Draft Strategic Regional Environment and Baseline Assessment (SREBA) Framework

Consultation Summary

June 2020



Document title	Draft Strategic Regional Environment and Baseline Assessment (SREBA) Framework		
Contact details	Department of Environment and Natural Resources		
Approved by	Dr Alaric Fisher		
Date approved	June 2020		
Document review	Not applicable		

Version	Date	Author	Changes made
1.0	June 2020	Department of Environment and Natural Resources	First and Final Version

Contents

1. Introduction	3
2. Consultation Outcomes	3
2.1. Purpose of the SREBA	4
2.2. Governance	5
2.3. Integration	6
2.4. Interests of Aboriginal people	7
2.5. Timeframes and boundaries	7
2.6. Data management	8
2.7. Social, cultural and economic studies	9
2.8. Other technical guidance notes	10
3. Conclusion	13
Appendix 1	

1. Introduction

The Final Report of the Scientific Inquiry into Hydraulic Fracturing in the Northern Territory (the Final Report) included the recommendation that a Strategic Regional Environmental and Baseline Assessment (SREBA) be undertaken prior to the granting of any further production approvals for onshore unconventional gas activities. Subsequently, the Northern Territory Government developed a draft Framework to describe the objectives and content of a SREBA, including technical guidance as to how baseline studies should be undertaken in six domains:

- water quality and quantity
- aquatic ecosystems
- terrestrial ecosystems
- greenhouse gas emissions
- environmental health
- social, cultural and economic

In addition to the technical guidance, the Framework also provides further information on:

- purpose and application of a SREBA
- governance arrangements
- stakeholder engagement & communication
- data management
- analysis, synthesis and reporting of baseline studies.

A consultation draft of the SREBA Framework was released for public comment from 4 December 2019. Comment was initially open for two months and subsequently extended until 28 February 2020 following requests from a number of parties. Stakeholders were also informed of the draft Framework via email and offered briefings from relevant agency staff.

During the public consultation period there were 12 in-person stakeholder briefings and discussions, and 16 written submissions were received, with a total of 20 different individuals or organisations involved. Submissions were received from range of interested parties, including environmental organisations, industry representative groups, land councils, academic researchers, consultants and members of the public.

A full list of stakeholders consulted is included at Appendix 1.

2. Consultation Outcomes

Common or similar feedback was received across multiple submissions on some key areas during the consultation process. These have been categorised into the following broad subject areas, which are discussed further below:

- purpose of the SREBA
- governance
- integration of baseline studies

- interests of Aboriginal people
- timeframes and boundaries
- data management
- social, cultural and economic studies
- other technical guidance notes.

2.1. Purpose of the SREBA

A number of submissions considered that the purpose of the SREBA was not clearly expressed in the Framework, including it lacking specific detail about outputs and how baseline data would be used. A number of submissions also stated what they believed the purpose of the SREBA should be. There was uncertainty or confusion reflected in some submissions about the extent to which a SREBA would replace other assessment and authorisation processes for onshore gas development. Some submissions also criticised wording in the SREBA as showing an inherent presumption that the industry will progress to production scale.

Response

The SREBA Framework has been carefully written to reflect the purpose for the SREBA described in the Final Report. In response to feedback, the Framework has been amended to more explicitly state that the primary purpose of a SREBA is:

"to provide the information necessary for sound decisions to be made about the development of the onshore unconventional gas industry in that region of the NT. The studies making up the SREBA should address knowledge gaps and establish appropriate baselines against which the potential impacts of proposed onshore gas activities can be assessed. The baselines will also assist in the design and planning of future development, particularly at a regional scale, in order to minimise negative impacts; and provide a reference point for ongoing monitoring."

The purpose of the SREBA is not to re-prosecute all the potential risks associated with onshore gas development, which were addressed exhaustively by the Scientific Inquiry. However, the SREBA will provide much improved baseline data for a region in which onshore gas development is proposed, which will allow well-informed decisions to be made about the approval, or otherwise, of individual and multiple development proposals. With the exception of the social and cultural domain, where the SREBA explicitly includes a Strategic Regional Assessment, the SREBA itself does not include formal impact assessment. The ways that SREBA baseline data may feed into future regulatory processes is described in section 1.4 of the Framework.

A strength of the regional approach of the SREBA baseline studies is that it enables better assessment of the potential cumulative impacts of the development of numerous well pads and associated infrastructure. Such consideration of cumulative impacts is required, for example, during assessment of proposals under the new Environment Protection Act 2019, and recommendation 14.21 in the Final Report requires the (Environment) Minister to consider cumulative impacts as part of the environmental assessment and approval process for onshore gas activities. In many cases it is expected that the outputs of the SREBA will provide clear guidance how potential risks from industry development may be avoided or minimised (for example through the delineation of areas of high ecological value) thereby limiting the likelihood of significant cumulative impacts.

One submission argued there should be stronger statutory or policy requirements to incorporate outputs from a SREBA into various decision-making processes associated with onshore gas activities, and provided a number of examples. These are important considerations for government, and in some cases are addressed through other recommendations from the Final Report, but are outside the scope of the SREBA Framework.

The wording of the Framework has been amended so that it is clearer that a SREBA does not replace project-level impact assessment and approval processes, or replace the need for proponents to prepare a project-specific Environment Management Plan, Social Impact Assessment or Environmental Impact Statement as required by the relevant legislation and regulator. However, by providing comprehensive baseline information at a regional scale, a SREBA will make these processes more efficient and effective and support both project design and the thorough assessment and management of risks.

The conduct of a SREBA does not presuppose gas production activities will proceed, and some wording in the Framework has been amended to ensure that this is not implied.

2.2. Governance

A number of submissions sought greater clarity about the governance of the SREBA program, and for further detail on decision-making processes and 'independence' in order to build trust in the process. Many submissions stressed the importance of a Regional Reference Committee, and a number suggested that the SREBA program should be managed by an independent expert group. There was also commentary in a number of submissions about the role of independent scientific expertise in developing or implementing the SREBA. A number of submissions were concerned that region-specific details of the baseline studies for a SREBA would be spelt out in Scopes of Work for those studies, and that this therefore reduced transparency. Some submissions suggested the proposed governance arrangements gave rise to a perception of undue influence by the gas industry on its design. Some submissions conflated the governance of the SREBA with that of the Gas Industry Social and Environment Research Alliance (GISERA) and/or the Geological and Bioregional Assessment Program (GBA), although other submissions also complained that the link between SREBA and GBA was not clear enough.

Response

The governance arrangements for the SREBA are outlined in Table 2.1 and Figure 2.1 of the Framework.

The Framework has been amended so that it is explicit that a Regional Reference Group will be established in consultation with local stakeholders for the region where a SREBA is undertaken. The Regional Reference Group will comprise stakeholders who live, or have relevant interests within, the SREBA region. The Group will provide advice on the development and implementation of the SREBA studies within the region, engagement with local stakeholders, and communication of results and outcomes to the community. In many regions, there are existing regional advisory groups that could be invited to take on the SREBA project as an extended function of their existing role. Once the Regional Reference Group is established, the Terms of Reference including membership and scope will be confirmed to ensure local requirements are taken into account.

The Northern Territory Government considers that the Department of Environment and Natural Resources (DENR) is the appropriate body to manage the SREBA program, and has provided additional resources to the Department to support this specific function. DENR, along with the Northern Territory Environment Protection Authority (NT EPA), is the primary environmental regulator for the onshore petroleum industry.

Consistent with recommendation 14.34 of the Final Report, this regulatory role (and oversight of the SREBA) is clearly separate from the agency responsible for promoting the industry.

There has been, and will continue to be, substantial external expert input into the development and implementation of a SREBA. The Scientific Inquiry was an exhaustive and comprehensive process undertaken by a Panel of esteemed independent experts, and their findings underpin the development of the SREBA Framework. Each technical guidance note in the Framework had significant input from external scientific experts (primarily but not entirely from CSIRO) during development and in some cases (such as the greenhouse gas emissions guidance) were prepared almost entirely by external experts. While DENR will oversee the preparation of region-specific Scopes of Work for the baseline studies in a SREBA, in almost all cases this will require input from subject matter experts in other agencies (for example Department of Health) and/or external to government. In some cases (notably the social, cultural and economic domain), the Scope of Works will be developed by external expert parties, secured through an open procurement process. The Framework also makes it explicit that each of the baseline and regional reports produced by the SREBA will be subject to independent peer review.

The governance arrangements for the SREBA include an explicit role for the Minister of Environment in approving the Scopes of Work for SREBA baseline studies, and confirming that final reports adequately address these scopes and that the SREBA is completed. In making these decisions, the Minister may request independent advice from the NT EPA.

There is no link between the governance arrangements for a SREBA and those for GISERA or GBA. In undertaking a SREBA, it will be important that data and outcomes from studies undertaken through GISERA or GBA are used as appropriate, along with all other sources of relevant information. This will be particularly important for a SREBA in the Beetaloo sub-Basin, where there has already been significant investment through GBA in groundwater and ecology studies.

The gas industry has had no influence on the development of the SREBA Framework, other than through the opportunity to provide feedback made available to all stakeholders.

2.3. Integration

Many submissions described the significant interrelationships between the different domains of the SREBA, and stated that the Framework did not adequately recognise this, or describe how these linkages would be incorporated into the baseline studies and subsequent analyses and reporting.

Response

A SREBA will be a complex program with a very broad scope across multiple biophysical and socio-economic and cultural domains. It is recognised that there are linkages and interrelationships between all of the baseline studies, which must be recognised and incorporated into the planning and implementation of the studies, and also considered in the synthesis of information to prepare the baseline reports and final regional report of a SREBA.

The Framework has been amended to better recognise these interrelationships. The technical guidance notes provide more specific detail about linkages between domains (for example Figure 4.1 illustrates input from water studies, terrestrial ecology studies and social and cultural studies into the design and implementation of the aquatic ecology work). As program manager, DENR has a key role in ensuring that these interrelationships are identified, and to establish mechanisms to coordinate baseline studies where

this is required, or facilitate the flow of relevant information between them. The Framework also describes the need for the final SREBA Regional Report to explore and describe the interrelatedness and dependencies between the different elements of the SREBA.

2.4. Interests of Aboriginal people

A number of submission noted that the draft Framework did not adequately address the interests and involvement of Aboriginal people in a SREBA, with detail of Aboriginal participation being mostly confined to the guidance note for social, cultural and economic studies. A number of suggestions for addressing this concern were made in submissions, including; representation of Aboriginal people on regional or advisory committees, the important role of Aboriginal knowledge across many baseline studies, protection of intellectual property, engagement of Aboriginal custodians as co-researchers and cultural advisors, involvement of Aboriginal ranger groups in data collections, and application of leading practice in relation to engagement of Aboriginal people, including during social.

Response

The role of Aboriginal people in a SREBA program has been given more attention in the amended Framework. Recognition of Aboriginal interests has been included in the overarching principles for a SREBA (Table 2.2) and the Framework explicitly describes the unique context of the Northern Territory and the implications for how SREBA studies should be carried out. The Framework recommends the engagement of local Aboriginal people in the capacity of co-researchers and cultural advisors during data collection for each domain, and the incorporation of Aboriginal knowledge into baseline data where agreed by the knowledge holder. Consideration of protecting Aboriginal cultural and ecological knowledge, and intellectual property is addressed in the data and information management section of the Framework. Each of the biophysical guidance notes has also been amended to recognise the importance of Aboriginal ecological knowledge, and for design of these studies to encompass cultural values of water, and culturally significant species or ecosystems. The membership of the Regional Reference Committee will include local Aboriginal people and/or representative organisations.

2.5. Timeframes and boundaries

Some submissions were critical of statements in the draft Framework that a SREBA, if undertaken efficiently and with adequate resources, could be completed in three years, and statements that time or resourcing constraint may restrict the scope of some baseline studies. Some submissions stated that undue preference was given to providing industry or investor certainty in this timeframe, and that the temporal scope of studies should depend on adequate coverage of anticipated inter-annual variation.

Some submissions stated that a SREBA should be undertaken prior to exploration activity for onshore gas (rather than prior to production activity) and/or questioned how a SREBA could provide a robust pro-development baseline if some exploration activity, including hydraulic fracturing, had already been undertaken in that region.

A number of submissions considered that the Framework did not adequately explain how the boundaries for a SREBA would be determined, and a number of submissions suggested that there should be a consistent boundary for all elements of the SREBA to facilitate synthesis across studies.

Response

The Final Report provided only limited guidance about the timespan of a SREBA, other than the constraints stated in recommendation 15.3. Specifically, in relation to multiple-year sampling to achieve adequate coverage of inter-annual variability of aquatic ecosystems, it considered "*in the Top End two to five years of baseline data will be required*" and "*in drier zones a longer timeframe is required*" (p445). In relation to the Beetaloo sub-basin, the Final Report estimated that it would take three to five years to complete all stages of a SREBA in that region (p451). The statement in the Framework that a SREBA could be completed within three years of commencement, providing it is adequately resourced, is not inconsistent with the Final Report. This is particularly the case in relation to the Beetaloo sub-basin, where some baseline data collection has already occurred in response to other Inquiry recommendations (for example, methane monitoring and water monitoring at exploration bores) and where there has been a substantial investment through GBA in some of the environmental studies also required for the SREBA.

Linking the timespan of aquatic ecosystem studies to a pre-determined span of inter-year variation in rainfall conditions is theoretically appealing, but unrealistic in practice. However, some of the important variables used to characterise aquatic ecosystems can be assessed over a full range of seasonal conditions using time-series of remotely-sensed data.

Text in the draft Framework relating to providing certainty in relation to SREBA timeframes reflect the Final Report, which stated that "the Panel recognises the need for any SREBA to be completed in a timely and efficient manner. The assessment process cannot be open-ended. Communities (local, regional and Territory wide), the Government and gas companies require certainty and finality to the SREBA process" (p452).

The relationship between a SREBA and exploration activity in a region was addressed in some detail in the Final Report (section 15.4). The Inquiry Panel concluded that that exploration activity would not compromise baseline data collection during a SREBA, and noted that exploration activity was important in providing critical hydrogeological information from deep drilling.

The Framework is clear that the broad remit of a SREBA means that that the most appropriate boundary may differ between domains. For example, groundwater studies will be concerned with aquifers that overlap the prospective unconventional gas basin, while social / cultural studies may need to include population centres that lie outside the basin boundaries. The Framework specifies in general terms that the spatial boundary for each SREBA domain should encompass the elements of the environment on which onshore unconventional gas development could feasibly have an impact, including predictable indirect and cumulative impacts; as well as sufficient regional extent to provide adequate context to these elements and the significance of any potential impact. The technical guidance notes provide additional principles for determining the appropriate boundary for each SREBA domain, which will ultimately be specified in regional-specific Scopes of Work. These boundary principles are linked to well-recognised criteria (such as IBRA sub-bioregions in the case of ecology baseline studies) rather than development site boundaries.

2.6. Data management

A number of submissions considered that the Framework did not provide enough detail around the data management system for a SREBA, and that data management standards and protocols should be established in advance of any data collection activities. Some submissions commented on the need to ensure adequate protection of sensitive data and protect intellectual property around Aboriginal traditional knowledge, but submissions were also concerned that open public access was assured and that, for example, commercial confidentiality was not used to unduly limit access.

Response

It is recognised that the SREBA will collate and generate large amounts of data and information with very different characteristics across a number of domains. There are existing systems and protocols within DENR or the Northern Territory Government more broadly, to manage some of these data types, and to make baseline resource assessment data publicly accessible (for example https://nrmaps.nt.gov.au/nrmaps.html). However, comparable systems do not currently exist for all data types or domains included in a SREBA. Development of data management systems for data associated with onshore gas development is an area of current focus for the Northern Territory Government, to meet the requirements of the SREBA and other recommendations of the Final Report requiring transparent public access to other aspects of the regulation of the onshore gas industry. The Northern Territory is also collaborating with the Commonwealth GBA to investigate whether the existing GBA data management platform can be adapted to meet the needs of the SREBA program. This includes ensuring that the source and any access or licencing requirements of third-party data can be tracked.

The Framework sets out principals for data management associated with the SREBA, including that in general data collated and generated during a SREBA should be open-access. The data management strategy developed for a SREBA will include a sensitive data policy to manage access data that is culturally sensitive or commercial-in-confidence, and ensure that privacy is protected, including meeting the requirements of the Northern Territory Information Act 2002. This will include consideration of protecting Aboriginal cultural and ecological knowledge, and intellectual property. It is anticipated that the test for restricting access to information claimed to be commercial-in-confidence will follow that to be applied under the Environment Protection Act 2019.

2.7. Social, cultural and economic studies

Many submissions provided feedback on the social, cultural and economic (SCE) baseline studies and Strategic Regional Assessment.

A number of these submissions sought clarification on the potential for duplication between the SREBA studies and project-based social impact assessment (SIA).

A number of submissions addressed the methods for SIA. These methodologies require reliable, locationbased information in order to establish the significance of impacts. Alternatively, some submissions emphasised that the studies must be undertaken though a locally-led assessment process, including description of appropriate methods for engagement and assessment, inclusive of the development of relevant data and local indictors.

Much of the feedback in the submissions concerned the approach to undertaking SCE studies specifically within the Beetaloo Sub-Basin.

A further concern from some submissions was that the SREBA baseline studies should address issues around Native Title.

Response

The Final Report uses the terms 'Strategic SIA' and 'Strategic Assessment' in relation to the SREBA. The intent behind these assessments as described in Chapter 12 of the Final Report has been retained, but the terms 'Baseline Studies' and 'Strategic Regional Assessment' are used for the purposes of this Guidance

Note. Throughout the development of this guidance and during stakeholder consultation the use of the term SIA became a cause for confusion, particularly as the SREBA assessment is designed for a large region, rather than a specific project or development.

A study of this kind has not been undertaken in the Northern Territory before, and to ensure there is a clear differentiation from the project-specific SIA undertaken by proponents for specific activities, the term Strategic Regional Assessment (SRA) is used. Assessing impacts is also only one component of the broader baseline data collection and assessment of the social, cultural and economic environment of a region.

The SREBA SRA approach does not seek to duplicate SIA but is a broader regional scale assessment. This is due to potential impacts that are unlikely to be accurately foreseen due to lack of information, certainty and timeframes of activity, including location and details of any future onshore gas development. Information must be available, reliable and predictable to undertake the impact assessment component, otherwise the SIA methodology can result in negative social impacts. Some of these negative social impacts reported from a previous study included building community and business expectations; creating anxiety for works that have an unknown level of likelihood to progress; conflict between different sectors of the community; and unforeseen socio-economic impacts on towns associated with unfulfilled expectations.

While the feedback provided in submissions relating specifically to the Beetaloo Sub-Basin will be considered and provided to the independent contractors undertaking the SCE studies in this region, it was too specific and prescriptive to incorporate into the guidance note, which is applicable to any region of the Northern Territory. This includes establishing the preferred data sets and the development of potential indicators that are specific and meaningful to the region, and prescriptive methods of engagement and participation. These details will be established during the development of the Scope of Work for SCE studies in a specific SREBA regions

A diagram and further information have been added to the SCE Guidance Note to better explain how these studies and Strategic Regional Assessment will complement and not duplicate any regulatory requirements of an Environment Management Plan or project-specific SIA. The SREBA baseline studies and SRA will provide evidence-based, region-specific resources and comprehensive social, cultural and economic data and information that can be used by proponents and the Northern Territory Environment Protection Authority (NT EPA) when assessing the social, cultural and economic impacts of proposals.

In relation to Native Title, Land Councils were engaged in the development of this Guidance Note and requested that the SREBA studies do not seek to consider information previously recorded by them or attempt to replace or duplicate existing statutory processes.

2.8. Other technical guidance notes

A relatively small number of comments specifically addressed the guidance notes for water, aquatic and terrestrial ecosystems, greenhouse gas emissions and environmental health. One submission included comments from subject matter experts that had reviewed each of the biophysical guidance notes. Responses to the key elements of these comments are summarised below.

Water

A number of submission raised issues around linkages to other SREBA domains and the socio-cultural aspects of water, which are discussed in sections 2.3 and 2.4 above.

Some submissions identified that the guidance note appeared to be predominantly based on the assessment and analysis of existing groundwater and surface water data, but submitters noted that additional data collection was likely to be essential, including establishment of additional monitoring infrastructure. One submission stated that the NT Government should establish a process to review previously granted water licenses and Water Allocation Plans to ensure all licences and allocations within a SREBA area are within genuinely sustainable limits. One submission stated that greater recognition should be given to baseline data collected form eater monitoring bores associated with exploration wells.

The guidance note has been amended to more clearly describe a gap analysis that will be undertaken in the early stages of the water studies, to identify additional studies or monitoring infrastructure required to address significant knowledge gaps. The types of additional studies likely to be required are also briefly described, noting the extent of existing data and hydrogeological understanding of potentially impacted aquifer systems will differ greatly between regions within the Northern Territory. In most conceivable cases (and in the case of the Beetaloo Sub-basin), water data collected during the SREBA will inform the development of a new Water Allocation Plan, which will take existing water uses into account when determining future sustainable allocations.

Aquatic ecosystems

A number of submission raised issues around linkages to other SREBA domains, the socio-cultural aspects of aquatic ecosystems, appropriate timeframes, and SREBA boundaries, which are discussed in sections 2.3, 2.4 and 2.5 above.

One submission considered the aquatic ecosystem guidance was very broad and did not provide sample intensity, and that resource constraints were often a key consideration when characterising aquatic ecosystems. Another submission suggested assessment of the impacts on aquatic biota of accidental release of wastes or additives associated with drilling and fracturing should be considered during the SREBA, and also commented on appropriate monitoring timeframes following drilling operations.

Due to the broad range of aquatic ecosystems and biota present across the Northern Territory, the guidance note cannot be prescriptive about sample intensity. However, it provides detailed principles to guide sample, design, site selection and choice of target taxa, and notes that region specific methods require appropriate expert advice and review, and approval from DENR. While the SREBA will provide information about the presence and significance of various aquatic biota, testing their susceptibility to chemicals or pollutants is outside the scope of the SREBA, and will be addressed during risk assessment of development proposals. Data collected during the SREBA will inform the design of robust monitoring programs for aquatic ecosystems if onshore gas developments proceed.

Terrestrial ecosystems

A number of submission raised issues around linkages to other SREBA domains, the socio-cultural aspects of terrestrial ecosystems or species, appropriate timeframes, and SREBA boundaries, which are discussed in sections 2.3, 2.4 and 2.5 above.

One submission provided a detailed critique of the terrestrial ecosystem guidance note. However, the submission contained a large number of misinterpretations or misrepresentations of the content of the guidance note. For example, the submission claimed the guidance had a heavy reliance on modelling based on existing data, whereas the guidance actually describes an extensive campaign of additional on-ground data collection, with modelling sensibly applied to guide sampling design and analyse results. The submission

also claims the survey techniques described in the guidance "will only record presence/absence of a particular species", whereas sample methods are specifically designed to account for detection probability. The alternative 'precautionary' approach recommended in the submission – habitat assessment – is inappropriate because the sparsity of data means that habitat associations of most species are poorly known, exactly the issue that the SREBA studies are designed to address. Wording in the guidance note around fragmentation and causality have been amended to address some issues raised in this submission.

Greenhouse gas emissions

Some submissions identified that there were other gases or compounds that may be emitted from onshore gas operations, including volatile organic compounds, and that these should be included in baseline monitoring. One submission also stated that baselining work could be used to inform future offsetting programs as well as providing a reference point for fugitive methane leakage rates. One submission noted that there were a range of monitoring techniques that may provide better measurement outcomes and the guidance note should not be too prescriptive.

The guidance note focuses on methane because this is the most meaningful greenhouse gas to monitor at a regional scale (including for tracking fugitive emissions), but notes that carbon dioxide and ethane emissions may also be measured to provide information on the source of methane emissions. The monitoring and management of other potential air pollutants will occur at the project scale and regulated through the Environment Management Plan and Human Health Risk Assessment processes. The guidance note describes a variety of methane monitoring methods (appendix 6.1) and notes that a combination of methods may be required, but focuses on mobile survey as these are currently the most applicable to accurately, and reasonably quickly, measure emissions over a large area.

Environmental health

Several submissions highlighted some inconsistencies within the environmental health guidance note between baseline data and data for impact and risk assessments. In response, the guidance note has been amended to focus primarily on establishing environmental health baseline data to contribute to future Human Health Risk Assessment and Health Impact Assessments processes, and to provide greater clarity on the scope of the environmental health aspects of a SREBA.

One submission raised the issue of informed consent and the need to highlight the requirements for ethics approvals. A section on Ethics and Standards has been added with guidance on what is required. Additional to this, any research or studies involving human participants will be required to seek Human Research Ethics approvals prior to commencing work. An additional section on privacy requirements has also been added.

Several submissions raised concerns that the Framework did not address the link between climate change and health. The issue of climate change was addressed in detail in the Final Report (Chapter 9 section 9.1.4). The issue of climate change mitigation and the links between climate change and health are beyond the scope of the SREBA baseline studies.

Mental health was highlighted as a concern and some submissions noted there needed to be a clear link between environmental health, psychosocial health and socio-economic and cultural studies. To address this, the guidance note more clearly states the links between the environmental health domain and the social, cultural and economic (SCE) domain, with mental health studies being incorporated under the SCE domain.

3. Conclusion

The submissions provided during public consultation highlighted some omissions or weaknesses in the Draft Framework, or areas of insufficient clarity. The Framework has been modified in response to the feedback received, as indicated under the theme areas above. Some feedback has not been adopted as it was inconsistent with the Norther Territory government's understanding of how the relevant recommendations of the Final Report should be implemented.

Some of the submissions raised concerns about the potential impacts of onshore unconventional gas development which have already been comprehensively addressed during the Scientific Inquiry, and these were not considered during revision of the SREBA Framework. Some comments also concerned issues relevant to other recommendations in the Final Report, and further information about the implementation of these recommendations can be found at <u>https://hydraulicfracturing.nt.gov.au/</u>.

The Final SREBA Framework will be publicly available on the DENR (<u>https://denr.nt.gov.au/onshore-gas</u>) and Onshore Gas in the NT (<u>https://hydraulicfracturing.nt.gov.au/home</u>) web sites.

Appendix 1 – Full Stakeholder List

Name	Organisation			
Written submissions				
Arid Lands Environment Centre (ALEC)	Environmental Defenders Office (EDO) NT			
Northern Land Council (NLC)	Central Land Council (CLC)			
Australian Petroleum Production & Exploration Association (APPEA)	Centre for Natural Gas, The University of Queensland			
Circle Advisory	Environment Centre Northern Territory (ECNT)			
Resolution88 Social License Solutions	Charles Darwin University (CDU)			
Protect Country Alliance	Five submissions from general public			
Briefings, face-to-face and teleconferences to receive verbal feedback on consultation draft				
Katherine Town Council	NLC			
Barkly Regional Council	CLC			
Territory Resources Services Association (TRSA)	Jemena Pipeline			
Members of the CBRG	Environmental Defenders Office (EDO) NT			
Buy Local Industry Advocate	Centre for Natural Gas, The University of Queensland			
Arid Lands Environment Centre (ALEC)	Charles Darwin University (CDU)			
Circle Advisory				
Social Cultural Economic Guidance Note development working group				
Aboriginal Areas Protection Authority (AAPA)	CDU			
NT Cattlemen's Association	Aboriginal Areas Protection Authority (AAPA)			
Northern Land Council (NLC)	University of Queensland (UQ)			
Commonwealth Scientific and Industrial Research Organisation (CSIRO)				