SUBMISSION TO THE EPBC ACT REVIEW

ANON-K57V-XYY3-A

Name
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Organisation
Bush Heritage Australia

State or Territory
New South Wales

Areas of interest
The objects of the Act; Threatened species; International obligations; Indigenous Australians; Heritage; Matters of National Environmental Significance; Environmental Impact Assessments; Cumulative impacts; Climate change; Compliance and enforcement; Decision making; Biodiversity; Conservation; Water.

Attachment provided?
Yes

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Yes – with my name and/or organisation

SUBMISSION RESPONSES

QUESTION 1: Some have argued that past changes to the EPBC Act to add new matters of national environmental significance did not go far enough. Others have argued it has extended the regulatory reach of the Commonwealth too far. What do you think?

The existing MNES do not enable Commonwealth oversight or intervention to protect the foundational elements of a functioning environment: healthy native vegetation as the supplier of ecosystem services including carbon sequestration and habitat for biodiversity, and natural hydrology including surface and underground water quality and quantity. This is in part due to a lack of coordination, support and financial resourcing. However, we also recommend that the existing list of MNES to be retained and augmented with the following:

a) Indigenous Conservation Estate – Indigenous Protected Areas(IPAs) and other Aboriginal land and conservation models (where applicable);

b) Culturally significant entities (species, populations, communities/ landscapes/ stories);

c) National Reserve System should be protected areas against significant impacts – including additive impacts even if each is of low significance;

d) Ecosystems of National Importance, such as wetlands of national importance, Key Biodiversity Areas, climate refugia and High Conservation Value Vegetation;
e) Climate refugia - areas with terrain characteristics where species may retreat to and colonise from, during extreme weather events or as the climate change impacts worsen over decades. Current knowledge should be blended with Traditional Knowledge to define these areas;

f) Climate change impacts – allowing for mitigation by embedding climate projections in strategic planning, and where high-emission projects have their impacts thoroughly assessed against international climate goals and national commitments;

g) Significant rivers and ground water resources against over-extraction, pollution and other adverse impacts, subject to the oversight of a National Water Commissioner (or the Sustainability Commission);

h) All Key Threatening Processes should be listed as triggers for the EPBC Act to regulate the serious negative impacts of land clearing and land degradation, including deforestation; and

i) Proposed MNES a) to e) listed above should be ‘no-take’ zones and considered areas in need of special protection.

We believe this is a fundamental principle for the amended Act that it enables Government to have the power to protect a broader range of MNES, ensure we restore and then retain a resilient and functional natural environment, curtail destructive developments across a much broader range of environmental assets and require ecologically sustainable development. The warming dryer climate means greater protections for a broader range of environmental assets are urgently needed.

QUESTION 2: Should the objects of the EPBC Act be more specific?

How could the principle of Ecologically Sustainable Development (ESD) be better reflected in the EPBC Act? For example, could the consideration of environmental, social and economic factors, which are core components of ESD, be achieved through greater inclusion of cost benefit analysis in decision making?

Greater inclusion of cost benefit analysis in decision-making could allow for better understanding of the real impacts and costs of any development, with consideration of the short- and long-term potential consequences to biodiversity. However, the trend in the USA of using cost benefit analysis in environmental regulation has been problematic and tends to be used by people arguing for much less environmental regulation. There need to be safeguards and minimum standards, and no cost-benefit considerations should enter into decision-making unless it occurs through an established environmental economic accounting mechanism.

Ecologically Sustainable Development should be clearly defined (ESD, 1992) and be reflected in the Act through the Principles, where the essential tenets and timeframes are clearly spelled out. For example, the cost benefit analysis must include all ESD elements, with equal weight given to ecological sustainability as to short-term benefit, with strong adherence to the proviso that costs and benefits are considered on a timeframe that includes future generations.
Abiding by the Principles, including the principle of Ecologically Sustainable Development should be an essential part of the referral and assessment processes. This would be a significant step forward. It would also assist the proponent to understand the real costs (financial, environmental and social) of their proposal and may encourage them to reduce or review their development plans.

It is vitally important that there is a requirement for proponents to undertake a full analysis of all biodiversity function and processes, environmental water, soil, species and vegetation health and connectivity, economic, social and cultural losses and benefits for the short-, medium- and long-term and to document how damage will minimised, mitigated, repaired, offset and/or compensated for.

Cost benefit analysis as it may apply to governments should not enter into decision-making when considering whether to take action to protect a species or ecosystem, but how to do so most efficiently.

Bush Heritage Case Study

In our experience, most businesses that impact the environment do not account or pay for the environmental, social, economic and cultural costs they impose on their local and wider communities. The costs are mostly borne by the community either directly or indirectly, while the developer benefits, at least in the short term. The direct impacts of unsustainable developments can include contamination with toxic and other waste, need for site clean-up and recovery, loss of native vegetation and species, increased erosion, increased invasive pests, fencing damage and/or removal, surface and ground water impacts and loss of control over water management and loss of or damage to cultural sites and artefacts.

The indirect costs borne by the wider community are more numerous and include, loss of productivity of the land for the future, loss of soil carbon, degradation and/or loss of native habitats, loss of biodiversity, loss of livelihoods where viable businesses (for example sustainable ecotourism or farming enterprises) are adversely impacted by extractive industries or ‘upstream’ environmental degradation. There are also social costs for those affected including declines in physical health and mental wellbeing, loss of culture, inter- and intra-generational inequity, economic and community demise.

As a conservation land buyer, Bush Heritage has borne first hand the costs of past land degradation. The acquisition of Charles Darwin Reserve in Western Australia was funded by private philanthropists and government support through the National Reserve System program. There has been however, no protection against the destruction of part of the reserve to facilitate nearby mining activities.

It is our supporters (the community) and grant makers (often government) who pay the cost for the work needed to return the land to a functional and healthy condition, and recover declining species populations, not the enterprise/s that caused the damage. These costs range from making safe and cleaning up past mining and farm infrastructure and toxic waste, and repairing highly active erosion heads, to revegetating thousands of hectares of degraded land, restoring overland water flow, controlling weeds and pest species and recovering threatened species lost to feral pests, over-
grazing and habitat decline. The costs to the community of this repair work are, in most instances, disproportionate to the profits extracted by the previous landowners. The reparation work we do costs our supporters millions of dollars annually.

Opportunities for change

- Include Ecologically Sustainable Development in the Principles by which the Act is administered
- A holistic approach to ecologically sustainable development is needed and must recognise both direct and indirect costs over multiple generations.
- Proponents should be required to demonstrate in business plans how they will assess, minimize, mitigate, repair and pay for direct and indirect impacts, both in the short- and long-term. Included should be impacts on culture, livelihoods, land productivity, native vegetation, species, soil carbon, aquifers and river systems.
- These proposed actions should be monitored consistently.
- Financial penalties for breaches or failure to undertake proposed actions in accordance with environmental conditions needs to be statutorily enforced to provide real disincentive for non-compliance by both companies and natural persons.

QUESTION 3: Should the objects of the EPBC Act be more specific?

Yes, the Objects of the Act need to be more specific, strengthened, focussed on National ecological outcomes and linked to measurable ecological goals to ensure the revised Objects of the Act are effectively operationalised and obtained. Accountability on environmental protection has been lacking and measurable goals will enable the community to track the performance of governments in delivering the Objects of the Act. Listed vegetation communities and species, and critical water resources which fall into the current Matters of National Environmental Significance have not been protected despite their inclusion in the Act. This demonstrates that the Objects, as they are, have failed to deliver the communities expectations of the Act.

The regulatory tools are sound, (but there is room for improvement and simplification) but the Act lacks clarity on what role the Commonwealth plays and how States/Territories and the Commonwealth work together to achieve a healthy, secure environment. Nowhere does it set any direction or trajectory for biodiversity – for example, what we need conservation programs and funding to achieve.

The Objects of the Act must be amended so as to elevate the protection of the environment as the primary object. The Act’s Objects must ensure the ongoing legal protection of all of Australia’s biodiversity, in particular stating a direction such as ‘no further loss’, or even better, a measurable improvement across a number of factors such as vegetation extent, soil carbon, river flows and species populations. Defining biodiversity targets would be a great step forward.

As a general comment, the Objects should be specific enough to be measurable, able to be reported against, and should include ‘outcome’ as well as ‘how achieved’ statements. They should clearly provide leadership and set a national direction for both biodiversity conservation and ecologically
sustainable development, while maintaining long-term relevance. This then enables the Commonwealth to accredit state processes, and to provide funding to meet biodiversity targets. It should provide more incentive for states and Commonwealth to work together.

The amended Act should also clearly set out how the Objects are to be achieved and specifically cite that the responsible Minister (and administering agency/ies) must exercise their powers and functions under the amended Act to achieve all of the Acts’ Objects.

However, it is critical that in amending the Act that, as a bare minimum, we at least retain the current level of legal protections rather than reducing protections for the environment.

**QUESTION 4: Should the matters of national environmental significance within the EPBC Act be changed? How?**

The existing MNES do not enable Commonwealth oversight or intervention to protect the foundational elements of a functioning environment: healthy native vegetation as the supplier of ecosystem services including carbon sequestration and habitat for biodiversity, and natural hydrology including surface and underground water quality and quantity. This is in part due to a lack of coordination, support and financial resourcing. However, we also recommend that the existing list of MNES to be retained and augmented with the following:

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We believe this is a fundamental principle for the amended Act that it enables Government to have the power to protect a broader range of MNES, ensure we restore and then retain a resilient and
functional natural environment, curtail destructive developments across a much broader range of environmental assets and require ecologically sustainable development. The warming dryer climate means greater protections for a broader range of environmental assets are urgently needed.

**QUESTION 5: Which elements of the EPBC Act should be priorities for reform? For example, should future reforms focus on assessment and approval processes or on biodiversity conservation? Should the Act have proactive mechanisms to enable landholders to protect matters of national environmental significance and biodiversity, removing the need for regulation in the right circumstances?**

The EPBC Act reforms should focus primarily on achieving measurable outcomes for biodiversity conservation, while using the opportunity to improve the assessment and approval process, and provide incentive mechanisms and regulatory controls. The implementation of the Act may well need to be streamlined and improved, but the Act needs to drive a step-change in Australia’s capacity to protect biodiversity and environmental assets.

From a regulatory point of view, we believe the Act should achieve the following:

- drive strategic planning, goal setting and resource allocation, across the expanded list of MNES (See Q.4);
- actively identify key threatening processes, with a specific and focus view to limit, mitigate and prevent the damage caused by Key Threatening Processes;
- establish national standards and time-based targets for biodiversity protection, vegetation retention and restoration, and to achieve reductions in water extraction and use.
- require BioRegional Plans to be revived and developed that adhere to the national standards for the extent and/or levels of protection of MNES, and which can also be used at the local level to guide priorities for funding and action.
- require detailed recovery plans for species or ecological communities to be developed or updated within specified timeframes, and which take into account likely shifts in habitat structure and function as a consequence of ongoing climate change
- provide accreditation mechanisms and processes for State conservation planning and regulation
- require real incentives and support mechanisms (including stewardship payments) for landholders to set aside land for conservation
- have strong, clear ‘call-in’ powers for regulatory proposals, plans or policies that affect MNES and where accredited processes to take MNES into account have not been properly followed.
- provide for funding and extension personnel to enable the Act and its requirements to be well understood in the community, with face-to-face support for proponents developing EPBC Act referrals.
- set in place compliance processes and penalties for breaches that are commensurate with the damage caused and the costs of recovery, including reparation to communities or Traditional Owners whose cultural sites or totem species have been impacted.
• The Government should strengthen its role as an information provider – funding research into environmental trajectories, climate impacts, species recovery, habitat restoration, and management of threats such as over-extraction of water. The Commonwealth is well positioned for broad-scale analysis of data, with universities, CSIRO and Geosciences Australia as partners.

• require that BioRegional Plans look ahead at projected future climates (at the ecosystem, catchment or landscape level), predict impacts on regional vegetation (particularly critical habitats), species, soils and water, and identify the likely best areas to conserve and restore. Make this information available to land managers. Work with Traditional Owners on recovery actions and monitoring.

• undertake analyses and make information available through accessible data bases. Open access to data for states, industries, NGOs and landholders so they can identify the best actions to take, the best places to act and implement effective responses.

• develop new mechanisms and incentives, and provide information, to enhance environmental protection on private land. Funding will likely be required on an on-going basis, especially to protect critical habitats on private land, but it is essential.

• develop forward looking response plans to manage environmental disasters;

• coordinate across jurisdictions, NGOs, Traditional Owners and other partners using regional planning instruments to achieve collective aims. To do this means jointly setting directions through shared planning, having useful tools and incentives in place for partners to use, including information, guidelines, mechanisms to facilitate conservation partnerships with landholders, leaseholders, businesses or others including incentive payments and tools to establish cooperative conservation agreements or covenants where state mechanisms are lacking.

**QUESTION 6: What high level concerns should the review focus on? For example, should there be greater focus on better guidance on the EPBC Act, including clear environmental standards? How effective has the EPBC Act been in achieving its statutory objectives to protect the environment and promote ecologically sustainable development and biodiversity conservation? What have been the economic costs associated with the operation and administration of the EPBC Act?**

We believe that the greatest high-level concerns that need to be addressed as part of this 2nd Review of the EPBC Act review are:

1. acknowledgement and acceptance of the fact that the Act must be amended in line with expert advice and recommendations such that it can address the the growing threats and declining environmental health (most of the Hawke Review recommendation were not adopted); and

2. funding and guiding the implementation of the Act to deliver what the public believes it should deliver – a healthy, secure environment where ecosystems, species and heritage sites are protected.
The lack of national standards and targets, that are consistent with Australia’s international legal obligations, to make plain what goals we, as a nation, need to achieve for Australia’s biodiversity, and against which all levels of government in Australia can report against and be held accountable to;

- EPBC Act referrals being assessed on a case-by-case basis without considering the cumulative effect of these many ‘small’ losses over the short, medium and long term. The combined impact of these incremental losses is contributing to regional extinctions in species populations, and national declines in ecosystem health and the death of river systems. A case of ‘death by a thousand cuts’.
- Good regional planning can be a panacea here together with national standards for vegetation retention and restoration, protection of critical habitats and limits on water extraction. Assessments can then be made in the context of these standards as they apply to biodiversity at both the regional and national scale (See Q 13).
- Lack of awareness among landholders and developers of the EPBC Act and their obligations under it, leading to destruction or degradation of MNES and the continued confusion over how, if and when a referral needs to be made by whom.
- Lack of or inadequate policing and penalties for breaches of the Act, and lack of a requirement for full restoration and reparation.
- Duplication and conflict with state regulations.
- The watering down, through an amendment bill in 2015, of the ability for affected parties to make a referral or for the public to appeal development proposals.

NB. Often it is people or organisations on the ground that have firsthand knowledge of species or habitats of significance and understand the real impacts on them of a proposed development. By not allowing them a means to alert the EPBC administrators it is preventing needed scrutiny of damaging developments.

Opportunities for change:

- Strengthen and expand the EPBC Principles, and set in place processes that ensure the Principles are applied to all aspects of the implementation of the Act (see also Q. 26)
- Build into the Act measurable goals and objectives for conservation gains, and a requirement for publicly available reporting against progress, so the community can see that the government is taking environmental protection seriously.
- Incorporate a requirement for Ecologically Sustainable Development principles to be part of any referral and its assessment.
- Require that climate projections and other likely future impacts and threats be incorporated into the guidelines for developing and assessing referrals.
- Set national standards and accreditation processes for plans developed by the states to remove the duplication and provide clarity on roles and responsibilities.
- Develop a framework of National Environmental Economic Accounts (using data above) to track and value extent, condition and trends in Australia’s natural capital (such as biodiversity, landscape health, native vegetation extent and condition, water quality and the extent and impact of threatening processes) to make clear the value of natural and
cultural resources and thus the costs of destruction and degradation of natural capital. Provide an annual set of accounts to enable transparency, changes of approach and adaptation

• Provide information and guidance to farmers (and the agriculture sector as a whole) and other proponents through regional extension personnel, who also assist in assessing the need for and preparing a referral and implementing any required actions.

Implementation:

• Put in place and implement long-term BioRegional Plans to help the community understand and implement the most effective actions for their region. Use the best-available science to identify effective strategies and conservation actions in a warming, drying climate. New ways to protect species will be needed, so keep staff up to date with the latest information, novel and innovative approaches that will need to be trialled.

• Establish cooperative partnerships with states, industry, Traditional Owners, NGOs and set up clear, shared objectives, but do not be overly prescriptive about how the work is achieved.

• Establish mechanisms to enable partners to be effective and engaged. This includes providing information and funding and recognising that all groups have a valuable role in achieving the objectives and need to be given a mandate to act.

• Work across government to embed ESD principles, biodiversity outcomes and impact avoidance in all plans and policies.

• Require regular reporting to Parliament and the public on the true condition of environmental assets, and the sources of decline including from government funded projects or programs. A true analysis of risks or policy failures will allow mechanism to be developed to address them.

• Remove the Prior-use provision for environmentally damaging actions, such as re-clearing regenerating native vegetation where at least 15 years has elapsed since it was first cleared.

An example of how the Act has failed to protect Matters of National Environmental Significance.

As stated in the EPBC Review Discussion Paper ‘the protection of water resources from coal seam gas development and large coal mining development’ was added to the Act as a Matter of National Environmental Significance in 2013. Evidence and expert advice suggests that the approval of the Adani Carmichael mine and the licence to extract 12.5 billion litres of water from the Suttor River at the likely cost of nationally important wetlands and agricultural livelihoods, is in direct contravention of the Act.

This case is a demonstrable example of the extent to which the Act does not and cannot protect a significant water source as a Matter of National Environmental Significance despite incontrovertible scientific evidence.
QUESTION 7: What additional future trends or supporting evidence should be drawn on to inform the review?

- Climate change will transform the Australian landscape over the next century. The EPBC Act must be amended to acknowledge climate change and accommodate the period of great uncertainty that we are now in, in terms of ecosystem function and integrity. There will be significant changes in the structure, composition and diversity of vegetation communities, consequential loss of species and increasing ecosystem collapse. CSIRO projections indicate that Australia will have ecosystems that disappear entirely, others that will be ‘novel’ (mostly hotter drier environments and deserts), and some that persist but change to a greater or lesser degree. Rainfall in the south of the country will continue to decline, particularly in the winter and spring, which will have direct impacts on the growing season for both native ecosystems and agriculture.

- Existing habitats and transitioning habitats will become important, and needed by species or communities to migrate to or through. Thus, it will be critically important to establish biolinks to connect these habitats, and critical habitats need strong protection. Our planning framework needs to look ahead, predict change and identify effective preventative or adaptive actions. Considerations would include how to mitigate the potential spread of invasive animals, plants and pathogens, declines in habitat quality for species, transitioning species to new locations, major interventions to protect refugia, key species or habitats etc.

- Conflicting with the reality of declining environmental health and increasing impacts of climate change is the general business-as-usual approach from extractive and many agricultural industries. The goal for agricultural expansion and increased mining appears to ignore the drying climate, the depletion of ground and surface water, and the increase in extreme temperatures, and weather and fire events. ABARES has just confirmed that its Outlook 2020 conference will explore the practical steps to reaching $100 billion in farm output by 2030.

- Changes in rainfall and inflows to waterways. The analysis for Victoria’s recent Long-Term Water Resource Assessment for southern Victoria shows alarming drying trends for waterways. The same story is occurring across much of Australia. Concerns for water security will affect the health of surface and sub-surface waterways, including Ramsar sites, and the health of vegetation communities and ecosystems dependent on ground water.

- On a more local level, changing agriculture is leading to different environmental impacts. The reduction in rain in southern Victoria has resulted in some farmers moving from grazing to cropping – with resultant loss of rock fields, native grasslands and paddock trees. Similarly, the construction of irrigation schemes in the Tasmanian Midlands is also leading to a shift to cropping and further land clearing. Both examples demonstrate the significant impacts on threatened birds, small mammals, reptiles, insects and other grassland animals and plants.

- Increases in the human population and the resulting growth in demand for water and other resources will put increasing pressure on native vegetation, aquifers and river
systems. The Act needs to provide a ‘line in the sand’ approach, implemented through national standards and BioRegional Plans, which ensures Australia maintains ecosystem function and species viability, despite increasing demands from population growth.

**QUESTION 8: Should the EPBC Act regulate environmental and heritage outcomes instead of managing prescriptive processes?**

Both are required. The purpose of the EPBC is to protect biodiversity. The outcomes that the Act regulates must be those that meet ecological and biodiversity goals, not management of processes. However, a clear and concrete process is critical for decision-making that is transparent, benefits from independent experts, involves stakeholders, can be challenged, and is enforceable (not to mention producing and disseminating data that abides by FAIR principles, etc). Biodiversity outcomes are clearly the main goal, but processes, including referrals, assessments, controlled actions and enforcement, are critical supports for getting there.

Establishing a good process will assist in delivering the environmental and heritage goals enshrined in the EPBC Act. The process by which those goals are achieved is important but not an end in itself. The current process has some good mechanisms in place but they can be improved, or even completely rethought, to ensure the best possible chance of achieving the conservation goals.

Opportunities for change:

- In conjunction with at least one newly established statutory and independent authority/body (for example, a National Environment Protection Authority) the Commonwealth will work with State and Territory governments and key stakeholders including Traditional Owners to develop a strong National Biodiversity Strategy that defines environmental and biodiversity standards and goals, and addresses international treaty obligations.
- Recovery plans (for both ecosystems and species) address our national and international obligations for protecting species and habitats, and funding is made available for their implementation.
- BioRegional Plans are developed, incorporate required actions from Recovery Plans, Threat Abatement Plans and together address the National Standards and International obligations.
- Commonwealth funding mechanisms support the implementation of BioRegional Plans by state agencies, NGOs, Traditional Owner Corporations, community groups and individuals.
- Implementation is supported by guiding documents, land-owner incentives, extension services, active enforcement and strong penalties for breaches.

**QUESTION 9: Should the EPBC Act position the Commonwealth to take a stronger role in delivering environmental and heritage outcomes in our federated system? Who should articulate outcomes? Who should provide oversight of the outcomes? How do we know if outcomes are being achieved?**
Yes, we concur with the opinion of APEEL (2017) that the Commonwealth should apply its Constitutional powers to protect the environmental and heritage more consistently and at a broader level through the application of the numerous environment-related Treaties and Conventions to which Australia is a signatory, as well as the UN Convention on the Rights of Indigenous Peoples.

In accordance with the Australian Constitution the Commonwealth Government must have a stronger role in delivering environmental and heritage outcomes. It is the only level of government that can take a national perspective and consider the international legal obligations of the nation. It has the legal responsibility for decisions that impact a viable, healthy environment at the national level.

We need to accept that biodiversity is a national public matter, a benefit for current and future generations which understands no artificial state boundaries, and which should not suffer further losses as consequence of policy failures or vested interests in any one state or territory. The current administration of the Murray-Darling Basin Plan is a graphic demonstration of state interests overriding the common good.

We concur with APEEL opinion (2017b) that climate change, habitat clearance, invasive species, urbanisation, diseases, pollution, and altered fire regimes threaten multiple species. The scale and pervasiveness of these threats requires landscape-scale management approaches and a long-term commitment of resources. Further, landscape-scale management of threats requires a nationally coordinated approach that is collaborative across jurisdictions (APEEL, 2017 -2).

The Commonwealth and States (given the States’ significant role in conservation within their jurisdictions) need to work closely together in setting National Standards, a framework for a national approach to conservation action, and a program for implementation at the regional level. This planning needs to be mindful of the environmental loss and generational and cultural inequity that has already occurred, the warming climate and other threats that we face (See Q 7 & 8).

We recommend that the responsibility for developing National Environmental Standards and Targets to protect ecosystems, species and heritage sites, and have oversight of on-ground implementation and reporting against goals, should be vested in an independent authority which reports to the Federal Minister. We also recommend that this independent authority includes Traditional Owners, and representatives from all states and territories. The local or regional outcomes would be measured against the regional goals and targets (set to meet the National Standards and international obligations) specified in BioRegional Plans and developed in partnership with states and territories. These plans should not necessarily be confined with state boundaries but developed around functional landscapes or catchments. This would also enable a nationally coordinated approach to environmental data collection, monitoring, evaluation and reporting, where the Commonwealth has a significant role.

**QUESTION 10:** Should there be a greater role for national environmental standards in achieving the outcomes the EPBC Act seeks to achieve? In our federated system should they be prescribed through:
• Non-binding policy and strategies?
• Expansion of targeted standards, similar to the approach to site contamination under the National Environment Protection Council, or water quality in the Great Barrier Reef catchments?
• The development of broad environmental standards with the Commonwealth taking a monitoring and assurance role? Does the information exist to do this?

Yes, national environmental standards are needed to set a benchmark for what is to be achieved and by when. The lack of clear and consistent national environmental goals, standards, indicators and data sources is a major barrier to effective decision making in multi-level governed Australia. These standards need to be determined through expert knowledge and best-available science and defined by what must be done (using a range of strategies) to retain viable species populations, vegetation cover, ecosystem integrity and functional landscapes in a changing climate. The standards need to facilitate the delivery of the goals set out in the Act.

There are a range of mechanisms that could be employed:

• Binding strategies – which would require secure Commonwealth funding – could be used to protect ‘critical habitats’, support interventions to protect species on the endangered and critically endangered lists and ensure required reductions in water extraction.
• Non-binding strategies and targets - could work if developed cooperatively with all implementing partners. Once agreed, funding could act as leverage to ensure delivery of the targets. Experience shows that without some significant Commonwealth leverage or incentive, non-binding targets would be less effective and less likely to be met.
• Targeted standards would have application where specific goals need to be reached within specified timeframes. An example would be restoration for vegetation cover in key biolinks.

We would recommend that monitoring is the responsibility of the States and those overseeing the on-ground work, but the structures, including funding and cross-jurisdictional agreements, to support that monitoring should be put in place by the Commonwealth. The structures would include a National Environmental Database, National Environmental Economic Accounts, and monitoring methodologies.

QUESTION 11: How can environmental protection and environmental restoration be best achieved together?

Bush Heritage believes that targets for restoration and repair of environmental damage should be enshrined in the EPBC Act. Restoration is now critical. The Government has a duty of care to drive landscape restoration to the greatest extent possible. Almost all habitats across Australia require some ongoing management or restoration, so restoration is only a matter of degree and an integral part of protection.
Private land-owners have a key role to play in restoring the land and rebuilding vegetation biolinks, particularly where they hold critical habitats for threatened species or endangered ecosystems.

Mechanisms and incentives including those below would encourage and support the efforts of the community to protect and restore land:

- incentives for landowners who permanently protect land under State administered conservation covenants
- land management funds to support on-ground works (that could encourage private sector contributions)
- perpetual stewardship programs (that could encourage private sector contributions and help farmers on the land—see Q 13), and
- programs that invite Traditional Owners to bring skills and Traditional Knowledge to the task of land restoration (that could encourage private sector contributions).

Benefits would include carbon sequestration, protection of species and habitats, diversified income for land-owners and Aboriginal Peoples, and opportunities for Traditional Owners to reconnect with Country and culture.

Bush Heritage believes strongly that a funding mechanism to proactively build the National Reserve System and Indigenous Protected Area estate is needed. Protecting existing high-quality habitats and land to create critical biolinks is much more cost-effective and delivers much higher conservation outcomes than repairing damaged land—as in prevention is better than cure. Building connectivity will be critical for climate change adaptation and the inevitable movement of species, and the NRS provides an ideal platform to achieve these goals. The previous funding model of $2 : $1 of Commonwealth to private funding was a world class program that saw, and continues to see, a massive investment from the private sector in land conservation. Individuals and organisations today continue to fund the management and enhancement of these protected areas at the cost of many millions of dollars annually (See also Q.25).

The National Reserve System (NRS) Program fueled a rapid increase in the protected area estate and was fundamental to achieving the 17 per cent protection goal set down in Aichi Target 11. Since NRS funding was withdrawn in 2011 it have been challenging to continue land acquisition for conservation. For example, Bush Heritage purchased Pullen Pullen Reserve in Queensland in 2016 to secure the only known population of the iconic Night Parrot. The philanthropic donations relied on to fund the purchase fell short and the private acquisition debt (mortgage) has still not been discharged.

We know if we are successful when we can report to governments and the community that our collective scientifically-based monitoring of on-ground work and species and ecosystem health (through our National Environmental Economic Accounts- NEEA) is showing that we are our meeting our national goals and objectives, and honouring our international obligations. Annual reporting to parliament and the people of the NEEA and progress on implementing Recovery Plans should be mandatory.
QUESTION 12: Are heritage management plans and associated incentives sensible mechanisms to improve? How can the EPBC Act adequately represent Indigenous culturally important places? Should protection and management be place-based instead of values based?

In the review of the Act, Bush Heritage strongly recommends that Traditional Owners, Registered National Title Body Corporates/Prescribed Body Corporates, other Aboriginal Corporations and Aboriginal leaders are invited to lead the development of plans and mechanisms to support the aspirations of the Aboriginal Peoples the respective corporations and leaders represent, to ensure that they can protect Country and culture, and determine in what ways the Act can protect both place-based cultural values and non place-based cultural values.

Bush Heritage strongly supports ongoing funding for the Indigenous Protected Area program, the development and implementation of Healthy Country Plans, and co-management arrangements for protected areas within the NRS. The IPA program is providing significant cultural and psychosocial benefits, which could be destroyed if the protected land is able to be developed in a way that damages critical biodiversity without the voluntary prior and informed consent of Traditional Owners.

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?

Effective National Standards and BioRegional Plans* (strategic assessments) and their associated implementation and monitoring plans, need to guide decision-making around referred proposals, so each is assessed for its impacts within the landscape context, and with consideration of the cumulative impacts from past, current and likely future activities. The framework, and criteria for decisions, established in these plans needs to be based on best-available science and be uncompromising in protecting MNES. The BioRegional Plans could also bring scrutiny to actions that would otherwise not trigger the EPBC Act, and allow for better consideration of cumulative effects. The national standards if devolved though to individual BioRegional Plans could also create a mechanism for achieving National Vegetation Clearance Controls.

For example:

BioRegional Plans reflect the EPBC Act Principles and MNES, and address the National Standards, establishing goals for levels/extent of biodiversity protection and condition for that region. The plans identify and map critical habitats including wetlands, climate refugia, Key Biodiversity Areas, ecosystems of significance, cultural sites and song lines and areas in which to retain or rebuild landscape connectivity to achieve a defined per cent cover of vegetation and latitudinal and or altitudinal pathways. Time-bound goals are then developed for reaching the required condition measure for each asset.

The defined biodiversity and cultural areas are quarantined from damaging activities, and strict protocols applied on what level (if any) of development is permitted, other than to enhance their condition. The goal must be to ensure these areas retain/rebuild their integrity, resilience and biodiversity. Any allowed actions would determined based on the cumulative impacts of past
developments and risks to achieving the goals and then be strictly monitored and controlled. Stewardship payments and/or compensation would need to be available to affected property owners.

Once the environmental and cultural assets are mapped and goals defined, it would be possible to identify areas suitable for further development, or where acceptable levels of impact could occur.

The endgame is to repair the landscape to the extent that it can be ecologically and culturally resilient into the future and under a changing climate, while protecting the interests of regional and rural communities.

This approach would also facilitate national environmental data collection, monitoring, evaluation and reporting. BioRegional Plans could be written by state or regional agencies with financial support and input from the Commonwealth, subject experts and regional stakeholders particularly Traditional Owners and custodians. The role of regional planners would include collaborating with other planners to ensure that collectively the national environmental standards and goals are met.

It could be through this mechanism that National Vegetation protection and clearing controls could be achieved from a Commonwealth perspective: by requiring state compliance with national standards for vegetation extent, protection of critical habitats, landscape connectivity goals, emissions reductions targets and protection of MNES.

* BioRegional Plans should be a consolidation of federal, state and local plans (including landscape level plans produced by non-government conservation organisations and Aboriginal groups), threat abatement and recovery plans, drawn together with rigour, using best-available science, local and traditional knowledge and planning methodologies. Cross-jurisdiction and stakeholder collaboration in developing these plans will be critical. This should be followed by ground-truthing of the plan by regional or local agencies to verify its accuracy and applicability, followed by public consultation and opt-in options for land-owners (including Traditional Owner groups) to receive stewardship payments and management support for biodiversity actions.

**Bush Heritage Case Study: Tasmania Midlands Farmers gain from protecting EPBC listed community.**

Bush Heritage Australia and the Tasmanian Land Conservancy (TLC) are working with private landholders in the Tasmanian Midlands to protect the critically endangered lowland native grasslands in Tasmania (and associated ecological communities) which occur almost exclusively on private land. We established the project back in 2007 and invited key farmers/landowners to a series of planning workshops that helped develop the strategies and products that would support them in protecting these critically endangered ecosystems on their land, now the Midlandscapes Conservation Action Plan. These consultations resulted in a program called the Midlands Conservation Fund (MCF). A strategic assessment was undertaken in the Midlands by Bush Heritage and TLC to identify key areas of lowland native grassland (for example, large patches in moderate to excellent condition) along with suitable buffers of important but lower priority wetlands, woodland and forests,
The landowners we have approached to protect these key areas have been very enthusiastic and supportive. They come from a range of backgrounds – small scale farmers right through to mixed farming properties over extensive areas. Their motivations for protecting their grasslands varied, but included personal commitment and care for the environment; desire to maintain their farms in good condition for future generations; recognition that protecting their natural capital would have long term benefits for productivity on their farms; and opportunities for improved access to markets or diversified markets for their product.

The majority of farmers join the program for initial 10-year periods, with options to roll over their agreements on a 5-yearly basis in perpetuity. They deliver conservation outcomes specified in a jointly developed management plan, and by delivering those outcomes they receive stewardship funding. This assists with management of the grasslands and associated woodlands by providing additional funding for the control of weeds such as Gorse, to better manage stock numbers (e.g. to destock early in dry periods) or to encourage natural regeneration of native plants. These stewardship arrangements put the dollars from the environment on their balance sheets and added diversity to incomes, that have proved beneficial during times of drought or unfavourable conditions.

The potential for in-perpetuity agreements comes from the dollars raised being invested in an endowment, combined with a long-term commitment from the governing organisations. The initial funding round was oversubscribed, and we have run a second round which nearly tripled our area under protection. In some cases, farmers have expanded the area under conservation protection on their property in the second round. Further expansion of the program has been curtailed because we have been unable to raise sufficient philanthropic funding, in the absence of government support. This is a proven model which would flourish if there was matching government funding to encourage philanthropic contributions.

As a national organisation, Bush Heritage sees that this type of program provides an example of how appropriate, efficient and effective support and incentives can help support farmers who have ecological communities that require protection under the EPBC Act but which need active management to maintain or improve their condition.

**QUESTION 14: Should the matters of national significance be refined to remove duplication of responsibilities between different levels of government? Should states be delegated to deliver EPBC Act outcomes subject to national standards?**

The legal protection of Matters of National Environmental Significance should be equally the responsibility of States, Territories and the Commonwealth Government. Environment and biodiversity are matters of common public good relevant to all jurisdictions and all citizens.

The Commonwealth must have call-in powers if, in the first instance, the States/Territories fail to uphold the requirements of the Act and protect the expanded list of MNES (see Q 4). Having checks and balances in place should enable the States and Territories to manage the broad range of species and communities listed as being of State significance, while giving the Commonwealth the authority to override state decisions for those species or communities listed under the EPBC Act. Reducing the opportunities for lobbying and political donations to compromise decision-making will be critical.
Having National Standards (particularly for vegetation retention, restoration, biodiversity protection and water use) embedded in BioRegional Plans that are developed collaboratively (see Q 13), delivered regionally and locally, and supported by both the Commonwealth and state funding, will ensure that all parties have an interest in achieving the outcomes. Annual reporting on progress should be mandated and penalties for failing to deliver the required outcomes considered.

Unfortunately, environmental law is and has historically been overly politicised in Australia. The recent issues over water in NSW (exposed in the ABC Four Corners report) are a good demonstration of untrustworthy behaviour at high levels. Thus, we recommend that assessment of referrals, oversight of controlled actions and calling-in of breaches should be undertaken by an independent authority, that reports to but doesn’t take direction from the responsible Minister.

**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?

The self-assessment process has been the cause of much environmental damage and has been shown to be easily rorted by unscrupulous proponents. The detailed mapping and community extension services needed to justify automatic approvals for projects deemed by their proponents as ‘low-risk’ or entitled to ‘exemption’, is not yet available, thus we do not support consideration of this option in this review. However, once there are BioRegional Plans in place, that include very detailed and up-to-date mapping of no-take zones (for example, critical habitats and threatened ecosystems), low-impact zones and development zones, supported by online GIS datasets and regional extension staff, it may be possible to simplify the assessment and monitoring process. This is likely to be a decade or more away. A possible structure for the future may be as follows:

1. National standards are identified as needed in each BioRegional Plan. Collectively these plans fully address all standards and international obligations.
2. Regional MNES, including critical habitats and their buffer zones, climate refugia, protected areas, significant wetlands and other no-take zones such as high-quality agricultural land, are mapped. This would mean proponents could immediately assess if their development was in a no-take zone.
3. Additional mapping of areas permitting low-risk, small-impact developments (criteria defined) would enable proponents to self-assess and make a referral appropriate to their proposal.
4. It would be necessary here to close potential loop-holes where proponents may split large projects into smaller units to meet the criteria for a low-risk small-impact development, when in fact the full project would meet the high risk, significant impact criteria.
5. Projects of high risk or significant impact (including water extraction from surface or underground water sources) would require the full assessment process to be undertaken.
6. Projects to take actions to enhance or protect threatened species or ecosystems could be assessed in a different stream and would need experienced staff who can respond promptly to referrals where urgent action is needed.

7. All data from environmental impact assessment should be made being publicly available.

8. An Australia wide remote monitoring program is established to ensure compliance, identify and prosecute infractions.

Bush Heritage strongly supports the establishment of a National Environment Database that make data publicly available. Good data and high-quality mapping will support informed decision-making and reduce misinformation and judgement calls. It will enable ESD to be properly accounted for, support transparent decisions, and enable monitoring of effectiveness and progress. However, much of the current data on the distribution of species, ecosystems, critical habitats, wetlands and other climate refugia needs to be reassessed to reflect the future climates that each region may face. A great deal of information on projected species and ecosystem distributions is now available but it will need to be integrated into datasets available for BioRegional Plans.

**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?**

The regulatory role of the Commonwealth should focus on an expanded list of MNES. These include both landscape-scale vegetation retention and restoration, ecosystems and hydrology, as well as protection of specific species or guilds. In the regulatory area, the protection of habitats at both landscape scale and species specific level could be achieved through the BioRegional Plans as outlined above (Q 13 & Q15).

**QUESTION 17: Should the EPBC Act be amended to enable broader accreditation of state and territory, local and other processes?**

Devolving Federal approval responsibilities to the States under the current structure has proved problematic, where State and Federal laws have not been aligned, and decision-making has been compromised to the detriment of biodiversity.

We are recommending an alternate approach – illustrated below in Figure 2. The ultimate responsibility for biodiversity protection rests with the Commonwealth. The Commonwealth, States and Territories should be aligned by common goals specified in the Act with which they need to comply. These goals would be reinforcement in the collaborative development of a National Biodiversity Strategy and National Standards. The States would have key roles in delivering on both through participating in the development and implement of the BioRegional Plans, together with the Commonwealth and other stakeholders.

In their development, these BioRegional Plans could draw on multiple knowledge sources including existing State plans, Threat Abatement and Recovery Plans, other regional government and non-government plans including Healthy Country Plans developed by Aboriginal land managers, while also incorporating new knowledge, projections for changes in climate, vegetation and species distributions and climate adaptation strategies. Each plan should align with the Goals in the EBPC.
Act, operate under its Principles and apply the National Standards in all decision-making. Each plan should have specific objectives, monitoring indicators and time-based deliverables relevant to the region, to track progress and accountability.

The aim should be to have one collaboratively developed BioRegional plan for each region to which all parties are committed and which each is variously responsible for its oversight and delivery. Implementation would be most effective if managed regionally or locally, and without any diminution of environmental protections and accountability. Data on progress against goals would be added to the National Environment Database, proposed in the response on Page 11.

Accountability needs to be clearly apportioned. The Commonwealth has ultimate responsibility to achieve the National Standards, meet international obligations and be accountable to the Australian public. It also needs to work collaboratively with the States to support their efforts to deliver BioRegional Plans. States and Territories need to be accountable for the delivery of their BioRegional Plans and protecting ecosystems and species within their jurisdiction. They are accountable to their constituencies in helping deliver the National Standards and meeting Australia’s international obligations. An independent well-funded enforcement agency, able to initiate legal action for a breach of the EPBC Act in the Federal Court, would demonstrate and build public confidence that environmental protection is being taken seriously.

**QUESTION 18: Are there adequate incentives to give the community confidence in self regulation?**

Given the on-going trajectory of environmental decline and species loss, there is little justification for the community to have confidence in self-regulation. The Banking and Aged Care Royal Commissions have demonstrated graphically why regulation is needed. Lack of regulation has been a significant contributor to the loss of trust in our public institutions. Business also requires certainty and clear regulation gives this.

Currently there is more evidence that people and organisations prioritise their own interests over those of the environment. Our experience is that many landowners are unaware of what values are on their land or that they have obligations under the EPBC Act to refer development proposals or potentially damaging changes in land use. For example, in Victoria critically endangered native grassland supporting critically endangered fauna is still being ploughed, with no referrals being made.

For those that are aware of their obligations, currently, it is an easier path to proceed with a development and build a possible fine into the business model (particularly as fines for breaches are rare and grossly inadequate to provide a disincentive), rather than to go through the process of referral, the delays that this entails and see potential limits placed on their development plans. This is also the case in State and local council jurisdictions where breaches to state or local laws are rarely prosecuted, penalties are minimal or non-existent, and there is no enforcement of court-imposed restoration work. Fundamentally, the law is not law unless it is adhered to or enforced. Thus currently the Act is a guide for good behaviour but not effective as law.
For land-owners to see financial and social value in protecting the environment, there needs to be meaningful incentives. There are opportunities to provide:

- free or affordable advice including whole-farm plans or ecological assessments with clear recommendations for actions, particularly if the land is, or buffers, critical habitat for threatened species, includes key connectivity pathways or protects threatened species, or contains significant wetlands or waterways;
- rebates or tax incentives for placing conservation covenants on land;
- perpetual stewardship payments;
- opportunities for land-owners to apply for funding to implement on-ground work; and
- support in preparing funding applications and progress reports for on-ground works.

These incentives need to be coupled with much greater community awareness-raising about our obligations as nature’s stewards for the future, to build social capital for changes to land-management practices and for environmental protection to be considered mainstream.

**QUESTION 19: How should the EPBC Act support the engagement of Indigenous Australians in environment and heritage management?**

- How can we best engage with Indigenous Australians to best understand their needs and potential contributions?
- What mechanisms should be added to the Act to support the role of Indigenous Australians?

These questions need to be asked directly of Aboriginal Australians, and that consultation must be undertaken with genuine intent, respect and cultural awareness.

Traditional Owners (in conjunction with their representative bodies) should decide if and how they wish to engage with the development and implementation of the Act.

The First Peoples are critical to the future of the health of this country, its culture and community. The IPAs make up a large proportion of the National Reserve System and make a significant contribution to Australia’s international environmental obligations on protected areas. IPAs should also be recognised as an additional MNES under any amended, future EPBC Act and formal legal recognition of IPAs, along with long term funding, should be enshrined in any future EPBC Act.

Aboriginal Peoples have the right to own and manage land and water to support self-determination. This EPBC Act Review needs to have a detailed engagement process to bring together different frameworks for thinking to benefit people and country – a collaborative approach based on recognition of the value that each group brings to a discussion when all groups have a shared interest in the outcomes.
As a national conservation organisation that works with Traditional Owners across the nation, our experience from our Aboriginal Partnership Program informs our recommendation that engagement with Aboriginal Australians in relation to environment and aboriginal cultural heritage management:

- is built on a foundation of trust and respect;
- addresses questions all parties are interested in exploring;
- occurs together with Aboriginal representatives at all levels of planning;
- recognises different knowledge systems, methods and peoples across the regions;
- recognises and protects the intellectual property of Aboriginal Peoples;
- provides opportunities for all parties to review and amend the recommendations;
- maintains open communication pathways (with limited jargon);
- appropriately acknowledges all contributors; and
- reduces risks of cultural appropriation i.e. taking knowledge without giving anything in return.

State or regional bodies preparing BioRegional Plans can probably build this process into the planning process, and work alongside the relevant Traditional Owner groups. They could provide a forum where Traditional Owners and custodians can translate their land, water and cultural rights, needs and aspirations into the development of the Act and into its implementation.

QUESTION 20: How should community involvement in decision making under the EPBC Act be improved? For example, should community representation in environmental advisory and decision-making bodies be increased?

There are four critical areas in which the community needs to contribute to decision-making under the EPBC Act:

1. by providing expert, scientific and Traditional Knowledge in developing and setting National Standards. There is much expertise through universities, CSIRO and other government agencies, NGOs and among on-ground experts and traditional owners. They should be called on to help set National Standards for vegetation retention and restoration, key connectivity areas, water extraction limits, species-specific conservation measures, and regional changes in extent of vegetation communities as a consequence of climate change etc, that will also deliver our international obligations.

2. by working with Commonwealth, State and Territory agency staff in developing BioRegional Plans. Traditional Owners together with regional experts, agency staff, species recovery experts and other stakeholders should be represented in the working groups that prepare the BioRegional Plans for public comment. The plans could then be signed off by states or territories and the Commonwealth, ready for implementation.

3. by understanding community responsibilities under the Act, referring matters as required and undertaking any controlled actions. Genuine community engagement, extension services and funding opportunities for on-ground works will be needed to achieve this.

4. by reviewing decisions, making submissions and receiving feedback on the reasons for decisions, and any mitigation measures required.
There is also a role for the community reviewing EPBC Act referral decisions and alerting the Commonwealth or state agencies to breaches or non-referrals that are damaging MNES. Past changes to the Act to restrict public referrals should be revoked and the opportunity for public referrals reinstated. It is often local experts who have detailed knowledge of likely impacts of developments and thus should have the opportunity to make official referrals.

**QUESTION 21: What is the priority for reform to governance arrangements? The decision-making structures or the transparency of decisions? Should the decision makers under the EPBC Act be supported by different governance arrangements?**

Areas of reform in governance that we would recommend are listed below:-

- Establish an independent and trusted institution (a National Environment Protection Authority) with a mandate to develop National Standards, BioRegional Plans and decision-making criteria for developments. These ‘foundational’ documents of the Act need to be based on science and thus can be done most effectively at arm’s length from government.
- Use the National Standards, BioRegional Plans, the Act’s Principles and ESD principles, to establish a scientifically based framework in which to set clear decision-making criteria.
- Keep current the lists of critical habitats and threatened ecosystems and species under the Act, and ensure that future projected impacts from climate change are considered in the listings
- Mandate development of Recovery Plans, which should be completed/updated within defined timeframes. Progress against recovery actions should be reported annually
- Establish and maintain a system of National Environmental Economic Accounts
- Remove the largely discretionary powers of the Minster and ministerial advisors. Discretionary decision-making compromises the perception of confidence and trust in the process of assessment, discourages compliance, provides opportunities for lobbying, corruption and other forms of political interference, and produces flawed outcomes for biodiversity. Instead rely on diverse expert panels to resolve conflict between competing interests.
- Improve the transparency and independence of decisions and provide greater access to the public for public interest litigation.
- Provide extension materials and regional staff to inform and assist the community to understand their roles and responsibilities under the Act.
- Review on-ground developments to ensure that they are undertaken in line with controlled action requirements.
- Ensure breaches of the Act incur effective penalties and require repair of damage.
- Provide for environmental performance audits and inquiries by the ‘independent authority’.

**QUESTION 22: What innovative approaches could the review consider that could efficiently and effectively deliver the intended outcomes of the EPBC Act? What safeguards would be needed?**

The Review could consider:
• Clearly stating the biodiversity and environmental goals to be achieved under the Act.
• Reviewing and implementing recommendations from the 2009 Hawke review of the EPBC Act
• Mandating development of National Standards for biodiversity protection
• Developing a new approach to the structure of planning for biodiversity with a cascade of interdependent plans: from the National Biodiversity Strategy, through Recovery plans to regional implementation plans (BioRegional Plans) that deliver against International, national, regional and recovery plan goals. (See flow diagram below)
• Developing Expert Panels to drive Threat Abatement Plans and issue specific responses.
• Embedding an ‘Environment in All Policies’ approach (noting that this may be best done at both State and Commonwealth level) See below for explanation*
• Mandating the development of foresight reports, that include analyses of threats and needed actions for biodiversity protection to help government manage emerging environmental threats (Hawke Review 2009)
• Funding and implementing a system of National Environmental Economic Accounts to track landscape condition, Australia’s environmental performance and call to account those that degrade land and or water.
• 5 yearly reporting to Parliament and the community on progress against the goals.
• A stronger role for the Commonwealth in information/data gathering, analysis and provision – via a national biodiversity database – to universities, CSIRO, agencies, NGOs and the business sector.
• Promoting to the community the true value of Australia’s natural capital and ecosystem services. This ‘value’ becomes an input to regulatory decisions to effectively enable the Acts objectives of ESD to be met
• Establishing an ongoing Biodiversity Restoration Fund: see the 2009 Hawke review with the recommendations to be included in this review.
• Commissioning an analysis of why biodiversity conservation hasn’t worked so far – or not as effectively as desired. The analysis should examine government practises, policies and funding allocations. The review should cover not just conservation policies but any policies that drive or result in environmental impacts including through broader business and private interests.

*To further explain the Environment in All Policies proposal:

An ‘Environment in All Policies’ approach could be applied across govt agencies and in all policy development. This would be a new, strong approach across public (and ideally private) bodies which requires everyone to take responsibility to help protect and secure biodiversity. This is more than just considering biodiversity through a permit or EIS. Instead, this would require that risks or impacts to biodiversity are considered and made transparent in every new policy or business decision by all agencies, with a requirement to seek ways to avoid harmful impacts.

The intent is to embed an ‘Environment in All Policies’ approach aligning to the ‘Health in All Policies (HiAP)’ approach which has been endorsed by EU member states in the Health Ministerial delegations of the EU in various fora including Rome in 2007 and Adelaide in 2010. A definition of
HIAP (which could easily be modified to refer to biodiversity) was adopted at the 8th global conference on Health Promotion in Helsinki: ‘Health in All Policies is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity. It improves accountability of policymakers for health impacts at all levels of policy making. It includes an emphasis on the consequences of public policies on health systems, determinants of health and well being’.

While challenging to implement, this is necessary, and there are various existing approaches that make others accountable – such as imposing a duty of care on public or private bodies or landholders. Biodiversity, as a public benefit and with a critical role in ecosystem and human health, so should be given this type of protection. Adopting this approach also aligns with a genuine consideration of ESD.

There is plenty of literature on this type of approach – a good starter is Browne, G. and Rutherfurd, I. 2015 The case for environment in all policies: lessons from the Health in all Policies approach in public health. Environment Health Perspectives.

QUESTION 23: Should the Commonwealth establish new environmental markets? Should the Commonwealth implement a trust fund for environmental outcomes?

The Commonwealth should establish a Biodiversity Restoration Fund (BRF) that will enable effective and guaranteed resourcing of environmental management and restoration (also recommended in the Hawke EPBC Act Review 2009). An additional funding mechanism should be developed to further build a comprehensive, adequate and representative National Reserve System and to facilitate the expansion of the IPA network.

With these funds in place developing incentives to encourage additional financial support for environmental protection from industry (and potentially the community) would be possible. For example, Biodiversity Bonds (contributions made into the BRF to support environmental restoration) could trigger a tax benefit or meet offset requirements that help achieve goals in the relevant BioRegional Plan.

In addition, the Government should follow the advice of the conservation sector in its securing the Natural Advantage proposal to bring Government together with the private sector and philanthropy to mobilise $10 billion investment in post-bushfire recovery and to build economic and environmental resilience of Australian farms, forests, woodlands, native grasslands and Aboriginal lands. The government has an opportunity to harness the resources of the private sector to invest in environmental outcomes that will benefit conservation, agricultural and tourism in Australia’s regional areas.

The success and impact of these conservation initiatives, whether on private or public lands, should be measured and publicly reported via National environmental economic accounts. Ecosystem Accounts together with other environmental economic accounts can provide the bases of impact reporting for any and all schemes, and can also feed into National environmental condition accounts.
and trajectory (or state of environment reporting) that can provide the information needed to better prioritise future actions. This in turn will require an agreed framework for measuring ecosystem condition and shared environmental data platforms to better understand baseline and counterfactual scenarios in order to measure impact.

Summary:

- Environmental markets have the potential to attract substantial private sector and philanthropic funding sources.
- The Conservation Sector has provided models for how this can be achieved.
- Such markets require agreed ways of measuring impact that can be provided by environmental economic accounts supported by agreed measurement frameworks and improved data systems.

QUESTION 24: What do you see are the key opportunities to improve the current system of environmental offsetting under the EPBC Act?

Offsets that provide for a direct impact from a development or other action, must deliver real value for biodiversity. Currently, some offsets have been tokenistic or even an abuse of the intent, and while delivering a statutory requirement, do not provide real environmental value. We are still seeing ‘net loss’ despite the ‘feel good’ factor of offsets. Thus, environmental offsetting needs to set significantly higher requirements for environmental benefit. The Act should not permit biodiversity offsetting of impacts on critical habitat, endangered or critically endangered species and ecological communities, and Ramsar wetlands.

Without having any direct experience in the Commonwealh’s use of offsets, we think that offsetting could include:

- A strategic approach to future ecosystem needs under climate change, and identify regions and habitats that are a priority for habitat protection or restoration, including areas that are projected to be refugia, or retain their health and resilience under a changed climate. This information could then be used both in regulation (preventing development to halt loss) or offsetting – purchasing, restoring and /or establishing habitats. This information should be made part of the National Database and freely, publicly available.

- Biodiversity offsetting, in relation to the loss of diminution of critical habitat, endangered/critically endangered species, should be prohibited, and acknowledgment that some environmental assets are too important to be offset.

- A National Offsets Policy and Standard(s) should be established. Offsets should be a last resort not the default position; meet strict scientific biodiversity principles; ensure offsets are protected in perpetuity; be consistent with the precautionary approach and not be available for future mine remediation due to lack of success of a mine project.

- While ‘like for like’ appears the most straightforward mechanism for offsetting, it would be possible to require that offsets help meet the goals of the relevant BioRegional Plan. For
example, offsets could provide funding for the management of key threats (feral cats and other invasive species), threatened species recovery or land restoration (including following bush fires or drought).

Clarity would be needed to define the respective roles of the States and Commonwealth, as currently regulation of offsetting is primarily at State level. However, the Commonwealth should have call-in powers around MNES where processes have not been followed or controlled actions not implemented.

**QUESTION 25: How could private sector and philanthropic investment in the environment be best supported by the EPBC Act?**

- Could public sector financing be used to increase these investments?
- What are the benefits, costs or risks with the Commonwealth developing a public investment vehicle to coordinate EPBC Act offset funds?

There is a very clear and powerful way to bring private sector and philanthropic investment into the environment. The Commonwealth developed this facility through the $2 : $1 Commonwealth to private funding contributions via the National Reserve System Program. This program raised, and still leverages millions of dollars of private funding annually for the ongoing management of the private protected area estate originally part funded through the NRSP, including for Indigenous Protected Areas. The NRSP was considered one of the most effective government programs at the time, with massive returns (both for biodiversity and via community contributions) on the relatively small Commonwealth investment. Bush Heritage very strongly supports the reinstatement of this funding program.

Private and philanthropic investment could also be supported by providing clear, strategic priorities for biodiversity protection at the BioRegional Plan level. People are more likely to support action, through financial contributions and volunteering, where it will benefit their local or regional communities, or areas of interest. The Biodiversity Restoration Fund could potentially be structured to receive funding to support priority programs for each Landscape.

There is an important role for the Commonwealth in undertaking analyses at a national scale to determine the most critical sites to protect, the most effective ways to conserve and restore biodiversity (including in a changed climate) and to provide this information in a clear, accessible way. The information that could be provided could include:

- where best to protect individual species
- where best to declare and protect critical habitats
- where to achieve the best outcomes for ecosystems and their dependent species
- what threats to manage and where, to achieve the best outcomes
- place-based analyses, to identify conservation action necessary in any locality.
A national environmental database should be the repository for this information, and receive updates on actions and progress at all levels of the government and community. Building a system that is open to all and used by all, will build commitment and demonstrate shared effort, as we work together and see that others working hard to protect biodiversity.

PRINCIPLES TO GUIDE FUTURE REFORM

It is important that future reforms are guided by a set of principles. These principles should reflect what is important to Australians, and our goals for national environmental law.

Effective Protection of Australia’s environment

• Protecting Australia’s unique environment and heritage through effective, clear and focussed protections for the benefit of current and future generations.

Making decisions simpler

• Achieving efficiency and certainty in decision making, including by reducing unnecessary regulatory burdens for Australians, businesses and governments.

Indigenous knowledge and experience

• Ensuring the role of Indigenous Australians’ knowledge and experience in managing Australia’s environment and heritage.

Improving inclusion, trust and transparency

• Improving inclusion, trust and transparency through better access to information and decision making, and improved governance and accountability arrangements.

Supporting partnerships and economic opportunity

• Support partnerships to deliver for the environment, supporting investment and creating new jobs.

Integrating planning

• Streamlining and integrating planning to support ecologically sustainable development.

QUESTION 26: Do you have suggested improvements to the above principles? How should they be applied during the Review and in future reform?

Bush Heritage strongly supports strengthening the current Principles of the EPBC Act. We believe that the Principles need to apply mostly to the outcomes to be achieved under the EPBC Act rather than the processes through which the Act is applied. We recommend that the following are included in the new list of Principles:

a. Protection of the environment and biodiversity into the future: the Act should tolerate no declines – including under a changed climate;
b. Evidence-based decision making: Use the best available information including the integration of Indigenous peoples' knowledge at foundational levels of policy development as well as in implementation and assessment;

c. Adopt the precautionary principle. Lack of full scientific certainty should not be used as a reason for allowing damage or postponing measures to prevent environmental degradation;

d. Adopt the Biodiversity principle: Ensure that biodiversity, ecological and human health are explicitly tied in policy as they are in nature to become a fundamental foundation of decision-making at all levels of government;

e. Adopt the Polluter Pays principle: where the responsibility and costs of restoration are borne by those that caused the harm, using the international UN SDG criteria and indicators;

f. Adopt the intergenerational and intragenerational equity principles: The present generation has an explicit duty of care for the environment, and ensures the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations and equally shared across current generations

g. Collaborative Conservation: Establish a structure for collaborative programs that promote cross sector and cross border efforts for biodiversity protection and breakdown programs that increase competition and artificially promote boundaries;

h. Restoration and Enhancement: the Act should work in the full knowledge of the environmental degradation that has already occurred across our continent and provide strong guides and implementation frameworks for improved biodiversity condition at a range of scales, making the responsibility for each State clear and avoid duplication between Federal and State bodies;

i. Strength in legislation: the Act should not allow any regression, relaxation or exemption from the laws that are designed to protect biodiversity;

j. Efficiency: the Act should prioritise prevention of harm over potential mitigation, reducing costly and complicated mechanisms that persist in allowing degradation;

k. Sustainable Development: The Act should incorporate Ecologically Sustainable Development as a Principle. This should provide clear guidance on best practice conservation on Protected Lands and guide sustainable development of all other lands using the UN Sustainable Development Goals;

l. Responsiveness: The Act should provide clear guidance, coordination and assistance to regulatory and implementation bodies at all levels to enable them to actively respond to large scale threats (e.g. climate change), to anticipate future local impacts and respond as needed with foresight and flexibility to ensure environmental protection is considered on par with industry.

We also recommend changes to the principle ‘Making decisions simpler’. There is no end to making them simpler, they should only be simple if they lose none of their purpose, nuance or effectiveness in protecting biodiversity. No regulator builds in ‘unnecessary regulatory burdens’ and thus the ‘unnecessary’ is probably a view of those being regulated and more unconcerned about damage to a public good. We suggest the wording be amended to reflect the following: ‘Clear and effective regulation and compliance to protect biodiversity’.
QUESTION 27: Is the EPBC Act delivering what was intended in an efficient and effective manner? - Is the EPBC Act delivering what was intended in an efficient and effective manner?

The inexorable expansion of the Threatened Species List (Woinarski et al., 2015), recent extinctions and growing evidence (Ward et al., 2019) of ecosystem collapse (Lawrence et al., 2011) are clear evidence that the Act has not delivered what was intended. Further, unabated facilitation of the known key threats to biodiversity at a local, state and federal level, for example: unsustainable water extraction; both sanctioned and illegal land clearing, subsidies to the oil, coal and coal-seam gas industry despite viable alternatives, failure to rehabilitate land following energy and resources exploration and extraction, demonstrates a lack of motivation to implement the Act. Thus we conclude that the EPBC Act has not delivered what was intended and thus has not been effective. The question of efficiency is therefore not relevant.

Case studies of the EPBC Act failing to protecting threatened species

Case study 1: Plains Wanderer, Pedionomus torquatus - The Act has failed to protect this species

Out of nearly 10,000 bird species, Plains-wanderers are recognised as No. 1 in Australia (4th globally) as the bird we could least afford to lose because of its evolutionary distinctiveness. This is a real possibility as they are Critically Endangered under the EPBC Act. They are wholly dependent on sparse native grasslands. Most of these grasslands are in private hands and are grazed. Grazing can be an effective management tool when done appropriately (Baker-Gabb et al., 1990; Deiz & Foreman, 1996).

Despite paddocks being critical habitat for this species, they continue to be ploughed for crops, not only destroying critically endangered grasslands but the habitat for this critically endangered bird and other dependant species. No referrals were made to the DoE by either farmers or local agencies authorising the cultivation. This may demonstrate a genuine lack of awareness by the farmer and agencies, failure of available information on the need for referrals, or disregard for breaching the Act as compliance and penalties are rare and provide no disincentive. Regardless of the root cause, this clearly demonstrates failures in the implementation of the Act. This is a recurring issue as discussed in a recent publication (Ward et al., 2019), that demonstrates the Agriculture and Forestry sector constitute a very small proportion of referrals to the EPBC, with residential development and mining by far the most common. However, in terms of extent of impact, agriculture has a much greater potential to cause harm.

Finally, this same publication noted that very few mining applications are rejected despite having a significant impact on Matters of National Environmental Significance. With respect to Plains-wanderers, Bush Heritage has direct experience with the approval of mining activities directly on or adjacent to key Plains-wanderer habitat. We have expended significant effort to restore this species habitat and to protect Plains-wanderers from feral predators to see approvals place a critically endangered species at greater risk and compromise our efforts to protect it and its habitat. This signals a complete lack of will to acknowledge the evidence and prosecute the stated objectives of the Act.
Case study 2 - South-eastern Red-tailed Black-cockatoos, Calyptorhynchus banksia - Enforcement can change behaviour

The endangered South-eastern Red-tailed Black-cockatoos are dependent on two tree species for their food and tree hollows for nesting. One such tree is the Buloke (Allocasuarina luehmannii). As little as three per cent of buloke woodland remains and paddock trees are still felled to facilitate the use of centre pivot irrigation. One major land-clearing event of over 10,000 trees of mixed species was referred to the DoE (as it was then) for prosecution, and while not yet resolved, this has contributed to a reduction in the further loss of trees as landholders are wary of also being prosecuted. This is an example of where enforcement has provided a deterrent and has changed behaviours. However, the land clearing event itself demonstrates again that the Act has failed to protect native habitats for threatened species.

The failure of the EPBC Act to protect native species can be told over and over again for the majority of species in the threatened species list. Many populations of these species have the opportunity to remain stable providing important ecosystem services and key elements of habitat function remain, but they decline because multiple threats are ignored, permitted and/or facilitated.

Case Study 3 – Red Finned Blue-Eye – Scaturiginichthys vermeilipinnis

Lack of resources to implement the Act has been a hindrance to conservation

Bush Heritage sought guidance from the DoE on the recovery of the Critically Endangered Red-finned Blue-eye, now restricted to one property owned and managed by Bush Heritage in central Queensland. The recommended actions in the draft Recovery Plan were required urgently to protect the remaining populations of fish from an invasive competitor (Gambusia) and included controlled actions. The documentary evidence required to justify the strategies were contained in the yet-to-be-approved draft Recovery Plan. The delays in approving the Plan, and subsequent decision-making prevented the urgent protective actions occurring in a timely way. This is as a direct result of lack of resourcing to the Recovery Team and to the section/branch of DoE responsible for administering the Act. The total delay was 18 months for all actions to be approved. In this time one major flood event would have seen all remaining springs invaded by Gambusia (Nicol et al., 2015) and a significant chance of the Red-finned Blue-eye becoming extinct in the wild.

QUESTION 28: How well is the EPBC Act being administered? - How well is the EPBC Act being administered?

One of the main reasons for the Act failing to deliver on its purpose is poor implementation across a range of areas, largely due to a lack of resourcing for the administering department and the thousands of volunteers who are asked to undertake the work to implement the Act.

The following areas are clear gaps in implementation:

1. Lack of support for preparing and implementing Recovery Plans, and overseeing and reporting on outcomes. As recovery plans are the key instrument in the Act to drive improvements in conservation status, this is a significant failing.
2. The lack of enforcement of the Act with respect to organisations and individuals who undertake actions without development approvals, and which contravene the Act
3. The overwhelming approval of proposals that present clear, significant impacts on Matters of National Environmental Significance.
4. Lack of monitoring and evaluation of land use and activities for reporting, enforcement and planning purposes.
5. Poor or no outreach to land managers on how to comply with the Act, the benefits of compliance, incentive programs and the implications of breaches.
6. The failure to take into account the cumulative impacts of many damaging actions.

Suggestions for addressing these gaps will be included in following sections.

QUESTION 29: Is the EPBC Act sufficient to address future challenges? Why?

The Act in its current form and under the current implementation regime is not sufficient to address future challenges. The challenges are now beyond anything that would be envisaged at the time the Act was drafted. This is the time to radically rethink what legislation we need to protect our declining environmental values against increasing threats, and how that legislation is implemented and funded. Remarkably, and disappointingly, the recommendations of the Hawke review of the EPBC Act in 2009 highlighted many of the same issues. The recommendations have not been implemented.

Catastrophic environmental events will increase in frequency and intensity (Williams et al. 2009; Cary et al. 2012). This year’s fires are a graphic example. We need new mechanisms and triggers to protect biodiversity in the face of such disasters. Disasters that may affect MNES, can be large scale – like bushfires, floods and droughts – and events with long-term or irreversible consequences, like the drying of the Darling River. It may be feasible to define a ‘biodiversity disaster’, which then sets in train a response for recovery - including funding, on-ground action including exceptional interventions (for example, translocating individuals of a species), revoking or suspending water extraction or mining permits, increased monitoring and reporting, Lessons Learned reviews, and adaption of Regional or Recovery Plans. Coordination with State legislation will be critical, but the EPBC Act can drive development of such agreements. There should be a mandatory review of Recovery plans in response to environmental emergencies that impact the listed species or ecosystems.

Preferably, the Act would guide the development of tools and an evidence-base to foresee (or at least plan for) an environmental disaster and work proactively with partners in government and non-government agencies, to ameliorate the conditions before the devastating impacts are felt.

Federal oversight and call-in powers are needed particularly for land clearing and climate change triggers. In the context of the 2019-20 bushfire crisis, some communities are likely to advocate for more clearing and more controlled burns based on the view of ‘bush’ as a fire hazard (rather than a carbon sink that might absorb CO2 from the atmosphere and limit increases in temperature in the long-term), and don’t realise that frequent burning makes some bush more prone to wildfire.
The challenges that this Act must now respond to include:

- Large scale ecosystem changes as a result of climate change. These are transforming habitats into new forms that are, and will be, outside the habitat requirements for many dependent species. For example, the internationally recognised South-West Biodiversity Hotspot is expected to suffer up to a 95 per cent change in plant species along the south west coast of Western Australia. Species and communities will need to ‘shift’ – sometimes to places that may be suitable but not physically connected or in poor condition. The CSIRO conservation planning tool AdaptNRM shows this need very clearly. These ‘new’ habitats need protecting and will often need restoring.

- Rapid changes to native species distributions resulting in information that guides planning being out-of-date. These databases are already inadequate and will increasingly be inaccurate and will not include those areas that are likely future habitats. Research on this subject is urgently needed and should be made publicly available through accessible databases and incorporated into government planning and decision-making;

- Changes to invasive species distributions or types as the climate changes. Pest species and pathogens generally adapt well to change and can be expected to be more problematic in the future and expand their distributions. Research is needed to understand where these likely expansions of range will occur, and where novel ecosystems will evolve. The EPBC Act needs to assess the likely future importance of these ‘novel’ habitats;

- Declines in river flows and unprecedented flooding. Flows in southern Victoria have declined by 10 to 25 per cent over the last 15 years, and declines in northern Victoria are likely to be higher. At best, this has meant that gains in environmental flows are offset by reductions in natural inflows. In waterways that cannot receive environmental flows – the vast majority – flows are drying up;

- Consideration of the cumulative impacts of climate change on native vegetation and fauna;

- Multiple, more frequent and large-scale disasters including droughts, fires, floods, tidal surges – resulting in catastrophic habitat loss, species loss and long-term ecosystem changes;

- Climate-driven or technology-driven intensification of land use, or land use change from grazing to cropping and irrigation;

- Ongoing loss of habitat from clearing and burning for urban growth, agriculture or “fire prevention”;

- Poorly resourced and mismanaged fire and land management regimes that may actually make an area more fire prone rather than protect it.

Opportunities to improve:

The recent bushfires and the government response have demonstrated the powerful, confidence-building, responsive role that the Federal government can play in an environmental emergency. The expert panel on bushfire response has provided an excellent, cohesive view of the cause, impacts
and potential opportunities to rebuild and maintain resilience in natural habitats and affected communities.

This systematic collaborative thinking must not be consigned to emergency responses only— to foresee and avoid an environmental disaster such as we have just seen – but should be the goal of the peak environmental instrument.

The invaluable resources available to the Federal government include the following:

- land managers (agriculture, mining, conservation, etc) who already provide annual data;
- Aboriginal elders and knowledge holders with deep local knowledge; and
- CSIRO, agency and university experts provide modelling and data integration and analytics to improve our predictive capabilities.

The bushfire response has demonstrated clearly that not only are these groups, in large part, enthusiastic to work together for greatest benefit, but also keen to work with government to help achieve our National Environmental Goals. Do not let this positive movement be relegated to crisis management only. Employ the opportunity we have now to drive improved functionality to foresee and mitigate future environmental disasters.

Bush Heritage Australia recommends the development and resourcing of long-term, collaborative, multi-disciplinary, expert-driven programs. These groups would drive Threat Abatement Plans and ensure policy makers, implementation and assessment/reporting agencies have access to verifiable, consistent information for the administration and prosecution of the Act. These programs should sit alongside and augment the species and community-specific Recovery Plan programs.

Bush Heritage also seeks provision for the development and support in perpetuity of a database that receives information from land managers from all sectors, and makes available up-to-date maps of all MNES and threats. The lack of such data was clear in the recent bushfire crisis and significantly slowed recovery efforts while basic research was conducted over several months to determine which species were affected. This critical information should be available to all citizens of Australia as they administer and comply with the Act to plan, implement, assess and communicate environmental activities and impacts. This should be modelled on the Bureau of Meteorology where standardised information is drawn into a single agency for the aggregation, analysis and communication of trends for adaptive and relevant policy making and to prepare for future environmental conditions.

In advance of the next environmental disaster, we must set triggers for appropriate responses and to fund rescue and/or recovery. Given the increasing number of environmental catastrophes – an ‘environmental disaster’ could trigger an immediate EPBC response, such as redirection of funding to rescue or restore; or revoke counterproductive licence conditions. For example, in a significant blackwater event in the Murray River, the legal bag limit for taking crayfish was reduced to nil as the crayfish were extremely vulnerable - climbing up trees and banks to get oxygen.

Post fire, the impact on threatened species can be devastating – especially if they are restricted to a few locations. Rapid and intensive action will be needed to provide or protect other habitats for
species at risk – which may previously have been considered marginal. Intensive workshops for scenario planning for a range of catastrophic environmental events would help enormously in the rapid response and protection of nature into the future.

Opportunities for Improvement:

- Explicitly address the existential threat of climate change.
- Develop and resource of long-term, collaborative, multi-disciplinary, expert-driven programs to plan for future environmental disasters
- Provide for the development and support in perpetuity of an interactive National database

QUESTION 30: What are the priority areas for reform? - What are the priority areas for reform?

Bush Heritage believes good effective environmental legislation has the following hallmarks.

It:

1. contains a clear Purpose and Goals for environmental improvement
2. contains evidence-based National limits on processes and actions that damage the environment and/or reduce the likelihood of reaching the goals
3. drives active engagement of knowledge holders at a foundational level in planning, implementation and evaluation
4. contains clear guidelines, tools and outreach to help land holders stay within the law, access incentives and understand the implications of contravening the Act
5. provides for resourcing of current support mechanisms and expands the available support mechanisms to drive positive outcomes and progress towards goals
6. provides clear delineation of responsibilities for each level of government, and provides for the support needed for assessments, incentives and prosecutions
7. makes explicit that the Government has a zero tolerance for contraventions of the Act and provides for tools and resources for consistent, active surveillance, investigation and prosecution of those individuals or companies that breach the Act
8. facilitates innovation and allows for the development of new programs to improve progress towards biodiversity goals.

It is clear that the Act does not exemplify these characteristics. This has led to its failure in meeting its purpose.

Key Direction: The Act must contain clear communication of Purpose and Goals for environmental improvement

The Act currently does not have a clearly stated Purpose or Goal. Bush Heritage stands with many conservation agencies around the world that employ a ‘Theory of Change’ model to make explicit Goals for habitats and species, and strategies and actions to achieve those goals. The Theory of Change lays out a critical pathway to guide actions, measure effectiveness and report progress against goals. Bush Heritage strongly urges the review of the EPBC Act to adopt this approach.
would provide a focus for the development and communication of clear, measureable goals and the pathwa to achieve them, for all Australian habitats and species, including MNES, as well as placing clear limits on threats at a National level.

We are hopeful that the Second Reading Speech delivered in October 2006 by Greg Hunt MP, then Parliamentary Secretary to the Minister for the Environment and Heritage, reflects the likely public understanding of the intentions of the Act ‘… the changes to the EPBC Act proposed by this Bill will ensure matters of national environmental significance continue to receive the highest possible level of protection’. One clear objective in the Objects - Item e (ii) establish an Australian Whale Sanctuary has been achieved. The other more clearly stated objectives, items e(i), e (iii) and e (iv), have been partly achieved in the cases of a small number of species and ecosystems. This indicates the value of having explicit goals and deliverables.

Further, guiding Principles in any organisation help maintain the direction and provide clarity when judgement is required on making subjective decisions. We recommend that the revised Act include a broader series of Principles by which the Act is administered.

These include:

a. Protection of the environment and biodiversity into the future: the Act should tolerate no declines – including under a changed climate;

b. Evidence-based Decision making: Use the best available information including the integration of Indigenous peoples' knowledge at foundational levels of policy development as well as in implementation and assessment;

c. The Precautionary principle: Lack of full scientific certainty should not be used as a reason for allowing damage or postponing measures to prevent environmental degradation;

d. The Biodiversity principle: Ensure that biodiversity, and ecological and human health are as explicitly tied in policy as they are in nature, and become a fundamental foundation of decision-making at all levels of government;

e. The Polluter Pays principle: where the responsibility and costs of land restoration and recovery of waterways are borne by those that caused the harm, using the international UN Sustainable Development Goals, criteria and indicators;

f. The Intergenerational and Intragenerational Equity principles: The present generation has an explicit duty of care for the environment, and ensures the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations and equally shared across current generations.

g. Collaborative Conservation: Establish a structure for collaborative programs that promote cross sector and cross border efforts for biodiversity protection;

h. Restoration and Enhancement: the Act should work in the full knowledge of the environmental degradation that has already occurred across our continent and provide strong guides and implementation frameworks for improving biodiversity condition at a range of scales. The Act should make clear the responsibility of each State, and avoid duplication between Federal and State bodies;
i. Sustainable Development: The Act should incorporate Environmentally Sustainable Development as a Principle using the UN Sustainable Development Goals. This will provide clear guidance on best practice conservation on Protected Lands and guide sustainable development of all other lands;

j. Strength in legislation: the Act should not allow any regression, relaxation or exemption from the laws that are designed to protect biodiversity;

k. Efficiency: the Act should prioritise prevention of harm over potential mitigation, reducing costly and complicated mechanisms that persist in allowing degradation;

l. Responsiveness: The Act should provide clear guidance, coordination and assistance to regulatory and implementation bodies at all levels to enable them to actively respond to large scale threats (for example, climate change), to anticipate future local impacts and respond as needed with foresight and flexibility.

Recommendations:

1. Strengthen the Act by including a clear purpose, time-bound goals and objectives with State-based deliverables for biodiversity gains, indicators to measure progress and report against, and clear principles by which the Act will be implemented.

2. Strengthen the Principles under which the Act is administered.

Key Direction: The Act must improve the identification of Key Threatening Processes, develop and prosecute evidence-based National limits on processes and actions that threaten MNES

The EPBC Act does not currently provide National limits to the primary threats that impact on nature, despite this being a highly efficient mechanism (Allek, 2018). As the Act is implemented on a case-by-case basis and only on the Matters of National Environmental Significance, we see devastating cumulative impacts of multiple threats on native vegetation cover, river health and species health, which suffer ‘death by a thousand cuts’.

An improved mechanism for the identification of Key Threatening Processes (KTP’s) and the development of effective, coordinated strategies to mitigate these threats is well overdue in Australia. We need National and State-based limits to primary threats such as vegetation clearing, where the public good outweighs the interest of a developer, local area or sector.

Further, Australia’s record breaking extinction rate is in part due to the devastating impact of invasive species. Australia’s tolerance of threats, demonstrated by ongoing protection of invasive species at the expense of native landscapes and fauna, and continuation of imports of invasive pasture grasses that pose a direct threat to native vegetation and habitat integrity, must cease. Biodiversity loss will be stemmed only with a zero tolerance of habitat degradation caused by invasive species. Finally, increasing pressure from extractive industries, including from water extractors and through agricultural intensification, means in its redrafting the Act needs to adopt the precautionary principle, set lower triggers for referrals and higher standards of environmental protection for approvals to be granted.
Bush Heritage supports the Invasive Species Council submission for a revised mechanism for threat abatement. As such, we suggest establishing EPBC Expert Panels to augment Recovery Team efforts to identify KTP’s, assess threat levels and set limits. These teams should coordinate mitigation strategies in a consultative framework, engage implementation agencies through a tender process, and measure and report on effectiveness (as we propose Recovery Teams do into the future). These panels would address a significant failing in the Act by reviewing proposed actions within the context of past environmental damage and climate driven changes to come – that will include degradation of native vegetation changed species distributions, expansion of invasive species among other threats.

Recommendations:

3. Develop and resource EPBC Expert Panels to improve the identification of Key Threatening Processes, assess threat levels, set limits and undertake issues-based collaborative problem solving, based on the model developed for Bushfire Recovery. These expert panels should coordinate development of Threat Abatement Plans (which include mitigation strategies) in consultation with the community and experts. The expert panel should engage implementation agencies using a tender process, and measure and report on their effectiveness in delivering the threat mitigation objectives (as we propose Recovery Teams do into the future).

4. Develop and communicate National limits on native vegetation clearing and degradation, to be enforced by the States and territories. These limits should be based on evidence and account for the impact of past damage and existing threats including land-use impacts on connectivity, habitat condition, species viability, society, culture, productivity and the economy, on both a short-term and long-term basis.

Key Direction: The Act must drive active engagement of Aboriginal leaders and knowledge holders at a foundational level in planning, implementation and evaluation of the Act.

We concur with the Threatened Species Scientific Committee (TSSC) that there is a need for meaningful, mainstream Indigenous involvement in all elements of the EPBC Act and its implementation, including:

- a mandatory requirement for Indigenous scientists on the TSSC and equivalent experts on all other statutory committees (see Section 2. 4 for our suggestions to mainstream Indigenous membership of statutory committees).
- establishment and maintenance of a list of contacts for Indigenous groups and Indigenous experts for the Department and its statutory committees.
- additions to MNES (see This section and Question 4) to include the national reserve network including the Indigenous Conservation Estate – IPAs and equivalent models (where applicable) – and culturally significant entities (species, populations, communities/ landscapes/ stories). The Indigenous Advisory Committee would be the Listing Authority for these MNES.
- an appropriately-resourced, mandatory, formalised process for consultation with Traditional Owners as key stakeholders of land/sea/biodiversity, with respect to:
planning (regional conservation plans, recovery plans, threat abatement plans and planning associated with the National Reserve System);

- listing of Ramsar Sites, World Heritage Areas (recognising that cultural values are included in the listing criteria)
- Environmental Impact Assessments
- controlled actions.

- Statutory Indigenous involvement in the (joint) management of all Commonwealth reserves that overlap with Indigenous land/sea country including National Parks, World Heritage sites, National Heritage sites and Ramsar areas, with the long-term vision of sole management built into the Act, where appropriate.

- Statutory requirement for goals, indicators and reporting to better incorporate and evaluate the environmental services performed by Indigenous people through initiatives such as:
  - Use of Bio-cultural Indigenous knowledge
  - IPA program
  - Working on Country programs
  - Monitoring and evaluation.

We agree there is a need for a statutory requirement for standards for Indigenous Involvement including:

- Free, prior and informed consent
- Engagement and participation in decisions
- Culturally appropriate communication
- Use of Indigenous Bio-cultural Knowledge (IBCK) in biodiversity conservation
- Compliance with IP Australia (https://www.ipaustralia.gov.au/) proposals and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits to ensure:
  - protection and equitable sharing of benefits derived from Australia’s biological genetic resources
  - the use of traditional knowledge undertaken with the cooperation and approval (free, prior and informed) of the holders of that knowledge and on mutually agreed terms.

The current framework does not provide sufficient guidance or resourcing for the inclusion of First Australians in conceptualisation, planning, implementation, assessment and monitoring of national conservation and cultural priorities. Mr Mike Ross has recently been appointed as the first Aboriginal head of a Recovery Team (Golden Shouldered Parrot, or Alwal). This is excellent recognition of a dedicated knowledge holder and strident protector of this species and its habitat, but it must be backed up with appropriate resourcing to ensure First Australian knowledge holders are empowered to put into practise their knowledge and expertise for best conservation outcomes. Bush Heritage welcomes the advent of Aboriginal-led Recovery Teams and strongly recommends this mechanism is resourced appropriately and promulgated across the nation. We further recommend the integration of Traditional Owners in conservation planning, implementation, assessment and on-ground delivery.
Recommendations:

5. We strongly urge the review team to recommend statutory requirements for Indigenous involvement to drive meaningful, mainstream participation by Aboriginal Australians in all elements of the EPBC Act review and its implementation.

6. Promote, promulgate and resource Aboriginal-led Recovery Teams across the nation, and facilitate the integration of First Australians in conservation planning, implementation, assessment and on-ground delivery.

Key Direction: The Act must contain clear guidelines, tools and outreach helping land holders to stay within the law, access incentives and understand the implications of contravening the Act.

The complexity of the Act, lack of outreach and inadequate mapping tools (for MNES, critical habitat, species distributions, current activities and additive threats) allow for ignorance of the Act’s requirements to be proffered as a defence for acting in contravention of the Act. The Act is not supported by sufficient resources to help land managers understand, comply with and support the Goals of the Act. The benefits of nature and ecosystem services to human health and well-being, and to agricultural productivity, have been well documented and must be communicated effectively. Extension officers have proved most effective in communicating and realising local benefits for land managers and local policy makers. Further, there are now assessment tools that demonstrate the financial value of biodiversity, functioning habitats and cultural connections to country. Equally, these measures make obvious the cost of degradation or destruction of this natural capital, as opposed to the short-term benefit of financial gain.

Further, extension officers have been important in assisting land managers to employ advisors or lawyers, interpret the Act, stay within the law, refer specific actions for approval and gain access to incentives for maintaining their natural capital. Extension officers are also valuable in surveillance, and provide early warning of potential breaches, investigate breaches and assist in negotiating resolutions.

The Act does not make provision for, and thus Australia does not have, an accessible, reliable, comprehensive source of environmental information for forecasting, planning, implementing, evaluating and reporting on environmental management (Lindenmayer et al. 2015, 2017, Sparrow et al. 2019). The development of this critical information base would help provide clarity on where and when referrals should be triggered, how to navigate the referral process and what the implications are for a) not submitting an application or b) contravening the conditions of an approval. As a consequence, as explained in case study above, actions that should have been referred, are not, and environmental damage continues without scrutiny or penalty.

We stand with the ESA and other organisations in requesting implementation action on the Craik Review Recommendation 17: To develop national environmental standards for monitoring, evaluation and data for assessments and referrals, that enable data to be incorporated into national datasets in a timely fashion and allow data to be made publicly discoverable, accessible and reusable.
National standards increase data interoperability and ensure that different jurisdictions deliver and assess Act-related activities in a consistent and reusable manner. We support the development and permanent support of an interactive database that receives environmental information from all sectors, and makes available maps which define the geographic boundaries of critical habitat and all MNES, relevant threats, specify the responsibilities of local land managers to reduce the threats MNES and indicate the need for a referral where appropriate. This should be based on the Bureau of Meteorology model where standardised information is drawn into a single agency for aggregation, analysis and communication. This would meet a significant gap in Australia’s environmental information systems.

Recommendations:

7. Take up the Craik Review Recommendation 17: To develop national environmental standards for monitoring, evaluation and data for assessments and referrals, that enable data to be incorporated into national datasets in a timely fashion and allow data to be made publicly discoverable, accessible and reusable. The database needs to make available clear maps with geographic boundaries of critical habitat and all MNES, relevant threats and the responsibilities of local land managers to reduce those threats and indicate where a referral is needed. The database should be based on the Bureau of Meteorology model where standardised information is drawn into a single agency for aggregation, analysis and communication.

8. Develop a framework of National Environmental Economic Accounts (using data above) to track and value extent, condition and trends in Australia’s natural capital (such as biodiversity, landscape health, native vegetation extent and condition, water quality and the extent and impact of threatening processes) to make clear the value of natural and cultural resources and thus the costs of destruction and degradation of natural capital. The accounts should be used to provide an annual set of accounts for transparency, and to indicate where changes of approach and adaptation are needed.

9. We strongly urge the re-establishment of extension officers to 1) communicate the benefits of biodiversity nationally and locally; 2) provide advice on working with the Act, including on actions that will trigger a referral; 3) assist with the submission of proposals and interpretation of responses; and 4) clearly communicate the implications of contravening the Act.

Key Direction: The Act must provide for resourcing of current support mechanisms and expand the available support mechanisms to drive progress towards the goals.

Recovery Plans help drive efforts and investment for threatened species (Woinarski et al. 2017), and lack of Recovery Plans can contribute to extinction of threatened species (Legge et al. 2018). As noted above, many threatened species do not have complete or approved Recovery Plans. Many have no guiding documents at all. This is due to a profound lack of oversight, funding, goals (consistent with National goals), interim milestones, reporting and evaluation of these programs. Bush Heritage requests the revised Act requires renewed efforts to mitigate threats to MNES by providing consistent funding for development of strategy, collaborative planning, approved
programs and accountability in the recovery planning process. This could be achieved through a tender process, where goals and strategies are proposed by teams of organisations or people, and gain funding if approved. The teams would provide oversight and guide required actions and evaluations, and provide reports through approved frameworks. The Conservation Standards https://www.conservationmeasures.org/version-4-0-of-the-conservation-standards-is-here/provides this framework and we recommend that it be adopted as a planning, delivery and reporting mechanism.

Further, Bush Heritage concurs with the recommendations of the EDO and HSI (2018) and adds further recommendations to expand MNES to include the factors below as triggers under the Act. The advent of a water trigger for the EPBC Act demonstrates progress and flexibility and has encouraged thinking around the development of triggers that would provide for better outcomes for the protection of nature.

Bush Heritage strongly encourages the inclusion of the following factors in the listed MNES:

a. Indigenous Conservation Estate – IPAs and equivalent models (where applicable);
b. Culturally significant entities (species, populations, communities/ landscapes/ stories);
c. National Reserve System of protected areas

d. Ecosystems of National Importance, such as wetlands of national importance, Key Biodiversity Areas, climate refugia and high conservation value vegetation;
e. Climate refugia - areas with terrain characteristics where species may retreat to and colonise from, during extreme weather events or as the climate change impacts worsen over decades. Current knowledge should be blended with Traditional knowledge to define these areas;
f. Climate change impacts – allowing for mitigation by embedding climate projections in strategic planning, and where high-emission projects have their impacts thoroughly assessed against international climate goals and national commitments;
g. Significant rivers and ground water resources; to prevent over-extraction, pollution and other adverse impacts, subject to the oversight of a National Water Commissioner (or the Sustainability Commission);
h. All Key Threatening Processes should be listed as triggers for the EPBC Act to regulate the serious negative impacts of land clearing and land degradation, including deforestation; and

Proposed MNES a) to e) listed above should be ‘no-take’ zones and considered areas in need of special protection.

Finally, the rate of change currently impacting our habitats and species means that approaches that focus on a single species or community will not be sufficient to identify, track and mitigate threats across the country. Bush Heritage urges the increased use of habitats as the preferred unit of conservation rather than solely species in the future. Bush Heritage requests serious consideration of the development of an additional instrument for the protection of habitats and species in a rapidly changing world. Threat Mitigation Teams could complement Recovery Planning using a multi-sector, cross border, approach similar to that established for the Bushfire Recovery Expert Panels. This is an excellent mechanism for data gathering, decision making, threat analysis and response
development – why wait for a crisis when we can act pro-actively to put these expert panels in place to avoid a crisis.

The development, resourcing and coordination of long-term, collaborative, multi-disciplinary, expert driven programs will ensure policy makers, implementation agencies and assessment/reporting agencies have full access to verifiable, consistent information and support for the administration and prosecution of the Act with respect to cross cutting themes as well as species impacts.

Recommendations:

10. Expand the MNES that trigger referrals under the Act (see above).
11. The establishment and funding of a dedicated independent institution (using the model of the National Environment Protection Authority) to undertake the following:
    a. develop cross jurisdictional BioReginal Plans;
    b. resource and support Recovery Teams and Plans;
    c. prioritise the effective development, support and assessment of Threat Abatement Plans;
    d. evaluate progress and report to the community and government;
    e. set limits and adaptations in land management actions;
    f. build efficiency and collaboration in these structural elements of environmental protection;
    g. enforce the Act and prosecute breaches with penalties that are a real disincentive.

This institution or the Administering Department (DAWE or relevant Division) provides coordination, oversight and arbitration within and among different jurisdictions to ensure consistent, cohesive application of the Act across the nation

Key Direction: The Act must provide clear delineation of responsibilities and support available for each level of government for assessment and prosecution.

There is a significant opportunity to revise the EPBC Act to provide for the Commonwealth to take a greater leadership role, as the Federal Government does in the USA for example. Australian states are responsible for implementation, but the Act must provide clarity that the National legal instrument for environmental protection will be actively enforced. Differences, competition and lack of accountability from the States have led to great environmental degradation. We look now to the Federal government to resolve these issues before our National situation becomes worse.

Example 1: The consequence of poor water management was demonstrated at a large scale in repeated fish kills in the Darling River. While greatly exacerbated by NSWs changes to their water sharing plans in 2012 (agreed to by the Commonwealth government though the MDBA) changes in water flows are a significant factor. Given the failure of competing States to protect this huge population of fish and other aquatic animals (including threatened species) which move in and out of three states, Commonwealth oversight, guided by the Principles of the EPBC (including those recommended below) should be considered.
Example 2: One of the greatest challenges Australia faces is ongoing clearing of native vegetation on both a broad and incremental scale. As native vegetation controls fall under State jurisdiction there is currently no national mechanism to protect native vegetation given the differing approaches of state governments. This was graphically demonstrated in Queensland between 2012 and 2015 when vegetation controls were lifted and clearing accelerated to about 300,000 ha annually.

Since the weakening of vegetation clearing controls in NSW in November 2016 there has been dramatic increase in clearing of agricultural land, with only 9 per cent of native vegetation now considered in good condition.

Example 3: To appease the Brumby lovers the Wild Horse Heritage Bill was passed in NSW in 2018. The consequence is that the iconic Kosciusko National Park and its delicate alpine habitats, and the surrounding high country, are now under threat from rapidly growing population of Brumbies. Numbers have increased from an estimated 9190 in 2014 to 25,320 in 2019.

The Act needs to include mechanisms to call-in the national interest for biodiversity protection and specifically, the retention of native vegetation over a state’s ideological, regional or local interest.

The Federal Government has an opportunity to play a critical role in these areas of diffuse responsibilities. It can set national goals, clearly communicate each State’s responsibility in achieving the goals, refuse approvals for actions that will cause significant damage to MNES, improve call-in powers when MNES are at risk, undertake surveillance of all land management, develop incentive programs, identify and investigate breaches, and prosecute and hold land managers and policy makers accountable for actions and decisions that drive environmental degradation. The policy settings of the EPBC Act are largely sufficient for the Department to take a coordination and leadership role. With greater emphasis on achieving biodiversity goals and with adequate resourcing it can significantly improve the administration of the Act.

Currently, there is no alignment between the EPBC Act and our international obligations to the Convention on Biological Diversity, Sustainable Development Goals, the Paris Climate Accord and other international agreements, targets and indicators. The Act should provide strong enabling legislation that clearly links these frameworks to ensure efficient reporting of impacts and adaptation. The review of the EPBC Act is a helpful mechanism to ensure alignment of national and international obligations, and we encourage the Review team to collaborate with the UN SDG review to improve communication and connection between these frameworks, improve efficiency in reporting and facilitate Australian access to international markets for valuing and funding environmental and biodiversity protection.

Recommendations:

12. Drive the development of a new Intergovernmental Agreement on Biodiversity to engender stronger commitments and cooperation among federal, state and territory governments. Set clear National and State-based Goals (see Recommendations 1 and 2), standards and measures for biodiversity, develop regional implementation plans and
13. Align the Act with Australia’s international obligations, and the relevant tracking and reporting tools.

Key Direction: The Act must indicate that the Government has a zero tolerance for contravention of the Act through establishing tools and resources for consistent, active surveillance, investigation of breaches and prosecution of those individuals or companies that contravene the Act.

One of the most obvious gaps in the implementation of the EPBC Act is the almost complete lack of enforcement. There is a lack of monitoring and assessment at a government level of activities that may present threats to MNES and critical habitats. Without this monitoring, enforcement of the Act is virtually impossible, and as a result, compliance is poor. Even when evidence of infraction is made available in the public domain (Kearney et al., 2018; Reside 2019), there appears to be no motivation or resources for prosecution. Advances in monitoring tools including analysis of images from drones and satellites with on-ground monitoring, the capability is within reach of government agencies that are motivated to achieve biodiversity protection. Bush Heritage would welcome the development of multi-disciplinary tools to detect and investigate actions that are in contravention of the Act and so improve our ability to prosecute those who threaten Australia’s natural resources, with penalties being commensurate with the damage sustained to the national natural capital and affected communities.

Recommendations:

14. Provide the strength of legislation to ensure that individuals or organisations found to have contravened the Act are prosecuted. This will also build confidence in the Australian public that the Australian government values biodiversity and cultural values.

15. Develop multi-disciplinary tools and engage with national, collaborative networks that already have large datasets, good predictive capability and excellent surveillance capabilities to detect and investigate actions that are in contravention of the Act and improve our ability to prosecute those who degrade Australia’s natural capital. These tools should interact automatically integrate with the database referred to in Recommendation 12.

Key Direction: The Act must facilitate innovation and the development of new programs to improve progress towards goals.

The current land management practices may be insufficient to address the current and emerging threats to the environment. New programs that develop model landscapes must be supported to develop and manage large-scale trials, which develop and test new methods of landscape management for conservation purposes. The succession of heatwaves, explosive fires, super-cell storms, hail and flooding rain off the back of one of the most intense droughts on record, has degraded Australia’s environmental condition score to an all-time low (Van Dijk et al., 2020). The environmental response and recovery continues but the Australian public, conservation practitioners
and First Australians alike are calling to be better prepared for future extreme events. What different strategies could we employ to increase the environmental resilience of our native species and ecosystems, in the face of accelerating change? Should we be aiming to restore these systems to their original assemblages of species? Or should the efforts be to rebuild a more fire resistant and climate-change resilient ecosystem?

These trials may be high risk, and will therefore be unlikely to be taken on by private organisations with slim budgets. We need government support to avoid being left without the tools and know-how needed to respond effectively to the inevitability of more catastrophic climate-related events like the fire season we have just witnessed. Community partnerships and government-researcher-practitioner collaborations are essential to our ability to learn, as is formulation of experimental methods that will allow the conservation community to rapidly learn in the context of the worsening climate emergency. The list of new options for landscape management that we are aware of (Prober et al., 2019) could be richly augmented by advice from a diverse and collaborative group of land managers and knowledge holders including First Australians, farmers, species experts, restoration practitioners, scientists and conservationists. Drawing out ideas from knowledge holders with deep local expertise will help us learn from the past in order to plan for the future, and so build on many centuries of sustainable land management in Australia.

Further, incentives for innovation and transition to new models of production will also be required. An emerging regenerative farming movement may hold the answer to maintaining resilience in productive lands, even in drought conditions. This has great implications for environmental protection and biodiversity conservation in Australia, as maintaining land zoned as agricultural in as productive condition as possible will reduce the potential for expansion of agriculture into remnant native vegetation or conservation reserves in order to maintain food security. Regenerative agriculture is likely to be the first of a number of farming innovations that will ensure the sustainable use of natural resources to supply the needs of our human communities if used hand in hand with environmental accounting (Ogilvy 2015).

Recommendations:

16. Provide mechanisms for scenario planning with expert panels to foresee, and develop, future-ready plans for proactive environmental protection and biodiversity conservation.
17. Provide the avenues and funding for innovation in land management that accelerates the active protection of species suddenly at risk and promotes methods that drive a shared future for nature and productivity.

QUESTION 31: What changes are needed to the EPBC Act? Why? - What changes are needed to the EPBC Act? Why?

In brief, Bush Heritage Australia makes the following recommendations in relation to the Act:
1. Strengthen the Act by including a clear purpose, time-bound goals and objectives with State-based deliverables for biodiversity gains, indicators to measure progress and report against, and clear principles by which the Act will be implemented.

2. Strengthen the Principles under which the Act is administered.

3. Develop and resource EPBC Expert Panels to improve the identification of Key Threatening Processes, assess threat levels, set limits and undertake issues-based collaborative problem solving, based on the model developed for Bushfire Recovery. These expert panels should coordinate development of Threat Abatement Plans (which include mitigation strategies) in consultation with the community and experts. The expert panel should engage implementation agencies using a tender process, and measure and report on their effectiveness in delivering the threat mitigation objectives (as we propose Recovery Teams do into the future).

4. Develop and communicate National limits on native vegetation clearing and degradation, to be enforced by the States and territories. These limits should be based on evidence and account for the impact of past damage and existing threats including land-use impacts on connectivity, habitat condition, species viability, society, culture, productivity and the economy, on both a short-term and long-term basis.

5. We strongly urge the review team to recommend statutory requirements for Indigenous involvement to drive meaningful, mainstream participation by Aboriginal Australians in all elements of the EPBC Act review and its implementation.

6. Promote, promulgate and resource Aboriginal-led Recovery Teams across the nation, and facilitate the integration of First Australians in conservation planning, implementation, assessment and on-ground delivery.

7. Take up the Craik Review Recommendation 17: To develop national environmental standards for monitoring, evaluation and data for assessments and referrals, that enable data to be incorporated into national datasets in a timely fashion and allow data to be made publicly discoverable, accessible and reusable. The database needs to make available clear maps with geographic boundaries of critical habitat and all MNES, relevant threats and the responsibilities of local land managers to reduce those threats and indicate where a referral is needed. The database should be based on the Bureau of Meteorology model where standardised information is drawn into a single agency for aggregation, analysis and communication.

8. Develop a framework of National Environmental Economic Accounts (using data above) to track and value extent, condition and trends in Australia’s natural capital (such as biodiversity, landscape health, native vegetation extent and condition, water quality and the extent and impact of threatening processes) to make clear the value of natural and cultural resources and thus the costs of destruction and degradation of natural capital. The accounts should be used to provide an annual set of accounts for transparency, and to indicate where changes of approach and adaptation are needed.

9. We strongly urge the re-establishment of extension officers to 1) communicate the benefits of biodiversity nationally and locally; 2) provide advice on working with the Act, including on actions that will trigger a referral; 3) assist with the submission of proposals and
interpretation of responses; and 4) clearly communicate the implications of contravening the Act.

10. Expand the MNES that trigger referrals under the Act (as per related section).
11. The establishment and funding of a dedicated independent institution (using the model of the National Environment Protection Authority) to undertake the following:
   a. develop cross jurisdictional BioReginal Plans;
   b. resource and support Recovery Teams and Plans;
   c. prioritise the effective development, support and assessment of Threat Abatement Plans;
   d. evaluate progress and report to the community and government;
   e. set limits and adaptations in land management actions;
   f. build efficiency and collaboration in these structural elements of environmental protection;
   g. enforce the Act and prosecute breaches with penalties that are a real disincentive.

This institution or the Administering Department (DAWE or relevant Division) provides coordination, oversight and arbitration within and among different jurisdictions to ensure consistent, cohesive application of the Act across the nation

12. Drive the development of a new Intergovernmental Agreement on Biodiversity to engender stronger commitments and cooperation among federal, state and territory governments. Set clear National and State-based Goals (see Recommendations 1 and 2), standards and measures for biodiversity, develop regional implementation plans, establish clear jurisdictional roles in communication, implementation and delivery of incentives and enforcement of infractions.
13. Align the Act with Australia’s international obligations, and the relevant tracking and reporting tools.
14. Provide the strength of legislation to ensure that individuals or organisations found to have contravened the Act are prosecuted. This will also build confidence in the Australian public that the Australian government values biodiversity and cultural values.
15. Develop multi-disciplinary tools and engage with national, collaborative networks that already have large datasets, good predictive capability and excellent surveillance capabilities to detect and investigate actions that are in contravention of the Act and improve our ability to prosecute those who degrade Australia’s natural capital. These tools should interact automatically integrate with the database referred to in Recommendation 12.
16. Provide mechanisms for scenario planning with expert panels to foresee, and develop, future-ready plans for proactive environmental protection and biodiversity conservation.
17. Provide the avenues and funding for innovation in land management that accelerates the active protection of species suddenly at risk and promotes methods that drive a shared future for nature and productivity.
QUESTION 32: Is there anything else of importance to you that you would like the review to consider? - Is there anything else of importance to you that you would like the review to consider?

We are grateful for the opportunity to submit to the Review recommendations for the development of a framework, programs, instruments and reporting structures that will genuinely contribute to making the EPBC Act more effective and better able to protect biodiversity.

We would be pleased to provide further information at any point.

ATTACHMENT

Additional information was provided as an attachment to this submission. The attachment is provided on the following pages of this document.
Submission

In response to:


Prepared by
Bush Heritage Australia
17 April 2020

For further information on this submission, please contact:
Dr Rebecca Spindler, Executive Manager Science and Conservation, Bush Heritage Australia

Submitted to
EPBC Act Review Secretariat
1800 065 823
epbcreview@environment.gov.au

Bush Heritage Australia is a national not-for-profit organisation, protecting millions of hectares of ecologically important land for the benefit of nature and all Australians. Operating nationally, Bush Heritage has an interest in and influence on the protection of our native species and natural landscapes. We work primarily in 19 priority landscapes that cover a vast and diverse subset of Australia’s human and environmental communities.

Within these areas we are focussed on restoring natural ecosystem health and the viability of native species both on our reserves and across the broader landscape. Aside from carefully managing our own land, Bush Heritage takes a collaborative approach to land management and biodiversity protection, engaging and working with others, across sectors, to protect natural assets at a landscape scale. Bush Heritage is involved in significant species recovery programs across Australia, working with Traditional Owners, other not-for-profit organisations, farmers, governments and universities. Bush Heritage is supported by more than 30,000 active donors and over 800 volunteers.

Bush Heritage interacts with the EPBC Act in its conservation work across Australia. The Act is clearly not achieving environmental and biodiversity protection in Australia, as evidenced by Australia’s record of having the world’s worst extinction rate (Woinarski et al. 2015), a continuing declining trend of species loss (Ward et al. 2019), and continuing habitat loss and degradation. The core objective of the Act – to provide for the protection of the environment, especially Matters of National Environmental Significance– is positive. The guidance, frameworks and mechanisms within the Act are a good foundation for nature protection but require clarification, improved implementation, broader coverage, funding and active enforcement if the trajectory for our species and habitats is to change.

Bush Heritage believes good effective environmental legislation has the following hallmarks.

It:

1. contains a clear Purpose and Goals for environmental improvement
2. contains evidence-based National limits on processes and actions that damage the environment and/or reduce the likelihood of reaching the goals
3. drives active engagement of knowledge holders at a foundational level in planning, implementation and evaluation
4. contains clear guidelines, tools and outreach to help land holders stay within the law, access incentives and understand the implications of contravening the Act
5. provides for resourcing of current support mechanisms and expands the available support mechanisms to drive positive outcomes and progress towards goals
6. provides clear delineation of responsibilities for each level of government, and provides for the support needed for assessments, incentives and prosecutions
7. makes explicit that the Government has a zero tolerance for contraventions of the Act and provides for tools and resources for consistent, active surveillance, investigation and prosecution of those individuals or companies that breach the Act
8. facilitates innovation and allows for the development of new programs to improve progress towards biodiversity goals.

It is clear that the Act does not exemplify these characteristics. This has led to its failure in meeting its purpose.
We are grateful for the opportunity to submit to the Review recommendations for the development of a framework, programs, instruments and reporting structures that will contribute to making the EPBC Act more effective and better protect biodiversity.

In brief, Bush Heritage Australia makes the following recommendations in relation to the Act:

1. Strengthen the Act by including a clear purpose, time-bound goals and objectives with State-based deliverables for biodiversity gains, indicators to measure progress and report against, and clear principles by which the Act will be implemented.

2. Strengthen the Principles under which the Act is administered

3. Develop and resource EPBC Expert Panels to improve the identification of Key Threatening Processes, assess threat levels, set limits and undertake issues-based collaborative problem solving, based on the model developed for Bushfire Recovery. These expert panels should coordinate development of Threat Abatement Plans (which include mitigation strategies) in consultation with the community and experts. The expert panel should engage implementation agencies using a tender process, and measure and report on their effectiveness in delivering the threat mitigation objectives (as we propose Recovery Teams do into the future).

4. Develop and communicate National limits on native vegetation clearing and degradation, to be enforced by the States and territories. These limits should be based on evidence and account for the impact of past damage and existing threats including land-use impacts on connectivity, habitat condition, species viability, society, culture, productivity and the economy, on both a short-term and long-term basis.

5. We strongly urge the review team to recommend statutory requirements for Indigenous involvement to drive meaningful, mainstream participation by Aboriginal Australians in all elements of the EPBC Act review and its implementation.

6. Promote, promulgate and resource Aboriginal-led Recovery Teams across the nation, and facilitate the integration of First Australians in conservation planning, implementation, assessment and on-ground delivery.

7. Take up the Craik Review Recommendation 17: To develop national environmental standards for monitoring, evaluation and data for assessments and referrals, that enable data to be incorporated into national datasets in a timely fashion and allow data to be made publicly discoverable, accessible and reusable. The database needs to make available clear maps with geographic boundaries of critical habitat and all MNES, relevant threats and the responsibilities of local land managers to reduce those threats and indicate where a referral is needed. The database should be based on the Bureau of Meteorology model where standardised information is drawn into a single agency for aggregation, analysis and communication.

8. Develop a framework of National Environmental Economic Accounts (using data above) to track and value extent, condition and trends in Australia’s natural capital (such as biodiversity, landscape health, native vegetation extent and condition, water quality and the extent and impact of threatening processes) to make clear the value of natural and cultural resources and thus the costs of destruction and degradation of natural capital. The accounts should be used to provide an annual
set of accounts for transparency, and to indicate where changes of approach and adaptation are needed.

9. We strongly urge the re-establishment of extension officers to 1) communicate the benefits of biodiversity nationally and locally; 2) provide advice on working with the Act, including on actions that will trigger a referral; 3) assist with the submission of proposals and interpretation of responses; and 4) clearly communicate the implications of contravening the Act.

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This institution or the Administering Department (DAWE or relevant Division) provides coordination, oversight and arbitration within and among different jurisdictions to ensure consistent, cohesive application of the Act across the nation.

12. Drive the development of a new Intergovernmental Agreement on Biodiversity to engender stronger commitments and cooperation among federal, state and territory governments. Set clear National and State-based Goals (see Recommendations 1 and 2), standards and measures for biodiversity, develop regional implementation plans, establish clear jurisdictional roles in communication, implementation and delivery of incentives and enforcement of infractions.

13. Align the Act with Australia’s international obligations, and the relevant tracking and reporting tools.

14. Provide the strength of legislation to ensure that individuals or organisations found to have contravened the Act are prosecuted. This will also build confidence in the Australian public that the Australian government values biodiversity and cultural values.

15. Develop multi-disciplinary tools and engage with national, collaborative networks that already have large datasets, good predictive capability and excellent surveillance capabilities to detect and investigate actions that are in contravention of the Act and improve our ability to prosecute those who degrade Australia’s natural capital. These tools should interact automatically integrate with the database referred to in Recommendation 12.

16. Provide mechanisms for scenario planning with expert panels to foresee, and develop, future-ready plans for proactive environmental protection and biodiversity conservation.

17. Provide the avenues and funding for innovation in land management that accelerates the active protection of species suddenly at risk and promotes methods that drive a shared future for nature and productivity.
In addition to Bush Heritage’s specific responses to the questions posed by the Review Team, below are case studies and general responses to the broad questions that this review is seeking to answer.

**Is the EPBC Act delivering what was intended in an efficient and effective manner?**

The inexorable expansion of the Threatened Species List (Woinarski et al., 2015), recent extinctions and growing evidence (Ward et al., 2019) of ecosystem collapse (Lawrence et al., 2011) are clear evidence that the Act has not delivered what was intended. Further, unabated facilitation of the known key threats to biodiversity at a local, state and federal level, for example: unsustainable water extraction; both sanctioned and illegal land clearing, subsidies to the oil, coal and coal-seam gas industry despite viable alternatives, failure to rehabilitate land following energy and resources exploration and extraction, demonstrates a lack of motivation to implement the Act. Thus we conclude that the EPBC Act has not delivered what was intended and thus has not been effective. The question of efficiency is therefore not relevant.

**Case studies of the EPBC Act failing to protecting threatened species**

**Case study 1: Plains Wanderer, *Pedionomus torquatus* - The Act has failed to protect this species**

Out of nearly 10,000 bird species, Plains-wanderers are recognised as No. 1 in Australia (4th globally) as the bird we could least afford to lose because of its evolutionary distinctiveness. This is a real possibility as they are Critically Endangered under the EPBC Act. They are wholly dependent on sparse native grasslands. Most of these grasslands are in private hands and are grazed. Grazing can be an effective management tool when done appropriately (Baker-Gabb et al., 1990; Deiz & Foreman, 1996).

Despite paddocks being critical habitat for this species, they continue to be ploughed for crops, not only destroying critically endangered grasslands but the habitat for this critically endangered bird and other dependant species. No referrals were made to the DoE by either farmers or local agencies authorising the cultivation. This may demonstrate a genuine lack of awareness by the farmer and agencies, failure of available information on the need for referrals, or disregard for breaching the Act as compliance and penalties are rare and provide no disincentive. Regardless of the root cause, this clearly demonstrates failures in the implementation of the Act. This is a recurring issue as discussed in a recent publication (Ward et al., 2019), that demonstrates the Agriculture and Forestry sector constitute a very small proportion of referrals to the EPBC, (Figure 1c) with residential development and mining by far the most common. However, in terms of extent of impact, agriculture has a much greater potential to cause harm (Fig 1d).

Finally, this same publication noted that very few mining applications are rejected despite having a significant impact on Matters of National Environmental Significance (Fig 1b). With respect to Plains-wanderers, Bush Heritage has direct experience with the approval of mining activities directly on or
adjacent to key Plains-wanderer habitat. We have expended significant effort to restore this species habitat and to protect Plains-wanderers from feral predators to see approvals place a critically endangered species at greater risk and compromise our efforts to protect it and its habitat. This signals a complete lack of will to acknowledge the evidence and prosecute the stated objectives of the Act.

Figure 1: (a) Top left pie chart illustrates the proportion of referrals per state. (b) The top right pie chart represents the proportion of referrals that were not a controlled action, a controlled action, or clearly unacceptable. (c) The bottom left pie chart illustrates the breakdown of industries referring their actions by number of referrals, (d) the bottom right pie chart illustrates the breakdown of industries referring their actions by area (hectares). Both (c) and (d) highlight the agricultural sector as a low-referring industry From: Ward et al 2019.
Case study 2 - South-eastern Red-tailed Black-cockatoos, *Calyptorhynchus banksia* - Enforcement can change behaviour

The endangered South-eastern Red-tailed Black-cockatoos are dependent on two tree species for their food and tree hollows for nesting. One such tree is the Buloke (*Allocasuarina luehmannii*). As little as three per cent of buloke woodland remains and paddock trees are still felled to facilitate the use of centre pivot irrigation. One major land-clearing event of over 10,000 trees of mixed species was referred to the DoE (as it was then) for prosecution, and while not yet resolved, this has contributed to a reduction in the further loss of trees as landholders are wary of also being prosecuted. This is an example of where enforcement has provided a deterrent and has changed behaviours. However, the land clearing event itself demonstrates again that the Act has failed to protect native habitats for threatened species.

The failure of the EPBC Act to protect native species can be told over and over again for the majority of species in the threatened species list. Many populations of these species have the opportunity to remain stable providing important ecosystem services and key elements of habitat function remain, but they decline because multiple threats are ignored, permitted and/or facilitated.

Case Study 3 – Red Finned Blue-Eye – *Scaturiginichthys vermeilipinnis*

Lack of resources to implement the Act has been a hindrance to conservation

Bush Heritage sought guidance from the DoE on the recovery of the Critically Endangered Red-finned Blue-eye, now restricted to one property owned and managed by Bush Heritage in central Queensland. The recommended actions in the draft Recovery Plan were required urgently to protect the remaining populations of fish from an invasive competitor (*Gambusia*) and included controlled actions. The documentary evidence required to justify the strategies were contained in the yet-to-be-approved draft Recovery Plan. The delays in approving the Plan, and subsequent decision-making prevented the urgent
protective actions occurring in a timely way. This is as a direct result of lack of resourcing to the Recovery Team and to the section/branch of DoE responsible for administering the Act. The total delay was 18 months for all actions to be approved. In this time one major flood event would have seen all remaining springs invaded by *Gambusia* (Nicol et al., 2015) and a significant chance of the Red-finned Blue-eye becoming extinct in the wild.

**How well is the Act being implemented?**

One of the main reasons for the Act failing to deliver on its purpose is poor implementation across a range of areas, largely due to a lack of resourcing for the administering department and the thousands of volunteers who are asked to undertake the work to implement the Act.

The following areas are clear gaps in implementation:

1. Lack of support for preparing and implementing Recovery Plans, and overseeing and reporting on outcomes. As recovery plans are the key instrument in the Act to drive improvements in conservation status, this is a significant failing.
2. The lack of enforcement of the Act with respect to organisations and individuals who undertake actions without development approvals, and which contravene the Act.
3. The overwhelming approval of proposals that present clear, significant impacts on Matters of National Environmental Significance.
4. Lack of monitoring and evaluation of land use and activities for reporting, enforcement and planning purposes.
5. Poor or no outreach to land managers on how to comply with the Act, the benefits of compliance, incentive programs and the implications of breaches.
6. The failure to take into account the cumulative impacts of many damaging actions.

Suggestions for addressing these gaps will be included in following sections.

**Is the EPBC Act sufficient to address future challenges? Why?**

The Act in its current form and under the current implementation regime is not sufficient to address future challenges. The challenges are now beyond anything that would be envisaged at the time the Act was drafted. This is the time to radically rethink what legislation we need to protect our declining environmental values against increasing threats, and how that legislation is implemented and funded. Remarkably, and disappointingly, the recommendations of the Hawke review of the EPBC Act in 2009 highlighted many of the same issues. The recommendations have not been implemented.

Catastrophic environmental events will increase in frequency and intensity (Williams et al. 2009; Cary et al. 2012). This year’s fires are a graphic example. We need new mechanisms and triggers to protect biodiversity in the face of such disasters. Disasters that may affect MNES, can be large scale – like bushfires, floods and droughts – and events with long-term or irreversible consequences, like the drying of the Darling River. It may be feasible to define a ‘biodiversity disaster’, which then sets in train a response for recovery - including funding, on-ground action including exceptional interventions (for example, translocating individuals of a species), revoking or suspending water extraction or mining permits, increased monitoring and reporting, Lessons Learned reviews, and adaption of Regional or Recovery Plans. Coordination with State legislation will be critical, but the EPBC Act can drive development of such agreements. There should be a mandatory review of Recovery plans in response to environmental emergencies that impact the listed species or ecosystems.
Preferably, the Act would guide the development of tools and an evidence-base to foresee (or at least plan for) an environmental disaster and work proactively with partners in government and non-government agencies, to ameliorate the conditions before the devastating impacts are felt.

Federal oversight and call-in powers are needed particularly for land clearing and climate change triggers. In the context of the 2019-20 bushfire crisis, some communities are likely to advocate for more clearing and more controlled burns based on the view of ‘bush’ as a fire hazard (rather than a carbon sink that might absorb CO₂ from the atmosphere and limit increases in temperature in the long-term), and don’t realise that frequent burning makes some bush more prone to wildfire.

The challenges that this Act must now respond to include:

- large scale ecosystem changes as a result of climate change. These are transforming habitats into new forms that are, and will be, outside the habitat requirements for many dependent species. For example, the internationally recognised South-West Biodiversity Hotspot is expected to suffer up to a 95 per cent change in plant species along the south west coast of Western Australia. Species and communities will need to ‘shift’ – sometimes to places that may be suitable but not physically connected or in poor condition. The CSIRO conservation planning tool AdaptNRM shows this need very clearly. These ‘new’ habitats need protecting and will often need restoring.
- rapid changes to native species distributions resulting in information that guides planning being out-of-date. These databases are already inadequate and will increasingly be inaccurate and will not include those areas that are likely future habitats. Research on this subject is urgently needed and should be made publicly available through accessible databases and incorporated into government planning and decision-making;
- changes to invasive species distributions or types as the climate changes. Pest species and pathogens generally adapt well to change and can be expected to be more problematic in the future and expand their distributions. Research is needed to understand where these likely expansions of range will occur, and where novel ecosystems will evolve. The EPBC Act needs to assess the likely future importance of these ‘novel’ habitats;
- declines in river flows and unprecedented flooding. Flows in southern Victoria have declined by 10 to 25 per cent over the last 15 years, and declines in northern Victoria are likely to be higher. At best, this has meant that gains in environmental flows are offset by reductions in natural inflows. In waterways that cannot receive environmental flows – the vast majority – flows are drying up;
- consideration of the cumulative impacts of climate change on native vegetation and fauna;
- multiple, more frequent and large-scale disasters including droughts, fires, floods, tidal surges – resulting in catastrophic habitat loss, species loss and long-term ecosystem changes;
- climate-driven or technology-driven intensification of land use, or land use change from grazing to cropping and irrigation;
- ongoing loss of habitat from clearing and burning for urban growth, agriculture or “fire prevention”;
- Poorly resourced and mismanaged fire and land management regimes that may actually make an area more fire prone rather than protect it.

Opportunities to improve:
The recent bushfires and the government response have demonstrated the powerful, confidence-building, responsive role that the Federal government can play in an environmental emergency. The expert panel on bushfire response has provided an excellent, cohesive view of the cause, impacts and potential opportunities to rebuild and maintain resilience in natural habitats and affected communities.
This systematic collaborative thinking must not be consigned to emergency responses only—to foresee and avoid an environmental disaster such as we have just seen—but should be the goal of the peak environmental instrument.

The invaluable resources available to the Federal government include the following:

- land managers (agriculture, mining, conservation, etc) who already provide annual data;
- Aboriginal elders and knowledge holders with deep local knowledge; and
- CSIRO, agency and university experts provide modelling and data integration and analytics to improve our predictive capabilities.

The bushfire response has demonstrated clearly that not only are these groups, in large part, enthusiastic to work together for greatest benefit, but also keen to work with government to help achieve our National Environmental Goals. Do not let this positive movement be relegated to crisis management only. Employ the opportunity we have now to drive improved functionality to foresee and mitigate future environmental disasters.

Bush Heritage Australia recommends the development and resourcing of long-term, collaborative, multi-disciplinary, expert-driven programs. These groups would drive Threat Abatement Plans and ensure policy makers, implementation and assessment/reporting agencies have access to verifiable, consistent information for the administration and prosecution of the Act. These programs should sit alongside and augment the species and community-specific Recovery Plan programs.

Bush Heritage also seeks provision for the development and support in perpetuity of a database that receives information from land managers from all sectors, and makes available up-to-date maps of all MNES and threats. The lack of such data was clear in the recent bushfire crisis and significantly slowed recovery efforts while basic research was conducted over several months to determine which species were affected. This critical information should be available to all citizens of Australia as they administer and comply with the Act to plan, implement, assess and communicate environmental activities and impacts. This should be modelled on the Bureau of Meteorology where standardised information is drawn into a single agency for the aggregation, analysis and communication of trends for adaptive and relevant policy making and to prepare for future environmental conditions.

In advance of the next environmental disaster, we must set triggers for appropriate responses and to fund rescue and/or recovery. Given the increasing number of environmental catastrophes—an ‘environmental disaster’ could trigger an immediate EPBC response, such as redirection of funding to rescue or restore; or revoke counterproductive licence conditions. For example, in a significant blackwater event in the Murray River, the legal bag limit for taking crayfish was reduced to nil as the crayfish were extremely vulnerable - climbing up trees and banks to get oxygen.

Post fire, the impact on threatened species can be devastating—especially if they are restricted to a few locations. Rapid and intensive action will be needed to provide or protect other habitats for species at risk—which may previously have been considered marginal. Intensive workshops for scenario planning for a range of catastrophic environmental events would help enormously in the rapid response and protection of nature into the future.

Opportunities for Improvement:

- Explicitly address the existential threat of climate change.
- Develop and resource of long-term, collaborative, multi-disciplinary, expert-driven programs to plan for future environmental disasters
- Provide for the development and support in perpetuity of an interactive National database
What are the priority areas for reform?
What changes are needed to the EPBC Act? Why?

Key Direction: The Act must contain clear communication of Purpose and Goals for environmental improvement

The Act currently does not have a clearly stated Purpose or Goal. Bush Heritage stands with many conservation agencies around the world that employ a ‘Theory of Change’ model to make explicit Goals for habitats and species, and strategies and actions to achieve those goals. The Theory of Change lays out a critical pathway to guide actions, measure effectiveness and report progress against goals. Bush Heritage strongly urges the review of the EPBC Act to adopt this approach. This would provide a focus for the development and communication of clear, measurable goals and the pathway to achieve them, for all Australian habitats and species, including MNES, as well as placing clear limits on threats at a National level.

We are hopeful that the Second Reading Speech delivered in October 2006 by Greg Hunt MP, then Parliamentary Secretary to the Minister for the Environment and Heritage, reflects the likely public understanding of the intentions of the Act ‘... the changes to the EPBC Act proposed by this Bill will ensure matters of national environmental significance continue to receive the highest possible level of protection’. One clear objective in the Objects - Item e (ii) establish an Australian Whale Sanctuary has been achieved. The other more clearly stated objectives, items e(i), e (iii) and e (iv), have been partly achieved in the cases of a small number of species and ecosystems. This indicates the value of having explicit goals and deliverables.

Further, guiding Principles in any organisation help maintain the direction and provide clarity when judgement is required on making subjective decisions. We recommend that the revised Act include a broader series of Principles by which the Act is administered. These include:

a. **Protection of the environment and biodiversity into the future:** the Act should tolerate no declines – including under a changed climate;
b. **Evidence-based Decision making:** Use the best available information including the integration of Indigenous peoples’ knowledge at foundational levels of policy development as well as in implementation and assessment;
c. **The Precautionary principle:** Lack of full scientific certainty should not be used as a reason for allowing damage or postponing measures to prevent environmental degradation;
d. **The Biodiversity principle:** Ensure that biodiversity, and ecological and human health are as explicitly tied in policy as they are in nature, and become a fundamental foundation of decision-making at all levels of government;
e. **The Polluter Pays principle:** where the responsibility and costs of land restoration and recovery of waterways are borne by those that caused the harm, using the international UN Sustainable Development Goals, criteria and indicators;
f. **The Intergenerational and Intragenerational Equity principles:** The present generation has an explicit duty of care for the environment, and ensures the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations and equally shared across current generations.
g. **Collaborative Conservation:** Establish a structure for collaborative programs that promote cross sector and cross border efforts for biodiversity protection;
h. **Restoration and Enhancement**: the Act should work in the full knowledge of the environmental degradation that has already occurred across our continent and provide strong guides and implementation frameworks for improving biodiversity condition at a range of scales. The Act should make clear the responsibility of each State, and avoid duplication between Federal and State bodies;

i. **Sustainable Development**: The Act should incorporate Environmentally Sustainable Development as a Principle using the UN Sustainable Development Goals. This will provide clear guidance on best practice conservation on Protected Lands and guide sustainable development of all other lands;

j. **Strength in legislation**: the Act should not allow any regression, relaxation or exemption from the laws that are designed to protect biodiversity;

k. **Efficiency**: the Act should prioritise prevention of harm over potential mitigation, reducing costly and complicated mechanisms that persist in allowing degradation;

l. **Responsiveness**: The Act should provide clear guidance, coordination and assistance to regulatory and implementation bodies at all levels to enable them to actively respond to large scale threats (for example, climate change), to anticipate future local impacts and respond as needed with foresight and flexibility.

### Recommendations:

1. Strengthen the Act by including a clear purpose, time-bound goals and objectives with State-based deliverables for biodiversity gains, indicators to measure progress and report against, and clear principles by which the Act will be implemented.

2. Strengthen the Principles under which the Act is administered.

### Key Direction: The Act must improve the identification of Key Threatening Processes, develop and prosecute evidence-based National limits on processes and actions that threaten MNES

The EPBC Act does not currently provide National limits to the primary threats that impact on nature, despite this being a highly efficient mechanism (Allek, 2018). As the Act is implemented on a case-by-case basis and only on the Matters of National Environmental Significance, we see devastating cumulative impacts of multiple threats on native vegetation cover, river health and species health, which suffer ‘death by a thousand cuts’.

An improved mechanism for the identification of Key Threatening Processes (KTP’s) and the development of effective, coordinated strategies to mitigate these threats is well overdue in Australia. We need National and State-based limits to primary threats such as vegetation clearing, where the public good outweighs the interest of a developer, local area or sector.

Further, Australia’s record breaking extinction rate is in part due to the devastating impact of invasive species. Australia’s tolerance of threats, demonstrated by ongoing protection of invasive species at the expense of native landscapes and fauna, and continuation of imports of invasive pasture grasses that pose a direct threat to native vegetation and habitat integrity, must cease. Biodiversity loss will be stemmed only with a zero tolerance of habitat degradation caused by invasive species. Finally, increasing pressure from extractive industries, including from water extractors and through agricultural intensification, means in its redrafting the Act needs to adopt the precautionary principle, set lower triggers for referrals and higher standards of environmental protection for approvals to be granted.
Bush Heritage supports the Invasive Species Council submission for a revised mechanism for threat abatement. As such, we suggest establishing EPBC Expert Panels to augment Recovery Team efforts to identify KTP’s, assess threat levels and set limits. These teams should coordinate mitigation strategies in a consultative framework, engage implementation agencies through a tender process, and measure and report on effectiveness (as we propose Recovery Teams do into the future). These panels would address a significant failing in the Act by reviewing proposed actions within the context of past environmental damage and climate driven changes to come – that will include degradation of native vegetation changed species distributions, expansion of invasive species among other threats.

**Recommendations:**

3. Develop and resource EPBC Expert Panels to improve the identification of Key Threatening Processes, assess threat levels, set limits and undertake issues-based collaborative problem solving, based on the model developed for Bushfire Recovery. These expert panels should coordinate development of Threat Abatement Plans (which include mitigation strategies) in consultation with the community and experts. The expert panel should engage implementation agencies using a tender process, and measure and report on their effectiveness in delivering the threat mitigation objectives (as we propose Recovery Teams do into the future).

4. Develop and communicate National limits on native vegetation clearing and degradation, to be enforced by the States and territories. These limits should be based on evidence and account for the impact of past damage and existing threats including land-use impacts on connectivity, habitat condition, species viability, society, culture, productivity and the economy, on both a short-term and long-term basis.

**Key Direction: The Act must drive active engagement of Aboriginal leaders and knowledge holders at a foundational level in planning, implementation and evaluation of the Act.**

We concur with the Threatened Species Scientific Committee (TSSC) that there is a need for meaningful, mainstream Indigenous involvement in all elements of the EPBC Act and its implementation, including:

- a mandatory requirement for Indigenous scientists on the TSSC and equivalent experts on all other statutory committees (see Section 2.4 for our suggestions to mainstream Indigenous membership of statutory committees).
- establishment and maintenance of a list of contacts for Indigenous groups and Indigenous experts for the Department and its statutory committees.
- additions to MNES (see this section and Question 4) to include the national reserve network including the Indigenous Conservation Estate – IPAs and equivalent models (where applicable) – and culturally significant entities (species, populations, communities/ landscapes/ stories). The Indigenous Advisory Committee would be the Listing Authority for these MNES.
- an appropriately-resourced, mandatory, formalised process for consultation with Traditional Owners as key stakeholders of land/sea/biodiversity, with respect to:
  - planning (regional conservation plans, recovery plans, threat abatement plans and planning associated with the National Reserve System);
  - listing of Ramsar Sites, World Heritage Areas (recognising that cultural values are included in the listing criteria)
  - Environmental Impact Assessments
  - controlled actions.
- Statutory Indigenous involvement in the (joint) management of all Commonwealth reserves that overlap with Indigenous land/sea country including National Parks, World Heritage sites, National
Heritage sites and Ramsar areas, with the long-term vision of sole management built into the Act, where appropriate.

- Statutory requirement for goals, indicators and reporting to better incorporate and evaluate the environmental services performed by Indigenous people through initiatives such as:
  - Use of Bio-cultural Indigenous knowledge
  - IPA program
  - Working on Country programs
  - Monitoring and evaluation.

We agree there is a need for a statutory requirement for standards for Indigenous Involvement including:

- Free, prior and informed consent
- Engagement and participation in decisions
- Culturally appropriate communication
- Use of Indigenous Bio-cultural Knowledge (IBCK) in biodiversity conservation
- Compliance with IP Australia (https://www.ipaustralia.gov.au/) proposals and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits to ensure:
  - protection and equitable sharing of benefits derived from Australia’s biological genetic resources
  - the use of traditional knowledge undertaken with the cooperation and approval (free, prior and informed) of the holders of that knowledge and on mutually agreed terms.

The current framework does not provide sufficient guidance or resourcing for the inclusion of First Australians in conceptualisation, planning, implementation, assessment and monitoring of national conservation and cultural priorities. Mr Mike Ross has recently been appointed as the first Aboriginal head of a Recovery Team (Golden Shouldered Parrot, or Alwal). This is excellent recognition of a dedicated knowledge holder and strident protector of this species and its habitat, but it must be backed up with appropriate resourcing to ensure First Australian knowledge holders are empowered to put into practise their knowledge and expertise for best conservation outcomes. Bush Heritage welcomes the advent of Aboriginal-led Recovery Teams and strongly recommends this mechanism is resourced appropriately and promulgated across the nation. We further recommend the integration of Traditional Owners in conservation planning, implementation, assessment and on-ground delivery.

**Recommendations:**

5. We strongly urge the review team to recommend statutory requirements for Indigenous involvement to drive meaningful, mainstream participation by Aboriginal Australians in all elements of the EPBC Act review and its implementation.

6. Promote, promulgate and resource Aboriginal-led Recovery Teams across the nation, and facilitate the integration of First Australians in conservation planning, implementation, assessment and on-ground delivery.

**Key Direction:** The Act must contain clear guidelines, tools and outreach helping land holders to stay within the law, access incentives and understand the implications of contravening the Act.

The complexity of the Act, lack of outreach and inadequate mapping tools (for MNES, critical habitat, species distributions, current activities and additive threats) allow for ignorance of the Act’s requirements to be proffered as a defence for acting in contravention of the Act. The Act is not
supported by sufficient resources to help land managers understand, comply with and support the Goals of the Act. The benefits of nature and ecosystem services to human health and well-being, and to agricultural productivity, have been well documented and must be communicated effectively. Extension officers have proved most effective in communicating and realising local benefits for land managers and local policy makers. Further, there are now assessment tools that demonstrate the financial value of biodiversity, functioning habitats and cultural connections to country. Equally, these measures make obvious the cost of degradation or destruction of this natural capital, as opposed to the short-term benefit of financial gain.

Further, extension officers have been important in assisting land managers to employ advisors or lawyers, interpret the Act, stay within the law, refer specific actions for approval and gain access to incentives for maintaining their natural capital. Extension officers are also valuable in surveillance, and provide early warning of potential breaches, investigate breaches and assist in negotiating resolutions.

The Act does not make provision for, and thus Australia does not have, an accessible, reliable, comprehensive source of environmental information for forecasting, planning, implementing, evaluating and reporting on environmental management (Lindenmayer et al. 2015, 2017, Sparrow et al. 2019). The development of this critical information base would help provide clarity on where and when referrals should be triggered, how to navigate the referral process and what the implications are for a) not submitting an application or b) contravening the conditions of an approval. As a consequence, as explained in case study above, actions that should have been referred, are not, and environmental damage continues without scrutiny or penalty.

We stand with the ESA and other organisations in requesting implementation action on the Craik Review Recommendation 17: To develop national environmental standards for monitoring, evaluation and data for assessments and referrals, that enable data to be incorporated into national datasets in a timely fashion and allow data to be made publicly discoverable, accessible and reusable.

National standards increase data interoperability and ensure that different jurisdictions deliver and assess Act-related activities in a consistent and reusable manner. We support the development and permanent support of an interactive database that receives environmental information from all sectors, and makes available maps which define the geographic boundaries of critical habitat and all MNES, relevant threats, specify the responsibilities of local land managers to reduce the threats MNES and indicate the need for a referral where appropriate. This should be based on the Bureau of Meteorology model where standardised information is drawn into a single agency for aggregation, analysis and communication. This would meet a significant gap in Australia’s environmental information systems.
Key Direction: The Act must provide for resourcing of current support mechanisms and expand the available support mechanisms to drive progress towards the goals.

Recovery Plans help drive efforts and investment for threatened species (Woinarski et al. 2017), and lack of Recovery Plans can contribute to extinction of threatened species (Legge et al. 2018). As noted above, many threatened species do not have complete or approved Recovery Plans. Many have no guiding documents at all. This is due to a profound lack of oversight, funding, goals (consistent with National goals), interim milestones, reporting and evaluation of these programs. Bush Heritage requests the revised Act requires renewed efforts to mitigate threats to MNES by providing consistent funding for development of strategy, collaborative planning, approved programs and accountability in the recovery planning process. This could be achieved through a tender process, where goals and strategies are proposed by teams of organisations or people, and gain funding if approved. The teams would provide oversight and guide required actions and evaluations, and provide reports through approved frameworks. The Conservation Standards https://www.conservationmeasures.org/version-4-0-of-the-conservation-standards-is-here/ provides this framework and we recommend that it be adopted as a planning, delivery and reporting mechanism.

Further, Bush Heritage concurs with the recommendations of the EDO and HSI (2018) and adds further recommendations to expand MNES to include the factors below as triggers under the Act. The advent of a water trigger for the EPBC Act demonstrates progress and flexibility and has encouraged thinking around the development of triggers that would provide for better outcomes for the protection of nature.

Bush Heritage strongly encourages the inclusion of the following factors in the listed MNES:

a. Indigenous Conservation Estate – IPAs and equivalent models (where applicable);
b. **Culturally significant entities** (species, populations, communities/landscapes/stories);
c. **National Reserve System** of protected areas
d. **Ecosystems of National Importance**, such as wetlands of national importance, Key Biodiversity Areas, climate refugia and high conservation value vegetation;
e. **Climate refugia** - areas with terrain characteristics where species may retreat to and colonise from, during extreme weather events or as the climate change impacts worsen over decades. Current knowledge should be blended with Traditional knowledge to define these areas;
f. **Climate change impacts** – allowing for mitigation by embedding climate projections in strategic planning, and where high-emission projects have their impacts thoroughly assessed against international climate goals and national commitments;
g. **Significant rivers and ground water resources**; to prevent over-extraction, pollution and other adverse impacts, subject to the oversight of a National Water Commissioner (or the Sustainability Commission);
h. **All Key Threatening Processes** should be listed as triggers for the EPBC Act to regulate the serious negative impacts of land clearing and land degradation, including deforestation; and

Proposed MNES a) to e) listed above should be ‘no-take’ zones and considered areas in need of special protection.

Finally, the rate of change currently impacting our habitats and species means that approaches that focus on a single species or community will not be sufficient to identify, track and mitigate threats across the country. Bush Heritage urges the increased use of habitats as the preferred unit of conservation rather than solely species in the future. Bush Heritage requests serious consideration of the development of an additional instrument for the protection of habitats and species in a rapidly changing world. Threat Mitigation Teams could complement Recovery Planning using a multi-sector, cross border, approach similar to that established for the Bushfire Recovery Expert Panels. This is an excellent mechanism for data gathering, decision making, threat analysis and response development – why wait for a crisis when we can act pro-actively to put these expert panels in place to avoid a crisis.

The development, resourcing and coordination of long-term, collaborative, multi-disciplinary, expert driven programs will ensure policy makers, implementation agencies and assessment/reporting agencies have full access to verifiable, consistent information and support for the administration and prosecution of the Act with respect to cross cutting themes as well as species impacts.

**Recommendations:**

10. Expand the MNES that trigger referrals under the Act (see above).

11. The establishment and funding of a dedicated independent institution (using the model of the National Environment Protection Authority) to undertake the following:
   a) develop cross jurisdictional BioRegional Plans;
   b) resource and support Recovery Teams and Plans;
   c) prioritise the effective development, support and assessment of Threat Abatement Plans;
   d) evaluate progress and report to the community and government;
   e) set limits and adaptations in land management actions;
   f) build efficiency and collaboration in these structural elements of environmental protection;
   g) enforce the Act and prosecute breaches with penalties that are a real disincentive.
This institution or the Administering Department (DAWE or relevant Division) provides coordination, oversight and arbitration within and among different jurisdictions to ensure consistent, cohesive application of the Act across the nation.
**Key Direction:** The Act must provide clear delineation of responsibilities and support available for each level of government for assessment and prosecution.

There is a significant opportunity to revise the EPBC Act to provide for the Commonwealth to take a greater leadership role, as the Federal Government does in the USA for example. Australian states are responsible for implementation, but the Act must provide clarity that the National legal instrument for environmental protection will be actively enforced. Differences, competition and lack of accountability from the States have led to great environmental degradation. We look now to the Federal government to resolve these issues before our National situation becomes worse.

**Example 1:** The consequence of poor water management was demonstrated at a large scale in repeated fish kills in the Darling River. While greatly exacerbated by NSWs changes to their water sharing plans in 2012 (agreed to by the Commonwealth government though the MDBA) changes in water flows are a significant factor. Given the failure of competing States to protect this huge population of fish and other aquatic animals (including threatened species) which move in and out of three states, Commonwealth oversight, guided by the Principles of the EPBC (including those recommended below) should be considered.

**Example 2:** One of the greatest challenges Australia faces is ongoing clearing of native vegetation on both a broad and incremental scale. As native vegetation controls fall under State jurisdiction there is currently no national mechanism to protect native vegetation given the differing approaches of state governments. This was graphically demonstrated in Queensland between 2012 and 2015 when vegetation controls were lifted and clearing accelerated to about 300,000 ha annually.

Since the weakening of vegetation clearing controls in NSW in November 2016 there has been dramatic increase in clearing of agricultural land, with only 9 per cent of native vegetation now considered in good condition.

**Example 3:** To appease the Brumby lovers the Wild Horse Heritage Bill was passed in NSW in 2018. The consequence is that the iconic Kosciusko National Park and its delicate alpine habitats, and the surrounding high country, are now under threat from rapidly growing population of Brumbies. Numbers have increased from an estimated 9190 in 2014 to 25,320 in 2019.

The Act needs to include mechanisms to call-in the national interest for biodiversity protection and specifically, the retention of native vegetation over a state’s ideological, regional or local interest. The Federal Government has an opportunity to play a critical role in these areas of diffuse responsibilities. It can set national goals, clearly communicate each State’s responsibility in achieving the goals, refuse approvals for actions that will cause significant damage to MNES, improve call-in powers when MNES are at risk, undertake surveillance of all land management, develop incentive programs, identify and investigate breaches, and prosecute and hold land managers and policy makers accountable for actions and decisions that drive environmental degradation. The policy settings of the EPBC Act are largely sufficient for the Department to take a coordination and leadership role. With greater emphasis on achieving biodiversity goals and with adequate resourcing it can significantly improve the administration of the Act.

Currently, there is no alignment between the EPBC Act and our international obligations to the Convention on Biological Diversity, Sustainable Development Goals, the Paris Climate Accord and other international agreements, targets and indicators. The Act should provide strong enabling legislation that clearly links these frameworks to ensure efficient reporting of impacts and adaptation. The review of the EPBC Act is a helpful mechanism to ensure alignment of national and international obligations, and
we encourage the Review team to collaborate with the UN SDG review to improve communication and connection between these frameworks, improve efficiency in reporting and facilitate Australian access to international markets for valuing and funding environmental and biodiversity protection.

**Recommendations:**

12. Drive the development of a new Intergovernmental Agreement on Biodiversity to engender stronger commitments and cooperation among federal, state and territory governments. Set clear National and State-based Goals (see Recommendations 1 and 2), standards and measures for biodiversity, develop regional implementation plans and establish clear jurisdictional roles in communication, implementation and delivery of incentives and enforcement of infractions.

13. Align the Act with Australia’s international obligations, and the relevant tracking and reporting tools.

**Key Direction:** The Act must indicate that the Government has a zero tolerance for contravention of the Act through establishing tools and resources for consistent, active surveillance, investigation of breaches and prosecution of those individuals or companies that contravene the Act.

One of the most obvious gaps in the implementation of the EPBC Act is the almost complete lack of enforcement. There is a lack of monitoring and assessment at a government level of activities that may present threats to MNES and critical habitats. Without this monitoring, enforcement of the Act is virtually impossible, and as a result, compliance is poor. Even when evidence of infraction is made available in the public domain (Kearney et al., 2018; Reside 2019), there appears to be no motivation or resources for prosecution. Advances in monitoring tools including analysis of images from drones and satellites with on-ground monitoring, the capability is within reach of government agencies that are motivated to achieve biodiversity protection. Bush Heritage would welcome the development of multi-disciplinary tools to detect and investigate actions that are in contravention of the Act and so improve our ability to prosecute those who threaten Australia’s natural resources, with penalties being commensurate with the damage sustained to the national natural capital and affected communities.

**Recommendations:**

14. Provide the strength of legislation to ensure that individuals or organisations found to have contravened the Act are prosecuted. This will also build confidence in the Australian public that the Australian government values biodiversity and cultural values.

15. Develop multi-disciplinary tools and engage with national, collaborative networks that already have large datasets, good predictive capability and excellent surveillance capabilities to detect and investigate actions that are in contravention of the Act and improve our ability to prosecute those who degrade Australia’s natural capital. These tools should interact automatically integrate with the database referred to in Recommendation 12.

**Key Direction:** The Act must facilitate innovation and the development of new programs to improve progress towards goals.

The current land management practices may be insufficient to address the current and emerging threats to the environment. New programs that develop model landscapes must be supported to develop and
manage large-scale trials, which develop and test new methods of landscape management for conservation purposes. The succession of heatwaves, explosive fires, super-cell storms, hail and flooding rain off the back of one of the most intense droughts on record, has degraded Australia’s environmental condition score to an all-time low (Van Dijk et al., 2020). The environmental response and recovery continues but the Australian public, conservation practitioners and First Australians alike are calling to be better prepared for future extreme events. What different strategies could we employ to increase the environmental resilience of our native species and ecosystems, in the face of accelerating change? Should we be aiming to restore these systems to their original assemblages of species? Or should the efforts be to rebuild a more fire resistant and climate-change resilient ecosystem?

These trials may be high risk, and will therefore be unlikely to be taken on by private organisations with slim budgets. We need government support to avoid being left without the tools and know-how needed to respond effectively to the inevitability of more catastrophic climate-related events like the fire season we have just witnessed. Community partnerships and government-researcher-practitioner collaborations are essential to our ability to learn, as is formulation of experimental methods that will allow the conservation community to rapidly learn in the context of the worsening climate emergency. The list of new options for landscape management that we are aware of (Prober et al., 2019) could be richly augmented by advice from a diverse and collaborative group of land managers and knowledge holders including First Australians, farmers, species experts, restoration practitioners, scientists and conservationists. Drawing out ideas from knowledge holders with deep local expertise will help us learn from the past in order to plan for the future, and so build on many centuries of sustainable land management in Australia.

Further, incentives for innovation and transition to new models of production will also be required. An emerging regenerative farming movement may hold the answer to maintaining resilience in productive lands, even in drought conditions. This has great implications for environmental protection and biodiversity conservation in Australia, as maintaining land zoned as agricultural in as productive condition as possible will reduce the potential for expansion of agriculture into remnant native vegetation or conservation reserves in order to maintain food security. Regenerative agriculture is likely to be the first of a number of farming innovations that will ensure the sustainable use of natural resources to supply the needs of our human communities if used hand in hand with environmental accounting (Ogilvy 2015).

**Recommendations:**

16. Provide mechanisms for scenario planning with expert panels to foresee, and develop, future-ready plans for proactive environmental protection and biodiversity conservation.

17. Provide the avenues and funding for innovation in land management that accelerates the active protection of species suddenly at risk and promotes methods that drive a shared future for nature and productivity.
Detailed responses to questions

QUESTION 1: Some have argued that past changes to the EPBC Act to add new matters of national environmental significance did not go far enough. Others have argued it has extended the regulatory reach of the Commonwealth too far. What do you think?

Since the commencement of the Act the state of the environment has significantly deteriorated (SOE 2006, 2011, 2016), and impacts of climate change, agriculture and intensification of extractive industries have added major threats to the land and biodiversity. Thus, as elements of reform, we strongly advocate for broadening the Matters of National Environmental Significance (MNES) (see response to Q 4 for a recommendation of matters to include) so as to add triggers for significant land-clearing, loss of habitat connectivity, significant carbon emissions, and unsustainable and illegal excessive water extraction.

All triggers should require consideration of the cumulative effects (including the effects of other activities that may or may not require referral under the Act). Requiring the consideration of cumulative impacts is standard practice in environmental impact assessment legislation across the globe (including in nations as diverse as USA, Canada, Chile, South Africa, South Korea and the United Arab Emirates). Considering the impacts of an individual referred action in isolation won’t achieve the objects of the Act. We are currently far behind global best practice on this front.

QUESTION 2: How could the principle of ecologically sustainable development (ESD) be better reflected in the EPBC Act? For example, could the consideration of environmental, social and economic factors, which are core components of ESD, be achieved through greater inclusion of cost benefit analysis in decision making

Yes, greater inclusion of cost benefit analysis in decision-making could allow for better understanding of the real impacts and costs of any development, with consideration of the short- and long-term potential consequences to biodiversity. However, the trend in the USA of using cost benefit analysis in environmental regulation has been problematic and tends to be used by people arguing for much less environmental regulation. There need to be safeguards and minimum standards, and no cost-benefit considerations should enter into decision-making unless it occurs through an established environmental economic accounting mechanism.

Ecologically Sustainable Development should be clearly defined (ESD, 1992) and be reflected in the Act through the Principles, where the essential tenets and timeframes are clearly spelled out. For example, the cost benefit analysis must include all ESD elements, with equal weight given to ecological sustainability as to short-term benefit, with strong adherence to the proviso that costs and benefits are considered on a timeframe that includes future generations.

Abiding by the Principles, including the principle of Ecologically Sustainable Development should be an essential part of the referral and assessment processes. This would be a significant step forward. It would also assist the proponent to understand the real costs (financial, environmental and social) of their proposal and may encourage them to reduce or review their development plans.
It is vitally important that there is a requirement for proponents to undertake a full analysis of all biodiversity function and processes, environmental water, soil, species and vegetation health and connectivity, economic, social and cultural losses and benefits for the short-, medium- and long-term and to document how damage will minimised, mitigated, repaired, offset and/or compensated for.

**Cost benefit analysis as it may apply to governments** should not enter into decision-making when considering whether to take action to protect a species or ecosystem, but how to do so most efficiently.

**Bush Heritage Case Study**

In our experience, most businesses that impact the environment do not account or pay for the environmental, social, economic and cultural costs they impose on their local and wider communities. The costs are mostly borne by the community either directly or indirectly, while the developer benefits, at least in the short term. The direct impacts of unsustainable developments can include contamination with toxic and other waste, need for site clean-up and recovery, loss of native vegetation and species, increased erosion, increased invasive pests, fencing damage and/or removal, surface and ground water impacts and loss of control over water management and loss of or damage to cultural sites and artefacts.

The indirect costs borne by the wider community are more numerous and include, loss of productivity of the land for the future, loss of soil carbon, degradation and/or loss of native habitats, loss of biodiversity, loss of livelihoods where viable businesses (for example sustainable ecotourism or farming enterprises) are adversely impacted by extractive industries or ‘upstream’ environmental degradation. There are also social costs for those affected including declines in physical health and mental wellbeing, loss of culture, inter- and intra-generational inequity, economic and community demise.

As a conservation land buyer, Bush Heritage has borne first hand the costs of past land degradation. The acquisition of Charles Darwin Reserve in Western Australia was funded by private philanthropists and government support through the National Reserve System program. There has been however, no protection against the destruction of part of the reserve to facilitate nearby mining activities.

It is our supporters (the community) and grant makers (often government) who pay the cost for the work needed to return the land to a functional and healthy condition, and recover declining species populations, not the enterprise/s that caused the damage. These costs range from making safe and cleaning up past mining and farm infrastructure and toxic waste, and repairing highly active erosion heads, to revegetating thousands of hectares of degraded land, restoring overland water flow, controlling weeds and pest species and recovering threatened species lost to feral pests, over-grazing and habitat decline. The costs to the community of this repair work are, in most instances, disproportionate to the profits extracted by the previous landowners. The reparation work we do costs our supporters millions of dollars annually.

**Opportunities for change**

- Include Ecologically Sustainable Development in the Principles by which the Act is administered
- A holistic approach to ecologically sustainable development is needed and must recognise both direct and indirect costs over multiple generations.
- Proponents should be required to demonstrate in business plans how they will assess, minimize, mitigate, repair and pay for direct and indirect impacts, both in the short- and long-term. Included should be impacts on culture, livelihoods, land productivity, native vegetation, species, soil carbon, aquifers and river systems.
- These proposed actions should be monitored consistently.
QUESTION 3: Should the objects of the EPBC Act be more specific?

Yes, the Objects of the Act need to be more specific, strengthened, focussed on National ecological outcomes and linked to measurable ecological goals to ensure the revised Objects of the Act are effectively operationalised and obtained. Accountability on environmental protection has been lacking and measurable goals will enable the community to track the performance of governments in delivering the Objects of the Act. Listed vegetation communities and species, and critical water resources which fall into the current Matters of National Environmental Significance have not been protected despite their inclusion in the Act. This demonstrates that the Objects, as they are, have failed to deliver the communities expectations of the Act.

The regulatory tools are sound, (but there is room for improvement and simplification) but the Act lacks clarity on what role the Commonwealth plays and how States/Territories and the Commonwealth work together to achieve a healthy, secure environment. Nowhere does it set any direction or trajectory for biodiversity – for example, what we need conservation programs and funding to achieve.

The Objects of the Act must be amended so as to elevate the protection of the environment as the primary object. The Act’s Objects must ensure the ongoing legal protection of all of Australia’s biodiversity, in particular stating a direction such as ‘no further loss’, or even better, a measurable improvement across a number of factors such as vegetation extent, soil carbon, river flows and species populations. Defining biodiversity targets would be a great step forward.

As a general comment, the Objects should be specific enough to be measurable, able to be reported against, and should include ‘outcome’ as well as ‘how achieved’ statements. They should clearly provide leadership and set a national direction for both biodiversity conservation and ecologically sustainable development, while maintaining long-term relevance. This then enables the Commonwealth to accredit state processes, and to provide funding to meet biodiversity targets. It should provide more incentive for states and Commonwealth to work together.

The amended Act should also clearly set out how the Objects are to be achieved and specifically cite that the responsible Minister (and administering agency/ies) must exercise their powers and functions under the amended Act to achieve all of the Acts’ Objects.

However, it is critical that in amending the Act that, as a bare minimum, we at least retain the current level of legal protections rather than reducing protections for the environment.

QUESTION 4: Should the matters of national environmental significance within the EPBC Act be changed? How?

The existing MNES do not enable Commonwealth oversight or intervention to protect the foundational elements of a functioning environment: healthy native vegetation as the supplier of ecosystem services including carbon sequestration and habitat for biodiversity, and natural hydrology including surface and underground water quality and quantity. This is in part due to a lack of coordination, support and financial resourcing. However, we also recommend that the existing list of MNES to be retained and augmented with the following:

- Financial penalties for breaches or failure to undertake proposed actions in accordance with environmental conditions needs to be statutorily enforced to provide real disincentive for non-compliance by both companies and natural persons.
a. Indigenous Conservation Estate – Indigenous Protected Areas (IPAs) and other Aboriginal land and conservation models (where applicable);
b. Culturally significant entities (species, populations, communities/landscapes/stories);
c. National Reserve System should be protected areas against significant impacts – including additive impacts even if each is of low significance;
d. Ecosystems of National Importance, such as wetlands of national importance, Key Biodiversity Areas, climate refugia and High Conservation Value Vegetation;
e. Climate refugia - areas with terrain characteristics where species may retreat to and colonise from, during extreme weather events or as the climate change impacts worsen over decades. Current knowledge should be blended with Traditional Knowledge to define these areas;
f. Climate change impacts – allowing for mitigation by embedding climate projections in strategic planning, and where high-emission projects have their impacts thoroughly assessed against international climate goals and national commitments;
g. Significant rivers and ground water resources against over-extraction, pollution and other adverse impacts, subject to the oversight of a National Water Commissioner (or the Sustainability Commission);
h. All Key Threatening Processes should be listed as triggers for the EPBC Act to regulate the serious negative impacts of land clearing and land degradation, including deforestation; and

Proposed MNES a) to e) listed above should be ‘no-take’ zones and considered areas in need of special protection.  

We believe this is a fundamental principle for the amended Act that it enables Government to have the power to protect a broader range of MNES, ensure we restore and then retain a resilient and functional natural environment, curtail destructive developments across a much broader range of environmental assets and require ecologically sustainable development. The warming dryer climate means greater protections for a broader range of environmental assets are urgently needed.

QUESTION 5: Which elements of the EPBC Act should be priorities for reform? For example, should future reforms focus on assessment and approval processes or on biodiversity conservation? Should the Act have proactive mechanisms to enable landholders to protect matters of national environmental significance and biodiversity, removing the need for regulation in the right circumstances?

The EPBC Act reforms should focus primarily on achieving measurable outcomes for biodiversity conservation, while using the opportunity to improve the assessment and approval process, and provide incentive mechanisms and regulatory controls. The implementation of the Act may well need to be streamlined and improved, but the Act needs to drive a step-change in Australia’s capacity to protect biodiversity and environmental assets.

From a regulatory point of view, we believe the Act should achieve the following:
- drive strategic planning, goal setting and resource allocation, across the expanded list of MNES (See Q.4);
- actively identify key threatening processes, with a specific and focus view to limit, mitigate and prevent the damage caused by Key Threatening Processes;
- establish national standards and time-based targets for biodiversity protection, vegetation retention and restoration, and to achieve reductions in water extraction and use.
require BioRegional Plans to be revived and developed that adhere to the national standards for the extent and/or levels of protection of MNES, and which can also be used at the local level to guide priorities for funding and action.

require detailed recovery plans for species or ecological communities to be developed or updated within specified timeframes, and which take into account likely shifts in habitat structure and function as a consequence of ongoing climate change

provide accreditation mechanisms and processes for State conservation planning and regulation

require real incentives and support mechanisms (including stewardship payments) for landholders to set aside land for conservation

have strong, clear ‘call-in’ powers for regulatory proposals, plans or policies that affect MNES and where accredited processes to take MNES into account have not been properly followed.

provide for funding and extension personnel to enable the Act and its requirements to be well understood in the community, with face-to-face support for proponents developing EPBC Act referrals.

set in place compliance processes and penalties for breaches that are commensurate with the damage caused and the costs of recovery, including reparation to communities or Traditional Owners whose cultural sites or totem species have been impacted.

require that BioRegional Plans look ahead at projected future climates (at the ecosystem, catchment or landscape level), predict impacts on regional vegetation (particularly critical habitats), species, soils and water, and identify the likely best areas to conserve and restore. Make this information available to land managers. Work with Traditional Owners on recovery actions and monitoring.

undertake analyses and make information available through accessible data bases. Open access to data for states, industries, NGOs and landholders so they can identify the best actions to take, the best places to act and implement effective responses.

develop new mechanisms and incentives, and provide information, to enhance environmental protection on private land. Funding will likely be required on an on-going basis, especially to protect critical habitats on private land, but it is essential.

develop forward looking response plans to manage environmental disasters;

coordinate across jurisdictions, NGOs, Traditional Owners and other partners using regional planning instruments to achieve collective aims. To do this means jointly setting directions through shared planning, having useful tools and incentives in place for partners to use, including information, guidelines, mechanisms to facilitate conservation partnerships with landholders, leaseholders, businesses or others including incentive payments and tools to establish cooperative conservation agreements or covenants where state mechanisms are lacking.

QUESTION 6: What high level concerns should the review focus on? For example, should there be greater focus on better guidance on the EPBC Act, including clear environmental standards? How effective has the EPBC Act been in achieving its statutory objectives to protect the environment and promote ecologically sustainable development and biodiversity conservation? What have been the economic costs associated with the operation and administration of the EPBC Act?

We believe that the greatest high-level concerns that need to be addressed as part of this 2nd Review of the EPBC Act review are:
1. acknowledgement and acceptance of the fact that the Act must be amended in line with expert advice and recommendations such that it can address the the growing threats and declining environmental health (most of the Hawke Review recommendation were not adopted); and

2. funding and guiding the implementation of the Act to deliver what the public believes it should deliver – a healthy, secure environment where ecosystems, species and heritage sites are protected.

The lack of national standards and targets, that are consistent with Australia’s international legal obligations, to make plain what goals we, as a nation, need to achieve for Australia’s biodiversity, and against which all levels of government in Australia can report against and be held accountable to;

- EPBC Act referrals being assessed on a case-by-case basis without considering the cumulative effect of these many ‘small’ losses over the short, medium and long term. The combined impact of these incremental losses is contributing to regional extinctions in species populations, and national declines in ecosystem health and the death of river systems. A case of ‘death by a thousand cuts’.
- Good regional planning can be a panacea here together with national standards for vegetation retention and restoration, protection of critical habitats and limits on water extraction. Assessments can then be made in the context of these standards as they apply to biodiversity at both the regional and national scale (See Q 13).
- Lack of awareness among landholders and developers of the EPBC Act and their obligations under it, leading to destruction or degradation of MNES and the continued confusion over how, if and when a referral needs to be made by whom.
- Lack of or inadequate policing and penalties for breaches of the Act, and lack of a requirement for full restoration and reparation.
- Duplication and conflict with state regulations.
- The watering down, through an amendment bill in 2015, of the ability for affected parties to make a referral or for the public to appeal development proposals.

NB. Often it is people or organisations on the ground that have firsthand knowledge of species or habitats of significance and understand the real impacts on them of a proposed development. By not allowing them a means to alert the EPBC administrators it is preventing needed scrutiny of damaging developments.

Opportunities for change:

- Strengthen and expand the EPBC Principles, and set in place processes that ensure the Principles are applied to all aspects of the implementation of the Act (see also Q. 26)
- Build into the Act measurable goals and objectives for conservation gains, and a requirement for publicly available reporting against progress, so the community can see that the government is taking environmental protection seriously.
- Incorporate a requirement for Ecologically Sustainable Development principles to be part of any referral and its assessment.
- Require that climate projections and other likely future impacts and threats be incorporated into the guidelines for developing and assessing referrals.
- Set national standards and accreditation processes for plans developed by the states to remove the duplication and provide clarity on roles and responsibilities.
- Develop a framework of National Environmental Economic Accounts (using data above) to track and value extent, condition and trends in Australia’s natural capital (such as biodiversity, landscape health, native vegetation extent and condition, water quality and the extent and impact of threatening processes) to make clear the value of natural and cultural resources and...
thus the costs of destruction and degradation of natural capital. Provide an annual set of accounts to enable transparency, changes of approach and adaptation

- Provide information and guidance to farmers (and the agriculture sector as a whole) and other proponents through regional extension personnel, who also assist in assessing the need for and preparing a referral and implementing any required actions.

Implementation:

- Put in place and implement long-term BioRegional Plans to help the community understand and implement the most effective actions for their region. Use the best-available science to identify effective strategies and conservation actions in a warming, drying climate. New ways to protect species will be needed, so keep staff up to date with the latest information, novel and innovative approaches that will need to be trialled.
- Establish cooperative partnerships with states, industry, Traditional Owners, NGOs and set up clear, shared objectives, but do not be overly prescriptive about how the work is achieved.
- Establish mechanisms to enable partners to be effective and engaged. This includes providing information and funding and recognising that all groups have a valuable role in achieving the objectives and need to be given a mandate to act.
- Work across government to embed ESD principles, biodiversity outcomes and impact avoidance in all plans and policies.
- Require regular reporting to Parliament and the public on the true condition of environmental assets, and the sources of decline including from government funded projects or programs. A true analysis of risks or policy failures will allow mechanism to be developed to address them.
- Remove the Prior-use provision for environmentally damaging actions, such as re-clearing regenerating native vegetation where at least 15 years has elapsed since it was first cleared.

An example of how the Act has failed to protect Matters of National Environmental Significance.

As stated in the EPBC Review Discussion Paper ‘the protection of water resources from coal seam gas development and large coal mining development’ was added to the Act as a Matter of National Environmental Significance in 2013. Evidence and expert advice suggests that the approval of the Adani Carmichael mine and the licence to extract 12.5 billion litres of water from the Suttor River at the likely cost of nationally important wetlands and agricultural livelihoods, is in direct contravention of the Act. This case is a demonstrable example of the extent to which the Act does not and cannot protect a significant water source as a Matter of National Environmental Significance despite incontrovertible scientific evidence.

QUESTION 7: What additional future trends or supporting evidence should be drawn on to inform the review?

- Climate change will transform the Australian landscape over the next century. The EPBC Act must be amended to acknowledge climate change and accommodate the period of great uncertainty that we are now in, in terms of ecosystem function and integrity. There will be significant changes in the structure, composition and diversity of vegetation communities, consequential loss of species and increasing ecosystem collapse. CSIRO projections indicate that Australia will have ecosystems that disappear entirely, others that will be ‘novel’ (mostly hotter drier environments and deserts), and some that persist but change to a greater or lesser degree. Rainfall in the south of the country will continue to decline, particularly in the winter and spring, which will have direct impacts on the growing season for both native ecosystems and agriculture.

- Existing habitats and transitioning habitats will become important, and needed by species or communities to migrate to or through. Thus, it will be critically important to establish biolinks to
connect these habitats, and critical habitats need strong protection. Our planning framework needs to look ahead, predict change and identify effective preventative or adaptive actions. Considerations would include how to mitigate the potential spread of invasive animals, plants and pathogens, declines in habitat quality for species, transitioning species to new locations, major interventions to protect refugia, key species or habitats etc.

- Conflicting with the reality of declining environmental health and increasing impacts of climate change is the general business-as-usual approach from extractive and many agricultural industries. The goal for agricultural expansion and increased mining appears to ignore the drying climate, the depletion of ground and surface water, and the increase in extreme temperatures, and weather and fire events. ABARES has just confirmed that its Outlook 2020 conference will explore the practical steps to reaching $100 billion in farm output by 2030.

- Changes in rainfall and inflows to waterways. The analysis for Victoria’s recent Long-Term Water Resource Assessment for southern Victoria shows alarming drying trends for waterways. The same story is occurring across much of Australia. Concerns for water security will affect the health of surface and sub-surface waterways, including Ramsar sites, and the health of vegetation communities and ecosystems dependent on ground water.

- On a more local level, changing agriculture is leading to different environmental impacts. The reduction in rain in southern Victoria has resulted in some farmers moving from grazing to cropping – with resultant loss of rock fields, native grasslands and paddock trees. Similarly, the construction of irrigation schemes in the Tasmanian Midlands is also leading to a shift to cropping and further land clearing. Both examples demonstrate the significant impacts on threatened birds, small mammals, reptiles, insects and other grassland animals and plants.

- Increases in the human population and the resulting growth in demand for water and other resources will put increasing pressure on native vegetation, aquifers and river systems. The Act needs to provide a ‘line in the sand’ approach, implemented through national standards and BioRegional Plans, which ensures Australia maintains ecosystem function and species viability, despite increasing demands from population growth.

**QUESTION 8: Should the EPBC Act regulate environmental and heritage outcomes instead of managing prescriptive processes?**

Both are required. The purpose of the EPBC is to protect biodiversity. The outcomes that the Act regulates must be those that meet ecological and biodiversity goals, not management of processes. However, a clear and concrete process is critical for decision-making that is transparent, benefits from independent experts, involves stakeholders, can be challenged, and is enforceable (not to mention producing and disseminating data that abides by FAIR principles, etc). Biodiversity outcomes are clearly the main goal, but processes, including referrals, assessments, controlled actions and enforcement, are critical supports for getting there.

Establishing a good process will assist in delivering the environmental and heritage goals enshrined in the EPBC Act. The process by which those goals are achieved is important but not an end in itself. The current process has some good mechanisms in place but they can be improved, or even completely rethought, to ensure the best possible chance of achieving the conservation goals.
Opportunities for change:

- In conjunction with at least one newly established statutory and independent authority/body (for example, a National Environment Protection Authority) the Commonwealth will work with State and Territory governments and key stakeholders including Traditional Owners to develop a strong National Biodiversity Strategy that defines environmental and biodiversity standards and goals, and addresses international treaty obligations.
- Recovery plans (for both ecosystems and species) address our national and international obligations for protecting species and habitats, and funding is made available for their implementation.
- BioRegional Plans are developed, incorporate required actions from Recovery Plans, Threat Abatement Plans and together address the National Standards and International obligations.
- Commonwealth funding mechanisms support the implementation of BioRegional Plans by state agencies, NGOs, Traditional Owner Corporations, community groups and individuals.
- Implementation is supported by guiding documents, land-owner incentives, extension services, active enforcement and strong penalties for breaches.

QUESTION 9: Should the EPBC Act position the Commonwealth to take a stronger role in delivering environmental and heritage outcomes in our federated system? Who should articulate outcomes? Who should provide oversight of the outcomes? How do we know if outcomes are being achieved?

Yes, we concur with the opinion of APEEL (2017) that the Commonwealth should apply its Constitutional powers to protect the environmental and heritage more consistently and at a broader level through the application of the numerous environment-related Treaties and Conventions to which Australia is a signatory, as well as the UN Convention on the Rights of Indigenous Peoples.

In accordance with the Australian Constitution the Commonwealth Government must have a stronger role in delivering environmental and heritage outcomes. It is the only level of government that can take a national perspective and consider the international legal obligations of the nation. It has the legal responsibility for decisions that impact a viable, healthy environment at the national level.

We need to accept that biodiversity is a national public matter, a benefit for current and future generations which understands no artificial state boundaries, and which should not suffer further losses as consequence of policy failures or vested interests in any one state or territory. The current administration of the Murray-Darling Basin Plan is a graphic demonstration of state interests overriding the common good.

We concur with APEEL opinion (2017b) that climate change, habitat clearance, invasive species, urbanisation, diseases, pollution, and altered fire regimes threaten multiple species. The scale and pervasiveness of these threats requires landscape-scale management approaches and a long-term commitment of resources. Further, landscape-scale management of threats requires a nationally coordinated approach that is collaborative across jurisdictions (APEEL, 2017 -2).

The Commonwealth and States (given the States’ significant role in conservation within their jurisdictions) need to work closely together in setting National Standards, a framework for a national approach to conservation action, and a program for implementation at the regional level. This planning needs to be mindful of the environmental loss and generational and cultural inequity that has already occurred, the warming climate and other threats that we face (See Q 7 & 8).
We recommend that the responsibility for developing National Environmental Standards and Targets to protect ecosystems, species and heritage sites, and have oversight of on-ground implementation and reporting against goals, should be vested in an independent authority which reports to the Federal Minister. We also recommend that this independent authority includes Traditional Owners, and representatives from all states and territories. The local or regional outcomes would be measured against the regional goals and targets (set to meet the National Standards and international obligations) specified in BioRegional Plans and developed in partnership with states and territories. These plans should not necessarily be confined with state boundaries but developed around functional landscapes or catchments. This would also enable a nationally coordinated approach to environmental data collection, monitoring, evaluation and reporting, where the Commonwealth has a significant role.

QUESTION 10: Should there be a greater role for national environmental standards in achieving the outcomes the EPBC Act seeks to achieve? In our federated system should they be prescribed through:
- Non-binding policy and strategies?
- Expansion of targeted standards, similar to the approach to site contamination under the National Environment Protection Council, or water quality in the Great Barrier Reef catchments?
- The development of broad environmental standards with the Commonwealth taking a monitoring and assurance role? Does the information exist to do this?

Yes, national environmental standards are needed to set a benchmark for what is to be achieved and by when. The lack of clear and consistent national environmental goals, standards, indicators and data sources is a major barrier to effective decision making in multi-level governed Australia. These standards need to be determined through expert knowledge and best-available science and defined by what must be done (using a range of strategies) to retain viable species populations, vegetation cover, ecosystem integrity and functional landscapes in a changing climate. The standards need to facilitate the delivery of the goals set out in the Act.

There are a range of mechanisms that could be employed:

- Binding strategies – which would require secure Commonwealth funding – could be used to protect ‘critical habitats’, support interventions to protect species on the endangered and critically endangered lists and ensure required reductions in water extraction.

- Non-binding strategies and targets - could work if developed cooperatively with all implementing partners. Once agreed, funding could act as leverage to ensure delivery of the targets. Experience shows that without some significant Commonwealth leverage or incentive, non-binding targets would be less effective and less likely to be met.

- Targeted standards would have application where specific goals need to be reached within specified timeframes. An example would be restoration for vegetation cover in key biolinks.

We would recommend that monitoring is the responsibility of the States and those overseeing the on-ground work, but the structures, including funding and cross-jurisdictional agreements, to support that monitoring should be put in place by the Commonwealth. The structures would include a National Environmental Database, National Environmental Economic Accounts, and monitoring methodologies.
QUESTION 11: How can environmental protection and environmental restoration be best achieved together?
- Should the EPBC Act have a greater focus on restoration?
- Should the Act include incentives for proactive environmental protection?
- How will we know if we’re successful?
- How should Indigenous land management practices be incorporated?

Bush Heritage believes that targets for restoration and repair of environmental damage should be enshrined in the EPBC Act. Restoration is now critical. The Government has a duty of care to drive landscape restoration to the greatest extent possible. Almost all habitats across Australia require some ongoing management or restoration, so restoration is only a matter of degree and an integral part of protection.

Private land-owners have a key role to play in restoring the land and rebuilding vegetation biolinks, particularly where they hold critical habitats for threatened species or endangered ecosystems.

Mechanisms and incentives including those below would encourage and support the efforts of the community to protect and restore land:
- incentives for landowners who permanently protect land under State administered conservation covenants
- land management funds to support on-ground works (that could encourage private sector contributions)
- perpetual stewardship programs (that could encourage private sector contributions and help farmers on the land—see Q.13), and
- programs that invite Traditional Owners to bring skills and Traditional Knowledge to the task of land restoration (that could encourage private sector contributions).

Benefits would include carbon sequestration, protection of species and habitats, diversified income for land-owners and Aboriginal Peoples, and opportunities for Traditional Owners to reconnect with Country and culture.

Bush Heritage believes strongly that a funding mechanism to proactively build the National Reserve System and Indigenous Protected Area estate is needed. Protecting existing high-quality habitats and land to create critical biolinks is much more cost-effective and delivers much higher conservation outcomes than repairing damaged land—as in prevention is better than cure. Building connectivity will be critical for climate change adaptation and the inevitable movement of species, and the NRS provides an ideal platform to achieve these goals. The previous funding model of $2 : $1 of Commonwealth to private funding was a world class program that saw, and continues to see, a massive investment from the private sector in land conservation. Individuals and organisations today continue to fund the management and enhancement of these protected areas at the cost of many millions of dollars annually (See also Q.25).

The National Reserve System (NRS) Program fueled a rapid increase in the protected area estate and was fundamental to achieving the 17 per cent protection goal set down in Aichi Target 11. Since NRS funding was withdrawn in 2011 it have been challenging to continue land acquisition for conservation. For example, Bush Heritage purchased Pullen Pullen Reserve in Queensland in 2016 to secure the only known population of the iconic Night Parrot. The philanthropic donations relied on to fund the purchase fell short and the private acquisition debt (mortgage) has still not been discharged.
We know if we are successful when we can report to governments and the community that our collective scientifically-based monitoring of on-ground work and species and ecosystem health (through our National Environmental Economic Accounts- NEEA) is showing that we are our meeting our national goals and objectives, and honouring our international obligations. Annual reporting to parliament and the people of the NEEA and progress on implementing Recovery Plans should be mandatory.

**QUESTION 12: Are heritage management plans and associated incentives sensible mechanisms to improve? How can the EPBC Act adequately represent Indigenous culturally important places? Should protection and management be place-based instead of values based?**

In the review of the Act, Bush Heritage strongly recommends that Traditional Owners, Registered National Title Body Corporates/Prescribed Body Corporates, other Aboriginal Corporations and Aboriginal leaders are invited to lead the development of plans and mechanisms to support the aspirations of the Aboriginal Peoples the respective corporations and leaders represent, to ensure that they can protect Country and culture, and determine in what ways the Act can protect both place-based cultural values and non place-based cultural values.

Bush Heritage strongly supports ongoing funding for the Indigenous Protected Area program, the development and implementation of Healthy Country Plans, and co-management arrangements for protected areas within the NRS. The IPA program is providing significant cultural and psychosocial benefits, which could be destroyed if the protected land is able to be developed in a way that damages critical biodiversity without the voluntary prior and informed consent of Traditional Owners.

**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?**

Effective National Standards and BioRegional Plans* (strategic assessments) and their associated implementation and monitoring plans, need to guide decision-making around referred proposals, so each is assessed for its impacts within the landscape context, and with consideration of the cumulative impacts from past, current and likely future activities. The framework, and criteria for decisions, established in these plans needs to be based on best-available science and be uncompromising in protecting MNES. The BioRegional Plans could also bring scrutiny to actions that would otherwise not trigger the EPBC Act, and allow for better consideration of cumulative effects. The national standards if devolved though to individual BioRegional Plans could also create a mechanism for achieving National Vegetation Clearance Controls.

For example:
BioRegional Plans reflect the EPBC Act Principles and MNES, and address the National Standards, establishing goals for levels/extent of biodiversity protection and condition for that region. The plans identify and map critical habitats including wetlands, climate refugia, Key Biodiversity Areas, ecosystems of significance, cultural sites and song lines and areas in which to retain or rebuild landscape connectivity to achieve a defined per cent cover of vegetation and latitudinal and or altitudinal pathways. Time-bound goals are then developed for reaching the required condition measure for each asset.

The defined biodiversity and cultural areas are quarantined from damaging activities, and strict protocols applied on what level (if any) of development is permitted, other than to enhance their condition. The goal must be to ensure these areas retain/rebuild their integrity, resilience and biodiversity. Any allowed actions would determined based on the cumulative impacts of past developments and risks to achieving
the goals and then be strictly monitored and controlled. Stewardship payments and/or compensation would need to be available to affected property owners.

Once the environmental and cultural assets are mapped and goals defined, it would be possible to identify areas suitable for further development, or where acceptable levels of impact could occur.

The endgame is to repair the landscape to the extent that it can be ecologically and culturally resilient into the future and under a changing climate, while protecting the interests of regional and rural communities.

This approach would also facilitate national environmental data collection, monitoring, evaluation and reporting. BioRegional Plans could be written by state or regional agencies with financial support and input from the Commonwealth, subject experts and regional stakeholders particularly Traditional Owners and custodians. The role of regional planners would include collaborating with other planners to ensure that collectively the national environmental standards and goals are met.

It could be through this mechanism that National Vegetation protection and clearing controls could be achieved from a Commonwealth perspective: by requiring state compliance with national standards for vegetation extent, protection of critical habitats, landscape connectivity goals, emissions reductions targets and protection of MNES.

* BioRegional Plans should be a consolidation of federal, state and local plans (including landscape level plans produced by non-government conservation organisations and Aboriginal groups), and threat abatement and recovery plans, drawn together with rigour, using best-available science, local and traditional knowledge and planning methodologies. Cross-jurisdiction and stakeholder collaboration in developing these plans will be critical. This should be followed by ground-truthing of the plan by regional or local agencies to verify its accuracy and applicability, followed by public consultation and opt-in options for land-owners (including Traditional Owner groups) to receive stewardship payments and management support for biodiversity actions.

**Bush Heritage Case Study: Tasmania Midlands Farmers gain from protecting EPBC listed community.**

Bush Heritage Australia and the Tasmanian Land Conservancy (TLC) are working with private landholders in the Tasmanian Midlands to protect the critically endangered lowland native grasslands in Tasmania (and associated ecological communities) which occur almost exclusively on private land. We established the project back in 2007 and invited key farmers/landowners to a series of planning workshops that helped develop the strategies and products that would support them in protecting these critically endangered ecosystems on their land, now the Midlandscapes Conservation Action Plan. These consultations resulted in a program called the Midlands Conservation Fund (MCF). A strategic assessment was undertaken in the Midlands by Bush Heritage and TLC to identify key areas of lowland native grassland (for example, large patches in moderate to excellent condition) along with suitable buffers of important but lower priority wetlands, woodland and forests.

The landowners we have approached to protect these key areas have been very enthusiastic and supportive. They come from a range of backgrounds – small scale farmers right through to mixed farming properties over extensive areas. Their motivations for protecting their grasslands varied, but included personal commitment and care for the environment; desire to maintain their farms in good condition for future generations; recognition that protecting their natural capital would have long term
benefits for productivity on their farms; and opportunities for improved access to markets or diversified markets for their product.

The majority of farmers join the program for initial 10-year periods, with options to roll over their agreements on a 5-yearly basis in perpetuity. They deliver conservation outcomes specified in a jointly developed management plan, and by delivering those outcomes they receive stewardship funding. This assists with management of the grasslands and associated woodlands by providing additional funding for the control of weeds such as Gorse, to better manage stock numbers (e.g. to destock early in dry periods) or to encourage natural regeneration of native plants. These stewardship arrangements put the dollars from the environment on their balance sheets and added diversity to incomes, that have proved beneficial during times of drought or unfavourable conditions.

The potential for in-perpetuity agreements comes from the dollars raised being invested in an endowment, combined with a long-term commitment from the governing organisations. The initial funding round was oversubscribed, and we have run a second round which nearly tripled our area under protection. In some cases, farmers have expanded the area under conservation protection on their property in the second round. Further expansion of the program has been curtailed because we have been unable to raise sufficient philanthropic funding, in the absence of government support. This is a proven model which would flourish if there was matching government funding to encourage philanthropic contributions.

As a national organisation, Bush Heritage sees that this type of program provides an example of how appropriate, efficient and effective support and incentives can help support farmers who have ecological communities that require protection under the EPBC Act but which need active management to maintain or improve their condition.

**QUESTION 14: Should the matters of national significance be refined to remove duplication of responsibilities between different levels of government? Should states be delegated to deliver EPBC Act outcomes subject to national standards?**

The legal protection of Matters of National Environmental Significance should be equally the responsibility of States, Territories and the Commonwealth Government. Environment and biodiversity are matters of common public good relevant to all jurisdictions and all citizens.

The Commonwealth must have call-in powers if, in the first instance, the States/Territories fail to uphold the requirements of the Act and protect the expanded list of MNES (see Q.4). Having checks and balances in place should enable the States and Territories to manage the broad range of species and communities listed as being of State significance, while giving the Commonwealth the authority to override state decisions for those species or communities listed under the EPBC Act. Reducing the opportunities for lobbying and political donations to compromise decision-making will be critical.

Having National Standards (particularly for vegetation retention, restoration, biodiversity protection and water use) embedded in BioRegional Plans that are developed collaboratively (see Q.13), delivered regionally and locally, and supported by both the Commonwealth and state funding, will ensure that all parties have an interest in achieving the outcomes. Annual reporting on progress should be mandated and penalties for failing to deliver the required outcomes considered.

Unfortunately, environmental law is and has historically been overly politicised in Australia. The recent issues over water in NSW (exposed in the ABC Four Corners report) are a good demonstration of untrustworthy behaviour at high levels. Thus, we recommend that assessment of referrals, oversight of
controlled actions and calling-in of breaches should be undertaken by an independent authority, that reports to but doesn’t take direction from the responsible Minister.

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?

The self-assessment process has been the cause of much environmental damage and has been shown to be easily rorted by unscrupulous proponents. The detailed mapping and community extension services needed to justify automatic approvals for projects deemed by their proponents as ‘low-risk’ or entitled to ‘exemption’, is not yet available, thus we do not support consideration of this option in this review. However, once there are BioRegional Plans in place, that include very detailed and up-to-date mapping of no-take zones (for example, critical habitats and threatened ecosystems), low-impact zones and development zones, supported by online GIS datasets and regional extension staff, it may be possible to simplify the assessment and monitoring process. This is likely to be a decade or more away. A possible structure for the future may be as follows:

1. National standards are identified as needed in each BioRegional Plan. Collectively these plans fully address all standards and international obligations.
2. Regional MNES, including critical habitats and their buffer zones, climate refugia, protected areas, significant wetlands and other no-take zones such as high-quality agricultural land, are mapped. This would mean proponents could immediately assess if their development was in a no-take zone.
3. Additional mapping of areas permitting low-risk, small-impact developments (criteria defined) would enable proponents to self-assess and make a referral appropriate to their proposal.
4. It would be necessary here to close potential loop-holes where proponents may split large projects into smaller units to meet the criteria for a low-risk small-impact development, when in fact the full project would meet the high risk, significant impact criteria.
5. Projects of high risk or significant impact (including water extraction from surface or underground water sources) would require the full assessment process to be undertaken.
6. Projects to take actions to enhance or protect threatened species or ecosystems could be assessed in a different stream and would need experienced staff who can respond promptly to referrals where urgent action is needed.
7. All data from environmental impact assessment should be made being publicly available.
8. An Australia wide remote monitoring program is established to ensure compliance, identify and prosecute infractions.

Bush Heritage strongly supports the establishment of a National Environment Database that make data publicly available. Good data and high-quality mapping will support informed decision-making and reduce misinformation and judgement calls. It will enable ESD to be properly accounted for, support transparent decisions, and enable monitoring of effectiveness and progress. However, much of the current data on the distribution of species, ecosystems, critical habitats, wetlands and other climate refugia needs to be reassessed to reflect the future climates that each region may face. A great deal of information on projected species and ecosystem distributions is now available but it will need to be integrated into datasets available for BioRegional Plans.
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?

The regulatory role of the Commonwealth should focus on an expanded list of MNES. These include both landscape-scale vegetation retention and restoration, ecosystems and hydrology, as well as protection of specific species or guilds. In the regulatory area, the protection of habitats at both landscape scale and species specific level could be achieved through the BioRegional Plans as outlined above (Q 13 & Q15).

QUESTION 17: Should the EPBC Act be amended to enable broader accreditation of state and territory, local and other processes?

Devolving Federal approval responsibilities to the States under the current structure has proved problematic, where State and Federal laws have not been aligned, and decision-making has been compromised to the detriment of biodiversity.

We are recommending an alternate approach – illustrated below in Figure 2. The ultimate responsibility for biodiversity protection rests with the Commonwealth. The Commonwealth, States and Territories should be aligned by common goals specified in the Act with which they need to comply. These goals would be reinforcement in the collaborative development of a National Biodiversity Strategy and National Standards. The States would have key roles in delivering on both through participating in the development and implement of the BioRegional Plans, together with the Commonwealth and other stakeholders.

In their development, these BioRegional Plans could draw on multiple knowledge sources including existing State plans, Threat Abatement and Recovery Plans, other regional government and non-government plans including Healthy Country Plans developed by Aboriginal land managers, while also incorporating new knowledge, projections for changes in climate, vegetation and species distributions and climate adaptation strategies. Each plan should align with the Goals in the EBPC Act, operate under its Principles and apply the National Standards in all decision-making. Each plan should have specific objectives, monitoring indicators and time-based deliverables relevant to the region, to track progress and accountability.

The aim should be to have one collaboratively developed BioRegional plan for each region to which all parties are committed and which each is variously responsible for its oversight and delivery. Implementation would be most effective if managed regionally or locally, and without any diminution of environmental protections and accountability. Data on progress against goals would be added to the National Environment Database, proposed in the response on Page 11.

Accountability needs to be clearly apportioned. The Commonwealth has ultimate responsibility to achieve the National Standards, meet international obligations and be accountable to the Australian public. It also needs to work collaboratively with the States to support their efforts to deliver BioRegional Plans. States and Territories need to be accountable for the delivery of their BioRegional Plans and protecting ecosystems and species within their jurisdiction. They are accountable to their constituencies in helping deliver the National Standards and meeting Australia’s international obligations. An independent well-funded enforcement agency, able to initiate legal action for a breach of the EPBC Act in the Federal Court, would demonstrate and build public confidence that environmental protection is being taken seriously.
Figure 2. Proposed structure of EPBC planning and implementation process

**EPBC**

**Principles and Obligations**

- **Principles**
  - Expanded EPBC Act & ESD

- **International treaty obligations**

**Inputs**

- Climate change projections
- Traditional knowledge
- Expert knowledge: Scientists, NGOs
- Agency knowledge: Commonwealth staff, State/Territory staff, Regional staff
- Community input

**Delivery**

- EPBC Act Objects (clear goals and objectives)
  - National Standards (goals and objectives)
  - National Environmental Economic Accounts
- Matters of National Environmental Significant (expanded list)
  - National Biodiversity Strategy
  - Recovery Plans
  - Threat Abatement Plans

**Mechanisms**

- Strategic Landscape Plans

**Outcomes**

- Biodiversity Restoration Fund
- NRS and IPA funding Stewardship payments
- Incentives for applying conservation covenants
- Tax incentives
- Extension staff and community information
- Community education
- Proposals, referrals, assessments, controlled actions, enforcement
- Reporting and accountability
- Mechanisms for data delivery to national database

- On-ground work and land restoration.
- Protected area estate expanded through new reserves and IPAs
- Aboriginal knowledge incorporated and culture respected
- Critical habitats stewarded by land owners
- Covenants over native habitats
- Support for proponents
- Increased community awareness of the Act
- Proposals assessed and referrals made
- Controlled actions enforced
- Data collected and made available
- Reporting and accountability

**On-ground delivery**

- National Environment Database (data, analysis, reports)
- Annual reporting progress against goals
QUESTION 18: Are there adequate incentives to give the community confidence in self-regulation?

Given the on-going trajectory of environmental decline and species loss, there is little justification for the community to have confidence in self-regulation. The Banking and Aged Care Royal Commissions have demonstrated graphically why regulation is needed. Lack of regulation has been a significant contributor to the loss of trust in our public institutions. Business also requires certainty and clear regulation gives this.

Currently there is more evidence that people and organisations prioritise their own interests over those of the environment. Our experience is that many landowners are unaware of what values are on their land or that they have obligations under the EPBC Act to refer development proposals or potentially damaging changes in land use. For example, in Victoria critically endangered native grassland supporting critically endangered fauna is still being ploughed, with no referrals being made.

For those that are aware of their obligations, currently, it is an easier path to proceed with a development and build a possible fine into the business model (particularly as fines for breaches are rare and grossly inadequate to provide a disincentive), rather than to go through the process of referral, the delays that this entails and see potential limits placed on their development plans. This is also the case in State and local council jurisdictions where breaches to state or local laws are rarely prosecuted, penalties are minimal or non-existent, and there is no enforcement of court-imposed restoration work. Fundamentally, the law is not law unless it is adhered to or enforced. Thus currently the Act is a guide for good behaviour but not effective as law.

For land-owners to see financial and social value in protecting the environment, there needs to be meaningful incentives. There are opportunities to provide:

- free or affordable advice including whole-farm plans or ecological assessments with clear recommendations for actions, particularly if the land is, or buffers, critical habitat for threatened species, includes key connectivity pathways or protects threatened species, or contains significant wetlands or waterways;
- rebates or tax incentives for placing conservation covenants on land;
- perpetual stewardship payments;
- opportunities for land-owners to apply for funding to implement on-ground work; and
- support in preparing funding applications and progress reports for on-ground works.

These incentives need to be coupled with much greater community awareness-raising about our obligations as nature’s stewards for the future, to build social capital for changes to land-management practices and for environmental protection to be considered mainstream.

QUESTION 19: How should the EPBC Act support the engagement of Indigenous Australians in environment and heritage management?
- How can we best engage with Indigenous Australians to best understand their needs and potential contributions?
- What mechanisms should be added to the Act to support the role of Indigenous Australians?

These questions need to be asked directly of Aboriginal Australians, and that consultation must be undertaken with genuine intent, respect and cultural awareness.
Traditional Owners (in conjunction with their representative bodies) should decide if and how they wish to engage with the development and implementation of the Act.

The First Peoples are critical to the future of the health of this country, its culture and community. The IPAs make up a large proportion of the National Reserve System and make a significant contribution to Australia’s international environmental obligations on protected areas. IPAs should also be recognised as an additional MNES under any amended, future EPBC Act and formal legal recognition of IPAs, along with long term funding, should be enshrined in any future EPBC Act.

Aboriginal Peoples have the right to own and manage land and water to support self-determination. This EPBC Act Review needs to have a detailed engagement process to bring together different frameworks for thinking to benefit people and country – a collaborative approach based on recognition of the value that each group brings to a discussion when all groups have a shared interest in the outcomes.

As a national conservation organisation that works with Traditional Owners across the nation, our experience from our Aboriginal Partnership Program informs our recommendation that engagement with Aboriginal Australians in relation to environment and aboriginal cultural heritage management:

- is built on a foundation of trust and respect;
- addresses questions all parties are interested in exploring;
- occurs together with Aboriginal representatives at all levels of planning;
- recognises different knowledge systems, methods and peoples across the regions;
- recognises and protects the intellectual property of Aboriginal Peoples;
- provides opportunities for all parties to review and amend the recommendations;
- maintains open communication pathways (with limited jargon);
- appropriately acknowledges all contributors; and
- reduces risks of cultural appropriation ie. taking knowledge without giving anything in return.

State or regional bodies preparing BioRegional Plans can probably build this process into the planning process, and work alongside the relevant Traditional Owner groups. They could provide a forum where Traditional Owners and custodians can translate their land, water and cultural rights, needs and aspirations into the development of the Act and into its implementation.

**QUESTION 20: How should community involvement in decision making under the EPBC Act be improved? For example, should community representation in environmental advisory and decision-making bodies be increased?**

There are four critical areas in which the community needs to contribute to decision-making under the EPBC Act:

1. by providing expert, scientific and Traditional Knowledge in developing and setting National Standards. There is much expertise through universities, CSIRO and other government agencies, NGOs and among on-ground experts and traditional owners. They should be called on to help set National Standards for vegetation retention and restoration, key connectivity areas, water extraction limits, species-specific conservation measures, and regional changes in extent of vegetation communities as a consequence of climate change etc, that will also deliver our international obligations.

2. by working with Commonwealth, State and Territory agency staff in developing BioRegional Plans. Traditional Owners together with regional experts, agency staff, species recovery experts and other stakeholders should be represented in the working groups that prepare the
BioRegional Plans for public comment. The plans could then be signed off by states or territories and the Commonwealth, ready for implementation.

3. by understanding community responsibilities under the Act, referring matters as required and undertaking any controlled actions. Genuine community engagement, extension services and funding opportunities for on-ground works will be needed to achieve this.

4. by reviewing decisions, making submissions and receiving feedback on the reasons for decisions, and any mitigation measures required.

There is also a role for the community reviewing EPBC Act referral decisions and alerting the Commonwealth or state agencies to breaches or non-referrals that are damaging MNES. Past changes to the Act to restrict public referrals should be revoked and the opportunity for public referrals reinstated. It is often local experts who have detailed knowledge of likely impacts of developments and thus should have the opportunity to make official referrals

QUESTION 21: What is the priority for reform to governance arrangements? The decision-making structures or the transparency of decisions? Should the decision makers under the EPBC Act be supported by different governance arrangements?

Areas of reform in governance that we would recommend are listed below:-

- Establish an independent and trusted institution (a National Environment Protection Authority) with a mandate to develop National Standards, BioRegional Plans and decision-making criteria for developments. These ‘foundational’ documents of the Act need to be based on science and thus can be done most effectively at arm’s length from government.
- Use the National Standards, BioRegional Plans, the Act’s Principles and ESD principles, to establish a scientifically based framework in which to set clear decision-making criteria.
- Keep current the lists of critical habitats and threatened ecosystems and species under the Act, and ensure that future projected impacts from climate change are considered in the listings.
- Mandate development of Recovery Plans, which should be completed/updated within defined timeframes. Progress against recovery actions should be reported annually.
- Establish and maintain a system of National Environmental Economic Accounts.
- Remove the largely discretionary powers of the Minister and ministerial advisors. Discretionary decision-making compromises the perception of confidence and trust in the process of assessment, discourages compliance, provides opportunities for lobbying, corruption and other forms of political interference, and produces flawed outcomes for biodiversity. Instead rely on diverse expert panels to resolve conflict between competing interests.
- Improve the transparency and independence of decisions and provide greater access to the public for public interest litigation.
- Provide extension materials and regional staff to inform and assist the community to understand their roles and responsibilities under the Act.
- Review on-ground developments to ensure that they are undertaken in line with controlled action requirements.
- Ensure breaches of the Act incur effective penalties and require repair of damage.
- Provide for environmental performance audits and inquiries by the ‘independent authority’.

QUESTION 22: What innovative approaches could the review consider that could efficiently and effectively deliver the intended outcomes of the EPBC Act? What safeguards would be needed?

The Review could consider:
• Clearly stating the biodiversity and environmental goals to be achieved under the Act.
• Reviewing and implementing recommendations from the 2009 Hawke review of the EPBC Act
• Mandating development of National Standards for biodiversity protection
• Developing a new approach to the structure of planning for biodiversity with a cascade of interdependent plans: from the National Biodiversity Strategy, through Recovery plans to regional implementation plans (BioRegional Plans) that deliver against International, national, regional and recovery plan goals. (See flow diagram below)
• Developing Expert Panels to drive Threat Abatement Plans and issue specific responses.
• Embedding an ‘Environment in All Polices’ approach (noting that this may be best done at both State and Commonwealth level) See below for explanation*
• Mandating the development of foresight reports, that include analyses of threats and needed actions for biodiversity protection to help government manage emerging environmental threats (Hawke Review 2009)
• Funding and implementing a system of National Environmental Economic Accounts to track landscape condition, Australia’s environmental performance and call to account those that degrade land and or water.
• 5 yearly reporting to Parliament and the community on progress against the goals.
• A stronger role for the Commonwealth in information/data gathering, analysis and provision – via a national biodiversity database – to universities, CSIRO, agencies, NGOs and the business sector.
• Promoting to the community the true value of Australia’s natural capital and ecosystem services. This ‘value’ becomes an input to regulatory decisions to effectively enable the Acts objectives of ESD to be met
• Establishing an ongoing Biodiversity Restoration Fund: see the 2009 Hawke review with the recommendations to be included in this review.
• Commissioning an analysis of why biodiversity conservation hasn’t worked so far – or not as effectively as desired. The analysis should examine government practises, policies and funding allocations. The review should cover not just conservation policies but any policies that drive or result in environmental impacts including through broader business and private interests.

*To further explain the Environment in All Policies proposal:

An ‘Environment in All Polices’ approach could be applied across govt agencies and in all policy development. This would be a new, strong approach across public (and ideally private) bodies which requires everyone to take responsibility to help protect and secure biodiversity. This is more than just considering biodiversity through a permit or EIS. Instead, this would require that risks or impacts to biodiversity are considered and made transparent in every new policy or business decision by all agencies, with a requirement to seek ways to avoid harmful impacts.

The intent is to embed an ‘Environment in All Polices’ approach aligning to the ‘Health in All Policies (HiAP)’ approach which has been endorsed by EU member states in the Health Ministerial delegations of the EU in various fora including Rome in 2007 and Adelaide in 2010. A definition of HiAP (which could easily be modified to refer to biodiversity) was adopted at the 8th global conference on Health Promotion in Helsinki: ‘Health in All Policies is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts in order to improve population health and health equity. It improves accountability of policymakers for health impacts at all levels of policy making. It includes an emphasis on the consequences of public policies on health systems, determinants of health and well being’.
While challenging to implement, this is necessary, and there are various existing approaches that make others accountable – such as imposing a duty of care on public or private bodies or landholders. Biodiversity, as a public benefit and with a critical role in ecosystem and human health, so should be given this type of protection. Adopting this approach also aligns with a genuine consideration of ESD.

There is plenty of literature on this type of approach – a good starter is Browne, G. and Rutherfurd, I. 2015 The case for environment in all policies: lessons from the Health in all Policies approach in public health. Environment Health Perspectives.

QUESTION 23: Should the Commonwealth establish new environmental markets? Should the Commonwealth implement a trust fund for environmental outcomes?

The Commonwealth should establish a Biodiversity Restoration Fund (BRF) that will enable effective and guaranteed resourcing of environmental management and restoration (also recommended in the Hawke EPBC Act Review 2009). An additional funding mechanism should be developed to further build a comprehensive, adequate and representative National Reserve System and to facilitate the expansion of the IPA network.

With these funds in place developing incentives to encourage additional financial support for environmental protection from industry (and potentially the community) would be possible. For example, Biodiversity Bonds (contributions made into the BRF to support environmental restoration) could trigger a tax benefit or meet offset requirements that help achieve goals in the relevant BioRegional Plan.

In addition, the Government should follow the advice of the conservation sector in its securing the Natural Advantage proposal to bring Government together with the private sector and philanthropy to mobilise $10 billion investment in post-bushfire recovery and to build economic and environmental resilience of Australian farms, forests, woodlands, native grasslands and Aboriginal lands. The government has an opportunity to harness the resources of the private sector to invest in environmental outcomes that will benefit conservation, agricultural and tourism in Australia’s regional areas.

The success and impact of these conservation initiatives, whether on private or public lands, should be measured and publicly reported via National environmental economic accounts. Ecosystem Accounts together with other environmental economic accounts can provide the bases of impact reporting for any and all schemes, and can also feed into National environmental condition accounts and trajectory (or state of environment reporting) that can provide the information needed to better prioritise future actions. This in turn will require an agreed framework for measuring ecosystem condition and shared environmental data platforms to better understand baseline and counterfactual scenarios in order to measure impact.

Summary:

- Environmental markets have the potential to attract substantial private sector and philanthropic funding sources.
- The Conservation Sector has provided models for how this can be achieved.
- Such markets require agreed ways of measuring impact that can be provided by environmental economic accounts supported by agreed measurement frameworks and improved data systems.
QUESTION 24: What do you see are the key opportunities to improve the current system of environmental offsetting under the EPBC Act?

Offsetts that provide for a direct impact from a development or other action, must deliver real value for biodiversity. Currently, some offsets have been tokenistic or even an abuse of the intent, and while delivering a statutory requirement, do not provide real environmental value. We are still seeing ‘net loss’ despite the ‘feel good’ factor of offsets. Thus, environmental offsetting needs to set significantly higher requirements for environmental benefit. The Act should not permit biodiversity offsetting of impacts on critical habitat, endangered or critically endangered species and ecological communities, and Ramsar wetlands.

Without having any direct experience in the Commonwealth’s use of offsets, we think that offsetting could include:

- A strategic approach to future ecosystem needs under climate change, and identify regions and habitats that are a priority for habitat protection or restoration, including areas that are projected to be refugia, or retain their health and resilience under a changed climate. This information could then be used both in regulation (preventing development to halt loss) or offsetting – purchasing, restoring and/or establishing habitats. This information should be made part of the National Database and freely, publicly available.

- Biodiversity offsetting, in relation to the loss of diminution of critical habitat, endangered/critically endangered species, should be prohibited, and acknowledgment that some environmental assets are too important to be offset.

- A National Offsets Policy and Standard(s) should be established. Offsets should be a last resort not the default position; meet strict scientific biodiversity principles; ensure offsets are protected in perpetuity; be consistent with the precautionary approach and not be available for future mine remediation due to lack of success of a mine project.

- While ‘like for like’ appears the most straightforward mechanism for offsetting, it would be possible to require that offsets help meet the goals of the relevant BioRegional Plan. For example, offsets could provide funding for the management of key threats (feral cats and other invasive species), threatened species recovery or land restoration (including following bush fires or drought).

Clarity would be needed to define the respective roles of the States and Commonwealth, as currently regulation of offsetting is primarily at State level. However, the Commonwealth should have call-in powers around MNES where processes have not been followed or controlled actions not implemented.

QUESTION 25: How could private sector and philanthropic investment in the environment be best supported by the EPBC Act?

There is a very clear and powerful way to bring private sector and philanthropic investment into the environment. The Commonwealth developed this facility through the $2 : $1 Commonwealth to private funding contributions via the National Reserve System Program. This program raised, and still leverages millions of dollars of private funding annually for the ongoing management of the private protected area estate originally part funded through the NRSP, including for Indigenous Protected Areas. The NRSP was considered one of the most effective government programs at the time, with massive returns (both for
biodiversity and via community contributions) on the relatively small Commonwealth investment. Bush Heritage very strongly supports the reinstatement of this funding program.

Private and philanthropic investment could also be supported by providing clear, strategic priorities for biodiversity protection at the BioRegional Plan level. People are more likely to support action, through financial contributions and volunteering, where it will benefit their local or regional communities, or areas of interest. The Biodiversity Restoration Fund could potentially be structured to receive funding to support priority programs for each Landscape.

There is an important role for the Commonwealth in undertaking analyses at a national scale to determine the most critical sites to protect, the most effective ways to conserve and restore biodiversity (including in a changed climate) and to provide this information in a clear, accessible way. The information that could be provided could include:

- where best to protect individual species
- where best to declare and protect critical habitats
- where to achieve the best outcomes for ecosystems and their dependent species
- what threats to manage and where, to achieve the best outcomes
- place-based analyses, to identify conservation action necessary in any locality.

A national environmental database should be the repository for this information, and receive updates on actions and progress at all levels of the government and community. Building a system that is open to all and used by all, will build commitment and demonstrate shared effort, as we work together and see that others working hard to protect biodiversity.

### PRINCIPLES TO GUIDE FUTURE REFORM

It is important that future reforms are guided by a set of principles. These principles should reflect what is important to Australians, and our goals for national environmental law.

**Effective Protection of Australia’s environment**
- Protecting Australia’s unique environment and heritage through effective, clear and focussed protections for the benefit of current and future generations.

**Making decisions simpler**
- Achieving efficiency and certainty in decision making, including by reducing unnecessary regulatory burdens for Australians, businesses and governments.

**Indigenous knowledge and experience**
- Ensuring the role of Indigenous Australians’ knowledge and experience in managing Australia’s environment and heritage.

**Improving inclusion, trust and transparency**
- Improving inclusion, trust and transparency through better access to information and decision making, and improved governance and accountability arrangements.

**Supporting partnerships and economic opportunity**
- Support partnerships to deliver for the environment, supporting investment and creating new jobs.

**Integrating planning**
- Streamlining and integrating planning to support ecologically sustainable development.

QUESTION 26: Do you have suggested improvements to the above principles? How should they be applied during the Review and in future reform?
Bush Heritage strongly supports strengthening the current Principles of the EPBC Act. We believe that the Principles need to apply mostly to the outcomes to be achieved under the EPBC Act rather than the processes through which the Act is applied. We recommend that the following are included in the new list of Principles:

a. **Protection of the environment and biodiversity into the future**: the Act should tolerate no declines – including under a changed climate;

b. **Evidence-based decision making**: Use the best available information including the integration of Indigenous peoples’ knowledge at foundational levels of policy development as well as in implementation and assessment;

c. **Adopt the precautionary principle**: Lack of full scientific certainty should not be used as a reason for allowing damage or postponing measures to prevent environmental degradation;

d. **Adopt the Biodiversity principle**: Ensure that biodiversity, ecological and human health are explicitly tied in policy as they are in nature to become a fundamental foundation of decision-making at all levels of government;

e. **Adopt the Polluter Pays principle**: where the responsibility and costs of restoration are borne by those that caused the harm, using the international UN SDG criteria and indicators;

f. Adopt the intergenerational and intragenerational equity principles: The present generation has an explicit duty of care for the environment, and ensures the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations and equally shared across current generations

g. **Collaborative Conservation**: Establish a structure for collaborative programs that promote cross sector and cross border efforts for biodiversity protection and breakdown programs that increase competition and artificially promote boundaries;

h. **Restoration and Enhancement**: the Act should work in the full knowledge of the environmental degradation that has already occurred across our continent and provide strong guides and implementation frameworks for improved biodiversity condition at a range of scales, making the responsibility for each State clear and avoid duplication between Federal and State bodies;

i. **Strength in legislation**: the Act should not allow any regression, relaxation or exemption from the laws that are designed to protect biodiversity;

j. **Efficiency**: the Act should prioritise prevention of harm over potential mitigation, reducing costly and complicated mechanisms that persist in allowing degradation;

k. **Sustainable Development**: The Act should incorporate Ecologically Sustainable Development as a Principle. This should provide clear guidance on best practice conservation on Protected Lands and guide sustainable development of all other lands using the UN Sustainable Development Goals;

l. **Responsiveness**: The Act should provide clear guidance, coordination and assistance to regulatory and implementation bodies at all levels to enable them to actively respond to large scale threats (e.g. climate change), to anticipate future local impacts and respond as needed with foresight and flexibility to ensure environmental protection is considered on par with industry.

We also recommend changes to the principle ‘Making decisions simpler’. There is no end to making them simpler, they should only be simple if they lose none of their purpose, nuance or effectiveness in protecting biodiversity. No regulator builds in ‘unnecessary regulatory burdens’ and thus the ‘unnecessary’ is probably a view of those being regulated and more unconcerned about damage to a public good.
We suggest the wording be amended to reflect the following: ‘Clear and effective regulation and compliance to protect biodiversity’.

References


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