1 The working group

Since 2016, the Environment Institute of Australia and New Zealand (EIANZ) has sponsored a Strategic Environmental Assessment (SEA) Working Group, under the auspices of its Special Interest Group on Impact Assessment. Convened by Carolyn Cameron, FEIANZ, the SEA Working Group has sponsored sessions and panels at the annual EIANZ Conferences, at the International Association for Impact Assessment Annual Conference in Brisbane last year, and a 'Thinking Strategically' forum in 2018. Good Practice Notes for SEA (2019) have been compiled and piloted on the concept of developing pumped hydro as a component of transitioning to more sustainable energy policy. A highlight of the group's activities was the 2019 international workshop on improving SEA in Australia, with 30 participants from around the country and working with five international experts to explore how Australia could best advance SEA.

2 Context

SEA, or 'strategic assessment' as it is termed under the EPBC Act, refers to the assessment of potential impacts of policies, plans and programs, as a distinct process from the more widely known project-level environmental impact assessment (EIA). The benefits of SEA are considerable both in terms of its potential to achieve environmental sustainability and facilitate more streamlined regulation. Transparency about decision-making and clarity about where and what environmental values should be protected are products of a robust SEA process.

SEA was initiated and developed as a response to the shortcomings experienced with applying project-level EIA. For example, assessments at the level of individual projects are typically unable to sufficiently address the broader issues of cumulative impacts, regional losses of biodiversity and threatening processes. SEA is better placed to take a more holistic perspective, by acting much earlier in the planning process, leading to projects (individual actions) aligned with broader, more strategic initiatives. Assessing strategic initiatives such as policies, plans and programs also ensures environmental concerns are taken into consideration more proactively than when assessing specific development proposals. The same arguments apply to bioregional plans, an existing mechanism under the EPBC Act that has not been utilised except for a number of marine applications. The distinction between a SEA and a bioregional plan is that the latter does not require a proponent or a draft policy, plan or program to assess - it can be entirely proactive by Government.

The EPBC Act recognises the value of SEA as a mechanism for environmental sustainability by allowing actions taken under endorsed policies, plans or programs to be approved with no requirement for subsequent EIA (s146B). This results in streamlined approvals processes, which benefits both proponents and governments.

The previous 2009 statutory review of the EPBC Act carried out by Alan Hawke (the Hawke Review) made a number of recommendations related to the increased use of SEAs and bioregional plans.

Recommendation 6

- 1. The [Hawke] Review recommends that the Australian Government:
 - a. expand the role of strategic assessments and bioregional plans so that they are used more often; and b. strengthen the process for creating these plans and undertaking these assessments, so they are more substantial and robust;
- 2. The Review further recommends that the Act be amended to provide:
 - a. for bio-regional plans to -
 - 1. change the terminology from 'bio-regional plans' to 'regional plans';
 - 2. allow the Commonwealth to unilaterally develop regional plans; and
 - 3. ensure that the process for delineating a region for the purpose of the Act is flexible.

The Australian Government's 2011 response to the Review was framed around four key themes:

- a shift from individual project approvals to strategic approaches including new regional environment plans
- streamlined assessment and approval processes
- better identification of national environmental assets, including through provision to list 'ecosystems of national significance' as a matter of national environmental significance under the EPBC Act
- cooperative national standards and guidelines to harmonise approaches between jurisdictions and foster cooperation with all stakeholders.

The amendments to the EPBC Act needed to implement the Government's response were never considered by the Australian Parliament.

Similarly, the 2018 Review of the interactions between the EPBC Act and the agriculture sector also noted the need for strategic approaches rather than case by case assessments:

The need for a more proactive approach to protecting MNES in regions where agricultural development does or will impact upon MNES health was a recurring theme in consultations undertaken for this Review. Reactive assessment and approval of multiple individual actions in a single area is unlikely to be an appropriate strategy to ensure the long-term viability of agriculture in that region, nor will it necessarily result in the conservation outcomes sought through the EPBC Act (p 63-64)

Of particular concern is that the Act itself, and hence the approach to its implementation, cannot adequately account for the cumulative impacts of multiple individual projects, and so is driving isolated decision making rather than landscape-scale decision making (p64).

3 Areas for improvement

This section of the submission incorporates insights raised in our SEA forums combined with our extensive knowledge and professional experience on six topics:

- 1. Bio]regional planning
- 2. Strengthening strategic assessments
- 3. Cumulative impacts
- 4. Matters of national environmental significance
- 5. Standards for assessment
- 6. Implementation

The SEA Working Group is keen to assist the EPBC Act Review Team in any way and is open to further conversations. We are willing to host or participate in workshops about how Australia could advance SEA and achieve more sustainable environmental outcomes.

3.1 [Bio] Regional Plans

Despite their great potential for managing key environmental values at the landscape scale, bioregional plans under the EPBC Act have not yet been applied to the terrestrial environment. The Working Group fully supports these recommendations of the Hawke Review with respect to the application of bioregional plans.

Bioregional plans and their content are outlined in detail in s171(2) of the EPBC Act. They are mechanisms for:

- identifying key environmental values within a defined region that warrant protection and/or restoration;
- determining environmental outcomes and objectives that should be achieved;
- assessing current and likely future threats to environmental values;
- determining measures needed to ensure environmental outcomes can be met; and
- providing a framework for future development in the region.

Like SEA, bioregional plans can also streamline future environmental assessment by creating clarity for developers and decision-makers about what values should be protected and where they occur in the landscape.

The EPBC Act currently allows the minister to co-operate with 'any person' for the purpose of developing bioregional plans (s171(1)). The Working Group believes the preparation of bioregional plans through a partnership between the Commonwealth and states, territories and/or corporations engaging with stakeholders will deliver better outcomes for the environment and the economy than are currently being achieved. The Working Group agrees with points made in the Environmental Defenders Office (EDO) Independent Review of the EPBC Act of February 2020:

- **o** A clearer legal framework for bioregional planning in both procedure and desired outcomes will improve certainty for Ecologically Sustainable Development and economic growth, address cumulative impacts upfront, and reduce future site-by-site land-use conflicts.
- **o** The Act should set out key elements for the bioregional

planning process, including a legislated purpose tied to achieving positive biodiversity outcomes in the region (such as a maintain or improve requirement), community engagement, integrating with infrastructure planning and monitoring and reporting requirements.

The Working Group believes that the following issues need to be addressed to establish effective [bio]regional plans:

- Change the name of [bio]regional plans. While the focus of these regional plans should always be environmental values, the use of 'bio' does not adequately reflect the holistic, systems-based approach that is required. It is essential to understand the interactions between environmental, social and economic values in order to identify the threats to key environmental values, establish appropriate environmental outcomes and objectives, and establish a framework for informed decision-making.
- Establish flexible 'fit-for-purpose' geographic areas for planning. The Interim Biogeographic Regionalisation for Australia (IBRA) bioregions may not be appropriate planning 'regions.' Adopting a flexible approach to establishing regional boundaries will enable the planning regions to reflect meaningful natural and/ or human systems.
- Make [bio]regional plans more strategic. Define the system(s) relevant to the 'region' and focus in on three to seven critical decision factors to underpin the analysis. For example, there may only be a couple of specific pressures in a bioregion, affecting just a few environmental values, which should be the scope of the [bio]regional plan. Alternatively, it may be a complex system with multiple variables, where focusing the [bio]regional plan on specific parameters within the broader system is required. Systems-thinking changes the assessment approach from a large EIA to enable participants to think more strategically, focusing in on the issues that really matter in the region.
- Use [bio]regional plans to define regional outcomes and objectives, to specify parameters for avoidance and 'no-go' areas, and to identify thresholds or other standards for consideration in downstream project-based assessments. This could reflect conventional urban planning approaches, which specify permitted and prohibited activities and establish clear objectives and performance measures to assess possible 'permissible' developments.
- **Provide further guidance** on the appropriate preparation of [bio] regional plans and mechanisms for their enforcement of these plans (see 'Implementation' below).
- Collaborate in plan development with relevant state, local government and key stakeholders with an interest in the plan's directions such as catchment authorities, Regional Development Authorities, peak industry bodies and major land holders.
- The active participation of Indigenous people in identification, assessment, management and reporting is integral to the effective protection of Indigenous heritage values in any regional plan.

Plans would have objectives, milestones, monitoring programs etc. so that states/territories are accountable for achieving the milestones and objectives. Projects could only be approved if they can be demonstrated to be consistent with the regional plan. The Commonwealth would have an assurance framework in place, and assessment and/or approval bilateral agreements could be withdrawn if states/territories were found to be approving projects that were inconsistent with the plan.

Ideally, significant Commonwealth money would be attached and be performance-based. States/territories would lose funding if they were failing to achieve milestones.

The Environmental Management Frameworks (EMF) in South Africa are a useful example of such an effective regional planning approach internationally. Here the EMF are included in all planning schemes and enshrined national law as part of the planning framework at national, provincial (state) and local level. As one paper puts it:

Environmental management frameworks (EMFs) are environmental sensitivity mapping instruments developed in South Africa as tactical management aids which can inform planning and provide strategic input into the EIA process. Their intended benefits are to direct new development to preferred development regions and minimise undesired developments in sensitive environments; they also potentially contribute to minimising unnecessary project level environmental impact assessments (EIA) in targeted development areas. – (M. Marais, F.P. Retief, L.A. Sandham & D.P. Cilliers) https://www.researchgate.net/publication/263275789_
Environmental_management_frameworks_Results_and_inferences_of_report_quality_performance_in_South_Africa



3.2 Strengthening strategic assessments

The Working Group urges the Australian Government to strengthen the strategic assessment provisions of the EPBC Act to enable more comprehensive and proactive assessments of plans, policies, and programs, leading to better environmental and regulatory outcomes. Depending on the scope and level of available information, the strategic assessment may establish a decision framework for future, specific site-based assessments.

We support the Environmental Defenders Office (2020) recommendations for SEA, The Independent Review of the EPBC Act: Response to Discussion Paper: A summary for the community; February 2020 (p19):

The Act should embed best practice strategic assessment by specifying:

- strong legislated standards, decision-making criteria and science-based methods, including requirements to be consistent with recovery plans and threat abatement plans;
- cumulative impact assessment requirements, taking account of past, present and likely (approved) future activities at the relevant scale;
- guidelines to support integration of federal strategic assessment with state and local planning processes at the earliest possible stage;
- comprehensive and accurate mapping and baseline environmental data:
- mandating transparency and public participation at all phases of the process, including to verify post-approval compliance, to ensure community confidence and acceptable outcomes;
- requiring alternative scenarios to be considered, including for climate change adaptation, to enable long-term planning for realistic worst-case scenarios;
- ground-truthing of landscape-scale assessment via [targeted] local studies and input;
- adaptive management and review once a PPP is accredited to respond to new discoveries, correct unsuccessful trajectories or implement best available technology.

3.3 Cumulative impacts

There is a clear opportunity to revise the EPBC Act to incorporate cumulative impact considerations into decision-making. Other jurisdictions such as Canada and the EU have had comprehensive provisions for cumulative impact assessment and management for over 20 years. Although consideration is not required under the Act, the Minerals Council of Australia recognised the challenges of cumulative impact assessment and management with their 2015 publication Cumulative Environmental Impact Assessment Industry Guide. The protection of threatened MNES, such as the Great Barrier Reef from cumulative impacts is detailed in the Reef 2050 Cumulative Impact Management Policy.

The explicit inclusion of cumulative impacts, along with direct, indirect and facilitated impacts, into the Act would provide a robust legal foundation for assessing and managing cumulative impacts. Past legal challenges under the Act have highlighted gaps in explicit recognition of cumulative impacts in the legislation as part of key legal decision-making process.

[Bio]Regional planning and strategic assessments are more effective approaches to identify and manage cumulative impacts on protected values than are site focused EIAs. A direct reference in the Act to cumulative impacts would facilitate strategic and innovative approaches to addressing cumulative impacts and enable genuine consideration of cumulative impacts.

3.4 Matters of national environmental significance

The tight focus of the EPBC Act on matters of national environmental significance (MNES) may not foster effective SEA or [bio]regional planning. As an example, the initial focus of the Perth Peel Strategic Assessment on MNES highlights the perverse outcomes that may be associated with restricting considerations to MNES. When the Western Australian Government grappled with the bigger underlying issues associated with growth and development of Perth, such as groundwater and habitat interactions, the vulnerabilities of coastal systems became apparent.

In Section 136 b of the EPBC Act the Minister is to consider economic and social matters when making a decision to approve an action. Yet the Minister can only consider a small subset of environmental issues, clearly precluding the kind of holistic, systems-based evaluation that is required. There is a clear opportunity to develop a robust regional planning framework to incorporate these matters upfront and consider ecological and sustainable development throughout the assessment and approval processes. This can be achieved through partnerships between the Commonwealth and states, territories or corporations as discussed above.

Dr Peter Burnett's PhD thesis discusses this issue quoting Justice Preston (Justice Brian J Preston, 'Adapting to the impacts of climate change: The limits and opportunities of law in conserving biodiversity', (2013) 30 Environment and Planning Law Journal 376):

First, the conservation of biological diversity and ecological integrity, or other desired ecocentric considerations need to be expressly and specifically identified as objects and relevant matters that must be taken into account in the exercise of powers and functions under the statute.

Secondly, if there is potential for conflict within or between objects or relevant matters, the priority or relevant weight to be accorded to each object or relevant matter needs to be stated.

Thirdly, if the object or relevant matter involves an outcome or standard to be achieved, then the statute needs to be drafted so as to require the decision-maker to exercise the relevant power or function so as to achieve that result and not merely to consider the matter ...

Dr Burnett notes the EPBC Act does the first, but not the second or third. He goes onto to advocate for either environmental plans or a comprehensive environmental information system to provide appropriate context for individual EIAs. The Working Group supports these suggestions.

3.5 Standards for assessment

The SEA Working Group advocates for national environmental standards that could be reflected in high level objectives within [bio] regional plans to provide the basis for downstream EIA assessments. Given our federal system, a more effective split of Commonwealth/ state roles would be for the Commonwealth to focus on setting national standards, objectives and policies for environmental protection and the states/territories to administer project impact assessment. We suggest a three-tiered approach along the lines of:

- National policies, strategies and standards for ESD, established by the Commonwealth in concert with the states and local authorities
- [Bio]regional plans, developed as outlined above, which reflect and comply with national policies/standards; together with SEAs of other policies, plans and programs, where the SEA also reflects the national policies/standards
- Project-level EIA conducted in the context of the higherlevel policies etc. and assessed for compliance with regional outcomes.

This approach is similar in concept to that used by the Australian Government when it sought to develop bilateral agreements between the Commonwealth and the states for environmental approvals. However, the Standards for Accreditation of agreements developed at the time (http://www.environment.gov.au/resource/standards-accreditation-environmental-approvals-under-environment-protection-and) were constructed at too high a level to provide a sufficiently rigorous assurance framework or be applicable in [bio]regional planning practice.

We are seeking principles which can be applied and tested in a region to identify specific objectives, best approaches and 'levers' to deliver conservation and sustainable outcomes. To what extent are we now able, in certain environments, to set thresholds for environmental protection? For example, what exactly is critical habitat and what are the parameters for assessment and protection associated with it?

An example of a useful approach are the Western Australian Environmental Protection Authority environmental principles, factors and objectives: (http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Statement%20of%20Environmental%20 Principles%2C%20factors%20and%20objectives.pdf

3.5 Implementation issues

By 'implementation' here we refer to both the process of undertaking strategic assessments and developing [bio]regional plans, and the process of ensuring the desired outcomes and objectives are ultimately achieved.

To date, most strategic assessments under Part 10 of the EPBC Act have struggled in implementation phases. This is partly due to the difficulties of securing and delivering meaningful offsets over the long-term and partly due to minimal direction being provided in s146 about how they should be undertaken. There is similarly little guidance in the Act on the preparation of [bio]regional plans. Such guidance should clarify the adequacy of information required for these strategic mechanisms – it will be less detailed than for project-level EIA. Appendix 1 lists considerations and procedures applicable for [bio]regional planning while Appendix 2 suggests guidelines for robust strategic assessments.

Adequate resourcing for strategic assessment and [bio]regional planning is also vital as is appropriate funding to implement the specified conservation measures in endorsed policies, plans and programs. Staff capacity building and training with clear documentation is important, especially as many of the Part 10 strategic assessments have been associated with turnover of critical staff at both the Commonwealth and state levels.

Both strategic assessment and [bio]regional plans require strong links to subsequent project-level EIAs falling within their scope. This ensures that streamlining opportunities are realised and environmental outcomes and objectives are achieved. Robust integration of Commonwealth processes with state and local planning processes at the earliest possible stag is also required.

Using the strategic assessment or [bio]regional plan to identify and structure an appropriate framework for monitoring and reporting against the specified regional objectives is fundamental to ensuring that these mechanisms deliver against the desired environmental outcomes and objectives. Accepting information will not be perfect at the time of the assessment, understanding what data is required to inform future adaptive management will structure management efforts.

4 EPBC Act Review questions (13, 15 & 16)

Question 13: Should the EPBC Act require the use of strategic assessments to replace case-by-case assessments? Who should lead or participate in strategic assessments?

In many instances strategic assessments can be designed and delivered in a way to reduce the need for case-by-case assessments. If Australia adopts strategic assessments more broadly it will lead to a range of endorsed plans, policies and programs. As actions taken in accordance with them may be approved, the demand for case-by case assessments should decrease.

However, there will always be a requirement for case-by-case applications. This may be because the proposed action was not envisaged, further mitigating information is available or someone wants to do something in a place or manner not covered by the approved plans, policies and programs. This does not mean these actions should be approved but provisions for their assessment will need to be made. This means that appropriate tiering and assessment can facilitate efficiencies in practice, enabling more proportionate approaches at respective levels of assessment.

There could be an option for lower risk projects (to be clearly described in the [bio]regional plan or other process) to receive approval with standard conditions for protected matters, similar to the current 'Particular Manner' specifications for Non-Controlled Actions.

As to who should lead and who should participate in strategic assessments, this submission is framed around a clear role for the Australian Government in establishing standards, considering cumulative impacts, nominating objectives and outcomes for regional plans and ensuring robust implementation. States, territories, local governments and/or corporations will have responsibilities as proponents or regulators for facilitated downstream actions.

Question 15: Should low-risk projects receive automatic approval or be exempt in some way? How could data help support this approach? Should a national environmental database be developed? Should all data from environmental impact assessments be made publicly available?

Several members of EIANZ agree there could be an option for lower risk projects (to be clearly described in, and consistent with, a regional plan or other clear process and standards) to receive approval with standard conditions for protected matters. This would still require registration of the project with the Australian Government and demonstration that the scope and impacts of the proposal were consistent with the [bio]regional plan.

Yes, a national environmental database should be developed in Australia. The protected matters search tool is a start, but more data should be made publicly available including from EIAs and other information documents. Standardised data collection and management would be critical. However, this could be controlled by establishing associated guidelines and specifying these in terms of reference for EIAs. The terms of reference should also state that this raw data will be handed over to the Australian Government for inclusion in the national environmental database. Currently there is a trial of this approach being led by the Western Australian Government, which should provide useful insights for future adoption nationwide.

Question 16: Should the Commonwealth's regulatory role under the EPBC Act focus on habitat management at a landscape-scale rather than species-specific protections?

Yes, as long as other jurisdictions are effectively protecting species by adhering to established standards, considering cumulative impacts and ensuring robust implementation.

The concept of landscape-scale assessment, understanding the natural and human systems operable in a place through [bio]regional planning, will set the scene for future decision-making. Essentially [bio]regional plans are mechanisms for identifying key environmental values within a defined region that warrant protection and/or restoration; determining environmental outcomes and objectives that should be achieved; assessing current and likely future threats to environmental values; determining measures needed to ensure environmental outcomes can be met; and providing a framework for future development and management in the region. The Commonwealth should specify objectives and outcomes for the 'region' and ensure the proponent's assessment demonstrates compliance.

APPENDIX 1 Proposed considerations and procedures for regional planning

A regional plan should, at a minimum require:

(a) collation of reasonably available information, and should identify and fill critical knowledge gaps:

- information should include the spatial extent of threatened species, ecological communities or heritage areas
- the assessment should present maps of habitat for listed threatened species, ecological communities, heritage areas and other important environmental components, and
- the process should include a call for relevant, existing data from researchers, consultants and others.

(b) identification of matters of NES and establishment of outcome objectives for the plan

 the assessment should state the minimum acceptable conservation outcomes for each of the environment and heritage values that the plan considers.

(c) examination of development and land use options with the aim of minimising impacts on protected matters and retaining ecological integrity

(d) an analysis of the consequences of the different options including:

- estimates of impacts;
- how the plan avoids, offsets and mitigates impacts on protected matters; and
- a measure of the uncertainty associated with the analysis.

(e) a description of mitigation measures, and quantification of expected benefits including:

- how future conservation 'gains' will be funded, measured and enforced; and
- analysis of the adequacy of the extent of habitat that will exist following the implementation of the plan, policy or program; and

(f) a description of adaptive management approaches in the plan. These should:

- indicate what actions will follow, should planned conservation actions not be implemented, or should expected outcomes from conservation actions not be achieved (that is, contingency plans should be clearly documented to account for environmental uncertainties); and
- allow for the unexpected, including new discoveries of species, habitats and/or communities of conservation concern in areas to be impacted by the proposed development.

APPENDIX 2 Proposed guidelines for undertaking a strategic assessment

The strategic assessment should:

- include the extent to which a plan, policy or program:
 o protects the environment (focusing on protected matters)
 o promotes ESD
 o promotes the conservation of biodiversity
 - o promotes the conservation of biodiversity o provides for the protection of heritage.
- set out minimum standards of acceptable environmental impacts, and
- provide a set of higher-level considerations. These criteria influence development of the plan, policy or program by outlining the basic decision making for any subsequent strategic approval. In addition to the existing endorsement criteria, the guidelines could specify the following requirements:
- (a) The area considered for strategic assessment should make ecological sense (i.e, comprise an ecoregion or a catchment) or provide meaningful protection of heritage values.
- (b) The strategic assessment should indicate how much data and knowledge is required to make a good decision that is, it should clearly describe and justify the minimum adequate data and knowledge set. Considerations should include the quality of data and current, remotely acquired data (especially in rapidly changing areas).
- (c) Critical gaps in the data should be identified and filled with targeted field surveys at appropriate times of the year, following best available survey guidelines, so that the conditions for the minimum adequate data set are achieved. Sufficient time should be given to arrange access to private land, where required.
- (d) Wherever possible and relevant, strategic assessments should include models of species persistence (particularly those that are informed by process models and community composition models). This is because perfect information on populations and species can never be obtained and so modelling is essential for conservation planning, particularly across private land and in peri urban areas.
- (e) The strategic assessment should employ accepted existing information and best practice conservation planning tools and protocols to maximize the effectiveness of conservation actions.
- (f) All stages of the strategic impact assessment process should be documented in a clear and transparent manner.
- (g) The strategic assessment should include precise recommendations for measurement endpoints that can be used in subsequent audits to verify predictions and assumptions of the effectiveness of conservation actions and the value of conservation outcomes.