAC newsletter has a relatively narrow scope. It is focused on issues relating to the Agreement and not always on Basin as a whole. Feedback from some community stakeholders was that it should take a LEB-wide perspective.

Despite the satisfaction with the CAC, we propose changing the composition of the CAC – but not its thrust – to incorporate the regional NRM Boards into the agreement. Our suggested composition of the CAC is: representatives the regional NRM bodies, Indigenous members appointed by the regional bodies, LEB NRM Facilitator, Parties to the LEBA, and the Chair of the SAP.

Recommendation: That the composition of the CAC be changed to include representatives of the regional NRM Boards.

5.6 (ToR 4e) The mechanisms for obtaining expert scientific research and advice to support informed decision making in relation to the Agreement

This is discussed in section 3.2.8. We agree with the thrust of that discussion.

Recommendation: That SAP be continued as constituted; that it have a strategic advisory role as well as to monitor the effectiveness of the work undertaken to underpin strategic INRM decision making in the Basin, and that the SAP be provided with sufficient support to undertake its work.

5.7 (ToR 4f) Any others matters of relevance to the objectives of the LEB Agreement

5.7.1 Relationship with the Great Artesian Basin

This was discussed in section 3.3.1.

Recommendation: Where appropriate, opportunities be pursued to hold CAC meetings in conjunction with GABCC meetings.

Section 6

Recommendations

6.1 Preamble

This section draws together the recommendations made as a result of our evaluation.

6.2 Recommendations

Notwithstanding this positive assessment of the LEBA and its impact, several key issues emerged that need to be addressed.

- 1) **Integrated, sustainable NRM.** The focus in the LEBA on 'water and related natural resources' does not align with the present day principles of INRM which underpin, e.g., Australia's regional NRM model. Over the five years of the Agreement, the emphasis has moved to integrated NRM.
Recommendation: *that the Agreement be modified to emphasise integrated, sustainable natural resources management as compared to the present water and related natural resources.*
- 2) **Avoidance of adverse, cross-border impacts.** This focus falls short of integrated whole-of-catchment management which also underpins present day best practice. This focus on adverse cross-border impacts is the reason that the NSW part of the LEB and much of the SA part are excluded from the LEBA – land management in those parts have no cross-border impacts.
Recommendation: *that the boundary of the LEBA area be expanded to include all of the hydrological LEB.*
- 3) **Encompassing the regional NRM Groups.** Since the LEBA came into effect, the national regional NRM delivery model has been established giving rise to three regional NRM Groups who are responsive for INRM in the Queensland, South Australian and Northern Territory parts of the LEB. Thus these Groups do not come within the Agreement and this disconnect runs the risk of (inadvertently) undermining the Agreement as each Group operations are restricted to the jurisdictional borders.
Recommendation: *That the regional NRM Groups be brought within the ambit of the Agreement by: comprising the CAC from representatives of the regional NRM Boards; building in formal two-way communications between the LEBMF (and LEB secretariat) and the regional NRM Boards; by establishing the position of one or more LEB Regional Facilitator(s) to facilitate and harmonise the integrated NRM work in the LEB, and by aligning the programs of the regional groups with the priorities of the LEB as strongly is feasible.*
The regional NRM Groups are themselves representative of the spectrum of stakeholders, so this enables the stakeholder-representative nature of the CAC to continue.
- 4) **Role and operation of the Ministerial Forum.** The Ministerial Forum is seen as an important reflection of the significance that should be accorded the LEB and the LEBA, and stakeholders want it retained. However, the requirement that it meet in the Basin, whilst desired by community stakeholders as an opportunity to meet with them Ministers, is logistically impractical, and disconnect the LEBMF from Australia's main NRM decision making process, the NRM Ministerial Council.
Recommendation: *That the LEBMF be retained; and that it be brought within the aegis of the NRMMC and not be required to meet in the Basin.*
- 5) **Role of the Scientific Assessment Panel.** The SAP has been effective by virtue for the high scientific credibility (and commitment) of its members and its direct access to the LEBMF. It has initiated important research and monitoring activities. More could have been achieved if it had better organisational support. Over the past five years the technical capacities of the jurisdictions' agencies (including the regional NRM Groups) have increased, this should be drawn upon for addressing LEBA issues.
Recommendation: *That SAP be continued as constituted; that it have a strategic advisory role as well as to monitor the effectiveness of the work undertaken to underpin strategic INRM decision making in the Basin, and that the SAP be provided with sufficient support to undertake its work.*

Section 6

Recommendations

- 6) **Relationship with the Great Artesian Basin Coordinating Committee.** The LEB overlaps the Great Artesian Basin, and the bore capping and piping work being undertaken by the GABCC is improving the condition of the natural resources of the Basin. Community stakeholders are confused between the two groups.

Recommendation: *Where appropriate, opportunities be pursued to hold CAC meetings in conjunction with GABCC meetings.*

Section 7

Limitations

URS Australia Pty Ltd (URS) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Department of Environment and Heritage¹ and only those third parties who have been authorised in writing by URS to rely on the report. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Proposal dated 5th October 2006.

The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared between 19th February and 14th June 2007 and is based on the conditions encountered and information reviewed at the time of preparation. URS disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners

¹ This has since been renamed to: Department of Environment and Water

Appendix A

Questionnaire

A.1 Evaluation questionnaire

Review of Lake Eyre Basin Agreement

Definitions

Abbreviation / term	Meaning
CAC / Community Advisory Committee	The broadly-based stakeholder group that provides community advice to Government on water and related natural resource issues in the Lake Eyre Basin
Context for the LEBA	Both Institutional context and Policy context – see below
GAB / Great Artesian Basin	The huge aquifer that underlies much of inland Australia. See Figure 2
GABCC	Great Artesian Basin Consultative Committee
Institutional context	The mix of other institutions that co-exist with the LEBA – national, State, regional, private, community
LEBA	Lake Eyre Basin Intergovernmental Agreement
LEBA area	The area to which the LEBA applies
LEB / Lake Eyre Basin	The area of the hydrological basin
MF / Ministerial Forum	The group Ministers who represent the Parties under the LEBA
Party	One of the Governments which is a signatory to the Agreement: Australian, Qld, SA and NT
Policy context	The mix of other policies within which the LEBA operates, both State and national – e.g., National Action Plan for Salinity and Water Quality, Natural Heritage Trust, Council of Australian Governments policies
Public	Members of the public at large who live or work in the Lake Eyre Basin or close to it.
Related natural resources	Those natural resources whose use or management affects, might affect or is possibly affected by the quantity or quality of water system (i.e. rivers, lakes and aquifers) in the Lake Eyre Basin
SAP / Scientific Advisory Committee	The group of scientists who advises the Ministerial Forum on scientific, research and monitoring matters

Goal Attainment Scaling

These GAS frameworks are to be used in conjunction with the LEBA Evaluation Questionnaire. Each of these is a scale for scoring the performance of the LEBA and the way it has been implemented.

The GAS scales might look complicated, but basically they are quite simple. The expected outcome at the time of the Review under the LEBA as it was intended to be implemented is given a score of 3. The worst outcome gets a score of 1, and the best possible outcome gets a score of 5. Intermediate outcomes are scored appropriately on the 1-5 scale.

When the questionnaire refers to a GAS score, study the appropriate GAS scale and apply your score. You may give fractional scores if you wish to – e.g., 2.5, if you can't decide between a score of 2 and a score of 3. If a GAS score does not apply to you, score = NA (not applicable). If it does apply to the stakeholder group you belong to, but you do not know enough to provide an answer, score = DK (don't know).

Personal Details

Please enter your personal details below

pd1: First Name

Please write your answer here:

pd2: Surname

Please write your answer here:

pd3: Date

Please write your answer here:

pd4: Organisation

Please write your answer here:

pd5: What is your relationship to / role in the Lake Eyre Basin?

Please write your answer here:

pd6: Email Address

Please write your answer here:

pd7: Phone Number

Please write your answer here:

pd8: Mobile

Please write your answer here:

Section 01: The Parties Coming Together

To provide a means for the Parties to come together in good faith to achieve the purposes of the Agreement

1.1.1: 1.1.1. To what extent has the Agreement provided an effective means for the Parties to come together?

Note: this is more than just the Ministerial Forums – but about the Parties' Officers working together.

Please write your answer here:

1.1.2: 1.1.2 * MF & Advisers only *** How many interactions have there been between the Parties under the LEBA? Please provide details:**

Please write your answer here:



1.1.3: 1.1.3 * MF & Advisers only *** How many of these interactions led to successfully avoiding or reducing adverse cross-border impacts?**

Please write your answer here:



1.2.1: 1.2.1 What are examples of parties working together in "good faith"?

i.e. getting on with the business of achieving the Purpose

Please write your answer here:



1.2.2: 1.2.2 What are examples of parties actively working to resolve "bad faith"

e.g. disputes, selfinterest over-riding LEB interests?

Please write your answer here:



1.3.1: 1.3 Please provide your GAS score for: "To what extent has the Agreement, and the way it has been implemented, provided an effective means for the Parties to come together for the purposes of the LEBA? To what extent have the parties worked together "in good faith" (i.e., to get on with the business of achieving the Purpose)?"

The Agreement, and the way it has been implemented ...

Most unfavourable outcome	1	... may have enabled the Parties to meet but there has been little real cooperation, and the self interests of the Parties' jurisdictions has meant that adverse cross-border impacts are still occurring in the management of the water and related natural resources in the LEBA area.
Less than expected success	2	... has enabled the Parties to meet and begin working together, but progress in managing the water and related natural resources in the LEBA area such that adverse cross-border impacts have been substantially reduced has been

		hampered by the self-interests of the Parties' jurisdictions.
Expected level of success	3	... has enabled the Parties to meet and work together and cooperate, in good faith, to make progress in managing the water and related natural resources in the LEBA area such that adverse cross-border impacts have been substantially reduced or avoided.
More than expected level of success	4	... has enabled the Parties to meet and work together and cooperate, in good faith, such that there is real synergy between the Parties in managing the water and related natural resources in the LEBA area such that there are now negligible adverse cross-border impacts or threat of such impacts.
Most favourable	5	... not only has enabled the Parties to meet and work together and cooperate, but to do so with such synergy that the water and related natural resources in the LEBA area are managed for the common outcome good as if the LEBA area is effectively a single jurisdiction without internal borders; thus 'adverse cross-border impacts' are no longer an issue.

Enter your GAS framework score above

Please write your answer here:

1.4: 1.4 Any other comments about – Section 1

Please write your answer here:

Section 02: Context and Process for addressing the issues

To define a process and context for raising and addressing water and related natural resource management issues in the LEBA Area that have cross-border impacts, particularly those related to water quantity and quality, and flow regimes.

Background

For Context please refer to the definitions at the start .

Process refers to the mechanisms to make the LEBA operate

2.1: 2.1 Have you found the LEBA's context to be effectively defined – both by the LEBA and the way it has been implemented?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

2.1a: If yes, why?

Please write your answer here:

2.1b: If no, why?

Please write your answer here:

2.2: 2.2 Have you found that the LEBA's definition of 'water and related natural resources' to be clear, and useful?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

2.2a: If yes, why?

Please write your answer here:

2.2b: If no, why?

Please write your answer here:

2.3: 2.3 To what extent has the interpretation of "water and related natural resources" moved beyond the intent of the Agreement (primarily water)? To what extent has any such change in interpretation duplicated the dialogue and breadth of activity of Regional Bodies?:

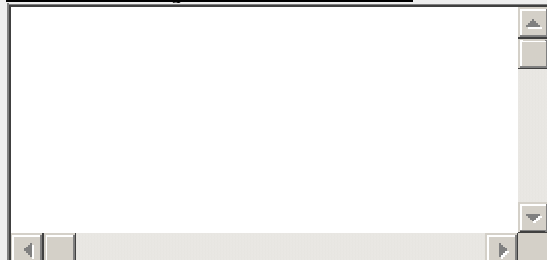
2.3.1: 2.3.1. Has the interpretation evolved since the LEBA came into effect?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

2.3.1a: If yes, how has it changed?

Please write your answer here:



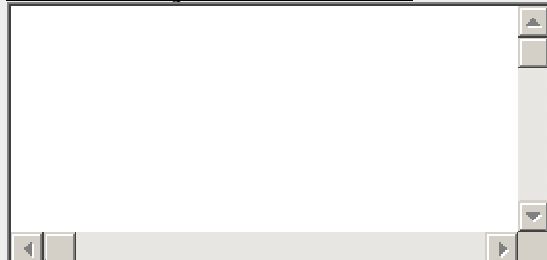
2.3.2: 2.3.2. To what extent has this change in interpretation duplicated the dialogue and breadth of activity of Regional Bodies?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

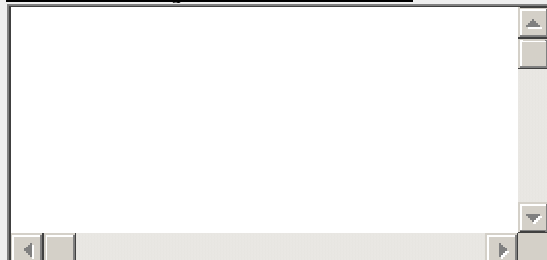
2.3.2a: If yes, please provide examples.

Please write your answer here:



2.3.2b: If no, please provide examples.

Please write your answer here:



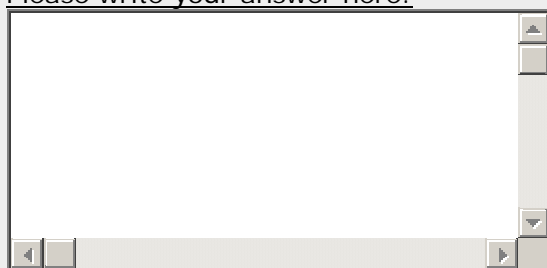
2.3.3: 2.3.3. Is the definition (and interpretation) of 'water and related natural resources used in the LEBA consistent with definitions effectively used by the relevant regional bodies?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

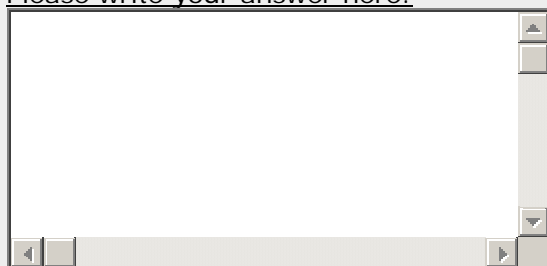
2.3.3a: If yes, please provide examples.

Please write your answer here:



2.3.3b: If no, please provide examples.

Please write your answer here:



2.4.1:

2.4 Please provide your GAS score for: "To what extent has an effective context been defined and an effective process(es) been defined?"

Most unfavourable outcome	1	The context for raising issues about cross-border water and related natural resource management issues in the LEBA Area is neither clear nor workable, such that there is real confusion between the Parties as to which issues are appropriate for the LEBA Ministerial Forum to deal with, and this has been an impediment to progress
Less than expected success	2	The context for raising issues about cross-border water and related natural resource management issues in the LEBA Area might be clear but it is not very effective. There is some confusion between the Parties as to which issues are appropriate for the LEBA Ministerial Forum to deal with, but this has not been a major impediment to progress
Expected level of success	3	The context for raising issues about cross-border water and related natural resource management issues in the LEBA Area is clear and reasonable. As the result it is reasonably clear among the Parties what issues are appropriate for the LEBA Ministerial Forum to deal with. However, the context is not well understood by stakeholders who are not close to the Ministerial forum
More than expected level of success	4	The context for raising issues about cross-border water and related natural resource management issues in the LEBA Area is clear and appropriate. As the result it is quite clear what issues are appropriate for the LEBA Ministerial Forum to deal with. This context is broadly understood by many of

		the non-public stakeholders in the LEBA area
Most favourable	5	as for 4, with the addition that the context is well understood by all non-public stakeholders, and many of the public, in the LEBA area
Enter your GAS framework score above		Please write your answer here: <input type="text"/>

2.5.1: 2.5.1. Is the process as defined by the Agreement and implemented by the Parties clear?

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

2.5.1a: If yes, please provide examples of processes being used.

Please write your answer here:

2.5.1b: If no, please provide examples of processes that do not work and skip 2.5.2 below.

Please write your answer here:

2.5.2: 2.5.2. Does this process effectively address cross-border water and related natural resource management issues in the LEBA Area?

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

2.5.2a: If yes, please provide examples of the process working.

Please write your answer here:

2.5.2b: If no, please provide examples when cross-border issues have not been addressed.

Please write your answer here:

2.6.1:

2.6 Please provide your GAS score for: “To what extent does this process effectively address cross-border water and related natural resource management issues in the LEBA Area? (as per the Purpose of the Agreement)”

Most unfavourable outcome	1	The process for raising and addressing cross-border water and related natural resource management issues in the LEBA Area is not clear and it is not effective
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	The process for raising and addressing cross-border water and related natural resource management issues in the LEBA Area is both reasonably clear and reasonably effective, although it may not be well understood by stakeholders who are not close to the Ministerial forum
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	The process for raising and addressing cross-border water and related natural resource management issues in the LEBA Area is very clear and highly effective, and it is well understood by all non-public stakeholders, and many of the public, in the LEBA area

Enter your GAS framework score above

Please write your answer here:

2.7: 2.7 Other comments on Section 2?

Please write your answer here:

Section 03: Development or adoption of policies and strategies

To establish institutional arrangements for the development or adoption of Policies and Strategies and for the adoption of any relevant management plans established by a State. (Note that the LEBA provides for the adoption of existing jurisdictional policies and strategies where appropriate)

3.1.1: 3.1.1 *** MF & Advisers only *** Have policies and strategies been developed or adopted?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

3.1.1a: If yes, please provide examples of policies and strategies.

Please write your answer here:

3.1.1b: If no, please provide examples of policies and strategies that should have been adopted but were not and skip 3.1.2 below.

Please write your answer here:

3.1.2: 3.1.2 *** MF & Advisers only *** Have management plans for the area been adopted?

(Note that the management plans may have been developed by others)

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

3.1.2a: If yes, please provide examples of management plans.

Please write your answer here:

3.1.2b: If no, please provide examples of management plans that should have been adopted but were not

Please write your answer here:

3.2.1: 3.2.1 Are the institutional arrangements an effective means of developing or adopting policies and strategies?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

3.2.1a: If yes, please provide reasons why they are effective and provide examples of institutional arrangements facilitating policy and strategy development.

Please write your answer here:

3.2.1b: If no, please provide reasons why they were ineffective and provide examples of institutional arrangements not facilitating policy and strategy development and skip 3.2.2 below.

Please write your answer here:

3.2.2: 3.2.2. How could the institutional arrangements be improved for developing or adopting strategies?

Please write your answer here:

3.3.1: 3.3.1. Do the institutional arrangements help the adoption of management plans?

Note 'adoption' means both the decision to adopt a management plan, and actually carrying out the intent of the management plan.

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

3.3.1a: If yes, please provide examples of cooperation between the jurisdictions involved in the LEBA in the development or adoption of management plans.

Please write your answer here:

3.3.1b: If no, please provide examples of conflict between the jurisdictions involved in the LEBA in the development or adoption of management plans.

Please write your answer here:

3.4:

3.4 Please provide your GAS score for: "To what extent are the institutional arrangements an effective means of developing or adopting policies and strategies? To what extent do the institutional arrangements help or hinder the adoption of any relevant management plans established by the Parties?"

The institutional arrangements developed under the LEBA ...

Most unfavourable outcome	1	... are ineffective for developing and adopting policies and strategies and for adopting any relevant management plans established by a Party [that avoid or eliminate adverse cross-border impacts], and there are few such policies and plans in place
Less than expected success	2	... are moderately effective for developing or adopting policies and strategies and for adopting any relevant management plans established by a Party [that avoid or eliminate adverse cross-border impacts] such that the suite of policies,

	strategies and plans is far from comprehensive. Furthermore, their implementation may have been hampered, e.g. by budgetary and resource constraints &/or the need for comprehensive consultation and involvement of many stakeholders / other reasons.
Expected level of success	3 ... have been designed so they should be effective for both developing or adopting policies and strategies and for adopting any relevant management plans established by a Party [that avoid or eliminate adverse cross-border impacts], and a good start has been made to getting in place a comprehensive suite of policies and strategies and management plans. However the full implementation of these arrangements appears to have been hampered, e.g. by budgetary and resource constraints &/or the need for comprehensive consultation and involvement of many stakeholders / other reasons.
More than expected level of success	4 ... have not only been designed to be effective for developing or adopting policies and strategies and for adopting any relevant management plans established by a Party [that avoid or eliminate adverse cross-border impacts], but they have been given full effect by the Parties without compromise, and a good start has been made to getting in place a comprehensive suite of policies and strategies and management plans
Most favourable	5 ... have not only been designed to be effective for developing or adopting policies and strategies and for adopting any relevant management plans established by a Party [that avoid or eliminate adverse cross-border impacts], but they have been given full effect by the Parties without compromise, and a there is now a comprehensive suite of policies and strategies and management plans in place

Enter your GAS framework score above

Please write your answer here:

3.5: 3.5 Any other comments about Section 3?

Please write your answer here:

Section 04: Progressing policies and strategies

To provide for each of the Parties, so far as they are able within their respective jurisdictions, to progress the implementation of Policies and Strategies developed or adopted under this Agreement and to make management decisions and allocate resources accordingly.

4.1: 4.1. Does the Agreement help the implementation of policies and strategies?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

4.1a: If yes, please provide examples of cooperation in relation to implementation.

Please write your answer here:

4.1b: If no, please provide examples of conflict in relation to implementation.

Please write your answer here:

4.2:

4.2 Please provide your GAS score for: “To what extent does the Agreement, and the way it has been implemented, help or hinder the implementation of LEBA policies and strategies by the Parties? To what extent does the Agreement, and the way it has been implemented, effectively facilitate decisions by the Parties to provide management support and allocate resources to implement LEBA policies and strategies?”

Under the LEBA as implemented ...

Most unfavourable outcome	1	... the Parties have, on balance, not implemented the LEBA policies and strategies (whether by not adopting them or by not resourcing their implementation)
Less than expected success	2	... the Parties have, on balance, only partially implemented the LEBA policies and strategies, (whether by partial adoption or by inadequate resourcing)
Expected level of success	3	... the Parties have, on balance, made good progress at implementing the LEBA policies and strategies, and in providing some resourcing specifically to enable this to happen, but it has been patchy with some Parties being much less effective than others
More than expected level of success	4	... the Parties have, on balance, made excellent progress at implementing the LEBA policies and strategies, and providing adequate resourcing specifically to enable this to happen
Most favourable	5	... all the Parties have fully implemented all the LEBA policies and strategies, including provided full resourcing, so that the intent of the policies and strategies is being fully realised in the Parties’ jurisdictions.

Enter your GAS framework score above

Please write your answer here:

4.3: 4.3. Does the Agreement facilitate decisions by the Parties to provide management support and allocate resources?

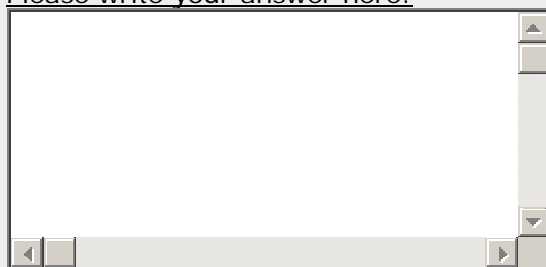
Please choose **only one** of the following:

- ☐ Yes
- ☐ No

- ☐ Don't Know
- ☐ N/A

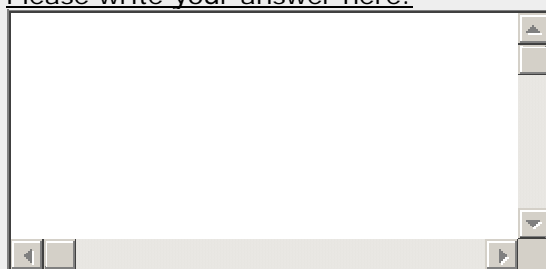
4.3a: If yes, please provide examples of effective support and resource allocation.

Please write your answer here:



4.3b: If no, please provide examples of ineffective support and resource allocation.

Please write your answer here:



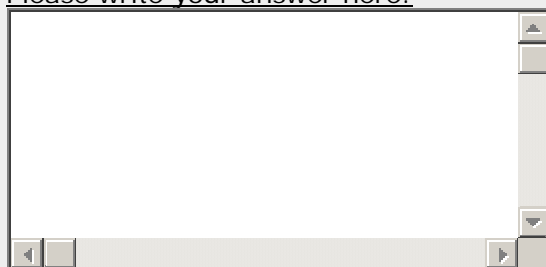
4.4: 4.4. Do the Parties' own NRM policies and processes recognise and account for impacts on other jurisdictions in the LEB?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

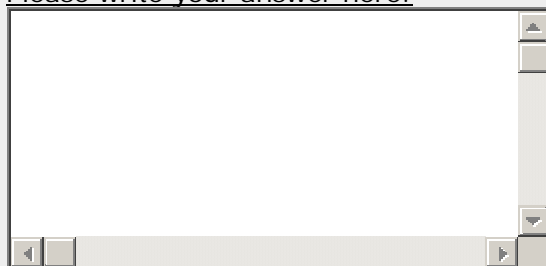
4.4a: If yes, please provide examples of the NRM policies and processes that achieve this.

Please write your answer here:



4.4b: If no, please provide examples of NRM policies and processes that do not recognise and account for impacts.

Please write your answer here:



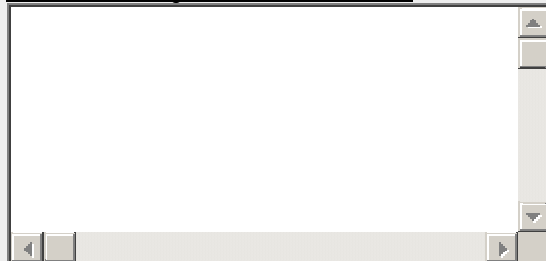
4.5: 4.5. Do the Parties' own NRM policies and strategies help the implementation of the Agreement?

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

4.5a: If yes, please provide examples of cooperation in relation to implementation.

Please write your answer here:



4.5b: If no, please provide examples of conflict in relation to implementation.

Please write your answer here:



4.6:

4.6. Please provide your GAS score for: "To what extent do the Parties' water and other NRM policies and processes recognise and account for impacts on other jurisdictions in the Lake Eyre Basin? To what extent do they help/hinder the implementation of the Agreement?"

Most unfavourable outcome	1	The Parties neither recognise nor take into account the impacts on the other jurisdictions in the Lake Eyre Basin, and adverse cross-border impacts [on water and related natural resources] are still occurring or are likely to occur
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	The Parties recognise and take into account the impacts on the other jurisdictions in the Lake Eyre Basin, but this is limited to the jurisdictions of the Parties themselves, and accordingly they try to avoid adverse cross-border impacts [on water and related natural resources]
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	The Parties not only recognise and take into account the impacts on the other jurisdictions in the Lake Eyre Basin as a whole, but they now actively collaborate to harmonise their policies to reflect best practice in water and related natural resources management, such that adverse cross-border impacts

	are completely avoided
--	------------------------

Enter your GAS framework score above	Please write your answer here: <div></div>
--------------------------------------	-----------------------------------------------

4.7: 4.7. Any other comments about Section 4?

Please write your answer here:

Section 05: Review mechanisms

To provide a mechanism to review Policies and Strategies

5.1: 5.1. * MF & Advisers only *** Does a mechanism exist for reviewing policies and strategies?**

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

5.1a: Please provide comments

Please write your answer here:

5.2: 5.2. Is the review mechanism effective?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

5.2a: If yes, please provide examples of policies and strategies that have been reviewed. Please provide examples of where the findings have been adopted.

Please write your answer here:

5.2b: If no, please provide examples when it was not effective.

Please write your answer here:

5.3:

5.3. Please provide your GAS score for: "To what extent has a mechanism been implemented to review policies and strategies? To what extent have reviews undertaken under this mechanism been effective?"

Most unfavourable outcome	1	A mechanism has not been implemented, or the one that has is ineffective for conducting competent reviews
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	A mechanism has been implemented and it enables LEBA policies and strategies to be adequately reviewed. Any reviews that have been undertaken have been competent, and have been considered by the Parties
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	The mechanism that has been implemented requires LEBA policies and strategies to be thoroughly reviewed, and procedures have been established to ensure that the reviews happen in a timely manner. Any reviews that have been undertaken have been competent and thorough, and all recommendations to improve the policies and strategies have been acted on by the Parties

Enter your GAS
framework score above

Please write your answer here:

5.4: 5.4. Any other comments about Section 5

Please write your answer here:

Section 06: Promoting and supporting water and related natural resources

To provide for the Parties to jointly promote and support the management of water and related natural resources through a cooperative approach between community, industry and other stakeholders, and all levels of government in the sustainable management of the LEBA Area

6.1: 6.1. Is management of water and related natural resources in the LEBA area being achieved through a cooperative approach between community, industry and other stakeholders, and all levels of government?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know

6.1a: If yes, please provide examples when management used a cooperative approach.

Please write your answer here:

6.1b: If no, please provide examples when management was not cooperative in its approach.

Please write your answer here:

6.2: 6.2. Are there any major community, industry or other stakeholder groups, or levels of government, currently NOT effectively part of a cooperative approach to the management of water and related natural resources in the LEBA area?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

6.2a: If yes, please provide examples:

Please write your answer here:

6.3: 6.3. Do the Parties support and undertake the sustainable management of water and related natural resources on an integrated Lake Eyre Basin-wide basis?

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

6.3a: If yes, please provide examples.

Please write your answer here:

6.3b: If no, please provide examples.

Please write your answer here:

6.4:

6.4 Please provide your GAS score for: "To what extent is the sustainable management achieved through a cooperative approach between community, industry and other stakeholders, and all levels of government? To what extent do the Parties support and undertake the sustainable management of water and related resources on an integrated Lake Eyre Basin-wide basis?"

Most unfavourable outcome	1	There is little cooperation between the LEBA Parties, and the community, industry other stakeholders and all levels of government, in the management of water and related natural resources in the LEBA Area, such that there is not an integrated Lake Eyre Basin-wide approach to the management of water and related natural resources
Less than expected success	2	Intermediate between 1 & 3

Expected level of success	3	The Parties have adopted an approach to managing the LEBA area's water and related natural resources which aims to cooperate with community, industry and other stakeholders, and all levels of government, but achieving an integrated Lake Eyre Basin-wide approach to management has been hampered by lack of cooperation from some other groups
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	The water and related natural resources are managed through a strongly cooperative approach between community, industry and other stakeholders, and all levels of government in the sustainable management of the LEBA Area. The result of this is that the water and related natural resources are managed in a truly integrated way that ignores internal administrative and jurisdictional boundaries.

Enter your GAS framework score above

Please write your answer here:

6.5: 6.5. Any other comments about Section 6?

Please write your answer here:

Section 07: Promoting water and related resource management practices

To encourage, promote and support water and related resource management practices which are compatible with the spirit and intent of the Agreement

7.1: 7.1. Are desirable water and related resource management practices effectively encouraged, promoted (to the relevant people, organisations and agencies) and supported by the way the Agreement has been implemented?

Note 'desirable' refers to practices that are compatible with the purpose, spirit and intent of the Agreement.

Please choose **only one** of the following:

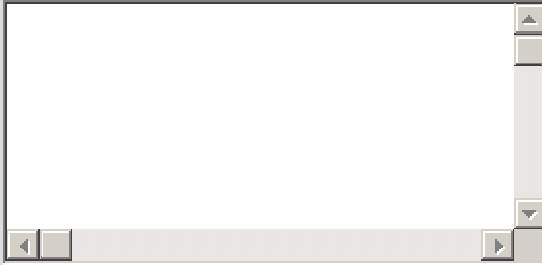
- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

7.1a: If yes, please provide examples of ways in which these practices are encouraged.

Please write your answer here:

7.1b: If no, please provide examples of practices that have not been encouraged, then please skip 7.2. below.

Please write your answer here:



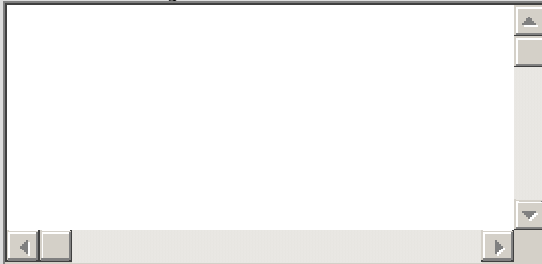
7.2: 7.2. Has the encouragement been effective?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

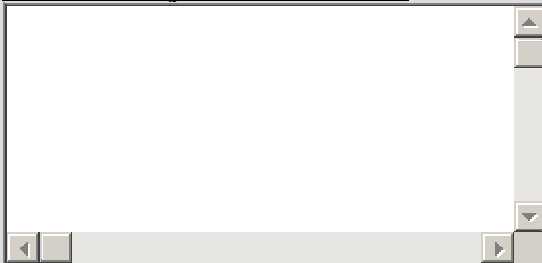
7.2a: If yes, please give examples of effective encouragement.

Please write your answer here:



7.2b: If no, please give examples of ineffective encouragement.

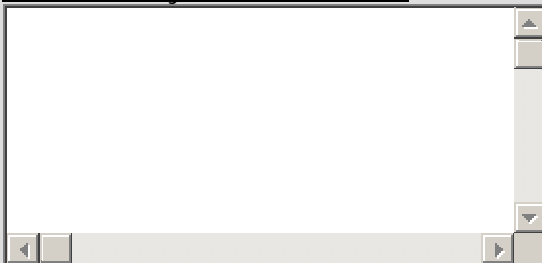
Please write your answer here:



7.3: 7.3. What other programs operate in or around the Lake Eyre Basin with similar intended outcomes to the LEB?

Please provide examples.

Please write your answer here:



7.4: 7.4. What other cross-jurisdictional programs and projects operate in the LEB area that encourage, promote and support water and related resource management practices which are compatible with the intended outcome of the Agreement?

If you don't know of any, please skip 7.5. below.

Please write your answer here:

7.5: 7.5. Are there synergies between the activities initiated by the LEBA Parties?

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

7.5a: If yes, please give examples of the activities.

Please write your answer here:

7.5b: If no, please give examples of the activities that do not work well together.

Please write your answer here:

7.6:

7.6 Please provide your GAS score for: "To what extent does the Agreement encourage, promote and support the adoption of desirable water and related resource management practices by relevant people, organisations and agencies that avoid or eliminate adverse cross-border impacts?"

Under the Agreement as implemented ...

Most unfavourable outcome	1	... there has been little encouragement, promotion and support for sustainable water and related resource management practices to relevant people, organisations and agencies, and management thinking about water and related natural resources remains unchanged throughout the Lake Eyre Basin
Less than expected success	2	Intermediate between 1 & 3

Expected level of success	3	... desirable water and related natural resource management practices are being encouraged, promoted and supported to relevant people, organisations and agencies. A number of mechanisms have been established to do this. As the result there is a growing awareness of the promoted management practices throughout the Lake Eyre Basin
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	... desirable water and related resource management practices are being actively encouraged, promoted and supported to relevant people, organisations and agencies. A number of mechanisms have established to do this – these are demonstrated to be effective and are continually being strengthened. As the result there is a widespread adoption of the promoted management practices for water and related natural resources throughout the Lake Eyre Basin

Enter your GAS framework score above

Please write your answer here:

7.7: 7.7. Any other comments about Section 7?

Please write your answer here:

Section 08: Promoting research and monitoring

To encourage and promote research and monitoring to improve understanding and support informed decision making in the LEBA Area

8.1: 8.1. Is research and monitoring being encouraged, promoted and implemented by the LEBA and Parties?

Please choose **only one** of the following:

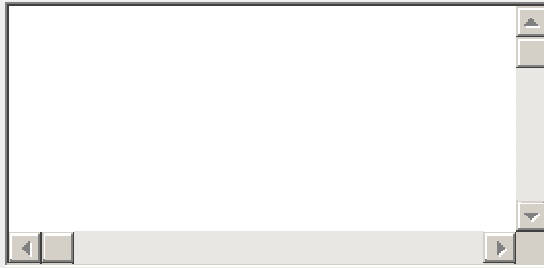
- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

8.1a: If yes, please provide examples when this research has been encouraged.

Please write your answer here:

8.1b: If no, please provide examples of when this research has not been encouraged and should have been.

Please write your answer here:



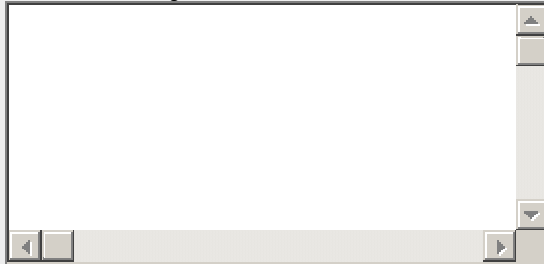
8.2.1: 8.2.1. Has there been improved awareness of the products of research and monitoring that has been enabled by the LEBA?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

8.2.1a: If yes, please provide examples of promotional activity that has increased your awareness. If no, please skip 8.2.2 below.

Please write your answer here:



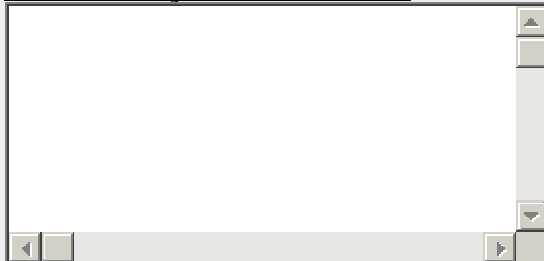
8.2.2: 8.2.2. Has this improved awareness resulted in improved understanding?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

8.2.2a: If yes, please provide examples of improved understanding.

Please write your answer here:



8.2.2b: If no, please provide examples when promotion and implementation did not improve understanding and resulted in confusion.

Please write your answer here:

8.3: 8.3 Has decision making in the LEBA drawn on this research and monitoring information?

Please choose **only one** of the following:

- ☐ Yes
☐ No
☐ Don't Know
☐ N/A

8.3a: If yes, please provide examples of decisions that utilised this information.

Please write your answer here:

8.3b: If no, please provide examples of decisions that did not utilise this information.

Please write your answer here:

8.4:

8.4. Please provide your GAS score for: "To what extent is this kind of research and monitoring being encouraged, promoted and (where appropriate) implemented by the LEBA and Parties? To what extent has promotion and implementation of research and monitoring resulted in improved understanding? To what extent has decision making in the LEBA Area drawn upon research and monitoring information?"

The Agreement, as implemented ...

Most unfavourable outcome	1	... has done little to encourage, promote and support research and monitoring that improves understanding, and decision making in the LEBA Area is no better informed than it was before the LEBA took effect
Less than expected success	2	Intermediate between 1 & 3

Expected level of success	3	... has encouraged, promoted and supported research and monitoring that improve understanding and enables decision making in the LEBA Area to be much better informed, at least within the Parties' jurisdictions, and this is being referred to in relevant decision making processes.
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	... has actively encouraged, promoted and supported comprehensive research and monitoring that improve understanding about water and related natural resources and its management, and as the result the decision making processes throughout the LEBA area are actively taking this information on board to produce policies, strategies and management plans that are effective at reducing or avoiding adverse cross-border impacts

Enter your GAS framework score above

Please write your answer here:

8.5.1: 8.5. To what extent have mechanisms implemented for obtaining expert scientific research and advice been effective?

Please write your answer here:

8.6:

8.6. Please provide your GAS score for: "To what extent have the mechanisms implemented for obtaining expert scientific research and advice been effective?"

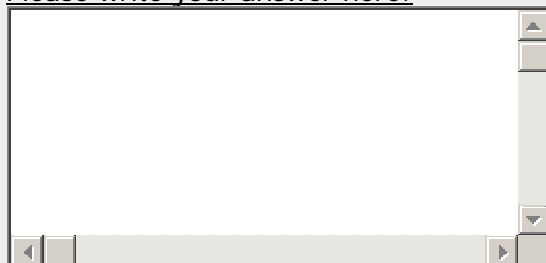
Most unfavourable outcome	1	The mechanisms implemented for obtaining expert scientific research and advice been quite inadequate and ineffective
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	The mechanisms implemented for obtaining expert scientific research and advice have been reasonably effective at obtaining relevant information
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	A comprehensive suite of mechanisms has been implemented for obtaining expert scientific research and advice, and they have been very effective at providing the comprehensive and robust advice required

Enter your GAS framework score above

Please write your answer here:

8.7: 8.7. Any other comments about Section 8?

Please write your answer here:

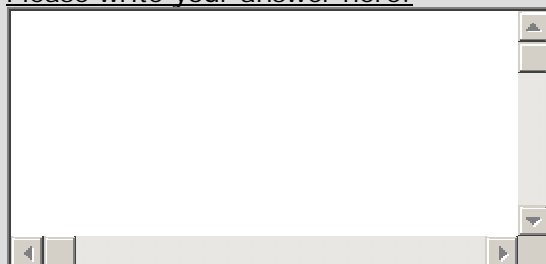


Section 09: Review and revision of the Agreement

To provide for the review and, if necessary, revision of the Agreement from time to time

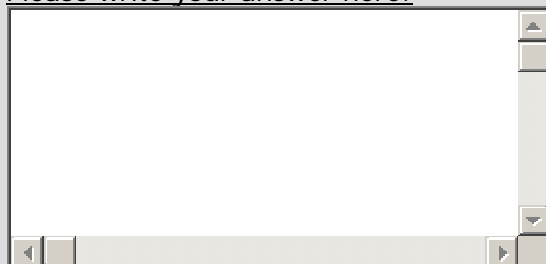
9.1: 9.1. Where should the Agreement head in the future? What revisions to the Agreement are needed, and why? Comments.

Please write your answer here:



9.2: 9.2. Any other comments about Section 9?

Please write your answer here:



Section 10: Raising public awareness

To raise general public awareness of the special biodiversity and heritage values of the LEBA Area

10.1.1: 10.1.1. What activities have been undertaken to raise the general public's awareness? Please provide examples of the Parties' activities relative to activities undertaken by others to raise awareness.

Please write your answer here:



10.1.2: 10.1.2. Is this a reasonable effort on the part of the LEBA and its Parties?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know

☐ N/A

10.1.2a: If yes, why?

Please write your answer here:

10.1.2b: If no, why?

Please write your answer here:

10.2.1: 10.2.1. How aware do you think the various kinds of stakeholders have become of the special biodiversity and heritage values of the LEBA area, as the result of the activities above?

Please write your answer here:

10.2.2: 10.2.2. Have you personally become more aware of the values of the LEBA as a result of the Parties' activities?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

10.2.2a: If yes, please give examples of the values about which you have become more aware.

Please write your answer here:


10.2.3: 10.2.3. Are you aware of the LEBA area's biodiversity and heritage values through other activities?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

10.2.3a: If yes, please give examples of these activities.

Please write your answer here:



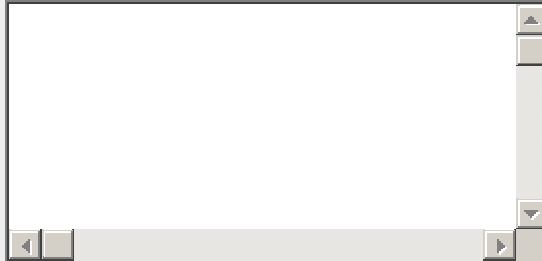
10.3: 10.3. Does the biennial LEB conference make a significant contribution to general public awareness of the LEB and its special values?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

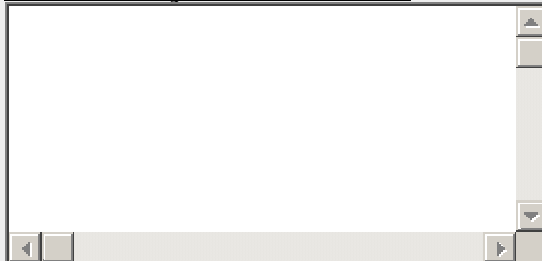
10.3a: If yes, please provide examples of how it improves public awareness.

Please write your answer here:



10.3b: If no, please give examples of missed opportunities to improve public awareness.

Please write your answer here:



10.4.1: 10.4.1. What activities are undertaken by groups not part of the LEBA to raise general public awareness of the special biodiversity and heritage values of the LEBA Area?

Please write your answer here:

10.4.2: 10.4.2. Which of these activities have impacted you in particular? Comments:

Please write your answer here:

10.5: 10.5. What other cost-effective activities could be undertaken (and by whom) to raise general public awareness of the special biodiversity and heritage values of the LEBA Area?

Please write your answer here:

10.6:

10.6. Please provide your GAS score for: "How aware have the various kinds of stakeholders become aware of the special biodiversity and heritage values of the LEBA Area, as the result of the activities above?"

The Agreement, as implemented ...

Most unfavourable outcome	1	... has implemented few activities to raise the awareness of the biodiversity and heritage values of the LEBA Area amongst the public [see below for definition of 'public'], or those activities that have been implemented have been ineffective or even counter-productive. As the result the awareness amongst the public remains unchanged and, as such, biodiversity and heritage values are threatened.
Less than expected success	2	... has implemented activities to raise the awareness of the biodiversity and heritage values of the LEBA Area amongst the public, but those activities that have been implemented have been only moderately effective. As the result the awareness amongst this group has not improved very much.
Expected level of success	3	... has implemented activities to raise the awareness of the biodiversity and heritage values of the LEBA Area amongst the public, and as the result public awareness is increasing.

More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	... has implemented a comprehensive suite of effective activities to raise the awareness of the biodiversity and heritage values of the LEBA Area amongst the public. The activities are continually being improved and augmented. As the result the public is now very aware of the biodiversity and heritage values of the LEBA Area

Enter your GAS framework score above

Please write your answer here:

10.7.1: 10.7. To what extent have the consultation processes and mechanisms for raising public awareness under the Agreement been effective?

Please write your answer here:

10.8:

10.8. Please provide your GAS score: "To what extent have the consultation processes and mechanisms for raising public awareness under the Agreement been effective?" [This relates to awareness raising of both the operation of the LEBA, and also about the water and related natural resources of the Lake Eyre Basin]

Most unfavourable outcome	1	Very few consultation processes and mechanisms for raising public awareness under the Agreement have been put in place
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	A range of consultation processes and mechanisms for raising public awareness under the Agreement has been put in place, and they have been reasonably effective
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	A comprehensive suite of consultation processes and mechanisms for raising public awareness under the Agreement has been put in place, and they are being continually improved as appropriate. They are proving to be very effective and there is high public awareness of the LEBA, the work happening from it, and the water and related natural resources of the Lake Eyre Basin

Enter your GAS framework score above

Please write your answer here:

10.9: 10.9. Any other comments about Section 10?

Please write your answer here:

Section 11: Operational policy and governance

Analysis of the operational policy and governance frameworks for implementing the Agreement and related policies and strategies.

11.1: 11.1. To what extent has the framework for governance been effective for implementing the Agreement and related policies and strategies?

Please write your answer here:

11.2: 11.2. To what extent has the framework for operational policy been effective for implementing the Agreement and related policies and strategies?

Please write your answer here:

11.3: 11.3. Are the current institutional arrangements the best? Is there a better framework for delivery?

Please write your answer here:

11.4:

11.4 Please provide your GAS score for: "To what extent has the framework for governance been effective for implementing the LEBA and related policies and strategies? To what extent has the framework for operational policy been effective for implementing the LEBA and related policies and strategies?"

Most unfavourable outcome

1

The operational policy and governance frameworks have inhibited the LEBA and related policies and strategies from being implemented

Less than expected success	2	The operational policy and governance frameworks have been only partly effective at enabling the LEBA and related policies and strategies to be implemented
Expected level of success	3	The operational policy and governance frameworks have been designed to enable the LEBA and related policies and strategies to be implemented, although the actual implementation of the frameworks has not yet given full effect to them.
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	The operational policy and governance frameworks have not only enabled the LEBA and related policies and strategies to be implemented, but have meant they have been done so with full effect

Enter your GAS framework score above

Please write your answer here:

11.5: 11.5. Any other comments for Section 11?

Please write your answer here:

Section 12: Sustainable management of natural resources

Analysis of whether the Agreement has provided for the sustainable management of water and related natural resource in the LEB area

12.1: 12.1. To what extent is the Agreement achieving the sustainable management of water and related natural resources in the LEB area?

Please write your answer here:

12.2: 12.2. Have improvements in the condition of water and related natural resources of the LEBA area occurred as the direct result of activities undertaken due to the operation of the LEBA?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

12.3: 12.3. Has there been prevention / reduction of damage to the condition of water and related natural resources of the LEBA area, as the direct result of activities undertaken due to the operation

of the LEBA?

Please choose **only one** of the following:

- ☐ Yes
- ☐ No
- ☐ Don't Know
- ☐ N/A

12.4:

12.4. Please provide your GAS score for: "To what extent is the Agreement achieving the sustainable management of water and related natural resources in the LEB area?"

Overall, taking all the decision making and activities implemented under the LEBA into account, the Agreement ...

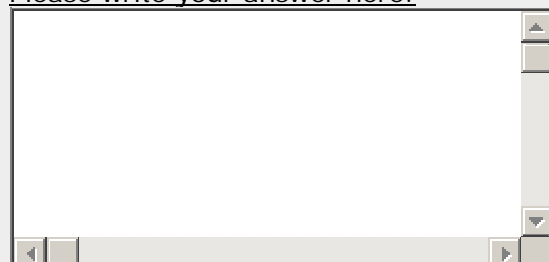
Most unfavourable outcome	1	... is failing to achieve sustainable management of water and related natural resources in the LEBA area, because adverse cross-border impacts are still occurring
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	... is making good progress at achieving sustainable management of water and related natural resources in the LEBA area by significantly reducing or avoiding adverse cross-border impacts
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	... is achieving sustainable management of water and related natural resources in the LEBA area through eliminating and preventing adverse cross-border impacts, and this is being reflected in significantly improved condition of the water and related natural resources in the LEBA area

Enter your GAS framework score above

Please write your answer here:

12.5: 12.5. Any other comments for Section 12?

Please write your answer here:



Section 13: Integration with other bodies in the LEB

Analysis of the operation of the LEBA in the context of the bodies operating in the LEB region. Note – some key bodies have come into formal operation since the signing of the LEBA.

13.1: 13.1. To what degree are LEBA activities (e.g., via the Ministerial Forum, Community Advisory Committee and the Scientific Advisory Panel duplicated by activities of other Ministerial Forums, the Great Artesian Basin Consultative Committee and Regional Bodies? Please provide examples to

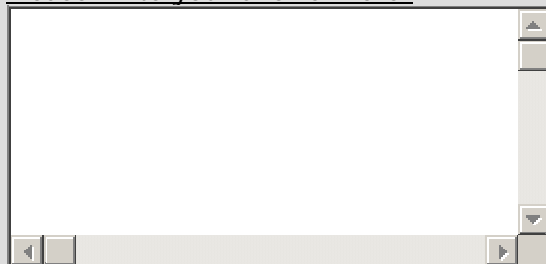
illustrate.

Please write your answer here:



13.2: 13.2. Is it possible that an Advisory Committee consisting of Regional Body nominees could provide advice on the Lake Eyre Basin, Great Artesian Basin and related matters in a single, integrated Ministerial Forum? Comments

Please write your answer here:



Section 14: The Purpose of the LEBA

To provide for the development or adoption, and implementation of Policies and Strategies concerning water and related natural resources in the LEBA Area to avoid or eliminate so far as reasonably practicable adverse cross-border impacts

14.1:

14.1. Please enter your GAS score for: "To what extent have "adverse crossborder impacts" (concerning water and related natural resources) been avoided or eliminated (in the LEBA Area) by the operation of the LEBA?"

Overall, considering all aspects of the LEBA and its implementation.....

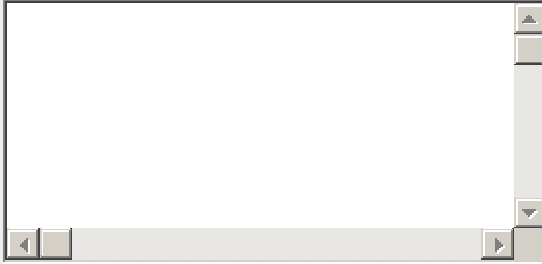
Most unfavourable outcome	1	... the operation of the LEBA has made little progress in avoiding or eliminating adverse cross-border impacts concerning water and related natural resources in the LEBA area, and these are still occurring to the detriment of the health of the water and related natural resources of the LEBA area
Less than expected success	2	Intermediate between 1 & 3
Expected level of success	3	... the operation of the LEBA has made good progress in avoiding or eliminating adverse cross-border impacts concerning water and related natural resources in the LEBA area
More than expected level of success	4	Intermediate between 3 & 5
Most favourable	5	... the operation of the LEBA is completely succeeding in avoiding or eliminating adverse cross-border impacts concerning water and related natural resources in the LEBA area; more than that it is positively assisting with improved management of water and related natural resources in the Lake Eyre Basin generally

Enter your GAS
framework score above

Please write your answer here:

14.2: 14.2. What would the situation likely have been if the Agreement was not in place?

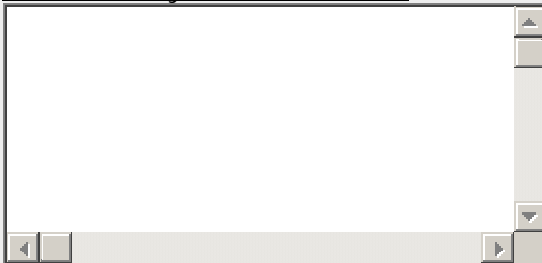
Please write your answer here:



14.3: 14.3. Finally, what other comments do you have about the overall effectiveness of the LEBA and how it has been implemented?

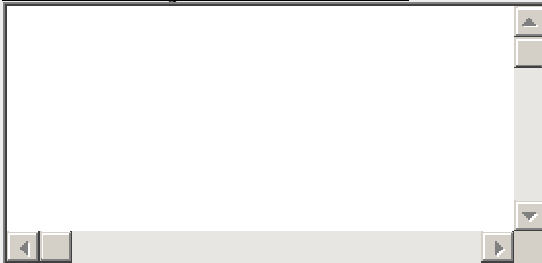
14.3.1: 14.3.1. Its strengths; what's good about it?

Please write your answer here:



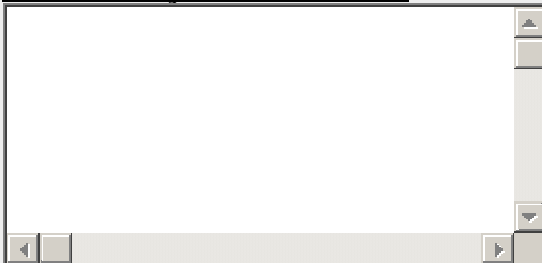
14.3.2: 14.3.2. Its weaknesses?

Please write your answer here:



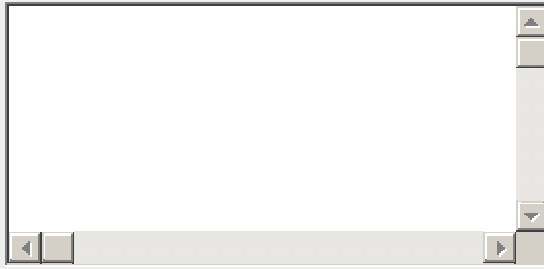
14.3.3: 14.3.3. Opportunities arising from the LEBA?

Please write your answer here:



14.3.4: 14.3.4. Threats to the LEBA?

Please write your answer here:




14.3.5: 14.3.5. Other comments on the LEBA?

Please write your answer here:



14.4: 14.4. Any comments about how this Review is being conducted?

Please write your answer here:



Submit Your Survey

Thank you for completing this survey. Please fax your completed survey to: .

Appendix B

Consultation Participants

Table 7-1 Consultation participant details, as at 19/02/07

Name	Organisation	Participants that were consulted – workshop, teleconference or questionnaire
Richard Kingsford	University of NSW	✓
Maree Morton	CAC, CCCC, DCQ and SAALNRMB	✓
David Cobon	DPI&F Qld	✓
Peter Jolly	NT Department of Natural Resources, Environment and the Arts	✓
Tom Jenkin	Aboriginal Legal Rights Movement Native Title Unit	✓
Adrian Stanley		
David Brook	pastoralist	✓
Trevor Whitelaw	Santos Ltd	✓
Claus Schonfeldt	Department Water, Land and Biodiversity Conservation	✓
Rhondda Alexander	Channel landcare Group/Georgina Diamantina Catchment	✓
Lynn Brake	Great Artesian Basin Coordinating Committee	✓
Angus Emmott	LEB Community Advisory Committee	✓
Peter Douglas	landholder	✓
Stuart Bunn	Griffith University	✓
Jan McIntyre	Georgina Diamantina Catchment Committee	✓
Brenda Shields	Irrawanyere Aboriginal Corporation	✓
Chris Reed	South Australian Arid Lands NRM Board	✓
Amy George	DWLBC	✓
Greg Campbell	S. Kidman & Co Ltd	✓
Geoffrey Lawrence	The University of Queensland	✓
David Thompson	Indigenous Program Facilitator for DCQ	✓
Isabel Tarrago	Cultural Heritage Coordination Unit	✓
Arthur Ah Chee	Witjira National Park Board of Management	✓
Sharon Oldfield	LEB CAC	✓
Ben Hyde	Australian Government Facilitator - Biodiversity	✓
Vol Norris	CAC facilitator	✓
Joe Pappalardo	RSD NRW	✓
Ed Donohue	RM - Water Services	✓
Andrew Johnson	Department Water, Land and Biodiversity Conservation	✓

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Consultation Participants

Name	Organisation	Participants that were consulted – workshop, teleconference or questionnaire
Nigel Kelly	RM - Water Services	✓
Brad Lewis	Ag NRM Facilitator - Rivercare	✓
Gillian Paxton	NRW - Water Allocation	✓
Ian Gordon	RM - Landscape and Community Services	✓
Peter Clem	NRW	✓
Ben Lynes	DPI&F	✓
Alun Hoggett	DCQ	✓
Lachlan Rich	Private stakeholder	✓
Sue Gardiner	DCQ	✓
Damian Arthur	NRW	✓
Lew Markey	DPI&F	✓
Ania Karzek	Senior Policy Officer, SADWLBC; SA LEB contact officer	✓
Brendan Lay	Senior Scientist, Pastoral Land Management Group, SA	✓
Valerie Fuschtei	Pt Augusta; member Witjira National Park Board of Management	✓
Betty Pearce	Arunta tribe; attended LEB meetings in the local [Alice Springs] area and is an applicant for on the new Indigenous positions on the CAC	✓
Tina Baine	Coordinator NRM, CLC	✓
Maree Meredith	Land Management coordinator, CLC (DEH-funded); attended Mt Searle Aboriginal Forum; LEBA contact person within CLC	✓
Neil Phillips	Regional Manager, integrated NRM – Southern Territory, NT NRETA	✓
John Childs		✓
Peter Armstrong	CLMA on-ground works	✓
Peter McDowall	CLMA – weed management, Sandoval Region	✓
Michelle Rodrigo	NT NRM Board – Regional NRM Facilitator, Alice Springs region	✓
Brenton Arnold	SAAL board	✓
Bill Davies	DWLBC	✓
Dr Carolyn Ireland	Pastoral Board	✓
John Gavin	Manager, SAALNRM Group	✓
David Leek	Manager, Pastoral Program	✓
Bill McIntosh	SAAL	✓
Michael Malavazos	PIRSA	✓
Geoff Mills	SAAL	✓

Appendix B

Consultation Participants

Name	Organisation	Participants that were consulted – workshop, teleconference or questionnaire
Dr Katherine Moseby	SAAL	✓
Chris Reed	SAAL and CAC	✓
John Watkins	DEH	✓

Appendix C

Documents reviewed

C.2 Reviewed documents

Table 7-2 contains a list of the documents provided by the Steering Group for the review. They are provided in the format of their electronic file name.

Table 7-2 Reviewed documents

Aboriginal Forums	Govt meeting 2002
2004 Aborig Forum - further write up.doc	Copy of teleconf 4April.doc
LEB Aborig Forum 2006-draft report-061114.pdf	Teleconf 13Aug02.doc
LEB Aboriginal Forum-Initial SummaryReport.doc	Teleconf minutes 13Aug02.doc
CAC meeting minutes	Govt meeting 2003
LEBCAC meeting #1-minutes.doc	Minutes10Jun03-BC.doc
LEBCAC meeting #2-minutes.doc	Minutes10Jun03.doc
LEBCAC meeting #3-minutes.doc	Outcomes12Dec03.doc
LEBCAC meeting #4-minutes.doc	Outcomes15Aug03.doc
LEBCAC meeting #5-minutes.doc	Outcomes15Sep03.doc
LEBCAC meeting #6-minutes.doc	Teleconf 2Apr03.doc
LEBCAC meeting #7-minutes.doc	Teleconf 12Dec03.doc
LEBCAC meeting #8-minutes.doc	Teleconf 15Aug03.doc
LEBCAC meeting #9-minutes.doc	Teleconf 15Sep03.doc
LEBCAC meeting #10-minutes.doc	Teleconf 28Feb.doc
LEBCAC meeting #11A-xtrta phone link-minutes.doc	
LEBCAC meeting #11-draft minutes.doc	Govt meeting 2004
	Agenda_12May04.doc
CAC meeting outcome summaries	Meeting 15 Nov agenda.doc
LEBCAC meeting #1-outcome summary for members.doc	Outcomes_12May04.doc
LEBCAC meeting #2-outcome summary for members.doc	Outcomes1Apr04.doc
LEBCAC meeting #3-outcome summary for members.doc	Outcomes15Apr04.doc
LEBCAC meeting #4-action list only.doc	Outcomes26Feb04.doc
LEBCAC meeting #7-outcome summary.doc	Teleconf 1Apr04.doc
LEBCAC meeting #8-outcome summary.doc	Teleconf 7 Oct 2004.doc
LEBCAC meeting #10-outcome summary.doc	Teleconf 15 Apr 04.doc
LEBCAC meeting #11-outcome summary.doc	Teleconf 26Feb04.doc
LEBCAC5 & CAC-SAP2-outcome summary for members.doc	Teleconf 28 Jul 04.doc
LEBCAC6 & CAC-SAP3-outcome summary.doc	
	Govt meeting 2005
CAC Newsletters & media releases & calls for issues	Agenda 05.doc
Article for Across the Outback-06.doc	HLG mtg 25 July agenda.doc
Article for Across the Outback Dec03.doc	HLG mtg Feb 05 - rhondda's brief.doc
Article for Desert Uplands News March 06.doc	HLG mtg Feb 05.doc
Article for Desert Uplands Newsletter Feb04-1 page.doc	HLG Outcomes 5 Feb 05.doc
Article for DPI Central West Newsletter-LEB intro Jan04.doc	Outcomes 7 nov 05 final.doc

Appendix C

Documents reviewed

Article for Lake Eyre Basin Newsletter Dec03.doc	Outcomes 7 nov 05.doc
Article for Range Mgt Newsletter-06.doc	Outcomes 25 July05.doc
Article for Rangeland Society Newsletter Feb04.doc	Strategies Attachment A.doc
Article in NRM NT Newsletter Mar04.doc	
CAC Meeting7-call for agenda items-May05.doc	Govt meeting 2006
CAC Meeting 6-call for agenda items-Jan05.doc	1 August 2006.doc
CAC Meeting 10-call for agenda items-Mar06.doc	Agenda 28 June 2006.doc
LEB CAC-Media release-1Feb05.doc	Outcomes 20 September 2006.doc
LEB CAC-Media release-11Oct05-final.doc	Outcomes 28 june 2006.doc
LEB CAC-Media release-17Jun05-final.doc	
News from LEB CAC no 1 April 2004.pdf	SAP meeting
News from LEB CAC no 2 July 2004.pdf	SAP1 Minutes.doc
News from LEB CAC no 3 May 2005.pdf	SAP2 Minutes.doc
News from LEB CAC no 4 Dec 2005.pdf	SAP3 Minutes.doc
	SAP4 Minutes.doc
CAC Recom & Reports to Ministers	SAP5 Minutes.doc
LEBCAC meeting #1-MF cover letter.doc	SAP6 Minutes.doc
LEBCAC meeting #1-MF letter attachment.doc	Minutes-SAP7.doc
LEBCAC meeting #2-MF cover letter-Aust Min Kemp.doc	MINUTES.DOC
LEBCAC meeting #2-MF letter attachment.doc	New sap 12 minutes 30-may.doc
LEBCAC meeting #3-MF cover letter-Aust Min Kemp.doc	Outcomes-SAP8.doc
LEBCAC meeting #3-MF letter attachment.doc	Outcomes-SAP9.doc
LEBCAC meeting #4-MF cover letter-Aust Min Campbell.doc	Outcomes-SAP10.doc
LEBCAC meeting #4-MF letter attachment 1.doc	SAP 14 Minutes.doc
LEBCAC meeting #4-MF letter attachment 2-extract-Aborig issu.doc	SAP 15 Minutes new.doc
LEBCAC meeting #5-MF cover letter-Aust Min Campbell.doc	SAP Outcomes draft 2.doc
LEBCAC meeting #5-MF letter attachment 1-Summary of Advice.doc	
LEBCAC meeting #5-MF letter attachment 2-Aboriginal Forum re.doc	LEB Conferences
LEBCAC meeting #5-MF letter attachment 3-Social Econ Profile.doc	2002 Proceedings.doc
LEBCAC meeting #6-MF cover letter-Aust Min Campbell.doc	Copy of Draft 1 LEB Proceedings 061106.pdf
LEBCAC meeting #6-MF letter attachment 1-Summary of Advice.doc	LEB_Final Report.pdf
LEBCAC meeting #10-MF cover letter-Aus Min Campbell-060428.doc	
LEBCAC meeting #10-MF letter attach1 re Wild Rivers Code.doc	Joint CAC-SAP material
MF Mtng 3-CAC report.doc	LEB CAC-SAP meeting #1-draft minutes-5Feb04.doc
MF Mtng 3-Indig Eng't Initiatives & Principles.doc	LEB CAC-SAP meeting #2-draft minutes-17Nov04.doc
MF Mtng 4-CAC Report.doc	LEB CAC-SAP meeting #3-Draft Minutes.doc
MF Mtng 4-CAC Summary of LEBIGA achievements.doc	LEB CAC-SAP meeting #4-Draft Minutes.doc

Appendix C

Documents reviewed

MF Mtng 5-CAC report.doc	
MF Mtng 5-Summary of 06 Aborig Forum.doc	Projects & Products
Submission-GD ROP-CAC ltr Campbell.doc	Hydro Atlas Basin Brochure_final.pdf
Submission-GD ROP-CAC submission.doc	2005-07 LAKE EYRE BASIN RIVERS ASSESSMENT.doc
Submission-GD WRP-CAC ltr Kemp.doc	AssessmentReportJanuary05.pdf
Submission-GD WRP-CAC ltr Robertson.doc	LEB RA 2005-07_Attachments A,B&C).doc
Submission-GD WRP-CAC submission.doc	LEB RA Brochure.pdf
Submission-LEB Heritage Tourism ltr Campbell.doc	
Submission-NHT review panel-CAC ltr.doc	Prior to Agreement – consultation
	Copy of CCREPORT.DOC
CAC Reports	Copy of COMMUN~1.DOC
Report-1Dec06-All CAC actions sorted by key word.rtf	Copy of mdugdalereport_V2.doc
Report-1Dec06-All CAC recs sortd by key word.rtf	Copy of NOTESF~1.DOC
Report-CAC action headings Nov03-Apr06 sorted by key word.doc	Copy of sommerreport.rtf
Report-CAC recommendations Nov03-Apr06.doc	1999 Community Brochure
CAC Work plans & procedures	Policies & Strategies
CAC Work Plan #1-with progress as at May04.doc	24 July Lake Eyre Basin activities snapshot.doc
CAC Work Procedures#2.doc	A - Final brochure.pdf
LEB CAC Media Protocol.doc	Background info.doc
	Comments on policies from SAP1.doc
LEB operating protocols	Draft Policies - Submission Summary.doc
A - Ministerial Forum Operating Protocol.doc	LEB AUDIT APPENDIX.doc
B - Secretariat arrangements.doc	LEB Audit summary.doc
D - CAC Operating Protocol.doc	LEB wshop outcomes ver 3.doc
E - SAP Operating Protocol.doc	LEBMF_Strategy Implementation_V6_No_Photos.doc
	POLICIES - Final 2002.doc
Ministerial Forum meetings	
Mtg 1 Decision Register.doc	Other
Mtg 2 Decision Register.doc	F - Budget v3.doc
Mtg 3 Decision Register.doc	Item 5 LEBMF Budget proposed.doc
Mtg 4 Decision Register.doc	LEBMF Budget.doc
Mtg 1_LEBMF Communique.doc	MF expenditure.xls
Mtg 2_LEBMF Communique.doc	Trip costs per destination.doc
Mtg 3_LEBMF Communique.doc	
Mtg 4_LEBMF Communique.doc	LEB-GAB-NRM workshop April 06
	Forum ouputs v.3 4 May 06.doc
LEB Social Econ Study	Implementation plan draft May 06-Mark 060518.doc
02-LEB Soc & Ec Study-NHT NCC-application-18Feb05.doc	
Lake Eyre Basin flyerFINAL.pdf	

Appendix D

Strategies and Policies

D.3 Strategies and policies

The following section contains information on the current Policies and Strategies (from the Lake Eyre Basin Ministerial Forum website <http://www.lebmf.gov.au/forum/policies.html>). Information regarding the current status of the Policies and Strategies is provided, based on the 'Lake Eyre Basin Agreement Strategy Implementation report' (Draft Ver. 6. – 25 July 2006).

The section also outlines legislation, policies, programs and projects adopted by Parties and of direct relevance to the LEB strategies based on the findings of the 'Activities in the Lake Eyre Basin: A quick overview (audit)', April 2006.

D.3.1 Policies

The Lake Eyre Basin Intergovernmental Agreement provides for the Ministerial Forum to develop policies and strategies for the sustainable cross-border management of water and related natural resources within the Agreement Area.

Since its inception in 2001, the LEB Ministerial Forum has adopted six policies under the Agreement, providing for a whole-of-basin approach to cross-border management of water and related natural resources. The aim of these policies is to ensure complementarity between the relevant legislation, policies, and planning processes across the Basin.

- 1) **River Flows Policy:** Flow regimes of river systems within the Agreement Area will be managed to protect and maintain the ecological integrity and natural function of in-stream and floodplain ecosystems, and the viability of economic, social, cultural and other activities which do not threaten these environmental values
- 2) **Water Quality Policy:** Water quality in the river systems within the Agreement Area will be managed to protect and maintain the ecological integrity and natural function of in-stream and floodplain ecosystems and the viability of economic, social, cultural and other activities which do not threaten these environmental values
- 3) **Water And Related Natural Resources Policy:** Water and related natural resources associated with the river systems within the Agreement Area will be managed to protect and maintain the ecological integrity and natural function of in-stream and floodplain ecosystems and the viability of economic, social, cultural and other activities which do not threaten these environmental values
- 4) **Existing Entitlements and Water Resource Development Policy:** Water resource planning, allocation and management arrangements, including the management of water entitlements, will be compatible with the Lake Eyre Basin Agreement. Efficient use of water will be a fundamental principle of water entitlements and utilisation. Water resource development proposals will be assessed to determine their potential impact on river flows and water quality, and compatibility with the Agreement and relevant water resource plans. These assessments will be based on the best available scientific information and local knowledge (including information from other regions in Australia and overseas).
- 5) **Research and Monitoring Policy:** Management of water and related natural resources associated with the river systems in the Agreement Area will be guided by the best available scientific information and local knowledge, and by the results of ongoing monitoring and periodic assessment of the condition of these river systems. Targeted research may also be undertaken to address identified knowledge gaps.
- 6) **Whole-of-Basin Approach Policy:** Water and related natural resources in the Lake Eyre Basin Agreement Area will be managed through a whole-of-Basin approach so as to achieve complementary outcomes, through the implementation of State/Territory legislation and the plans and associated investment strategies of relevant regional bodies in Queensland, South Australia and the Northern Territory.

Appendix D

Strategies and Policies

D.3.2 Strategies

Implementing the policies of the LEB Ministerial Forum requires coordination and information exchange between the various jurisdictions, regional NRM bodies and other stakeholders in the Basin.

The LEB jurisdictions, the [Community Advisory Committee](#), the [Scientific Advisory Panel](#) and key community groups in the Basin are collaborating to develop and implement strategies under the LEB Agreement that create synergies across the Basin while avoiding duplication with existing initiatives.

Issues addressed by current priority strategies under the Agreement include:

- Coordination and consistency of approach to aquatic and terrestrial weed and feral animal management activities.
- Assessment of the need for convergence and/or alignment of legislation, policy and planning for water resource management in different jurisdictions.
- Best practice in road and other engineering works that have potential to significantly affect the distribution and timing of river flows.
- Potential for coordination of water quality monitoring and data management frameworks across jurisdictions to enable data collation, analysis, comparison and reporting at regional, catchment and whole-of-basin scales.
- Promotion of a Basin-wide approach to NRM decision-making, including the comprehensive assessment of water resource development proposals for their appropriateness for Lake Eyre Basin river systems and catchments.
- Communication needs, including:
 - integration of the LEB Rivers Assessment outcomes into water and related natural resource management decision-making
 - continued engagement of non-Indigenous and Indigenous stakeholders to ensure that local knowledge is recognised and utilised in assessment and management of the Basin
 - annual reporting to the Basin community on progress in implementing the Agreement
 - improved access for community and other stakeholders to information on the economic, social, environmental and heritage values of the Basin.

D.3.3 LEB Agreement Strategy Status

The following tables are taken from the Lake Eyre Basin Agreement Strategy Implementation report ((Draft Ver. 6. – 25 July 2006).

Table 7-3 Strategy status (2006)

Strategy	Establish a process / mechanism for implementation and ongoing monitoring of the strategy implementation.			
Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources

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Strategies and Policies

Strategy	Establish a process / mechanism for implementation and ongoing monitoring of the strategy implementation.			
Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
1. Undertake an audit/ review of on ground actions in each jurisdiction that supports Strategy Implementation	High	AG	Consultant engaged and audit completed. Completed: July 2006	\$10K LEBMF funding
2. Nominate persons to participate in Strategy Implementation working groups	High	AG per LEB Secretariat	Nominations endorsed by LEB Government Officers Working Group. Refer Attachment B Due: July 2006	Government in-kind
3. Establish Strategy Implementation working groups and develop their terms of engagement.	High	Lead agency / contact for strategy grouping	Strategy Implementation working groups formed and ToE's developed. Due: Sep 2006	Government in-kind
4. Establish a Strategy Implementation monitoring and review and reporting program	High	AG per LEB Secretariat	Monitoring program in place and report prepared for the 2007 LEBMF Due: Sep 2006	Government in-kind
5. Complete a Strategy Implementation Schedule which includes arrangements for CAC and SAP engagement.	High	Lead agency / contact for strategy grouping	Strategy Implementation Schedule completed Due: August 2006	Government in-kind

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Strategies and Policies

1. Scope the need for convergence and/or alignment of legislation, policy and planning for water resource management in different jurisdictions.

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
1. Scan applicable water legislation, policy and planning instruments for similarities / disparities and identify significant gaps.	High	QLD NRMW	Scan completed; and gaps documented. Due:	Working group 1
2. Evaluate gaps against the objectives of the LEB Agreement.	High	QLD NRMW	Evaluation completed Due:	Working group 1
3. Provide recommendations on convergence and or alignment to jurisdictions.	High	QLD NRMW	Recommendations reported to LEBMF / jurisdictions. Due:	Working group 1

Strategy 2. Encourage best practice in road and other engineering works that have potential to significantly affect the distribution and timing of river flows

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
Map significant existing and planned engineering works in each jurisdiction	Medium	Transport SA / PIRSA	Map produced	Working group 2
Define best practice and extent to which it should be required/regulated	Medium	SA DWLBC	Best practice principles agreed	Working group 2
Determine best method of distributing information / education program	Medium	SA DWLBC	Education program agreed and implemented	Working group 2
Monitoring / compliance?	Low	Transport SA / PIRSA	Compliance program in place	Working group 2

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Strategies and Policies

Strategy 3. Coordinate water quality monitoring and data management frameworks across jurisdictions to enable data collation, analysis, comparison and reporting at regional, catchment and whole-of-basin scales.

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
1. Map existing water quality monitoring networks, including site location, parameters measured, frequency and methodology.	Medium	QLD NRMW	Mapping completed and documented. Due:	Working group 3
2. Assess the adequacy of the networks against statutory requirements and the objectives of the LEB Agreement.	Medium	QLD NRMW	Assessment completed and documented. Due:	Working group 3
3. Assess compatibility of data management systems and formalise data share agreements between jurisdictions.	Medium	QLD NRMW	Assessment completed and data share agreements formalised. Due:	Working group 3
4. Map current statutory reporting requirements, schedules and scale; determine gaps and recommend changes to jurisdictions.	Medium	QLD NRMW	Mapping completed and recommendations reported to LEBMF / jurisdictions. Due:	Working group 3

Strategy 4. Promote the need for natural resource management decisions to take account of potential impact on other parts of the system

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
Scope additional information requirements with regional NRM groups and stakeholders, taking into account LEB Socio-economic project progress and findings	Medium	AG DEH	Requirement scoped	Working Group 4.
Implement actions that address requirements in consultation with AG NRM Div. and LEB signatory jurisdictions	Medium	AG DEH	Requirements addressed, noting progress of LEB Socio-economic project.	Working Group 4.

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Strategies and Policies

Strategy 5. Identify opportunities for improved coordination and consistency of approach to aquatic and terrestrial weed and feral animal management activities

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
1. Map the known distribution of Weeds of National Significance (WONS) species and the known distribution of feral animals (ref: State Pest Management Strategies).	High	NT DNRE&A	Distribution map completed. Due:	Working Group 5
2. Map current strategic control programs; their funding source; duration; and evaluate their effectiveness.	Medium	NT DNRE&A	Control programs map completed. Due:	Working Group 5
3. Determine gaps in current programs and identify target areas, pathways for coordination and potential funding sources.	Medium	NT DNRE&A	Programs evaluated, future direction determined and report completed. Due:	Working Group 5
4. Provide recommendations on integration and or alignment of programs/activities	Medium	NT DNRE&A	Paper recommending target sites endorsed by national WONS Committee and State pest management authorities. Due:	Working Group 5

Strategy 6. Develop principles to guide the comprehensive assessment of water resource development proposals in Agreement area, in particular their appropriateness for Lake Eyre Basin river systems and catchments.

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
1. Scan water and other development legislation, policy and planning across jurisdictions and record "principles" included in their objectives / outcomes.	High	QLD NRMW	Scan completed and principles recorded. Due:	Working group 6
2. Evaluate the "principles" against the objectives of the LEB Agreement, identify gaps and document the final suite of principles.	High	QLD NRMW	Evaluation completed and principles reported to LEBMF / jurisdictions. Due:	Working group 6

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Strategies and Policies

Strategy 7. Promote the integration of the LEB Rivers Assessment outcomes into water and related natural resource management decision-making

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
1. Determine the most effective pathways/instruments to promote the integration of the outcomes of the LEB Rivers Assessment.	Low	QLD NRMW	Pathways / Instruments determined and documented. Due:	Working group 7
2. Develop a schedule amongst jurisdictions and other organisations to promote integration.	Low	QLD NRMW	Promotion schedule completed and implemented. Due:	Working group 7

Strategy 8. Engaging non-Indigenous and Indigenous stakeholders to ensure that local knowledge is recognised and utilised in assessment and management of the Basin

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
Compile an Indigenous Outreach Strategy following 2006 Aboriginal Forum	Medium	AG DEH	Strategy completed	Working Group 8

Strategy 9. The Communication strategy will include annual reporting to the Basin community through the Ministerial Forum on progress on implementing policies, strategies and other activities under the Agreement

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
Identify current reporting arrangements	medium	SA DWLBC	Current reporting arrangements mapped	Working group 9
Identify gaps / shortfalls	medium	SA DWLBC	Gaps identified	Working group 9
Include requirement to report annually in communication	Medium	SA DWLBC	Annual report included in communication strategy	Working group 10

Appendix D

Strategies and Policies

Strategy 9. The Communication strategy will include annual reporting to the Basin community through the Ministerial Forum on progress on implementing policies, strategies and other activities under the Agreement

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
strategy				

Strategy 10. Develop and implement a communication strategy to raise public awareness of the LEB Agreement and the work of the ministerial Forum, the CAC and the SAP

Strategy Actions	Priority	Lead	Milestones / Instrument	Resources
Identify existing communication tools, messages, methods etc	medium	SA DWLBC	Existing communications including newsletters, email networks etc, mapped	Working group 10
Identify gaps	medium	SA DWLBC	Gaps identified	Working group 10
Identify key stakeholders and key messages	medium	SA DWLBC	List of key stakeholders, agreement on key messages to be delivered through communication (ie, report on activities or policy/management messages, etc)	Working group 10
Write communication strategy	medium	SA DWLBC	Written communication strategy developed	Working group 10
Approval of communication strategy by CAC, SAP and MF	medium	SA DWLBC	Strategy approved	Working group 10
Implementation of communication strategy	High	DEH	Agreed messages are being communicated to nominated stakeholders in appropriate manner.	To be determined

Strategy 11. Scope the need for consistent and complementary data management frameworks across jurisdictions to enable data collation, analysis, comparison and reporting at regional, catchment and whole-of-basin scales

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
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Appendix D

Strategies and Policies

Need for consistency and complementarity scoped	Medium	AG DEH	Report produced outlining perceived need / use of such complementary frameworks, current programs and projects that are addressing the perceived need and cost/benefits of implementing anything further, noting the overlaps and progress with the LEB Rivers Assessment sub-projects re data management.	Working group 11
-------------------------------------------------	--------	--------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------

Strategy 12. Improving community and other stakeholder access to data and information on the economic, social, environmental and heritage values of the Basin, including Internet based systems

Strategy Actions	Priority	Lead Agency	Milestones / Instrument	Resources
Map current available access	Medium	AG DEH	Mapping completed	Working Group 12
Consult stakeholders re data and information needs	Medium	AG DEH	Consultation undertaken	Working Group 12
Recommend actions to address requirements	Medium	AG DEH	Recommendations compiled	Working Group 12
Cost-effective, targeted actions implemented	Medium	AG DEH	Actions implemented	Working Group 12

D.3.4 Parties' Progress towards LEB Agreement strategies

This section contains excerpts from the findings of the 'Activities in the Lake Eyre Basin: A quick overview (audit)', April 2006. It outlines legislation, policies, programs and projects adopted by Parties and of direct relevance to the LEB strategies.

Water

Water Legislation

This Audit found that water resource legislation, policies and planning systems for hydrographic, surface and ground water allocation for Queensland, SA & NT contain similar elements and intents. SA & Queensland have developed extensive and detailed legislation including a hierarchy of plans dealing with both regional and resource specific issues which outline parameters for addressing water flows and quality in the LEB area.

The NT has a less formal, working policy approach but in 2005 introduced a Draft Alice Springs Water Resource Strategy and Water Allocation Planning framework for the Arid Zone (southern two thirds of NT).

Water resource legislation in SA, NT and Qld of relevance to the LEB is not completely aligned nor is it ever likely to be owing to the complexity of jurisdictional management frameworks and requirements.

Appendix D

Strategies and Policies

However there is convergence in the intent of each jurisdiction's legislative frameworks for water resource management in the LEB. In addition, the National Water Initiative provides a broad national framework for achieving a nationally compatible market, regulatory and planning based system of managing surface and groundwater resources for rural and urban use.

Planning and principles – on ground action

Overall the above water management programs and projects are broadly in keeping with the intent of Strategy 3 (water quality monitoring and data management frameworks across jurisdictions to enable data collation, analysis, comparison and reporting at regional, catchment and whole-of-basin scales). Data collation, analysis, comparison and reporting at regional, catchment and whole of basin scales will continue to be a challenge given the complexities of jurisdictional frameworks however partnerships have been built and will continue to be augmented as projects such as ARIDFLO and the LEB Rivers Assessment are progressed and the results utilised to implement actions addressing water quality monitoring across the LEB (Strategy 3).

NRM Planning

Invasive species

In summary, NRM planning and projects that take into account the entire Lake Eyre Basin are being implemented by signatory jurisdictions to the LEB Agreement. The LEB NRM policies and strategies provide a further focus for 'whole of catchment' NRM project implementation outcomes.

Engaging non-Indigenous and Indigenous stakeholders to ensure that local knowledge is recognised and utilised in assessment and management of the Basin

This Audit has found that overall, non-Indigenous and Indigenous stakeholders in LEB are currently being engaged under state and territory Water and NRM legislation and in the management of a variety of NRM programs. The inclusion reflects the sentiment of Strategy 8 to ensure that local knowledge is recognised and utilised in assessment and management of the Basin. Current LEB Indigenous consultation mechanisms, particularly through the regional NRM groups, LEB CAC and Aboriginal Forum provide a framework for continued Indigenous consultation in the LEB.

Infrastructure

Queensland, South Australia and the Northern Territory transport / road departments provide environmental guidelines for the construction of roads and infrastructure.

The environmental guidelines in place in Qld, SA and NT are not very specific to the LEB and if deemed to be a significant matter of priority and urgency, further work could be undertaken by governments. The guidelines in existence currently likely do contain many elements of direct relevance to the LEB and further work in this area, given the many competing priorities could be considered.

Data

Monitoring is the responsibility of the State agencies. Most LEB data is available by broader region or by industry but not by individual catchments. NRM information is patchy as different agencies collect data in different ways. Scientific research data on LEB Rivers has so far been collected on river flows, floods, fish, waterbirds and invertebrates at five groups of sites spread across the Lake Eyre Basin.

Communications

A more targeted, focused approach outlining key stakeholders, messages and strategies, developed in consultation with government agencies and key LEB stakeholders (including NRM Groups) should be considered in developing the Implementation Plan for Strategies 9 and 10.

Appendix E**Major Products from Research and Monitoring**

This appendix outlines some of the projects and activities implemented under the LEB Agreement. It is sourced from the 'Activities in the Lake Eyre Basin A quick overview (audit), April 2006'.

LEB Rivers Assessment

Building on the methodology completed by Griffith University in 2005, the LEB Rivers Assessment will examine the condition of the Lake Eyre catchment, monitor potential impacts from future water development activities and protect the rivers of the basin from long term decline. Activities under stage one of the project include:

- Examining the trajectory of natural change in selected biotic groups (as agreed by the project Steering Committee) in the Lake Eyre Basin
- Developing innovative methods for assessing catchment indicators for inclusion in the Rivers Assessment.
- Evaluating existing data management systems
- Reviewing hydrological monitoring equipment required
- Identifying potential long term monitoring sites within the LEB.

LEB Hydrological Atlas

In 2005–06 an atlas of the hydrology of the Lake Eyre Basin was completed. The atlas provides a stronger scientific base for management of the basin and will inform the Lake Eyre Basin Rivers Assessment. The key findings of the hydrology atlas have been summarised in a 12 page brochure, which is available from the Community Information Unit of the Australian Government Department of the Environment and Heritage (phone 1800 803 772).

Publicity and education (on-going)

Awareness raising activities regarding the activities of the Lake Eyre Basin Ministerial Forum and related initiatives include:

- Regular newsletters to relevant stakeholders
- Publication of LEB Scientific Advisory Panel Information Papers (LEB floodplains & river systems knowledge)
- Media releases and communiqués of LEBMF outcomes
- Biennial LEB conference
- Indigenous Forum
- LEB Knowledge Strategy (in progress).