Independent Review of
the EPBC Act

Independent Review of the EPBC Act – Final Report

October 2020

Professor Graeme Samuel AC

The Review acknowledges the Traditional Owners of Country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respects to their cultures and their elders past, present and emerging.

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Department of Agriculture, Water and the Environment

GPO Box 787 Canberra ACT 2601

Telephone 1800 065 823

Web awe.gov.au

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Independent Review of the EPBC Act – Final Report

October 2020

Professor Graeme Samuel AC

Foreword

I am pleased to present the Final Report of the Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. They are not sufficiently resilient to withstand current, emerging or future threats, including climate change.

The EPBC Act is out dated and requires fundamental reform. It does not enable the Commonwealth to effectively fulfil its environmental management responsibilities to protect nationally important matters. The Act, and the way it is implemented, results in piecemeal decisions, which rarely work in concert with the environmental management responsibilities of the States and Territories. The Act is a barrier to holistic environmental management which, given the nature of Australia's federation, is essential for success.

The resounding message that I heard throughout the Review is that Australians do not trust that the EPBC Act is delivering for the environment, for business or for the community. The reforms I recommend are designed to enable the Commonwealth to step up its efforts to deliver nationally important outcomes for the environment by:

- setting clear outcomes through new, legally enforceable National Environmental Standards that set the boundaries for decision-making to deliver the protections needed
- actively restoring the environment and facilitating the scale of investment needed to deliver better outcomes
- taking an adaptive approach, through better planning, measuring the effectiveness of implementation and adjusting where needed to achieve outcomes
- harnessing the knowledge of Indigenous Australians to better inform how the environment is managed.

National Environmental Standards are the centrepiece of my recommended reforms. The activities of government should be consistent with the Standards, noting that an elected government should always retain the ability to exercise discretion in individual cases. Such discretion should be a rare exception, demonstrably justified in the public interest, with reasons and environmental implications transparently communicated.

To be effective, National Environment Standards must be supported by a broader framework of reform. This includes independent oversight and audit to build and maintain confidence that the EPBC Act, and the National Environmental Standards are working as intended. Separately, a mandated, rigorous compliance and enforcement regime is needed to ensure that decisions made are consistently and fairly enforced in accordance with the law.

The operation of the EPBC Act has failed to harness the extraordinary value of Indigenous knowledge systems that have supported healthy Country for over 60,000 years in Australia. A significant shift in attitude is required, so that we stop, listen and learn from Indigenous Australians and enable them to effectively participate in decision-making. National-level protection of the cultural heritage of Indigenous Australians is a long way out of step with community expectations. As a nation, we must do better.

Outcomes-focused law requires the capacity to effectively monitor and report on these outcomes, and to understand the difference made by management interventions. Reform must be underpinned by the best available scientific, cultural, economic and social information to enable the best possible decisions to be made, for outcomes to be properly measured, and the effectiveness of environmental management efforts to be better understood. Well-planned and staged investment to deliver a quantum change in the quality of data and information will deliver returns – for government, for the community, for business and, most importantly, for the environment.

The EPBC Act requires fundamental reform, and a sensible and staged pathway of change is needed to achieve this. Changes should be made immediately to deliver the best possible outcomes from dated law. This should be followed by a concerted effort to fundamentally re-write and modernise the Act and its implementation.

A sustained commitment to change is required from all stakeholders. Legislative reform should not be a once-in-a-decade opportunity, but rather part of a sensible process of continuous improvement. Governments should avoid the temptation to cherry pick from a highly interconnected suite of recommendations. Business, industry and non-government stakeholders, who have actively and constructively engaged in this Review, must continue their pursuit of common ground.

The tendency to focus narrowly on highly prescriptive processes and individual projects must become a thing of the past. The EPBC Act should not be about stopping all development, nor should it be about permitting all development. The Act should deliver better outcomes for the environment, while allowing a sensible and sustainable approach to meeting Australia's future development needs. The reforms recommended support a fundamental shift, from a transaction-based approach to one centered on effective and adaptive planning.

Given the current state of Australia's environment, broad restoration is required to address past loss, build resilience and reverse the current trajectory of environmental decline. Restoration is necessary to enable Australia to accommodate future development in a sustainable way. The scale of the task ahead is significant and is too large for governments to try to solve alone. To support greater collaboration between governments and the private sector, new mechanisms are needed to leverage the scale of investment that will be needed for decades to come.

To shy away from the fundamental reforms recommended by this Review is to accept the continued decline of our iconic places and the extinction of our most threatened plants, animals and ecosystems. This is unacceptable. A firm commitment to change from all stakeholders is needed to enable future generations to enjoy and benefit from Australia's unique environment and heritage.

I would like to thank the 30,142 people and organisations that contributed written submissions to the Review and the more than 100 stakeholders who invested significant time to share their views, experiences, insights and expertise with me.

I would also like to thank the Review Expert Panel – Mr Bruce Martin, Dr Erica Smyth AC, Dr Wendy Craik AM and, until his appointment as a Royal Commissioner, Professor Andrew Macintosh. In conducting this Review, I have valued their expert input and advice. I take full responsibility for the conclusions I have drawn and the recommendations I have made.

In closing, I express my sincere thanks to all members of the incredibly dedicated and assiduous Review Secretariat. The commitment and expertise of the team consistently surpassed my considerable demands.

Professor Graeme Samuel AC

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Key messages

Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The environment is not sufficiently resilient to withstand current, emerging or future threats, including climate change. The environmental trajectory is currently unsustainable.

The EPBC Act does not clearly outline its intended outcomes, and the environment has suffered from 2 decades of failing to continuously improve the law and its implementation. Business has also suffered. The Act is complex and cumbersome and it results in duplication with State and Territory development approval processes. This adds costs to business, often with little benefit to the environment.

The EPBC Act and its operation requires fundamental reform to enable the Commonwealth to:

- set clear outcomes for the environment and provide transparency and strong oversight to build trust and confidence that decisions deliver these outcomes and adhere to the law
- actively plan for environmental outcomes and restore the environment to accommodate Australia's future development needs in a sustainable way
- measure effectiveness to ensure that the Act delivers the right level of protection to make a difference for the environment and to support adjustments where changes are needed
- respect and harness the knowledge of Indigenous Australians to better inform how the environment is managed.

New, legally enforceable National Environmental Standards are the centrepiece of the recommended reforms.

- The Standards should focus on outcomes for matters of national environmental significance and on the fundamental processes for sound decision-making. Standards should prescribe that all activities contribute to national environmental outcomes.
- Decisions should be made in a way that is consistent with the Standards. The rare exception being where the Commonwealth overtly exercises discretion, demonstrably and transparently justified in the public interest.
- The full suite of National Environmental Standards recommended should be implemented immediately. The Standards developed in detail by the Review should be accepted in full, and other necessary Standards should be developed and implemented without delay.
- All the Standards are necessary to improve decision-making by the Commonwealth and to provide confidence that any agreements to accredit States and Territories will contribute to national environmental outcomes not just streamline development approvals.

Strong oversight of the implementation of National Environmental Standards is needed to provide the community, and the Australian Parliament, with the confidence that decisions are being made in a way that is consistent with the law.

- The new, independent, statutory position of Environment Assurance Commissioner (EAC) should be created. The EAC should be responsible for reporting on the performance of the Commonwealth, States and Territories, and other accredited parties in implementing the Standards.
- EAC reports should provide recommendations for action to the Environment Minister where there are issues of concern. The Minister should be required to publicly respond.

Separately, the National Environmental Standard for compliance and enforcement developed by the Review should be immediately implemented to ensure a robust and consistent approach to compliance and enforcement of decisions under the EPBC Act or accredited arrangements.

- The Commonwealth should immediately establish a new independent Office of Compliance and Enforcement within the Department of Agriculture, Water and the Environment. It should have modern regulatory powers and tools to enable it to deliver compliance and enforcement of Commonwealth approvals, consistent with this Standard.

Continued next page

- To be accredited, States and Territories and other parties should also ensure compliance and enforcement consistent with this Standard.

Reform is needed to ensure that Indigenous Australians are listened to and decision-makers respectfully harness the enormous value of Indigenous knowledge of managing Country.

- The National Environmental Standard for Indigenous engagement and participation in decision-making developed by this Review should be immediately adopted to deliver initial improvements.
- The current laws that protect Indigenous cultural heritage are well behind community expectations. They do not deliver the level of protections that Indigenous Australians deserve and the community expects. These laws should be immediately reviewed, and reform should be delivered in line with best practice requirements for Indigenous heritage legislation.

Reversing the unsustainable environmental trajectory will require good planning to manage the environment, as well as broadscale environmental restoration.

- Ultimately, governments should shift their focus from individual project approvals to a focus on clear outcomes, integrated into national and regional plans for protecting and restoring the environment and plans for sustainable development. The National Environmental Standards set clear outcomes for matters of national environmental significance. The EPBC Act needs to enable more effective planning and governments must commit to and resource the development and implementation of plans.
- All relevant levers of government should be focused on delivering outcomes for MNES that are aligned with the priorities of plans. This includes program funding and regulatory levers such as how and where the impacts of development can be offset in an ecologically feasible way.
- The size and long-term nature of investment required in restoration cannot be delivered solely by governments. New mechanisms are needed to leverage private-sector investment and to align this with national outcomes for the environment. It will be important to get the institutional settings for these investments right, and detailed work is required to design them well.

Decision-makers, proponents of development and the community do not have access to the best available data, information and science. There is insufficient capability to understand the likely impacts of the interventions made, particularly in a changing climate. Unacceptable information gaps exist, and many matters protected under the EPBC Act are not monitored at all. Poor data and information are costly for all. A quantum shift in the quality of data and information will support the reforms recommended by this Review.

- A national supply chain of information will deliver the right information at the right time to those who need it. Better data and information are needed to set clear outcomes, effectively plan and invest in a way that delivers them, and to efficiently regulate development.
- A long-term strategy is needed, so that each investment contributes to building and improving the system. Clear requirements for the provision and use of data and information should be immediately mandated through the National Environmental Standard for data and information.

The focus of all recommendations made by the Review is on ensuring the intended outcomes of the EPBC Act are clear and they are achieved. The operation of the Act must support continuous improvement.

- A coherent framework for monitoring, evaluating and reporting on the effectiveness of the EPBC Act is required to understand if we are on track to achieve outcomes and, if not, where a change of course is needed.
- A new overarching advisory committee – the Ecologically Sustainable Development Committee – should be assigned responsibility for developing this framework and reporting on outcomes for matters of national environmental significance.

The 38 recommendations in this Review amount to substantial and necessary reforms to reverse the current state of environmental decline. They will enable Australia to meet future development needs in a sustainable way and will support long-term economic growth, environmental improvement and the effective protection of Australia's iconic places and heritage for the benefit of current and future generations.

Executive summary

Protection of Australia's environment and iconic places

Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The current environmental trajectory is unsustainable

The overwhelming message received by the Review is that Australians care deeply about our iconic places and unique environment. Protecting and conserving them for the benefit of current and future generations is important for the nation.

The evidence received by the Review is compelling. Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The pressures on the environment are significant – including land-use change, habitat loss and degradation, and feral animals and invasive plant species. The impact of climate change on the environment will exacerbate pressures and contribute to further decline. In its current state, the environment is not sufficiently resilient to withstand these threats. The current environmental trajectory is unsustainable.

The EPBC Act is ineffective. It does not enable the Commonwealth to effectively protect environmental matters that are important for the nation. It is not fit to address current or future environmental challenges

The EPBC Act focuses on nationally important matters, termed 'matters of national environmental significance' (MNES). Good outcomes for the environment, including heritage, cannot be achieved under the current laws.

Cumulative impacts on MNES are not holistically addressed, as the Commonwealth and the States and Territories do not manage their environmental and heritage responsibilities in concert. The overall result for the nation is net environmental decline, rather than protection and conservation.

The lack of integration between jurisdictions is exacerbated by the construction of the EPBC Act and the way the Commonwealth implements it. Significant efforts are made to assess and list threatened species. However, once listed, not enough is done to deliver improved outcomes for them.

Most decisions of the Commonwealth that determine environmental outcomes are made on a project-by-project basis only when impacts exceed a certain size, and only for those parts of the environment protected under the EPBC Act. This means that cumulative impacts on the environment are not systematically considered. Rather than an integrated system of environmental management that ensure cumulative impacts are well managed, pressure to manage impacts is placed on individual projects.

When introduced, the EPBC Act was intended to be part of a broader package of Commonwealth initiatives that worked together to protect and conserve the environment and invest in restoration. Over time, these initiatives have become disconnected. Planning, funding and regulatory decisions are not well integrated or clearly directed towards achieving long-term environmental sustainability. Given the state of decline of Australia's environment, restoration to improve the environment is required to make it easier to accommodate future development in a sustainable way.

New National Environmental Standards should be the centrepiece of fundamental reform of national environmental law

The EPBC Act has no comprehensive mechanism to describe the environmental outcomes it is seeking to achieve or to ensure decisions are made in a way that contributes to them.

Legally enforceable National Environmental Standards should be made as the centrepiece of effective planning, regulation and investment. This will ensure that all decisions clearly track towards improved environmental and heritage outcomes.

National Environmental Standards should be a set of binding and enforceable Regulations. They should be one set of rules that apply nationwide. The Commonwealth should make the Standards, and a formal process for doing so should be set out in the EPBC Act. This should include consultation with Indigenous Australians; science, environmental and business stakeholders; and the broader community.

Consultation with States and Territories is essential. However, the process cannot be one of negotiated agreement to accommodate existing rules or development aspirations. To do so would result in a patchwork of protections or rules set at the lowest bar.

National Environmental Standards should set clear requirements for those that interact with the EPBC Act and clear bounds for decision-makers. Standards should prescribe how activities at all scales, including actions, decisions, plans and policies contribute to outcomes for the environment.

National Environmental Standards should be concise, specific and focused on the requisite outcomes, with compliance focused on attaining the outcomes. Standards should not be highly prescriptive processes where compliance is achieved by 'ticking the boxes' to fulfil a process. This is necessary to focus attention on whether environmental outcomes are being achieved and shift from the current mindless adherence to a process.

The full suite of National Environmental Standards recommended by the Review (Appendix B) should be adopted in full and immediately implemented. To accelerate this process, the Review has developed detailed recommended Standards for:

- matters of national environmental significance (MNES)
- Indigenous engagement and participation in decision-making
- compliance and enforcement
- data and information.

Other necessary National Environmental Standards set out in Appendix B should be developed without delay. The full suite of Standards will provide clear rules and improved decision making. Together with a sound accreditation process, the full suite of Standards will provide confidence that any agreements with States, Territories or other parties under the EPBC Act will achieve good environmental outcomes, as well as streamlined development approval decisions.

National Environmental Standards for matters of national environmental significance

The current arrangements and decision-making requirements are not focused on outcomes for MNES and allow considerable discretion by the decision-maker. Requirements are buried within hundreds of pages of legislation, statutory documents, and unenforceable guidelines and policies.

National Environmental Standards for MNES developed by the Review clearly prescribe the outcomes in managing the environment. This is important to help the community know what they can expect from the EPBC Act. It is important for business – who seek clear and consistent rules – and it is important for decision-makers and regulators because it gives clarity on the outcomes their decisions need to support.

The law must require the National Environmental Standards for MNES to be applied, with only the Commonwealth Environment Minister able to make a decision that is inconsistent with the Standards. This should be a rare exception that must be demonstrably and transparently justified in the public interest.

National Environmental Standards should be applied to multiple scales of decision-making

Ideally, National Environmental Standards for MNES should be applied in a way that supports a shift to a more holistic way of managing the environment. The Standards enable the intended outcomes of the EPBC Act to be more effectively integrated into broader environmental management responsibilities and activities of others (such as States and Territories) – so long as they can demonstrate that they can act consistently with the Standards. A management plan, regional plan, environmental planning policy, development assessment and approval regulation or control, or program of investment should individually, or as part of a broader system of management, demonstrate that the outcomes in the Standards are being achieved.

When applied at a system scale, a decision at the project scale must not prevent the National Environmental Standards for MNES from being met. 'Hard lines' and 'no-go zones' in the Standards are equally relevant to the project scale. A system that allows for developments that impact certain habitats is not consistent with a Standard that requires impacts on these habitats to be avoided. Similarly, if the Standards require that the values or attributes of a heritage place or property are to be protected to achieve the outcome, then a project-level decision cannot allow a development to destroy or compromise those values or attributes.

The National Environmental Standards for MNES provide flexibility by outlining clear outcomes but not dictating how these should be achieved. For example, where the Standards allow ecologically feasible offsets to balance habitat loss from a development, this balance could be achieved in different ways. A decision-maker could impose the requirement on an individual project approval. Alternatively, it could achieve the outcome in a collective way at the system level, where the offset obligations of multiple projects are delivered by a centralised approach. The outcome is important, not the path to achieve it.

Regardless of whether the rules are applied at a system or project scale, the National Environmental Standards for MNES support more streamlined decision-making for development proposals. If the outcomes are clear and legally required, then it does not matter who makes project assessment and approval decisions.

The recommended National Environmental Standards for MNES developed by the Review are an immediate step that can be taken. They clarify the existing settings of the EPBC Act to define clear limits of acceptable impacts while allowing flexibility for development. They represent an improvement on the status quo where opaque rules and unfettered discretion in decision-making can result in poor environmental outcomes. Progress towards stabilising the current rate of decline of MNES can be made if the recommended Standards for MNES are accepted in full and immediately implemented.

The National Environmental Standards must evolve

The recommended National Environmental Standards for MNES cannot deliver the level of protection required to alter the current trajectory of environmental decline. They are constrained by the current requirements of the EPBC Act. The Act needs to change so that Standards can be set in a way that enables the environment and our iconic places to be protected, maintained and actively enhanced. This is necessary to ensure ecologically sustainable development (ESD). ESD, including the sustainable management of heritage, means that development to meet today's needs is undertaken in a way that ensures the environment, natural resources and heritage are maintained for the benefit of future generations.

The recommended National Environmental Standards for MNES are also constrained by the quality of data, information and systems available to describe and apply them. A quantum shift is required so that Standards can become granular and measurable. With better information, Standards can be applied with greater precision and efficiency. For example, accurate mapping of habitat for threatened species provides clear and accessible information. Currently, this information is provided as a general scientific description, which then requires expert interpretation.

When the application of the National Environmental Standards is underpinned by quality data, information and systems, the Standards can support faster and lower-cost assessments and approvals, including the capacity to automate consideration of low-risk proposals.

Precise, quantitative National Environmental Standards that provide for effective environmental protection and biodiversity conservation will ensure that development is sustainable in the long term. Settling only for the full suite of Standards recommended by the Review, rather than pursuing the fundamental reform of the EPBC Act that is needed and the investment in restoration that is required, means accepting the continued decline of our iconic places and the extinction of our most threatened plants, animals and ecosystems.

National Environmental Standards are the centrepiece of a broader reform framework

National Environmental Standards are the centrepiece of reforms needed to deliver effective environmental protection and biodiversity conservation, and more efficient decision-making.

The recommended National Environmental Standards developed in detail by this Review should be implemented, and the remainder of the full suite of Standards should be developed and implemented immediately. The full suite of Standards is necessary to support an immediate improvement in decision-making by the Commonwealth, as well as confidence that any agreements with States, Territories or other parties will achieve good environmental outcomes and streamlined development approval decisions.

In isolation, National Environmental Standards are insufficient. A broader framework of reform is required to provide confidence that good decisions are being made about Australia's environment in a way that adheres to the law. Reform is also required to understand if Australia is on track to deliver the intended environmental outcomes, or what adjustments might be needed.

Key elements of the broader reform framework recommended by the Review are:

- respectful inclusion of Indigenous Australians' knowledge and views in decision-making
- the provision of comprehensive expert advice to decision-makers
- full transparency of decisions that are made
- independent auditing of decisions, regardless of who makes them
- appropriate legal review and access to justice
- high-quality accessible data and information
- strong, independent compliance and enforcement
- comprehensive monitoring, evaluation and reporting on environment outcomes.

The protections of the EPBC Act should focus on core Commonwealth environmental responsibilities

The focus of the EPBC Act should be on the Commonwealth's core responsibilities for protecting the environment and conserving biodiversity. The Act, and the National Environmental Standards that underpin its operation, should focus on the places, flora and fauna that the Commonwealth is responsible for protecting and conserving in the national interest – including World Heritage and National Heritage, Ramsar wetlands, and nationally important species and ecological communities.

Contributions to the Review have suggested that amendments to the EPBC Act be made to remove the Commonwealth's role in regulating the impacts from coal and coal seam gas on water resources, and in regulating nuclear activities. The Review considers the Commonwealth should maintain an ability to intervene where any activity (not just large coal mining or coal seam gas projects) is likely to have a significant impact on cross-border water resources. Similarly, for community confidence, the Commonwealth should retain the capacity to ensure nuclear (radioactive) activities are managed effectively and in accordance with best practice.

The Review does not support the many proposals received to broaden the environmental matters that the EPBC Act specifically deals with. To do so would result in a muddling of responsibilities, leading to poor accountability, duplication and inefficiency.

Climate change is a significant and increasing threat to Australia's environment. However, successive Commonwealth Governments have elected to adopt specific mechanisms and laws to implement their commitments to reduce greenhouse gas emissions. The EPBC Act should not duplicate the Commonwealth's framework for regulating emissions.

The Review considers there is merit in mandating proposals required to be assessed and approved under the EPBC Act or by an accredited party (due to their impacts on nationally protected matters), to transparently disclose the full emissions profile of the development. The Act should also require that development proposals explicitly consider the effectiveness of their actions to avoid, mitigate or offset impacts on nationally protected matters under specified climate change scenarios.

This position is consistent with the foundational intergovernmental agreements that underpin how the Commonwealth manages the environment. It was agreed that emissions would be dealt with by national-level strategies and programs, rather than by the EPBC Act.

National Environmental Standards will support greater integration of Commonwealth, State and Territory environmental responsibilities

The construct of Australia's federation means that the management of Australia's environment is a shared responsibility. The Commonwealth, States and Territories need to work together, and in partnership with the community, to effectively manage Australia's environment and iconic places.

Jurisdictions have agreed their respective roles and responsibilities for protecting the environment and, where possible, have agreed that they will accommodate each other's laws and regulatory systems. This is a sound ambition, and more needs to be done to realise it.

The National Environmental Standards are designed to provide a pathway for the Commonwealth to recognise and accredit the regulatory processes and environmental management activities of others. Setting clear, legally enforceable rules also means that decisions should be made consistently, regardless of who makes them. The Standards enable the management of Australia's environment to be better integrated across jurisdictions.

In the immediate term, implementing the National Environmental Standards through bilateral accreditation can achieve this. This may require a State or Territory to amend their environmental management arrangements to enable them to demonstrate that they can meet the Standards. Over time, the preferable arrangement would be for State and Territory laws be amended to adopt the Standards made under the EPBC Act, enabling jurisdictions to fully accommodate the requirements of the Commonwealth through their own laws. By accrediting States and Territories, the way business is regulated can be streamlined by removing duplicative processes that can be costly to business and result in little tangible benefit to the environment.

The reforms recommended by this Review are not about the Commonwealth relinquishing its responsibilities. Rather, they are about the Commonwealth meeting its obligations in a more effective and efficient way, including by accrediting others to deliver against the National Environmental Standards. They enable the Commonwealth to lift its focus from process-driven project-level transactions to the achievement of national level environmental outcomes, and oversight of how the environmental management systems and project-level decisions of others contribute to outcomes.

The reforms recommended by the Review will enable the Commonwealth to step up its own efforts to deliver nationally important outcomes for the environment, and to show national leadership on the environment. This includes:

- applying the National Environmental Standards to its own decision-making
- stronger Commonwealth-led national and regional planning
- the mechanisms to deliver long-term and substantial investment in restoration
- improved data and information
- the frameworks to enable effective monitoring and reporting of environmental outcomes.

The EPBC Act should continue to be about sustainable management of the environment and the achievement of ecologically sustainable development. However it needs fundamental reform to ensure that future generations can enjoy Australia's unique environment and iconic places and heritage.

Indigenous culture and heritage

Indigenous knowledge and views are not fully valued in decision-making

The Review considers that the EPBC Act is not fulfilling its objectives as they relate to the role of Indigenous Australians in protecting and conserving biodiversity and heritage and promoting the respectful use of their knowledge.

Over the last decade, there has been a significant evolution in the way Indigenous knowledge, innovations and practices are incorporated into environmental management. Environmental management is inadequate without incorporating the knowledge, land and sea management practices of Indigenous Australians.

The EPBC Act lags well behind leading practice, and as a result, the operation of the Act forgoes the enormous benefits that can be derived when Indigenous knowledge is fully considered in decision-making.

Western science is heavily prioritised in the way the EPBC Act operates. Indigenous knowledge and views are diluted in the formal provision of advice to decision-makers. This reflects an overall culture of tokenism and symbolism, rather than one of genuine inclusion of Indigenous Australians.

The way the advice of the Indigenous Advisory Committee (IAC) is sought and taken into account by decision-makers typifies the culture of tokenism. The EPBC Act does not require the IAC to provide decision-makers with advice. The IAC is reliant on the Minister inviting its views. This contrasts to other statutory committees under the Act, which have clearly defined and formal roles at key points in statutory processes.

The Department has issued *Engage Early – Guidance for proponents on best practice Indigenous engagement for environmental assessments under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).* This sets out expectations for applicants for EPBC Act approval, but it is not required or enforceable. There is a lack of transparency about how the Environment Minister factors Indigenous matters into decision-making for EPBC Act assessments.

Through an Indigenous-led process, the Review has developed a recommended National Environmental Standard for Indigenous engagement and participation in decision-making. The purpose of this Standard is to ensure that Indigenous Australians who speak for and have traditional knowledge of Country are empowered to participate in decision-making, and their views and knowledge are respectfully and transparently considered in the operation of the EPBC Act.

This National Environmental Standard should be implemented immediately, to take the first steps to improve how decision-makers listen to Indigenous Australians and respectfully harness the value of their knowledge of managing Country. It will ensure that, where appropriate, Indigenous land and sea management practices can be applied to the operational aspects of the EPBC Act to help improve outcomes for MNES and for the Australian environment. Refinements to this Standard should be pursued through an Indigenous-led co-design process.

This National Environmental Standard seeks to complement existing Commonwealth, State and Territory legal frameworks that recognise cultural rights and interests of Aboriginal and Torres Strait Islander peoples – such as Native Title, statutory land rights and heritage protection. It sets out the minimum requirements for meaningful engagement and participation of Indigenous Australians in the legislative and policy processes related to the EPBC Act.

The National Environmental Standard is based on key principles such as the right of Indigenous people to self-determination, the right for Indigenous people to derive benefit from the sharing and use of their knowledge, and the provision of support and resources to Indigenous Australians where engagement is required as part of a statutory process. As with the Standards for MNES, this Standard is constrained by the current settings of the EPBC Act. Amendments are needed to enable other principles, such as the principle of free, prior and informed consent, to be fully incorporated into the Standard.

The role of the IAC should be substantially recast. The EPBC Act should establish an Indigenous Engagement and Participation Committee, responsible for providing the Environment Minister with policy advice on the National Environmental Standard for Indigenous engagement and participation in decision-making, and for monitoring and reporting on the effectiveness of its implementation. The IAC should advise the Commonwealth Minister on the application of this Standard to decision-making, including:

- the making and review of all National Environmental Standards
- listing decisions
- Commonwealth-led national and regional planning
- the incorporation and use of Indigenous knowledge in the information supply chain
- other decisions, as requested.

Indigenous Australians seek, and are entitled to expect, stronger national-level protection of their cultural heritage

Places of natural and cultural value that are important to the world or Australia can be recognised and protected by nominating them for World Heritage listing or listing them as National Heritage or Commonwealth Heritage under the EPBC Act. At the national level, Indigenous cultural heritage is also protected under other Commonwealth laws, including the *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act). The ATSIHP Act can be used by Aboriginal and Torres Strait Islander peoples to ask the Commonwealth Environment Minister to protect an area or object where it is under threat of injury or desecration and where State or Territory law does not provide for effective protection.

Contributions to the Review have highlighted the importance of cultural heritage issues being dealt with early in a development assessment process. However, under the ATSIHP Act, the timing of a potential national intervention is late in the development assessment and approval process, or after an approval has been issued.

Indigenous Australians have emphasised to the Review the importance of the Commonwealth's ongoing role in Indigenous cultural heritage protection. Because the States and Territories also play a key role in the legal framework for Indigenous heritage protection, the jurisdictional arrangements need to work together to avoid duplication or regulatory gaps.

The destruction of the Indigenous heritage in the Juukan Gorge in Western Australia was approved under State laws, and Commonwealth intervention under the ATSIHP Act did not occur. The outcry from this event – from Traditional Owners and Indigenous leaders, from shareholders and from the Australian community – has garnered international attention. Other large companies have subsequently taken stock of their approvals in response to shareholder and community pressure. The current laws that protect Indigenous cultural heritage in Australia are well behind community expectations. They do not deliver the level of protections that Indigenous Australians and the community expect, and they do not work well with the way developments are assessed, approved and conducted.

The national-level laws for Indigenous cultural heritage protection require immediate and comprehensive review. On 20 July 2020, the Environment Minister and Minister for Indigenous Australians announced a commitment to a national engagement and co-design process for modernising the protection of Indigenous cultural heritage in Australia, but little detail is available about how this will occur.

A sound starting point for the review of cultural heritage protection laws is the *Best Practice Standards in Indigenous Cultural Heritage Management and Legislation* that has been developed by the Heritage Chairs and Officials of Australia and New Zealand, in partnership with Indigenous heritage leaders. The review of heritage laws should explicitly consider the role of the EPBC Act in providing national-level protections. It should also consider how comprehensive national-level protections are given effect – for example, how they effectively interact with the development assessment and approval and regional planning processes of the EPBC Act.

The EPBC Act does not meet the aspirations of Traditional Owners for managing their land

The EPBC Act provides the legal framework for the joint management of 3 Commonwealth National Parks – Kakadu, Uluṟu-Kata Tjuṯa and Booderee. Traditional Owners lease their land to the Director of National Parks (DNP), a statutory position established under the Act. For each of these parks, a joint board of management is established to work in conjunction with the DNP.

The legal settings in the EPBC Act have created an unbalanced power relationship between the DNP (as the lease holder) and Traditional Owners, resulting in long-standing tensions between the boards of management and the DNP. The legal construction of the position means that the DNP is ultimately responsible for decisions made in relation to the management of national parks, and for the effective management of risks such as those relating to occupational health and safety. Given this responsibility, the DNP has made decisions contrary to the recommendations of boards or when a board has been unable to reach a consensus view. Contributions to the Review from Traditional Owners and the Land Councils who support them, indicate that the current settings for joint management are unsatisfactory, falling well short of their aspirations for genuine joint decision-making or sole management.

A shared vision for success is needed. This should be done for each park to reflect local differences. Without a shared vision any change is likely to deliver unintended outcomes, diluted focus, or underinvestment in the transition needed. The first step must be to reach agreement on the long-term goals for each of the jointly managed parks, and the nature of the relationship the Traditional Owners want to have with the Commonwealth. The legal, policy, institutional and transitional arrangements required to successfully achieve these goals should then be co-designed with Traditional Owners.

Reforms should be co-designed with Indigenous Australians

This Review has highlighted significant shortcomings in the way the views, aspirations, culture, values and knowledge of Indigenous Australians are supported by the EPBC Act.

The Australian Government recognises that improved outcomes are achieved when Indigenous Australians have a genuine say in the design and delivery of the policy and programs that affect them. This is reflected in COAG's commitments in the *Partnership Agreement on Closing the Gap 2019–2029*. It is important that reform to the EPBC Act be conducted in a way that is consistent with these commitments. The recommended Indigenous Engagement and Participation Committee should play a key leadership role in the reform process.

Legislative complexity

The EPBC Act is complex, its construction is dated, and it does not meet best practice for modern regulation. Complex legislation makes it difficult, time-consuming and expensive for people to understand their legal rights and obligations. This leads to confusion and inconsistent decision-making, which creates unnecessary regulatory burdens for business and restricts access to justice.

The policy areas covered by the EPBC Act are inherently complex. The way the different areas of the Act work together to deliver environmental outcomes is not always clear, and many areas operate in a siloed way. The Act also interacts with a wide range of other Commonwealth environment, heritage and Indigenous legislation. These interactions include inconsistency and conflicts, which drives complexity and uncertainty when applying the Act.

There is a heavy reliance on detailed prescriptive processes that are convoluted and inflexible, meaning engaging with the Act is time-consuming and costly. This is particularly the case for environmental impact assessment. Convoluted processes are made more complex by key terminology being poorly defined or not defined at all.

The EPBC Act needs to be completely overhauled. This will involve both immediate and ongoing change, with sensible staging of legislative reform required. Legislative amendments should be immediately made to address known inconsistencies, gaps, and conflicts that can deliver improvements to the operation of the Act.

The EPBC Act must also be amended to effectively deliver the legal framework of National Environmental Standards, accreditation of alternative decision-makers, and audit and oversight of these arrangements.

The National Environmental Standards should immediately be established through a straightforward technical amendment to provide a legislative basis for them. This is an important first step. However, the effectiveness of the Standards and the efficiency of their application are limited without more comprehensive changes. Changes need to be made to those parts of the EPBC Act that interact with the Standards because they would need to be applied alongside the existing rules in the Act. More complex amendments are needed to significantly reduce complexity, delivery more effective protections and improve efficiency, particularly to support accreditation. Comprehensive amendments to these parts of the Act should be pursued as a matter of priority and delivered within the next 12 months. This will ensure that legislation is amended in a way that can deliver the full benefit of the package of reforms.

Comprehensive redrafting of the remainder of the EPBC Act (or a new set of related Acts) is also required and should be completed within 2 years. This process should consider the benefits of alternate structures for the Act, such as creating separate pieces of legislation for its key functional areas. Redrafting should also consider how to improve the interactions within the Act and with other Commonwealth legislation.

Trust in the EPBC Act

The community and industry do not trust the EPBC Act and there is merit in their concerns

The community and industry do not trust the EPBC Act and the regulatory system that underpins its implementation. A dominant theme in the 30,000 plus contributions received by the Review is that many in the community do not trust the EPBC Act to deliver for the environment. Limited access to information about decisions and the lack of opportunity to substantively engage in decision-making under the Act further erodes trust.

The EPBC Act and its processes focus on the provision of environmental information, yet the Environment Minister can and should consider social and economic factors when making an approval decision. The community can’t see how these factors are weighed in Act decisions. Under the current arrangements, this leads to public perception that the environment is losing out to other considerations due to proponents having undue influence on decision-makers.

The EPBC Act is also not trusted by industry. They generally view it as cumbersome, pointing to duplication, slow decision-making, and legal challenges being used as a tool to delay projects and drive up costs for business (often called ‘lawfare’).

An underlying theme of industry distrust in the EPBC Act relates to the length of time it takes to receive an approval and perceived duplication with State and Territory processes for little additional environmental benefit. On average, complex resource-sector projects can take nearly 3 years, or 1,009 days to assess and approve. This is too long. Recent provision of additional resources has improved performance of on-time assessment and approval decisions, from 19% of key decisions made on time at the end of December 2019 to 97% by the end of September 2020.

Lengthy assessment and approval processes are not all the result of a slow Commonwealth regulator. On average, the process is under the management of the proponent for 70% of the total assessment time. This is indicative of the time taken to navigate current requirements and collect the necessary information for assessment documentation. For business, time is money. Delays, regardless of when they occur, can result in significant additional costs, particularly on large projects.

Transparent independent advice can improve trust in the EPBC Act

Low levels of trust are an underlying driver behind calls for independent agencies to be established to make decisions under the EPBC Act. This solution is not supported by the Review. Rather, community confidence and trust in the process should be enhanced by the provision of transparent, independent advice on the adequacy of information provided to a decision-maker.

The statutory advisory committee structures in the EPBC Act should be recast. An Ecologically Sustainable Development (ESD) Committee should be established, comprising an Independent Chair and the Chairs of the:

- Indigenous Engagement and Participation Committee – to advise on the co-design of reforms, including the National Environmental Standard for Indigenous engagement and participation in decision-making and the application of this Standard to decision-making
- Biodiversity Conservation Science Committee (a recasting of the Threatened Species Scientific Committee) – to advise on the status of migratory species, threatened species and threatened ecological communities, and actions needed to improve their condition in regional recovery plans
- Australian Heritage Council – to advise on heritage matters (as established under the *Australian Heritage Council Act 2003*)
- Water Resources Committee – to advise on matters related to Ramsar wetlands and the impacts of projects subject to the water trigger.

The national environmental information supply chain custodian should be a member of the ESD Committee. Other members may also be necessary to ensure the committee has the skills and expertise to execute its functions.

The ESD Committee should provide transparent policy advice to the Environment Minister to inform decisions on the making of National Environmental Standards and strategic national plans and regional plans. This should include advice on the:

- extent to which the environment and heritage outcomes under the EPBC Act are being achieved, by developing and overseeing the implementation of a comprehensive monitoring and evaluation framework
- development of National Environmental Standards, and recommended refinements to the Standards when outcomes are not being achieved
- the framework and priorities for strategic national plans and Commonwealth-led regional plans
- overall adequacy of the environmental, social, cultural and economic information available for decision-making.

On request, the ESD Committee could provide policy advice to the Minister on other issues or specific decisions, where they have relevant expertise).

Legal standing and review

The Review has received conflicting views about the appeal mechanisms under the EPBC Act. Where concerns arise about environmental outcomes associated with a decision, public focus turns to challenging high-profile projects. Legal review is used to discover information and object to a decision, rather than its proper purpose to test and improve decision-making consistent with the law. Industry is very concerned that legal challenges are politically motivated ‘lawfare’ and result in unnecessary delay.

Third-party court actions over the life of the EPBC Act have been diverse in nature and stable in number. The ability of the public to hold decision-makers to account is a fundamental foundation of Australia’s democracy. To characterise these types of actions as ‘lawfare’ misrepresents the importance of legal review in Australian society.

The Review does not agree that the current standing provisions in section 487 of the EPBC Act should be removed or changed. Standing has not been interpreted broadly by the courts, because it is aimed at protecting the public interest rather than private concerns. Broad standing remains an important feature of environmental legislation, particularly given the presence of collective harm resulting from damage to environmental or heritage values.

The courts have the capacity to deal with baseless or vexatious litigation, and litigation with no reasonable prospect of success can be dismissed in the first instance. The EPBC Act should require an applicant seeking to rely on the extended standing provisions to demonstrate that they have an arguable case, or that the case raises matters of public importance, before it can proceed (for example, by seeking the advice of senior counsel).

The recommended reforms to deliver improved transparency and robust oversight of decision-making address the underlying causes of distrust in decisions. This should reduce the need for third parties to resort to court processes to discover information. Improving participation and transparency will mean that stakeholders will be less likely, and have less justification, to resort to legal challenge.

Legal challenges should be limited to matters of outcome, not process, to reduce litigation that does not have a material impact on the outcome. In a mature regulatory framework, judicial and merits review operate in concert. Judicial review helps ensure legal processes are followed and is complemented by merits review to ensure decisions are meeting the intent of the legislation, not simply following processes.

Full merits review is not advised. Opening decisions on appeal or review to the admission of new documentation or materials for consideration can delay decisions without necessarily improving outcomes. It also promotes ‘forum shopping’.

Adjustments to legal review provisions should be made to provide for limited merits review ‘on the papers’ for development assessment and approval decisions made under the EPBC Act. This type of review should be:

- available to proponents and those with standing
- limited to the material available at the time of the original decision
- apply to the approval decision and the application of conditions
- related to consideration of decisions where the exercise of discretion was incorrect in the circumstances or the decision was unreasonable in the circumstances.

Limited merits review should result in either the decision being affirmed or referred to the original decision-maker with recommendations on remaking or varying the decision.

Overlaying an entirely new legal review process on the EPBC Act in its current prescriptive form is likely to be administratively complex and have unintended consequences, leading to uncertainty. The improvements to decision-making recommended in this Review are a necessary precursor to ensure that merits review, when introduced, is focused on environmental and heritage outcomes and not process.

Interactions with State and Territory laws

A key criticism of the EPBC Act is that it duplicates State and Territory regulatory processes for development assessment and approval. The Review has found this is largely true, with a few exceptions.

There is no systematic way to determine the additional environmental benefits resulting from the EPBC Act. There are examples where the Act has led to demonstrably different environmental outcomes than those arising from State and Territory processes. The EPBC Act requires that environmental offsets only be applied for the protected matter the approval relates to – that is, they must be 'like for like'. This policy may not be perfect, but it exceeds requirements in some jurisdictions. This results in additional or different conditions placed on projects that have better outcomes than would have been the case under State or Territory law alone.

Frustration rightly arises when Commonwealth regulation does not tangibly correspond to better environmental outcomes, given the additional costs to business of dual processes. The extent to which the Commonwealth’s responsibilities are effectively addressed by the processes of State and Territory Governments varies between jurisdictions and over time as rules change. Under the current arrangements, the same environmental outcomes cannot be consistently replicated even though the process is duplicative.

Efforts made to reduce duplication in development assessment and approval have not gone far enough

The EPBC Act currently allows for the accreditation of State and Territory laws and management systems for both development assessments and approvals.

Under an assessment bilateral agreement, the Commonwealth retains responsibility for approval decisions based on environmental impact assessments undertaken by the jurisdictions. Between July 2014 and June 2020, on average 38% of proposals under the EPBC Act were assessed (or are still being assessed) through either a bilateral assessment (25%) or accredited assessment (13%) arrangements with jurisdictions. The proportion of projects covered by an assessment bilateral agreement is limited, because not all State and Territory processes can deliver an adequate assessment of matters that are protected under the EPBC Act. This is largely due to a lower standard, or the absence of a process for certain impacts, in State and Territory arrangements.

Approval bilateral agreements have never been implemented. Under this type of agreement, the Commonwealth would accredit States and Territories to undertake assessment and approvals for Commonwealth matters. Under the current settings, the mechanism is inherently fragile. Particularly important amendments to the EPBC Act are needed to:

- enable the Commonwealth to complete an assessment and approval if a State or Territory is unable to do so
- ensure agreements can endure minor amendments to State and Territory settings, rather than requiring the bilateral agreement to be remade or amended settings to be re-accredited (and consequently be subject to disallowance by the Australian Parliament on each occasion).

In 2015, these and other necessary amendments failed to garner support in the Australian Parliament. This was in response to significant community concerns about the ability of States and Territories to uphold the national interest when applying discretion in approval decisions. A similar Bill was tabled in the Parliament in August 2020.

Legally enforceable National Environmental Standards provide a clear pathway to accredit States and Territories

The foundational intergovernmental agreements on the environment envisaged that jurisdictions would accommodate their respective responsibilities in each other's laws and regulatory systems, where possible. This is a sound ambition, and one that governments should continue to pursue.

The Review recommends that the EPBC Act should enable the Commonwealth to recognise and accredit the regulatory processes and environmental policies, plans and programs of other parties, including States and Territories.

The full suite of National Environmental Standards should clarify the requirements of the EPBC Act and be a legally binding mechanism that provides confidence to support the accreditation of the arrangements of States and Territories in the immediate term. Accreditation should only occur when a State or Territory can demonstrate it is capable of meeting all the Standards and, therefore, the requirements of the Act. Once accredited, a State or Territory would approve or authorise a project under its own laws, and approval from the Commonwealth Environment Minister would no longer be required.

An accredited party must be required to make decisions in a way that is consistent with the National Environmental Standards. Only the Commonwealth Environment Minister can make a decision that is inconsistent with the Standards. This must be demonstrably justified in the public interest, and a clear statement of reasons why such a decision was made must be provided.

A party must refer an activity to the Commonwealth Environment Minister for decision – for example, where an accredited party believes it is in the public interest to undertake an activity or make a decision that is inconsistent with the National Environmental Standards.

Importantly, under the accreditation model recommended by the Review, the EPBC Act would still apply in the event of failure of an accredited arrangement. For example, if a project is approved by a State or Territory in a way that is not in accordance with the accredited arrangement, the project would continue

to be subject to the ordinary referral, assessment and approval processes of the Commonwealth. Similarly, a project conducted in a way that is not consistent with the accredited arrangement (such as failure to implement conditions of an approval) may result in a breach of the EPBC Act.

Accrediting State or Territory arrangements would be on an 'opt-in' basis, and they should be required to demonstrate that their system operates in a way that is consistent with the National Environmental Standards. This may require States and Territories to amend their legislation to meet the Standards and to satisfy accreditation requirements. While it is important that the Commonwealth provides a sound mechanism for willing States and Territories to enter these arrangements, a focus solely on accreditation at the expense of other reforms it not recommended.

The recommended accreditation model involves 6 key steps:

1) Make National Environmental Standards – to define clear outcomes for matters of national environmental significance (MNES), and for important processes, to set the legal benchmark for protecting the environment and provide the ability to measure the outcomes of decisions.
2) Accreditation assessment – a State or Territory or other suitable party demonstrates they have the capacity to deliver the outcomes of the National Environmental Standards, and the public is provided the opportunity to comment on the proposal.
3) Accreditation by the Commonwealth to provide accountability and legal certainty, involving
   a) a formal check by the Environment Assurance Commissioner to give confidence that arrangements are consistent with the National Environmental Standards and can be effectively audited
   b) the opportunity for the Parliament to consider and disallow the arrangement that the Commonwealth Environment Minister proposes to accredit
   c) formal accreditation by the Commonwealth Environment Minister.
4) Transparent pathways to enable the Commonwealth Environment Minister to intervene in a proportionate and escalating way at times when accredited arrangements are not performing well, or failing, or where there is serious risk of environmental harm. The pathways for escalation should include the ability for
   a) the Commonwealth Environment Minister to step in to make a decision where they are satisfied that a significant breach of the accredited arrangement or the National Environmental Standards is likely to occur, or to prevent serious or irreversible environmental damage
   b) the Commonwealth Environment Minister to suspend or revoke the accreditation
   c) the accredited party to request the Commonwealth make a decision (for example, where they are unable to effectively manage conflicts) or to request Commonwealth consideration of a decision that is inconsistent with the National Environmental Standards.
5) Strong audit and independent oversight by the Environment Assurance Commissioner – to give confidence that decision-makers are adhering to the National Environmental Standards and the provisions of the bilateral accreditation.
6) Regular review – to ensure accredited arrangements are contributing to environmental outcomes, and to make necessary adjustments.

The Commonwealth Environment Minister should retain the unfettered right to make decisions, even where an accredited arrangement is in place and working well. To avoid unnecessary disruption, uncertainty or 'forum shopping', this right should be exercised only at key points early in the project proposal cycle. For example, when a project is registered or when an accredited party issues its environmental impact assessment requirements. This unfettered right is distinct from the Minister's ability to step in at any time before a decision is made to address situations such as a breach of the accredited arrangement or the National Environmental Standards, or risk of serious environmental harm.

Accrediting another party does not mean that the Commonwealth is no longer responsible for environmental protection and biodiversity conservation. Rather, the reform directions recommended would result in greater focus on setting standards and planning, and accrediting and providing oversight of the activities of others, to ensure that national environmental outcomes are being achieved.

Oversight by the Environment Assurance Commissioner

Past attempts to accredit the approval processes of States and Territories have failed due to community concerns that decision-making would be too discretionary and inconsistent with national obligations and the national interest. The inherent conflicts of interest at a State and Territory level justify the community's scepticism of the ability for these arrangements to achieve the aims and objectives of the EPBC Act. The reforms recommended by this Review are designed to address the shortcomings of past processes.

Legally enforceable National Environmental Standards would prescribe clear outcomes, and an accredited State or Territory would need to demonstrate that they are adhering to the Standards in their decision-making. But Standards alone are not enough. They need to be buttressed by strong and independent oversight of the performance of accredited arrangements.

The Australian Parliament and the public need confidence that accredited parties – and the Commonwealth Environment Minister – are adhering to the law by making correct decisions and properly implementing their commitments.

A new, independent, statutory position of Environment Assurance Commissioner (EAC) should be created to provide this oversight. The EAC should be free from political interference and responsible for publicly reporting on the performance of the Commonwealth and accredited parties. The EAC would report to the Australian Parliament, through the Minister, with reports tabled within a prescribed time frame.

The EAC should be supported by a standing, well-resourced audit function within the Department of Agriculture, Water and the Environment that would conduct recurring scheduled audits and special audits or investigations of concerns. The EAC would ensure the rigour and integrity of the audit function. The EAC would provide advice and recommendations for action to the Commonwealth Environment Minister, where issues of concern with accredited arrangements are found. The EPBC Act should require the Minister publicly respond to the EAC's advice and recommendations, within a reasonable time frame specified in the Act.

Commonwealth decisions and interactions with other Commonwealth laws

Commonwealth-led assessments and approvals should be streamlined

Even where accredited arrangements are in place with States and Territories, the Commonwealth will have an ongoing role in directly assessing and approving some developments, including:

- where accredited arrangements with States and Territories are not in place or cannot be used
- at the request of a jurisdiction – for example, where conflicts cannot be appropriately managed
- when the Commonwealth Minister exercises their unfettered right to make decisions
- when the activity occurs on Commonwealth land or in Commonwealth waters
- when the activity is undertaken by a Commonwealth agency.

The Review has identified opportunities to streamline environmental impact assessments and approvals conducted by the Commonwealth. The most significant gains will be realised by fundamental changes to the way the EPBC Act works. The development of National Environmental Standards and regional plans, and improvements in the data, information and regulatory systems, are central to improving the quality and efficiency of development assessment and approval processes.

When in place, these reforms will identify where and in what form development is acceptable (and therefore does not need approval or can receive automated approval). The reforms will also provide clarity on the matters that will need to be considered and the required information to do this.

Streamlining the assessment pathways available under the EPBC Act will reduce the complexity of and efficiencies in the current process. The first step in all assessment pathways is known as 'referral', where the decision-maker determines whether a proposal requires more detailed assessment. For proposals where the need for detailed assessment and the relevant environmental matters are obvious, the referral creates an additional, pointless step in the process.

For other proposals, the lack of clarity on the requirements of the EPBC Act means that proponents refer proposals for legal certainty. More than half of all referrals result in a decision that detailed assessment and approval is not required or is not required so long as the project is carried out in a particular manner. National Environmental Standards and regional plans will provide clarity on impacts that are acceptable, and those that will require assessment and approval. In many cases, this will avoid the need for referral.

Interactions with other Commonwealth environmental management laws

The EPBC Act operates in a way that seeks to recognise other Commonwealth environmental regulatory and management frameworks. The interplay between the Act and these other frameworks is complex. It is often more onerous than it needs to be, which leads to inefficiencies. At times the arrangements are not supported by robust systems and processes, which can compromise effectiveness in achieving intended environmental outcomes.

The accreditation model recommended by the Review can equally be applied to other Commonwealth agencies where they can meet the National Environmental Standards. Subjecting these types of arrangements to the oversight of the EAC will provide community confidence that the Standards are applied equally across Australia, regardless of the decision-maker.

Key interactions include the management of Commonwealth fisheries, Regional Forest Agreements (RFAs), offshore petroleum activities and the regulatory activities of other Commonwealth agencies.

Commonwealth fisheries

The Australian Fisheries Management Authority (AFMA) is responsible for the day-to-day management and compliance of Commonwealth fisheries. Assessments under the EPBC Act are currently conducted on the environmental performance of all export fisheries and all Commonwealth-managed fisheries, to ensure they are managed in an ecologically sustainable way. The recommended accreditation model is designed to streamline these processes, while maintaining oversight by the Commonwealth Environment Minister of AFMA's environmental regulation of commercial fishing operations in Commonwealth waters and jointly managed fisheries.

Offshore petroleum

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is the Commonwealth regulator for offshore energy activities in Commonwealth waters. Since 2014 significant streamlining of the environmental regulation of offshore energy activities has been achieved through the accreditation of NOPSEMA via a strategic assessment. However, the current settings for strategic assessments have significant limitations. The regulatory setting for NOPSEMA are effectively frozen, stifling continuous improvement of environmental regulation and further streamlining. The accreditation model provides a way to overcome these limitations with the current arrangements.

Regional Forest Agreements

A Regional Forest Agreement (RFA) is a regional plan agreed between a State and the Commonwealth for management of native forests. When first made, RFAs resulted in the protection of significant areas of forest by excluding forestry activities. The EPBC Act recognises the *Regional Forest Agreements Act 2002* (RFA Act), and EPBC Act assessment and approvals are not required for forestry activities conducted in accordance with an RFA (except where operations are in a World Heritage property or a Ramsar wetland).

There are fundamental shortcomings in the interactions between RFAs and the EPBC Act. The Review has low confidence that the environmental considerations under the RFA Act are equivalent to those imposed by the EPBC Act, but recognises that some RFAs afford environmental protections that exceed the requirements of the RFA Act. RFAs rely on the States to undertake monitoring, compliance and enforcement, with little Commonwealth oversight.

In May 2020 the Federal Court found that a forestry operator had breached the terms of an RFA and should therefore be subject to the ordinary controlling provisions of the EPBC Act. Legal ambiguities in the relationship between the EPBC Act and the RFA Act should be clarified. This should be achieved by requiring that RFAs demonstrate consistency with the National Environmental Standards to avoid the need for an EPBC Act assessment and approval. Adopting the accreditation model would support greater Commonwealth oversight of the RFAs, including the effectiveness of the State-based compliance and enforcement regimes.

Amendments to both the RFA Act and the EPBC Act will be required to implement these changes in a legally binding way. But changes to these arrangements should be pursued by the Commonwealth now to provide for equivalent protections for MNES and strong Commonwealth oversight. This will provide confidence to the community and certainty for the forestry industry, with forestry activities able to continue under well-made, well-implemented, transparent RFAs. To do this, the Commonwealth should require a State to commit to the application of the National Environmental Standards to RFAs and consequential oversight by the EAC, as a condition of any accreditation process.

Approvals granted by other Commonwealth agencies

The EPBC Act provides for approvals issued through other Commonwealth agencies in relation to airspace, airports, foreign aid and other activities prescribed under the Regulations – for example, sea dumping. These are known as Section 160 advice. These arrangements require the Environment Minister to conduct an environmental impact assessment and provide advice to the responsible Commonwealth Minister or agency, enabling them to issue an approval under their own laws and processes without the need for an accompanying EPBC Act approval.

There are shortcomings in these arrangements, particularly where the approving agency does not have sufficient expertise in environmental monitoring, or compliance and enforcement. The Section 160 advice provisions should be removed, and these arrangements should be subject to the accreditation model, consistent with National Environmental Standards and subject to the oversight of the EAC. Where accreditation is not possible, the ordinary EPBC Act assessment and approval processes should apply.

Regulation of wildlife trade

The EPBC Act includes requirements intended to meet Australia's international commitments as a signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on the Conservation of Migratory Species (Bonn Convention). Some aspects of the EPBC Act go beyond Australia's international obligations, such as restricting the take of some species listed under the Bonn Convention. Others, such as those relating to the humane transport of wildlife, do not go far enough. The Review recommends that the EPBC Act should be amended to bring requirements into line with Australia's international obligations.

The EPBC Act should be amended to reduce unnecessary prescription and administrative process around wildlife trade permitting. This adds additional costs for individuals, businesses and government, but provides no additional protection for endangered species. Other amendments – such as those enabling proportionate compliance and enforcement responses and reducing instances where wildlife permitting could be subject to abuse by applicants – will improve the effectiveness of these provisions.

Planning and restoration

Despite its purpose, the EPBC Act does not facilitate the maintenance or restoration of the environment. The current settings cannot halt the trajectory of environmental decline, let alone reverse it.

Future development needs to be able to be accommodated in a sustainable way. For the purpose of the EPBC Act to be achieved, cumulative impacts on the environment need to be addressed, threats to the environment properly managed, and the legacy of past degradation rectified by pursuing environmental restoration at scale.

Many of the reforms to the EPBC Act recommended by the Review will deliver greater environmental protections in the future – including National Environmental Standards that enable MNES to be protected, maintained and enhanced.

Significant investment is also required to reverse the current trend of environmental decline and to enable future development to be sustainable. This challenge is exacerbated by the impacts of climate change.

To do this effectively and efficiently, adaptive planning is required. Broadscale investment in restoration and sustainable land management will improve the overall state of the environment and enable Australia to accommodate future development in a sustainable way.

The scale of the restoration challenge is beyond the ability of governments alone to solve. However, government can provide clear direction and facilitate and coordinate the contributions of others. This requires good planning and the mechanisms to support collaborative investment.

The EPBC Act lacks comprehensive plans

With limited exception, the way the EPBC Act operates does not support effective planning at the right scale. The Act requires some plans to be made – such as plans for World Heritage properties, National Heritage places on Commonwealth land and for Commonwealth reserves – but the effectiveness of these plans and their implementation has been variable.

The approach to planning for the recovery of threatened species and ecological communities is piecemeal. Once listed, each threatened species and ecological community MNES is separately described and managed through individual species or community conservation advices and may also have recovery plans. Even if these plans were implemented effectively, they would still result in piecemeal planning because they focus on the needs of a single species or ecological community.

Plans to address key threats to the environment are not required. Currently, 21 threats are listed as key threatening processes and only 6 have an up-to-date threat abatement plan. Critically, the Act has no clear mechanism to enable a quick response to acute threats, such as:

- major bushfires – which can have a devastating impact on threatened species and lead to more common species becoming rarer
- new biosecurity incursions – which are best managed quickly, before they become established and widespread.

Opportunities for coordinated national actions and investments to address key environmental challenges – such as feral animals, habitat restoration and adapting to climate change – are ad hoc, rather than a key national priority.

With limited exception, the administration of the EPBC Act is not based on comprehensive planning to manage the environment on a national or regional (landscape) scale.

National and landscape scale plans are needed

Planning at the national and regional (landscape) scale is needed to take action where it matters most and to support adaptive management. The EPBC Act should be amended to enable adaptive regional planning approaches. These amendments, together with a commitment to make and implement plans, are necessary to support a fundamental shift in focus – from project-by-project development transactions, to effectively planning at the right scale for a sustainable environment and for sustainable future development.

This does not mean that the Commonwealth must plan for everything. Rather, the Commonwealth, through the National Environmental Standards can be clear about national-level outcomes and priorities for MNES, which can then be incorporated into planning activities of other jurisdictions or organisations to support more holistic environmental management.

Strategic national plans should be developed for 'big-ticket', nationally pervasive issues such as the management of feral animals and adaptation of the environment to climate change. These plans should guide the national response and enable action and investment by all parties to be effectively targeted to where it delivers the greatest benefit. National-level planning should also ensure that the capability and processes are in place to quickly and effectively deal with acute threats to the environment. The current Intergovernmental Agreement on Biosecurity provides a model for this type of preparedness planning to enable rapid and coordinated responses. National-level plans will support a consistent approach to addressing issues in regional plans or to inform activities in areas where there is no regional plan.

Regional (landscape) plans should be developed that support the management of the environment at the right scale. Three regional planning tools are recommended:

1) Commonwealth-led regional recovery plans that identify recovery priorities for multiple threatened species and ecological communities at the landscape scale.
2) Ecologically sustainable development plans that identify environmental, economic, Indigenous and social priorities, incorporate outcomes for MNES and support the regulation of development.
3) Strategic assessments that consider the staged proposed development by proponents in a coordinated manner.

The EPBC Act should set out the explicit criteria the Commonwealth should use to make its own regional plans, or to assess and accredit plans developed by other parties. These criteria could include:

- consistency with the full suite of National Environmental Standards – including those for MNES, data and information, compliance and enforcement and Indigenous participation
- consistency with the requirements of relevant strategic national plans and regional recovery plans to effectively address threats across tenures and borders
- clearly identified priorities for restoration and identified funding to meet environmental outcomes and shared goals
- clearly identified responsibilities and accountabilities for implementing the actions in the plan
- consistency with requirements for monitoring and reporting on outcomes for MNES
- a requirement for regular (for example 5-yearly) reviews to assess whether plans are achieving their intended environmental outcomes, and to identify adjustments needed.

Ideally, these plans would be developed in a way that allows national outcomes to be fully integrated into the land use and environmental planning systems of the States and Territories. Ecologically sustainable development plans, or similar plans developed by a State or Territory that seek to balance competing activities, should be developed in a way that is consistent with the National Environmental Standards and strategic national plans and regional recovery plans (where in place).

Where integration with State and Territory environmental planning regimes is not possible, the Commonwealth should develop its own regional recovery plans to enable it to better manage threats to and cumulative impacts on MNES at a landscape-scale. This will have flow-on benefits for more common species and biodiversity more broadly. Regional recovery plans should prioritise protection,

conservation and investment in restoration where it is most needed and delivers the biggest environmental gains. The Commonwealth's regional planning efforts should be initially focused on those regions with the highest pressures on MNES, in biodiversity hotspots, or in areas where the Commonwealth has identified national priorities for future development.

Government investment should align with planning priorities

Investment to improve the environment should align with the priorities identified in the national and regional plans.

Commonwealth programs for investment in environmental restoration have been a constant feature of national environmental policy over the past 20 years. These include the National Heritage Trust, Caring for Country, the Environmental Stewardship Program, the National Landcare Program, the Green Army, the Threatened Species Recovery Fund and the Reef Trust.

The current streams of Australian Government funding allocated towards environmental protection, conservation and restoration, despite being aligned with MNES, are not comprehensively coordinated to prioritise investment in a way that achieves the greatest possible biodiversity benefits.

Funding is often spread thinly across the nation, and the link between the investment of program funds on a particular project and outcomes for MNES can be difficult to discern. More recent efforts to target and prioritise funds, albeit at a modest scale, are starting to deliver results. For example, the Threatened Species Strategy has shown that with targeted investment the decline of species can be halted, and some species' numbers are now increasing. This underscores the value of targeted and sustained investment in key species and their habitat.

The reforms recommended by this Review, with a focus on National Environmental Standards and national and regional planning, will provide a foundation for more effective prioritisation and coordination of direct government investment in restoration.

The regulatory levers of government, including offsets, should align with the priorities of plans

A regional plan (such as an ecologically sustainable development plan or strategic assessment) must be consistent with the National Environmental Standards for MNES to be accredited under the EPBC Act. These plans will need to clearly demarcate areas where development is desirable and is encouraged, those areas where development must be avoided, and those areas where unavoidable impacts on MNES can be acceptable so long as an ecologically feasible offset can be delivered. Where they are acceptable, environmental offsets should deliver against the restoration priorities of a regional plan.

The current EPBC Act environmental offsets policy states that after all reasonable efforts are made to avoid impacts, remaining impacts should be mitigated to reduce the impacts on MNES, and any residual impact can be offset. However, this is not how it has been applied in practice. Some proponents see offsets as something to be negotiated from the outset, rather than making a commitment to fulsome exploration (and exhaustion) of options to avoid or mitigate impacts. Conditions of approval most often require proponents to protect areas of habitat similar to the area that has been destroyed or damaged by the project, but compliance and enforcement of these conditions is ineffective.

Immediate changes are required to the environmental offsets policy to ensure that offsets do not contribute to environmental decline. Offsets should only be acceptable:

- when they are applied in accordance with the recommended National Environmental Standards for MNES
- where an offset plan demonstrates that they can be ecologically feasible
- where outcomes from offsets can be properly monitored and measured.

In the longer term, offsets should be enshrined in law. The EPBC Act should require:

- offsets to be ecologically feasible and deliver genuine restoration in areas of highest priority
- a decision-maker accept offsets that encourage restoration offsets to enable a net gain for the environment to be delivered before the impact occurs
- a public register of offsets for all Commonwealth, State or Territory offsets sites, designated as a national interest environmental dataset.

These settings would incentivise early investment in restoration. If offsets were to be supported with greater certainty under the EPBC Act, this could catalyse a market response. Proponents are generally not in the business of managing habitats as their core business. There are, however, expert land managers and specialist project managers who deliver these services. The right policy and legal settings would provide certainty for these players to invest in landscapes, confident that proponents will be in the market to purchase offsets based on these investments down the track.

Additional mechanisms to support private investment are needed

The Commonwealth continues to spend significant public funds to improve the environment. However, the overall level and targeting of investment has been insufficient to deliver the broad restoration required to address past loss, build resilience and adjust the environmental trajectory from its current path of decline.

The Review has identified opportunities for national leadership beyond the EPBC Act that should be considered. This includes opportunities for greater collaboration between governments and the private sector to invest in the environment directly and to invest in innovation that reduces the costs of environmental restoration activities.

Mechanisms are needed that leverage public and private capital to deliver the significant scale of investment in restoration that is required. The Commonwealth also has a clear role in assisting private-sector investment by improving data and key metrics of environmental health, to provide the market with certainty to encourage investment in activities that contribute to sustainability.

The Australian Government has allocated $2.5 million in the 2020–21 Budget for further policy work related to environmental markets. This should include formal investigation of the feasibility of mechanisms that leverage private capital to deliver greater investment, including:

- funding innovation that reduces the cost of large-scale environmental restoration
- co-investing with private capital to improve the sustainability of private land management
- establishing a central trust or point of coordination for private and public investment in restoration (including offsets)
- using opportunities to leverage existing markets (including the carbon market) to help deliver restoration.

Access to Commonwealth funds and mechanisms for restoration should be made contingent on States and Territories implementing the National Environmental Standards. This provides an incentive for greater integration of Commonwealth requirements into State and Territory systems to deliver more holistic environmental management. It is also important to avoid paying for restoration in some areas, while the environment is being degraded elsewhere.

Compliance and enforcement

Compliance and enforcement of the EPBC Act is ineffective

There has been limited activity to enforce the EPBC Act over the 20-year period it has been in effect and a lack of transparency about what has been done. The Department has improved its regulatory compliance and enforcement functions in recent years. However, it still relies on a collaborative approach to compliance and enforcement, which is too weak.

Serious enforcement actions are rarely used, which indicates a limited regard for the benefits of using the full force of the law where it is warranted. When issued, penalties are not commensurate with the harm of damaging a public good of national interest. For example, since 2010, a total of 22 infringements have been issued for breaches of conditions of approval, with total fines less than $230,000.

The compliance and enforcement powers in the EPBC Act are outdated. Powers are restrictive and can only be applied in a piecemeal way across different parts of the Act due to the way it is constructed. The complexity of the legislation, impenetrable terminology and the infrequency with which many interact with the law, make both voluntary compliance and the pursuit of enforcement action difficult.

Strong, independent compliance and enforcement is required

Independent compliance and enforcement functions that are not subject to actual or implied political direction are needed. The functions should be properly resourced and include a full toolkit of powers and systems.

Penalties and other remedies for non-compliance and breaches of the EPBC Act, or of an arrangement accredited under the Act, need to be adequate to ensure that compliance is regarded as mandatory and not optional. The cost of non-compliance should be an active deterrent, not simply a ‘cost of doing business’.

A strong compliance and enforcement regulatory stance is needed. It is important to be proportional and to work with people where inadvertent non-compliance has occurred. However, a culture that does not shy from firm action where needed is also important. Strong compliance and enforcement activities protect the integrity of most of the regulated community, who spend time and money to comply with the law. Those who break the rules should face appropriate consequences.

A National Environmental Standard for compliance and enforcement is recommended. This Standard should apply to the compliance and enforcement of requirements under the EPBC Act and those under accredited arrangements. The Standard requires compliance and enforcement functions to be delivered in a way that:

- is independent of actual or implied political interference
- deters illegal behaviour, through high penalties for non-compliance
- is proportionate to the seriousness of the non-compliance
- is transparent and accountable, including public registers of action.

Where the Commonwealth Environment Minister is responsible for an approval, the Commonwealth should deliver compliance and enforcement functions consistent with the National Environmental Standard. This includes where the Commonwealth Environment Minister has issued an approval under the EPBC Act, and for activities that should have been the subject of an application for approval (such as illegal land clearing).

The Commonwealth should immediately assign independent powers for Commonwealth compliance and enforcement to the Secretary of the Department of Agriculture, Water and the Environment, with the current compliance functions consolidated into an Office of Compliance and Enforcement established within the Department. Consistent with the Standard, the exercise of these functions should not be subject to ministerial direction.

The Office of Compliance and Enforcement should be provided with a full suite of modern regulatory powers and tools, and adequate resourcing. This will enable the Commonwealth to deliver compliance and enforcement consist with the National Environmental Standard and provide confidence that the law is being enforced.

An accredited party (such as a State or Territory) should be primarily responsible for compliance and enforcement of approvals under an accredited arrangement, and activities that should have been the subject of an application for approval through that party.

An accredited party would be subject to the National Environmental Standard for compliance and enforcement, and it would need to report adherence with this Standard to the EAC. Reporting on accredited arrangements should include reporting on all potential breaches and the compliance and enforcement response taken by the accredited party.

Data, information and systems

Decision-makers, proponents and the community do not have access to the best available data, information and science. This results in sub-optimal decision-making, inefficiency and additional cost for business, and poor transparency for the community. The Department's systems for information analysis and sharing are antiquated and the user experience is clunky and cumbersome for proponents and for members of the community interested in a project and its impacts on the environment.

The collection of data and information is fragmented and disparate. There is no clear, authoritative source of environmental information that people can rely on. This adds cost for business and government, as they collect and recollect the information they need. It also results in lower community trust in the process, as they question the quality of information on which decisions are made and the outcomes that result from them.

A quantum shift will support the reforms recommended by this Review. Better data and information will improve the efficiency of:

- setting clear outcomes, effectively plan to deliver them and efficiently regulate to achieve them
- ensuring the mechanisms for public and private-sector investment in restoration are well targeted and delivers the best returns
- understanding the baseline starting point, and to monitor and report on the impact of activities and to adjust them where needed.

A national supply chain of information will deliver the right information at the right time to those who need it. This supply chain should be an easily accessible, authoritative source that the public, proponents and governments can rely on. A clear strategy to deliver an efficient supply chain is needed so that each investment made contributes to building and improving the system. Immediate investment in the information supply chain is needed to support reform. We can't wait until perfect data is available.

The Commonwealth should assign a Custodian to provide national level leadership, coordination and responsibility for the national environmental information supply chain. Adequate resources should be provided to deliver the evidence base for Australia's national system of environmental management, including a complete overhaul of departmental and public-facing systems.

The essential information required to underpin the National Environmental Standards for MNES should be identified and designated as a set of National Environmental Information Assets (NEIAs). This approach is consistent with broader government reforms to identify, prioritise and manage high-value and critical datasets. The requirement to deliver and improve these NEIAs should be enshrined in the EPBC Act.

A National Environmental Standard for data and information has been developed by the Review and should be immediately implemented to provide clarity on expectations for the use and provision of information and data and improve accountability. The recommended Standard includes requirements for:

- sharing environmental data – these requirements apply to proponents who seek approval, parties accredited under the Act, and researchers where data has been generated as part of a government-funded project
- ensuring that decisions made under the EPBC Act or an accredited arrangement are informed by the best available evidence.

An outcomes-based approach to implementing the National Environmental Standards requires long-term monitoring to measure outcomes against a clearly established baseline.

Adequate resources should be provided to develop the systems and capability that are needed to deliver the evidence base for Australia's national system of environmental management and for efficient regulation. The recent financial commitment from the Australian Government and the Western Australian Government to the collaborative Digital Environmental Assessment Program, which offers significant potential efficiencies for both proponents and governments, is a good first step in this direction. The program will deliver a single online portal for assessments and biodiversity databases. However, at this stage it is only a pilot of a potential national system.

The short-term costs of a quantum shift in information and data will be high, but improvements will deliver efficiencies and cost-savings to decision-makers and proponents. The adoption of the recommended National Environmental Standard for data and information will increase the accessibility and usability of existing data, lowering the overall level of government investment required.

Ultimately, better data and information will enable National Environmental Standards to be more precise and to support faster decision-making. It will enable governments to determine what activities will deliver the biggest environmental gains and where adjustments are needed to enable outcomes to be achieved.

Monitoring, evaluation and reporting of outcomes

There is no effective framework to support a comprehensive, data-driven evaluation of the EPBC Act, its effectiveness in achieving intended outcomes and the efficiency of implementation activities. The Act includes some requirements for monitoring and reporting, but these have not all been met. Efforts are not comprehensive, activities that are done lack coordination and often the focus is on 'bare minimum' administrative reporting.

The current approach lacks a clear articulation of environmental outcomes and a mechanism for evaluating and reporting on the effectiveness of the EPBC Act. The lack of an overarching framework to support evidenced-based and adaptive management, and to optimise monitoring and reporting effort remains a key shortcoming that needs to be addressed.

Evaluating the effectiveness of environmental policy is challenging, given that attributing observed outcomes to specific interventions can be difficult. But that does not mean environmental monitoring and evaluation should be dismissed as too hard. Effective monitoring, evaluation and reporting of the EPBC Act is essential to achieve improved environmental outcomes and maintain public trust in the environmental management systems.

The development of a coherent framework to monitor and evaluate the effectiveness of the EPBC Act in achieving its environmental outcomes is needed. Key reforms recommended by this Review, particularly the establishment of National Environmental Standards provide a solid foundation for this framework. Each Standard for MNES should have a monitoring and evaluation plan, and these plans should be underpinned by a National Environmental Standard for environmental monitoring and evaluation.

The Ecologically Sustainable Development (ESD) Committee should be assigned responsibility for developing this framework and establishing the baseline to measure performance in implementing the National Environmental Standards for MNES. The ESD Committee should prepare an annual statement for the Minister on progress implementing the framework, how the outcomes for MNES are tracking and whether the Standards need adjustment.

The Commonwealth Government has a clear leadership and stewardship role in maintaining a healthy national environment, and international reporting obligations that require a national-level view. The national State of the Environment (SoE) report is established under the Act as the mechanism to 'tell the national story' on Australia's system of environmental management. The report provides an important point-in-time overview, but it is an amalgam of insights and information and does not generate a consistent data series over time. There is no feedback loop and no requirement to stop, review, and where necessary change course.

A broader monitoring and evaluation framework, developed in collaboration all jurisdictions, is needed to better understand the performance of the different parts of the national environmental management system. Improvements in monitoring, evaluation and reporting for the EPBC Act provide a springboard for greater collaboration and alignment in national reporting, underpinned by the national environmental information supply chain.

The Commonwealth should lead a revamp of the national SoE report. The report should examine the state and trends of Australia's environment and the underlying drivers of these trends, including interventions that have been made, and current and emerging pressures. It should provide an outlook for Australia's environment, based on future scenarios. It also needs to examine the effectiveness of all interventions made to manage the environment. The Commonwealth should be required to formally respond to the national SoE report, in the form of a national plan for the environment that identifies priority areas for action and the levers that will be used to act.

National environmental-economic accounts will be a useful tool for tracking Australia's progress to achieve ESD. More efforts should be made to accelerate the development of these accounts and embed them across the implementation of the EPBC Act and as a core input to SoE reporting. The Act should include a requirement to table a set of national environmental-economic accounts in the Parliament alongside traditional budget reporting.

The reform pathway

The EPBC Act is ineffective and inefficient, and reform is long overdue. Past attempts at reform have been largely unsuccessful. The inaction of the last 2 decades is in large part the reason why the review recommends such fundamental reform to the Act and its operation, and the urgency with which reform should be pursued.

Commitment to a clear pathway of staged reform is required. The reform agenda recommended is not one to 'set and forget'. Settings should be monitored and evaluated, and the path forward adjusted as lessons are learnt and new information and ways of doing things emerge.

Immediate steps should be taken to start reform. The Act should be immediately amended to:

- create a provision to make the National Environmental Standards as Regulations
- improve the durability of the settings for accreditation of other decision-makers
- provide comprehensive powers for effective compliance and enforcement, and ensure that the use of these powers is not subject to ministerial direction
- establish the position of Environment Assurance Commissioner with responsibility for strong oversight and audit of Commonwealth decision-making and accredited arrangements
- establish the recommended committee structure.

The recommended National Environmental Standards developed in detail by this Review should be adopted, and the remainder of the full suite of Standards should be developed and implemented immediately to set clear rules and to improve decision-making. The full suite of Standards is required to support the accreditation of the environmental management arrangements of States, Territories and other parties and to provide the community with confidence that these arrangements are sound.

The process for delivering complex reforms and the mechanisms required to underpin continuous improvement should also commence immediately. This will enable policy development to occur, implementation plans to be finalised and resourcing commitments to be made. These reforms include:

- establishing the framework for monitoring, reporting and evaluating the performance of the EPBC Act
- committing to sustained engagement with Indigenous Australians to co-design reforms that are important to them – the culturally respectful use of their knowledge, effective national protections for their culture and heritage, and working with them to meet their aspirations to manage their land in partnership with the Commonwealth

- appointing a Custodian responsible for delivering a national environmental information supply chain and for overhauling the systems needed to capture value from the supply chain
- examining the feasibility of mechanisms to leverage private-sector investment and deliver the scale of restoration required for future development in Australia to be sustainable.

Within 12 months, a second tranche of reform should be completed that includes comprehensive amendments to the EPBC Act. These amendments should:

- substantially re-write Part 3 through to Part 10 to:
  - enable proactive measures to recover, repair and enhance matters of national environmental significance
  - support the efficient integration of the National Environmental Standards with decision-making of the Commonwealth or an accredited party
  - introduce limited merits review
- support strategic national and regional planning
- provide the legislative basis for the national environmental information supply chain custodian and the National Environmental Information Assets.

The National Environmental Standards for MNES should then be revised to reflect the level of protection and restoration necessary for the environment to be sustainable. A program of Commonwealth-funded national and regional plans should commence to support the implementation of the Standards.

The final phase of reforms should complete the legislative overhaul, including reforms related to the management of Commonwealth reserves and the settings for the Director of National Parks and joint-management. This phase should be finalised by 2022.

Effective administration of a regulatory system is not cost free. The recommended reforms seek to improve the overall efficiency of the system. It is important to consider how to best fund the implementation of a reformed system, including the fair costs that should be recovered from proponents. In principle, governments should pay for elements that are substantially public benefits (for example, the development of National Environmental Standards), while businesses should pay for those elements of the regulatory system required because they derive private benefits by impacting the environment (for example, approvals and monitoring, compliance and enforcement). Costs should be shared for elements of the regulatory system that have mixed benefits (for example, data and information).

The Commonwealth, in its leadership capacity, should instigate a refresh of the underpinning intergovernmental agreements on the environment, including:

- a shared future program of regional planning priorities and priorities for strategic national plans
- leveraging Commonwealth reforms in data and information
- monitoring and reporting on environmental outcomes across Australia through the State of the Environment report
- ensuring the recovery of fair costs from proponents to fund the respective regulatory systems of the States, Territories and the Commonwealth.

The recommended reforms seek to build community trust that the national environmental laws deliver effective protections and regulate businesses efficiently. The recommendations of the Review provide a path to effective environmental protection and biodiversity conservation, efficient regulation of business and confidence that the Act is working as intended to achieve nationally important environmental outcomes.

The recommended reforms are substantial, but fundamental changes are necessary to reverse the current state of environmental decline and to build the resilience of the environment to withstand future threats.

Adopting these reforms will mean that Australia can meet its future development needs in a sustainable way that delivers long-term economic growth, environmental improvement and the effective protection of Australia's iconic places and heritage for the benefit of current and future generations.

Recommendations

This Report provides 38 recommendations for reform. These recommendations should be considered in the context of the relevant chapter of this Report in which they appear. The reform pathway recommended to implement these recommendations is provided in Chapter 12. The recommendations in the report are set out in line with these tranches:

- Immediate reforms should be delivered to progress priority reforms
- The second tranche of reform should be completed within 12 months
- The third and final tranche should be completed within 2 years.

1 National-level protection and conservation of the environment and iconic places

Recommendation 1 Matters of national environmental significance should be focused on Commonwealth responsibilities for the environment.

a) The water MNES (section 24D/24E) should be amended to apply only to cross-border water resources. Any action that is likely to have a significant impact on cross-border water resources should be subject to the trigger. Restrictions should be removed where they prevent other parties from being accredited to undertake approvals of proposals assessed under the water trigger. This amendment should occur in the second tranche of reforms.

b) The nuclear MNES (section 21/22A) should be retained. In the first tranche of reforms, the Australian Government should immediately adopt the recommended National Environmental Standard for the protection of the environment from nuclear actions. In the second tranche of reform, the EPBC Act and the regulatory arrangements of the Australian Radiation Protection and Nuclear Safety Agency should be aligned, to support the implementation of best-practice international approaches based on risk of harm to the environment, including the community.

Recommendation 2 National Environmental Standards recommended by this Review should require development proposals to:

a) explicitly consider the likely effectiveness of avoidance or mitigation measures on nationally protected matters under specified climate change scenarios

b) transparently disclose the full emissions of the development.

Recommendation 3 The EPBC Act should be immediately amended to enable the development and implementation of legally enforceable National Environmental Standards.

a) The Act should set out the process for making, implementing and reviewing National Environmental Standards. The Act should include specific provisions about their governance, consultation, monitoring and review.

b) The Act should require that activities and decisions made by the Minister under the Act, or those under an accredited arrangement, be consistent with National Environmental Standards.

c) The Act should include a specific power for the Minister to exercise discretion to make a decision that is inconsistent with the National Environmental Standards. The use of this power should be a rare exception, demonstrably justified in the public interest and accompanied by a published statement of reasons which includes the environmental implications of the decision.

d) National Environmental Standards should be first made in a way that takes account of the current legal settings of the Act. The National Environmental Standards set out in detail in Appendix B should be adopted in full. The remainder of the suite of Standards should be developed without delay to enable the full suite of 9 Standards to be implemented immediately. Standards should be refined within 12 months.

Recommendation 4 In the second tranche of reforms, the EPBC Act should be amended to deliver more effective environmental protection and management, accelerate achievement of the environmental outcomes and improve the efficiency of National Environmental Standards. Parts 3 to 10 of the Act should be completely overhauled to enable:

a) National Environmental Standards to evolve and be set in a way that delivers ecologically sustainable development, through the collective contributions of the actions, decisions, plans and policies of the Commonwealth and accredited parties.

b) A proactive focus on managing matters of national environmental significance. The Act should require that matters of national environmental significance be protected, conserved, recovered and enhanced.

c) All decisions to be targeted towards achieving the environmental outcomes set out in National Environmental Standards.

d) National Environmental Standards to be more efficiently applied to decision-making, including accredited arrangements.

2 Indigenous culture and heritage

Recommendation 5 To harness the value and recognise the importance of Indigenous knowledge, the EPBC Act should require decision-makers to respectfully consider Indigenous views and knowledge. Immediate reform is required to:

a) amend the Act to replace the Indigenous Advisory Committee with the Indigenous Engagement and Participation Committee. The mandate of the Committee will be to refine, implement and monitor the National Environmental Standard for Indigenous engagement and participation in decision-making

b) adopt the recommended National Environmental Standard for Indigenous engagement and participation in decision-making

c) amend the Act to require the Environment Minister to transparently demonstrate how Indigenous knowledge and science is considered in decision-making.

Recommendation 6 The Department of Agriculture, Water and the Environment should take immediate steps to invest in developing its cultural capability to build strong relationships with Indigenous Australians and enable respectful inclusion of their valuable knowledge.

Recommendation 7 The Commonwealth Government should immediately initiate a comprehensive review of national-level cultural heritage protections, drawing on best practice frameworks for cultural heritage laws.

Recommendation 8 The Commonwealth Government, through the Director of National Parks, should immediately commit to working with Traditional Owners to co-design reforms for joint management, including policy, governance and transition arrangements. The Commonwealth Government should ensure that this process is supported by amending the EPBC Act when needed, and providing adequate resources.

3 Reducing legislative complexity

Recommendation 9 Legislative reforms should be redrafted in line with modern, best practice drafting guidance. Immediate amendments should be made to:

a) fix inconsistencies, gaps and conflicts in the EPBC Act to make it easier to understand and work with

b) implement enforceable National Environmental Standards; improve the durability of bilateral agreements; independent oversight and audit; and compliance and enforcement.

Recommendation 10 Over a 2-year transition period, a comprehensive reworking of the EPBC Act should be undertaken to fully implement the reforms recommended by this Review and to deliver an effective legislative framework.

a) The Act should be restructured to clarify and simplify the functions of the Act and how they interact.

b) Redrafting and restructuring of the Act should explicitly consider its interaction with other Commonwealth legislation to remove inconsistency and to improve operational efficiency. To deliver the full results, this may require consequential changes in other legislation.

c) Redrafting should include consideration of dividing the Act, such as creating separate pieces of legislation for its key functional areas.

4 Trust in the EPBC Act

Recommendation 11 The Commonwealth Government should increase the transparency of the operation of the EPBC Act by:

a) immediately improving the availability of information as required by the National Environmental Standards

b) immediately improving the accessibility of the Act through plain English guidelines and targeted communication

c) immediately implementing arrangements to publish reasons for Commonwealth decisions under Parts 9 and 10 of the Act

d) in the second tranche of reform, amend the Act to require publication of all information relevant to, and the reasons for, decisions made under the Act. Processes and systems should be implemented to support greater transparency.

Recommendation 12 The EPBC Act should be immediately amended to recast the statutory committees to create the Ecologically Sustainable Development Committee, the Indigenous Engagement and Participation Committee, the Biodiversity Conservation Science Committee, the Australian Heritage Council, and the Water Resources Committee. The Ecologically Sustainable Development Committee should be an overarching committee with responsibility for providing advice on National Environmental Standards, planning and implementation, and coordination across all the committees.

Recommendation 13 The EPBC Act should retain the current extended standing provisions. In the second tranche of reform, the Act should be amended to provide for limited merits review for development approval decisions but be restricted:

a) by set time frames for applications

b) to the papers at the time of the original decision

c) to matters that will have a material impact on environmental and heritage outcomes

d) to where senior counsel advice is that there is a reasonable likelihood of the matter proceeding.

5 Interactions with States and Territories

Recommendation 14 Immediately amend the EPBC Act to provide confidence to accredit State and Territory arrangements to deliver single-touch environmental approvals in the short-term. Accreditation should be:

a) underpinned by legally enforceable National Environmental Standards

b) subject to rigorous, transparent oversight by the Commonwealth, including comprehensive audit by the independent Environment Assurance Commissioner.

6 Commonwealth decisions and interactions with other Commonwealth laws

Recommendation 15 Increase the level of environmental protection afforded in Regional Forest Agreements (RFAs).

a) The Commonwealth should immediately require, as a condition of any accredited arrangement, States to ensure that RFAs are consistent with the National Environmental Standards.

b) In the second tranche of reform, the EPBC Act should be amended to replace the RFA 'exemption' with a requirement for accreditation against the National Environmental Standards, with the mandatory oversight of the Environment Assurance Commissioner.

Recommendation 16 In the second tranche of reform, the accreditation model should be applied to arrangements with other Commonwealth agencies, where they demonstrate consistency with the National Environmental Standards and subject themselves to transparent independent oversight. Specifically:

a) The complex requirements for Ministerial advice on certain Commonwealth authorisations (sections 160–164) should be removed. These arrangements should be subject to the accreditation model, or the standard assessment and approval provisions of the EPBC Act.

b) The accreditation model should be applied to the National Offshore Petroleum Safety and Environmental Management Authority and the Australian Fisheries Management Authority using appropriate legislative amendments.

c) Where relevant, a broader application of the National Environmental Standards to other Commonwealth decisions and management plans, beyond those already provided for under the current settings of the Act, should be considered.

Recommendation 17 In the second tranche of reform, a National Environmental Standard for actions impacting on Commonwealth land and Commonwealth actions should be developed to provide a national benchmark for effective environmental protections. The Commonwealth should promote the broader application of this Standard by encouraging other jurisdictions to adopt it.

Recommendation 18 In the second tranche of reform, Commonwealth assessment pathways should be rationalised to enable a risk-based approach to assessments that is proportionate to the level of impact on matters protected by the EPBC Act.

Recommendation 19 In the second tranche of reform, the implementation of Commonwealth assessments should be supported by providing clear guidance, modern systems and appropriate cost recovery.

Recommendation 20 Amend the EPBC Act to ensure wildlife permitting requirements align with Australia's international obligations related to:

a) species listed under Appendix I and II of the *Convention on the Conservation of Migratory Species* (Bonn Convention)

b) import permitting requirements for Appendix II listed species under the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES)

c) requirements to ensure the humane transport of live fish and live invertebrates.

Recommendation 21 Amend Part 13A Division 2 and 5 of the EPBC Act, EPBC Regulations and associated definitions to streamline and reduce regulatory burden on wildlife trade permitting processes and to enable proportionate compliance and enforcement responses.

Recommendation 22 Reduce instances under the EPBC Act and EPBC Regulations where wildlife trade permitting may be subject to abuse by applicants.

a) Tighten the definitions for the non-commercial categories of exhibition and travelling exhibition, including what can be classified as a zoo.

b) Apply a fit-and-proper-person test as broadly as possible to wildlife permitting approvals under the Act.

7 Accreditation, audit and independent oversight

Recommendation 23 Immediately establish, by statutory appointment, the position of Environment Assurance Commissioner with responsibility to:

a) oversee audit of decision-making by the Commonwealth under the EPBC Act, including the Office of Compliance and Enforcement

b) oversee audit of an accredited party under an accredited arrangement

c) conduct performance audits, like those of the Auditor General and set out in the *Auditor-General Act 1997*

d) provide annual reporting on performance of Commonwealth and accredited parties against National Environmental Standards. This report should be provided to the Environment Minister, to be tabled in the Australian Parliament in a prescribed timeframe.

Recommendation 24 In the second tranche of reform, the EPBC Act should be amended to remove outdated bilateral agreement processes and replaced with robust and efficient accreditation processes, based on National Environmental Standards, that include:

a) self-assessment of arrangements by the party proposing to be accredited

b) independent advice of the Environment Assurance Commissioner

c) the opportunity for the Australian Parliament to disallow a proposed accreditation

d) accreditation agreement by the Commonwealth Environment Minister

e) escalation processes to resolve disputes between the Commonwealth Environment Minister and the accredited party

f) the Commonwealth Environment Minister's unfettered right to make a decision

g) scheduled formal review.

8 Planning and restoration

Recommendation 25 In the second tranche of reform, the EPBC Act should be amended to support more effective planning that accounts for cumulative impacts and past and future key threats and build environmental resilience in a changing climate. Amendments should enable:

a) strategic national plans to be developed, consistent with the National Environmental Standards, to guide a national response and effectively target action and investment to address nationally pervasive issues such as high-level and cross-border threats

b) regional recovery plans to be developed, consistent with the National Environmental Standards, to support coordinated threat management and investment to reduce cumulative impacts on threatened species and ecological communities

c) ecologically sustainable development plans to be developed and accredited, consistent with the National Environmental Standards. These plans should address environmental, economic, cultural and social values and include priority areas for investment in the environment

d) strategic assessments to be approved, consistent with the National Environmental Standards and regional recovery plans and provide for a single approval for a broad range of actions

e) the Commonwealth to accredit plans made by other parties, where these plans are consistent with National Environmental Standards and other relevant plans

f) plans to be made consistent with key principles for quality regional planning.

Recommendation 26 In the second tranche of reform, the Commonwealth should establish a dedicated program to develop and implement strategic national plans and regional plans with a focus on key Commonwealth priorities, including:

a) strategic national plans for key, new and emerging threats of national significance

b) regional plans in biodiversity hotspots, areas foreshadowed as national priorities for economic development and areas where matters of national environmental significance are under greatest threat.

Recommendation 27 The Commonwealth should reform the application of environmental offsets under the EPBC Act to address decline and achieve restoration.

a) The EPBC Act environmental offsets policy should be immediately amended (or a National Environmental Standard for restoration that includes offsets should be made) in accordance with the recommendations in Box 28.

b) As part of the second tranche of reform, the Act should be amended or standalone legislation passed to legislate the revised offsetting arrangements, providing the certainty required to encourage investment in restoration.

Recommendation 28 To foster private sector participation in restoration, the Commonwealth should formally investigate and consider:

a) co-investment with private capital to improve the sustainability of private land management

b) establishing a central trust or point of coordination for private and public investment in restoration to be delivered (including offsets)

c) opportunities to leverage existing markets (including the carbon market) to help deliver restoration

d) changes to the tax code that can deliver environmental restoration.

9 Compliance and enforcement

Recommendation 29 Immediate reforms are required to ensure that compliance and enforcement functions by the Commonwealth, or an accredited party are strong and consistent.

a) The recommended National Environmental Standard for compliance and enforcement should be immediately adopted.

b) Commonwealth compliance and enforcement functions and those of any accredited party should be required to demonstrate consistency with this Standard.

c) The Commonwealth should retain the ability to intervene in project-level compliance and enforcement, where egregious breaches are not being effectively dealt with by the accredited party.

Recommendation 30 The Commonwealth should immediately increase the independence of and enhance Commonwealth compliance and enforcement. This requires:

a) Simplified law and a full suite of modern regulatory surveillance, compliance and enforcement powers and tools, including targeted stakeholder resources to build understanding and voluntary compliance.

b) Assigning independent powers for Commonwealth compliance and enforcement to the Secretary of the Department of Agriculture, Water and the Environment, with compliance functions consolidated into an Office of Compliance and Enforcement within the Department. This office should be provided with a full suite of modern regulatory powers and tools, and adequate resourcing to enable the Commonwealth to meet the National Environmental Standard for compliance and enforcement.

c) An increase in the transparency and accountability of activities, including clear public registers of activities, offsets and staff conflicts of interest.

10 Data, information and systems

Recommendation 31 The Commonwealth should initiate immediate improvements to the environmental information system by:

a) adopting a National Environmental Standard for data and information to set clear requirements for providing best available evidence, including requiring anyone with environmental information of material benefit to provide it to the environmental information supply chain

b) appointing an interim supply chain Custodian to oversee the improvements to information and data

c) designating a set of national environment information assets to ensure essential information streams are available and maintained to underpin the implementation and continual improvement of the National Environmental Standards for MNES

d) expanding the application of existing work with jurisdictions on the digital transformation of environmental assessments and ensuring it is aligned with implementation of the national environmental information supply chain

e) commencing the overhaul of the Department's information management systems to provide a modern interface for interactions on the EPBC Act and support better use and efficient transfer of information and knowledge.

Recommendation 32 The Commonwealth should build, maintain and improve an efficient environmental information supply chain to deliver the best available evidence to improve the effectiveness of the EPBC Act. Aligned with the second tranche of reform, the supply chain should:

a) have a clearly assigned Custodian responsible for providing long-term stewardship and coordination

b) have a legal foundation with provisions in the Act that details responsibilities, governance, National Environmental Information Assets and reporting to ensure accountability

c) be underpinned by a long-term strategy and roadmap prepared and maintained by the Custodian, with the first strategy due within 12 months

d) be supported by a coordinated effort to improve national ecosystem and predictive modelling capabilities

e) have adequate up-front and ongoing funding.

11 Environmental monitoring, evaluation and reporting

Recommendation 33 To monitor and evaluate the effectiveness of the EPBC Act the Commonwealth should immediately:

a) establish a National Environmental Standard for environmental monitoring and evaluation of outcomes to ensure that all parties understand their obligations to monitor, evaluate, report on and review their activities.

b) assign the Ecologically Sustainable Development Committee responsibility for the oversight and management of monitoring, evaluating and reporting on the outcomes of the Act. Immediate priorities of the Ecologically Sustainable Development Committee should be developing a monitoring and evaluation framework and preparing monitoring and evaluation plans for the National Environmental Standards for MNES.

Recommendation 34 In the second tranche of reforms, the EPBC Act should be amended to require formal monitoring, evaluation and reporting on the effectiveness of the Act in achieving its outcomes. Specifically, amendments should include requirements to:

a) deliver a comprehensive and coherent monitoring and evaluation framework that includes appropriate mechanisms for embedding the framework including governance

b) require a long-term strategy to identify and achieve systematic monitoring required to understand the trend and condition of MNES

c) deliver an annual statement by the Ecologically Sustainable Development Committee to the Environment Minister and the Environment Assurance Commissioner. The statement should evaluate environmental performance under the Act, how the outcomes for MNES are tracking, and make recommendations for adjustments as required.

Recommendation 35 The Commonwealth should immediately agree to deliver a published response to the 2021 State of the Environment report. The response should provide a strategic national plan for the environment, including annual reporting on the implementation of the plan.

Recommendation 36 In the second tranche of reform, the EPBC Act should be amended to provide a sound legislative basis for the Commonwealth's national leadership and reporting role including amendments to:

a) set out the purpose of the national State of the Environment report to provide the national story on environmental trends and condition, and require that it be independent, based on a consistent, long-term set of environmental indicators, and align the timing of the report to enable it be used as a contemporary input into the decadal review of the Act

b) require a government response to future State of the Environment reports that should be tabled in the Australian Parliament in the form of a strategic national plan for the environment and annual reports on the implementation of the plan.

c) require a set of national environmental-economic accounts to be tabled annually in the Australian Parliament alongside traditional budget reporting.

Recommendation 37 As part of the third tranche of reform, the Commonwealth, in its national leadership role, should build on its own reforms by pursuing harmonisation with States and Territories to streamline national and international reporting by delivering:

a) a national environmental monitoring and evaluation framework, developed in collaboration with jurisdictions, to better understand the performance of the different parts of the national environmental management system

b) a nationally agreed system of environmental-economic accounts to support streamlined environmental reporting. These accounts should be continuously improved over time.

12 The reform pathway

Recommendation 38 In the third tranche of reform, the Commonwealth should instigate a refresh of intergovernmental cooperation and coordination to facilitate collaboration with the States and Territories, including:

a) greater consistency and harmonisation of environmental laws

b) finalising a single national list of protected matters to facilitate streamlining under the common assessment method

c) a shared future program of regional planning and strategic national plans

d) leveraging Commonwealth reforms in data and information

e) consolidating monitoring and reporting on environmental outcomes across Australia through the State of the Environment report and other reporting.

About the Review

Background

In accordance with section 522A of the EPBC Act, an Independent Review of the Act is required at least every 10 years. Section 522A requires the Review to examine the operation of the Act and the extent to which its objects have been achieved. The first review was undertaken in 2009.

On 29 October 2019 the Minister for the Environment, the Hon. Sussan Ley MP, commissioned the second Independent Review of the *Environment Protection and Biodiversity Conservation Act 1999*.

The Minister appointed Professor Graeme Samuel AC to conduct the Review (Box 1).

Box 1 Independent Reviewer – Professor Graeme Samuel AC

Professor Samuel is recognised as having specialist public policy expertise in economic reform and regulation.

At the time of the Review, Professor Samuel holds the position of Professorial Fellow in Monash University's Business School and School of Public Health and Preventative Medicine. He is also President of Dementia Australia, Chair of Australian Dementia Network Ltd, Chair of Lorica Health, and Chair of Airlines for Australia and New Zealand.

He was formerly President of the National Competition Council and Chair of the Australian Competition and Consumer Commission. He has been involved in several recent reviews and inquiries, including on economic regulation, governance and the efficient operation of the Victorian urban water sector, Australia's Independent Medical Research Institutes, the Commonwealth Department of Health's review of private health insurance, Australia's Wool Selling Systems, the Food and Grocery Code, the Australian Prudential Regulatory Authority's Prudential Inquiry into the Commonwealth Bank of Australia and the Capability Review of APRA.

In 2010 he was made a Companion of the Order of Australia for eminent service to public administration through contributions in economic reform and competition law, and to the community through leadership roles with sporting and cultural organisations.

Scope of the Review

The Australian Government issued broad terms of reference for the Review as follows:

1) In accordance with section 522A of the EPBC Act, the Review will examine:
    a) the operation of the Act
    b) the extent to which the objects of the Act have been achieved.
2) The Review will make recommendations to modernise the EPBC Act and its operation to address current and future environmental challenges, including consideration of:
    a) the objects in section 3(1)(a)–(g) of the Act
    b) Australia's international environmental responsibilities
    c) Indigenous peoples' knowledge and role in the management of the environment and heritage
    d) implementation of relevant agreements between the Commonwealth, States and Territories
    e) other legislation that may relate to the operation of the Act
    f) recommendations of previous reviews and inquiries and significant publications regarding the operation of the Act and potential reform
    g) broad consultation, including with State, Territory and other levels of government, non-government organisations, Indigenous peoples, members of the community, industry and academia
    h) costs and benefits of recommendations.

3) The review will be guided by the principles of:
   a) protecting Australia's unique environment through strong, clear and focused protections
   b) making decisions simpler, including by reducing unnecessary regulatory burdens for Australians, businesses and governments
   c) supporting partnerships to deliver for the environment, supporting investment and creating new jobs
   d) improving transparency to ensure better use of information, accountability and trust in the system
   e) streamlining and integrating planning to support ecologically sustainable development.
4) The Independent Reviewer will provide a report to the Minister for the Environment within 12 months of the commencement of the Review.

The Review process

Professor Samuel was supported throughout the Review by an Expert Panel (Box 2). The Expert Panel brought expertise and experience in industry, environmental law, agriculture and Indigenous culture and heritage to the Review.

The Expert Panel provided advice to the Reviewer on the Discussion Paper, Interim Report and the Final Report.

Box 2 Expert Panel members

- Dr Erica Smyth AC – Dr Smyth has over 40 years' experience in the minerals and petroleum industry, initially as an exploration geologist and later in government approvals, corporate affairs and community consultation for BHP and Woodside. At the time of the Review she was the Chair of National Offshore Petroleum Safety and Environmental Management Authority Advisory Board and a non-executive director of the MinEx CRC and the NERA Growth Centre.
- Dr Wendy Craik AM – Dr Craik is a respected policy advisor with a wealth of experience in natural resource management in Australia and overseas. At the time of the Review she was the Chair of the Climate Change Authority and undertook the Independent Review into Interactions Between the EPBC Act and the Agriculture Sector in 2018. Dr Craik's previous roles include CEO of the Murray–Darling Basin Commission, President of the National Competition Council, Chair of the Australian Fisheries Management Authority, Executive Director of the National Farmers' Federation and Executive Officer of the Great Barrier Reef Marine Park Authority.
- Mr Bruce Martin – Mr Martin is a Wik Ngathan man from the community of Aurukun on the Western Cape York Peninsula. He has 10 years' experience in the community development sector. He worked for the Cape York Land Council, the Wuchopperen Aboriginal Medical Service, the Queensland Department of Families in Cairns and the Aurukun Shire Council. At the time of the Review he was a member of the board of the Indigenous Land and Sea Corporation, the Managing Director of the Regional Development Corporation and Director of Civil Safety FNQ. He was also president of the Cape York Peninsula Live Export Group and a member of Regional Development Australia Far North Queensland and Torres Strait.
- Professor Andrew Macintosh – Professor Macintosh is an environmental law and policy expert. He has been a leading contributor to environmental and climate change law for over a decade. He is regarded as one of Australia's pre-eminent experts on environmental regulation, federal environmental law and carbon offsets. At the time of the Review he was the Director of Research at the ANU Law School, Chair of the federal Emissions Reduction Assurance Committee, and a director of the Sydney Desalination Plant and Paraway Pastoral Company.

In March 2020 the Governor-General appointed Professor Macintosh as a Royal Commissioner for the national Royal Commission into the Black Summer bushfires. As a result of the appointment he was unable to continue as an Expert Panel member for the duration of the Review.

Discussion Paper

With broad terms of reference, a key early step in the Review process was to identify those areas where reform would deliver the greatest benefit for the environment, business and the community, while maintaining strong environmental standards.

Professor Samuel published a Discussion Paper on 21 November 2019. The Discussion Paper provided background information about the EPBC Act and the outlook for the Australian environment, focus areas for how the Act could be improved, and principles to guide future reform.

The Review invited submissions on the questions asked in the Discussion Paper.

The Review received and analysed 3,242 unique submissions and 26,053 largely identical contributions on the Discussion Paper.

Interim Report

The Interim Report set out the Reviewer's preliminary views on the EPBC Act and how it operates. It provided detail of the fundamental problems of the legislation and proposed key reform directions needed to address them. It was informed by submissions on the Discussion Paper and discussions the Reviewer had with stakeholders.

The Interim Report was provided to the Minister for the Environment on 30 June 2020 and published on 20 July 2020.

Feedback on the Interim Report was invited through a survey and 847 responses were received.

Consultation

An extensive stakeholder consultation process was undertaken to inform the Review. Consultation involved face-to-face meetings, public submissions and comments, and focused roundtable discussions. A broad range of stakeholders were engaged with throughout the Review, including State and Territory Governments, statutory committees, joint boards of management, Indigenous Australians, scientists, interest groups, academics and the general public.

Face-to-face meetings were held with national-level stakeholders, statutory committees and States and Territories following the releases of the Discussion Paper and the Interim Report.

A series of roundtables and a consultative group were convened in August 2020 to enable Professor Samuel to hear views on the Interim Report. Expert input was invited to help inform the refinement of the National Environmental Standards recommended by the Interim Report.

A complete list of stakeholders Professor Samuel met with for the Review is provided at Appendix A.

This report

This is the Final Report of the Review. Chapters 1 to 11 of the report set out the key problems with the Act and its operations and provides recommendations to address these. Chapter 12 sets out the recommended pathway with 3 tranches of reform. The recommendations in the report are set out in line with these tranches:

1) Immediate reforms should be delivered to progress priority reforms.
2) The second tranche of reforms should be completed within 12 months.
3) The third and final tranche should be completed within 2 years.

Appendix B of the report presents recommended National Environmental Standards that should be immediately adopted as part of a broader suite of Standards that will be central to the reform of the Act.

For accessibility purposes, in-text references have been kept to a minimum. A Further reading section at the end of the Report provides full references of the submissions and sources that the Report drew from.

1 National-level protection and conservation of the environment and iconic places

Key points

The environment and our iconic places are in decline and under increasing threat. The EPBC Act does not enable the Commonwealth to effectively protect and conserve nationally important environment and heritage matters. It is not fit for current or future environmental challenges.

The key reasons the operation of the EPBC Act does not effectively protect the environment are:

- The Act lacks clear national outcomes and effective mechanisms to address environmental decline. Ecologically sustainable development is a key principle of the Act, but it is not being applied. The environment is not being managed in a sustainable way.
- The Act does not facilitate a strategic or systematic approach to managing or restoring the environment. Cumulative impacts and emerging threats are not adequately managed. The current settings cannot halt the trajectory of environmental decline, let alone reverse it.
- Decision-making is process-driven and too focused on individual projects. Environmental offsets have become the default, rather than the exception after all practical options to avoid or mitigate impacts have been exhausted.
- Opportunities for coordinated national action to address key environmental challenges – such as feral animals, habitat restoration and adapting to climate change – are ad hoc, rather than a key national priority.

The key reforms recommended by the Review are:

- Matters of national environmental significance should focus on Commonwealth responsibilities resulting from international agreements, national-level priorities and cross-border matters, as was the original intent of the EPBC Act.
- New, legally enforceable National Environmental Standards should be made to ensure that decisions clearly support ecologically sustainable development, including the sustainable management of heritage.
- The full suite of National Environmental Standards, including those developed in detail by this Review should focus on outcomes for matters of national environmental significance and the important processes for sound and efficient decision-making. Standards will be most effective when planning, policies, decisions and funding align to support outcomes.
- National Environmental Standards should be made immediately, to maximise the environmental outcomes that can be achieved under the current legal settings of the EPBC Act. However, current settings are unlikely to significantly alter downward trends or deliver sustainable development outcomes.
- The EPBC Act, and the National Environmental Standards that underpin its implementation, should support a shift from transaction-based regulation to an integrated outcome-driven system that maintains and enhances the environment.

Standards alone will not halt the decline of the environment. To enable future development to be sustainable, cumulative impacts and threats to the environment need to be managed, and the impacts of necessary development balanced by restoring the environment.

The reforms recommended in this Review combine to provide a more effective and efficient regime to protect Australia's unique environment and iconic places. They aim to foster greater cooperation and harmonisation between the Commonwealth, States and Territories.

This will require strong national leadership and intergovernmental cooperation to safeguard the future of Australia's environment.

Protecting the environment and iconic places is important for all Australians. Australia is recognised as a global biodiversity hotspot, with unique plants and animals found nowhere else in the world. Indigenous Australians have a deep connection to and knowledge of Country. They are the custodians of the oldest continuous culture in the world. As the nation's central piece of environmental law, the EPBC Act must ensure the environment, natural resources and Australia's rich heritage is maintained for the benefit of future generations.

A healthy environment is important to the quality of life, health and wellbeing of all Australians. The recent bushfire season provided us with a stark reminder of this. For Indigenous Australians, connection to healthy Country is their expression of culture. Many industries are reliant on the sustainable use of Australia's vast natural resource base. Their long-term productivity and profitability contribute to the continued vibrancy of regional areas and the nation. Many contributions to the Review have presented a strong view that nature has a right to exist for its intrinsic value, rather than just as a resource.

The overwhelming message received from contributions to the Review is that Australians care immensely about the state, and future of our unique and inspiring environment. They highlight a strong community expectation that the Commonwealth plays a key role in managing Australia's environment and maintaining effective national environmental laws.

1.1 The environment and iconic places are in decline and under increasing threat

The evidence provided to this Review about the state of Australia's environment is compelling. Overall, Australia's environment is in a state of decline and under increasing pressure. There are localised examples of good outcomes but the national outlook is one of decline and increasing threat to the quality of the environment. At best, the operation of the EPBC Act has contributed to slowing the overall rate of decline (Box 3).

In contrast to the outcomes for biodiversity, contributions to the Review present a mixed view about heritage. The EPBC Act has strengthened Commonwealth obligations and enabled resources to be targeted towards protecting Australia's significant and outstanding heritage places. However the World Heritage and National Heritage values of some iconic places have diminished, and the recognition of and funding for community and historic heritage has reduced.

Box 3 Trends in Australia's biodiversity, ecosystems and heritage

It is not the Review's role to provide a comprehensive summary of the state of the environment. This box provides a synopsis of the latest national State of the Environment report (Jackson et al. 2016) and contributions to the Review from a range of experts.

Threatened species and biodiversity

Australia is losing biodiversity at an alarming rate and has one of the highest rates of extinction in the world. More than 10% of Australia's land mammals are now extinct and another 21% are threatened and declining (Woinarski et al. 2015). Populations of threatened birds, plants, fish and invertebrates are also continuing to decrease and the list of threatened species is growing. Although there is evidence of localised population increases where targeted management actions are undertaken (such as controlling or excluding feral animals or implementing ecological fire management techniques), these are exceptions rather than a broad trend.

Since the EPBC Act was introduced, the threat status of species has deteriorated. Approximately 4 times more vulnerable-listed species have shown declines in their threat status (become more threatened) than those that have shown an improvement. Over its 20-year operation, only 13 animal species (0.7%) have been removed from the Act's threatened species lists and only one of these (Muir's Corella) is generally considered a case of genuine improvement (Wentworth Group of Concerned Scientists 2020).

Continued next page

Box 3 (continued)

Protected areas

Australia's network of protected areas – for example, national parks, marine reserves and Indigenous Protected Areas – has expanded. However, not all ecosystems or habitats are well represented, and the management of these areas is not delivering strong outcomes for the environment. Considering future scenarios indicates that reserves and protected areas alone are unlikely to provide adequate protection for species and communities in the face of future pressures such as climate change.

Oceans and marine

Aspects of Australia's marine environment are in good condition and there have been some management successes, but our oceans face significant current and future threats from climate change and human activity, especially land-based pollution.

Increases in humpback whale populations for example, are encouraging. However, submissions pointed to recent evidence of steep declines in habitats across Australia's marine ecosystems – including coral reefs in the Great Barrier Reef, saltmarshes on the east coast, mangroves in northern Australia, and kelp forests in Tasmania.

Heritage

The 2016 national State of the Environment report found that 'Australia's extraordinary and diverse natural and cultural heritage generally remains in good condition, despite some deterioration and emerging challenges since 2011'. The International Union for Conservation of Nature (IUCN) has specific concerns for 3 of Australia's 20 World Heritage places (IUCN 2017). The loss of heritage values since the last EPBC Act Review is due to a range of factors – most recently, the impact of the 2019–20 bushfire events on World Heritage properties and National Heritage places.

For more information, see the Environmental decline further reading at the end of this report.

The Australian environment faces significant future pressures, including land-use change, pollution, habitat fragmentation and degradation, and invasive species. Climate change will continue to exacerbate these impacts and contribute to ongoing decline.

The current state of the environment means that it is unlikely to be sufficiently resilient to increasing future threats. The lack of long-term monitoring data limits the ability to understand the pace and extent of environmental decline, which actions to prioritise and whether previous interventions have been successful.

1.2 The EPBC Act does not enable the Commonwealth to play its part in managing Australia's environment

1.2.1 Managing Australia's environment is a shared responsibility

The construct of Australia's federation means that the management of Australia's environment is a shared responsibility, and jurisdictions need to work effectively together and in partnership with the community.

The Commonwealth, on behalf of the nation, has signed up to international agreements on the environment and has a responsibility to ensure they are implemented. The Commonwealth's responsibilities in managing the environment have been confirmed by High Court decisions over time and agreed in foundational intergovernmental agreements on the environment (for example, CoAG 1992). These agreements reflect the respective constitutional responsibilities of the Commonwealth and States and Territories. The Commonwealth's interests are known as matters of national environmental significance (MNES) (see 'Further reading' list). The Commonwealth also has responsibilities under the EPBC Act for protection of the environment from proposals involving the Commonwealth.

The EPBC Act implements the Commonwealth's responsibility for key MNES. Changes over time, including to MNES, have contributed to a drift in the Commonwealth's role and introduced overlaps with the role of the States and Territories. This is particularly the case for MNES for activities impacting water resources and nuclear actions, which must the consider the whole of the environment and inherently overlap with State and Territory responsibilities.

The EPBC Act is also the mechanism for the Commonwealth to regulate the impacts to the environment on Commonwealth land and waters and the activities undertaken by the Commonwealth.

Australia's system of environment and heritage protection management must recognise the roles of the Commonwealth and States and Territories, to enable them to work together effectively. This was acknowledged by all jurisdictions in the foundational intergovernmental agreements, which committed to an intent of harmonised laws and regulatory systems based on clear interests and, where possible, accommodating their respective responsibilities. This direction was embedded in the original design of the EPBC Act, but the implementation of the Act has failed to fulfil this ambition. The Commonwealth and jurisdictions have instead focused narrowly on their defined interests, rather than on genuine harmonisation of responsibilities in the way the environment is managed. A recommitment to intergovernmental cooperation is needed to safeguard the future of Australia's environment and iconic places.

1.2.2 The environment is not managed in a holistic way

When the EPBC Act was introduced it was intended to be part of a comprehensive package of initiatives – including the Natural Heritage Trust Reserve, which has a main objective 'to conserve, repair and replenish Australia's natural capital infrastructure'. The Act and the programs meant to support it have become disconnected. Planning, funding and regulatory decisions are not integrated or aligned. The focus and priorities of governments have not been directed towards achieving long-term environmental sustainability. The EPBC Act does not work in concert with the environmental responsibilities and activities of States and Territories to enable the environment to be managed as a system at the right scale.

Pursuing strategic opportunities to improve outcomes for Australia has become discretionary, particularly when resources are constrained. The Commonwealth has retreated to process-driven project-level transactions, rather than leading strategically in the national interest.

Decisions that determine environmental outcomes are generally made on a project-by-project basis, only when impacts exceed a certain size and only for those parts of the environment protected under the EPBC Act. This means that cumulative impacts on the environment are not systematically considered. This puts pressure on individual projects to deliver sustainable development, rather than being implemented within an integrated system of environmental management that operates at multiple scales.

Contributions to the Review have highlighted the need to manage the environment in a strategic and systematic way. Submissions have suggested that the Commonwealth take over the environment responsibilities of the States and Territories. This is neither appropriate nor necessary.

Submissions to the Review have further pointed to the missed opportunities to incorporate Indigenous knowledge, including traditional land management practices, to protect the environment and Indigenous heritage. In its submission to the Review, the Central Land Council (2020) stated:

> The knowledge and understanding held by Indigenous peoples, accrued over tens of thousands of years, provides rich expertise that should be more appropriately valued and engaged in protecting and managing Australia's environment.

Although the objects of the EPBC Act include an intent to recognise the role of Indigenous Australians and promote the use of traditional knowledge, in practice this rarely occurs (Chapter 2). Bringing traditional knowledge and understanding into decision-making and planning will create opportunities for the holistic management of the environment.

The Commonwealth needs to work cooperatively with others in a system where the collective efforts of all parties contribute to environmental outcomes at multiple scales.

1.2.3 The EPBC Act is not delivering ecologically sustainable development

The promotion of ecologically sustainable development (ESD) is an object of the EPBC Act. ESD means that development to meet the needs of Australians today should be done in a way that ensures the environment, natural resources and heritage are maintained for the benefit of future generations.

The principles of ESD underpin good environmental decision-making frameworks around the world and were committed to by the Commonwealth and all States and Territories in the Intergovernmental Agreement on the Environment in 1992 (CoAG 1992). These principles have been incorporated in various planning and environmental laws across Australia, including the EPBC Act (Box 4).

Despite being central to the objects of the EPBC Act, ESD is not being applied or achieved. The decision-making framework lacks strength and transparency. Decisions under the Act are required to consider the principles of ESD (including the precautionary principle) but these are not given sufficient weight or prominence, particularly in approval decisions.

ESD is an outcome of a sustainably managed environment and the sum of the collective actions (positive and negative) of all parties.

Box 4 Principles of ecologically sustainable development

Section 3A of the EPBC Act outlines principles of ecologically sustainable development:

- decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
- if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (known as the precautionary principle)
- the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations (known as the principle of inter-generational equity)
- the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making
- improved valuation, pricing and incentive mechanisms should be promoted.

1.3 The EPBC Act does not enable the Commonwealth to effectively protect and conserve nationally important matters

1.3.1 The EPBC Act lacks clear outcomes for MNES

The EPBC Act is not clear on what environmental outcomes it seeks to achieve for matters of national environmental significance (MNES). The objects of the Act are written broadly, which is appropriate for national legislation. The Act lacks effective mechanisms to describe or measure the environmental outcomes it is seeking to achieve and to ensure decisions are made in a way that contributes to these outcomes.

The current arrangements and decision-making requirements for MNES are opaque and buried within hundreds of statutory documents. These arrangements fail to integrate the goals of key plans (such as recovery plans and other management documents) with approval decisions. The Act lacks clear rules for protecting MNES and enables considerable discretion in decision-making.

There is no clear link between how decisions to approve development are connected to achieving environmental outcomes for MNES and the objects of the EPBC Act.

1.3.2 The way the EPBC Act operates facilitates ongoing decline

The EPBC Act is transactional, focused on individual matters and project-by-project development assessment. Opportunities for more strategic approaches that can consider landscape-scale management and cumulative impacts, such as bioregional plans and strategic assessments, have a history of limited use (Chapter 8). This has resulted in limited consideration or management of cumulative impacts.

Individually listed species and ecological communities dominate the number of assessments carried out under the EPBC Act, both in number and as triggers of development impact assessments. Species and ecological communities are listed using a complex scientific assessment based on internationally determined scientific criteria. After listing, a conservation advice is prepared for each listed species or community. The Environment Minister may decide that a more comprehensive recovery plan is required.

Under the present arrangements, considerable attention is given to the assessment and listing process, with little attention or resources provided for effective management. Currently, there are 718 recovery plans in place for species and 27 in place for ecological communities (of 1,891 listed species and 84 listed ecological communities) (DAWE unpublished). Many of these plans are out of date or expired. There is no requirement to implement a recovery plan or report on progress and the outcomes achieved.

Plans are generally not backed by the necessary resources and actions to implement them. The way the EPBC Act currently operates implies that the goal is to list things and prepare a plan. There is little incentive to achieve environmental outcomes. Under these arrangements, it is not surprising that the number of threatened species and communities listed has increased over time and very few have recovered to the point that they can be removed from the list.

The case is similar for heritage places. Although 5-yearly review and reporting requirements exist for National and Commonwealth Heritage places, none of the 3 past reports have been able to assess the effectiveness of existing heritage management plans (DoEE 2019a). Despite considerable attention at nomination and listing, the ongoing expectations and obligations of property owners and site managers are often unclear and ill-defined.

Under the current settings, cumulative impacts on and threats to the environment are often not well managed. Development assessment and approval decisions are largely made on a project-by-project basis, with the assessment of impacts largely done in isolation of other current or anticipated projects. This approach underestimates the broadscale cumulative impacts that development can have on a species, ecosystem or region. Each individual development may have minimal impact on the national environment, but the combined impact of development can result in significant long-term damage.

This focus on project-by-project assessment and approvals sets the EPBC Act up to deliver managed decline, not sustainable maintenance or recovery. The impact of development is not counterbalanced with legislated recovery processes. This is exacerbated by an EPBC Act environmental offsets policy which is ineffective at compensating for loss and inconsistently implemented. The decision-making hierarchy of ‘avoid, minimise and only then offset’ is not being applied – offsets are too often used as a default measure not as a last resort (Chapter 8).

The EPBC Act itself does little to support environmental restoration. Stabilisation of decline or a net improvement in the state of the environment cannot be achieved under the current system. Restoration is required to enable future development to be sustainable.

1.4 Recommended reforms

1.4.1 The EPBC Act should focus on Commonwealth responsibilities

The Review has received a wide range of views on the MNES that should be included in the EPBC Act (Box 5). Many, including scientific stakeholders and environmental non-government organisations (eNGOs), express a view that triggers should be more expansive, extending the reach of the Commonwealth to deliver greater environmental protections. Others, particularly industry groups and advocates of streamlined and efficient regulation, argue that current triggers result in duplication with other regulators and should be removed (Chapter 5).

Box 5 Stakeholder suggestions for changes to matters of national environmental significance

Stakeholders provided suggestions covering the key themes of:

- Ecosystems, biodiversity and habitat – including the National Reserve System (national parks, marine protected areas, covenanted private lands and Indigenous Protected Areas), vulnerable ecological communities, ecosystems of national importance, areas of outstanding biodiversity value (climate refuges, biodiversity hotspots and critical habitats), wetlands of national significance and native vegetation.
- Threats – including key threatening processes (for example, significant land clearing, invasive species or disaster-related impacts).
- Cultural – for including Indigenous values, priorities and places, or entities of particular significance and concern (such as species, populations, ecological communities, ecosystems, stories, Songlines), tangible and intangible cultural heritage.
- Climate change – including significant greenhouse gas emissions, and protection of the environment from climate change impacts (discussed later in this section).
- Water – including significant water resources (surface and groundwater, rivers, wetlands, aquifers and their associated values), an expanded water trigger beyond coal seam gas and large coal mining, nationally significant river systems, and groundwater-dependent ecosystems. Other stakeholders suggest removing or reducing the scope of the water trigger to remove duplication with State and Territory regulations (discussed later in this section).
- Nuclear – expand limitations contained in section 140A of the EPBC Act that prohibit approval of certain nuclear installations to include all uranium mining and milling actions. Other stakeholders suggest reducing the scope of the nuclear trigger to remove duplication with State, Territory and other Commonwealth regulations (discussed later in this section).

Note: This box draws on input from many submissions to the EPBC Act Review's Discussion Paper. For a selection of submissions and documents that detail the range of positions put forward, see the Suggestions for matters of national environmental significance further reading at the end of this report.

Many of the suggestions about the Commonwealth taking on a broader role reflect a lack of trust that States and Territories will manage these elements well. The Review does not agree with suggestions that the environmental matters the EPBC Act deals with should be broadened. The remit of the Act should not be expanded to cover environmental matters that are State and Territory responsibilities. To do so would result in muddled responsibilities, further duplication and inefficiency. Unclear responsibilities mean that the community is less able to hold governments to account.

The matters protected by the EPBC Act should focus on the places, flora and fauna that the Commonwealth is responsible for protecting and conserving in the national interest. This includes World and National Heritage, internationally important wetlands, migratory species and threatened species and ecological communities, as well as the environment of Commonwealth areas and actions by the Commonwealth.

Three particular changes to MNES dominated submissions to the Review – those relating to water, nuclear activities and climate change. Each of these are explored in this section.

Water

The ‘water trigger’ (section 24D) requires proposed coal seam gas and large coal mining developments likely to significantly impact on a water resource to be assessed and approved by the Commonwealth. The Australian Parliament amended the EPBC Act in 2013 to include the ‘water trigger’, as a response to community concern of the perceived inadequacy of state-based water regulation of these types of activities. The 2013 Act amendments prohibit the Commonwealth from accrediting a State or Territory to make approval decisions under the ‘water trigger’.

The Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Developments (IESC) was established in part to provide technical advice to the Commonwealth and State and Territory decision-makers. The IESC has improved decision-making and led to increased transparency and community confidence that cumulative impacts of proposals are assessed.

Stakeholders have presented highly polarised views to the Review about the operation of the ‘water trigger’ (Box 5). Mining industry stakeholders argue that it duplicates state-based water regulatory frameworks and should be removed. Others suggest its limited scope ignores other types of actions that impact on water resources.

The operation of the ‘water trigger’ suffers from insufficient definition of the water resources covered and the scale of the impact on the resources it is seeking to regulate. Further, it targets the activity of part of a specific sector, which results in regulatory inconsistency. Only large coal mining and coal seam gas projects are regulated under the ‘water trigger’, despite other activities conceivably posing the same or greater risk of irreversible damage. Finally, the current construct of the ‘water trigger’ is inconsistent with the Commonwealth’s agreed role in environmental and water resources management.

The States and Territories have constitutional responsibility for managing their water resources. This responsibility is reflected in the National Water Initiative, which is the intergovernmental agreement that sets out the respective roles of jurisdictions in water management and the water reform agenda they have collectively agreed to pursue.

The Review considers that it is not the role of the EPBC Act to regulate impacts of development on water users such as towns or agricultural users. This is the responsibility of the States and Territories and they should be clearly accountable for the decisions they make. In its leadership role, the Commonwealth should continue to transparently report on the progress made by jurisdictions in advancing commitments to manage water under the National Water Initiative.

However, the Commonwealth does have responsibility for protecting listed threatened or migratory species, wetlands of international importance (Ramsar wetlands), World Heritage sites and for leadership on cross-border issues. Direct or indirect changes to water resources that have a potential to impact protected matters have always triggered the EPBC Act and should continue to do so.

The Commonwealth should have the capacity to step in to protect water resources to adjudicate cross-border matters (for example, on a water resource that spans jurisdictions, such as the Great Artesian Basin). One State or Territory should not be able to unilaterally approve projects that risk (individually or cumulatively) irreversible damage or contamination to a water resource that the environment of another State or Territory relies on. The capacity to step in should be clearly linked to processes for assessments and approvals.

The Review recommends that the MNES relating to water be amended so that the Commonwealth’s focus in regulating water resources in the EPBC Act is limited to those water resources that span jurisdictions (cross-border water resources). This new trigger should apply to all actions that are likely to have a significant impact on cross-border water resources. The current restriction that prevents the accreditation of others to undertake approvals of proposals assessed under the ‘water trigger’ should be removed, subject to the accredited party demonstrating compliance with the National Environmental Standards for MNES.

The name and remit of the IESC should be adjusted to reflect an amended water resources MNES. The Commonwealth Environment Minister (or accredited party) should continue to seek the advice of this Committee when considering a proposal against the National Environmental Standards.

Nuclear actions

Nuclear activities are regulated under the EPBC Act in 2 ways. The first is section 140A, which prohibits the Environment Minister from approving specific nuclear installations. This section reflects a policy choice of elected Parliaments to ban specific nuclear activities in Australia. Any change in scope is similarly a policy choice of elected Parliaments. Should Australia's policy shift in relation to these types of nuclear activities, changes to section 140A would be required.

The second way nuclear activities are regulated is similar to the construct of other MNES, whereby 'nuclear actions' that are likely to have a significant impact on the environment (defined broadly in section 528 as including people and communities) are assessed and approved by the Commonwealth.

The nuclear trigger reflects Australia's commitment to maintain high levels of community and environmental protection from the harmful effects of radiation, and supports Australia's commitments under international agreements to ensure nuclear safety and security in Australia and around the world.

The EPBC Act and Regulations together define activities and thresholds for 'nuclear actions'. In practice, this trigger primarily captures:

- mining projects, including uranium mining, and rare earth and mineral sand mining, transport and milling activities that result in radioactive by-products that exceed certain thresholds
- Commonwealth agencies undertaking nuclear transport, research or waste treatment.

It is both appropriate and desirable that the Commonwealth maintains its oversight over the long-term risks of radiation arising from nuclear actions to the community and the environment. The Review recommends that regulation of nuclear actions should remain within the EPBC Act. Regulation should be made more consistent and efficient by aligning the requirements of the EPBC Act to the national and international best-practice approaches of the Commonwealth's Australian Radiation Protection and Nuclear Safety Agency (Chapter 5). This should focus on protecting the community from the harmful effects of radiation and radioactive material, regardless of the activity being undertaken.

Climate and emissions

Contributions to the Review have suggested that the EPBC Act should be expanded to include a climate trigger, which would seek to solve 2 apparent problems.

The first view presented is that Australia's current emissions reduction policy settings are insufficient to meet our international commitments and more needs to be done. Advocates for a climate trigger suggest it would contribute to reducing Australia's emissions profile by regulating significant land clearing and those projects with large emission profiles.

Successive Australian Governments have elected to adopt specific policy mechanisms to implement their commitments to reduce emissions. The Review agrees that these specific mechanisms, not the EPBC Act, are the appropriate way to place limits on greenhouse gas emissions.

The Review recommends that proposals required to be assessed and approved under the Act or accredited arrangements (due to their impacts on nationally protected matters) should transparently disclose the full emissions of the development.

The second view is that the EPBC Act does not effectively support adaptive management that uses the best available climate modelling and scenario forecasting to ensure the actions taken to protect matters will be effective under a changing climate.

The Review recommends that the EPBC Act require that development proposals assessed under the Act or accredited arrangements explicitly consider the likely effectiveness of their avoidance or mitigation measures on nationally protected matters under a range of specified climate change scenarios.

Recommendation 1 Matters of national environmental significance should be focused on Commonwealth responsibilities for the environment.

a) The water MNES (section 24D/24E) should be amended to apply only to cross-border water resources. Any action that is likely to have a significant impact on cross-border water resources should be subject to the trigger. Restrictions should be removed where they prevent other parties from being accredited to undertake approvals of proposals assessed under the water trigger. This amendment should occur in the second tranche of reforms.

b) The nuclear MNES (section 21/22A) should be retained. In the first tranche of reforms, the Australian Government should immediately adopt the recommended National Environmental Standard for the protection of the environment from nuclear actions. In the second tranche of reform, the EPBC Act and the regulatory arrangements of the Australian Radiation Protection and Nuclear Safety Agency should be aligned, to support the implementation of best-practice international approaches based on risk of harm to the environment, including the community.

Recommendation 2 National Environmental Standards recommended by this Review should require development proposals to:

a) explicitly consider the likely effectiveness of avoidance or mitigation measures on nationally protected matters under specified climate change scenarios

b) transparently disclose the full emissions of the development.

1.4.2 The EPBC Act should define and deliver sustainable environmental outcomes

The objects of the EPBC Act are sufficiently broad to enable the Commonwealth to fulfil its role. The range of views on the objects of the Act received by the Review span from full support to a complete revamp. The broadness of the objects has been applauded for flexibility but criticised for carrying little clout and being ‘uninspiring and perfunctory’.

The Review considers that amending the objects of the EPBC Act will not provide more clout or deliver better outcomes unless other issues that diminish the effectiveness of the Act to protect the environment are addressed.

A fundamental shortcoming in the EPBC Act is that it does not clearly outline the outcomes it aims to achieve and does not provide sufficient constraints on discretion to ensure that development is sustainable. To do this, ecologically sustainable development (ESD) needs to be hardwired into the Act as the basis of decisions made. This means that:

- the Act must require the Environment Minister to apply and deliver ESD, rather than just consider it
- decisions must be based on a clear and transparent assessment of environmental, social, economic and cultural information (Chapter 4)
- strong protections are needed for those matters most at risk of being lost, including clear rules about unacceptable impacts.

Effective environmental protection and economically important development are not mutually exclusive. Sustainable development is possible and should be encouraged. ESD cannot be achieved on a transaction-by-transaction basis. It is a collective outcome, the sum of all policies, plans, actions and decisions that affect the environment, across all jurisdictions. To support this, the system needs flexibility to balance out impacts across landscapes and across timescales (section 1.4.4). This can be best achieved by adopting a regional planning approach and ensuring that public and private investment in restoration is targeted towards achieving the overall outcome (Chapter 8).

1.4.3 Legally enforceable National Environmental Standards should be the foundation for effective regulation

National Environmental Standards are the centrepiece of recommended reforms

The EPBC Act and the decisions made under it are not delivering for the environment. Strong, measurable and legally enforceable National Environmental Standards are needed to clearly define environmental outcomes and underpin and uplift the operation of the Act.

As the centrepiece of recommended reforms, National Environmental Standards should set clear requirements for those operating or accredited under the EPBC Act, and clear outcomes and limits for decision-makers. National Environmental Standards should prescribe how activities at all scales, including actions, decisions, plans and policies, contribute to the outcomes under the Act. Standards should be concise, specific and focused on the requisite outcomes. Compliance should focus on whether environmental outcomes are being achieved (or if there are failings), rather than whether a process has been correctly adhered to.

National Environmental Standards should not be dominated by highly prescriptive processes so that compliance is only achieved by ‘ticking the boxes’ to fulfil a process. However, Standards should cover the fundamental processes needed to support effective implementation of the EPBC Act and the delivery of outcomes.

Standards are increasingly used internationally to support sustainability objectives and have been used successfully within Australia for air pollutants under the National Environment Protection (Ambient Air Quality) Measure. The Commonwealth has made past attempts to define some standards for the EPBC Act (DoE 2014). These attempts focused on clarifying important processes that were already set out in the Act, and they provide a useful foundation to build on in developing the full suite of National Environmental Standards. A key shortcoming of these is the absence of any clear articulation of the intended outcomes for, and acceptable impacts on, MNES.

Contributions to the Review indicate strong support for National Environmental Standards. Despite this strong support, there will inevitably be objection to the detail contained within them. As rules and outcomes become clearer, so too will the limits on discretion in decision-making. Industry stakeholders and jurisdictions consistently call for clarity but have raised concerns about limiting discretion on approving the environmental impacts of developments. At the other end of the spectrum, environmental groups advocate for uncompromising rules that prevent any impact to protected matters. Neither of these views are compatible with ESD or the objects of the EPBC Act. National Environmental Standards must be set in a way that delivers better outcomes for the environment, while allowing a sensible and sustainable approach to meeting Australia’s future development needs.

National Environmental Standards should be legally enforceable and relevant to all parties operating or accredited under the EPBC Act, including the Commonwealth Environment Minister and accredited third parties.

Application of the National Environmental Standards by the Commonwealth Environment Minister

National Environmental Standards should be made and implemented by the Commonwealth Environment Minister.

The activities and decisions made by the Environment Minister under the EPBC Act should be consistent with the National Environmental Standards. The Standards are relevant to activities and decisions at all scales, including policies, plans and programs. This includes decisions on the approval of individual projects or actions, where they trigger the EPBC Act.

This enables consistency and flexibility across the administration of the EPBC Act and recognises that the overall outcome is best accomplished by the collective achievements of all activities.

The EPBC Act should provide discretion for the Environment Minister to make a decision that is inconsistent with the National Environmental Standard. However, the use of this power should be a rare exception, justified in the public interest. In these cases, the Minister should publish a statement of reasons.

In considering the accreditation of the regulatory processes or arrangements of third parties under the EPBC Act, the Environment Minister must be satisfied that the processes or arrangements proposed for accreditation can meet the National Environmental Standards and that the parties assure accountability for the outcomes.

Application by third parties following accreditation

Ideally, National Environmental Standards should be applied in a way that supports a shift to a more cooperative and holistic way of managing the environment. The Standards enable the outcomes sought through the EPBC Act to be more effectively integrated into broader environmental management responsibilities and activities of others (such as a State or Territory), so long as they can demonstrate that they can deliver the Standards.

The activities and decisions of an accredited party should be consistent with the National Environmental Standards. The Standards are relevant to activities and decisions at all scales including policies, plans and programs. This includes decisions on the approval or authorisation of individual projects or actions. An accredited party must not allow an activity, such as an individual project, that prevents a Standard from being met.

In limited circumstances, such as where an accredited party believes it is in the public interest to undertake an activity or make a decision that would prevent them from meeting a National Environmental Standard, the party must refer that activity to the Commonwealth Environment Minister for decision.

Processes to make and review National Environmental Standards

The Commonwealth is responsible for ensuring the National Environmental Standards are effective, have public confidence and deliver national environmental outcomes.

The Commonwealth Environment Minister should immediately develop and implement the full suite of National Environmental Standards recommended by the Review (section 1.4.4). A consultative process like that conducted by this Review should be adopted and include consultation with States and Territories. However, the process cannot be one of negotiated agreement to accommodate existing rules or solely on the basis of development aspirations. This would result in a patchwork of protections or rules set at the lowest bar.

National Environmental Standards should be enacted through legislation, with a clear head of power to make and apply Standards, including the ability to apply them to accredit of other parties.

The EPBC Act should include legislative requirements for regular monitoring, reporting and review of the National Environmental Standards to ensure they remain contemporary and continue to effectively deliver environmental outcomes. Standards should be subject to both regular reviews and reviews in response to changing, unforeseen or emergency situations, such as the 2019–20 Black Summer bushfires. The Standards should be adjusted if the settings are not resulting in the right environmental trajectory, to ensure a path that will deliver ESD.

1.4.4 National Environmental Standards should describe environmental outcomes and the fundamental processes of good decision-making

A comprehensive set of National Environmental Standards is needed

The Review recommends that a full suite of National Environmental Standards should be made to describe the outcomes that contribute to effective environmental protection and management as well as the processes needed to support the effective implementation of the EPBC Act (Appendix B). All the Standards are necessary to improve decision-making.

The full suite of Standards should include:

- matters of national environmental significance
- Commonwealth actions and actions involving Commonwealth land
- transparent processes and robust decisions, including
  - judicial review
  - community consultation
  - adequate assessment of impacts on MNES – including climate change impacts
  - disclosure of emissions profile
  - quality regional planning
- Indigenous engagement and participation in decision-making
- compliance and enforcement
- data and information
- environmental monitoring and evaluation of outcomes
- environmental restoration, including offsets
- wildlife permits and trade.

Contributions to the Review have suggested many additional topics for National Environmental Standards but not everything needs to be codified within a Standard. Standards should be used where the collective achievement of multiple activities or scales are necessary to effectively deliver an outcome. Other mechanisms, such as planning frameworks, policies and guidelines, should continue to be used to support the efficient operation of the EPBC Act.

To demonstrate that National Environmental Standards can be developed, and that they immediately provide greater clarity and consistency, the Review has developed in detail recommended Standards for 4 high-priority issues:

- matters of national environmental significance (in this section)
- Indigenous engagement and participation in decision-making (Chapter 2)
- compliance and enforcement (Chapter 9)
- data and information (Chapter 10).

The recommended National Environmental Standards developed in detail by the Review are set out in Appendix B. They have been developed and refined following consultation with science, Indigenous, environmental and business stakeholders and with input from technical experts. They should be adopted in full and immediately implemented.

The recommended National Environmental Standard for Indigenous engagement and participation in decision-making should be adopted in full and immediately implemented. Over time, refinements should be made through an Indigenous-led process (Chapter 2 and Appendix B).

The National Environmental Standards set out in detail in Appendix B should be adopted in full. The remainder of the suite of Standards should be developed without delay to enable the full suite of 9 Standards to be implemented immediately.

Clear National Environmental Standards will improve the effectiveness and efficiency of Australia's national environmental law. Strong, clear and nationally consistent Standards will improve outcomes for Australia's biodiversity and heritage, and ensure development is ecologically sustainable over the long term. Improved certainty for all stakeholders will lead to a more efficient, accessible and transparent regulatory system, and enable faster and lower-cost development assessments and approvals (Chapter 4).

National Environmental Standards for matters of national environmental significance

The current arrangements and decision-making requirements are not focused on outcomes for matters of national environmental significance (MNES). Decision-making requirements are buried within hundreds of pages of legislation and statutory documents, and unenforceable guidelines and policies.

The recommended National Environmental Standards for MNES developed by the Review clearly prescribe the national intent for the protection and conservation of MNES (Appendix B). Clear outcomes and requirements are important to help the community know what they can expect from the EPBC Act. It is important for businesses, which seek clear and consistent rules. It is also important for decision-makers and regulators, because it gives clarity on the rules they are expected to adhere to and enforce.

The recommended National Environmental Standards for MNES also support harmonisation and integration with States and Territories through a clear articulation of the requirements for accreditation under the EPBC Act.

Decisions at all scales and by all parties should work together to protect, conserve and improve outcomes for MNES. Progress towards environmental outcomes will result from the collective achievements of the combination of activities. This provides flexibility to decision-makers in how and where they balance impacts, while establishing critical protections for MNES. The outcome is important, not the path chosen to get to it. For example:

- Where the Standard requires the habitat of a threatened species to be maintained and improved, this can be achieved by the combination of a range of activities including for example, through regulation or programs of restoration.
- Where a Standard allows ecologically feasible and viable offsets to balance habitat loss from development, this can be achieved by imposing the requirement on individual project approvals or the offset obligations of multiple projects being delivered through a centralised approach.

However, individual decisions must not prevent a Standard for MNES from being met. Hard lines and no-go zones in the Standards protect critical assets and prevent unacceptable impacts. For example:

- Where a Standard requires impacts on certain threatened species habitats to be avoided, for example critical breeding habitat, a system cannot deliver this if it allows for developments that adversely impact these habitats.
- Where a Standard requires the values or attributes of a heritage place or property to be protected to achieve an outcome, then a project-level decision cannot allow a development to destroy one or more of those values or attributes.

Regardless of whether the rules are applied at a system or project scale, the National Environmental Standards for MNES support more streamlined decision-making at the project level. If the outcomes are clear and legally required, it does not matter who makes project assessment and approval decisions.

The recommended National Environmental Standards for MNES developed by the Review are a first and immediate step that should be taken. They clarify the existing settings of the EPBC Act to define clear limits of acceptable impacts for MNES, while accepting flexibility for development. They represent an improvement on the status quo, where opaque rules and unfettered discretion in decision-making often results in the trading away of environmental outcomes.

The National Environmental Standards recommended by this Review must evolve. The current settings of the EPBC Act constrain the recommended National Environmental Standards for MNES, such that they cannot deliver the level of protection required to alter the current trajectory of environmental decline. The Act needs to change so that Standards can evolve in a way that requires ESD, and for the values and attributes of our iconic places to be protected, maintained and actively enhanced.

The recommended National Environmental Standards for MNES are further constrained by the quality of data, information and systems available to describe and apply them. A quantum shift is required so that, in the future, Standards can become granular and measurable. With better information, Standards can be applied with greater precision and efficiency (Chapter 10). For example, definitive mapping of habitat critical to the survival of a species will provide greater clarity than a more general scientific description of that habitat.

When the application of National Environmental Standards is underpinned by quality data, information and systems, they can support faster and lower-cost assessments and approvals, including the capacity to automate consideration of low-risk proposals.

In the future, National Environmental Standards for threatened species could be expressed in quantitative measures to support recovery over a specific time frame – with targets that specify the intended outcomes. Measures such as population size and trends, and the area and quality of habitat available across a landscape type (that is, population numbers, hectares, threat management and years), should be developed. In time, and with better information and the capability to model ecosystem outcomes, these Standards could shift to measures of probable outcomes for species (such as the likelihood of survival or recovery).

Precise, quantitative National Environmental Standards for MNES that require ESD to be delivered will provide for effective environmental protection and biodiversity conservation and ensure that development is sustainable in the long-term. To settle for the recommended Standards, rather than pursue the fundamental reform of the Act that is needed, and the scale of investment in restoration that is required, is to accept the continued decline of our iconic places and the extinction of our most threatened plants, animals and ecosystems.

Recommendation 3 The EPBC Act should be immediately amended to enable the development and implementation of legally enforceable National Environmental Standards.

a) The Act should set out the process for making, implementing and reviewing National Environmental Standards. The Act should include specific provisions about their governance, consultation, monitoring and review.

b) The Act should require that activities and decisions made by the Minister under the Act, or those under an accredited arrangement, be consistent with National Environmental Standards.

c) The Act should include a specific power for the Minister to exercise discretion to make a decision that is inconsistent with the National Environmental Standards. The use of this power should be a rare exception, demonstrably justified in the public interest and accompanied by a published statement of reasons which includes the environmental implications of the decision.

d) National Environmental Standards should be first made in a way that takes account of the current legal settings of the Act. The National Environmental Standards set out in detail in Appendix B should be adopted in full. The remainder of the suite of Standards should be developed without delay to enable the full suite of 9 Standards to be implemented immediately. Standards should be refined within 12 months.

Recommendation 4 In the second tranche of reforms, the EPBC Act should be amended to deliver more effective environmental protection and management, accelerate achievement of the environmental outcomes and improve the efficiency of National Environmental Standards. Parts 3 to 10 of the Act should be completely overhauled to enable:

a) National Environmental Standards to evolve and be set in a way that delivers ecologically sustainable development, through the collective contributions of the actions, decisions, plans and policies of the Commonwealth and accredited parties.

b) A proactive focus on managing matters of national environmental significance. The Act should require that matters of national environmental significance be protected, conserved, recovered and enhanced.

c) All decisions to be targeted towards achieving the environmental outcomes set out in National Environmental Standards.

d) National Environmental Standards to be more efficiently applied to decision-making, including accredited arrangements.

1.4.5 National Environmental Standards will support greater integration with State and Territory environmental management

The National Environmental Standards are designed to deliver greater integration of the environmental management responsibilities of the Commonwealth, States and Territories. They provide a pathway for the Commonwealth to recognise and accredit the regulatory processes and environmental management activities of others, enabling the environment to be managed as a system at the right scale (Chapter 7).

National Environmental Standards provide the foundation on which the Commonwealth can confidently accredit others to make project-level decisions, removing duplicative processes that can be costly to business and result in little tangible benefit to the environment. Over time, the preferable arrangement would be for State and Territory laws to be amended to mirror the Standards made under the EPBC Act, enabling jurisdictions to fully and transparently accommodate the requirements of the Commonwealth in their own laws.

National leadership and intergovernmental cooperation are needed to safeguard the future of Australia's environment and iconic places. The Intergovernmental Agreement on the Environment (IGAE, CoAG 1992) is over 20 years old and did not contemplate the pace of development, complexity of environmental matters or the scale of the cooperation required to achieve harmonisation in environmental regulation. Governments should revisit the IGAE to ensure it provides a contemporary foundation for shared management of Australia's environment.

1.4.6 To be successful, National Environmental Standards must be part of a broader framework

The National Environmental Standards recommended by the Review are the centrepiece of the reforms needed to deliver effective environmental protection and biodiversity conservation and more efficient decision-making. But Standards will not work in isolation.

Reform is needed to ensure that Australia listens to Indigenous Australians and respectfully harnesses the enormous value of their knowledge of managing Country (Chapter 2).

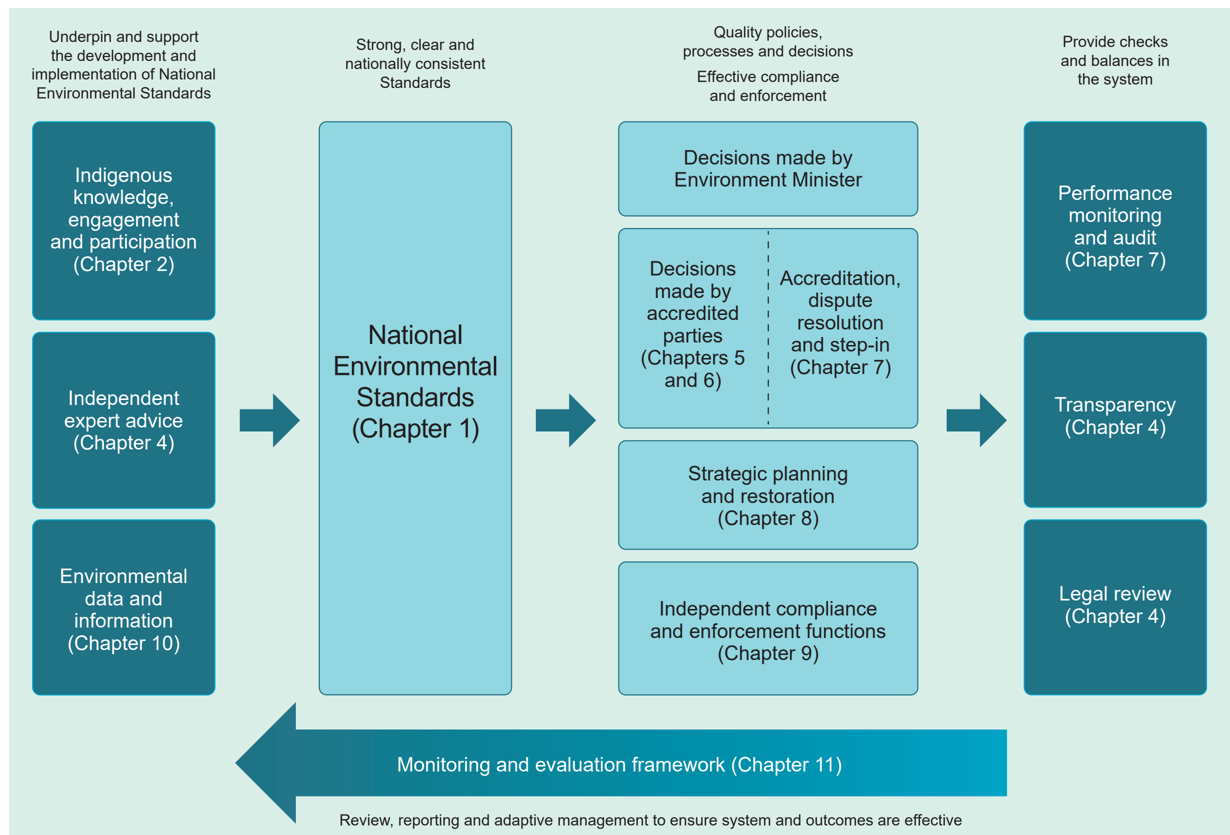
A broader framework of reform is required to provide confidence that, as a nation, we are on track to deliver the intended environmental outcomes and ensure that good decisions are being made about Australia's environment in a way that adheres to the law.

Key elements of the broader reform framework recommended by the Review are:

- respectful inclusion of Indigenous Australians' knowledge and views (Chapter 2)
- the provision of comprehensive expert advice to decision-makers (Chapter 4)
- full transparency of decisions that are made (Chapter 4)
- appropriate legal review and access to justice (Chapter 4)
- independent oversight of Commonwealth decision-making and accredited arrangements (Chapter 7)
- strategic planning and restoration of the environment (Chapter 8)
- investment in restoration of the environment (Chapter 8)
- strong, independent compliance and enforcement of project-level activities (Chapter 9)
- high-quality accessible data and information (Chapter 10)
- comprehensive monitoring, evaluation and reporting on environmental outcomes (Chapter 11).

These broader reform elements, together with National Environmental Standards, combine to support and deliver a more effective and efficient regime to protect Australia's unique environment and iconic places (Figure 1).

Figure 1 Reform framework



The reforms recommended by this Review are not about the Commonwealth relinquishing itself of its responsibilities. Rather, they are about the Commonwealth meeting its obligations in a more effective and efficient way by enabling others to be accredited to deliver against the National Environmental Standards. They enable the Commonwealth to lift its focus from process-driven project-level transactions, to the achievement of national-level environmental outcomes and providing oversight to ensure the environmental management systems and decisions of others contribute to these outcomes.

The recommended reforms enable the Commonwealth to improve its own efforts to deliver nationally important outcomes and to show national leadership on the environment. This includes applying the National Environmental Standards to its own decision-making, stronger Commonwealth-led national and regional planning, the establishment of mechanisms that support greater investment in restoration, improved data and information and the frameworks to enable effective monitoring and reporting of environmental outcomes.

Strong, independent and transparent oversight of all parties implementing National Environmental Standards will be necessary to build and maintain confidence that the EPBC Act is working as intended and delivering environmental outcomes.

The EPBC Act is and should continue to be about sustainable management of the environment and ensuring that future development is ecologically sustainable. However, it needs fundamental reform to ensure that future generations can enjoy Australia's unique environment, iconic places and heritage.

2 Indigenous culture and heritage

Key points

The Review considers that the EPBC Act is not fulfilling its objectives as they relate to the role of Indigenous Australians in protecting and conserving biodiversity, working in partnership with and promoting the respectful use of their knowledge.

The key reasons why the EPBC Act is not fulfilling these objectives are:

- There is a culture of tokenism and symbolism. Indigenous knowledge or views are not fully valued in decision-making. The Act prioritises the views of western science, and Indigenous knowledge and views are diluted in the formal provision of advice to decision-makers.
- Indigenous Australians are seeking stronger national protection of their cultural heritage. The *Aboriginal and Torres Strait Islander Heritage Protection Act 1984* (ATSIHP Act) provides last-minute intervention but does not work effectively with the development assessment and approval processes of the Act. The national level arrangements are unsatisfactory and out of step with community expectations.
- The Act does not meet the aspirations of Traditional Owners, where they lease their land to the Commonwealth. The settings for the Director of National Parks and the joint boards means that, ultimately, the Director makes decisions for these areas.

The key reforms recommended by the Review are:

- The co-design of policy and implementation to improve outcomes for Indigenous Australians.
- The National Environmental Standards should include specific requirements relating to best-practice Indigenous engagement and participation, to enable Indigenous views and knowledge to be incorporated into regulatory processes.
- A recommended National Environment Standard for Indigenous engagement and participation in decision-making, developed in detail by the Review through an Indigenous-led process, should be adopted in full and immediately implemented.
- The role of the Indigenous Advisory Committee should be substantially recast as the Indigenous Engagement and Participation Committee. The role of this Committee is to provide leadership in the co-design of reforms and advise the Environment Minister on the development and application of the National Environmental Standard for Indigenous engagement and participation in decision-making.
- Indigenous knowledge and western science should be considered on an equal footing in the provision of formal advice to the Environment Minister. The recommended Ecologically Sustainable Development Committee should be responsible for ensuring advice provided to the Environment Minister incorporates the culturally appropriate use of Indigenous knowledge.
- The national level settings for Indigenous cultural heritage protection need comprehensive review. This process should consider how comprehensive national level protections are given effect, including how they interact with the development assessment and approval process of the EPBC Act. This review should explicitly consider the role of the Act in providing protections.
- Where aligned with their aspirations, transition to Traditional Owners having more responsibility for decision-making in jointly managed parks. For this to be successful in the long term there is a need to build capacity and capability, so that joint boards can make decisions that effectively manage risks and discharge responsibilities.

2.1 The Act does not fully support the rights of Indigenous Australians in decision-making

Over the past decade, there has been increased recognition of the value of incorporating Indigenous knowledge, innovations and practices into environmental management to deliver positive outcomes for the Australian environment. Indigenous Australians play a significant role in direct land and sea protection and management throughout Australia. These activities are supported by the Australian Government, but most support mechanisms sit outside the operation of the EPBC Act such as:

- Indigenous Land Use Agreements (ILUAs)
- Indigenous ranger programs
- Indigenous Protected Areas (IPAs)
- savanna burning carbon farming projects
- national investment in environmental research – for example, through the National Environmental Science Program (NESP) – which also supports and facilitates the participation of Indigenous Australians in research and environmental management activities.

Within the operation of the EPBC Act, the participation of Indigenous Australians is focused on:

- an Indigenous Advisory Committee, which has a broad, 'as needed' advisory function and is not linked to specific decisions that are made
- the arrangements for joint management of Commonwealth reserves on land owned by Indigenous Australians
- the protection of some Indigenous heritage, including requirements for the Australian Heritage Council to consult with Indigenous Australians who have rights or interests in the places that it is considering.

Although the EPBC Act was world leading when first legislated, it is now dated and does not support best practice for incorporating the rights of Indigenous Australians in decision-making processes. It lags behind best practice within Australia and behind key international commitments Australia has signed (Box 6).

Box 6 International agreements relating to Indigenous peoples' rights

The **United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)** 'affirms the minimum standards for the survival, dignity, security and well-being of Indigenous peoples worldwide and enshrines Indigenous peoples' right to be different'. It emphasises the right of Indigenous peoples to participate in the decision-making process for matters that affect them, the need for mechanisms for redress, and obliges signatory states to obtain free, prior and informed consent before taking actions that may impact Indigenous peoples, such as making laws or approving projects on Indigenous lands.

The **Convention on Biological Diversity (CBD)** provides for the recognition of Indigenous peoples' inherent ecological knowledge and, with the free, prior and informed consent of Indigenous knowledge holders, promotion of the wider application of such knowledge. It requires signatories, subject to their national legislation, to respect, preserve and maintain Indigenous peoples' ecological knowledge and practices with respect to the conservation and sustainable use of biological diversity.

The **Aichi Biodiversity Targets** agreed under the CBD include a specific target (Target 18) that 'by 2020, the traditional knowledge, innovations and practices of Indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of Indigenous and local communities, at all relevant levels.'

Continue next page

Box 6 (continued)

The **Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (the Nagoya Protocol)** is a global agreement that implements the access and benefit-sharing obligations of the CBD. The Nagoya Protocol, signed but not yet ratified by Australia, establishes a framework that ensures the fair and equitable sharing of benefits that arise from the use of genetic resources. Indigenous communities may receive benefits through associated frameworks that ensure respect for the value of traditional knowledge associated with genetic resources.

For more information, see the International agreements further reading at the end of the report.

2.2 Indigenous knowledge and views are not fully valued in decision-making

2.2.1 There is a culture of tokenism and symbolism

The EPBC Act heavily prioritises the views of western science, with Indigenous knowledge and views diminished in the formal provision of advice to decision-makers. This reflects an overall culture of tokenism and symbolism, rather than one of genuine inclusion of Indigenous Australians.

While individuals may have good intentions, the settings of the EPBC Act and the resources afforded to implementation are insufficient to support effective inclusion of Indigenous Australians in the processes for implementing the Act. The cultural issues are compounded because the Act does not have the mechanisms to require explicit consideration of Indigenous community values and Indigenous knowledge in environmental and heritage management decisions. Although national protocols and guidelines for involving Indigenous Australians have been developed (AHC 2002; DoEE 2016), resourcing to implement them is insufficient and they are not a requirement.

However, there are examples of species recovery being led by Indigenous communities for culturally important species using recovery planning tools within the EPBC Act (Box 7). In its submission to the Review, the Indigenous Advisory Committee (2020) noted that:

> The inclusion of Indigenous Knowledge in other management instruments designed to inform the conservation of ecosystems and biodiversity (species and ecological community recovery plans, conservation advisories, research and monitoring plans) are not as numerous (as management plans) although they do exist.

These examples are the exception rather than the rule.

Box 7 Incorporating Indigenous knowledge into recovery plans

Draft Recovery Plan for the Greater Bilby

Over 70% of naturally occurring bilby populations occur on Aboriginal lands and the species continues to be culturally significant for many Indigenous Australians, even in areas where bilbies are locally extinct. The collaborative approach taken between Indigenous community groups and western scientists to develop the draft recovery plan for the Greater Bilby ensured that ongoing recovery efforts for the species incorporated traditional and contemporary knowledge.

As a result, the draft plan includes actions that will ensure:

- the cultural knowledge of the Greater Bilby is kept alive and strong
- community awareness of the Greater Bilby increases, both locally and more broadly

Continued next page

Box 7 (continued)

- Indigenous Ranger support and activities are strengthened and increased
- management efforts are increased
- bilby distribution and abundance, threats and management effectiveness are monitored and mapped.

Saving Alwal, the Golden-shouldered Parrot, Cape York

The Golden-shouldered Parrot Recovery Plan (2003–2007) demonstrates the value of Indigenous knowledge in recovering species, with the Olkola Aboriginal Corporation partnering with landholders, government and environment organisations to deliver the recovery actions. The Golden-shouldered Parrot Recovery Plan recognises the parrot, or Alwal, as a culturally significant species to Olkola people and outlines Traditional Owners as critical partners for landscape-scale recovery actions through fire management. A key recovery action is using traditional fire regimes on properties to reduce woody shrubs that threaten the seed grasses the parrots feed on.

For more information, see the Recovery planning further reading at the end of the report.

The Department has issued guidance *Engage Early – Guidance for proponents on best practice Indigenous engagement for environmental assessments under the Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (DoEE 2016) on expectations for applicants for EPBC Act approval. However, this is not an enforceable standard or requirement. It is unclear how the Environment Minister considers Indigenous matters in decision-making for Act assessments.

The operation of the EPBC Act Indigenous Advisory Committee (IAC) exemplifies the culture of tokenism. The Act does not require the IAC to provide decision-makers with advice. The IAC is reliant on the Environment Minister inviting its views. This is in contrast to other statutory committees, which have clearly defined and formal roles at key points in statutory processes. The effective operation of the IAC is further limited by the lack of adequate funding.

For example, the IAC does not provide independent advice on the adequacy of the incorporation of Indigenous knowledge in key decision-making processes (such as listings, recovery plans and conservation advices, or environmental impact assessments).

The IAC's operating practice is to avoid cutting across the roles of other statutory committees. While the IAC and other statutory committees have established dialogues and ad hoc interactions, this has been informal and lacks structured intent. The incorporation of input by Indigenous Australians to the deliberations of other committees has often been tokenistic and symbolic. Representatives of Indigenous Australians on certain, but not all committees, is further accepted as satisfying the mandate to involve Indigenous Australians. But this involvement pays lip service to the ethic of involvement and respectful integration of Indigenous knowledge and culture into environment protection and biodiversity conservation. This lack of genuine involvement in committees and decision-making processes has been raised in submissions to the Review, including those from the IAC and Indigenous Land Councils.

2.2.2 Reforms should be pursued through co-designed policymaking and implementation

The Australian Government is recognising improved outcomes for Indigenous Australians through enabling co-design and policy implementation with Indigenous Australians. Any reform to the EPBC Act must be conducted in a way that is consistent with the National Agreement on Closing the Gap, the Council of Australian Governments commitments in the Partnership Agreement for Closing the Gap (CoAG 2019a) and other supporting processes (Box 8).

The pursuit of reforms would occur alongside other Australian Government initiatives, including those related to an Indigenous Voice, the Northern Australian economy, the protection of Indigenous intellectual property and development of a government-wide Indigenous Evaluation Strategy.

Indigenous Australians often engage with multiple departments and organisations across all levels of government. Activities should seek to align with or complement other work, while maintaining relevance to the environment portfolio.

Box 8 COAG Closing the Gap commitments

Priority reforms in the National Agreement on Closing the Gap

For the first time, the National Agreement on Closing the Gap (CoAG 2020) has been developed in genuine partnership between the Australian Government and the Coalition of Aboriginal and Torres Strait Islander Peak Organisations. The National Agreement sets out 4 priority reforms that focus on changing the way governments work with Aboriginal and Torres Strait Islander peoples. They include:

1) Formal partnerships and shared decision making – building and strengthening structures to empower Aboriginal and Torres Strait Islander peoples to share decision-making with governments.
2) Building the community-controlled sector – building formal Aboriginal and Torres Strait Islander community-controlled sectors to deliver services to support Closing the Gap.
3) Transforming government organisations – systemic and structural transformation of mainstream government organisations to improve accountability and better respond to the needs of Aboriginal and Torres Strait Islander peoples.
4) Shared access to data and information at a regional level – enable shared access to location-specific data and information to support Aboriginal and Torres Strait Islander communities and organisations to achieve the first 3 priority reforms.

Key excerpts from the Partnership Agreement

- ‘Priority Action 1 – developing and strengthening structures so that Aboriginal and Torres Strait Islander people share in decision-making with governments on Closing the Gap.
- Priority Action 2 – building formal Aboriginal and Torres Strait Islander community-controlled service sectors to deliver Closing the Gap services.
- Priority Action 3 – ensuring mainstream government agencies and institutions that deliver services and programs to Aboriginal and Torres Strait Islander people undertake systemic and structural transformation to contribute to Closing the Gap.’

Excerpts from a ‘New Way of Working’ Coalition of the Peaks document

- ‘When Aboriginal and Torres Strait Islander people are included and have a real say in the design and delivery of services that impact on them, the outcomes are far better.
- Aboriginal and Torres Strait Islander people need to be at the centre of Closing the Gap policy: the gap won’t close without our full involvement.
- COAG cannot expect us to take responsibility for outcomes or to be able to work constructively with them if we are excluded from decision-making.’

For more information, see the Closing the Gap further reading at the end of the report.

The practice of co-design should be applied to progressing the agreed recommendations from this Review and be embedded into policy, procedures and behaviours going forward.

The role and membership of the IAC should be substantially recast, to form the Indigenous Engagement and Participation Committee (Chapter 4). The role of this Committee would be to:

- support the co-design of reforms (and the participation of Indigenous Australians in this process)
- monitor and advise on, the application of the National Environmental Standard for Indigenous engagement and participation in decision-making and oversee the further refinement of this Standard
- provide advice to other statutory committees (Chapter 4) on the respectful use of Indigenous knowledge.

The philosophy adopted by the co-design process could include that it:

- genuinely demonstrate respect for Indigenous knowledge, world views, culture and ongoing custodianship
- acknowledge and redress perceived imbalances of power
- promote transparency, open communication and two-way knowledge sharing
- be flexible about engagement approaches outside of traditional written and face-to-face consultations and in how the Commonwealth Government receives feedback and advice
- support two-way communication and initiation of co-design, where all parties have equal rights and opportunities to initiate engagement and discussion
- acknowledge the value of Indigenous knowledge across a diverse range of issues, beyond what have traditionally been determined issues of interest or significance for Indigenous Australians
- support a continual process of monitoring, revising and reviewing approaches to actively involve Indigenous Australians
- link to support more coordinated and consistent efforts for Indigenous engagement at the national level.

2.2.3 Best-practice engagement to embed Indigenous knowledge and views in regulatory processes

Contributors to the Review highlighted that the EPBC Act should more actively facilitate Indigenous participation in decision-making processes. Specifically, contributors called for normalisation of incorporating Aboriginal and Torres Strait Islander knowledge in environmental management planning and environmental impact assessment through culturally appropriate engagement.

Contributions have all highlighted the importance of the underpinning concept of free, prior and informed consent. A range of views have been presented to the Review on how this could be achieved, including:

- specific regulatory requirements or standards expected in decision-making processes (for example, standards for proponents in conducting environmental impact assessment) or binding standards for consultation with Indigenous Australians
- requirements for participation of Indigenous Australians in regional planning activities (such as strategic assessments or ecologically sustainable development plans) to incorporate their knowledge and values into decision-making
- greater investment in scientific research where Indigenous Australians are co-researchers alongside western science.

A National Environmental Standard for Indigenous engagement and participation in decision-making will ensure that Indigenous Australians that speak for Country have had the opportunity to do so, and that their views and knowledge is explicitly considered in decisions in a culturally respectful and transparent way.

Through an Indigenous-led process, the Review has developed a recommended National Environmental Standard for Indigenous engagement and participation in decision-making (Appendix B). This Standard sets out the minimum requirements for meaningful engagement and participation of Indigenous Australians in the legislative and policy processes related to the EPBC Act. It is intended to complement existing Commonwealth, State and Territory legal frameworks that recognise cultural rights and interests, such as native title, statutory land rights and heritage protection. This Standard is to be used by all parties undertaking any activities under government legislation or policies relating to the Act, including the process for making National Environmental Standards.

The National Environmental Standard recognises the longstanding custodianship of land, freshwater and sea management in Australia by Indigenous Australians and their ongoing role in protecting and managing the environment and maintaining their cultural responsibility and connection to Country. It provides a set of principles to empower Indigenous Australians to actively participate in decision-making with governments, and enable greater consideration of their land, freshwater and sea

management knowledge as it relates to the operation of the EPBC Act. These principles are intended to be consistent with the UN Declaration on the Rights of Indigenous Peoples and the Convention on Biological Diversity (UN 2007) and have drawn on existing guidelines recognised as best practice (Box 9).

Box 9 Guidance for the recommended National Environmental Standard for Indigenous engagement and participation in decision-making

The recommended National Environmental Standard reflects key principles from engagement guidelines and policies that are recognised as best practice by Indigenous leaders:

- Heritage Chairs and Officials of Australia and New Zealand – *Best Practice Standards in Indigenous Cultural Heritage Management and Legislation*
- *Engage Early – Guidance for proponents on best practice Indigenous engagement for environmental assessments under the EPBC Act*
- *Ask First: A guide to respecting Indigenous heritage places and values*
- *Our Knowledge, Our Way*
- *Guidelines for Collaborative Knowledge Work in Kimberley Saltwater Country.*

Aspects of the recommended National Environmental Standard relating to the use of Indigenous knowledge were also informed by contributions to the Review by Indigenous leaders and these policies:

- Kimberley Land Council – *Intellectual Property and Traditional Knowledge Policy*
- Kimberley Land Council – *Research Protocol.*

For more information, see the Guidelines for Indigenous engagement further reading at the end of the report.

The recommended National Environmental Standard has been prepared to reflect the current settings of the EPBC Act.

The recommended National Environmental Standard for Indigenous engagement and participation in decision-making should be adopted in full and immediately implemented. The Indigenous Engagement and Participation Committee will be responsible for overseeing the implementation of this Standard, and leading the co-design of improvements, including providing advice to the Minister on how it should be maintained and refined.

However, for the National Environmental Standard to fully reflect best-practice principles for involving Indigenous Australians in decision-making, the EPBC Act would require broader reform and detailed legislative amendment. Amendment to the Act is needed to enable this Standard to be strengthened to meet best practice and public expectations.

Amendments to the EPBC Act will enable the recommended National Environmental Standard to be improved including in the following ways:

- Participation of Indigenous Australians in shared decision-making should be undertaken in a way that promotes the rights, obligations, ecological knowledge and cultural protections afforded to Indigenous Australians under law, including the right to self-determination and in accordance with the principle of free, prior and informed consent.
- Indigenous Australians have the right to self-determination and derive benefit from the way their knowledge is shared and used. Knowledge holders have the right to keep confidential any information concerning their cultural practices, traditions or beliefs and to exclude this information from publication.

Refinements to the National Environmental Standard over time should involve a broad and open opportunity for Indigenous Australians to participate. In line with the Standard itself, the process should provide adequate time to enable Indigenous Australians to provide their views.

2.2.4 Combine Indigenous knowledge and western science in statutory advisory committees

The structure of the statutory advisory committees in the EPBC Act, and the lack of interaction between them, ingrains the cultural primacy of western science in the way that the Act operates.

The National Environmental Standard for Indigenous engagement and participation in decision-making is one mechanism to ensure that Indigenous Australians that speak for and have traditional knowledge of Country have the proper opportunity to contribute to decisions made under the EPBC Act. Establishment of this Standard further recognises the value of Indigenous knowledge systems that include practices that have supported sustainable livelihoods and healthy Country for over 60,000 years in Australia. It will ensure that, where appropriate, these practices can be applied to the operational aspects of the Act to help improve outcomes for matters of national environmental significance and the Australian environment more broadly.

In addition to a substantial re-casting of the role of the Indigenous Advisory Committee, more needs to be done to enhance how Indigenous land, freshwater and sea management knowledge is considered equally alongside western science and information.

Combining these 2 knowledge systems is increasingly being recognised as having multiple benefits if done in the right way. The Our Knowledge, Our Way Guidelines in Caring for Country (Woodward et al. 2020) is an Indigenous-led resource that presents examples of how weaving together Indigenous and western knowledge can provide benefit to Country and people (Box 10). It further highlights the strong connection and protocols Indigenous Australians have with their knowledge and the need for non-Indigenous researchers and policy developers to respect how they want their knowledge used or not used.

Box 10 Our Knowledge, Our Way in Caring for Country – Indigenous-led approaches to strengthening and sharing our knowledge for land and sea management

Best-practice guidelines from Australian experiences

'Our Knowledge, Our Way in Caring for Country' are the first Indigenous-led, co-developed guidelines for recognising the value of Indigenous knowledge and advising on how Indigenous knowledge can be used respectfully to sustainably manage the Australian environment.

The Indigenous-majority Project Steering Group established a vision for the guidelines that:

- Indigenous Australians are empowered to look after Country our way
- improved environmental conditions and multiple social, cultural and economic benefits come from effective Indigenous adaptive management of Country.

They provide an in-depth resource that describes Indigenous knowledge systems, including governance and protocols. Best-practice case study examples from around Australia demonstrate how partnerships between Indigenous and non-Indigenous Australians have incorporated Indigenous knowledge into land management practices.

Reforms to the statutory advisory committees of the EPBC Act (Chapter 5) will be key to ensuring Indigenous knowledge is considered alongside western science in a way that respects Indigenous environmental management practices, which have been used for thousands of years and continue to be used to care for Country. The establishment of the Ecologically Sustainable Development (ESD) Committee will ensure coordination and stewardship over all National Environmental Standards. The ESD Committee will ensure that advice is well balanced and composed of the scientific, economic, social and Indigenous knowledge required to underpin the operation of the Act.

The Indigenous Engagement and Participation (IEP) Committee should be responsible for advising on the application of the National Environmental Standard for Indigenous engagement and participation in decision-making relating to:

- achievement of environment and heritage outcomes as part of the broader monitoring and evaluation framework (Chapter 11)
- development and maintenance of all National Environmental Standards (Chapter 1)
- Commonwealth Government led strategic national and regional planning (Chapter 8)
- adequacy of the information influencing decisions (Chapter 10)
- data and information supply chain (including environmental accounts, monitoring and evaluation, and National Environmental Information Assets (NEIAs)) (Chapter 11).

Annual monitoring, evaluation and reporting of the inclusion of Indigenous views and knowledge in decisions and, more broadly, the National Environmental Standard for Indigenous engagement and participation in decision-making will ensure that improvements can be made over time to the Standard and supporting processes. The IEP Committee will be responsible for establishing the monitoring and reporting method of the Standard.

The Department of Agriculture, Water and the Environment should invest in cultural capability development to support these reforms and build staff capacity to ensure that relationship building with Indigenous Australians, and inclusion of their knowledge, is done respectfully. The Department should also support this cultural shift by:

- Recognising the importance of language – In reviewing internal plans, processes and external communications activity, considering the way things are framed will be critical. On early review of some of the current language used, there are opportunities to strengthen this, for instance by moving away from concepts of 'recognition' to 'respect' and moving from 'now recognising places of significance' to 'acknowledging places that have always held significance'.
- Supporting Indigenous leadership in the Department – Maintaining a continued focus on creating meaningful employment pathways for Indigenous staff will be critical to embed Indigenous perspectives within all levels of Commonwealth decision-making.
- Creating mechanisms to support proactive engagement from Indigenous Australians – In any two-way partnership, both parties should hold equal rights to initiate discussion and consultation activity. The Department should review what mechanisms and models are in place to support Indigenous Australians to consult with the Commonwealth and initiate conversation.
- Being clear about paid participation policies – Where engagement processes are extended to include a more diverse range of stakeholders (which include community members) the Commonwealth will need to be clear about what paid participation policies are in place and how these apply to various processes.
- Delivering clear and proactive communication about policy and funding changes – Clear communication should be a particular focus when changes (both at the department and government levels) are made to key funding, programs, policies or decisions. In an Indigenous context, the Department will need to consider what communication activities work best, beyond simply making information public.
- Investing in research – Continued investment in research with Indigenous Australians into impacts of combining knowledge systems, engagement approaches and models of program innovation will also be critical to ensuring that an evidence base can be developed over time.

This capacity building should begin now.

Recommendation 5 To harness the value and recognise the importance of Indigenous knowledge, the EPBC Act should require decision-makers to respectfully consider Indigenous views and knowledge. Immediate reform is required to:

a) amend the Act to replace the Indigenous Advisory Committee with the Indigenous Engagement and Participation Committee. The mandate of the Committee will be to refine, implement and monitor the National Environmental Standard for Indigenous engagement and participation in decision-making

b) adopt the recommended National Environmental Standard for Indigenous engagement and participation in decision-making

c) amend the Act to require the Environment Minister to transparently demonstrate how Indigenous knowledge and science is considered in decision-making.

Recommendation 6 The Department of Agriculture, Water and the Environment should take immediate steps to invest in developing its cultural capability to build strong relationships with Indigenous Australians and enable respectful inclusion of their valuable knowledge.

2.3 Indigenous Australians seek, and are entitled to expect, stronger national-level protection of their cultural heritage

2.3.1 Current laws that protect Indigenous cultural heritage in Australia are behind community expectations

Places of natural and cultural value that are important to the world or Australia can be recognised and protected by nominating them for World Heritage listing, or listing them as National Heritage or Commonwealth Heritage under the EPBC Act.

These include places that hold particular cultural importance for Indigenous Australians. For example, Kakadu National Park, Tasmanian Wilderness, Uluṟu-Kata Tjuṯa National Park, Willandra Lakes Region, Budj Bim Cultural Landscape, Brewarrina Aboriginal Fish Traps (Baiame's Ngunnhu), and the Myall Creek Massacre and Memorial Site are all places protected under the EPBC Act for their natural or Indigenous cultural values.

At the national level, Indigenous cultural heritage is protected under numerous other Commonwealth laws, including the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (ATSIHP Act). The ATSIHP Act can be used by Aboriginal and Torres Strait Islander peoples to ask the Environment Minister to protect an area or object where it is under threat of injury or desecration and where State or Territory law does not provide for effective protection.

At the Commonwealth level, cultural heritage is also protected under the Copyright Act 1968 (for some intangible heritage) and the Moveable Cultural Heritage Act 1986 (for tangible, moveable heritage).

The States and Territories also play a role in Indigenous heritage protection. Submissions, including from the Victorian Aboriginal Heritage Council, have highlighted the potential for duplication. Others, such as the Tasmanian Aboriginal Centre (2020), noted the importance of the Commonwealth Government playing a role where State and Territory-based arrangements, in their view, provide insufficient protections.

The current laws that protect Indigenous cultural heritage in Australia are well behind community expectations. They do not deliver the level of protections that Indigenous Australians and the community expect, and they do not work with the way developments are assessed, approved and conducted. During the course of the Review, the destruction of Indigenous cultural heritage in rock shelters at Juukan Gorge in Western Australia was approved under State laws. Commonwealth intervention under the ATSIHP Act did not occur. The outcry over this event from Traditional Owners and Indigenous leaders, from shareholders and from the Australian community has garnered international attention. Other large companies have subsequently taken stock of their approvals, in response to shareholder and community pressure.

The ATSIHP Act does not align with the development assessment and approval processes of the EPBC Act. Cultural heritage matters are not required to be broadly or specifically considered by the Commonwealth Government in conjunction with assessment and approval processes under Parts 7 to 9 of the EPBC Act. Interventions through the ATSIHP Act occur after the development assessment and approval process has been completed.

Contributions to the Review have highlighted the importance of considering cultural heritage issues early in a development assessment process, rather than Traditional Owners relying on a last-minute ATSIHP Act intervention. The misalignment of the operation of the EPBC Act and the ATSIHP Act promotes uncertainty for Traditional Owners, the community and for proponents.

The ability to protect some aspects of Indigenous cultural heritage, such as Songlines, is limited by the settings of the EPBC Act. This is because serial listings (groups of sites that collectively tell a story that is of outstanding heritage value) for national heritage cannot be made (Box 15, Chapter 3).

In their submissions, stakeholders raised their concerns that the Commonwealth Government does not provide sufficient protection of Indigenous heritage and that fundamental reform is both required and long overdue. For example, the NSW Aboriginal Land Council (2020) submission highlighted:

> … significant improvements are needed to protect and promote Aboriginal cultural heritage. Successive 'State of the Environment' reports have highlighted the widespread destruction of Aboriginal cultural heritage and have observed that 'approved destruction' and 'economic imperatives' are key risks. Fundamentally, reforms are needed to ensure Aboriginal people are empowered to protect and promote Aboriginal heritage, make decisions, and are resourced to lead this work.

These submissions identify opportunities for the EPBC Act to play a more constructive role in Indigenous cultural heritage protection at the national level.

2.3.2 National-level cultural heritage protections need comprehensive review

The current laws that protect Indigenous cultural heritage at the national level need comprehensive review. This review should consider both tangible and intangible cultural heritage (Box 11).

Box 11 Intangible cultural heritage

The concept of intangible cultural heritage relates to knowledge of or expressions of traditions. Intangible Indigenous cultural heritage is defined in various Commonwealth and State and Territory laws in Australia.

Victorian Aboriginal Heritage Act 2006

'Aboriginal intangible heritage means any knowledge of or expression of Aboriginal tradition … and includes oral traditions, performing arts, stories, rituals, festivals, social practices, craft, visual arts, and environmental and ecological knowledge, but does not include anything that is widely known to the public.'

Continued next page

Box 11 (continued)

Northern Territory Aboriginal Scared Sites Act 1989

'Aboriginal tradition means the body of traditions, observances, customs and beliefs of Aboriginals or of a community or group of Aboriginals, and includes those traditions, observances, customs and beliefs as applied in relation to particular persons, sites, areas of land, things or relationships.

A sacred site means a site that is sacred to Aboriginals or is otherwise of significance according to Aboriginal tradition, and includes any land that, under a law of the Northern Territory, is declared to be sacred to Aboriginals or of significance according to Aboriginal tradition.'

ATSIHP Act 1984

'…the body of traditions, observances, customs and beliefs of Aboriginals generally or of a particular community or group of Aboriginals, and includes any such traditions, observances, customs or beliefs relating to particular persons, areas, objects or relationships.'

For more information, see the Intangible heritage further reading at the end of the report.

Contributors to this Review have emphasised the intrinsic link between Indigenous Australians, land and water and their culture and wellbeing.

> For Indigenous Australians, Country owns people and every aspect of life is connected to it, it is much more than just a place. Inherent to Country are vistas, landforms, plants, animals, waterways, and humans. Country is loved, needed and cared for and Country loves, needs and cares for people. Country is family, culture and identity, Country is self. (IWG 2020)

These contributors have suggested that the EPBC Act could have a more expansive role to protect culturally important species and important cultural places that have intangible, ecological, environmental, and physical cultural assets.

Comprehensive review of national-level Indigenous cultural heritage protection legislation is needed. Reform should consider processes currently underway that are looking to improve Indigenous cultural heritage protection outcomes.

The Environment Minister has committed to a national engagement and co-design process for modernising the protection of Indigenous cultural heritage in Australia. This process commenced in mid-September 2020 with an Indigenous Heritage Roundtable meeting of State and Territory Indigenous and environment Ministers. The meeting was jointly chaired by Minister for the Environment, the Hon. Sussan Ley MP, and Minister for Indigenous Australians, the Hon. Ken Wyatt AM MP. Little detail has been provided about how this process will be progressed.

Since 2018 the Heritage Chairs and Officials of Australia and New Zealand (HCOANZ) has been working to develop Dhawura Ngilan: A vision for Aboriginal and Torres Strait Islander heritage in Australia (Box 12). The vision was developed to 'present a united voice for Indigenous Australians' heritage aspirations for the next decade. This work has been done in partnership with Indigenous heritage leaders.

To support this vision, HCOANZ has developed the *Best Practice Standards in Indigenous Cultural Heritage Management and Legislation*. This is presented as an appendix to the vision. It sets out the fundamental principles required to ensure that Indigenous cultural heritage legislation and policy is of the highest standard in Australia.

The vision and standards framework provide a basis on which to comprehensively review how Indigenous heritage is protected by national laws in Australia and how national laws should interact with state-based arrangements.

Box 12 Dhawura Ngilan: A vision for Aboriginal and Torres Strait Islander heritage in Australia

***Dhawura Ngilan* – Remembering Country**

Dhawura Ngilan provides key areas of focus to guide actions of the Commonwealth Government and State and Territory governments to better protect and recognise Aboriginal and Torres Strait Islander cultural heritage over the next decade. The name Dhawura Ngilan was given to the vision with the permission of the Winanggaay Ngunnawal Language Group to reflect a deep emotional and spiritual connection to the environment.

There are 4 high-level vision statements:

1) Aboriginal and Torres Strait Islander peoples are the custodians of their heritage. It is protected and celebrated for its intrinsic worth, cultural benefits and the wellbeing of current and future generations of Australians.
2) Aboriginal and Torres Strait Islander heritage is acknowledged and valued as central to Australia's national heritage.
3) Aboriginal and Torres Strait Islander Heritage is managed efficiently, effectively and consistently across jurisdictions according to community ownership.
4) Aboriginal and Torres Strait Islander heritage is recognised for its global significance.

These statements should underpin all Indigenous cultural heritage policy development and legislative amendments in the future.

Best Practice Standards in Indigenous Cultural Heritage Management and Legislation

Appendix C of the vision sets out the Best Practice Standards for Indigenous Cultural Heritage Legislation developed by the HCOANZ Indigenous Chairs.

The foundational principle of the HCOANZ Standards is that 'Australia's Indigenous Peoples are entitled to expect that Indigenous Cultural Heritage legislation will uphold the international legal norms contained in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)'. Additional best-practice legislative standards discussed further in the HCOANZ Standards include:

- basic structures
- definitions
- incorporation of principles of self-determination
- process
- resourcing and participation
- resourcing compliance and enforcement
- Indigenous ancestral remains
- secret and sacred objects
- intangible Indigenous cultural heritage.

Combined, the application of these Standards provide a consistent approach to best-practice Indigenous cultural heritage protection, promotion and management across all governments.

For more information, see the Guidelines for Indigenous engagement further reading at the end of the report.

The goal of a national review is to ensure that national laws provide best-practice protection of cultural heritage – tangible and intangible – and work in concert with protections afforded under State and Territory laws.

Given the intrinsic links between the environment, culture and wellbeing, and the objects of the EPBC Act, the Act could play a significant role in delivering more effective protections. This includes how Indigenous heritage is protected under the Act (for example, protection of places or culturally important but common species) and how protections are given effect (for example, in regional planning processes, protected area management or development assessment and approval processes).

However, the EPBC Act may not be best placed to protect all Indigenous cultural heritage (such as language and crafts). Other laws or processes will need to work in concert with national environmental law to provide comprehensive, national-level protections.

Recommendation 7 The Commonwealth Government should immediately initiate a comprehensive review of national-level cultural heritage protections, drawing on best practice frameworks for cultural heritage laws.

2.4 The EPBC Act does not meet the aspirations of Traditional Owners for managing their land

2.4.1 Legal settings of the EPBC Act create an unbalanced relationship between the Director of National Parks and Traditional Owners

Joint management arrangements for Commonwealth reserves (Chapter 5, Part 15, Division 4 subdivision F of the EPBC Act) are in place for 3 parks – Kakadu, Uluṟu-Kata Tjuṯa and Booderee. In these areas, Traditional Owners lease their land to the Director of National Parks (DNP). The DNP is a statutory position, established under Part 19, Division 5 of the EPBC Act. For each jointly managed park, a board of management has been established.

The governance framework for jointly managed parks is shaped by the provisions of:

- relevant Commonwealth Land Rights legislation – the Aboriginal Land Rights (Northern Territory) Act 1976 and Aboriginal Land Grant (Jervis Bay Territory) Act 1986
- the lease agreements between Traditional Owners and the DNP
- the EPBC Act.

The legal settings in the EPBC Act have created an unbalanced power relationship between the DNP (as the lease holder) and Traditional Owners. This imbalance has resulted in longstanding tensions between the joint boards of management and the DNP.

The position of the DNP being a corporation sole under the EPBC Act also means that, ultimately, the position is responsible for decisions made about management of parks and for the effective management of risks such as those relating to occupational health and safety. As a corporation sole, the DNP relies on resources provided to it by the Department to execute its functions. Employees in these parks are employed by the Department, consistent with Australian Public Service (APS) requirements, and resourcing levels are subject to usual government budgetary processes.

Previous reports (ANAO 2019) have highlighted shortcomings in the structure of the relationship between the Department and the DNP. This Review has not revisited these issues given the comprehensive recent assessment.

The contributions of Traditional Owners of Kakadu, Uluṟu-Kata Tjuṯa and Booderee National Parks, as well as the Land Councils that support them, have indicated that the current settings in the EPBC Act for joint management of parks fall short of their aspirations. Examples of this include:

- the inability for Traditional Owners of Booderee National Park to exercise functions, rights and powers within the park under the relevant land rights law
- limits on the number of Traditional Owners on boards means that, for parks that comprise of many Traditional Owner groups, some groups are left out of decision-making
- lease agreements stipulate that the DNP should actively seek suitably qualified Indigenous staff members to fill the majority of permanent employed positions. However, APS-wide employment conditions mean that pathways for employment are reduced, and career progression is limited to lower levels of the public service
- Traditional Owners feel that important opportunities for employment that support connection to Country (such as through 'day labour') have diminished over time
- Traditional Owners feel they don't have recourse if the DNP fails to implement park management plans, decisions of joint management boards, or lease obligations
- Traditional Owners perceive that their views on restricting public access to particular areas of a park that have cultural significance or at particular times are not respected.

Decisions made by a joint management board can be overturned by the DNP. The ultimate decision-making position of the DNP does not empower Traditional Owners to make genuine joint management decisions. There are examples where joint boards have had the opportunity to participate in decision-making but have been unable to effectively do so. They are either reluctant to accept the responsibilities associated with decisions or are unable to draw together disparate community interests and aspirations.

The contributions received from Traditional Owners to the Review indicate that they seek a real partnership and more responsibility to make decisions. Traditional Owners seek their position as owners of land to be respected by the DNP and reflected in the way the DNP (as the leaseholder) interacts with them.

Some contributors to the Review seek a broader application of joint management settings.

2.4.2 Transition to Traditional Owners having more responsibility for managing their land

Traditional Owners of jointly managed parks have expressed their aspiration to have more responsibility and control over the management of their land and waters. Submissions received by the Review have highlighted opportunities to better support these aspirations. These include:

- improved monitoring, compliance and review of joint management arrangements to ensure the DNP implements management activities in a manner consistent with agreed plans
- genuine joint decision-making, meaning that Boards accept the responsibilities and risks that are currently borne by the DNP
- improved employment opportunities and through employment the opportunity to work on Country and share knowledge of Country
- changes to the relationships between laws to provide for greater local management and control.

The shared vision between Traditional Owners and the Commonwealth Government on what they seek to achieve from their partnership in joint management and how this builds toward the longer-term aspirations of Traditional Owners is unclear.

A shared vision for success is needed. This should be done for each park so that local differences can be reflected. Without a shared vision, any change is likely to deliver unintended outcomes, diluted focus or underinvestment in the transition needed to meet the aspirations of Traditional Owners. The first step must be to reach consensus on the shared vision and then co-design the policy, governance and transition arrangements needed to achieve it.

Any transition to greater responsibility for Traditional Owners in decision-making will require support for them to develop the capabilities to execute the legal and administrative responsibilities associated with managing parks. This includes responsibility for effective health and safety risks to park staff and visitors, accountability for expending operating costs (between $7 million and $20 million per year) and for the effective management of capital works budgets. The magnitude and significance of a transition to greater decision-making for Traditional Owners should not be underestimated.

The pathway to sole management cannot occur without some change to the legal settings of the role of the DNP in parks management and decision-making, including consideration of whether standalone law is most appropriate (Chapter 3). The changes need to be co-designed with the Traditional Owners to ensure that a more balanced relationship between Traditional Owners, the Commonwealth and the DNP can occur.

Recommendation 8 The Commonwealth Government, through the Director of National Parks, should immediately commit to working with Traditional Owners to co-design reforms for joint management, including policy, governance and transition arrangements. The Commonwealth Government should ensure that this process is supported by amending the EPBC Act when needed, and providing adequate resources.

3 Reducing legislative complexity

Key points

The EPBC Act is complex. Complex legislation makes it difficult, time-consuming and expensive for people to understand their legal rights and obligations. This leads to confusion and inconsistent decision-making, which creates unnecessary regulatory burden for business and restricts access to justice.

The key reasons the EPBC Act is complex are:

- The policy areas covered by the Act are inherently complex. Environmental approvals, Commonwealth reserves, heritage protection, wildlife trade, and the conservation and recovery of threatened species are all complex. The way the different areas work together to deliver environmental outcomes is not always clear, and many policy areas operate in a siloed way.
- The Act relies heavily on detailed prescriptive processes that are convoluted and inflexible, meaning engaging with it is time-consuming and costly. Convoluted processes are made more complex by important terminology being poorly defined or not defined at all.
- The Act also interacts with a wide range of other Commonwealth environment, heritage and Indigenous legislation. These interactions include inconsistency and conflict, which drives complexity and uncertainty when applying the Act.
- The construction of the Act is archaic and does not meet best practice for modern regulation. It is not structured for clarity, ease of use or to enable the full delivery of a national, standards-based framework to achieve environmental and heritage outcomes over the long term.

Neither the EPBC Act in its current state nor minor efficiency adjustments to the Act can effectively deliver:

- the recommended National Environmental Standards
- accreditation of third parties to make decisions
- audit and oversight.

A systemic overhaul of the EPBC Act is required. This involves both immediate and ongoing amendment. Sensible staging of legislative reform should be matched with the maturity of the system as it evolves.

The key reforms recommended by the Review are to:

- Immediately improve the operation of the EPBC Act by implementing legislative amendments in the short term to address known inconsistencies, gaps and conflicts.
- Comprehensively overhaul the Act to enable the delivery of the policy reforms recommended by this Review – without this, the full delivery of reform will not be possible.
- Consider alternate structures for the Act, such as creating separate pieces of legislation for its key functional areas. Redrafting should explicitly consider how to improve the interactions within the Act and with other Commonwealth legislation.
- Consistent with the Intergovernmental Agreement on the Environment (IGAE), redraft the Act to enable harmonisation with State and Territory regulation to deliver the recommended standards-based accreditation framework.

3.1 The EPBC Act covers a range of complex policy areas

The original ambition of the EPBC Act for a 'joined up', comprehensive environmental framework – one that combined 5 pieces of legislation into one – has not been realised.

The complexity in the Act, and across the broader environmental, heritage and Indigenous cultural protection responsibilities of the Commonwealth, is in part driven by underlying policy complexity. The broad policy areas covered by the Act – environmental approvals, Commonwealth reserves, heritage protection, wildlife trade, and threatened species conservation and recovery – are complex in their own right.

Having multiple policy functions in the one Act makes it challenging to understand how the requirements for these areas operate separately or together. This creates confusion and inconsistency in decisions and limits the effectiveness of the compliance and enforcement function (Box 13). The interrelationships between the different parts of the Act are often not clear, and there can be ambiguity when different parts of the Act are in operation.

Box 13 Unclear linkages between the functional parts of the EPBC Act

Example 1: The link between recovery plans (Part 13) and approval decisions (Part 9)

It is administratively difficult to apply the current legislative requirement to 'not act inconsistently with a recovery plan' made under Part 13 and an approval decision made under Part 9. There are commonly different opinions as to what practically amounts to an inconsistency. Recovery plans are written with a focus on protecting and enhancing species' survival. Decisions made under Part 9 are generally applied in a way that minimises harm to the environment while facilitating development but do not aim to enhance species' survival.

Example 2: The link between permits (Part 13) and approvals (Part 9) in a Commonwealth area

A Part 13 permit (to kill, injure, take, trade, keep or move a member of a listed species or ecological community in or on a Commonwealth area) is not required for actions that are covered by a Part 9 approval. However, where a Part 9 approval has not been granted (for example, where a 'not controlled action' decision or a 'particular manner' decision is made), a Part 13 permit is still required. This means that even when the same action is found not to have a significant impact on a matter of national environmental significance (MNES) under one part of the Act, it could still be an offence under another (Chapter 1).

In some cases, the complexity of the State and Territory impact assessment and planning processes are equal to or greater than the federal requirements (LCA 2020). EPBC Act complexity is compounded by the way it overlaps and interacts with State and Territory regulatory arrangements.

Harmonisation of State and Territory laws, in concert with an overhaul of the EPBC Act, is a necessary recommitment to key goals of the IGAE of reducing duplication of process and harmonising actions on the environment across all levels of government.

3.2 Environmental impact assessment is a convoluted process based on poorly defined terms

The EPBC Act uses overly prescriptive processes. This means the effort of the regulator and the proponent is often focused on completing the process as quickly as possible rather than achieving the outcome intended.

This is most visible for environmental impact assessment (EIA), where the Act prescribes the:

- required, detailed steps for preparing content of relevant documents
- documents that must be provided
- way they must be considered by the decision-maker (Box 14).

Box 14 Complexity of EIA processes

Example 1: Part 9 decisions – approval of actions

The EPBC Act does not set out a clear standard for deciding whether to approve an action based on the acceptability or otherwise of the impacts (Chapter 1).

The focus on process is at the expense of outcomes. The administrative overhead to manage the technicalities of prescriptive processes is significant and adds to delay and cost with no additional environmental benefit.

A decision-maker may approve an action if they follow the correct legal processes and have regard to all the relevant statutory considerations.

The statutory considerations a decision-maker is required to apply differ depending on which information and documents need to be considered. For example, a decision-maker may have to: 'have regard to', 'take into account', 'consider', 'not act inconsistently with', or 'not contravene', the relevant information or statutory document.

This complexity must be reflected in the recommendation report and decision brief to meet all the requirements of the EPBC Act. Approval decisions have been overturned on technical grounds then remade with no change to the environmental outcomes.

This has practical consequences. Where there is community concern arising from a decision, that decision is contested on technical grounds about the process rather than the environmental outcome (Chapter 4).

Example 2: Poorly defined terms

Key terms in the EPBC Act lack clarity, which leads to confusion about obligations and inconsistent interpretation.

Ambiguous terminology such as 'significant' (impact), 'action' or 'continuing use' means people, including departmental staff, aren't sure how the EPBC Act should apply.

Poorly defined terminology also leads to uncertainty about how to undertake self-assessment to determine if a referral is needed. This drives unnecessary referrals as proponents seek to manage risk by requesting a referral decision even if they don't think their action would trigger the EPBC Act.

The Department has been inconsistent in its application and guidance about requirements under the EPBC Act, which has added to confusion and uncertainty. For example, whether to refer or not to refer, or whether something is a controlled action.

Example 3: Uncertainty about 'controlled actions' and the 'controlling provisions' in Part 3

The concept of 'controlled actions' and 'controlling provisions' is central to the referral and subsequent assessment and approval of an action but is unclear.

Before an assessment is carried out, there is often insufficient information on matters of national environmental significance (MNES). At the referral stage, it is difficult for an assessment officer to identify with certainty which controlling provisions apply. If a controlling provision is not specified at the referral stage but is identified as relevant during the course of the assessment, the EPBC Act requires a reconsideration of the initial controlled action decision and the assessment process must begin again.

Example 4: Legal uncertainties relating to condition-making powers

Usually, EIA approval decisions have conditions applied to them. There are uncertainties about how conditions are to be applied and what happens to them over time. For example, consent of an approval holder is required to apply conditions that are not 'reasonably related to an action', but it is unclear what this means.

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Box 14 (continued)

Conditions relating to management plans are usually set early in the life of a project before impacts are fully understood making implementation and enforcement difficult. Changes in circumstances are also not well accommodated, meaning some conditions can cease to be appropriate or relevant but remain in force unless actively removed.

Example 5: Inconsistent interactions between EIA and other parts of the EPBC Act

The EPBC Act seeks to simplify the operation of Part 10 (strategic assessments) by applying the Part 9 approval and post-approval processes to a strategic assessment approval. If a strategic assessment approval is in force, the Act applies several of the provisions of Part 9 to that approval (section 146D). This leads to potential legal inconsistencies as a Part 10 approval is quite different in practice to a Part 9 approval.

3.3 The construction of EPBC Act is outdated and its interactions with other Commonwealth legislation are unclear

The EPBC Act does not meet Commonwealth Government best-practice guidance on minimising legislative complexity. The Act was drafted 20 years ago and best-practice legislative drafting has evolved since this time.

There is a general need to remove duplication, apply consistency and simplify the law where possible. An example of this is the distributed nature of compliance and enforcement provisions throughout the EPBC Act, rather than a broad set of compliance and enforcement provisions that can be applied across it (Chapter 9). Management of heritage matters is a further example (Box 15).

Box 15 Examples of EPBC Act inconsistency on heritage matters

Examples of inconsistency can be seen in the way the management principles and listing guidelines for World Heritage properties located within Australia interact with those of the National Heritage List.

World Heritage properties within Australia are automatically included on the National Heritage List. Under the current settings, managers of a place included in both lists must comply with 2 different sets of management principles. This introduces administrative uncertainty and confusion, despite both sets of principles having protection of the place as their goal.

There also exists no straightforward way to amend the boundary of a National Heritage property. This contrasts with World Heritage guidelines, which include provisions to make such amendments including an option for a minor modification to a boundary. This means places that are both World Heritage and National Heritage listed may have slightly different boundaries under each list, leading to confusion regarding management of the place and assessment of relevant development proposals.

The EPBC Act does not currently allow for serial listings. A serial listing is a group of sites that may not be in close proximity to each other, but that when considered collectively 'tell a story that is of outstanding heritage value to the nation' (AHC 2020). Songlines and trading routes are 2 examples of cultural heritage with component parts located separately but for which their cultural significance lies in the aggregation of these places.

Under the current settings, the listing process for related properties requires nominations for each component property to proceed separately, imposing an administrative burden with little discernible benefit and potential for perverse outcomes where protection is delayed.

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Box 15 (continued)

By contrast, the *Operational Guidelines for the Implementation of the World Heritage Convention* make provision for the listing of multiple properties which may not necessarily lie in proximity to one another, but which are connected by factors such as historico-cultural, geological, or ecological significance and which, as a series, exhibit Outstanding Universal Value (UNESCO 2012). For example, the 11 places that make up the Australian Convict Sites.

Many clauses in the EPBC Act are unnecessarily wordy, which makes them hard to read. For example, section 133(1):

> After receiving the assessment documentation relating to a controlled action, or the report of a commission that has conducted an inquiry relating to a controlled action, the Minister may approve for the purposes of a controlling provision the taking of the action by a person.

The level of detailed prescription in the EPBC Act is not consistent with the *Legislation Act 2003*, the *Regulatory Powers (Standard Provisions) Act 2014* or the *Acts Interpretation Act 1901*. Examples of this include:

- The level of prescription in the Act on how an instrument is revoked or amended makes it difficult to amend that instrument where it is redundant or no longer has the intended effect.
- Instruments made under the Act can be amended by other instruments, leading to legal questions about their status. For example, heritage lists are published on the Department's website, but can be amended by gazette notices (for inclusion), notifiable instruments or legislative instruments (for removal of places, depending on the reason for removal).

The interrelationships between the EPBC Act and other laws are not clear. This arises because definitions of terms, processes and outcomes set out in the Act do not always align or operate in conjunction with other legislation.

There is a range of Commonwealth legislation that directly or indirectly interact with the EPBC Act. Resolving the tension between different legislation is beyond the scope of the Review. However, any redrafting of the Act needs to explicitly consider the connections across the range of Commonwealth legislation to remove inconsistencies and conflicts.

3.4 Recommended reforms

Complexity of a policy area necessitates a degree of complexity in legislation. There is general acceptance that the core functions of the EPBC Act are all necessary to implement Australia's international obligations and to achieve national environmental outcomes.

The reforms recommended by the Review, particularly those related to the hardwiring of the requirement for ecologically sustainable development (ESD), the establishment of National Environmental Standards, and pursuing a regional planning approach, will all reduce the need for complexity in the law.

The controversial and contentious nature of some parts of the EPBC Act result in political sensitivity about the Act as a whole, making administrative amendments or amendments to less controversial parts of the Act difficult. Successive governments have been reluctant to propose amendments unless absolutely unavoidable, leading to a hesitation even within the Department to recommend amendments. Such opportunities are seen as out of reach, when they should be routine. Largely uncontested changes to less controversial parts of the Act (such as some related to wildlife trade or the management of Commonwealth reserves) have suffered from this unwillingness to amend the Act.

3.4.1 Make known improvements to the EPBC Act in its current form

Key problems with the EPBC Act, and the potential solutions for them, have been long-known. In the short term, legislative amendments to the Act are required to address known inconsistencies, gaps, and conflicts in the Act. Submissions to the Review have indicated this to be a priority (Law Council of Australia 2020).

Opportunities to reduce process prescription

Process prescription must be addressed both in how the EPBC Act is constructed as well as how it is implemented. Opportunities to reduce prescription include:

- reducing the number of statutory tests – many different statutory tests apply to a decision. For example 'take into account', 'have regard to' and 'consider' different documents or requirements
- clarifying the information that must be before the decision-maker as part of a briefing (and the form in which it should be provided)
- removal of requirements for publication of notices in newspapers – these and similar reductions in process prescriptions affecting transparency should be offset by corresponding improvements in the accessibility of information and the use of alternative media to ensure increased overall transparency of the Act.

Resolving the connection between Part 9 and Part 10

The long-standing problems relating to the connection between approvals (Part 9) and strategic assessments (Part 10) should be addressed:

- The inability to vary a program once endorsed makes a Part 10 approval 'frozen in time' and unable to respond to changes in information and circumstances. For example, strategic assessments are unable to deal with technological advances that, while inconsistent with an approved plan, would result in both environmental and productivity improvements. This means strategic assessments that operate for long periods of time are unable to be changed to achieve the environmental outcomes envisaged, including those in the National Environmental Standards.
- Strategic assessments are made on a policy, plan or program, which commonly include commitments that must be fulfilled by different people. The consequences of a failure to implement a commitment in an endorsed policy, plan or program are unclear. For example, it is unclear whether a person can rely on a strategic assessment approval if a commitment has not been fulfilled.
- Strategic assessments give approval for many unidentified persons to undertake the approved action(s) or class of action. In most cases, there is no identified 'approval holder' for a Part 10 approval. This makes it difficult to vary the conditions of the strategic assessment approval where the consent of the approval holder is required, or to revoke or suspend a Part 10 approval, because there are legal difficulties in providing procedural fairness.

Rework the EPBC Act to ensure delivery of the fully functional National Environmental Standards

The EPBC Act was designed to deliver a prescriptive, process-based approach to environmental protection. In its current form, the Act cannot deliver or fully realise the recommended reforms with respect to:

- implementing enforceable National Environmental Standards (Chapter 1) and regional planning (Chapter 8)
- establishing the required accreditation, auditing and oversight functions (Chapter 7)
- embedding monitoring, evaluation and reporting across multiple scales of decision-making (Chapter 11)
- establishing the necessary institutional and governance arrangements including comprehensive advisory committees and strong, independent compliance and enforcement (Chapter 4 and Chapter 9).

It is expected that different parts of the recommended legislative changes will take varying amounts of times to be developed. For example, the data and information supply chain is highly complex and is likely to take several years to build. Reform of the EPBC Act should be carried out in phases to allow the proper development of different foundational components of the recommended reform package (Chapter 12).

Restructure and simplify the law

In the long term, comprehensive redrafting of the EPBC Act (or related Acts) is required. Redrafting should be framed around core principles for legislative drafting (OPC 2016) (Box 16). For example, the *Fair Work Act 2009* was drafted using principles including:

- Policy simplification (where possible) should be carried out first.
- Material of most relevance to the reader should be placed upfront.
- Important concepts should be clearly defined.
- Language and sentence structure should follow guidance to reduce complexity.
- The overall structure of legislation and its provisions should be carefully constructed for readability.
- Only necessary detail should be included, and detail should be in the right place.

Box 16 Better practice lawmaking

Well-designed and well-implemented regulation promotes certainty and minimises costs for business and the community. Good design also enables effective administration and enforcement of the law. Key elements for creating good regulatory design (OPC 2016, PC 2020) are:

- effective consultation and community engagement
- clearly defined objectives, policy settings and operational frameworks
- clear regulatory roles, responsibilities and functions
- adequate resourcing for regulatory bodies, including staff with an understanding of the issues they are regulating.

In addition, regulator conduct must provide clarity and predictability. An open and transparent process promotes impartiality and accountability and helps build community confidence. Regulators must be consistent in applying the law and supporting policy and monitoring and enforcing compliance.

Plain English guidance material should accompany legislation to aid interpretation and use. This material should be easily accessible and updated regularly.

Split the EPBC Act into logical categories

When simplifying the legislation, consideration should be given to dividing the EPBC Act – or reworking how the parts of the Act are separated and relate to each other – along functional or operational lines by creating separate legislation for some or all of the Act's functions including:

- biodiversity and ecosystem management, to regulate the recovery of natural systems and nationally important biota (via National Environmental Standards and regional planning)
- environment and heritage protection, to regulate EIA decision-making in relation to matters of national environmental significance
- wildlife trade restrictions, to meet international obligations
- protected areas management, to regulate Commonwealth reserves and heritage places and to administer Commonwealth reserves

- environmental data and reporting, to administer data coordination, and national and international reporting
- institutional arrangements, including those for monitoring, compliance, enforcement and assurance
- national biodiversity markets and trusts.

Any legislatively separate areas should be clearly integrated by:

- requiring decision-making across relevant Acts to comply with the National Environmental Standards, accreditation, and independent oversight and audit (Chapter 1 and Chapter 7).
- ensuring consistent data and reporting requirements, in line with recommended reforms for the monitoring, evaluation and reporting of the outcomes from the national system for environmental management (Chapter 11).

Creating multiple Acts could also prove to be more cumbersome than the current single piece of legislation. Targeted legislation can bring greater focus to specific issues, but the trend across many jurisdictions has been to have increasingly comprehensive administrative processes. The Review recommends considering whether separation of elements of the EPBC Act is beneficial. However, an informed decision is not possible until after the policy direction agreed by the Commonwealth Government and detailed legislative drafting is scoped.

Recommendation 9 Legislative reforms should be redrafted in line with modern, best practice drafting guidance. Immediate amendments should be made to:

a) fix inconsistencies, gaps and conflicts in the EPBC Act to make it easier to understand and work with

b) implement enforceable National Environmental Standards; improve the durability of bilateral agreements; independent oversight and audit; and compliance and enforcement.

Recommendation 10 Over a 2-year transition period, a comprehensive reworking of the EPBC Act should be undertaken to fully implement the reforms recommended by this Review and to deliver an effective legislative framework.

a) The Act should be restructured to clarify and simplify the functions of the Act and how they interact.

b) Redrafting and restructuring of the Act should explicitly consider its interaction with other Commonwealth legislation to remove inconsistency and to improve operational efficiency. To deliver the full results, this may require consequential changes in other legislation.

c) Redrafting should include consideration of dividing the Act, such as creating separate pieces of legislation for its key functional areas.

4 Trust in the EPBC Act

Key points

The community and industry do not trust the EPBC Act and the regulatory system that underpins its implementation. A dominant theme in the 30,000 or more contributions received by the Review is that many in the community do not trust the EPBC Act to deliver for the environment.

The community and industry fundamentally don't believe, with good reason, that decisions made under the EPBC Act can achieve the outcomes they want. The avenues for the community to substantively engage in decision-making are limited. Poor transparency further erodes trust.

The lack of trust is evident in high community interest in development applications, high-profile public campaigns, legal challenges to EPBC Act decisions, and a growing rate of both Freedom of Information (FOI) applications and requests for statements of reasons.

The EPBC Act is not trusted by industry. They generally view it as cumbersome, pointing to duplication, slow decision-making, and legal challenges being used as a tool to delay projects and drive up costs for business (often called 'lawfare').

Access to judicial review remains important for the rule of law and the effectiveness of the EPBC Act over time. The ability of the public to hold decision-makers to account is a fundamental foundation of Australia's democracy. To characterise these types of actions as 'lawfare' misrepresents the importance of legal review in Australian society.

The key reforms recommended by the Review are to:

- establish a comprehensive advisory committee structure to provide confidence that decision-makers have access to the best available environmental, cultural, social and economic information
- improve community participation in decision-making processes, including through incorporation in the National Environmental Standards, and the transparency of both the information used and the reasons for decisions
- retain extended standing provisions, but amend the settings for legal review to provide for limited merits review for development approvals. Legal challenges should be limited to matters of outcome, not process, to avoid litigation that does not have a material impact on the outcome.

4.1 The community does not trust the EPBC Act is delivering for the environment

The EPBC Act is broadly perceived as ineffective at protecting the environment. The lack of clear outcomes (Chapter 1), weak compliance and enforcement (Chapter 9), and ineffective environmental monitoring and evaluation (Chapter 11) drive mistrust.

Limited access to information about decisions and the lack of opportunity to substantively engage in decision-making under the EPBC Act adds to this mistrust. This drives the use of legal review to discover information, rather than its proper purpose to test and improve decision-making.

The number of public interest challenges has been limited. Submissions to the Review have suggested most of these challenges have been on issues that have a high significance to the community.

The EPBC Act is not seen as being able to deliver environmental protection through its ordinary operation, so legal challenge on procedural grounds is sometimes used by the community to slow or attempt to stop development. Third-party enforcement rights become more important in the absence of effective and transparent decision-making.

4.2 Community participation is limited to process – they do not feel heard

The processes of the EPBC Act limit avenues for community participation in decision-making. For example, participation in the process for listing species is largely limited to matters of scientific fact. There is no avenue in the process to raise concerns about the potential social and economic implications of listing additional species or ecological communities.

Effective, outcomes-based decision-making, where the community can engage with the process and understand the reasons for decisions, is the primary way to improve trust.

The experts who lead community engagement processes in environmental impact assessments (EIA) highlight that:

> the levels of community outrage...increasingly reflect a greater community intolerance of proponents who disregard community values…key stakeholders and communities are losing, or have lost, confidence in project development and government approval processes (EIANZ 2020).

The growth in community interest in environmental decisions is indicative of the degree of mistrust. People want to know why decisions are made and want to contribute to decisions that affect them and Australia's environment, especially when they believe those decisions are having negative consequences.

With limited trust in the effectiveness of the EPBC Act and no alternative avenue to participate, the community seeks information or influence through whatever means possible. The formal access options for both business and the community under the current arrangements are:

- FOI applications
- requesting statements of reasons
- judicial review
- merits review for Part 13A wildlife trade permit decisions (noting that merits review is not available for EIA decisions)
- public comment processes.

4.2.1 There is limited transparency of the information and advice provided to decision-makers and how these are considered in decisions

A key theme in submissions is the lack of transparency of how information is collected and incorporated into decision-making processes. The public do not trust claims made by advocates or governments on the costs or benefits of a proposal, and they do not trust the effectiveness of compliance and enforcement activities. There are concerns that proponents themselves commission environmental consultants in the EIA process. However, there are no professional standards or accreditation for these consultants, which further erodes trust in decision-making.

Low transparency and a lack of early public engagement by some proponents means that it is often late in decision-making processes that community concerns have the opportunity to be raised, such as when a specific development application is being considered. This is the most likely point the community will engage with the project impacts and the process.

Poor transparency encourages challenges to decisions. The growth in FOI requests is indicative of the degree of mistrust and the perceived lack of transparency and accountability for decision-makers. People cannot understand how decisions to approve developments can be consistent with the laws that protect the environment, if overall environmental indicators are trending down.

This lack of visibility is exacerbated by the complexity of the EPBC Act and limitations in both the scope and transparency of information used for decision-making, and to ensure compliance with the Act. There is a growing trend of post-approval arrangements, where specific environmental impacts and treatments are considered when proponent management plans are assessed. This post-approval process happens without the opportunity for public comment. The community also cannot see how allegations of non-compliance with the Act are investigated and resolved.

The EPBC Act and its processes focus on the provision of environmental information, yet the Minister can and must consider social and economic factors when making many decisions. The community cannot see how these factors are weighed in Act decisions under the current arrangements. There is no requirement for proponents to give fulsome information in relation to social and economic impacts of a project proposal, nor is there scope for the assessment process to test the veracity of that information.

The social and economic benefits and costs put forward by proponents are at the project scale, meaning that decision-making is not based on a complete nationally focused economic or social analysis. The trade-offs and considerations of decision-makers are not explicit, often happening behind closed doors. This gives rise to allegations that proponents have undue influence on decision-makers and the environment loses out to other considerations.

The advice provided to support decisions is not always made publicly available. This promulgates community concerns over the quality of the advice, or that government may have something to hide and shuns accountability for its decisions. There is a view that decisions are biased towards competing imperatives other than protection of the environment. To resolve this concern, many submissions to this Review have expressed a strong preference for decisions to be made by independent authorities or commissions, rather than democratically elected decision-makers and their delegates.

4.2.2 High-profile decisions are contested – the community is dissatisfied with environmental outcomes

It is not clear how decisions explicitly contribute to environmental outcomes. Many contributions to the Review raised concerns that development approval decisions made under the EPBC Act are out of step with the views and values of the community.

Where concerns arise about environmental outcomes associated with a decision – and with no other viable alternative for the community – public focus turns to challenging high-profile decisions. Concerns are raised about the validity, completeness or accuracy of information on which decisions are based. Challenges can succeed on technical legal grounds rather than on environmental outcomes. There is currently no avenue in the EPBC Act to challenge the merits of EIA decisions; consequently, technical process compliance has become the focus.

In past Federal Court decisions (e.g. Tarkine National Coalition Inc v Minister for Sustainability, Environment, Water, Population and Communities [2013] FCA 694), the technicality was a failure to attach documents to a ministerial decision brief. This legal challenge was based on a failure to fulfil process obligations rather than questioning the outcomes resulting from the decision, which was remade with the same environmental outcome after legal proceedings were completed.

Where used, campaigns, protests and the use of the courts slow down developments. These delays often result in no material change to the decision. Technical challenges can therefore result in delays and costs for industry and the economy with little, if any, benefit to the environment.

4.2.3 Industry perceives the EPBC Act to be cumbersome and prone to unnecessary delays

Complexity of the EPBC Act leads to uncertainty for business

The complexity of the EPBC Act leads to cumbersome processes, which are inefficient for both business and government. This adds to regulatory costs, without any associated environmental benefit (Chapter 3 and Chapter 11). For example, the Act does not allow decision-makers to correct or adjust decisions where strict adherence to process has not occurred. This leads to unnecessary process delays for industry, without necessarily changing the substance of the original decision.

Judicial review cases have driven a culture of 'box-ticking' within the Department. This has led to fewer resources being dedicated to assisting proponents to improve outcomes for the environment and more resources to administering processes.

The information used to make a decision and how the decision is made based on that information is not always consistent or clear. This leads to uncertainty for proponents. Past decisions are not transparent. Industry cannot derive lessons from previous interactions with the EPBC Act, which would lead both to efficiency and improvements over time. This is in contrast to determinations made under tax law or competition law, which are public and searchable.

Duplicative processes and slow decision-making drive up costs

An underlying theme of industry mistrust in the EPBC Act relates to its perceived duplication with State and Territory processes (Chapter 5) and the length of time it takes to receive a development approval. These are key reasons why industry is calling for a 'single-touch' model to reduce duplication and assessment time frames.

Between 2014 and 2019, resources sector projects took an average of nearly 3 years, or 1,009 days, to approve under the EPBC Act. This is too long (Box 17). For business, time is money. On large projects, time delays can result in significant additional costs. Recent provision of additional resources has improved performance of on-time assessment and approval decisions, from 19% of key decisions made on time at the end of December 2019 to 97% by the end of September 2020.

There is also little accountability in the post-approval phase. There are no statutory time frames for these decisions, and this has led to increased uncertainty and delay for industry (PC 2020, MCA 2020, APPEA 2020).

Box 17 Time frames for assessment and approval of resource projects

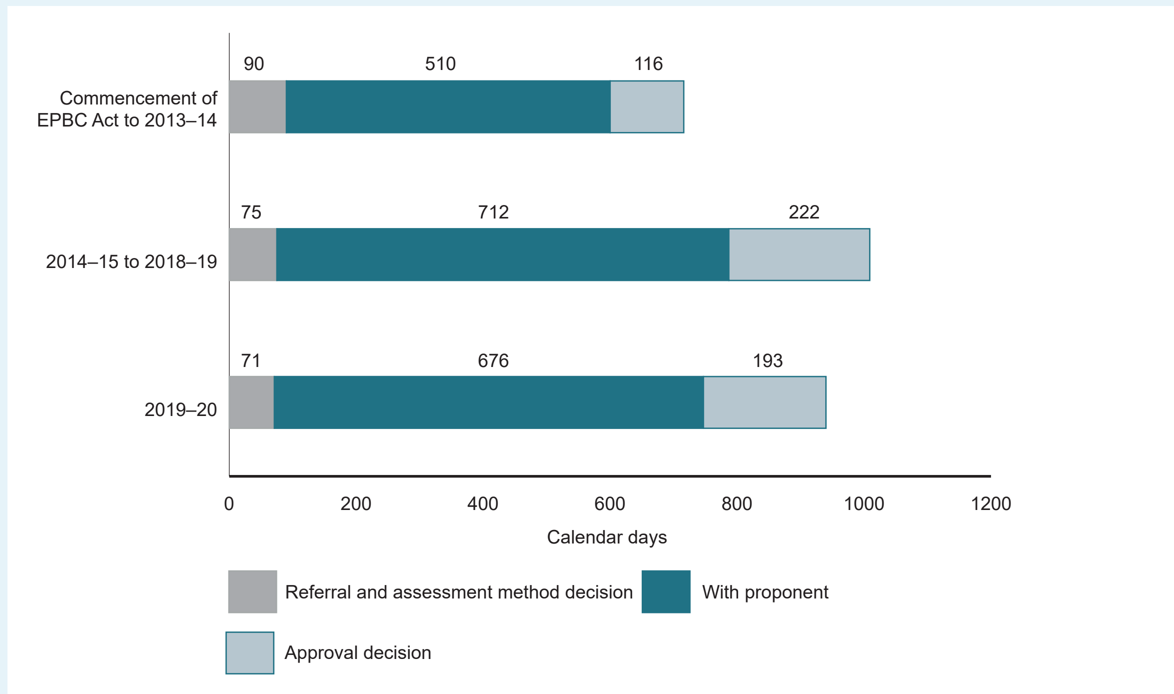
The process for assessment and approval of development projects can be described in 3 stages: the time taken by the Environment Minister to receive a referral and make an assessment method decision; the time taken for the proponent to prepare the assessment documentation; and the time taken by the Environment Minister to make an approval decision.

Between the commencement of the EPBC Act in 2000 and the 2019–20 financial year, the average time taken for resource projects to be assessed and approved increased from an average of 716 days to 1,009 days. The time taken for the Environment Minister to make an approval decision on these projects increased from an average of 116 days to 193 days, with a peak average of 222 days during the 5 years between 2014 and 2019. A small reduction in average time frames is evident in the 2019–20 financial year (Figure 2).

Continued next page

Box 17 (continued)

Figure 2 Average number of days taken for assessment and approval of resource projects under the EPBC Act, commencement of EPBC Act to 2013–14, 2014–15 and 2019–20



Source: Department of Agriculture, Water and the Environment, unpublished

These time frames do not factor in time taken for post approval requirements, such as the development of management plans, which can be significant. They also do not factor in appeal time frames.

Submissions have noted that businesses have experienced time delays due to statutory deadlines being missed by the regulator. The Minerals Council of Australia cited project examples where it has taken 7 months to make a controlled action decision with a 20 business day statutory time frame and 87 business days to make an approval decision with a 40 business day statutory time frame (MCA 2020).

Lengthy assessment and approval processes are not all the result of a slow Commonwealth regulator. On average, the process is with the proponent for more than 70% of the total assessment time (Figure 2). This includes the time needed to collect required environmental information and collate necessary documentation, or when projects are shelved for periods of time for commercial reasons by proponents. In some instances, projects that require State and Commonwealth approvals can be held up by State or Territory assessment and approval processes. In rare cases, Commonwealth approvals can be received years before a State or Territory approval (PC 2020).

Industry is concerned that legal challenges add further delays

Poor trust in the EPBC Act has played out in a lengthy public debate about 'lawfare', with accusations that politically motivated environment groups use the courts to delay projects. The public discourse on legal challenges is focused on large projects with considerable economic benefits that impact highly valued environmental areas – for example, the Shenhua Watermark coal mine, the Carmichael coal mine (Adani), and Shree Minerals (Tarkine). Pro-development groups argue that the extended standing provisions (standing beyond a person directly affected by a decision) should be removed from the Act. Previous attempts have been made to remove these provisions.

The EPBC Act standing provisions provide broad but not open standing. The scope of extended standing has been tested in the courts, so there is a high degree of certainty about its application. In fact, the courts have interpreted the standing provisions to exclude 'mere intellectual or emotional' concerns as sufficient standing under the Act.

The Review has received highly conflicting evidence and views about whether there is significant abuse or gaming of appeal mechanisms under the EPBC Act. Generally, only a small number of decisions have been challenged relative to the approximately 6,500 projects referred under the Act. Figure 3 shows third-party court actions over the life of the Act. These cases have remained stable over this period.

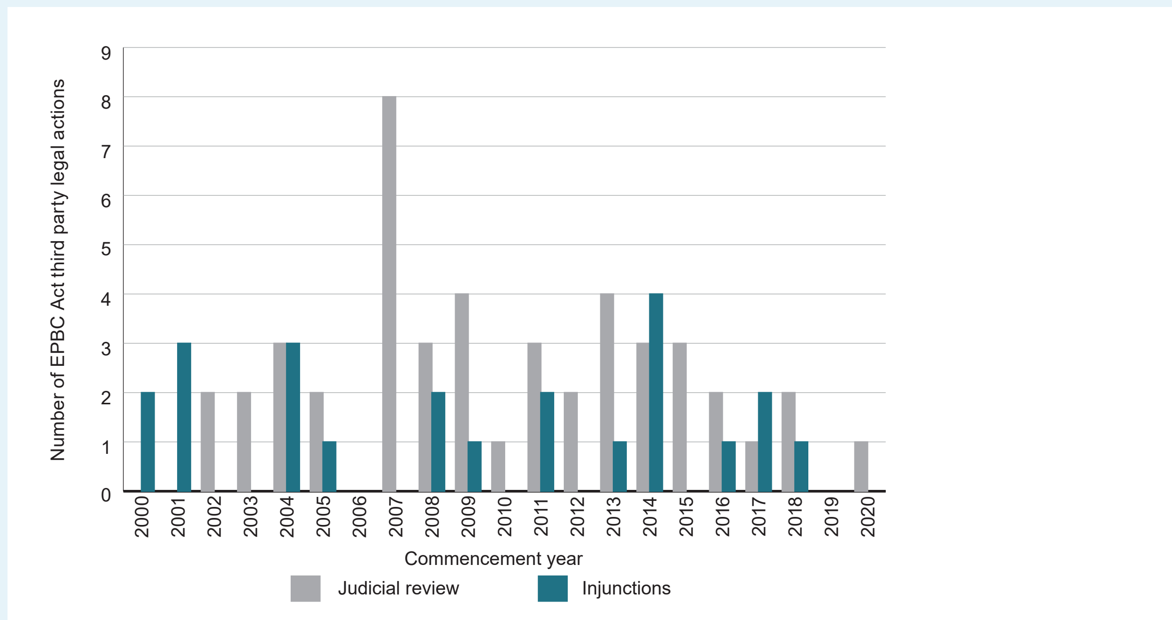
Similarly, evidence from other jurisdictions indicates that open-standing arrangements (which are broader than the current provisions in the EPBC Act) do not necessarily lead to excessive numbers of legal challenges. In New South Wales, less than 2% of development applications are challenged via judicial or merits review (Macintosh et al. 2018).

Figure 4 shows FOI requests in the last 5 years relating to EPBC Act decisions. Although there is an increase in FOI requests in 2018 and 2019, there does not appear to be any significant driver to explain the increase (Box 18).

Box 18 EPBC Act judicial reviews (2000 to 2020) and FOI requests (2015 to June 2020)

The number of third-party legal actions (judicial reviews and injunctions) in relation to development approval decisions has remained consistent each year over the life of the EPBC Act (2000 to 2020). Annually, judicial review proceedings vary from zero to 8 cases and injunctions number zero to 4 applications (Figure 3). In some cases, injunctions and judicial review proceedings relate to the same matter but this has not been quantified. Numbers are assigned according to the year in which the action commenced.

Figure 3 Number of third-party legal challenges for EPBC Act decisions, 2000 to 2020



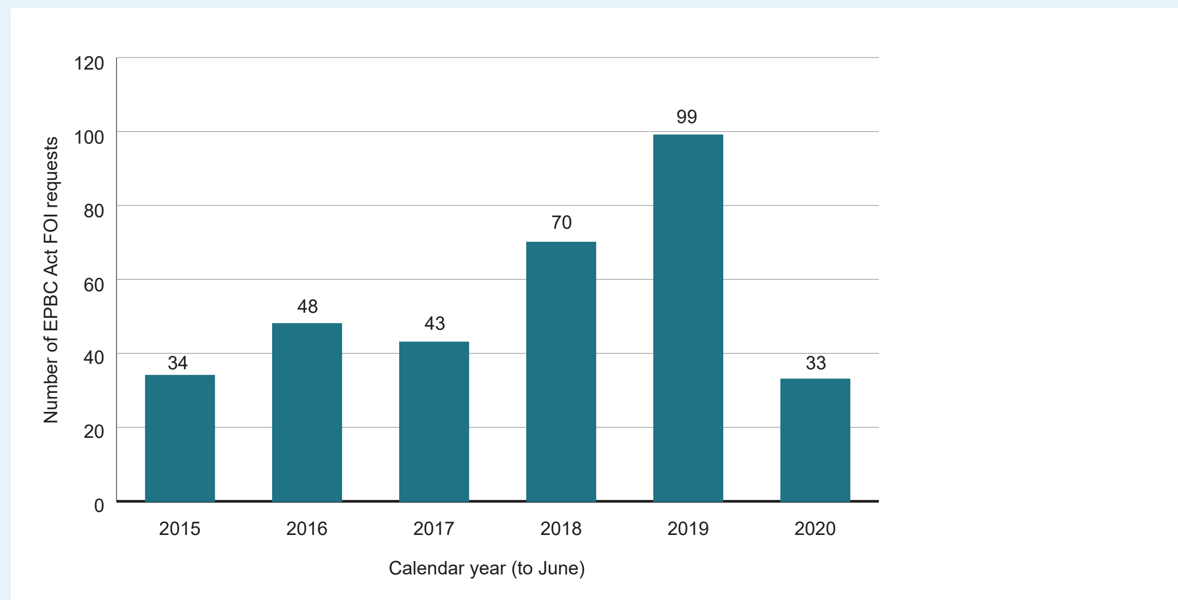
Source: Department of Agriculture, Water and the Environment, unpublished

Continued next page

Box 18 (continued)

The number of FOI requests in relation to EPBC Act decisions grew between 2015 and 2019. The Department received 34 FOI requests in 2015, 48 in 2016, 43 in 2017, 70 in 2018 and 99 in 2019. To June 2020 the Department received 33 FOI requests (Figure 4).

Figure 4 Number of FOI requests for EPBC Act decisions, 2015 to 2020



Source: Department of Agriculture, Water and the Environment, unpublished

The focus should not be to limit the capacity of people to use legal review to challenge decisions in the public interest. Rather, improving communication and transparency as well as the excessive requirements of the EPBC Act should be addressed as a matter of urgency to remove the most significant sources of delay and to increase certainty. This effort will minimise the drivers for legal challenge, particularly for litigation that is vexatious or without reasonable prospects of success.

4.3 Recommended reforms

An aim of the key reforms recommended by the Review is to minimise the demand for formal review, while providing the necessary access to the law demanded of modern regulatory practice. These reforms seek to address the reasons the community chooses legal challenge over other mechanisms. The reforms will strengthen the capacity for improvements to be generated from effective scrutiny and testing of decision-making through formal legal review.

A key driver of low trust in the EPBC Act is the lack of confidence that it is contributing to good environmental outcomes. This Review recommends a suite of reforms focused on clearly defined outcomes (via National Environmental Standards) to improve decision-making and the effectiveness of the Act. Demonstrating an improvement in delivering outcomes is the basis for lifting trust in the Act and its operation.

The setting of National Environmental Standards (Chapter 1) and the development of regional plans (Chapter 8) are key mechanisms to set the clear outcomes that the EPBC Act intends to achieve. Many of the reform directions recommended in other chapters seek to provide greater confidence that decisions contribute to achieving these outcomes. These include:

- a quantum change in the data and information that underpins the operation of the Act (Chapter 10)
- effective, independent monitoring, compliance and enforcement (Chapter 9)

- the development of effective frameworks for monitoring and evaluating the operation of the Act and the broader national environmental management system (Chapter 11)
- an independent Environment Assurance Commissioner, providing comprehensive oversight and audit of the effectiveness of the Act and its operation (Chapter 7).

Many of the reforms recommended will also reduce the time taken for regulatory decisions. Clear rules (Chapter 1), greater integration with other regulators (Chapter 5) and better information, data and regulatory systems (Chapter 10) will speed up the time taken to receive environmental approval.

4.3.1 Improve community participation in decision-making and transparency of information

A fundamental reform is to facilitate adequate time for the community to consider information and respond to it. Improved community participation in processes can save time by ensuring that the right information surfaces at the right time and can be considered in the decision-making process. Best-practice community consultative processes are well established and the National Environmental Standard for transparent processes and robust decisions should include specific requirements for community consultation (EIANZ 2020).

Changes are required to provide greater transparency and community access to information about decisions. This includes greater transparency of:

- the stage of the decision-making process the decision is up to
- opportunities for community participation
- information that is being considered in the decision-making process
- the reasons for decisions.

Better information management systems (Chapter 10) that are interactive and connected digitally can facilitate efficient access to information. Plain English guidance about how the EPBC Act applies is also a critical component of transparency and should be bolstered (Box 19).

Box 19 Examples of plain English guidance material

EPBC Act stakeholder information kit

The Department has recently released a new online information kit about environmental impact assessments to help explain in plain English the EPBC Act, the Department's role, and the assessment processes. This information has been designed to help stakeholders identify the information they need and to support them to navigate the Department's website. This website also uses a more streamlined structure to direct users to the most relevant information first (DAWE 2020a).

Draft guide to nationally protected species significantly impacted by paddock tree removal

Paddock trees are small groups of trees that are isolated and scattered. These trees are a feature of agricultural landscapes across Australia that contribute to salinity mitigation, reducing erosion, recycling nutrients and providing shade and shelter. There are circumstances when removing paddock trees is required for improving access for and efficiency of farming operations. However, paddock trees contribute to the viability of threatened species populations by providing nesting, roosting and foraging habitat and maintaining connectivity between larger patches of vegetation (DAWE 2020b).

The Department is currently seeking comment on a draft guide, which seeks to provide clear information on whether the removal of a paddock tree will need approval under national environmental law.

Recommendation 11 The Commonwealth Government should increase the transparency of the operation of the EPBC Act by:

a) immediately improving the availability of information as required by the National Environmental Standards

b) immediately improving the accessibility of the Act through plain English guidelines and targeted communication

c) immediately implementing arrangements to publish reasons for Commonwealth decisions under Parts 9 and 10 of the Act

d) in the second tranche of reform, amend the Act to require publication of all information relevant to, and the reasons for, decisions made under the Act. Processes and systems should be implemented to support greater transparency.

4.3.2 Strengthen independent advice to provide confidence that decision-makers are using best available information

The community is skeptical that EPBC Act decisions are made free of inappropriate political interference. Lack of trust is an underlying driver behind calls for independent authorities or commissions to make decisions (WGCS 2020).

This solution is not supported by the Review. It is entirely appropriate that elected representatives (and their delegates) make decisions that require competing values to be weighed and competing national objectives to be balanced. It is important that the law is clear and that core regulatory functions are carried out effectively, rather than decision-making being 'independent'.

That said, community confidence and trust in the process could be enhanced by the provision of transparent, independent advice on the adequacy of information provided to a decision-maker. The statutory advisory committee structures in the EPBC Act should be recast. An Ecologically Sustainable Development (ESD) Committee should be established, comprising an Independent Chair and the Chairs of subject-specific committees:

- Indigenous Engagement and Participation Committee – to advise on the co-design of the National Environmental Standard for Indigenous engagement and participation in decision-making and its implementation.
- Biodiversity Conservation Science Committee – to advise on the status of migratory species, and threatened species and ecological communities and actions needed to improve their condition in regional recovery plans.
- Australian Heritage Council – as established under the *Australian Heritage Council Act 2003* to provide advice on heritage matters.
- Water Resources Committee – to advise on matters related to Ramsar wetland and the impacts of projects subject to the water trigger (Chapter 6).

The national environmental information supply chain custodian (Chapter 10) should be a member of the ESD Committee. Other members may also be needed to ensure the ESD Committee has the skills and expertise to execute its functions.

The membership of the ESD and subject-specific committees, and specific obligations regarding the National Environmental Standards and transparency, are outlined in Box 20.

Box 20 Key roles and responsibilities for the statutory advisory committees

A comprehensive statutory advisory committee structure is required to provide structured advice and stewardship for the system of National Environmental Standards. Specific areas of advice are:

- species and ecological communities – their status, trends and management and recovery requirements
- the adequacy of data and information available for decision-making
- Indigenous engagement and participation, including co-design of decision frameworks
- Australian heritage assets – their status, trends and management
- water resources – their status and trends, and the potential and realised impacts of development.

Ecologically Sustainable Development (ESD) Committee

The role of the ESD Committee should be to provide transparent policy advice to the Environment Minister on ESD status and trends, particularly in relation to the National Environmental Standards.

The ESD Committee should provide specific, formal advice on:

- whether environment and heritage outcomes are being achieved
- the development and maintenance of the National Environmental Standards
- the framework and priorities for strategic national plans and regional plans
- the overall adequacy of the environmental, social, cultural and economic information for decision-making and the framework in which this information is used
- a monitoring and evaluation framework for the EPBC Act, including the strategy to identify and deliver the long-term, systematic monitoring required to understand trend and condition of matters of national environmental significance (Chapter 11).

The ESD Committee is responsible for reporting on environmental performance under the EPBC Act, including achievement of the outcomes as set out in the National Environmental Standards for MNES (Chapter 11).

The ESD Committee is an oversight committee. It should coordinate the work of all the statutory advisory committees to inform advice to decision-makers.

The ESD Committee is specifically responsible for overall committee governance, including managing specific advice requests from the Environment Minister. It is also responsible for tasking committees (including to assess and update the National Environmental Standards), collaboration on cross-cutting issues, and national-level interpretation of data and information.

Indigenous Engagement and Participation Committee (IEP Committee)

The IEP Committee should advise on the co-design of reforms for Indigenous engagement and mechanisms for the proper use and employment of Indigenous knowledge and views.

IEP Committee membership should be expertise-based, include a majority of Indigenous representation and have an Independent Chair.

The IEP Committee should be specifically responsible for providing the Environment Minister with advice on a National Environmental Standard for Indigenous engagement and participation in decision-making, and for monitoring and reporting on the effectiveness of its implementation.

The IEP Committee should advise the Environment Minister on the application of this National Environmental Standard to decision-making, including:

- the making and review of all National Environmental Standards
- listing decisions

Continued next page

Box 20 (continued)

- Commonwealth-led national and regional planning
- the incorporation and use of Indigenous knowledge in the information supply chain
- other decisions, as requested.

Biodiversity Conservation Science Committee (BCS Committee)

The BCS Committee should advise on the listing and status of threatened species and ecological communities and actions needed to improve their condition.

BCS Committee membership should be expertise-based and must include an Independent Chair and the Threatened Species Commissioner.

The BCS Committee should be specifically responsible for the National Environmental Standard for MNES (threatened species and ecological communities) and National Environmental Standard for MNES (migratory species), publishing their advice about species and ecological communities, and recovery and regional planning advice.

Australian Heritage Council (AHC)

The AHC should retain its role established under the Australian Heritage Council Act 2003 to provide advice on national and Commonwealth heritage matters.

AHC membership should be expertise-based and include an Independent Chair and at least one Indigenous Australian representative with relevant experience.

The AHC should be specifically responsible for the National Environmental Standard for MNES (National Heritage), publishing data and information about heritage matters, and providing advice on heritage management plans.

Water Resources Committee (WR Committee)

The WR Committee should provide scientific advice in relation to proposed developments that are likely to have a significant impact on water resources. Water resources are defined in the *Water Act 2007*.

WR Committee membership should be expertise-based and must include an Independent Chair and at least one member with agricultural or economic expertise.

The WR Committee should be specifically responsible for:

- the National Environmental Standard for MNES (water resources) and National Environmental Standard for MNES (Ramsar wetlands)
- publishing their advice about water resources
- establishing priorities for research to improve scientific understanding of the impacts of developments on water resources
- collecting, analysing, interpreting and disseminating scientific information in relation to the impacts of development on water resources.

The Environment Minister has a specific role to implement governance arrangements including the establishment, terms of reference and membership of the statutory advisory committees.

The ESD Committee should provide transparent advice to the Environment Minister to inform decisions. This should include policy advice on the:

- design and implementation of the monitoring and evaluation framework of the EPBC Act
- making of National Environmental Standards
- the framework and priorities for strategic national plans and Commonwealth-led regional plans
- overall adequacy of the environmental, social, cultural and economic information provided to the available for decision-making.

The Environment Minister could request, and the ESD Committee provide, transparent policy advice on other issues or specific decisions where they have relevant expertise such as:

- whether the processes that underpin the recommendation have been conducted in accordance with relevant National Environmental Standards (for example, for community or Indigenous engagement)
- the benefits and impacts of decisions, such as listings of threatened species and ecological communities, and the adequacy of measures to protect listed matters
- consistency of a proposed decision, such as Commonwealth-led regional plans or an individual approval, with the National Environmental Standards.

Transparency of the statutory advisory committee arrangements should occur at multiple scales:

- The ESD Committee should be required to report annually on environmental and heritage outcomes in line with the monitoring and evaluation framework for the EPBC Act (Chapter 11) – making specific reference to the National Environmental Standards – as well as the functioning of the committee framework.
- The ESD Committee should report annually on the functioning of all committees, including advice provided and areas of focus.
- The EPBC Act should require the Environment Minister to explain how the advice of the ESD Committee was considered.

Recommendation 12 The EPBC Act should be immediately amended to recast the statutory committees to create the Ecologically Sustainable Development Committee, the Indigenous Engagement and Participation Committee, the Biodiversity Conservation Science Committee, the Australian Heritage Council, and the Water Resources Committee. The Ecologically Sustainable Development Committee should be an overarching committee with responsibility for providing advice on National Environmental Standards, planning and implementation, and coordination across all the committees.

4.3.3 Retain standing with a refined, limited merits review mechanism

Improving participation and transparency will mean that stakeholders will be less likely, and have less justification, to resort to legal challenge. The limited merits review model recommended requires information to be available as part of the decision-making process. Therefore, more complete information is available to make the decision rather than being withheld for legal 'forum shopping'.

The legal review framework should not be the primary determinant for the performance of the EPBC Act. The ability of the public to hold decision-makers to account is a fundamental foundation of Australia's democracy and improves the performance of law over time. To characterise legal review as 'lawfare' is artificial and misrepresents the importance of legal review in Australian society. Limited merits review and judicial review operating together enables improvements to decision-making to be identified over time, if available at the right points in the process (ARC 2007).

Effective, efficient and transparent decisions based on clear outcomes should reduce the demand for legal review. Implementing the package of recommended reforms, including National Environmental Standards, transparent decisions based on quality data and information, monitoring of environmental outcomes, improved compliance and enforcement and a comprehensive independent oversight, will reduce the need for legal challenges. This is because the underlying reasons for these challenges will have been addressed. For example, challenges on the basis of a lack of visibility of the information used in a decision will not be justifiable if information is transparently available.

Standing

Broad standing remains an important feature of environmental legislation, particularly given the presence of collective harm resulting from damage to environmental or heritage values. Individual loss is not always identifiable or quantifiable. The inability to rely on individual loss, means that the cost of rectifying or restoring environmental damage falls to the tax-payer.

The courts already have the capacity to deal with baseless or vexatious litigation. Litigation with no reasonable prospect of success can be dismissed in the first instance. Both the Federal Court and the High Court have the capacity to maintain lists of vexatious litigants, who are prohibited from taking legal action without permission. This can also impact a litigant's ability to retain counsel.

The likely result in removing extended standing is that individuals with a demonstrable interest in a project would be co-opted to join litigation driven by others, or that courts would continue to grant standing to applicants in line with previous case law. It also means that hearings would be lengthened to consider arguments as to a person's standing before the substantive issues are considered.

Removing the current standing provisions in the EPBC Act would mean that general standing provisions would apply. This would mean some uncertainty as the courts revisit the application of standing in the environment context (Wilcox 2015). The scope of general standing provisions under Commonwealth law is wider than under the Act. It is possible that removing the current extended standing arrangements could lead to an increase in challenges.

The Review does not agree that the current standing provisions in the EPBC Act (section 487) should be removed or changed. The Review has found no reason to broaden standing under the EPBC Act, even though open standing (as opposed to extended standing as set out in section 487) would be unlikely to result in a deluge of cases. As highlighted in the submission from the Law Council of Australia, the case law supports a finding that standing is not interpreted broadly by the courts because it is aimed at protecting the public interest rather than private concerns (LCA 2020).

Court time should be optimised by limiting vexatious litigation and litigation with no reasonable prospect of success. Reforms should focus on:

- improving transparency of decision-making, to reduce the need to resort to court processes to discover information
- limiting legal challenges to matters of outcome, not process, to reduce litigation that would not have a material impact on the outcome.

In this light, it may be beneficial for the EPBC Act to require an applicant who seeks to rely on the extended standing provisions to demonstrate that they have an arguable case, or that the case raises matters of exceptional public importance before it can proceed.

Form of legal review

Legal review processes aim to ensure that decisions are:

- made correctly in accordance with the law (judicial review)
- 'preferable' – that is, within the range of decisions possible under the law, the best decision is made to meet the intent of the relevant legislation based on the relevant facts (merits review) (AGD 1999, ARC 2007).

In a mature regulatory framework, judicial and merits review mechanisms are complementary. They operate in concert to test and refine decision-making over time to ensure that regulation achieves its objectives and is responsive to changing circumstances.

Full merits review is not advised. The evidence in support of full merits review is limited and indicates that it could lead to adverse consequences. Opening decisions to the admission of new documentation or materials for consideration – on appeal or review – delays decisions without necessarily improving outcomes. It can also result in the applicant receiving a substituted decision that is preferable or more complete in some way, leading to withholding of important information and 'forum shopping'. Box 21 outlines elements of a limited merits review (LMR) model for development assessment and approval decisions under the EPBC Act.

Box 21 Elements of limited merits review

Decision-making points in environmental impact assessment (EIA)

Relevant decisions are the approval decision and the application of conditions. Section 78 of the EPBC Act provides for reconsideration of a decision in limited circumstances. This already constitutes a limited internal review process for controlled action decisions, so limited merits review (LMR) is not necessary for these decisions.

Equivalent access to legal review should also be available under an accredited decision-making arrangement.

Limited merits review available on certain grounds

The grounds for LMR should relate to the consideration of decisions where the exercise of discretion was incorrect in the circumstances, or the decision was unreasonable in the circumstances.

LMR should be limited to the material available at the time of the original decision.

Standing for limited merits review

With the written advice of senior counsel, directly affected or interested persons or bodies should be able to apply for an LMR. This includes proponents. The claim must be a valid claim with reasonable prospects for success. Applications should only be available within defined time frames. However, noting the complexity of EPBC Act matters, the community may require flexibility or sufficient time for to understand the nature of the decision.

Limited merits review outcomes

LMR should result in either the decision being affirmed or referred back to the original decision-maker with recommendations on remaking or varying the decision. LMR findings should be required to be provided within a reasonable time frame.

Impact on judicial review

An application for LMR cannot preclude the availability of judicial review.

Limited merits review 'on the papers' (that is based on the information available to the original decision-maker) has benefits in terms of:

- ensuring decisions are 'reasonable' given the material at the time of the decision
- contributing to ensuring decisions are of high quality – that is, transparent and consistent decisions, contested to a degree that is not detrimental to the effectiveness of regulation, and less open to gaming.

However, LMR must be carefully designed to minimise perverse outcomes. The primary consideration is a focus on good, transparent decision-making by the regulator. Merits (and judicial) review should be a last resort to ensure correct decisions are being made. Limits on the ability to exercise merits review should be clear and in the interests of outcomes of the legislation. A successful LMR approach should:

- support long-term environmental and heritage outcomes
- ensure interested parties can meaningfully participate in decision-making processes
- result in merits review applications being the exception rather than the rule
- not enable 'forum shopping' nor encourage people to hold back information at the original decision point
- be efficient and cost-effective
- maintain regulatory certainty.

Introducing new legal review processes into the current prescriptive EPBC Act arrangements is likely to lead to greater administrative complexity and uncertainty. The improvements to decision-making recommended in this Review (Chapter 3) are a necessary precursor to ensuring LMR is efficient and focused on environmental and heritage outcomes and not process.

Recommendation 13 The EPBC Act should retain the current extended standing provisions. In the second tranche of reform, the Act should be amended to provide for limited merits review for development approval decisions but be restricted:

a) by set time frames for applications

b) to the papers at the time of the original decision

c) to matters that will have a material impact on environmental and heritage outcomes

d) to where senior counsel advice is that there is a reasonable likelihood of the matter proceeding.

5 Interactions with States and Territories

Key points

The EPBC Act is duplicative, inefficient and costly for the environment, business and the community.

The intergovernmental agreements of the 1990s have not delivered an effective framework for cooperation and integration of Commonwealth, State and Territory environmental regulation.

The interaction between Commonwealth and State and Territory laws and regulations leads to duplicative processes. Despite efforts to streamline these processes, significant overlap remains. A continuation of the piecemeal approach is a barrier to improving effectiveness and efficiency.

Past attempts to accredit States and Territories to make approval decisions that are consistent with the EPBC Act have been unsuccessful, due to lack of defined outcomes and concerns that decisions would be inconsistent with the national interest.

Reforms recommended by the Review provide confidence for the Commonwealth to accredit the processes and decision-making of other parties. This includes National Environmental Standards that set clear outcomes, improved data and information, and a comprehensive framework for monitoring and evaluating environmental outcomes.

There should be no barriers to accreditation where a State or Territory can demonstrate they can meet the National Environmental Standards and be subjected to rigorous, independent oversight by the Commonwealth.

Effective accreditation arrangements would enable Commonwealth requirements to be met and to operate in a more integrated way with State and Territory regulation to deliver national environmental and heritage outcomes. Accreditation allows for a single pathway or ‘single-touch’ for development assessment and approval decisions.

The Review recommends that the EPBC Act be amended to enable durable accreditation arrangements where the States and Territories demonstrate they meet the National Environmental Standards and will allow rigorous oversight by the Commonwealth, including comprehensive audit arrangements.

5.1 There is duplication with State and Territory regulation

5.1.1 There have been efforts to streamline and harmonise with States and Territories

The EPBC Act includes tools to achieve streamlining processes between the Commonwealth and States and Territories. These tools include:

- a common assessment method for listing threatened species, which means that lists are aligned and consistent protections are provided across jurisdictions
- accreditation through bilateral assessment and approval agreements.

Common assessment methods for threatened species listing

The Commonwealth and State and Territory Governments have been working since 2015 to harmonise and streamline the listing of threatened species and ecological communities through a common assessment method. This work is formally underpinned by an intergovernmental memorandum of understanding (Australian Government 2015).

Any jurisdiction can undertake a national assessment using the common assessment method. The outcome of this assessment may be adopted by other jurisdictions where that species occurs (under their laws), as well as the Commonwealth (under the EPBC Act). This work is supported by the States and Territories (NSW Government 2020). It also supports regulatory harmonisation by aligning lists and providing consistent protections across jurisdictions, which reduces confusion. Rather than a species being assessed numerous times, it can be considered once and listed in the same threatened category across all relevant jurisdictions, which leads to corresponding improvements in efficiency.

To date over 100 species listing decisions have been made under the EPBC Act based on State and Territory-led assessments and a further 47 are in progress. The Commonwealth should pursue opportunities for greater streamlining by moving to a single list of nationally protected matters. The Commonwealth should maintain this list on behalf of all jurisdictions.

Assessment bilateral agreements

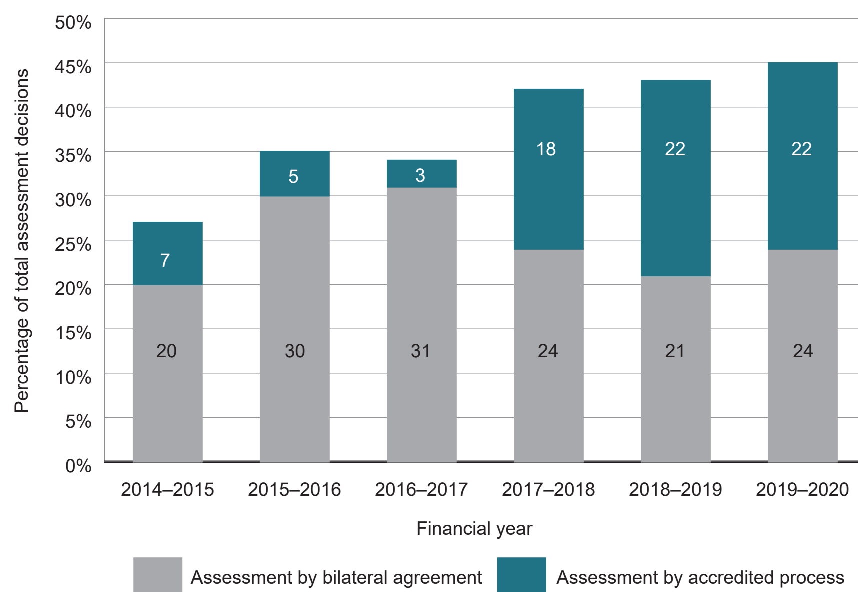
The EPBC Act allows for the accreditation of State or Territory laws and management systems where they provide appropriate protections for nationally protected matters. Under a bilateral assessment agreement, the Commonwealth retains responsibility for approvals based on environmental impact assessments undertaken by the jurisdictions on nationally protected matters.

These agreements do not provide full accreditation of State and Territory arrangements because the Commonwealth remains the decision-maker for the approval decision. Assessment bilateral agreements allow the Commonwealth to rely on the assessment processes under State and Territory laws in making its decision.

Assessment bilateral agreements are in place in all 8 jurisdictions. However, recent changes to State and Territory laws mean that some of these agreements are being re-made to make them fully operational. Where agreements are not fully operational, individual assessments are often undertaken jointly (known as accredited assessments). This has the same effect as if a bilateral assessment agreement was in place and ensures continued streamlining and reduced impact on projects. However, it also highlights the inherent fragility of the agreements when changes are made to State and Territory laws.

Between July 2014 and June 2020, and average of 38% of proposals under the EPBC Act were assessed (or were being assessed) through either a bilateral assessment (25%) or accredited assessment (13%) arrangement with States and Territories. Figure 5 shows the breakdown over this period.

Figure 5 Percentage of projects assessed under bilateral agreements and accredited processes, 1 July 2014 to 30 June 2020



Source: Department of Agriculture, Water and the Environment, unpublished

Significant shortcomings exist in the current arrangements. The requirements of the EPBC Act mean that even where they are in place, bilateral assessment agreements do not cover all development types. For example, activities are unable to be accredited under the current inflexible bilateral provisions where States and Territories do not actively assess certain development types – such as code-based developments – or where assessments are conducted by local councils under local planning laws.

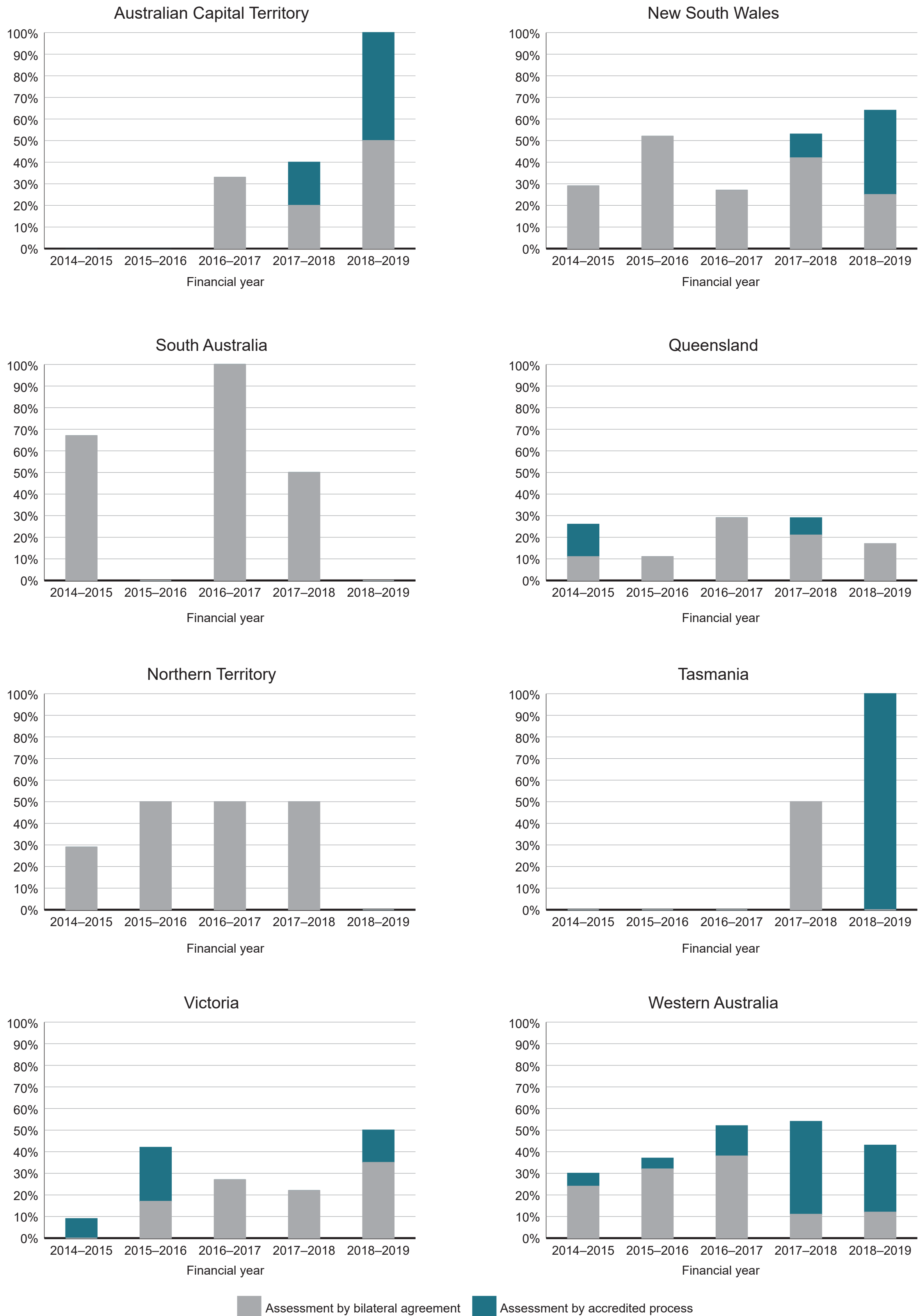
For a single project, bilateral agreements may cover some aspects of the project, but not all. For example, not all clearing of habitat of nationally threatened species can be accredited due to the way State and Territory land clearing laws are constructed. The NSW land clearing codes are not an 'assessment and approval' process that is equivalent to Part 5 of the EPBC Act, and hence cannot be accredited under a bilateral agreement.

Bilateral agreements contain provisions committing parties to information-sharing and cooperation in surveillance. However, under the current arrangements this does not occur in a meaningful way. For example, a commitment to regular provision of compliance data is contained in only one agreement. As noted by the Australian National Audit Office (ANAO) in its recent performance audit of referrals, assessments and approvals under the EPBC Act:

> in the absence of agreed and structured information sharing arrangements, information received from co-regulators will be reactive, issue-based and dependent on personal relationships. Consequently, compliance information may be incomplete and limited in value for strategic planning. (ANAO 2020)

Figure 6 provides the breakdown by jurisdictions and shows that approaches to streamline arrangements have had varied success between jurisdictions.

Figure 6 Percentage of projects assessed under bilateral agreements and accredited processes, by State or Territory, 1 July 2014 to 30 June 2019



Source: Department of Agriculture, Water and the Environment, unpublished

Both proponents and regulators are supportive of bilateral assessment agreements and acknowledge the benefits they provide. Benefits cited in submissions to the Review by proponents include:

- better communication between the parties, which translates to greater clarity for proponents
- cost savings for industry and government
- reduced administrative overheads, through production of a single set of assessment documentation
- greater alignment of approval conditions, including offsetting arrangements
- broader landscape scale benefits for the environment, because individual matters of national environmental significance (MNES) are considered in the landscape context required by State and Territory arrangements.

Similarly, as co-regulators with the Commonwealth, the States and Territories indicated in their submissions to the Review that they support effective bilateral assessment agreements. The benefits they see from harmonised assessments include:

- increased cooperation, understanding and collaboration between assessment teams and proponents
- reduced regulatory duplication in the assessment of proposals, including aligning conditions of approval where appropriate
- reduced time frames for project assessments.

For example, the NSW Government advised in their submission to the Review that since the commencement of the NSW bilateral agreement in February 2015:

> 6 projects (with a combined Capital Investment Value of $6.4 billion and the creation of up to 5,150 jobs) have been assessed through the streamlined process, leading to an overall reduction in time frames for project assessments.

Some stakeholders raised strong concerns that environmental outcomes are not clearly defined, and States and Territories may not be able uphold the national interest (Chapter 7).

Approval bilateral agreements

Despite attempts by successive Australian Governments, approval bilateral agreements have never been implemented. Under such agreements, the Commonwealth would not apply the EPBC Act. Instead, it would rely on the State or Territory decision to achieve an acceptable environmental outcome.

The EPBC Act requires an action that may have or is likely to have a significant impact on a MNES to be referred to the Commonwealth Environment Minister to decide if it is a controlled action. If determined to be a controlled action, the Act requires the impacts of that action be assessed and the action approved before it can be legally taken.

Where an approval bilateral agreement is in place, an EPBC Act referral or approval is no longer needed because it is replaced by the accredited State or Territory approval for specified types of actions. The need for EPBC Act approval is avoided where are action is authorised in accordance with the accredited arrangements set out in the bilateral agreement. If not, the action requires approval under the EPBC Act.

Under the current settings, bilateral agreements are inherently fragile and amendments to the EPBC Act are required to make accreditation stable and to work efficiently in practice. A suite of amendments was pursued by the Australian Government in 2014 to support the implementation of its One-Stop Shop for environmental approvals policy and to provide a more enduring framework for accreditation.

Based on the advice of this Review, the Australian Government committed to develop Commonwealth-led National Environmental Standards to underpin new 'single-touch' agreements with State and Territory Governments. To support this, the Commonwealth introduced a Bill in 2020 to make amendments to the EPBC Act that would:

- enable the Commonwealth to complete assessments and approvals if an accredited State or Territory is unable to
- ensure agreements can endure minor amendments to State and Territory settings, rather than requiring the bilateral agreement to be remade (and consequently be subject to disallowance by the Australian Parliament on each occasion).

In their submissions to the Review, jurisdictions expressed a range of views on this, including both an ongoing desire to pursue the accreditation of approval powers (WA Government 2020, SA Government 2020) as well as to continue to improve existing arrangements (ACT Government 2020, NSW Government 2020, NT Government 2020).

5.1.2 Duplication with States and Territories remains

Submissions to the Review identified that despite efforts to streamline and harmonise, a key criticism of the EPBC Act is that it duplicates State and Territory regulatory processes for development assessment and approval. The Review has found this is largely true, with a few exceptions.

The 'water trigger' and 'nuclear trigger' matters of national environmental significance (MNES) (Chapter 1) are often cited as areas where streamlining with the States and Territories is incomplete. Uranium and other projects assessed under the 'nuclear trigger' require a whole-of-environment assessment. These expanded assessments cover impacts that the States and Territories already regulate (such as air, noise and water quality), as well as duplicating State and Territory regulation of mining projects.

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) highlighted in its submission (ARPANSA 2020), that if decision-makers adopt relevant national codes developed under the Australian Radiation Protection and Nuclear Safety Act 1998, then EPBC Act assessments can lead to 'substantially the same assessment activities being undertaken across multiple jurisdictions creating duplicative regulatory processes'. The evidence presented to the Review suggests these areas have significant potential to be streamlined while ensuring that the national interest continues to be upheld.

The duplication that is evident does not mean, as suggested by some, that the EPBC Act is unnecessary and the Commonwealth should step out of the way. The Commonwealth has a clear role in Australia's system of environmental management (Chapter 1).

However, the regulatory systems of the States and Territories have changed over time and, with increasing jurisdictional cooperation, the regulatory gap filled by the EPBC Act has reduced. For example, to meet the requirements for accreditation for bilateral assessment agreements, most States and Territories have made changes to their environmental or planning laws to improve environmental impact assessment processes. Furthermore, joined-up assessments through bilateral assessment agreements or accredited assessments mean that many EPBC Act project approvals mirror those given by the relevant State or Territory. The current EPBC Act Condition-setting Policy (DAWE 2020c) aims to streamline approval conditions between jurisdictions in circumstances where State or Territory conditions are adequate to protect MNES.

There is no systematic way to determine the additional environmental benefits resulting from the EPBC Act. There are examples where the operation of the Act has led to demonstrably different environmental outcomes than those arising from State and Territory processes. In some cases, States have used powers for state-significant developments that effectively circumvent their environmental impact assessment requirements, while at the same time the Commonwealth has maintained the importance of due process and undertaken assessment and approval. Submissions to the Review point to examples such as the rejection of the State-sponsored Traveston Dam in Queensland in 2009 and fast-tracked processes for designated state significant developments in New South Wales as evidence of this.

For the application of offsets conditions, the EPBC Act requires they be applied only for the protected matter the approval relates to — that is, they must be 'like-for-like'. This exceeds requirements in some jurisdictions (Chapter 1 and Chapter 8). This results in additional or different conditions placed on projects that have better outcomes than would have otherwise been the case under State or Territory law alone.

Submissions to the Review have highlighted that Commonwealth involvement should set the tone and provide leadership, as the Commonwealth is more at arms length from the benefits that would arise from the proposed action. There is anecdotal evidence of this, but there are also cases where the regulatory requirements of States and Territories are more stringent than those of the EPBC Act (for example, Indigenous engagement requirements of Victoria and the Northern Territory).

Frustration rightly arises when regulation under the EPBC Act does not tangibly correspond to better environmental outcomes, given the additional costs to business of dual processes. Various estimates of the costs to industry and business of dual assessment and approval systems have been provided to the Review:

- The Minerals Council of Australia estimated delays can increase costs for a major greenfield mining project (worth $3 billion to $4 billion) in Australia by up to $46 million per month.
- The Property Council of Australia estimated that delays in assessments can add up to $36,800 to the cost of new homes in some greenfield sites.
- The 2017 Independent Review of the Water Trigger Legislation estimated costs to industry of around $46.8 million per year.

Estimates of costs will invariably depend on the underpinning data, assumptions and the cost structures of projects. Caution should be exercised, since the additional costs to business arising from the EPBC Act cannot always be clearly delineated from the impositions of other processes (such as costs associated with complying with state-based regulations). Nevertheless, the essential argument put forward by industry is undisputed – a reduction in time taken will reduce the cost of regulation.

As others have also done (PC 2020), the Review finds there is duplication in regulatory processes that should be addressed. There is a clear case for reducing duplication but, to achieve this, States and Territories must demonstrate they can effectively accommodate the national interest. The accreditation process should not be one of negotiated agreement.

5.2 Recommended reforms

Previous processes to accredit decision-making have focused too heavily on prescriptive processes and lacked clear expectations and thresholds for protecting the environment in the national interest. The National Environmental Standards recommended by this Review provide a legally binding pathway to accredit the regulatory processes or management arrangements of other parties, while at the same time ensuring the aims and objectives of the EPBC Act are achieved (Chapter 1). The Standards set clear outcomes and provide a legally binding way to reduce the complexity and fragility of the current accreditation arrangements in the Act.

In the short term, the National Environmental Standards should be applied through the current assessment and approval bilateral agreement provisions. For this to occur, Standards should be implemented through regulations, preferably based on a new provision in the Act. The regulations should also specify those matters required for the Commonwealth Environment Minister to be satisfied that the States and Territories will comply with the Standards. Agreements should be conditional on the States and Territories meeting the requirements of the Standards (Chapter 1) and subjecting themselves to the accreditation model outlined in Chapter 7.

In the longer term, the Act should be amended to fully replace the bilateral agreement provisions to enable the recommended accreditation model to be realised and efficient.

Pursuing greater accreditation is not about the Commonwealth relinquishing its environment protection and biodiversity conservation responsibilities. Rather, the recommended reforms would enable the Commonwealth to meet its obligations more effectively and efficiently. A shift to a standards-based approach with appropriate accrediting arrangements is a more effective way of ensuring environmental outcomes are being achieved in the national interest.

States and Territories should demonstrate that their environmental management systems, including development assessment and approval processes, other legislation, policies or investments, delivers on the requirements of the National Environmental Standards. States and Territories would have to transparently track, monitor and report on how different elements contribute to delivering an overall system that is consistent with the Standards.

The recommended accreditation model is not an all-or-nothing concept. The Commonwealth would need to retain its capability to conduct assessments and approvals:

- where the Commonwealth provides sole jurisdiction
- where accredited arrangements are not in place (or cannot be used)
- at the request of a jurisdiction
- when the Commonwealth uses its discretion to step in.

Such capability is essential to ensure that EPBC Act requirements can continue to be upheld in circumstances where other regulators are, for whatever reason, unable to accommodate national requirements in their processes. To weaken this capability would risk unnecessary delay for projects.

An effective accreditation approach provides confidence that accredited arrangements can deliver the National Environmental Standards and can be effectively monitored and audited. It provides certainty about when and where the Commonwealth can intervene to prevent serious or irreversible environmental damage or significant breach of the Standards. With strong oversight, it will facilitate a general uplift in overall regulatory standards and consistency.

The accreditation model recommended by this Review is in Chapter 7.

Recommendation 14 Immediately amend the EPBC Act to provide confidence to accredit State and Territory arrangements to deliver single-touch environmental approvals in the short-term. Accreditation should be:

a) underpinned by legally enforceable National Environmental Standards

b) subject to rigorous, transparent oversight by the Commonwealth, including comprehensive audit by the independent Environment Assurance Commissioner.

6 Commonwealth decisions and interactions with other Commonwealth laws

Key points

The EPBC Act operates in a way that seeks to recognise other Commonwealth environmental regulatory and management frameworks, including the management of Commonwealth fisheries, Regional Forest Agreements (RFAs) and offshore petroleum activities.

As mentioned in Chapter 3, the interplay between the Act and these other frameworks is complex and onerous, which leads to inefficiencies. Often the arrangements are not supported by robust systems and assurance, which can compromise effectiveness in achieving intended environmental outcomes.

The environment does not follow jurisdictional or institutional boundaries and National Environmental Standards should be applied across Australia.

Even with greater accreditation of States and Territories and other parties, the Commonwealth will have an ongoing role in directly assessing and approving some developments. These Commonwealth-led project assessment and approval processes must be as efficient as possible.

The EPBC Act includes requirements for permitting for wildlife trade intended to meet Australia's international commitments under the *Convention on the Conservation of Migratory Species (Bonn Convention) and Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES).

The wildlife trade provisions in the EPBC Act are inflexible and do not always align with international requirements. In many cases the laws are unnecessarily burdensome but in other cases they are insufficient to deliver on Australia's commitments.

The key reforms recommended by the Review are:

- Make immediate reforms to Regional Forestry Agreements to ensure environmental protections consistent with the National Environmental Standards, equivalent to those of the EPBC Act, and to provide for effective Commonwealth oversight.
- The Review's accreditation model (Chapter 7) should be considered for all situations to ensure effective environmental outcomes and to improve efficiency, including for decisions made by other Commonwealth regulators interacting with the EPBC Act.
- A National Environmental Standard should be developed that considers impacts to the whole of the environment for Commonwealth actions and actions impacting on Commonwealth land.
- Assessment pathways should be rationalised and adequate cost-recovery processes implemented to ensure a 'user pays' approach to environmental impact assessment.
- Amend wildlife trade provisions to ensure environmental protections are consistent with international obligations. These amendments will improve the effectiveness and efficiency of these provisions, including by enabling proportionate compliance and enforcement responses, and reducing instances where wildlife permitting could be subject to abuse by applicants.

6.1 Existing accreditation arrangements with other Commonwealth agencies

The EPBC Act operates in a way that recognises other environmental regulatory and management frameworks regulated by the Commonwealth, including Commonwealth fisheries, Regional Forest Agreements (RFAs) and frameworks that regulate activities on Commonwealth land, in Commonwealth waters, and Commonwealth actions. Different mechanisms in the EPBC Act have been used to streamline assessments and approvals through other Commonwealth agencies, but there is significant variation in the effectiveness of these arrangements. The strategic assessment provisions of the Act, although not specifically designed for this purpose, have been used to remove the need for an EPBC Act approval where an action is taken in accordance with these arrangements (for example, Commonwealth management of offshore petroleum activities). Each of these arrangements are explored in this section.

6.1.1 Offshore petroleum

The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is the Commonwealth regulator for offshore energy activities in Commonwealth waters. Since 2014 significant streamlining of the environmental regulation of offshore energy activities has been achieved through the accreditation of NOPSEMA to approve offshore petroleum and greenhouse gas activities, via a strategic assessment made under Part 10 of the EPBC Act.

The strategic assessment endorsed NOPSEMA's environmental management authorisation process. Activities undertaken in a way that are consistent with the authorisation process do not need to be separately referred, assessed and approved under the EPBC Act.

NOPSEMA is responsible for compliance and enforcement under the strategic assessment, and the Environment Minister is responsible for checking compliance with the endorsed arrangements.

The current settings for strategic assessments have significant limitations (Chapter 3), resulting in inflexibility in the streamlining arrangements in place with NOPSEMA. The strategic assessment endorsed the NOPSEMA's arrangements in place at the time of the agreement. In effect, this froze them in time, which has invariably stifled continuous improvement and further streamlining even when there are opportunities to do so that do not compromise environmental outcomes.

6.1.2 Commonwealth fisheries

The *Fisheries Management Act 1991 Act* implements management arrangements for Commonwealth-managed fisheries. It enables the Australian Fisheries Management Authority (AFMA) to manage permits and Statutory Fishing Rights (registers), compliance and enforcement, and declared prohibited activities in Commonwealth marine areas. Commonwealth-managed fisheries are strategically assessed under Part 10 of the EPBC Act.

AFMA is responsible for the day-to-day management and compliance of Commonwealth fisheries. Assessments under the EPBC Act are conducted on the environmental performance of all export fisheries via Part 13A assessments. Part 10 strategic assessments provide additional assurance that Commonwealth-managed fisheries are managed in an ecologically sustainable way over time.

EPBC Act assessments of fisheries are conducted against well-established guidelines that assess the ecological sustainability of management arrangements (DEWR 2007). Lower-risk fisheries are now assessed on a 10-yearly rolling basis. Higher-risk fisheries, including those that interact with protected species such as dolphins, dugongs and sea lions, are generally assessed every 3 years.

Parts 13 and 13A of the EPBC Act provide processes to assess impacts to protected marine species (including those protected under the Bonn Convention, Box 23) and ensure compliance with export controls and international wildlife trade rules. The assessments of fisheries, export controls and permitting processes are generally undertaken in parallel for Commonwealth-managed fisheries and all export fisheries.

The accredited arrangements with AFMA provide an effective framework for managing protected species under the EPBC Act. The key features of this arrangement that support its effectiveness are:

- the presence of a regulator (AFMA) supported by its own robust legislative framework
- adequate compliance and enforcement capabilities (implemented by AFMA)
- separate strategic oversight of the system by the Department of Agriculture, Water and the Environment (via strategic assessments), which provides an assurance mechanism to ensure outcomes are achieved.

There are opportunities to streamline the multiple assessment and permitting processes needed to undertake commercial fishing operations in Commonwealth waters or jointly managed fisheries (section 6.4).

6.1.3 Regional Forest Agreements

A Regional Forest Agreement (RFA) is a 20-year regional plan that is agreed between a state and the Commonwealth for the management of native forests. RFAs aim to balance economic, social and environmental demands on forests and seek to deliver ecologically sustainable forest management, certainty of resource access for the forest industry and protection of native forests as part of Australia's national reserve system.

The *Regional Forest Agreement Act 2002* (RFA Act) is Commonwealth legislation under which RFAs are made. RFAs must consider the conditions outlined in Box 22. These provide the benchmark for protection of environmental values of the areas covered by RFAs.

Box 22 Conditions for RFAs relevant to the EPBC Act

A Regional Forest Agreement must consider assessments of the following matters as they are relevant to the region or regions (*Regional Forest Agreements Act (Cwlth) 2002*):

- environmental values, including old growth, wilderness, endangered species, national estate values and World Heritage values
- Indigenous heritage values
- economic values of forested areas and forest industries
- social values (including community needs)
- principles of ecologically sustainable management
- the agreement provides for the ecologically sustainable management and use of forested areas in the region or regions.
- the agreement provides for a comprehensive, adequate and representative reserve system.

The EPBC Act recognises the RFA Act by 'exempting' the need for additional assessment and approval for forestry activities under the EPBC Act where the activity assessments is conducted in accordance with an RFA or where they are within an RFA region (except where forestry operations are in a World Heritage property or a Ramsar wetland). The EPBC Act does not specify the environmental benchmarks against which the RFA must be consistent for the exemption to apply.

The Review considers that the environmental considerations under the RFA Act are weaker than those imposed elsewhere for MNES and do not align with the assessment of significant impacts on MNES required by the EPBC Act. Submissions from stakeholders indicated concern around the effectiveness of the RFAs to protect threatened species that rely on the forest areas covered by RFAs. There is also great concern that the controls on logging within forests have not adequately adapted to pressures on the ecosystem such as climate change or bushfire impacts (WS 2020).

There is insufficient Commonwealth oversight of RFAs and the assurance and reporting mechanisms are weak. The RFA Act requires agreements to be subject to a 5-yearly review process but those reviews have been consistently late by an average of approximately 3 years. The first RFA to be signed was not reviewed until 13 years after the commencement date. All RFAs have been progressively

extended as their initial 20-year term came to an end, rather than renegotiated from scratch. The extended RFAs included some incremental improvements, including mandating annual meetings between State and Commonwealth officials responsible for administering the RFA Act, to consider compliance issues and the overall performance of the RFAs. The outcomes of each meeting are released via a public communiqué.

The RFAs rely solely on the States to undertake surveillance, compliance and enforcement. During this Review, a Federal Court ruling found that State-owned logging agency VicForests breached the code of practice under the Central Highlands RFA and, therefore, was not exempt under the EPBC Act (Friends of Leadbeater's Possum Inc v VicForests 2020). As of October 2020, the Commonwealth had not commenced compliance action for this potential breach of the EPBC Act.

The EPBC Act does not require reporting on the environmental outcomes of activities conducted under RFAs. The Review considers that Commonwealth oversight of environmental protections under RFAs is insufficient and immediate reform is needed. The National Environmental Standard for MNES should be immediately applied and RFAs should be subject to robust Commonwealth oversight.

6.1.4 Advice on specific actions by Commonwealth agencies

The intention of Section 160 of the EPBC Act is to provide for streamlined assessments and approvals with other Commonwealth agencies on airspace, airports, foreign aid and other activities outlined in the EPBC regulations (including permits for sea dumping and hazardous waste permits under the Basel Convention). It is designed to provide a single Commonwealth assessment of specific actions undertaken by the Commonwealth, on Commonwealth land, or in Commonwealth marine areas.

Section 160 provides an alternative pathway for managing the environmental impacts of projects managed by other Commonwealth agencies (for example, the development of a new runway at an airport under the *Airports Act 1996*), based on advice from the Environment Minister. The Review has found that these arrangements are at risk of leading to poorer environmental outcomes and less streamlining than intended.

The requirements for advice under this section of the EPBC Act are extremely confusing and overly complex. There are a number of issues associated with implementation of this process, including:

- Often the environmental impact assessment reports provided by other Commonwealth agencies are inadequate or inconsistent with the assessment information requirements of the Act. The Commonwealth Environment Minister is required to undertake a secondary assessment of the impacts to enable advice to be provided to the approving agency, which negates the perceived efficiency.
- The approving Minister or agency is not required to accept or adhere to the advice provided, though they must inform the Commonwealth Environment Minister if the advice was not taken into account. There are also no ongoing reporting requirements to the Commonwealth Environment Minister.
- The approving agency may be unable to support enforcement of environmental conditions under its legislation, and often lacks the expertise to undertake ongoing surveillance, compliance and enforcement.
- The Commonwealth Environment Minister cannot enforce conditions and, importantly, residual significant impacts cannot be offset because there is no formal approval of the action under the EPBC Act.
- The arrangements also do not remove the requirement to obtain a wildlife permit for catching, killing, injuring, taking or moving a protected species (Part 13 of the EPBC Act), which results in an additional permitting process and often unnecessary duplication of effort.
- There is a lack of clarity about how the requirements apply to composite actions (actions that are not wholly within a Commonwealth area) – for example, sea dumping, which may also be referred under the standard provisions of Parts 7 to 9 of the EPBC Act.

The duplication and complexities associated with the arrangements mean that they result in little if any streamlining benefit to the Commonwealth, and they do not allow for adequate assurance that environmental outcomes are being met.

6.1.5 Reform recommendations – accreditation of other Commonwealth processes

The environment does not follow jurisdictional or institutional boundaries. The same environmental standards should be applied across Australia to all accredited or streamlining arrangements irrespective of whether decisions are made by a State, Territory or other Commonwealth agency.

Of all streamlining processes provided for under the EPBC Act, the Review considers that the provisions for RFAs are the most unacceptable and require immediate reform. Specifically, RFAs should be required to demonstrate consistency with the National Environmental Standards and have greater Commonwealth oversight.

In the immediate term, and as a condition of accreditation (Chapter 7), States and Territories should ensure, and the Commonwealth expect, RFAs be consistent with National Environmental Standards.

Following this immediate step, the RFA provisions in the EPBC Act should be amended as part of the second tranche of comprehensive legislative reforms recommended by this Review. These amendments should replace the current exemption with the ability for the RFA process to be accredited where it can be demonstrated to be consistent with the National Environmental Standards. Accredited RFAs should be subject to the mandatory oversight of the Environment Assurance Commissioner.

Chapter 3 recommends restructuring and simplifying the EPBC Act to enable the accreditation model recommended by the Review to be effectively and efficiently applied. Relevant parts of the Act should be amended, then the accreditation model should be applied to arrangements with other Commonwealth agencies where they demonstrate consistency with the National Environmental Standards and subject themselves to transparent independent oversight (Chapter 7). Specifically (in addition to RFAs):

- The accreditation model should be applied to NOPSEMA and AFMA using appropriate legislative amendments.
- Accreditation of actions by Commonwealth agencies (such as those currently covered by Section 160 of the Act) should occur only where they are consistent with the National Environmental Standards and accreditation model. Where an agency cannot meet accreditation requirements, actions should be subject to the standard assessment and approval conditions of the EPBC Act.

Consideration could also be given to a broader application of the National Environmental Standards to other Commonwealth decisions or management plans, beyond those already provided for under the current settings of the Act.

Recommendation 15 Increase the level of environmental protection afforded in Regional Forest Agreements (RFAs).

a) The Commonwealth should immediately require, as a condition of any accredited arrangement, States to ensure that RFAs are consistent with the National Environmental Standards.

b) In the second tranche of reform, the EPBC Act should be amended to replace the RFA 'exemption' with a requirement for accreditation against the National Environmental Standards, with the mandatory oversight of the Environment Assurance Commissioner.

Recommendation 16 In the second tranche of reform, the accreditation model should be applied to arrangements with other Commonwealth agencies, where they demonstrate consistency with the National Environmental Standards and subject themselves to transparent independent oversight. Specifically:

a) The complex requirements for Ministerial advice on certain Commonwealth authorisations (sections 160–164) should be removed. These arrangements should be subject to the accreditation model, or the standard assessment and approval provisions of the EPBC Act.

b) The accreditation model should be applied to the National Offshore Petroleum Safety and Environmental Management Authority and the Australian Fisheries Management Authority using appropriate legislative amendments.

c) Where relevant, a broader application of the National Environmental Standards to other Commonwealth decisions and management plans, beyond those already provided for under the current settings of the Act, should be considered.

6.2 Actions by other Commonwealth agencies, where accredited arrangements are not in place

6.2.1 Actions on Commonwealth land and actions undertaken by Commonwealth agencies

In addition to matters of national environmental significance, other protected matters that are subject to development assessment and approval under Parts 7 to 9 of the EPBC Act include actions undertaken by Commonwealth agencies and actions on Commonwealth land.

As these actions do not require any State or Territory approval if they are being undertaken wholly on Commonwealth land, they require an assessment of the impacts to the 'whole of the environment'. The issues considered vary greatly depending on the type of action. Although there are significant impact guidelines for Commonwealth actions (DSEWPC 2013), there are no clear standards to drive consistency around what must be considered if a significant impact is deemed likely.

Some Commonwealth agencies have their own processes for managing environmental impacts. However, this depends on the frequency of interaction with the EPBC Act or the need to assess environmental impacts as part of their day-to-day business.

For example, the nuclear MNES often triggers Commonwealth agencies undertaking nuclear transport, research or waste treatment. However, most referrals received do not require approval under the EPBC Act (and are often deemed not a controlled action – an 'NCA' – or not a controlled action if undertaken in a particular manner – an 'NCA-PM') because activities are conducted in accordance with the regulatory guidelines and protocols under the *Australian Radiation Protection and Nuclear Safety Act 1998* (ARPANS Act) and regulated by the Australian Radiation Protection and Nuclear Safety Authority (ARPANSA).

Composite actions (actions affecting both Commonwealth land and outside of Commonwealth land) often result in the need for multiple assessments with States and the Commonwealth Environment Minister (for example, involving the Great Barrier Reef Marine Park Authority or the Sydney Harbour Heritage Trust) because they may also be subject to assessment under State or Territory processes.

6.2.2 Reform recommendations – National Environmental Standards for Commonwealth actions and actions impacting on Commonwealth land

To provide for a clear and consistent set of rules for whole-of-environment assessments not covered by the National Environmental Standards for MNES, the Commonwealth should develop additional National Environment Standards for actions impacting on Commonwealth land and Commonwealth actions. This Standard should further develop the guidance provided in the Significant Impact Guidelines 1.2 (DSEWPC 2013) and include consideration of:

- ecosystem functioning and diversity
- impacts to natural and physical resources – for example, impact of chemicals such as per- and poly-fluoroalkyl substances (also known as PFAS), impacts to air and water quality, impacts to non-listed wetlands and other important natural landscape features
- depletion of resources and intergenerational equity
- people and community impacts – for example, noise, tourism and fly-in fly-out business impacts
- heritage values, including Commonwealth heritage places, Indigenous and cultural heritage

This would set clear rules for the Commonwealth to make decisions on whole-of-environment matters where it has responsibility to do so. The National Environmental Standard could also provide a national benchmark for environmental protections more broadly, which could then be reflected by States and Territories to promote continuous improvement.

The National Environmental Standard would also allow for the accreditation model to apply to suitable Commonwealth agencies that can demonstrate consistency against these Standards. This would also help reduce the number of NCA/NCA-PM referral decisions (for example, the accreditation model could be applied to ARPANSA for specific nuclear actions that would otherwise have been NCA-PMs).

Recommendation 17 **In the second tranche of reform, a National Environmental Standard for actions impacting on Commonwealth land and Commonwealth actions should be developed to provide a national benchmark for effective environmental protections. The Commonwealth should promote the broader application of this Standard by encouraging other jurisdictions to adopt it.**

6.3 Commonwealth-led assessment processes are inefficient

6.3.1 Assessments and systems that support environment impact assessment are inefficient

Even with greater accreditation, the Environment Minister is likely to have an ongoing role in directly assessing and approving some developments. It is important that conflicts of interest are managed and situations of unconstrained self-regulation are avoided.

The Environment Minister would need to retain capability to conduct assessments and approvals where the Commonwealth provides sole jurisdiction, where accredited arrangements are not in place, or when the Commonwealth exercises its ability to step in. Such capability is essential to ensure that EPBC Act requirements can continue to be upheld when other decision-makers are, for whatever reason, unable to accommodate Act requirements in their processes. To weaken this capability would risk unnecessary delays for projects.

The business and information systems that the Department uses for conducting assessments are antiquated and inefficient. File management systems used by assessment officers are cumbersome and information is double handled throughout the process (Chapter 10). Steps are missed or duplicated, interactions with proponents are not easily recorded, and project tracking is difficult and often out of date.

Inefficiencies have arisen in the way information is received from proponents. To determine if a valid referral has been received the Department conducts manual checks, rather than an automated system to prevent invalid referrals from being submitted. The environmental impact assessment documentation provided by proponents is voluminous and can extend to more than 10,000 pages. These are provided in a form that is not word-searchable and with data that cannot be interrogated.

There are inefficiencies in the Department's procedures for conducting assessments. Documentation from past decisions is not maintained and is not used to provide guidance to proponents about what they can expect or to support consistent assessment and decision-making. Relevant projects from past decisions are difficult to identify and, if found, it is difficult to extract information in a way that aids decision-making. Where there is deviation from past decisions, this is often not well explained.

6.3.2 Assessments and systems are not fully funded

Timely assessments require resourcing of the assessment capability and systems (Chapter 4). The benefits for industry from extra resourcing of assessments is evident in recent improvements to timely assessments due to additional 'congestion busting' funding in 2019 (Minister for the Environment 2019).

Existing Commonwealth cost recovery arrangements are not sustainable because they do not cover many indirect costs that are currently born by the Commonwealth Government. Examples of some key costs that are not cost recovered include resourcing of data collection, management and IT systems, and receiving legal advice.

6.3.3 Multiple environmental assessment pathways create unnecessary complexity

When a proposal is referred under the EPBC Act, the Environment Minister determines if an action will, or is likely to, have a significant impact. For those proposals that will clearly need to be assessed in detail, it creates an additional and time-consuming step in the process.

For some proponents, the lack of clarity on the requirements of the EPBC Act (for example, key terms like 'significant impact') means that they refer proposed actions for legal certainty. More than half of all referrals result in a decision that detailed assessment and approval is not required, or not required as long as the action is carried out in a particular manner.

The EPBC Act contains 5 environmental assessment pathways:

1) Assessment on Referral Information
2) Preliminary Documentation, with or without further information
3) Public Environment Report
4) Environmental Impact Statement
5) Public Inquiry.

Each environmental assessment pathway has its own specific set of requirements, time frames and processes set out in the EPBC Act. This increases the complexity of the regulatory framework and affects the Department's ability to clearly communicate regulatory requirements (Chapter 3). Multiple pathways do not result in any additional environmental benefit or significantly change the assessment time frames for the regulated community.

In practice, the Assessment on Referral Information, Public Environment Report and Environmental Impact Statement assessment pathways have had limited use in recent years (Table 1). The Public Inquiry pathway has never been used.

Table 1 Percentage of total assessment method decisions, from 2014–15 to 2019–20

Assessment approach	Per cent of total assessment method decisions
Preliminary Documentation, with further information	56%
Accredited Process	13%
Bilateral Process	25%
Public Environment Report	2%
Environmental Impact Statement	2%
Assessment on Referral Information	1%
Preliminary Documentation, without further information	1%
Public Inquiry	0%

Source: Department of Agriculture, Water and the Environment, unpublished.

6.3.4 Reform recommendations – streamlining environmental impact assessments conducted by the Environment Minister

The Environment Minister will continue to have a role undertaking environmental impact assessments and approvals for individual projects.

To reduce the complexity of the regulatory process, the pathways for assessing proposals should be rationalised. Separate pathways should be provided for high-impact and lower-impact developments, so that the assessment is proportionate to the level of impact on MNES.

Better guidance and clarity upfront on the types of impacts that are acceptable, and those that will require assessment and approval, will also reduce the number of unnecessary referrals. The National Environmental Standards (Chapter 1) will help provide the foundation for determining acceptable impacts.

As a result of the reforms recommended by this Review, the overall caseload of the Department is anticipated to reduce over time. The most significant gains will be realised by fundamental legislative changes to the way the EPBC Act works. National Environmental Standards and regional plans will set clear rules, meaning that proponents will be incentivised to develop projects with acceptable impacts. This will streamline, or indeed avoid the need for any interaction with, the regulatory process. Lower-risk projects that still require assessment could receive approval with standard conditions (Chapter 3), which would provide proponents with greater certainty.

Similarly, the recommended accreditation model incentivises the States and Territories to enter into accredited arrangements with the Commonwealth because the overall time frame for project assessment and approval would be expedited (Chapter 5).

Effective administration of a regulatory system (whether by the Commonwealth or an accredited party) is not cost free. Fair costs should be recovered from proponents. In principle, governments should pay for elements that are substantially public benefits (for example, the development of standards) and business should pay for those elements of the regulatory system required because they derive private benefits by impacting the environment (for example, assessments and approvals; assessment of complex post-approval management plans). There are elements of the regulatory system that have mixed benefits where costs should be shared (for example, data and information).

The EPBC Act should ensure a 'user pays' approach to cost recovery. This could include simplifying the current cost recovery fee structure, levies for ongoing after-market activities or introducing indexation. In the short term, until regulatory amendments to cost recovery have been implemented, the congestion busting funding should be continued for as long as required to achieve required performance levels and maintain the efficiencies achieved through its introduction.

Recommendation 18 In the second tranche of reform, Commonwealth assessment pathways should be rationalised to enable a risk-based approach to assessments that is proportionate to the level of impact on matters protected by the EPBC Act.

Recommendation 19 In the second tranche of reform, the implementation of Commonwealth assessments should be supported by providing clear guidance, modern systems and appropriate cost recovery.

6.4 Wildlife trade and permitting

6.4.1 Wildlife trade and permitting requirements do not align with Australia's international obligations, are inflexible and unnecessarily burdensome

The take, trade and movement of wildlife products (including live animals, plants and products) are regulated under Parts 13 and 13A of the EPBC Act. Part 13 includes permits to take, injure or kill listed species or ecological communities in Commonwealth areas, including in Commonwealth waters. Part 13A is dedicated solely to the international movement of wildlife specimens and gives effect to Australia's obligations as a signatory to the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) and the *Convention on the Conservation of Migratory Species* (Bonn Convention).

The requirements of the EPBC Act go beyond Australia's obligations under these international conventions in some instances and in others do not go far enough to enable obligations to be fulfilled. For example, the Bonn Convention states only species listed under Appendix I need be afforded protected status (Box 23). However, the EPBC Act requires that any species listed under either of the Appendixes to the Convention be included as a listed migratory species under the Act, which affords Appendix II listed species higher protection status under the Act.

Box 23 The Bonn Convention

The *Convention on the Conservation of Migratory Species* (Bonn Convention) provides a global platform for the conservation and sustainable use of migratory animals and their habitats.

Under the Convention, only species listed under Appendix I need be afforded protected status. For species listed under Appendix II, the Convention encourages range states to enter into regional or global agreements to improve these species' conservation status.

Currently the EPBC Act requires any species listed under either of the Appendices to the Convention to be included as a listed migratory species under the Act, making it an offence to catch, kill, injure, take or move the species in Commonwealth waters without a permit issued under Part 13.

Listing is automatic and occurs without regard to the species' conservation status in Australia. For example, for some species included under Appendix II of the Convention, the Australian population is distinct from the global one and is sustainably harvested within Australia. Automatic inclusion under the provisions of the EPBC Act affords such species greater protection than is required under the Convention and is counter to the Convention's intent.

Additionally, the EPBC Act requires import permits to be issued for Appendix II CITES listed species, even though the exporting country has already conducted a sustainability assessment. This results in around 2,000 additional permits being issued each year, leading to costs to individuals, companies and government, but no appreciable conservation benefit.

CITES stipulates that live animals must be transported in a humane manner (Articles III, IV and V and Resolution Conf. 10.21 (Rev. CoP16) on *Transport of live specimens (CITES n.d.))*, and this is reflected in the objects of Part 13A of the EPBC Act and specific requirements in the Act and EPBC Regulations. However, the current Regulations do not apply these requirements to live fish or live invertebrates. This omission in the Regulations risks live fish or live invertebrates being seized by an importing country should they be transported in a way that does not meet welfare requirements of CITES.

Australia's obligations under CITES do not extend to applying welfare considerations to native, non-CITES-listed fish and invertebrates. Welfare considerations are largely the responsibility of State and Territory legislation covering the prevention of cruelty to animals and through model codes of practice for the welfare of animals, although these codes are not primarily developed for native species.

There is the potential for the domestic implementation of wildlife trade regulation to be inconsistent with CITES obligations as it relates to the possession of and trade in CITES-listed species within Australia (for example, ivory products). This arises because States and Territories are responsible for the laws that control the domestic movement of these products within their jurisdiction.

The settings for permitting wildlife trade are inefficient and unnecessarily prescriptive, which results in complexity and increased regulatory burden. Regulatory effort is often not aligned in a way that is proportionate to risk and conservation benefit.

The movement of personal and household effects is overregulated. Australia requires permits for personal low-risk trade items, such as tourist souvenirs, which exceeds CITES requirements. Prescription in these parts of the EPBC Act prevents flexibility and discretion, where this is warranted. Other examples include the narrow focus of what is permitted to be considered as a household pet, cumbersome permitting requirements for the transport of musical instruments, specimens exempt through CITES guidance and outdated publication gazettal requirements.

Wildlife trade operation declarations (approvals) are restricted to 3 years or less. This leads to issues for both the proponent and the Commonwealth because applications must be assessed ahead of declarations expiring to enable business continuity. If declarations expire, the proponent can no longer export their commodity overseas – which impacts trade (for example, for commercial fisheries). The arrangements result in regulatory burden because operations must be re-assessed every 2 to 3 years.

Compliance breaches cannot be enforced in a proportionate manner. For example, the Environment Minister must revoke an approval if a condition of a wildlife trade operation is not met, potentially resulting in businesses being shut down for months even for minor breaches.

Under the EPBC Act and EPBC Regulations, there are instances where wildlife trade permitting may be open to abuse by applicants. For example, the Act and Regulations fail to clearly define what is meant by the exhibition/travelling exhibition categories, including for what is considered a zoo. There is the potential for profit-making private zoos or entities that exhibit (even for a short period) to import, export, and breed from, live animals with limited capacity for ongoing checks of facilities to ensure adherence to permitting requirements.

Furthermore, the EPBC Regulations already require the Environment Minister to consider whether the operator of a program has been convicted of an offence or is subject to proceedings for an offence for environmental/wildlife crime in the last 10 years before approving a program. This test though only applies to Australian citizens and specific programs, including approved captive breeding programs, CITES-registered captive breeding programs (Australian-based), approved artificial propagation programs and approved aquaculture programs. This test does not apply more broadly outside of these current programs, such as to overseas applicants and recipients of specimens exported from Australia.

6.4.2 Reform recommendations – Aligning with international obligations and improving the efficiency of wildlife permits and trade

The Review recommends reforms to wildlife trade permitting arrangements to align the EPBC Act with Australia's international obligations under the Bonn Convention and CITES.

The EPBC Act should be amended to align with Australia's international obligations arising from Appendix I and II of the Bonn Convention. The take of species listed in Appendix II should be allowed, subject to all management arrangements demonstrating take would not be detrimental to the survival of the species.

Similarly, the Act should remove the requirement for permits to be issued for the import of Appendix II CITES-listed species where the exporting country has already conducted a sustainability assessment.

The EPBC Regulations on the transport of live CITES-listed specimens should be amended to ensure the humane transport of CITES-listed live fish and live invertebrates, consistent with the objects of Part 13A of the EPBC Act and the requirements of CITES. The Department has made a policy decision to include a condition on CITES import and export permits for live specimens, which states that the permit holder must prepare and transport the animal(s) in a way that is known to minimise stress, risk of injury and adverse effects on the health of the animal(s). This condition should be formally incorporated into the EPBC Regulations. The condition should apply to the transport of all live specimens (that is, all fish and invertebrates) for which permits are required.

Domestically, the Commonwealth should ensure that members of the public are aware of their obligations to acquire permits for international trade and demonstrate legal acquisition and possession of CITES specimens (such as ivory) within Australia. Since States and Territories have responsibilities for the domestic trade within Australian jurisdictions, they should use their laws to control domestic trade of CITES specimens.

Recommended amendments to Part 13A, Divisions 2 and 5 of the Act (and associated regulations and definitions) to improve the flexibility and efficiency in permitting decisions include those to:

- broaden the scope of EPBC Act permitting exemptions for low-risk personal trade items such a tourist souvenirs to reduce the need for travellers to carry permits
- align purpose-of-trade codes and permit requirements for the export and import of CITES specimens for an improved client experience
- broaden the scope of regulated species that can be exported as bona fide household pets, where doing so would have no conservation impact
- introduce musical instrument passports and accept overseas musical instrument passports for import and export, for improved client experience
- remove regulation for specimens exempt through CITES guidance – for example, faeces, urine and ambergris (whale 'vomit').
- remove the explicit requirement for wildlife trade decisions to be published as an instrument in the gazette (for example, decisions relating to fisheries activities) and/or align publication requirements with EPBC Act development referrals and approvals
- provide provisions in the Act to enable penalties for compliance breaches to be proportionate to the breach.

The EPBC Act and EPBC Regulations should be amended to tighten the definitions for the non-commercial categories of exhibition and travelling exhibition. Tighter definitions of what is classified as a zoo and more clarity on what falls under the definition of exhibition and travelling exhibition for imports and exports is required to ensure applicants have clear advice on what can be approved under these categories. The definitions should be included in the Act and Regulations for clarity and transparency. The Government should also fully examine the circumstances under which a fit-and-proper-person test can be applied and enforced more broadly to wildlife permitting approvals under the Act. This should include the circumstances in which an Australian exporter would be required to certify that the intended recipient(s) of the wildlife satisfy the fit-and-proper-person test.

Once changes are made to improve the efficiency and effectiveness of wildlife permitting and trade functions under the current construct of the EPBC Act, the effectiveness of wildlife trade protection and management should also be further improved through the development of a National Environmental Standard for wildlife permits and trade (Chapter 1). This would allow other regulators to be accredited, which would streamline the regulation of wildlife trade.

Recommendation 20 Amend the EPBC Act to ensure wildlife permitting requirements align with Australia's international obligations related to:

a) species listed under Appendix I and II of the *Convention on the Conservation of Migratory Species* (Bonn Convention)

b) import permitting requirements for Appendix II listed species under the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES)

c) requirements to ensure the humane transport of live fish and live invertebrates.

Recommendation 21 Amend Part 13A Division 2 and 5 of the EPBC Act, EPBC Regulations and associated definitions to streamline and reduce regulatory burden on wildlife trade permitting processes and to enable proportionate compliance and enforcement responses.

Recommendation 22 Reduce instances under the EPBC Act and EPBC Regulations where wildlife trade permitting may be subject to abuse by applicants.

a) Tighten the definitions for the non-commercial categories of exhibition and travelling exhibition, including what can be classified as a zoo.

b) Apply a fit-and-proper-person test as broadly as possible to wildlife permitting approvals under the Act.

7 Accreditation, audit and independent oversight

Key points

- Past attempts to accredit the approval processes of States and Territories have been unsuccessful due to concerns that decision-making would be too discretionary and inconsistent with the national obligations and national interest.
- The Commonwealth has a patchy history of demonstrating that it makes and enforces decisions according to the law, and in a way that achieves the objects of the EPBC Act.
- The reforms recommended by the Review include many elements that can build confidence that the EPBC Act is delivering an effective national system of environment protection and biodiversity conservation (Chapter 1).
- To be acceptable and trusted, accredited arrangements need robust structures and processes to provide accountability and enable the community to be confident they are working well.

The key reforms recommended by the Review are:

- Establish, by statutory appointment, the position of an independent Environment Assurance Commissioner to oversee the performance of decision-makers, including the Commonwealth and accredited parties.
- Amend the EPBC Act to establish robust processes to accredit the regulatory processes and environmental management arrangements of other parties (States and Territories and Commonwealth agencies), where they can demonstrate they are capable of meeting the National Environmental Standards.
- Provide transparent pathways to enable the Commonwealth Environment Minister to intervene in a proportionate and escalated way at times when accredited arrangements are not performing well, or failing, or where there is serious risk of environmental harm.
- Subject all types of arrangements to transparent regular and periodic audits by the Environment Assurance Commissioner, to provide community confidence that the National Environmental Standards are applied equally across Australia, regardless of jurisdiction or decision-maker.

7.1 Past attempts to accredit the approval processes of States and Territories have been unsuccessful

Reducing duplication in development assessment and approval is a sound ambition, and one that governments should continue to pursue. The Review recommends that the EPBC Act should enable the Commonwealth Government to recognise and accredit the regulatory processes and environmental management activities of other parties, including States and Territories and other Commonwealth agencies. This would streamline decision-making by removing the obligation for a project to be assessed under multiple environmental assessment laws. Accreditation also provides a way to better integrate Commonwealth requirements into the broader environmental management activities of the accredited party (Chapter 5).

The EPBC Act has always included provision to accredit the arrangements of a State or Territory. However, the community is rightfully sceptical of the ability for these accredited arrangements to achieve the objectives of the EPBC Act and deliver ecologically sustainable development (ESD).

Amendments to the accreditation provisions in the EPBC Act failed to pass the parliament in 2015. There was considerable community and stakeholder concern that environmental outcomes were not clearly defined and that the States and Territories would not be able to uphold the national interest in protecting the environment. A lack of clear environmental (as opposed to process) standards fuelled political opposition at the time. A Bill to amend the Act, tabled in the Australian Parliament in August 2020 has prompted similar concerns from stakeholders.

Past attempts have failed because the community does not trust the States and Territories to properly manage their conflicts. Furthermore, in the absence of clear and prescribed outcomes, there are concerns about whether States and Territories are able to make decisions that reflect the national interest.

Stakeholders are also concerned that the Commonwealth does not deliver effective oversight of how system-level approaches have been implemented and how they are delivering environmental outcomes. Regional Forest Agreements (Chapter 6) are an example of this. Strategic assessments are another. In June 2020 the Victorian Auditor-General found that the Victorian Government had not met its commitments under the Melbourne Strategic Assessment to improve conservation outcomes by establishing the Western Grassland Reserve and Grassy Eucalypt Woodlands Reserve by 2020 (VAGO 2020). Due to the complexities of enforcing compliance with strategic assessments, the Commonwealth has to date not taken any formal action to ensure that the environmental outcomes set out in the strategic assessment are being achieved (Chapter 3).

Audits of the Commonwealth's performance are undertaken by the Australian National Audit Office (ANAO), but these are ad hoc. Responses are made to the findings of these audits, but there is a lack of accountability in the implementation of actions to address the ANAO's recommendations. The most recent ANAO report indicated that the Department of Agriculture, Water and the Environment had made limited progress on addressing the recommendations arising from previous audits (ANAO 2020). There is no complementary or recurring process that audits the effectiveness of the implementation of accredited arrangements, where these are in place. The ANAO was highly critical of the Department's lack of outcome-level performance measurement and reporting, and its inability to determine how its decisions related to outcomes for matters of national environmental significance (MNES).

The key reforms recommended by this Review are designed to address the shortcomings identified in past processes. National Environmental Standards provide a foundation for more effective and efficient environmental decision-making and enable the environment to be managed at the right scale.

But National Environmental Standards themselves are not enough. They need to be supported by strong and independent oversight of the performance of all parties, including accredited arrangements to meet the Commonwealth's outcomes as prescribed in the Standards. The Australian Parliament and the public need confidence that accredited decision-makers are adhering to the Commonwealth's regulations and Standards by making correct decisions and properly implementing commitments.

7.2 Recommended reforms

7.2.1 Strong, independent oversight by an Environment Assurance Commissioner

A new, independent, statutory position of Environment Assurance Commissioner (EAC) should be created to provide independent monitoring, audit and transparent public reporting on the operational and administrative performance of all parties operating or accredited under the EPBC Act.

The Commonwealth Environment Minister should be required to subject their own decision-making, as well as that of accredited parties, to the oversight of the EAC. This would help address the low levels of trust in the operation of the EPBC Act (Chapter 4) and the Commonwealth's own highly variable performance in making and enforcing decisions according to the law (see ANAO 2020 and Chapter 9).

The EPBC Act should be amended to clearly set out the role, functions and reporting requirements of the EAC (Box 24). The position should be free from political interference and responsible for publicly reporting on the performance of the Commonwealth Environment Minister, the Office of Compliance and Enforcement and all accredited parties. The EAC would report to the Parliament through the Environment Minister, and the report tabled within a specified timeframe.

Box 24 Role and functions of the Environment Assurance Commissioner

The Environment Assurance Commissioner (EAC) will provide confidence that the decisions of all parties are consistent with the National Environmental Standards.

The role of the EAC should be:

- independent of government, free from real or perceived political interference
- established by statutory appointment, with legislated functions and powers
- supported by dedicated Department resources.

The functions of the Environment Assurance Commissioner should include:

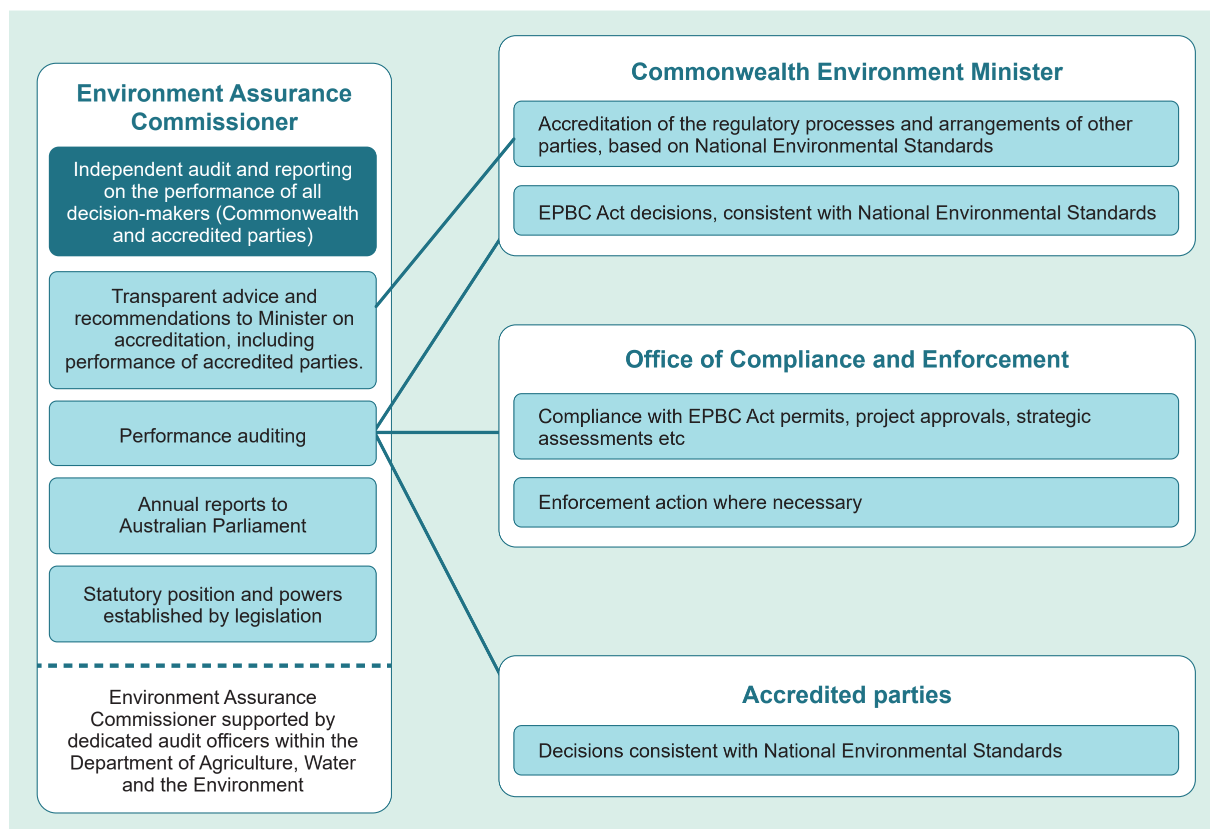
- oversight of the audit and performance of the Commonwealth including the Office of Compliance and Enforcement (Chapter 9)
- oversight of the audit and performance of an accredited party under an accredited arrangement
- investigation of complaints about the performance or operation of decision-makers
- providing recommendations to the Commonwealth Environment Minister where adverse findings are made
- regular and transparent reporting to Australian Parliament (via the Environment Minister), including tabling reports on the performance of all arrangements, with specified timeframes.

The EAC would provide permanent audit and oversight of the implementation of the EPBC Act and the National Environmental Standards (see section 7.2.5). The EAC should be supported by a dedicated standing, well-resourced, audit function within the Department of Agriculture, Water and the Environment that would conduct recurring scheduled audits and special audits or investigations of concerns. The EAC would ensure the rigour and integrity of the audit function. The EAC would provide advice and recommendations for action to the Commonwealth Environment Minister, where material issues of concern with accredited arrangements are found. The EPBC Act should require the Minister to publicly respond to the EAC's advice and recommendations, within a reasonable time frame specified in the Act.

The EAC role is separate to that of the independent Office of Compliance and Enforcement which provides surveillance, compliance and enforcement (Chapter 9). The role is also distinct from that of the Ecologically Sustainable Development Committee which monitors and reports on the effectiveness of the National Environmental Standards in delivering environmental outcomes (Chapter 4 and Chapter 11). All three roles are needed to provide confidence that the EPBC Act is being effectively and efficiently administered, and that it is achieving its objects.

The relationship between the EAC, the Environment Minister, accredited parties and the independent Office of Compliance and Enforcement is shown in Figure 7.

Figure 7 Relationship between the Environment Assurance Commissioner, the Commonwealth Environment Minister, the Office of Compliance and Enforcement, and accredited parties



7.2.2 A robust accreditation model

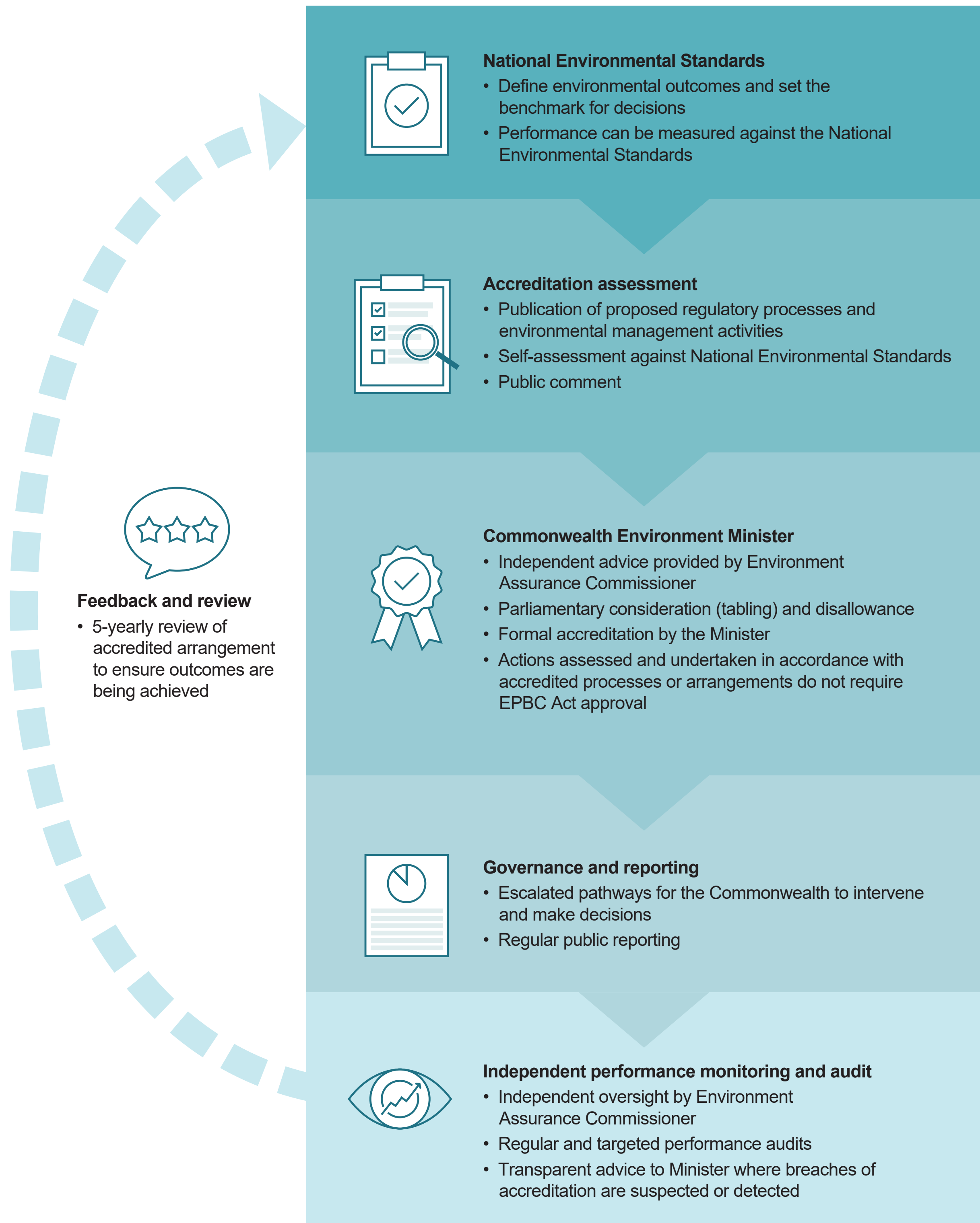
Accreditation is not about the Commonwealth handing away responsibility to the States and Territories. It is not a devolution of responsibility. Accrediting another decision-maker does not mean that the Commonwealth gets out of the business of environmental protection and biodiversity conservation. Rather, the recommended reforms would result in a greater focus at the Commonwealth level on setting the National Environmental Standards, accrediting others, providing oversight of the activities of others, and ensuring national environmental outcomes are being achieved.

Three key elements are required to provide confidence in the accreditation model:

1) Sound accreditation processes, based on National Environmental Standards (see section 7.2.3)
2) Transparent pathways to enable the Commonwealth Environment Minister to intervene in a proportionate and escalating way to ensure National Environmental Standards are upheld (see section 7.2.4)
3) Independent performance monitoring and audit of all regulators (see section 7.2.5)

The accreditation model recommended by this Review is shown in Figure 8.

Figure 8 Recommended accreditation model



7.2.3 Accreditation processes to ensure parties meet National Environmental Standards

Sound and durable accreditation processes are required to provide the Australian Parliament and community with confidence that accredited parties have the capacity and capability to meet the National Environmental Standards.

The Review recommends that the accreditation process includes:

1) National Environmental Standards that define clear outcomes for matters of national environmental significance and for important processes, including:
    a) National Environmental Standards established in law, binding decision-makers, including accredited parties. The decisions of parties operating or accredited under the EPBC Act cannot be inconsistent with the Standards.
2) Accreditation assessment that allows parties to transparently demonstrate that their systems meet National Environmental Standards and can be effectively audited, including:
    a) transparent self-assessment of the party's environmental management arrangement and/or regulatory processes to demonstrate they have the capacity to deliver the National Environmental Standards. The party should be required to provide evidence to demonstrate their competence to deliver the Standards. The self-assessment should be published and demonstrate:
        i) the proposed arrangement has capacity and capability to meet the National Environmental Standards
        ii) the proposed arrangement is sufficient to enable effective performance auditing.
    b) a public comment period, including an opportunity for the party to adjust their self-assessment prior to seeking formal accreditation
    c) clear measures of accountability, including nominating the role with overall responsibility for implementing the accredited arrangement and cooperating with the Australian Government in its review, audit and reporting on arrangements.
3) Accreditation by the Commonwealth Environment Minister to provide accountability and legal certainty. Key steps are:
    a) the provision and publication of formal advice from the Environment Assurance Commissioner to give confidence that the proposed accredited arrangements can operate in a way that is consistent with the National Environmental Standards and can be effectively audited
    b) the opportunity for the *Parliament to consider and disallow the arrangement that the Environment Minister proposes to accredit*
    c) formal accreditation by the Commonwealth Environment Minister, including:
        i) transparent demonstration of how the advice of the Environment Assurance Commissioner was considered
        ii) a signed accreditation agreement stipulating the obligations of all parties.

7.2.4 Commonwealth intervention to ensure National Environmental Standards are met

There will be times when accredited arrangements are not performing well or fail

The performance of an accredited party in implementing the agreement will sometimes be cause for concern – for example, where capability changes, where interpretation of requirements changes, or where objective decision-making against the accredited requirements is compromised. This shouldn't result in automatic revocation of accreditation.

Transparent pathways should enable the Commonwealth Environment Minister to intervene in a proportionate and escalating way when accredited arrangements are not performing well, or failing, or when there is serious risk of environmental harm. The pathways for escalation should be set out in the EPBC Act and include the ability for:

- the Commonwealth Environment Minister to step in to make a decision, where they are satisfied that a significant breach of the accredited arrangement or a National Environmental Standard is likely to occur, or to prevent serious or irreversible environmental damage. Depending on the level of concern this could include:
  - senior officer–level discussions on issues or projects of specific concern
  - formal notices of interest in a project or assessment that causes concern, with a requirement that the accredited party respond in a specified time frame
  - formal step in, to prevent a breach of the Standards or serious or irreversible environmental damage
- the Commonwealth Environment Minister to suspend or revoke the accreditation
- the accredited party to request the Commonwealth Environment Minister make a decision – for example, where they are unable to effectively manage conflicts – or to request Commonwealth consideration of a decision that contravenes the Standard.

The Commonwealth Environment Minister could step in unilaterally, following receipt of a complaint, on the advice of the Environment Assurance Commissioner (EAC) or following a decision of the courts.

It is reasonable to anticipate that escalation provisions would be used more frequently early in the arrangement, as the practice becomes established and the Commonwealth's confidence in the implementation of the arrangements is built.

The EPBC Act currently contains provisions for the partial or temporary suspension or revocation of an agreement. These include provisions for consultation with accredited parties, notice of the intention to suspend or cancel and transparent reporting of the reasons for such decisions. These provisions should continue to apply to accredited arrangements.

The EPBC Act does not currently allow the Commonwealth Environment Minister to step in and make a decision where an accredited arrangement is in force. In the short term, ahead of amendment to the Act, these provisions should be provided for in accreditation agreements.

The law still applies where accreditation fails

Importantly, under the model recommended by the Review, the EPBC Act must still apply in the event of failure of an accredited arrangement. For example, if a project is approved by a State or Territory in a way that is not in accordance with the accredited arrangement, the project would continue to be subject to the ordinary referral, assessment and approval processes of the Commonwealth. Similarly, if a project is conducted in a way that is not consistent with the accredited arrangement (such as failure to implement conditions of an approval), the Commonwealth Environment Minister should have the power to intervene to enforce compliance with the requirements of the EPBC Act.

Provisions in the EPBC Act should make sure that other projects validly approved and enforced by the accredited party are not penalised by breaches elsewhere.

The Commonwealth should retain the unfettered right to make decisions

The Commonwealth Environment Minister should retain the unfettered right to make decisions, even where an accredited arrangement is in place and working well. To avoid unnecessary disruption, uncertainty or 'forum shopping', this right should be exercised only at key points early in the project proposal cycle – for example, when a project is registered, or when an accredited regulator issues its statement of environmental impact assessment requirements. This unfettered right is distinct from the Environment Minister's ability to step in at any time before a decision is made to address situations such as a breach, or risk of a breach, of the accredited arrangement or the National Environmental Standards, or risk of serious environmental harm.

7.2.5 Audit and reporting on decision-making

Independent and transparent auditing and reporting is a key function of the recommended EAC. The EAC oversees the audit of decision-making under the EPBC Act, including decisions made by the Commonwealth Environment Minister, the Office of Compliance and Enforcement or an accredited party. The EAC supports broader assurance through the transparent reporting of these arrangements.

Subjecting all types of arrangements to the oversight and audit of the EAC will provide community confidence that the National Environmental Standards are applied equally across Australia, regardless of jurisdiction or decision-maker.

The Review recommends the EAC's oversight and audit functions include:

- recurring scheduled audits in accordance with an annual audit work plan
- special audits or investigations of concerns about the arrangements or the performance of the system
- investigation of complaints (including from the public) made regarding the performance of accredited arrangements or decision-makers.

All findings should be published. Where material issues of concern are found, the EAC should provide advice and recommendations for action to the Commonwealth Environment Minister. The EPBC Act should require the Minister to publicly respond to the EAC's advice and recommendations, to the Parliament, within a reasonable time frame specified in the Act.

It is reasonable to anticipate that audits might be more frequent in early stages of accreditation, to ensure key arrangements are firmly established and implementation is effective.

Similar to the Commonwealth Auditor-General, the EAC should not be subject to direction from anyone in relation to:

- whether or not a particular audit is to be conducted
- the way in which a particular audit is to be conducted
- the priority to be given to any particular matter.

The EAC should identify priorities or topics for its audit program and publish these as part of an annual audit plan. These priorities should be set on the basis of risks to performance or service delivery. In identifying these priorities, the EAC should have regard to the audit priorities of the Australian Parliament and the Commonwealth Environment Minister.

To assist in fulfilling these audit functions, the EAC should have powers akin to those of the ANAO, which include wide access and information-gathering powers, including the power to obtain and handle information and documents, conduct interviews and access premises. The EAC should be provided with stable and reliable funding and resourcing over forward budget estimates, including administrative funds to support a team of dedicated audit officers within the Department of Agriculture, Water and the Environment.

In undertaking audits and reporting on parties and arrangements, the EAC should:

- establish processes for the receipt and management of allegations and for handling these appropriately
- in relation to allegations of project-level non-compliance, include processes to refer the complaint to the appropriate compliance and enforcement authority and to follow up to ensure the complaint is duly investigated
- in relation to complaints regarding decision-making or the performance of accreditation arrangements:
  - publish a resolution of no concern, where this is the finding
  - provide transparent advice and recommendations for action to the Commonwealth Environment Minister for escalation and dispute resolution.

The auditing functions should not:

- question the merits of the Government's policy objectives
- provide an absolute assurance of the truth of agency information, or the effectiveness of internal controls
- enforce recommendations
- resolve individual matters of contention.

The EAC should itself be subject to the auditing provisions of the ANAO.

Recommendation 23 Immediately establish, by statutory appointment, the position of Environment Assurance Commissioner with responsibility to:

a) oversee audit of decision-making by the Commonwealth under the EPBC Act, including the Office of Compliance and Enforcement

b) oversee audit of an accredited party under an accredited arrangement

c) conduct performance audits, like those of the Auditor General and set out in the *Auditor-General Act 1997*

d) provide annual reporting on performance of Commonwealth and accredited parties against National Environmental Standards. This report should be provided to the Environment Minister, to be tabled in the Australian Parliament in a prescribed timeframe.

Recommendation 24 In the second tranche of reform, the EPBC Act should be amended to remove outdated bilateral agreement processes and replaced with robust and efficient accreditation processes, based on National Environmental Standards, that include:

a) self-assessment of arrangements by the party proposing to be accredited

b) independent advice of the Environment Assurance Commissioner

c) the opportunity for the Australian Parliament to disallow a proposed accreditation

d) accreditation agreement by the Commonwealth Environment Minister

e) escalation processes to resolve disputes between the Commonwealth Environment Minister and the accredited party

f) the Commonwealth Environment Minister's unfettered right to make a decision

g) scheduled formal review.

8 Planning and restoration

Key points

The EPBC Act does not facilitate the maintenance or restoration of the environment. The current settings cannot halt the trajectory of environmental decline or manage cumulative impacts.

The settings of the Act cannot mobilise the large-scale restoration needed and support future development in a sustainable way.

Reversing this unsustainable trajectory will require planning to manage the environment on a national or regional (landscape) scale, as well as broad scale investment in restoration. To do this effectively and efficiently, a fundamental shift is required – from a transaction-based approach to one that is centred on effective and adaptive planning.

The regulatory levers of government, including offsets, should align with the priorities of plans. However, immediate change is required to the current EPBC Act environmental offsets policy to ensure that offsets do not continue to contribute towards environmental decline.

The scale of investment required to enable future development to be sustainable means that environmental restoration cannot be delivered solely by direct government investment.

The EPBC Act can provide certainty for investment in offsets and identify matters of national environmental significance in need of protection and restoration. But outside of the Act, more work is needed to recognise and halt the degradation of Australia's 'natural capital'.

More avenues for investment in restoration and sustainable land management will 'grow the pie' to improve the overall state of the environment. This will enable Australia to accommodate future development in a sustainable way.

The key reforms recommended by the Review are:

- Strategic national plans for 'big-ticket', nationally-pervasive issues to guide the national response and enable action and investment by all parties.
- Regional plans that support the management of the environment at the landscape scale. These plans should be consistent with the National Environmental Standards and developed in accordance with quality planning principles.
- Immediate improvements should be made to the offsets policy ahead of more fundamental legislative change.
- The Commonwealth should formally examine and publicly report on the feasibility (costs and benefits) of an investment and research organisation and the suite of measures required to deliver environmental restoration.

8.1 The EPBC Act lacks comprehensive plans to manage cumulative impacts, key threats and to set priorities

8.1.1 Current operation of the EPBC Act does not effectively address cumulative impacts

Cumulative impacts on and threats to the environment are often not well managed under the current settings of the EPBC Act. Administration of the EPBC Act has contracted to core statutory requirements, with a focus on project-by-project assessment and approvals. Individually, developments may have minimal impact on the national environment, but their combined impact can result in significant long-term damage. Where assessed, the impacts are most often considered in isolation of other current or anticipated projects. These project-level decisions fail to fully factor in other pressures on the environment, resulting in an underestimation of the broadscale cumulative impacts on a species, ecosystem or region.

Provisions for more strategic approaches that can consider cumulative impacts, such as bioregional plans and strategic assessments, have a history of limited use.

This focus on project-based assessment and approvals sets the EPBC Act up to deliver managed decline, not sustainable maintenance or recovery of the environment. The impacts of development are not counterbalanced with legislated recovery processes. This is exacerbated by an ineffective offsets policy (section 8.3).

8.1.2 Planning is patchy and often poorly implemented

The current settings of the EPBC Act require plans for some matters of national environmental significance (MNES). Plans for World Heritage properties and National Heritage places on Commonwealth land are required to be reviewed every 5 years. Monitoring and review of plans for World Heritage properties is highly scrutinised, but the effectiveness of plans for National Heritage places has not been assessed and requires attention (DoEE 2019a). Commonwealth reserves jointly managed by the Director of National Parks (DNP) and the joint boards of management also require management plans, which must be updated every 10 years. An audit report by the ANAO identified shortcomings in the effectiveness and implementation of reserve management plans (ANAO 2019). The DNP is working to address these shortcomings.

The EPBC Act also contains provisions for the development of bioregional plans in Commonwealth areas or in collaboration with States and Territories where a plan is not wholly within a Commonwealth area. These plans are not statutory and are not required to be monitored and reviewed. Undertaking a whole-of-system approach has had many benefits in the Commonwealth marine environment. Bioregional plans have been developed for 4 of Australia's marine regions. These plans provide clear direction on some priorities the Minister must have regard to when making decisions under the Act – for example, important habitat areas for migratory marine species and key ecological features of the marine environment. These plans are less clear on how to address other issues, such as marine pollution.

Marine bioregional plans have not been substantially evaluated or reviewed since they were first made and implemented. This means there is limited information available to determine if they are achieving the intended environmental outcomes. Under the EPBC Act, bioregional plans have not been developed for terrestrial environments that have complex cross-jurisdictional boundaries, competing land-use requirements and different requirements under State, Territory and Commonwealth legislation.

The approach to planning for the recovery of threatened species and ecological communities is poor. Once listed, each threatened species and ecological community MNES is separately described and managed through individual species or community conservation advices. Some also have recovery plans. Opportunities for more coordinated action that supports sustainable habitat use and restoration are missed. Listed threatened species and ecological communities influence funding programs that encourage restoration and threat abatement, such as the National Landcare Program or the Threatened Species Recovery Fund. However, the distribution of funding is often scattergun, unreliable and short-term. Funding cycles do not support an enduring, focused or prioritised approach. With limited exception, the planning that is done is piecemeal and poorly implemented. Even if these plans were implemented well, they still fail to deliver at a system scale because they are mostly focused on a threat-by-threat and species-by-species basis.

8.1.3 Threats are not well managed

The EPBC Act is limited in its ability to manage key threats or quickly respond to acute threats such as bushfires, biosecurity incursions or other natural disasters. These can have a devastating impact on threatened species and can lead to more common species becoming rarer.

Australia's history of extinctions shows that predation by feral cats and European red foxes is a primary driver of extinctions of small mammals in Australia. A recent assessment of historical extinctions during the mid-19th or early 20th century concluded that of 13 species assessed, 11 are believed to have gone extinct primarily due to the predation of feral cats and European red foxes (DAWE n.d.(a)).

Provision in the EPBC Act for managing threats – such as the listing of key threatening processes (KTPs) and the development and implementation of threat abatement plans – were designed to support a coordinated and strategic approach to dealing with threats that cause the majority of extinctions and declines in Australia. However, these mechanisms are not achieving their intent and many threats in Australia are worsening.

The current list of 21 KTPs is not comprehensive, because the process relies on the receipt of nominations from the public. The listing process is slow and subject to ministerial discretion. No new KTPs have been listed since 2014, and several major threats – such as inappropriate fire regimes – are not listed. Listed KTPs are dominated by immediate or existing threats where strong evidence is available, rather than emerging threats. This is despite evidence that early intervention on emerging threats is more cost-effective and achieves better outcomes than responding to entrenched threats (ISC & BHA 2020).

Once a KTP is listed, action to address the threat is not a requirement of the EPBC Act. The decision to make and implement a threat abatement plan is discretionary. The Threatened Species Scientific Committee noted in their submission to the Review:

> A Key Threatening Process listing has no statutory obligations. Thus, a listing is ineffectual unless a Threat Abatement Plan is made or adopted. This constraint means that Key Threatening Processes are not prioritised in a resource-constrained environment. (TSSC 2020)

Only 6 KTPs have an up-to-date plan. For others, an alternative non-statutory approach is used, or the plans have exceeded or are about to exceed the statutory 5-year review deadline (TSSC 2020).

The EPBC Act does not refer to climate change or explicitly require consideration of future pressures. As a result of an inefficient, drawn out listing process, there is no avenue for quickly listing newly threatened species in response to natural disasters such as the 2019–20 Black Summer bushfires. In addition to listing efficiencies, better planning is the missing piece to consider the cumulative and long-term nature of these threats.

8.2 Better planning is required to protect and restore the environment

8.2.1 Strategic, national-level planning is required

To achieve the outcomes in the National Environmental Standards, comprehensive planning under the EPBC Act is required. Effective planning enables cumulative risks to be managed, the response to future impacts to be coordinated and the clear priorities for restoration to address historical impacts to be identified. Not all issues or threats are limited to a particular area. There are nationally pervasive issues that would benefit from strategic coordination, such as the management of feral animals or adaptation of the environment to climate change.

Strategic plans for big-ticket items can:

- provide a national framework to guide a national response
- direct research (for example, feral animal control methods)
- support prioritisation of investment (public and private)
- enable shared goals and implementation across jurisdictions.

National-level plans can achieve efficiencies and provide a consistent approach that can be reflected in regional plans. They can also inform activities in those areas where a regional plan is not in place.

Specific opportunities that lend themselves to national strategic planning include:

- the delivery of a comprehensive, adequate and representative National Reserve System
- high-level and cross-border threats, such as biosecurity or feral animals
- forecasting the pressures and risks of climate change scenarios to support other planning efforts and to guide decision-making.

There is an opportunity to drive greater collaboration in the approach to managing nationally pervasive issues by setting clear priorities for the issues that should be addressed through strategic national plans. Many of these issues are not new, some were indeed identified in existing agreements such as the foundational governmental agreements (for example, CoAG 1992). Recent unpublished work by the Australian Academy of Science and the National Environmental Science Program's Threatened Species Recovery Hub provides a contemporary analysis of the nationally pervasive threats to threatened species and ecological communities listed under the Act.

Current efforts to control feral cats is an example of how a coordinated, cooperative approach between governments contributes to effective management of threats. Box 25 explains the value of this collaborative approach and how it could be enhanced through a strategic national plan.

Box 25 Cooperation between governments for effective feral cat control

Feral cat control

Cooperative efforts to tackle the impact of feral cats provides an example of what could be achieved with enhanced intergovernmental collaboration through strategic national planning and coordinated investment.

The key driver for more effective management of cats relates to their impact on native animals. Predation by cats has been a significant factor in 27 of the 47 extinctions of Australian reptiles, birds and mammals (Woinarski et al. 2019). Feral cats also threaten 75 critically endangered and near-threatened mammal species (Woinarski et al. 2015), as well as 40 threatened birds, 21 reptiles and 4 amphibians (DoEE 2015).

Continued next page

Box 25 (continued)

Feral cat management is carried out by the States and Territories. Jurisdictions vary widely in their management response, from efforts to eradicate cats from offshore islands, targeted baiting, trapping and exclusion programs (notably Western Australia) to little management at all in some jurisdictions.

In 2015 Commonwealth, State and Territory Ministers agreed that feral cats threaten wildlife, and that managing them is important for threatened species recovery. Coordinated action has been driven through reformed legislation to remove barriers to feral cat management in jurisdictions as well as a national focus through the Threatened Species Strategy (Australian Government 2015).

The Threatened Species Strategy outlines the establishment of the Feral Cat Taskforce, quantitative targets for feral cats, increasing predator-free areas, eradication from key islands, and dedicated funding for research, monitoring and management (including a culling program).

There is recognition of the need to improve outcomes from feral cat management programs in Australia. Appropriately funded, targeted research to address knowledge gaps is critical to address this need (Webber 2020).

A strategic national plan for feral cats could enhance this current model of intergovernmental cooperation by providing a statutory basis for implementation, monitoring and reporting and would enhance the current approach to strategic, targeted investment.

Note: The information in this Box draws extensively from contributions made by the Threatened Species Scientific Committee to the Review.

A national plan could be developed to support preparedness for new threats (such as a biosecurity incursion), or responses to acute events (such as a bushfire) that require a rapid response (Box 26). The Intergovernmental Agreement on Biosecurity (CoAG 2019b) has created a framework for governments to coordinate and identify priority areas of reform and action to build a stronger and more effective biosecurity system. It provides a model for Commonwealth leadership and interjurisdictional cooperation for strategic national plans. It deals with established biosecurity threats, as well as providing the settings for rapid response to new events.

Box 26 Establishment of arrangements for emerging or acute threats

Biosecurity model for response to pest or disease outbreaks

When a pest or disease outbreak occurs in Australia (also referred to as a biosecurity incident), arrangements are in place to allow for a rapid nationally coordinated response. When the pest or disease is exotic to Australia or occurs in more than one State or Territory, the Department of Agriculture, Water and the Environment takes the lead in coordinating the national response to the outbreak.

Plans, groups and processes come together under a nationally agreed system to respond to the incursion. The system is used consistently by all jurisdictions (NBCEN n.d.(a)). National environmental biosecurity pest and disease incursion response plans are developed under the National Environmental Biosecurity Response Agreement (CoAG 2012). Similar plans exist for pest and disease incursions affecting agriculture.

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Box 26 (continued)

Red imported fire ant

Red imported fire ant (RIFA) (*Solenopsis invicta*) is a rapid-spreading invasive species that can inflict painful bites on people, pets and livestock.

RIFA is a superpest that is likely to affect most areas of the economy, including agriculture, animal industries, infrastructure, biodiversity, human health and lifestyle, by stinging animals, invading crops, causing anaphylactic reactions in humans, compromising electrical systems and disrupting sporting events. It continues to be the target of national cost-shared eradication programs.

The National Red Imported Fire Ant Eradication Program was first established in 2001 in response to the discovery of *RIFA* in western Brisbane and Fisherman Island, Queensland and there have been a number of iterations responding to new incursions.

The current 10-year investment of $411.4 million to 2027 aims to find, contain and destroy fire ants in South East Queensland. The program is delivered by Biosecurity Queensland on behalf of the Australian Government and all State and Territory Governments.

An independently chaired steering committee provides clear guidance and support to ensure program transparency and accountability. The committee is made up of representatives from all jurisdictions and monitors the program's progress against agreed targets and milestones.

The most recent 2-yearly efficiency and effectiveness review of the program (Wonder 2019) recommended 37 improvements to assist the program to achieve its intended outcomes. The review noted that there are some promising indications, but the success of the program will rely on consistently targeted effort and review.

Given the importance of eradication of this highly invasive species, responses to incursions are mobilised quickly under the national arrangements and have resulted in eradication at previous locations in Queensland (Yarwun in 2006 and 2013, Brisbane Airport in 2015 and Port of Brisbane in 2016) and in other jurisdictions (Port Botany, New South Wales in 2016). The current program is aiming to clear ants from an area of over 600,000 hectares. An eradication response is also underway at the Port of Fremantle, Western Australia after RIFA were detected in November 2019 (NBCEN n.d.(b)). Without a clear, nationally coordinated response, the management of RIFA incursions would be impossible.

Overarching plans also exist for biosecurity incursions for livestock and plants.

A similar model could be applied to other acute threats or events, such as a response to bushfires. Having an established process and mechanisms for collaboration and sharing costs can support direct and rapid action and minimise the delays that result from needing to develop arrangements once the acute threat or event has already occurred.

Source: QLD DAF 2020

The EPBC Act should be amended to provide a statutory basis for strategic national plans, which should include requirements for:

- compliance with the National Environmental Standards
- alignment with threats to MNES identified in relevant statutory documents such as conservation advices
- clear priorities and assigned responsibilities for investment
- mandatory implementation, monitoring and reporting
- periodic evaluation and review, on a 5-yearly basis.

The Act should establish a clear process for the Commonwealth to make and implement strategic national plans. This should include requirements for consultation and transparently seeking the advice of the Ecologically Sustainable Development (ESD) Committee, and a requirement to make decisions in a way that is consistent with plans.

Agreement to align with and implement the priorities of national-level plans that address threats to MNES should be an explicit requirement for accreditation under the EPBC Act. This is because national-level plans are a key part of addressing threats to MNES and achieving the environmental outcomes of the National Environmental Standards (Chapter 1 and Chapter 7).

Some priorities in strategic national plans, and those that relate to preparedness for dealing with emerging or acute threats, may be relevant to the broader environmental responsibilities of the States and Territories. In these cases, implementation plans prepared by each jurisdiction would support integration of these plans into the environmental management systems of the States and Territories.

8.2.2 A greater focus on regional planning

The EPBC Act should be amended to enable adaptive regional planning approaches that reflect National Environmental Standards. These amendments, together with a commitment to make and implement plans, are necessary to support a fundamental shift in focus from project-by-project development transactions, to effectively planning at the right scale for a sustainable environment and for sustainable future development.

Regional plans would consider cumulative impacts and key threats and build environmental resilience in a changing climate by addressing cumulative risks at the landscape scale. Managing these threats to matters of national environmental significance (MNES) at the regional scale will have flow-on benefits for more common species and biodiversity more broadly.

Regional plans should be developed that support the management of threats at the right scale, provide a sound basis for regulatory decision-making, and set clear rules to manage competing land uses. These plans should direct investment in protection, conservation and restoration to where it is most needed and where the environment will most benefit.

Regional plans should be developed consistent with the National Environmental Standards to enable the Commonwealth to accredit the plans, based on advice from the ESD Committee on whether the plans will effectively achieve the outcomes in the Standards (Chapter 1 and Chapter 4).

Ideally, these plans would be developed in conjunction with States and Territories and community organisations. However, where this is not possible, the Commonwealth should develop its own plans to manage threats and cumulative impacts on MNES. The regional planning efforts should initially be focused on those regions of highest pressure on MNES.

The benefits of a regional planning approach include:

- the ability to take pre-emptive actions to address declines before species become eligible for listing
- implementing priorities of strategic national plans to contribute to achieving national environmental outcomes
- certainty about where prospective development could occur and, more importantly, should not occur
- more efficient environmental research and monitoring of habitat recovery to support threatened species and ecological communities
- contributing to and ensuring ownership of environmental outcomes where communities are involved in regional plan development and implementation
- directing investment to where it is needed most to achieve environmental outcomes such as restoration.

The development and implementation of regional plans should be guided by key principles for quality regional planning. Regional plans should be:

- based on appropriate and best available scientific, economic, social and cultural knowledge
- determined at the appropriate scale
- developed in collaboration with the community and stakeholders
- integrated with other national, jurisdictional and regional plans
- able to respond to changing circumstances to guide improvements
- appropriately resourced and funded to implement the specified conservation measures
- able to quantify and demonstrate progress towards goals and targets, through regular monitoring, measuring, evaluation and reporting of organisational and project performance and the use of the results to guide improved practice
- clear about how information will be managed (Chapter 10).

These principles should be incorporated into the EPBC Act – for example through a National Environmental Standard for regional planning.

It would be inappropriate for the Commonwealth to make detailed plans at every scale. Plans developed by other parties, such as States and Territories or local planning organisations should be able to be accredited under the EPBC Act. When accredited, these plans would support governments to avoid duplication of development assessment and approval, while enabling Commonwealth oversight that local planning activity is clearly meeting national outcomes (Chapter 7). Plans made by the Commonwealth, or accredited plans made by others, must adhere to the National Environmental Standards and the principles for quality regional planning.

Three regional planning tools are recommended:

1) Regional recovery plans – which identify recovery priorities for multiple threatened species and ecological communities at the landscape scale.
2) Ecologically sustainable development (ESD) plans – spatial plans that identify environment, economic, Indigenous and social priorities and incorporate outcomes for MNES.
3) Strategic assessments – spatial plans that consider proposed development by a proponent(s) in a coordinated manner.

Regional recovery plans

At the Commonwealth level, a shift is required from recovery planning for an individual listed species or community to planning at a landscape scale, with a focus on collective biodiversity conservation outcomes for threatened species and ecological communities that are protected under the EPBC Act.

Regional recovery plans should provide for coordinated management of threats to all listed species and communities in a region and consider the cumulative impacts of these threats. They should identify important populations or areas of habitat critical to the survival of a species or ecological community.

Regional recovery plans should incorporate local ecological knowledge, including Indigenous knowledge (where appropriate) and could draw from regional-scale plans that are already in place, including Healthy Country Plans or plans prepared by natural resource management groups.

Regional recovery plans should set out the geographical focus of restoration to most efficiently and effectively deliver the outcomes defined in the National Environmental Standards for MNES. These plans will include guidance on the land that, if restored, would provide greatest environmental benefit at lowest cost. Regional recovery plans should also provide the basis for prioritising action and investment, including the offset obligations arising from development.

A regional approach to recovery plans drives efficiency because many listed species and communities in a region rely on the same habitat and suffer from the same threats. New listings in a region can be more easily incorporated and individual species recovery plans would only be required as the exception. Such landscape-scale planning would also have benefits for more common species and contribute better to arresting the overall decline of the environment. Initial focus should be on Australia's unique biodiversity hotspots, which would protect and restore the most MNES.

The EPBC Act should be amended to allow for regional recovery plans that require:

- compliance with the National Environmental Standards
- consistency with other statutory documents, such as conservation advices and strategic national plans
- clearly identified priorities for conservation and restoration activities
- quantitative performance targets for conservation and recovery of each species or community
- monitoring and reporting against agreed quantitative performance targets to understand if the species within the plan area are recovering
- adjusting the plan where recovery is not being achieved, or incorporating newly listed species, ecological communities or priorities from other relevant plans
- costing and appropriately resourcing the plan to support implementation.

The Minister should establish the process and priorities for planning and seek transparent advice from the Biodiversity Conservation Science Committee (Chapter 4) on developing the detailed framework for regional recovery plans.

Areas of focus should include biodiversity hotspots (such as south-west Western Australia or eastern coastal regions), areas foreshadowed by future developments or where current multi-species plans could be readily incorporated into a regional recovery plan.

Other priority areas for developing regional recovery plans should focus on areas of highest pressure on the targeted MNES. This could include threatened species or threatened ecological communities that regularly trigger controlled action decisions, such as the koalas in Queensland and New South Wales.

Ecologically sustainable development plans

The EPBC Act currently includes a bioregional planning mechanism which has only been used in Commonwealth areas. While these plans provide guidance, consistency with them is not required when making decisions. The Act should be amended to replace the bioregional planning mechanism with the ESD planning approach recommended by this Review.

ESD plans should be spatial plans that address environment, economic, Indigenous and social priorities. ESD plans should support more integrated management of the environment by accommodating the respective interests of the Commonwealth, and States and Territories.

ESD plans should set clear rules to manage competing land uses and identify future long-term development aspirations. They should identify areas where impacts on the environment should be avoided or minimised, where development may be of lower or higher risk to the environment, and where development assessment and approval is not required. The Commonwealth Environment Minister (or an accredited party) should make decisions on development approvals in a way that is consistent with the provisions of the ESD plan.

Having ESD plans within the EPBC Act does not mean that the Commonwealth must plan for everything. Rather, through the National Environmental Standards, the Commonwealth can be clear about national-level outcomes and priorities for MNES. These outcomes and priorities can then be incorporated into planning conducted by others.

The Commonwealth could collaborate with a State or Territory to develop ESD plans in priority areas, or a jurisdiction could propose its own plan to be considered and accredited by the Commonwealth. Existing plans, such as those by local councils or natural resource management organisations, could be

accredited to avoid duplication of planning efforts. ESD plans developed by others such as the States and Territories, could be accredited by the Commonwealth as an alternative to strategic assessments (for example, the strategic assessments for Western Sydney and Melbourne growth boundary). This would overcome a key shortcoming of current strategic assessments under the EPBC Act (Chapter 3).

The development of ESD plans should be driven by clear priorities that consider areas where MNES are likely to be subject to future long-term development pressures or national economic development priorities (such as northern Australia). ESD plans should also identify where restoration of the environment would be most beneficial. This would ensure that longer-term development priorities do not conflict with efforts made to restore the environment.

The EPBC Act should be amended to enable the development and accreditation of ESD plans. The Act should establish a clear process for the Commonwealth to make ESD plans. This should include requirements for consultation and transparently seeking the advice of the Ecologically Sustainable Development Committee. Regulatory decisions must be made in a way that is consistent with plans. Plans made by others (such as a State or Territory), and accredited by the Commonwealth Environment Minister, should be subject to the accreditation model set out in Chapter 7.

To be made or accredited under the EPBC Act, ESD plans should:

- be consistent with the suite of National Environmental Standards including MNES, data and information, compliance and enforcement, and Indigenous engagement and participation in decision-making
- integrate the requirements of relevant strategic national plans, regional recovery plans, species and community plans to effectively address threats across tenures and borders
- identify social, economic, cultural and environmental values, including the location of likely future development, areas of cultural value to Indigenous Australians, and areas that are priorities for environmental protection, conservation and restoration
- identify priorities for investment in environmental restoration
- assign responsibility and accountability for implementation of the actions contained within the plan
- identify processes for monitoring and reporting on the outcomes of the plan, including adherence to established Commonwealth requirements for environmental monitoring and evaluation
- include 5-yearly reviews to ensure plans are adaptive and achieving their intended environmental outcomes.

Transitional arrangements for existing bioregional plans made under the Act (such as marine bioregional plans) should be considered. When existing plans are reviewed, adjustments may be required to ensure they meet both the principles for quality regional planning and requirements for compliance with the National Environmental Standards. The same should apply in transitioning other existing planning tools under the Act, including potential future modifications to strategic assessments.

Strategic assessments

Part 10 of the EPBC Act provides for landscape-scale assessments in the form of strategic assessments. The legal arrangements for strategic assessments are complex (Chapter 3), but those that have been conducted have led to more streamlined regulatory arrangements (Chapter 6). Some have been criticised for not achieving their intended environmental outcomes (VNPA 2020). The use of a strategic assessment in some cases, for example for growth corridors of major cities, has been a work around rather than the most ideal planning tool. The recommended ESD plans would provide a more effective planning tool, and a clearer foundation for regulatory decision-making.

The EPBC Act should continue to enable proponents to enter into a strategic assessment with the Commonwealth for developments not covered by an ESD plan. As is the case now, a strategic assessment would provide a single approval for a broad range of actions covering multiple projects. This would provide certainty of permissible development areas and environmental outcomes.

A strategic assessment should be required to be developed in a manner that is consistent with the National Environmental Standards and regional recovery plans (where they are in place). The accreditation model outlined in Chapter 7 should be applied to strategic assessments.

Recommended adaptive planning tools

Table 2 summarises the recommended adaptive planning tools.

Table 2 Summary of recommended plans

Plan type	Leadership, collaboration and approval	Scope	Intent	Spatial coverage
Strategic national plans – for nationally pervasive issues such as high-level and cross-border threats	Led by Commonwealth, approved by Commonwealth	National framework to guide a national response, direct research and support prioritisation	Enable shared goals and implementation across jurisdictions	Not spatially focused
Regional recovery plans – for listed threatened species and ecological communities and where relevant migratory species	Led by Commonwealth, approved by Commonwealth	Protection, conservation and restoration priorities for listed threatened species and ecological communities	Coordinated threat management, consideration of cumulative impacts Support prioritisation of Commonwealth action Clear protections for MNES	Priority regions in the first instance
Ecologically sustainable development plans	Collaborative process led by jurisdictions or jointly between jurisdictions and the Commonwealth Made by the Commonwealth, or made by others and accredited by the Commonwealth	Biodiversity, economic, cultural and social values	Consistent with the National Environmental Standards and regional recovery plans Set clear rules to manage competing land uses Basis for development decisions	Priority regions in the first instance or where proposed by a jurisdiction for accreditation
Strategic assessments	Led by proponents and approved by the Commonwealth	Biodiversity, economic, cultural and social values	Consistent with the National Environmental Standards and regional recovery plans Provide a single approval for a broad range of actions	Where instigated by proponent

Recommendation 25 In the second tranche of reform, the EPBC Act should be amended to support more effective planning that accounts for cumulative impacts and past and future key threats and build environmental resilience in a changing climate. Amendments should enable:

a) strategic national plans to be developed, consistent with the National Environmental Standards, to guide a national response and effectively target action and investment to address nationally pervasive issues such as high-level and cross-border threats

b) regional recovery plans to be developed, consistent with the National Environmental Standards, to support coordinated threat management and investment to reduce cumulative impacts on threatened species and ecological communities

c) ecologically sustainable development plans to be developed and accredited, consistent with the National Environmental Standards. These plans should address environmental, economic, cultural and social values and include priority areas for investment in the environment

d) strategic assessments to be approved, consistent with the National Environmental Standards and regional recovery plans and provide for a single approval for a broad range of actions

e) the Commonwealth to accredit plans made by other parties, where these plans are consistent with National Environmental Standards and other relevant plans

f) plans to be made consistent with key principles for quality regional planning.

Recommendation 26 In the second tranche of reform, the Commonwealth should establish a dedicated program to develop and implement strategic national plans and regional plans with a focus on key Commonwealth priorities, including:

a) strategic national plans for key, new and emerging threats of national significance

b) regional plans in biodiversity hotspots, areas foreshadowed as national priorities for economic development and areas where matters of national environmental significance are under greatest threat.

8.3 Government-driven investment in restoration

8.3.1 Current activities in restoration do not align with priorities for MNES

Investment in environmental restoration is required to reverse environmental decline and enable future development to be more easily accommodated in a sustainable way.

Grant programs and direct funding of restoration

Australian Government programs for investments in environmental restoration have been a constant feature of national environmental policy over the past 20 years. The majority of these have been traditional grant-style, project-by-project programs, including the National Heritage Trust, Caring for Country, the Environmental Stewardship Program, the National Landcare Program, the Green Army and the Threatened Species Recovery Fund. These programs may have achieved their designed objectives, but they have only stemmed, not stopped, the broader environmental decline.

Despite being aligned with MNES, program funding and other investments are not well coordinated to prioritise investment in a way that achieves the greatest possible biodiversity benefits. It is also difficult to discern the specific effect of the investment on the outcomes.

Over the past 20 years, funding of these restoration programs has been variable and often spread thinly across Australia. There is no clear plan for the prioritisation of current streams of Australian Government funding allocated to environmental protection, conservation and restoration.

Recent efforts to target and prioritise funds, albeit at a modest scale, are starting to deliver results. The Threatened Species Strategy has shown that the rate of increase has improved for some species – such as the Gilbert's Potoroo, the Helmeted Honeyeater and the Mala – as a result of targeted, consistent effort at a national scale (DoEE 2019b).

Restoration delivered by offsets under the EPBC Act

Offsets are a tool that should limit environmental decline resulting from development and increase restoration. The different types of offsets are shown in Box 27.

Box 27 Types of offsets

Averted loss offsets

These offsets are met by purchasing and improving an otherwise at-risk area of land with the same habitat as that which is destroyed or damaged by the development. The land is then protected from future development. The protection of land through an averted loss offset does not add to the amount of habitat. When considered with the habitat loss from the development, a net reduction of habitat results.

Restoration offsets

These offsets are met by creating new (or recovering old) habitat from highly degraded land. A development with a restoration offset can result in a net gain of habitat.

Advanced offsets

Advanced environmental offsets are those that are 'supplied' in advance of an impact occurring. The offset area is set aside for potential future use by the owner, or to sell to another developer. The current offset policy allows advanced offsets for:

- protecting and improving existing habitat (averted loss)
- creating new habitat from highly degraded land (restoration).

Offsets have the potential to aid environmental restoration, but the current EPBC Act environmental offsets policy (DSEWPAC 2012) contributes to environmental decline rather than active restoration. The EPBC Act environmental offsets policy has major shortcomings in both its design and implementation.

The 'avoid, mitigate, offset' hierarchy is a stated intent of the policy. This is not how the policy has been applied in practice. Proponents see offsets as something to be negotiated from the outset, rather than making a commitment to fulsome exploration (and exhaustion) of options to avoid or mitigate impacts.

This is in part because the proponent has generally made the decision to develop a particular site before a referral is made under the EPBC Act. This limits real consideration of broadscale avoidance. Once a proposal is referred, assessment officers have limited scope and time to work with proponents to avoid and mitigate impacts. This becomes a 'nice to do', rather than a core focus of their efforts. An offset has become an expected condition of approval, rather than an exception.

The policy allows proponents to meet their offset condition by creating new habitat from highly degraded land – an approach the Review terms a 'restoration offset' – however, this rarely occurs. Most offsets are averted loss offsets that deliver only weak protection of remnant habitats of MNES that may have never been at risk of development. This is reinforced by the lack of a formal requirement to adequately demonstrate that the area set aside for the offset was sufficiently likely and able to be cleared for future development.

Although the policy allows restoration ahead of impacts ('advanced offsets'), they are difficult to deliver under the current settings. There is no guarantee that the Environment Minister will accept an advanced offset, nor is it possible to accurately determine the area of offset required before an approval is granted. This makes investing in an advanced offset a risky proposition. Consequently, proponents focus on protecting what is left rather than promoting restoration.

Offset requirements are applied as a condition of approval. These conditions are not adequately monitored to ensure appropriate management and efforts to enforce compliance are weak (Chapter 9). There is no transparency of the location, quality or quantity of offsets. There is no register of offsets and, in the absence of such a tool, the same area of land may be 'protected' more than once.

The Review concludes that the EPBC Act environmental offsets policy requires fundamental change.

8.3.2 The levers of Government, should align with National Environmental Standards and plans

Government funding is finite and needs to be targeted to achieve the best results. The reforms recommended by this Review will provide a foundation for more effective prioritisation and coordination of investments by governments. Specifically:

- The adoption of National Environmental Standards for MNES will provide clarity on the environmental outcomes that should be targeted through investments in restoration.
- National and regional plans will define how to most effectively and efficiently improve MNES in a landscape. Offsetting should also be guided by priorities identified in regional plans.
- The quantum change in information and data will assist monitoring and evaluation of environmental improvement delivered through government investments.

A pre-condition for Commonwealth funding of any restoration in a State or Territory should be that the State or Territory has agreed to implement the National Environmental Standards. This will ensure that restoration does not occur in areas where there is little protection of the environment and that the Commonwealth does not pay for restoration while the environment is being degraded in the same region.

Reforming the EPBC Act environmental offsets policy

Recent research has shown that even when sophisticated offset metrics are applied, restoring individual patches of land can still lead to poor outcomes for species if the wider landscape is not considered (Marshall et al. 2020). Regional recovery plans should help coordinate offsets by defining the areas where restoration would deliver the greatest environmental return within the region, including benefits to targeted species and ecological communities. The development and implementation of successful regional plans will reduce the need for offsets, because less species should be up-listed and more down-listed as the environment is restored.

A greater use of strategic assessments will also improve environmental restoration outcomes by balancing impacts and delivering offsets in a coordinated way across multiple projects in a region. However, major short-comings in the EPBC Act environmental offsets policy need to be addressed prior to widespread adoption in strategic assessments.

Changes are required to the policy to ensure that offsets do not contribute towards further environmental decline. Immediate changes need to be made to ensure that the existing policy is adequately implemented. Amendments are required to ensure the policy is aligned with the reform framework and that offsets required under the EPBC Act or accredited arrangements can effectively achieve net-benefit outcomes for the environment. These changes (Box 28) include only accepting offsets where:

- they are permitted under the National Environmental Standards
- they align with planning instruments
- an offset plan demonstrates that they can be ecologically feasible
- outcomes from offsets can be properly monitored and measured.

Box 28 Recommended changes to the EPBC Act environmental offsets policy

The environmental offsets policy and its implementation should also be immediately improved to ensure:

- consistency with the National Environmental Standards
- offsets are ecologically feasible and deliver genuine protection and restoration in areas of highest priority.

In the first instance, these improvements should be delivered immediately by making the following amendments to the policy.

1) Biodiversity offsets can only be considered after all possible measures to avoid and mitigate the impacts of an action have demonstrably been taken. Avoidance and mitigation measures must include, but not be limited to, consideration of:
    - the appropriateness of project scoping, footprint relocation and/or reduction
    - changed timing of project activity
    - design-based avoidance and minimisation.
2) Offset activities must be
    - done in accordance with the suite of National Environmental Standards
    - ecologically feasible and achievable.
3) Offset plans must
    - be supported by relevant robust scientific evidence that considers the appropriateness and feasibility of the offset
    - clearly define offset activities. Averted loss offsets should only be used where there is an imminent and demonstrable risk of loss and where the land is not otherwise protected by the EPBC Act and the National Environmental Standards for MNES (for example, if it is part of a project that has previously been approved under the Act)
    - include time-bound milestones that clearly identify the required absolute increases of approved indicators – for rehabilitation and restoration offsets milestones, this must be in accordance with the International Principles and Standards for the Practice of Ecological Restoration (Gann et al. 2019)
    - outline corrective courses of action that will be taken where increases in the indicators or milestones have not been achieved
    - define who will fund, manage, monitor and report on the ongoing outcomes of the offset area, including indicators and milestones.
4) Offset sites must:
    - conform with offset components in relevant regional plans and strategic assessments
    - be identified and legally secured prior to commencement of the approved impact – delays between impact and full achievement of required offsets gains must be minimised and appropriate discount factors applied
    - not be used more than once, noting that the one site may provide offsets for impacts on multiple MNES – offsets must be additional to existing actions and regulatory obligations
    - clearly demonstrate management of activities that ensure attainment and maintenance of the required improvement of indicator(s) for the duration that the migratory species, threatened species or threatened ecological community is affected by the impact.
5) The policy must be reviewed at least every 3 years to ensure that it is achieving its objectives.

Proponents are generally not in the business of restoring and managing habitats. There are, however, expert land managers and specialist project managers who deliver these services. The right policy and legal settings would provide certainty for these parties to invest in landscapes, confident that proponents will be in the market to purchase offsets based on these investments down the track.

Ultimately, the foundations for offsets should be enshrined in legislation – either in the EPBC Act or a specific standalone Act. This will provide the right market certainty for investment to occur. Initially, however, the offsets policy should be amended, or a National Environmental Standard be developed for offsets. Either the amended policy or a Standard for offsets should be aligned with the changes outlined in Box 28.

To reduce the costs of restoration, future offsets legislation should also capture the recommended changes and consider the requirements of market participants. To incentivise early investment in restoration and encourage greater private investment, the legislation needs to improve the market settings, including consideration of market, depth, integrity and efficiency.

A public register of offsets should also be established for all Commonwealth, State and Territory offset sites. This register should be designated as a National Environmental Information Asset (Chapter 10).

Greater alignment between biodiversity and carbon markets

The Carbon Credits (Carbon Farming Initiative) Act 2011 (Carbon Credits Act), has supported substantial government investment in native forest restoration. Since the Carbon Credits Act came into force, the Australian Government has committed $2 billion in investment toward lowest cost carbon abatement through the Clean Energy Regulator's Emissions Reduction Fund and Climate Solutions Fund (CER 2020). Much of the allocated funds have been put toward restoring forests or protecting them from clearing. These funds are an example of a more innovative investment mechanism that is restoring more than 2.3 million hectares of native forest (ERAC 2019).

Funding for carbon abatement has expanded the area of potential habitat that can support threatened species, but these projects have not been targeted at MNES. Multiple reviews have identified opportunities to better align carbon abatement with biodiversity benefits (CCA 2018, CCA 2020, King 2020). Despite this, restoration funded by carbon farming has not occurred in areas of high biodiversity. This opportunity still exists because progress in aligning carbon and biodiversity benefits has been limited.

There is potential to increase investment in threatened species habitat restoration by reducing barriers between carbon-focused and biodiversity-focused markets, where appropriate. When developing new offsets laws, government should reduce these barriers at both the Commonwealth and State or Territory level.

Greater alignment between the carbon and biodiversity markets could shift restoration efforts toward areas that will assist more threatened species. It could deliver the dual benefits of:

- increasing the net carbon abatement and threatened species recovery, due to an increase in area being restored
- reducing the overall cost of achieving carbon and threatened species outcomes because both benefits can be realised from one activity.

Recommendation 27 The Commonwealth should reform the application of environmental offsets under the EPBC Act to address decline and achieve restoration.

a) The EPBC environmental offsets policy should be immediately amended (or a National Environmental Standard for restoration that includes offsets should be made) in accordance with the recommendations in Box 28.

b) As part of the second tranche of reform, the Act should be amended or standalone legislation passed to legislate the revised offsetting arrangements, providing the certainty required to encourage investment in restoration.

8.4 Government effort alone is not enough

Significant investment to improve the environment is required to reverse the current unsustainable trend and to enable future development to be sustainable. Governments continue to spend significant public funds to improve the environment. However, even with the recommended improvements to ensure the regulatory levers of government contribute to restoration, this will not be enough.

The predicted shortfall in restoration funding in Australia is $10 billion annually (Ward & Lassen 2018). It is unrealistic to expect government, and the taxpayer, to fund this level of investment. Philanthropic investment, while helpful, is not of the scale required for long-term restoration.

Some restoration activities will not provide a private return and may come at a financial loss to the landholder, particularly in the short term. It is therefore also unreasonable to expect private landholders to fund such activities for public benefits. There is opportunity though for the Commonwealth to facilitate mechanisms that both incentivise environmental restoration and generate greater private return.

8.4.1 Private-sector interest

There is appetite to invest private capital in the environment in Australia. Globally there has been a shift towards investment in environmental, social and corporate governance (ESG), which refers to the 3 central factors in measuring the sustainability and societal impact of an investment. The pool of available capital interested in ESG investment has grown rapidly over the past decade. In 2018 the responsible investment market in Australia reached $980 billion and sustainability-themed investments accounted for $70 billion (RIAA 2019). The capital available to invest in environmental outcomes is likely to continue to grow.

Environmental services are provided by a healthy environment – often called 'natural capital' (HMT 2020). Despite growing interest in ESG, little private capital flows towards environmentally sustainable land management that can improve natural capital and deliver restoration of matters of national environmental significance (MNES). Given the scale of available private capital, only a moderate change in the way the private sector invests could drive a material improvement to the environment.

Combined, private landholders such as farmers and Indigenous Australians manage 77% of Australia's land mass and are key to sustainably managing natural capital and improving outcomes for MNES (Ward & Lassen 2018). Over the long-term, the maintenance and improvement of natural capital is linked to the success of landholders' businesses and the resilience of regional economies. However, many landholders use their natural capital in ways that unintentionally degrade the environment. This unvalued loss of natural capital is a form of market failure.

The Commonwealth has the opportunity to help resolve this market failure and deliver the scale of restoration required to sustainably manage MNES. In response to the opportunity highlighted in the Interim Report of this Review, the Australian Government has allocated $2.5 million in the 2020–21 budget (Treasury 2020) for further policy work related to environmental markets – including how to best address this market failure. It is the Review's view that this will be best achieved by government working with private capital investors and landholders to better value their natural capital and invest in the management of privately owned land.

Improved land management can deliver long-term returns at the farm gate, while also minimising impacts on MNES, and in some instances deliver restoration. Willingness exists to consider investment that better supports natural capital and restoration, but the information, tools and systems are not available to deliver the shift. Key issues include:

- the lack of farm-level information and metrics on the dollar value of natural capital or likely returns from investment
- the timeframes for returns on investments in environmental capital can exceed the time horizons of traditional private capital markets
- relatively immature markets for environmental capital, result in high-risk premiums and less investment.

8.4.2 Commonwealth leadership to better align private investment with national priorities

The Review has identified opportunities for national leadership outside the EPBC Act that should be considered. This includes opportunities for greater collaboration between government and the private sector, to invest in the environment directly and to invest in innovation to bring down the costs of environmental restoration activities.

Attracting greater private investment in natural capital and restoration of private land requires Commonwealth leadership. The Commonwealth is best placed to deliver the mechanisms including the legal, governance and institutional foundations required to support private-sector investment and leverage public investment in restoration. Government is also best placed to improve data and key metrics of environmental health, to provide the market with certainty to encourage investment in activities that contribute to sustainability.

Mechanisms are needed that leverage public and private capital to deliver the scale of investment in restoration that is required.

Some stakeholders have highlighted concerns about the availability of farm-level information on natural capital stock. Information at this granular level will need to be available to enable the formation of environmental markets and determine the return on investment associated with an investment in natural capital.

The Commonwealth should formally work with the private sector and research organisations to investigate the feasibility of mechanisms that leverage private capital to deliver greater investment, including:

- funding innovation to reduce the cost of large-scale environmental restoration
- co-investing with private capital to improve the sustainability of private land management
- establishing a central trust or coordination point for private and public investment (including offsets)
- using opportunities to leverage existing markets, including the carbon market.

The links between these mechanisms and other government environmental management initiatives such as the Agriculture Stewardship Program (DAWE 2020d) should also be examined.

Past Australian Government restoration activities have focused on grants as the primary mechanism to fund innovation in restoration. Grants and other funding programs are biased towards past proven activities, which take precedence over innovative solutions – especially when funding is scarce. They also promote short-term planning and ongoing reliance on government resources. Grants may or may not require co-investment by the private sector. Where private return is possible, the grants model can lead to rent-seeking behaviour by private interests.

New grants are not the right mechanism to invest in the innovation and long-term structural change required to deliver large-scale restoration and should no longer be the central focus of government investment. The exception to this is grant funding where there is a pure public good outcome or for high-risk innovation that is unlikely to deliver a financial return on the upfront cost. In these circumstances, co-investment is not feasible or attractive to the private sector and a grant may be the only mechanism to deliver the innovation.

Encouraging innovation to lower costs

Submissions to the Review have stated the cost of achieving environmental restoration is high (PCA 2020). Substantial opportunities exist for cost reduction through fostering technological improvement in restoration and new business models – and there is a role for government to facilitate this. Previously, similar government programs have aimed to reduce costs of activities that will deliver public benefits. Box 29 provides examples of the role of government in growing the renewable energy sector and biomedical research in Australia.

Box 29 Examples of government innovation and finance models

Australian Renewable Energy Agency

Australian Renewable Energy Agency (ARENA) supports activities in the renewable energy and low-emissions technology sector that are not yet commercially viable. ARENA co-invests with the private sector in projects to research, develop and demonstrate new approaches, providing a pathway to prove the viability of technologies to support commercialisation and uptake. The uptake of proven restoration technologies or new approaches could be accelerated by government – for example, by recognising their suitability in the biodiversity market or by underwriting access to the finance need for upfront investment. Grants are used to support ground-breaking projects based on evidence that co-investment is not feasible, but it is not the focus of their funding strategy (ARENA 2017; Treasury 2020).

Biomedical Translation Fund

A similar model is used by the Biomedical Translation Fund, which provides companies with venture capital through licensed private-sector fund managers to help develop and commercialise biomedical research (DIIS & DH 2016).

Cooperative Research Centres

Cooperative Research Centres (CRCs) are key bodies for Australian scientific research. CRCs aim to enhance Australia's economic growth through the development of sustained, user-driven, cooperative public-private research centres that achieve strong outcomes in adoption and commercialisation. The program emphasises the importance of collaborative arrangements to maximise the benefits of research through an enhanced process of utilisation, commercialisation and technology transfer.

Clean Energy Finance Corporation

The Clean Energy Finance Corporation (CEFC) is an Australian Government-owned 'green bank' established to facilitate increased flows of finance into the clean energy and low-emissions technology sector. The CEFC is governed by an independent board responsible for decision-making and management of the CEFC's investments.

The CEFC also runs an innovation fund created to invest in early-stage clean technology companies. The fund targets technologies and businesses that have passed beyond the research and development stage and provides primarily equity finance to innovative businesses (CEFC 2020, Treasury 2020).

NSW Biodiversity Conservation Trust and Queensland Land Restoration Fund

NSW Biodiversity Conservation Trust and Queensland Land Restoration Fund are government-run, sometimes independent legal entities and investment vehicles designed to oversee the collection and allocation of money to improve the environment. They have legal, governance and financial structures, and capitalisation and resourcing strategies. Environmental trust funds come from public funding and from developers who pay the trust to discharge their development approval offset obligations.

Fostering private investment

Programs that seek to leverage private-sector capital in new markets often do so by initially using the public balance sheet and its competitive bond rates. Because this involves investment of government funds, they are generally facilitated by government organisations such as government-owned investment bodies. They require an initial investment of public capital, with an expectation of financial returns in the long term while also achieving broader public benefits. The exact investment model and scale of public capital investment required is best determined by government, after thorough consultation with potential market participants.

Capital investments must demonstrate returns over time (both public and private). Therefore, investments should target land-management activities that generate both returns in the real economy, such as productive agriculture or tourism ventures, while also delivering natural capital improvements through restoration. All investment activities will need to ensure a balance between public and private outcomes and focus on activities that are unlikely to occur without government intervention – for example, activities that have higher public benefit than private benefit or substantial upfront costs or other barriers that prevent private capital investment.

The investment model chosen by the Commonwealth will require flexibility in the methods for deploying capital. The Australian Government should explore the merits of different financial products, including debt, equity and hybrid investments (Box 30).

Box 30 Financial products

Debt

A financial contract in which the initial receiver of money promises a set cashflow (usually calculated at the interest rate) to the provider of the funds. A loan (debt) issued from the government entity would be used to fund agreed activities. This loan would be repaid at an agreed interest rate over an agreed period. The loan can be secured against real assets (such as farmland) or may be unsecured. Government could issue new debt or allow refinancing of existing debt.

Equity

The degree of residual ownership in a firm or asset after subtracting all debts associated with that asset. An investment by the government entity is made in return for partial ownership of an agreed asset (such as shares in a company) and is used to fund agreed activities. Rather than being repaid at an agreed interest over an agreed period, the government and the business share the financial opportunities and risks on an agreed basis. Although it can be more complex than debt finance, equity investments typically feature genuine risk sharing and aligned incentives.

Hybrid

A single financial instrument that combines 2 or more different financial instruments. Hybrid securities generally combine both debt and equity characteristics. Hybrid instruments would afford the government entity the opportunity to convert a loan to an equity investment at a point in the future, based on agreed events or criteria.

To ensure longevity of the investments, financial returns should be skewed towards the private sector. Equity or hybrids that weight returns to the private sector are a form of subsidy that also provide a return to government. The Biomedical Translation Fund achieves this through returns being evenly distributed between the Australian Government and investors until return is equal to the government bond rate. After that point, the balance of the relevant distribution is split between the Government and the private investors on a 40:60 basis (DIIS & DH 2016).

In practice, investments in natural capital could take the form of:

- providing concessional finance, revenue-contingent loans or ability to refinance existing debt
- building investor confidence by de-risking private investment using equity
- providing subordinated debt to allow projects to secure other sources of funding
- debt for nature swaps in which a debt portion is forgiven on the condition that conservation outcomes are maintained.

Prior to any capital allocation, the Australian Government should set out clear investment principles stating how these investment principles work towards achieving the outcomes established in the National Environmental Standards.

For example, tax incentives can be a useful tool because changes to the tax system avoid the need for a direct public capital investment and can help to balance variable returns to the private sector.

Reducing the tax a business must pay leads to increases in business cash flow and gives that business the ability to invest. Conditional tax reduction can induce behaviour change, leading to greater investment in natural capital. For example, if a farm has increased its natural capital and is more resilient in times of drought, that farm is more likely to be profitable (and pay tax) during a drought. Tax averaging enables private landholders to smooth the often high upfront costs associated with restoration, while tax deductions and investment write-offs would provide annual stimulus for landholders to engage in restoration activities.

A range of incentives are already in place (ATO 2020). However, the Australian Government should investigate opportunities to further incentivise restoration through changes to the tax code. This investigation should consider any additional tax incentives, including tax smoothing, tax deductions, and investment write-offs.

Investment coordination

Governments should consider allowing for development proponents to pay offset obligations to an investment organisation, as a means of discharging their obligations. This could provide an additional revenue source for the organisation, reduce regulatory burden on proponents and allow for strategic purchase of offsets in accordance with regional plans.

To harness the growing private sector demand (section 8.4.1), the Commonwealth should formally investigate and report on the merits of different organisational structures, governance, required financial products, and the potential for tax incentives that would benefit environmental restoration.

Recommendation 28 To foster private sector participation in restoration, the Commonwealth should formally investigate and consider:

a) co-investment with private capital to improve the sustainability of private land management

b) establishing a central trust or point of coordination for private and public investment in restoration to be delivered (including offsets)

c) opportunities to leverage existing markets (including the carbon market) to help deliver restoration

d) changes to the tax code that can deliver environmental restoration.

9 Compliance and enforcement

Key points

Surveillance, compliance and enforcement under the EPBC Act is ineffective. There has been limited enforcement of the Act over the 20 years it has been in effect, and the transparency of what has been done is also limited.

There is broad consensus from the regulated community and the experts that advise them that complying with the EPBC Act is not easy. Likewise for the Department, the complexity of the Act impedes compliance and enforcement.

The compliance and enforcement powers in the EPBC Act are outdated. Powers are restrictive and can only be applied in a piecemeal way across different parts of the Act due to the way it is constructed.

Compliance and enforcement activities are significantly under-resourced. The culture of surveillance, compliance and enforcement is not forceful. This erodes public trust in the ability of the law to deliver environmental outcomes.

Ensuring a clear expectation for adequate compliance and enforcement by accredited parties is a core element of the Review's recommended accreditation model.

The key reforms recommended by the Review are:

- A new National Environmental Standard for compliance and enforcement should be implemented to ensure a robust and consistent approach to compliance and enforcement of the EPBC Act or accredited arrangements. Commonwealth compliance and enforcement and accredited parties would have to demonstrate they meet the Standard.
- While accredited parties would be responsible for enforcing their decisions, the Commonwealth should retain the ability to intervene in project-level compliance and enforcement, where parties are not effectively dealing with egregious breaches.
- The Commonwealth should immediately assign independent powers for Commonwealth compliance and enforcement to the Secretary of the Department of Agriculture, Water and the Environment. The Department's compliance functions should be consolidated into an Office of Compliance and Enforcement.
- The Office of Compliance and Enforcement should be provided with a full suite of modern regulatory powers and tools, and adequate resourcing. This will enable the Commonwealth to deliver compliance and enforcement consist with the National Environmental Standard and provide confidence that the law is being enforced.

9.1 Compliance and enforcement is weak and ineffective

Effective compliance and enforcement is key to delivering the intent of the EPBC Act. This includes capabilities and systems for surveillance (that is, monitoring of compliance with project approval conditions and of illegal activities that have not been subject to approval), investigations, deterrence (including prosecution) and transparent public reporting. There is little reason for rules if they are not monitored and if failure to meet them does not result in appropriate compliance and enforcement action.

Strong surveillance, investigation, compliance and enforcement is essential to protecting the environment and building trust that breaches of the EPBC Act will be fairly, proactively and transparently addressed. It is also necessary to protect the integrity of most of the regulated community, who spend time and money to comply with the law. Those that do not play by the rules should face the consequences.

To ensure compliance and enforcement is delivered across the EPBC Act in a consistent way, strong arrangements must be in place that equally apply to all parties operating or accredited under the Act (for example, the Commonwealth and States and Territories). This is a core element of the Review's recommended accreditation model that will rebuild public trust in the Act.

9.1.1 Complexity impedes compliance and enforcement

The EPBC Act is long and complex (Chapter 3). The complexity of the legislation, impenetrable terminology and the infrequency with which many interact with the law, makes voluntary compliance and the pursuit of enforcement action difficult.

The EPBC Act primarily relies on self-assessment by proponents to determine whether they are likely to have a significant impact on a nationally protected matter. The Department provides some guidance material to assist with that process but submitters to the Review have highlighted that interpreting the Act remains a challenge due to its size and complexity.

Understanding is further strained where related State and Territory-based rules change, generating confusion about how local rules relate to national-level rules. For example, changes to Queensland and NSW land-clearing rules in recent years resulted in confusion about whether activities that could be legally conducted under new state requirements also needed to be considered under the EPBC Act, even though the Act requirements had not changed. For the person impacted by the changed requirements, it didn't matter whose rules had changed, this just led to a new layer of confusion.

Most Australians will never need to interact with the EPBC Act. For some, interaction may be limited to a single circumstance. This contrasts with other broad and complex laws, where frequent interactions mean that the regulated community builds knowledge of their obligations over time. For example, most of the adult population engages with the *Income Tax Assessment Act 1997* on an annual basis, and both employees and employers frequently engage with their obligations under employment laws.

The infrequency of interactions with the EPBC Act is further complicated because the circumstances in which the rules apply change each time lists of threatened species and ecological communities are added to or amended. Companies of reasonable scale have the capacity to deal with these adjustments, but compliance in this context is particularly difficult for individuals and small landholders. This was highlighted in the Craik Review as a challenge for the agricultural sector (Craik 2018).

9.1.2 Limited and under-utilised compliance and enforcement powers

Enforcement provisions are rarely applied and serious action rarely taken, particularly related to Part 3 activities (requirements for environmental approvals). The penalties do not appear commensurate with the harm of damaging a public good of national interest.

There have only been 41 breaches of the EPBC Act that have been subject to compliance outcomes (DAWE n.d.(b)). Of these, 31 relate to requirements for environmental approvals (Part 3 or Part 9) with the remaining 10 being breaches of the wildlife trade provisions.

The largest penalty issued under the EPBC Act was via an enforceable undertaking with a company to regenerate 31.5 hectares of Central Hunter Valley Eucalypt Forest Woodland for a cost of $2.1 million. Although a suspended jail sentence has been handed down for failure to refer an activity for consideration under the Act, the evidence available to the Review to date suggests that a jail sentence has not been applied for a breach of a condition of approval.

Since 2010 a total of 22 infringements have been issued by the regulator for breaches of conditions of approval granted under Part 9, with total fines less than $230,000. In contrast, local governments often issue more than this amount in parking fines annually. For example, Dubbo and Orange Councils in New South Wales respectively issued more than $220,000 and $1.15 million in parking fines in 2018–19 (CWDN 2019).

Provisions are not fully utilised, but the regulator is also impeded by limitations in the powers at its disposal. The EPBC Act provides an incomplete and inconsistent set of regulatory tools that are spread across different parts of the Act. Some enforcement mechanisms apply only to specific contraventions of the Act. The Act lacks contemporary powers needed to monitor and address breaches of the law. This includes powers for information sharing and tracking. This can also lead to inefficient and mismatched pathways being taken. For example, the ability to issue an infringement notice under the EPBC Act is limited to instances where a breach of approval conditions has occurred. If a person cleared a protected habitat and wasn't an approval holder, the regulator is limited to pursuing court or other actions even where a fine might be the most direct and appropriate way to respond.

9.1.3 Inadequate transparency of compliance and enforcement functions

The transparency of compliance and enforcement under the EPBC Act, including proactive communication with the regulated community, is limited.

Compliance and enforcement reporting is limited to departmental annual reports. Some activities are reported online, but the lack of a mandatory requirement to do so under the EPBC Act results in incomplete reporting and the use of different approaches over time.

Submissions received by the Review indicate that the lack of transparency of current compliance arrangements is contributing to low public trust that appropriate action is taken. In the absence of transparency, a number of submitters to the Review highlighted their view that compliance actions may be subject to political interference.

Chapter 5 discusses the lack of trust in the EPBC Act, including the lack of transparency associated with decisions. There is a lack of a separation between compliance decisions and the Environment Minister, which could lead to implied political interference. A recent Australian National Audit Office (ANAO) report on referrals, assessments and approvals of controlled actions (ANAO 2020) found unsatisfactory monitoring and recording of offsets, and no conflict of interest register for staff working on the assessment processes and within the Compliance Division.

Most modern regulators have clear logs that include investigation of potential breaches and comprehensively list even minor notices that have been issued. The lack of thorough reporting for the EPBC Act makes it hard to find information. This fails to provide any disincentive to others not to breach the Act or confidence to the community that matters are followed up.

Improving data and information between decision-makers, compliance and enforcement functions and the recommended Environment Assurance Commissioner (EAC) will be important to allow adequate auditing of compliance and enforcement outcomes as part of the broader reform framework (Chapter 7).

9.1.4 Compliance and enforcement activities are significantly under-resourced

The available resources for compliance and enforcement constrain the ability of the Department to deliver credible functions.

These functions of the EPBC Act are not supported by cost recovery arrangements. The Department's staff also undertake compliance and enforcement of other Commonwealth environmental laws, constraining the pool of resources dedicated to the EPBC Act. The resources available are insufficient and the caseload continues to increase as more projects are approved.

A move toward risk-based regulation is far from complete and the full investment needed to deliver efficiency by the use of modern risk-based systems and analytics has not yet been made.

9.1.5 The compliance and enforcement culture is weak

The Department has improved its regulatory compliance and enforcement functions in recent years but it does not have a strong compliance culture. Progress has included the establishment of a Compliance Division, the development of a regulatory framework and new compliance policies that identify priority areas for focus.

These are small steps forward, but the foundations of the Department's regulatory posture focus heavily on a voluntary approach to compliance. The Department has positioned itself as a collaborative regulator, working to reach agreement with the regulated community.

The Department's compliance policy describes its approach as 'fair, reasonable, respectful, reliable' (DoEE 2019c). This stance comes from good intentions of recognising that the majority of stakeholders work to be compliant. However, it is a passive approach that has contributed to a culture with limited regard for the benefits of using the full force of the law where it is warranted.

There is limited evidence of proactive compliance effort and the compliance posture of the Department is reactionary. Enforcement efforts often rely on a tip off from the public, rather than active surveillance driving enforcement activities. There is little active surveillance to provide confidence that conditions of approval are being met. Surveillance to confirm that environmental offsets have been secured and are delivering intended outcomes is limited (Chapter 8). There are insufficient resources dedicated to proactive compliance.

9.2 Recommended reforms

9.2.1 Clear law, a full regulatory toolkit and transparent decisions

Key reforms recommended by the Review, including simplifying the EPBC Act and setting clear and enforceable National Environmental Standards (Chapter 1 and Chapter 3), will assist with greater clarity of obligations to support voluntary compliance and the ability to better enforce provisions. These reforms should be supported by specific guidance for sectors in line with recommendations from the Craik Review. Combined, these efforts will improve the Department's ability to convey regulatory obligations and improve the regulated community's ability to understand them.

The compliance and enforcement powers in the EPBC Act should be overhauled. The *Regulatory Powers (Standard Provisions) Act 2014* provides a standardised approach to setting out such powers, and these should be considered and potentially bolstered with specific arrangements to ensure that compliance and enforcement powers in the EPBC Act are fit for purpose. The compliance and enforcement functions should have access to a full 'toolkit', so that fair, consistent and proportionate action can be taken across different scenarios.

Changes to the compliance and enforcement provisions of the EPBC Act should include, but not be limited to:

- standardised powers to delegate authorised officers to undertake compliance, including to accredited parties
- incorporation of modern information sharing provisions – supporting collaboration with other parties
- improvements to coercive powers under the Act to facilitate greater intelligence capability, including using surveillance warrants.

Penalties must be sufficient to be an active deterrent, rather than a 'cost of doing business'. A review of the adequacy of penalties and provisions should consider, but not be limited to:

- ensuring penalties across the EPBC Act align with the potential harm or benefit and provide a reasonable deterrence
- ensuring remediation orders that deliver restoration are used when monetary penalties are unlikely to provide adequate disincentive, due to the potential significant financial benefit from some areas of non-compliance
- ensuring appropriate use of criminal prosecutions in serious cases of egregious and irreparable damage.

There should be improved transparency of compliance and enforcement functions, including publishing all actions taken, and the outcomes of these actions in a timely manner. This should include directions, prohibition notices and improvement notices that have been issued.

To facilitate effective audits and improved transparency, adequate data on compliance and enforcement activities must be collected, provided to the EAC and published (Chapter 10 and Chapter 7).

A clear set of compliance priorities should also be published and reported in an annual compliance plan.

The compliance and enforcement function should set out a clear and strong regulatory stance. It remains important to be proportional, and to work with people where inadvertent non-compliance has occurred. However, the compliance and enforcement functions need to establish a culture that does not shy from firm action where needed. This is essential to providing community confidence and giving business a clear and level playing field.

Powers, penalties and transparency requirements should also be equivalent under any accredited arrangements. The Commonwealth needs to be assured that the accredited party has a clear and strong regulatory posture, and that any action undertaken under the arrangements is transparent and commensurate to the severity of the offence.

9.2.2 A National Environmental Standard for compliance and enforcement

The key components that result in effective compliance and enforcement functions are integrity, consistency and transparency, to foster public trust in compliance and enforcement activities.

A National Environmental Standard for compliance and enforcement has been developed by the Review (Appendix B) and should be implemented.

This National Environmental Standard should apply to the compliance and enforcement of projects approved under the EPBC Act and those of accredited parties. The Standard requires compliance and enforcement functions to be delivered in a way that:

- is independent of actual or implied political interference
- deters illegal behaviour because the penalties for non-compliance are high
- ensures remedial orders that deliver effective restoration are used to rectify damage caused by non-compliance
- is proportionate to the seriousness of the non-compliance
- is transparent and accountable, including public registers of action.

This National Environmental Standard provides a consistent benchmark for achieving effective compliance and enforcement decisions made under the EPBC Act, or accredited arrangements. While there may be a diversity in the accredited parties, it is important that safeguards are in place to achieve a strong culture of compliance and enforcement across each of them. Some parties may need to change their arrangements in order to meet the Standards.

This National Environmental Standard should remain focused on ensuring independence, strong and rigorous surveillance, compliance and enforcement. It should not be concerned with specific institutional arrangements provided these outcomes are met.

The National Environmental Standard will form the basis against which accredited compliance and enforcement arrangements are audited and reported to the EAC.

9.2.3 Delivering compliance and enforcement

Compliance and enforcement functions must be adequately resourced both in terms of funding and staffing, and resources sustained over the long-term.

In the short-term, appropriate systems and tools should be invested in to enable the independent compliance and enforcement functions to effectively deliver surveillance and risk-based compliance. This will help people comply with the EPBC Act and to assure the community that risks to the environment from non-compliance are identified and managed. Resourcing must support adequate surveillance and follow-up action to respond to issues as they arise. Proactive surveillance and investigation are needed to restore public trust in the system and to review and ensure actions that have occurred to date are meeting requirements and delivering for the environment.

Adjustments may be required to enable a party to meet the National Environmental Standard. A condition of accreditation must be that the party can sustain adequate compliance and enforcement capability.

9.2.4 Independent compliance and enforcement functions

Compliance and enforcement functions should not be subject to actual or implied direction from political interference. This should address significant community concern about perceived conflict of interest, which is undermining trust in the EPBC Act.

Compliance and enforcement by the Commonwealth

Chapter 6 notes that the Commonwealth Environment Minister will always maintain responsibility for certain decisions under the EPBC Act (including some actions on Commonwealth land and where accredited arrangements are not in place). The Commonwealth will need to deliver compliance and enforcement functions for these decisions, and for legacy projects.

The legacy projects already approved under the EPBC Act must have appropriate compliance and enforcement. Approved activities often take years to complete and will continue to require careful management and oversight to ensure environmental protection is achieved over the long-term.

Strong, independent compliance and enforcement of Commonwealth decisions will provide confidence that, once conditions are set, they will be enforced to deliver the intended outcomes. This means institutional arrangements should ensure sufficient independence from the Commonwealth Environment Minister.

The Review recommends that independent powers for Commonwealth compliance and enforcement be provided to the Secretary of the Department of Agriculture, Water and the Environment as the statutory decision-maker. The Department's compliance functions should be consolidated into an Office of Compliance and Enforcement, with staff assigned to work exclusively on the EPBC Act compliance and enforcement functions to support the statutory decision-maker.

The Commonwealth should also be required to meet the National Environmental Standard for compliance and enforcement. The independent Office of Compliance and Enforcement would report its adherence to this Standard to the EAC, and be subject to EAC audits (Chapter 7).

The combination of the recommended suite of powers, independence, strong culture and adequate resourcing will deliver strong compliance and enforcement of the law. The EAC will provide confidence that compliance and enforcement functions are effective.

Compliance and enforcement by accredited parties

An accredited party (such as a State or Territory) should be primarily responsible for surveillance monitoring, compliance and enforcement of approvals under and accredited arrangement, and activities that should have been the subject of an application for approval through that party. Reporting on accredited arrangements should include reporting on all potential breaches and the response taken.

Any accredited party would also be subject to the National Environmental Standard for compliance and enforcement and would need to report compliance against this Standard to the Environment Assurance Commissioner.

The Commonwealth should retain the ability to intervene in project-level compliance and enforcement, where egregious breaches are not being effectively dealt with by the accredited party.

Recommendation 29 Immediate reforms are required to ensure that compliance and enforcement functions by the Commonwealth, or an accredited party are strong and consistent.

a) The recommended National Environmental Standard for compliance and enforcement should be immediately adopted.

b) Commonwealth compliance and enforcement functions and those of any accredited party should be required to demonstrate consistency with this Standard.

c) The Commonwealth should retain the ability to intervene in project-level compliance and enforcement, where egregious breaches are not being effectively dealt with by the accredited party.

Recommendation 30 The Commonwealth should immediately increase the independence of and enhance Commonwealth compliance and enforcement. This requires:

a) Simplified law and a full suite of modern regulatory surveillance, compliance and enforcement powers and tools, including targeted stakeholder resources to build understanding and voluntary compliance.

b) Assigning independent powers for Commonwealth compliance and enforcement to the Secretary of the Department of Agriculture, Water and the Environment, with compliance functions consolidated into an Office of Compliance and Enforcement within the Department. This office should be provided with a full suite of modern regulatory powers and tools, and adequate resourcing to enable the Commonwealth to meet the National Environmental Standard for compliance and enforcement.

c) An increase in the transparency and accountability of activities, including clear public registers of activities, offsets and staff conflicts of interest.

10 Data, information and systems

Key points

The information systems supporting the EPBC Act are inefficient, disorganised and incomplete. Decision-makers, proponents and the community do not have access to the best available data, information and science. This results in suboptimal decision-making, inefficiency, additional cost for business and poor transparency to the community.

The key reasons the EPBC Act is not using the best available information are:

- The collection of data and information is fragmented, disparate, and there are fundamental information gaps. For example, at least one quarter of all threatened vertebrate fauna species and almost three-quarters of threatened ecological communities are currently not monitored at all.
- There is no clear, authoritative source of environmental information that people can rely on. The many disparate sources of information are hard to navigate and not always reliable. Reducing the time and effort involved in sourcing data could save proponents $1 million per year.
- There is no requirement for environmental data collected as part of assessment, research, monitoring or restoration programs to be in an electronic, standardised format that can be nationally integrated with similar data submitted to State and Territory authorities.
- The right information is not available to inform decisions. Available information is skewed towards western environmental science and does not adequately consider Indigenous knowledge of the environment or social, economic and cultural information. Cumulative impacts and future challenges like climate change are not effectively considered. Advances in modelling capability are not being used.
- The Department's systems for information analysis and sharing are antiquated. The user experience is clunky and cumbersome for both proponents and members of the community.

A quantum shift will ensure the reforms recommended by this Review can be implemented efficiently. Improved data and information will improve the efficiency of:

- setting clear outcomes, effectively planning to deliver them, and regulating to achieve them
- the mechanisms for public and private sector investment in restoration, ensuring they are well targeted and deliver the best returns
- understanding the baseline starting point to monitor and report on the impact of activities, and to adjust them where needed.

The key reforms recommended by the Review are:

- A national supply chain of information to deliver the right information at the right time to those who need it. This supply chain should be an easily accessible, authoritative source on which the public, proponents and governments can rely.
- A clear strategy to deliver an efficient supply chain so that each investment made contributes to building and improving the system over time. Immediate investment in the information supply chain is needed to support reform. Waiting until perfect data are available is not possible.
- A Custodian for the national environmental information supply chain assigned by the Commonwealth with responsibility for national level leadership and coordination. Adequate resources should be provided to deliver the evidence base for Australia's national system of environmental management, including a complete overhaul of departmental and public-facing systems.
- To identify and designate a set of National Environmental Information Assets (NEIAs) to ensure the essential information streams for the National Environmental Standards for matters of national environmental significance are delivered. The requirement to deliver and improve these NEIAs should be enshrined in the EPBC Act.

- A National Environmental Standard for data and information to improve accountability and provide clarity on expectations for the use and provision of information and data. A recommended Standard is at Appendix B.
- Further investment in modelling capability and other key gaps in the supply chain will improve the precision of Standards, and the efficiency of their application to decision-making. Existing initiatives across the Department will only deliver part of the improvements that are needed.

While the short-term costs of the necessary change will be high, improvements to data and information will deliver cost-savings to decision-makers and proponents. It will enable decision-makers to make faster decisions, and enable the National Environmental Standards to be more precise.

10.1 There is no clear, authoritative source of environmental data and information

10.1.1 Data and information are hard to find, access and share

There is no clear, authoritative source of data and information on Australia's environment. There are many disparate sources of information but these are hard to navigate and not always reliable. This adds cost for business and governments, as they collect and re-collect the information they need. It also results in less community trust in the process, because the quality of information on which decisions are made is questioned, as are the outcomes that result from them (Chapter 4).

Existing information is produced by a wide range of organisations, including proponents, researchers, various Commonwealth agencies, State and Territory governments, local governments and regional natural resource management organisations. Each organisation collects and manages information to suit their own needs. For example, the distribution of the same species is mapped differently by different jurisdictions because they are intended to underpin different types of decisions. There are also key gaps in information due to a lack of data being collected, shared and made available in a timely way.

At the Commonwealth level, several different organisations play a role in coordinating and delivering environmental information. The 1992 Intergovernmental Agreement for the Environment discusses data collection and handling and refers directly to the Australian Land Information Council (now ANZLIC) and the Environmental Resources Information Network within the Department. The Australian Biological Resources Study, Bureau of Meteorology, Geoscience Australia, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) and CSIRO also all have roles relating to environmental information. Each State and Territory also has agencies with expertise in environmental data and produces different information products aligned to their responsibilities and priorities.

All these agencies play a different role, but the distinction between the information products that they provide is not always clear. This can create the risk of inappropriate use of information to underpin a given decision because the user doesn't fully understand the data – for example, using information collected on a broad scale for local, project-level decisions.

There is no clear, authoritative point of expertise to help users identify and access the range of information that is relevant and appropriate to inform the various decisions being made under the EPBC Act. This means those who interact with the Act are faced with a confusing range of portals, tools and datasets. Departmental datasets – including the Species Profile and Threats (SPRAT) Database and the Protected Matters Search Tool – do not refine and present data in a way that is useful for proponents, assessment officers, decision-makers or the general public. The Atlas of Living Australia attempts to bring together disparate sources of data in one place, but even its custodian, CSIRO, acknowledges its shortcomings (Box 31).

Valuable data are often 'locked' in inaccessible formats, which makes it very difficult and time consuming to find, review and analyse. Historical data are stored in paper reports. Information on listed species and communities contained in conservation advices and recovery plans are usually in PDF form. To access this information, each document must be found, opened and read individually.

Box 31 Atlas of Living Australia

The Atlas of Living Australia (ALA) is a digital platform that pulls together Australian biodiversity data from multiple sources, making it accessible and reusable. It aims to support better decisions and on-ground actions and deliver efficiency gains for data management.

Launched in 2010, the ALA is hosted by CSIRO and funded under the National Collaborative Research Infrastructure Strategy. Further funding has been secured until 2023.

A wide range of organisations and individuals contribute data to the ALA, including universities, museums, governments, CSIRO, Indigenous ecological knowledge holders, and conservation and community groups. The ALA provides the technology, expertise and standards to aggregate the data and make it available in a range of ways. The platform now contains over 85 million biodiversity occurrence records, covering over 111,000 species, including birds, mammals, insects, fish and plants.

The ALA provides a user-friendly, online interface that supports species information, data visualisation and mapping tools, download of data and access to more sophisticated analysis tools. Organisations can also build on the ALA's open IT infrastructure to enhance their own information services and products – for example, the Department of Agriculture, Water and the Environment did this for its Monitoring, Evaluation, Reporting and Improvement Tool (MERIT).

A recent review of the ALA found that the ALA has 'pioneered a step-change' in the use of Australia's biodiversity data (Daly 2019). However, the review noted some stakeholder concerns about the lack of controls and metrics around data quality and reliability, and data coverage and diversity. The report found that minimal data are provided to the ALA by consultants and industry, which can represent a major source of biodiversity information. Industry is also not identified as a key user of the ALA, which is a missed opportunity. In discussions with the Review, CSIRO noted that significant effort would be required to get the ALA from a tool targeted at researchers to one appropriate to inform regulatory decisions, including filling data gaps and ensuring data currency.

The issues identified by stakeholders in the ALA review highlight the overall lack of both a strategic approach to delivering diverse, representative and comprehensive data to align with national needs, and consistent funding to support such an approach.

For more information, see the Environmental data initiatives further reading at the end of this report.

10.1.2 There are cultural, legal and technical barriers to sharing information

Large amounts of valuable environmental data collected are not shared within government, between governments or made available for further use. Data collected by proponents to support environmental impact assessments or the acquisition and management of offsets is not provided in a way that is able to be shared or re-used by governments. As discussed in Box 35, collecting, collating and sharing the raw data that underpins these reports could have significant benefits for governments and industry.

The current barriers to data sharing between governments are largely cultural and legal, complicated by a lack of structured approaches and technical systems that 'talk to each other'. The culture of open government, and the 'public good' nature of environmental data, has not filtered through to the operation of the EPBC Act. Proponents typically use a consultant to undertake environmental surveys. In most cases, the nature of the contract means that the consultant retains ownership of the raw data. This, along with a perceived lack of value in sharing the data with government, creates a significant barrier to sharing (Box et al. 2018). This jars because proponent information is being collected as evidence to justify impacts on MNES. The Review considers that claims that the data collected to inform environmental impact assessments is commercial-in-confidence and subject to copyright are unacceptable. Regulators should not be dictated to by the regulated community.

Trust and credibility is reduced when information is used for reasons beyond its original intended purpose, or without a good understanding of its limitations. The risk of inappropriate use of information can also be a barrier to sharing by agencies, particularly when they are not adequately resourced to maintain the data and undertake quality assurance for a wider range of potential uses.

The current settings of the EPBC Act and its regulations incorporate limited powers to compel proponents to provide datasets in a format that would support sharing and re-use. The EPBC Act regulations also provide some counter-productive options, such as allowing referrals to be provided in non-electronic form. In some States and Territories, another disincentive to sharing data is that some systems require people to pay for access to data lodged with governments (Box et al. 2018).

Data collected by the research community is often targeted for scientific publication and not always easily accessible for wider use. Regrettably, critical data and the opportunity to establish longitudinal datasets are lost over time as organisational priorities change and the resources to maintain datasets are withdrawn.

The costs and frustrations of unclear requirements, limited access to shared data, duplication and lack of transparency in the environmental assessment process have been widely acknowledged. In November 2019, environment ministers from across Australia agreed to work together to digitally transform environmental assessment systems. In 2019 the Australian and Western Australian Governments made financial commitments to the collaborative Digital Environmental Assessment Program. This will deliver a single online portal to submit an application across both tiers of government and a biodiversity database that is intended to be rolled out nationally (Box 37). This is a good first step to improve the interface between proponents and regulators and access to and ease of use of information for environmental impact assessments. However, given this only applies to one State, it is only a pilot for a potential national system.

10.1.3 There is no enduring national strategy to manage environmental information

There is no clear national strategy for environmental information. Unlike other areas of national policy (such as the economy, the labour market and health), environment and heritage policy does not have a comprehensive, well-governed and funded national information base. Efforts are duplicated and Australia does not make the most of public investment in information and data. Multiple parties collect or purchase the same or similar information, often because they aren't aware of other efforts. Similar systems and databases are built by multiple jurisdictions. Shared or collective development would be more efficient.

The Commonwealth, States and Territories have put considerable resources into research, data collation and integration, and analysis to help make better decisions about the environment. Several government-funded initiatives have sought to deliver a level of prioritisation, greater coordination and standardisation of environmental data. Insights from the implementation of these initiatives are discussed in Box 32. Funding though is often uncertain because it consists of ad-hoc program-based investments.

These programs have also suffered from a lack of accountability. There is minimal meaningful reporting on outcomes and no expectation for decision-makers to demonstrate they are using best available evidence. Despite considerable effort, governments often must resort to negotiating case-by-case data licensing and sharing, rather than having data-sharing agreements and systems that can talk with each other. The collation of information on the impacts of the 2019–20 bushfires on the environment is an example of this (Box 35).

Box 32 Learning from past and current environmental information initiatives

Evaluations of past and current environmental information initiatives and contributions to the Review provide insights on the drivers behind these programs, key lessons from their implementation, and reasons why programs may have failed to achieve their objectives.

A key shortcoming in many cases is that these approaches have not been embedded in legislation or supported by long-term funding. As government priorities change, programs that lack a legislative basis, or a champion within an agency, have been discontinued.

The diverse funding sources of the current system are spread across multiple agencies, without central direction and coordination. This has resulted in misaligned goals and activities, and a current system that often does not support the EPBC Act and its application.

The Atlas of Living Australia (ALA, Box 31) and the Terrestrial Ecosystem Research Network (TERN) are funded through the National Collaborative Research Infrastructure Strategy (NCRIS) managed by the Department of Education, Skills and Employment. These institutions have a different mission, which is primarily aimed at the research community but can have a beneficial overlap with the needs of policy and regulatory end users. Despite being critical components of the current information system, the heavy reliance on research infrastructure for our national view of environmental data is risky, because current funding arrangements do not guarantee that these systems will be sustained (Box et al. 2018, Daly 2019).

The complexity of sharing data between the Commonwealth and States and Territories is also a significant challenge. Different jurisdictions have different cultures, legislation and policy regimes around the collection and storage of information, which can make meaningful sharing and consolidation challenging. The incentives for States and Territories to invest in system improvements that deliver benefits at a national level rather than jurisdictional, regional or local level are limited. Collaborative approaches between governments to build consistent approaches can deliver good outcomes, but without adequate resourcing and incentives this can take a long time, leading to a loss of support. This was a contributing factor in the discontinuation of the pilot Essential Environmental Measures for Australia program, which ran from 2015 to 2017.

Another consistent theme across programs is that end users are often not consulted, or struggle to identify their needs and priorities. This may be due to a lack of clear overarching outcomes and oversight to guide these decisions.

There is no comprehensive long-term national strategy or coordination. There are custodians for some national-level data and information (for example, Geoscience Australia coordinates satellite data and the Great Barrier Reef Marine Park Authority coordinates information about the Great Barrier Reef) but there are major gaps in coordination and oversight, particularly for terrestrial environments. The information and resourcing to support understanding of the state, condition and effectiveness of management of Australia's natural and cultural heritage has also declined in recent years (Mackay 2016).

No single organisation has clear responsibility or adequate and ongoing funding for stewardship and coordination across the breadth of national environmental information required to support decisions under the EPBC Act. The lack of coordination drives higher costs for government and industry, and derives fewer benefits from the investments that are made in information collection and curation.

10.2 The right information is not available to inform decisions made under the EPBC Act

10.2.1 Western scientific environmental information is the focus

To deliver ecologically sustainable development (ESD), decision-makers must weigh up information on the long-term environmental, economic, cultural and social impacts and benefits of their decisions.

The current focus of the EPBC Act is on western environmental science. There are currently clear structures and avenues for western scientific advice on the environment to be provided and considered. For example, the Act establishes the Threatened Species Scientific Committee for threatened species and communities listing advice and the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) for advice on the water impacts of these types of proposals. There is no corresponding avenue or expectation for Indigenous environmental knowledge, or economic or social information, to be explicitly included or considered in statutory processes. Decision-makers must weigh competing factors, yet the information they rely on to do so is not comprehensive or transparent.

The information base for development assessment decisions is heavily skewed to environmental information collected by the proponent. As discussed in Chapter 4, there is no requirement for the proponent to give comprehensive information on social, economic or cultural impacts, or for the assessment process to examine the veracity of that information. The avenues to seek expert advice (beyond that provided by the IESC) in the development assessment process are limited and rarely used in practice.

10.2.2 There are some fundamental information gaps

The lack of distribution, condition and trend data for terrestrial biodiversity is a key information gap and a barrier to successful environmental management (TSSC 2020). Even if more proponent and research data can be shared and made accessible, systematic monitoring over a long enough time frame is needed to detect changes in the environment.

Systematic monitoring enables short-term project information to be put in the context of trends in condition, extent or abundance to support a meaningful understanding of development impact at the local scale, or the impact of government recovery and conservation activities. The collection of this type of information is a responsibility of governments, not individual projects.

Currently, this core information is often not collected or not authoritative. In recent decades the rate of collection of field data has declined, as shown by the 90% reduction in annual rate of records contributed to the Australasian Virtual Herbarium (Gallagher 2020). For example, at least one-quarter of all threatened vertebrate fauna species and almost three-quarters of threatened ecological communities are currently not monitored at all. The monitoring programs that do exist are generally under-resourced, poorly designed, do not make their data easily accessible, or lack coordination (Legge et al. 2018). Although new technologies mean that an incredible amount of information can be gathered remotely, these data still need to be verified with on-ground measurements.

10.2.3 Cumulative impacts and future threats are not well considered

Environmental science and management have traditionally aimed to understand past environmental conditions, how and why conditions have changed, and what needs to be done to return the environment to some arbitrary past state.

As highlighted in Chapter 1, a key shortcoming of the EPBC Act is the focus on project-by-project decisions. These decisions are largely based on project-centric information, which is collected and collated for the purposes of conducting an environmental impact assessment. With limited exceptions (Box 33), the cumulative impacts of decisions on the landscape are not well considered. This is a key shortcoming of the Act.

Box 33 Assessment of cumulative impacts of proposed coal seam gas or large coal mining developments

The analysis and advice provided by the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) is an example of a clear expectation and process for considering cumulative impacts in advice provided to the decision-maker.

The Information guidelines for proponents preparing coal seam gas and large coal mining development proposals outline the definition and requirements for the consideration of cumulative impacts and provide advice on the scale and nature of assessment.

The consideration of cumulative impacts and risks needs to take into account 'all relevant past, present and reasonably foreseeable actions, programmes and policies that are likely to impact on water resources'. Consideration of local-scale cumulative impacts is undertaken by the proponent, informed by groundwater and surface modelling, bioregional assessments and other relevant regional plans. Advice on broader cumulative impacts may be provided by government regulators.

This focus on considering and providing advice on cumulative impacts is facilitated by several factors, including:

- the broad definition of water resources (defined according to the Water Act 2007) supports a holistic view of impacts on the underlying processes that support species and ecosystem services, leading to more comprehensive and integrated scientific advice
- significant focus on and investment in groundwater and surface water models over several decades
- the more recent investment in the Commonwealth Government's bioregional assessment programs to deliver independent, scientific assessments of the potential cumulative impacts of coal and unconventional gas developments on the environment
- the IESC's legislative functions, and its focus on developing a suite of resources to assist industry and regulators with environmental assessments, providing clarity around expectations and information needs.

The establishment of the IESC and the delivery of the Bioregional Assessments Program was part of a $150 million National Partnership Agreement announced by the Australian Government in 2012, with an additional $30.4 million in funding announced for the Geological and Bioregional Assessments Program in 2017. This highlights the significant investment required in data aggregation, analysis and expert advice required to underpin the consideration of cumulative impacts.

For more information, see the IESC and the bioregional assessments further reading at the end of the report.

In a changing climate, the past is no longer a useful guide to the future. Key threats to the environment, including biosecurity incursions and altered fire regimes, will be compounded by climate change. Although considering cumulative impacts is important now, this will become increasingly important as the predicted widespread and substantial changes to the environment manifest.

There will always be inherent uncertainty about how future pressures will affect the environment, but it is possible to better understand different future scenarios to help inform decisions. There is a clear need to enhance capability to consider a dynamic environment and a changing future.

The recommended reforms, including the setting of National Environmental Standards and the making of regional and strategic national plans, will enable cumulative impacts to be better considered over long time frames. A substantially improved information base and a broader suite of information tools, including the capacity to model the outcomes of alternative scenarios, will provide greater precision and efficiency.

10.2.4 Advances in modelling capability are not being used

New information tools are needed. Despite being proven and long used in many areas of environmental management (such as climate modelling, fisheries, management of the Great Barrier Reef and for water resources), the modelling capability to predict the impacts of threats and management actions on land-based biodiversity is still relatively immature in Australia.

New technologies and increased computing power are fundamentally shifting the questions that environmental science can address using existing data sources. The technologies to analyse and gain insights from diverse and very large datasets are not broadly used, but these insights are essential to develop and refine predictive models. This contrasts to other areas of national policy, such as the economy and health, where predictive modelling is a mainstream and widespread tool used to inform decision-making. There are examples of how models are being used to solve complex environmental problems (Box 34). This approach could be used more broadly.

An impediment to the further uptake of new modelling and analytical approaches is a lack of the necessary staff expertise. The Department, and other agencies, have pockets of excellence in these areas. However, a broader uplift in skills is needed to make the most of emerging technologies and effectively translate analysis and science into decisions, including knowledge brokering. There is a tendency for data, digital and science skills to be viewed as niche, rather than skills that are relevant across the broader agency in many applications. Modelling efforts often lack the broader governance and long-term funding to support maintenance, communication, training and support for more general uptake.

Box 34 Practical application of models in management of terrestrial ecosystems

This box contains examples of how models can be applied to the management of terrestrial ecosystems from the Biodiversity Knowledge Projects (CSIRO n.d). The projects aimed to improve the knowledge base and long-term research infrastructure to support biodiversity conservation and natural resource management, and the techniques are now underpinning projects such as pilot ecosystem accounts (Box 40, Chapter 11). CSIRO and the Department of Agriculture, Water and the Environment collaborated closely so that the models could be practically applied to departmental decision-making, reporting and enhanced internal capability. However, there are still challenges with broader uptake and consistency with other approaches used by States and Territories.

Restoration thresholds for the Ranger Uranium Mine

Full ecosystem restoration of mine sites can take many decades. To support the achievement of long-term restoration outcomes after the Northern Territory Ranger Uranium Mine ceases to operate in 2021, Energy Resources of Australia and scientists from CSIRO and the Office of the Supervising Scientist collaborated to develop a set of restoration trajectories. These will help predict when the rehabilitated site will move to a sustainable ecosystem without further management intervention.

The Australian Ecosystem Models Framework was used to develop a dynamic ‘state and transition model’ of rehabilitation that drew on expert input to interpret and synthesise the extensive scientific research undertaken in the region, and analyse the uncertainties in rehabilitation trajectories. This work will enable the revegetation rehabilitation pathways, risks, contingencies and monitoring to be more clearly articulated.

Identifying areas of high biodiversity in Australia

An approach known as generalised dissimilarity modelling brings together millions of species observations at particular locations with fine-scale, continuous layers of information on soil, topography and climate to compare grid cells across the Australian continent.

This provides an automated, repeatable and improvable layer that shows where the ecological environment is more or less unique. When integrated with other datasets, it can be used to explore the representative nature of the national reserve system in a changing climate, the implications of climate change for biodiversity, the location of climate refugia, potential offset areas, areas of depleted biodiversity, and gap analyses for targeted surveys.

Continued next page

Box 34 (continued)

Modelling habitat condition from remotely sensed data

Assessing habitat condition using field-based surveys is an established technique but is costly. Remotely sensed data can be combined with information on other environmental characteristics to simulate habitat condition, which can be validated against the data from on-ground condition assessments. This generates a nationally consistent view of the condition of habitats and how this is changing over time, but is at a scale that means it can be used for more local decisions.

10.2.5 The Department's information management systems are antiquated

The EPBC Act was developed in the last century, when the use of paper was standard and the internet was not yet central to the effective delivery of government services. The way the Act is administered has not kept pace with the rapid transformation in how government, business and people interact with technology. In essence, the Department uses systems that are insufficient to deliver its regulatory functions efficiently.

The online systems that support the EPBC Act are cumbersome, duplicative and slow. They do not meet expectations for an easy, tailored, digital experience. As discussed in Chapter 6, the Department's systems for managing assessment documentation result in the need to manually handle files, leading to mistakes and delays. Interactions with proponents are not easily recorded, which results in duplication and a lack of structure.

There is no system for efficient case management and it is not easy for the Department, the proponent or the community to determine the status of a proposal in the assessment process or track a project after an approval has been granted. Departmental systems do not link with State and Territory systems and there is no single user portal.

The Department's internal systems do not support simple extraction of information when making key decisions. Instead, systems rely on the informal transfer of information between staff. This can lead to duplicated information requests when staff change. Data exchange between systems is manual and often labour intensive. Underinvestment in information systems over many years has translated into fixes that rely on manual processes or upgrades of aging IT systems that are costly to maintain.

The EPBC Act requires archaic methods of communication, such as newspaper advertisements and publishing in the Government Notices Gazette. The focus on meeting statutory requirements often comes at the expense of efforts to use more modern forms of presenting and communicating information in an easily accessible way and supporting better engagement with the community in decision-making.

10.2.6 The current information system will not allow the full benefits of EPBC Act reform to be realised

Good information on the environment and the outcomes from management interventions is a fundamental requirement for successful reform. Reforms recommended by this Review will increase demand for quality information, as better information will improve efficiency including for:

- the precision and refinement of the National Environmental Standards
- scrutiny of the adequacy of information available for decisions by the Ecologically Sustainable Development Committee
- the accreditation model
- regional planning
- the mechanisms to attract private sector investment in restoration
- the monitoring and evaluation framework for the EPBC Act.

As noted in Chapter 4, for business time is money. For approval processes, better information and systems could significantly reduce the time taken for decisions to be made and provide greater confidence in the outcome. There is a high cost to industry and government in relying on the existing data and information system. Some examples of the potential time and cost savings from improving the information system are shown in Box 35. Another benefit of improving the information system supporting the EPBC Act is improving the adequacy and transparency of the evidence underpinning advice and decisions (Chapter 4).

At present, the management of environmental information and the advice that draws on it falls well short of public expectation and government commitments for sharing, re-use and transparency. In 2015, the Commonwealth Government released the *Public Data Policy Statement*, which recognises that the data held by the Australian Government is a strategic national resource. The statement commits the Government 'to optimise the use and reuse of public data; to release non-sensitive data as open by default; and to collaborate with the private and research sectors to extend the value of public data for the benefit of the Australian public'. The Australian Government is also committed to open government and engagement through the *Open Government Partnership*, with a set of actions around enhancing information access and public accountability, and the technology and innovation to support those aims. Consistent with these whole-of-government commitments, both the frameworks and data – and how these have been applied in the development of advice for decision-makers (for example, in making a National Environmental Standard, regional plan or decision on a development application) – should be publicly available information. The Government's systems should have the capability to efficiently support the preparation, consideration and publication of this information.

The management of environmental information has failed to keep step with increasing recognition of the need for greater respect and awareness when dealing with Indigenous knowledge and data. The movement towards open data has often focused on the 'FAIR' principles – that data is findable, accessible, interoperable and reusable. This creates a tension for Indigenous Australians, who are increasingly asserting their right to have greater control over how their data and knowledge are used. To complement the FAIR principles, the Global Indigenous Data Alliance has developed the CARE principles for Indigenous data governance – collective benefit, authority to control, responsibility and ethics (GIDA 2019).

Box 35 Cost efficiencies and benefits of improvements to the information system

Benefits for large developers

The 2019 Digitally Transforming Environmental Impact Assessment report, prepared by the Western Australian Biodiversity Science Institute, identified significant financial benefits to proponents and the government from developing systems to improve the flow of information into the environmental assessment process (WABSI 2019).

The report found that reducing the time and effort involved in sourcing data could save proponents $1 million per year. It also considered the potential for improved information to increase confidence and allow decisions to be made earlier. Reducing assessment times can save industry-led projects up to $72 million per year and State government infrastructure projects up to $100 million per year. Accelerated private and public project development would deliver a benefit of more than $150 million every year.

Benefits for landholders and smaller businesses

The National Farmers' Federation (NFF) has highlighted the benefits of a nationally consistent and clear method for vegetation and ecosystem mapping. Divergence in mapping products and regulatory instruments between jurisdictions is a significant frustration for landholders. The NFF submission (2020) to the Review's Discussion Paper highlighted an example in Queensland where mismatched mapping and requirements between levels of government led to ambiguous signals for landholders and a high level of uncertainty. Unsure of their rights, landholders have delayed or shelved development plans and haven't undertaken fuel reduction burning and regrowth management.

Continued next page

Box 35 (continued)

While the NFF recognised the challenges associated with data collection and access, the message was that the benefits of a nationally clear and consistent method would exceed the cost of the investment, delivering more certainty to farmers and building greater trust in regulators.

Benefits for government

Mapping of fire severity and extent for the 2019–20 Black Summer bushfires was vital to inform the government response to the fires. The Department of Agriculture, Water and the Environment led this effort, aggregating data collected across multiple jurisdictions with different processes and for different purposes. The effort was slowed by having to find the relevant agencies, understand the different data structures and negotiate individual licensing agreements to make the information public.

The mapping effort took 4 months, 6 staff and cost $600,000. This time and money could be halved for similar events by implementing improvements such as data sharing agreements and generating approaches for automated data exchange.

10.3 Recommended reforms

10.3.1 A national environmental information supply chain

The provision of information can be viewed like a supply chain. Information is delivered through a series of processes that convert raw data into end products that can be used – by decision-makers to inform their decisions, by proponents to help them understand and design their project proposals, and by the community to understand the impacts of decisions and the outcomes that are achieved.

As with more traditional supply chains, effort and resourcing is needed for an efficient chain that delivers the right products at the right time to the right customers. The customer (or user) is central to the design of the supply chain.

A national environmental information supply chain will cover the entire system of processes and skills to convert raw data into the end products needed to inform the implementation, evaluation, reporting and assurance of the National Environmental Standards and other aspects of the EPBC Act, including State of the Environment reporting. The supply chain will ensure that consistent information is available to each decision-maker (for example, across the Commonwealth or in a State or Territory under an accredited arrangement), and will make it easier for governments to demonstrate that their systems deliver decisions that meet the Standards.

The opportunity to derive benefit from a national supply chain for environmental information is broader than just the EPBC Act. While the focus should be on delivering to the National Environmental Standards, incremental effort can provide a supply chain that delivers to the broader national system of environmental management (Chapter 11).

The steps in the information supply chain, the limitations and inefficiencies in the 'current state' and the outcomes from a 'future state' that would support the recommended reforms are shown in Figure 9 and Figure 10. An aspect of information delivery that is often overlooked in planning and program design is the need for investment in strong links between the 'analyse' step and the 'use' step. Technology can increasingly provide user-friendly interfaces and decision-support tools to help end users query and explore information. However, providing tools and reports that are suited to the full range of end users in the context of the EPBC Act, which include assessment officers, policymakers, program managers, industry, landholders and the community, is extremely challenging. There is still a need for easy access to trusted experts who understand the content and context and are skilled at working with the relevant groups. Another important feature of a future-state supply chain is the use of metrics to measure the performance of the supply chain, and good data sharing along the chain to understand where and how the chain could be improved.

Figure 9 Current state of the national environmental information supply chain

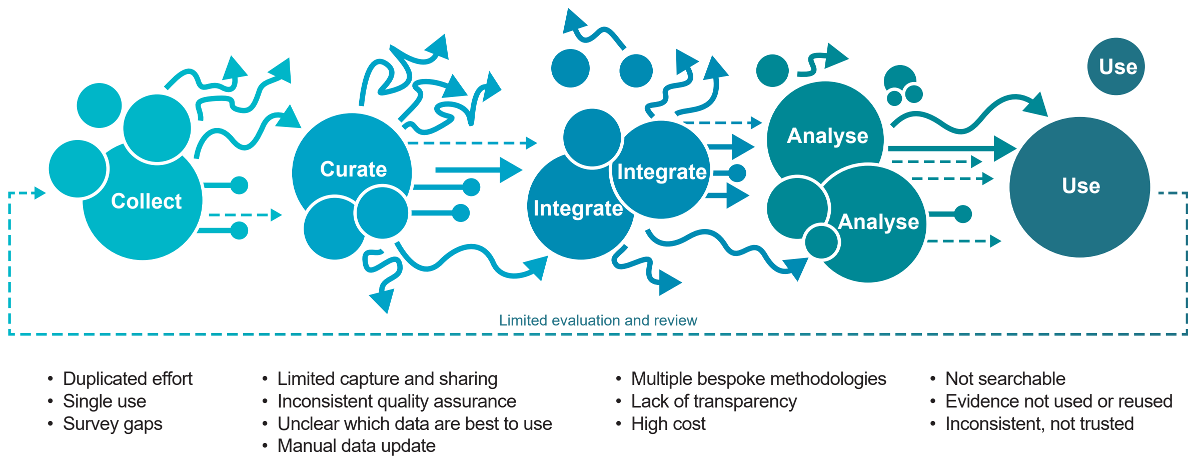
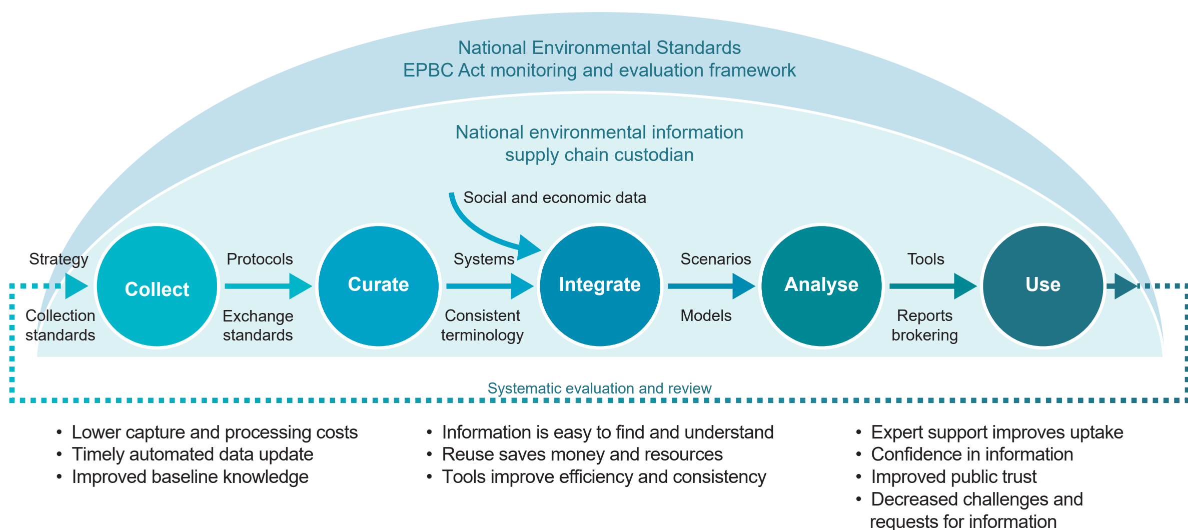


Figure 10 Future state of the national environmental information supply chain



The supply chain should be based on these principles:

- outcomes focused – delivers value to users across the national system of environmental management, with clear outcomes supported by monitoring, evaluation and reporting
- strategic – delivers sustainable infrastructure, continuous data supply and decision-making tools
- comprehensive – captures, curates and shares environmental data from a range of sources and scales, and supports integration with data from other domains
- collaborative – coordinates and shares data and methodologies managed by experts
- authoritative and transparent – accurate and current, fit for purpose, peer reviewed and publicly available
- future-focused – flexible to new technologies and techniques, with predictive capability to assess cumulative pressures, future scenarios and risks
- respectful – incorporates and protects Indigenous data and knowledge in a culturally appropriate way, consistent with the National Environmental Standard for Indigenous engagement and participation in decision-making
- efficient – reduces duplication and maximises the value of the information assets
- sustainable – ensures that responsibility to maintain, develop and resource the supply chain over the long term is clear and legislated at relevant levels.

An efficient, future-state environmental information supply chain, supported by capable people with the range of capabilities requires strong leadership and a clear vision. The range data streams required will result in the supply chain drawing from multiple sources, including States and Territories. This ‘federated approach’ will focus on building on existing information architectures and standards, technical infrastructure, data sources and modelling capabilities, making them fit for purpose and durable. This will facilitate better sharing and aggregation of data collected under different frameworks.

Demand and accountability for ongoing investment should be supported by embedding clear requirements and expectations for improved information management, reporting in legislation and the National Environmental Standards.

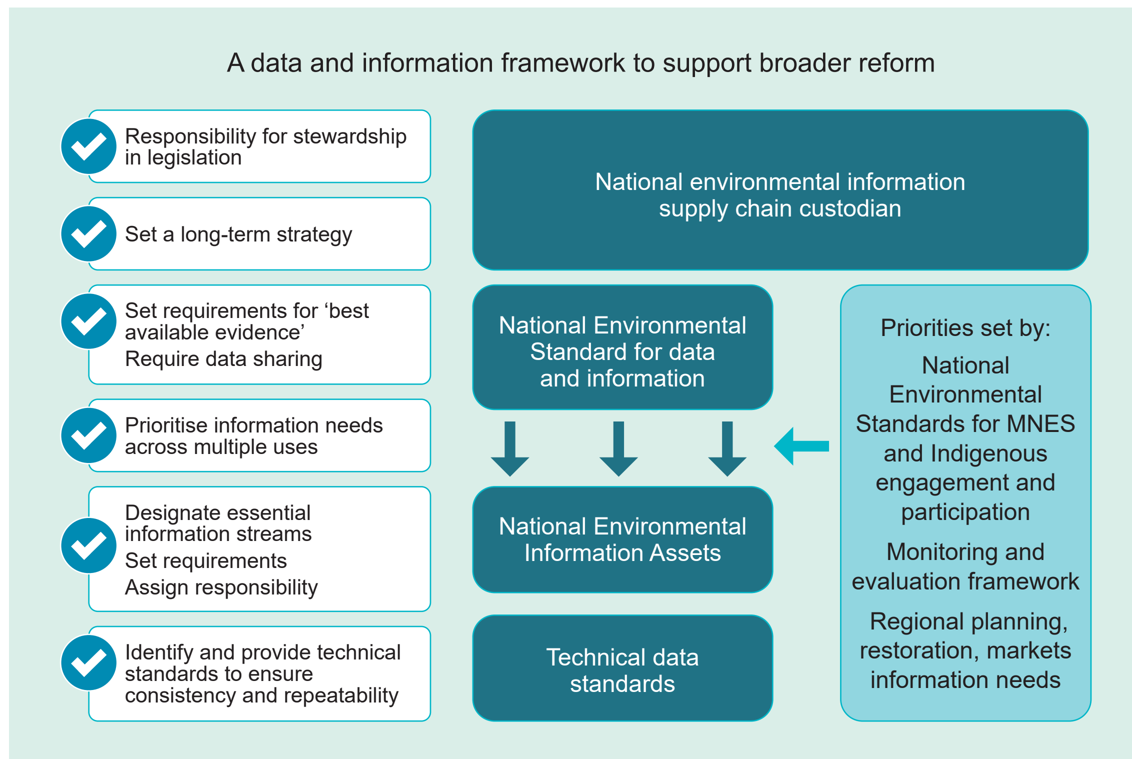
10.3.2 A framework to deliver a national environmental information supply chain

The Review recommends a framework to deliver a national environmental information supply chain that will complement the other recommended reforms.

Building on Figure 1 in Chapter 1, which shows the components of a robust reform framework, Figure 11 shows the components in the data and information framework and how they work with the other recommended reforms to address many of the barriers faced by previous initiatives, including:

- providing a clear legal mandate and requirement to curate, organise and deliver environmental information
- setting clear outcomes for the regulatory system through a set of National Environmental Standards for MNES (Chapter 1)
- implementing an approach to monitor, evaluate and report on environmental outcomes and performance (Chapter 11)
- an institution, legally accountable for driving, coordinating and setting priorities for environmental information, delivering efficiencies and providing long-term stewardship
- a National Environmental Standard for data and information that sets legal requirements for the use of best available evidence and the provision of data
- a compliance and enforcement regime to ensure people meet the National Environmental Standards for MNES (Chapter 9).

Figure 11 Components of the data and information framework and how they will improve the supply of environmental information



10.3.3 A supply chain Custodian with a clear legal mandate and a clear strategy

Given the significant investment required, the supply chain should be delivered in a strategic and coordinated way. A comprehensive roadmap is needed. Responsibility for planning and delivering the supply chain should be assigned to a national institution – the national environmental information supply chain custodian.

The Custodian will have overall responsibility for the long-term stewardship of environmental information and be accountable for ensuring the efficient and effective operation, and integrity, of the environmental information supply chain. It must be independent to decision-making and trusted by stakeholders. To support the implementation of the National Environmental Standard for data and information (section 10.3.4), the Custodian will outline expectations for best available evidence, provide clear guidance on requirements for the sharing and publishing of information, and design and implement a collaborative process for identifying and establishing National Environmental Information Assets. The Custodian will work across the range of existing institutions involved in delivering and coordinating environmental information to learn from existing and past efforts to avoid 'reinventing the wheel', identify and fill gaps, make the necessary links and embed best-practice approaches to the use and sharing of Indigenous knowledge (Chapter 2). Over time, the Custodian should seek efficiencies in the stewardship of environmental information of relevance that is beyond the scope of the EPBC Act.

Stakeholders identified that the custodian role could be approached in several ways and there are numerous potential candidates among key national institutions. However, the Review is not going to suggest a particular candidate.

It will be critical for the custodian role to be embedded in legislation to provide a long-term mandate and accountability and avoid unnecessary changes in direction that can arise from short-term program drivers. A potential model for the legal mandate is the responsibility given to the Bureau of Meteorology to manage water information in Part 7 of the *Water Act 2007.*

The EPBC Act should be amended to strengthen the powers of the Custodian and reflect the objectives and responsibilities of the role. Prior to these amendments, an interim Custodian may be established.

Strategic objectives for the Custodian should include:

- mobilising environmental data from all available sources to make them promptly and routinely available to the entire environmental management community in a standardised, searchable and accessible form
- supporting the curation and management of individual surveys into integrated datasets that give them context and meaning, as a member of the ESD Committee to identify and fill critical data gaps, and providing the systems and expertise to enable these data to be turned into tailored, trusted products and advice
- informing National Environmental Standards and supporting evidence-based decision-making across the EPBC Act
- leading the appropriate management and use of Indigenous data and Indigenous knowledge, drawing on the advice of the Indigenous Engagement and Participation Committee
- working with the Environment Assurance Commissioner to advise the Environment Minister on the application and settings of the National Environmental Standard for data and information
- enabling robust, repeatable and sustainable analysis; allowing optimised policy and decision-making and transparent, efficient decision-making processes; informed monitoring, evaluation, review and reporting frameworks; and providing investment confidence and an informed community
- creating and leading a culture of shared expertise across the Commonwealth, States and Territories with common data standards, policies and incentives for data sharing, and promoting the integration of environmental data with data from other domains
- supporting a network of systems for the persistent storage and archiving of environmental data.

10.3.4 A National Environmental Standard for data and information

A National Environmental Standard for data and information is an important component of the suite of National Environmental Standards that will clarify expectations and improve accountability.

A recommended National Environmental Standard for data and information, developed with input from experts, is included in Appendix B. It sets out the expectations for all parties involved in the operation and review of the EPBC Act to support the delivery of the national environmental information supply chain.

The National Environmental Standard for data and information will require the collection, curation, integration, analysis, use and sharing of information to agreed technical standards. Its intended outcome is to ensure that decisions made in the operation and review of the EPBC Act are informed by the best available evidence, and that the nature of the environmental outcomes from activities under the Act are understood, documented and accessible.

A requirement for the sharing of environmental data is a major element of the National Environmental Standard for data and information. Proponents will be required to submit data and information supporting development approval applications in a standardised way and this information will be made publicly available. Researchers and program managers will be expected to contribute environmental data into the system where data have been generated as part of a government-funded project.

There are some valid cases where public disclosure of information is not beneficial. Examples include where releasing information would potentially threaten species; to ensure the culturally appropriate use of Indigenous knowledge; for public safety; or where non-disclosure is demonstrably in the public interest. There are established processes in place to deal with sensitive ecological information. Consistency with Australian privacy law, the advice of the Office of the Australian Information Commissioner, and with the National Environmental Standard for Indigenous engagement and participation in decision-making (Chapter 2) and the advice of the Indigenous Engagement and Participation Committee should ensure these valid cases are managed appropriately and respectfully.

The National Environmental Standard for data and information will put clear requirements in place to overturn the impediment to sharing created by claims of commercial-in-confidence. Compliance with the Standard will be a requirement for all activities under the EPBC Act or an accredited arrangement, such as an application for development approval. Once the Standard is in place and the expectations are clear, the market will respond. Consultants unwilling to enter into agreements that allow the sharing of raw data will be not be commissioned as they will not meet proponent needs. When redrafting the Act and the Regulations, every opportunity to remove barriers to and hardwire expectations for data sharing should be taken.

The recommended National Environmental Standard for data and information at Appendix B represents a step change in expectations but is consistent with the current settings in the EPBC Act, which is largely silent on data and information. The EPBC Regulations should be reviewed and updated as soon as possible to remove any impediments to the implementation of the Standard.

The efficient implementation of the National Environmental Standard for data and information will rely on a Custodian with the appropriate technical and policy expertise, and with sufficient resources to develop and sustain the supply chain. Short-term implementation of the Standard will be less effective before further investment and effort to refine the supply chain and the infrastructure to support efficient collection and sharing of information.

Supply chain priorities framed around the National Environmental Standards

The National Environmental Standard for data and information will establish National Environmental Information Assets (NEIAs). These are the essential information streams that underpin the National Environmental Standards for MNES.

A suite of NEIAs, established in a process overseen by the Custodian, will become legal instruments that provide certainty and accountability for priority components of the information supply chain. Prior to legislative change, the NEIAs will be defined in policy.

The NEIA approach is broadly aligned with government commitments to identify, designate and prioritise high-value and critical datasets (DPMC 2020). The approach builds on a 2017 Productivity Commission recommendation to designate 'National Interest Datasets' to promote the development of a valuable suite of datasets, with broader community benefits 'that are be treated – and funded – as the valuable strategic assets that they are' (PC 2017).

In the context of environmental information, the NEIAs are a prioritisation mechanism that addresses barriers identified from previous attempts to reform the environmental information system. The NEIAs focus effort and resourcing on the datasets or 'information streams' (including integration and analysis as relevant) that are essential to support effective implementation of the EPBC Act. This will help ensure the priority information is high quality and well maintained. The NEIAs will:

- provide for the delivery of information to implement, monitor and improve the suite of National Environmental Standards for MNES
- name a responsible organisation and collaborative partners, and identify the data and tools to model and map the state and trends at different scales.

NEIAs should draw on the process, led by the Ecologically Sustainable Development Committee, of delivering a monitoring and evaluation framework for the EPBC Act, including identifying key environmental indicators (Chapter 11), and provide stewardship of the information sources and methods to deliver these indicators. The NEIAs will refer to technical standards that will establish the more specific expectations and format for different data types to support linking, integration and re-use.

10.3.5 Building the information supply

A first task of the Custodian, or interim Custodian, will be to develop a strategy for delivering the national environmental information supply chain that will identify the 'quick wins' and activities that need investment now to deliver benefits in the future.

Make the most of existing information

The environmental information currently available to support implementation of the EPBC Act is clearly inadequate, but imperfect information should not be a barrier to implementing the Review's recommended reforms. It is counterproductive to wait for perfect information because decisions that impact the environment continue to be made with current information.

Significant gains can be made by making better use of existing information and data by focusing on parts of the supply chain beyond raw data collection and collation. For example, models can provide a way to fill information gaps through structuring expert input and drawing insights from a huge array of remotely collected information. Early implementation of the National Environmental Standards may draw on proxies and surrogates based on readily available information. This will improve over time as data collection and modelling activities improve understanding of state and trends. There are also benefits to investing in identifying and maximising the accessibility and use of priority existing and historic sources – for example, through technologies to automatically extract standardised information from PDF documents (Box 36).

Box 36 Unlocking 20 years of trapped knowledge from PDFs

Statutory documents about fauna and flora conservation, such as conservation advices and recovery plans, contain over 20 years of key information about threatened species and ecological communities, their habitats, threats and associated on-ground protection activities.

This information is crucial for many environmental decisions, but the knowledge is locked in unstructured, PDF documents that are hard to search, compare and update. Ideally, this knowledge would be available in a format that is easily accessible through search or browsing interfaces to support further analysis. However, the work involved in doing this manually would take considerable time and resources.

A feasibility study undertaken by CSIRO's Data61 and funded under the Platforms for Open Data program investigated and piloted an approach to automate the extraction of knowledge from PDF conservation advices and recovery plans. The approach used natural language processing to transform a collection of PDF conservation advices and recovery plans with unstructured text into tabular form for searching and browsing to support further querying and analysis.

The study found that a significant amount of the knowledge held in the documents could be automatically extracted into a structured format, providing a first step to making the information contained in these documents more available and reusable. This work can help fast track the update and review of these documents, and support the creation of a single database of similar information held by jurisdictions across Australia that is automatically created and updated. The approach could also be used to extract knowledge from other unstructured text files, such as biosecurity documents.

Build on and focus current initiatives

Many initiatives are already underway to address deficiencies in environmental information. These should continue but with the flexibility to align with the accreditation model, the Custodian's roadmaps and strategy, and the delivery of data, information and methodologies to support the implementation and evolution of the National Environmental Standards.

The Digital Environmental Assessment Program (DEAP) is a significant investment targeted at digital transformation of environmental assessment. It will support streamlined, integrated and transparent processes, including better management of existing information and improving the interface with regulators and the community. DEAP will be delivered as a partnership between the Commonwealth and Western Australian Government and is further discussed in Box 37. The DEAP is only a pilot at this stage, working with one State. If the pilot is successful, a national roll-out is envisaged, but this will need to be resourced.

Box 37 Current programs addressing the environmental information supply chain

Digital Environmental Assessment Program

The Digital Environmental Assessment Program (DEAP) is a partnership between the Australian Government and Western Australian Government. Over 3 years the program will deliver:

1) The DEAP portal and assessment system project – providing a significant first step in streamlining the assessment process of the Commonwealth and WA systems. This work will:

- provide a single online portal and shared and standardised approach across the two jurisdictions and an end-to-end workflow system to enable proponents to track progress
- enable the community to see elements of applications, track progress and provide comment (such as formal submissions), which will significantly improve transparency
- increase information capture to support sharing and re-use across systems, providing valuable input to understanding the cumulative impact of projects, and monitoring, evaluation and reporting.

2) A biodiversity data repository – to store and share environmental information (such as wildlife surveys) between proponents, Commonwealth, State and Territory regulators, and the community.

This repository will capture data from field-based ecological surveys of species (native and introduced) and their habitat, vegetation and ecological communities. It will include on-ground measurements and observations, supported by metadata to enable the national collation of high-quality, high-resolution and comprehensive biodiversity data. The data will be relevant to monitoring trends, predictive modelling and management of environmental assets and their threats. The repository will be nationally federated, so data are exchanged freely between Western Australia, the Commonwealth and the Terrestrial Ecosystem Research Network (TERN) in the short term. Over time, other States and Territories and other repositories such as the Atlas of Living Australia (Box 31) will be progressively added. Agreed ecological survey protocols and data standards will reduce the resourcing spent on data integration, which will enable greater sharing, use and re-use for many purposes.

The Australian and Western Australian governments have committed combined funding of $55 million for the 3-year program for digital transformation of environmental assessments. This includes $37.2 million for Western Australia's delivery of the Environmental Online initiative and Biodiversity Information Office, $15.7 million for the DEAP Portal and Assessment System project and biodiversity data repository, and $2.1 million for other States and Territories to work towards data sharing with the national biodiversity data repository.

Collaborative Species Distribution Modelling Program within EcoCommons

The Collaborative Species Distribution Modelling Program within EcoCommons will provide assurance of the models used by governments to inform environmental management decisions. It aims to provide greater national consistency in modelling and decision-making.

The shared, cloud-based platform currently includes more than 17 peer reviewed species models, each with default parameters. The system provides the ability for government analysts and researchers to compare and share data and models for sensitive species in a secure environment, with the option to re-run the models using the same data and parameters, providing an audit and reproducibility trail.

For more information, see the Environmental data initiatives further reading at the end of this report.

Overhaul the Department's information management systems

The Department's information management systems need to be overhauled to provide a modern interface for interactions related to the EPBC Act and to embed within systems the key decision-making frameworks that harness information and knowledge.

A modern interface includes:

- a case-management system that supports the full project lifecycle, including application, assessment, approval, compliance and enforcement (Chapter 4)
- the capacity to link with others – so that information can be provided once and shared many times (for example, with the supply chain Custodian or other regulators and accredited decision-makers)
- the ability to record, share and search information related to EPBC Act decisions in a way that is accessible to both the public and proponents
- the ability to readily communicate decisions using modern communication channels, rather than relying on newspaper advertisements and the Government Notices Gazette (Chapter 3).

The Regulatory Maturity Project (Woodward 2016) identified a range of functions for the 'ideal IT system', which were also highlighted in the Craik Review of interactions between the EPBC Act and the agricultural sector (Craik 2018). The DEAP program (Box 37) will deliver some of the necessary improvements to internal systems.

This overhaul needs to be consistent with broader digital transformation efforts across government and draw on whole-of-government leadership on digital systems and services. This includes a greater focus on capability within the Department to make better use of systems and the data behind them. Data should be treated as an asset and staff need to have the capability, motivation and mandate to drive better use of data. This requires a change in culture as well as systems – buy-in from senior leaders will be fundamental (DPMC 2019).

Invest in centralised predictive and ecosystem models

To apply granular standards to decision-making, governments need the capability to model the environment, including the probability of outcomes from proposals, drawing on predictive modelling capabilities and decision-making frameworks for ESD that will be delivered as part of the information supply chain. Predictive modelling efforts will save money and time, ultimately better focusing expensive field surveys and increasing the efficiency of the regulatory system.

To do this well, investment is required to improve knowledge of how ecosystems operate and develop the capability to model them, which is essential for testing scenarios and making informed, risk-based decisions. Predictive ecosystem models that draw on local-level information and understanding will be vital to effective regional planning and understanding cumulative impacts. These models can also support the setting of National Environmental Standards and thresholds (Box 34).

The Commonwealth has a clear leadership role in coordinating the development and application of an ecosystem modelling capability. There is an argument for a predictive modelling capability to be centralised due to the specialist skill sets, high performance computing requirements and benefit of national consistency and potential efficiency.

The 2019 Australian National Outlook work led by CSIRO is an example of how an integrated assessment model can be brought together with expert insight to explore future scenarios for Australia's natural resources, energy, productivity and services, and cities and infrastructure (CSIRO 2019). In recent years, as part of the 2016 National Research Infrastructure Roadmap, an expert committee has investigated the design needs and requirements for a National Environmental Prediction System. This work could provide a strong contribution, but this scoping effort is only the first step. In the longer-term the focus needs to move beyond the research sector and have enduring funding and governance.

Developing a national ecosystem modelling capability will take time. The strategy delivered by the Custodian can provide a structure to guide short-term investments, so they incrementally contribute towards a longer-term goal, delivering improved capability at each step. A key step will be to overcome

the current silos and bring together the main government and business investors. The Shared Analytic Framework for the Environment work being undertaken as the next step for digital transformation of environmental assessment in Western Australia is a starting point to providing a consistent way to identify 'quick win' tools and deliver more complex modelling needs.

Operationalising new systems and approaches developed through research programs can be challenging given limitations in departmental IT systems, internal skills and capability, as well as short delivery timeframes. Increasingly, access to computing and modelling capability is moving to the cloud (Box 37). Innovative approaches such as the UK Met Office Informatics Lab can help trial new analytic techniques and tools cheaply and at lower risk to existing systems. For implementation of new IT systems, investment in new modelling capability needs to be complemented by a focus on improving staff capability and expertise.

10.3.6 Resourcing and sequencing reforms

The Review acknowledges that the quantum shift in information and data systems will come at significant cost. Upfront investment is required to deliver an information supply chain in which all stakeholders have confidence. Ongoing investment will also be required to maintain the system over time. This will improve the effectiveness of Australia's environmental management and deliver efficiencies for governments at all levels and for business. There is evidence from private sector forecasting that an initial, more significant investment to support digital transformation can reduce the high costs of running and operating out-of-date systems, which can lead to significant ongoing financial benefits as well as better services (DPMC 2019).

A national information supply chain, with a Custodian, should deliver efficiencies for all governments over time. It is an up-front investment that negates the need for multiple systems to be developed by individual governments or to fund new one-off initiatives requiring grants or program funds. However, the investment should be phased and managed appropriately and flexibly, responding to the needs and priorities identified in the supply chain roadmap and strategy. The traditional funding and procurement approach of large one-off investment and change has been one of the impediments to providing sustained and ongoing solutions in the past and should be avoided.

The need for investment in data, information and systems is in part generated by the need to regulate the impacts of development on the environment. Consistent with the principle that the impactor (or polluter) pays, proponents should be required to pay the efficient cost of the share of information, knowledge and systems that underpin the regulation of their activities (Chapter 6).

An efficient information supply chain that provides a forecasting capability and supports the application of granular National Environmental Standards will take time. For success a clear strategy and ongoing funding is required. A coordinated and strategic approach that maximises the use of available information will support short-term advances in priority areas and enable the reforms recommended in this Review to be implemented.

Improvements to data and information will deliver cost savings to decision-makers and proponents, enabling decision-makers to make faster decisions. However, the need for this reform is more than just to provide for more efficient development assessments and approvals. It is essential for the Commonwealth to execute its national leadership role, and overall responsibility for delivering environmental outcomes in the national interest.

Better data and information are also needed to understand the baseline starting point, and to monitor and report on the difference that is being made. Without better data, information and systems, there is no way to determine what activities will deliver the biggest gains, if they are working, or if adjustments are needed to enable outcomes to be delivered (Chapter 11).

The implementation of the recommended reforms should not be delayed for the sake of a better information base. The effort and precaution imposed by working with our existing evidence base will provide a strong incentive to improve the quality of environmental information to fully realise the benefits of the recommended reforms.

Recommendation 31 The Commonwealth should initiate immediate improvements to the environmental information system by:

a) adopting a National Environmental Standard for data and information to set clear requirements for providing best available evidence, including requiring anyone with environmental information of material benefit to provide it to the environmental information supply chain

b) appointing an interim supply chain Custodian to oversee the improvements to information and data

c) designating a set of national environment information assets to ensure essential information streams are available and maintained to underpin the implementation and continual improvement of the National Environmental Standards for MNES

d) expanding the application of existing work with jurisdictions on the digital transformation of environmental assessments and ensuring it is aligned with implementation of the national environmental information supply chain

e) commencing the overhaul of the Department's information management systems to provide a modern interface for interactions on the EPBC Act and support better use and efficient transfer of information and knowledge.

Recommendation 32 The Commonwealth should build, maintain and improve an efficient environmental information supply chain to deliver the best available evidence to improve the effectiveness of the EPBC Act. Aligned with the second tranche of reform, the supply chain should:

a) have a clearly assigned Custodian responsible for providing long-term stewardship and coordination

b) have a legal foundation with provisions in the Act that details responsibilities, governance, National Environmental Information Assets and reporting to ensure accountability

c) be underpinned by a long-term strategy and roadmap prepared and maintained by the Custodian, with the first strategy due within 12 months

d) be supported by a coordinated effort to improve national ecosystem and predictive modelling capabilities

e) have adequate up-front and ongoing funding.

11 Environmental monitoring, evaluation and reporting

Key points

Currently there is no effective framework to support a comprehensive, data-driven evaluation of the EPBC Act to determine whether it is achieving its intended environmental outcomes. This is a key cause of the lack of trust in the Act.

To determine whether the EPBC Act is operating effectively and efficiently, this Review has relied on diverse, disparate and, at times, patchy sources of information and the knowledge of contributors. In modern public policy, this is unacceptable.

The Commonwealth has a clear leadership and stewardship role in maintaining a healthy environment and Australia's international commitments require a national-level view.

Assessing the relative effectiveness of how governments individually and collectively manage Australia's environment is extremely difficult. The key reasons for this are:

- The current monitoring and reporting requirements in the EPBC Act do not span its operation and are not underpinned by a clear articulation of intended outcomes. Monitoring and reporting that is done lacks coordination and often focuses on bare minimum administrative reporting. Not all requirements for evaluation (such as reviews of key plans) have been met.
- A lack of long-term monitoring makes it difficult to establish a baseline against which to evaluate performance.
- There is no consistent approach to monitoring and reporting on outcomes across the national environmental management system. Meeting our international and national reporting obligations currently involves repeated, high-cost efforts.
- The mechanism established under the EPBC Act to provide the overarching national story on environmental outcomes – the national State of the Environment (SoE) report – has no clear purpose and no feedback loop. There is no requirement to stop, review and where necessary change course.

A comprehensive framework is needed to track whether the environmental outcomes articulated in the recommended National Environmental Standards are being achieved. The Ecologically Sustainable Development Committee should be responsible for developing and reporting on this framework. This is distinct from the role of the Environment Assurance Commissioner, who will be responsible for auditing whether the Standards are being adhered to by governments.

The key reforms recommended by the Review are to:

- develop a coherent framework to monitor and evaluate the effectiveness of the EPBC Act in achieving its outcomes. This should be framed around individual plans for each National Environmental Standard for MNES and be underpinned by a National Environmental Standard for environmental monitoring and evaluation of outcomes
- implement the EPBC Act monitoring and evaluation framework by embedding it in the governance and legislative reforms. The Ecologically Sustainable Development Committee should be responsible for the design and implementation of the framework, and delivering an annual statement on environmental performance
- revamp national SoE reporting to include future outlooks and require a government response
- accelerate development and uptake of the national environmental-economic accounts as a tool for tracking Australia's progress toward sustainable management of the environment. Reporting on national environmental-economic accounts should be embedded in the Act.

Implementing a coherent monitoring and evaluation framework for the EPBC Act provides a springboard for a more consistent approach to national-level reporting efforts. This will improve the quality of reporting and enable an adaptive approach to environmental management.

Regular monitoring, evaluation and reporting are key features of modern public policy and regulation. They are essential for:

- understanding the success or failure of interventions
- enabling improvements to be identified and settings to be adapted to enhance effectiveness or increase efficiency
- providing accountability to the public.

Effective monitoring, evaluation and reporting of the EPBC Act, and of the broader national environmental system, is essential to achieve improved environmental outcomes. It is also central to improving and maintaining public trust in the environmental management systems (Chapter 4). If the community, and the regulated community in particular, don't have visibility of the outcomes arising from management intervention then they will question it.

Monitoring and evaluation is fundamentally linked to information and data management – it should inform the design of monitoring activities that provide data into the national environmental information supply chain (Chapter 10). The quality of the insights that can be drawn from evaluations, and how efficiently they can be derived, depends on how information is collected, collated, shared and analysed.

The Review acknowledges that evaluating the effectiveness of environmental policy is challenging and that attributing observed outcomes to individual management actions is extremely difficult. But that does not mean environmental monitoring and evaluation should be dismissed as too hard. This chapter examines the effectiveness of monitoring and evaluation of the EPBC Act. Because the Act includes settings for the national State of the Environment (SoE) report, it also explores the leadership role the Commonwealth plays in monitoring, evaluation and reporting on the effectiveness of the nation's broader system of environmental management.

11.1 Monitoring, evaluation and reporting of the EPBC Act is inadequate

11.1.1 Requirements for monitoring and reporting under the EPBC Act are inadequate

The EPBC Act includes some requirements for monitoring and reporting on activities and outcomes. However, these do not span the operation of the Act and follow-through is poor. Resourcing constraints mean that the focus is on reporting to meet the bare minimum requirements, rather than monitoring and evaluation driving adaptive improvements over time.

For listed threatened species and ecological communities, requirements for monitoring are limited in scope. Recovery plans for threatened species are required to include details on how progress will be monitored, but there is no requirement to implement monitoring activities and report on whether outcomes are being achieved. This means that efforts to monitor and report are a rare exception, rather than common practice.

Conservation advices for listed threatened species and ecological communities have no detail on monitoring requirements. Most mandated 5-yearly reviews of threat abatement plans are either well behind schedule or haven't occurred (TSSC 2020).

For developments approved under Part 9 of the EPBC Act, the Environment Minister may attach conditions that require specified environmental monitoring or testing to be carried out and reports to be prepared. This is an administrative decision, rather than a statutory requirement. As highlighted in Chapter 8 and Chapter 9, where offsets form a condition of approval, there is no comprehensive tracking of offsets or assessment to determine if they are achieving the intended outcomes.

Strategic assessments made under Part 10 of the EPBC Act often include provisions for monitoring and evaluation, although this is not a requirement. Approval holders are required to provide reports, but the Department lacks the capacity to follow-up if activities are not conducted. Similarly, bilateral agreements may include provisions for auditing, monitoring and reporting on the operation and effectiveness of all or part of the agreement, but these are not a requirement.

Other parts of the EPBC Act require management plans to be developed and, in some cases, reports against these plans to be prepared. Many requirements and approaches currently fall short of best practice, but there is ongoing effort to improve the quality and consistency of planning and reporting. Inconsistencies, inadequacies and delays exist in the monitoring and evaluating of activities by other regulators subject to agreements under the Act. An example is Regional Forest Agreements discussed in Chapter 6 – the required 5-yearly reviews have often been extensively delayed or not undertaken, which undermines confidence in the agreements (Lacey et al. 2016).

For World Heritage properties and for National Heritage places entirely on Commonwealth land, a management plan is required to be prepared and reviewed every 5 years. Where heritage places are not entirely on Commonwealth land, only 'best endeavours' must be made to ensure a plan is in place. Similar requirements are in place for Ramsar wetlands. This makes planning optional, where management responsibility falls largely with a State or Territory.

Solid processes are in place for the monitoring and reporting of World Heritage properties, which is guided and scrutinised by the international World Heritage Committee. Planning and review of National Heritage places is patchier. While some form of plan is in place or being prepared for most areas, a recent 5-yearly review by the Environment Minister did not assess their effectiveness (DoEE 2019a).

The Director of National Parks (DNP) and Boards for jointly managed Commonwealth reserves are required to prepare management plans, which must be updated every 10 years. All reserves have plans in place, but a 2019 Australian National Audit Office report identified shortcomings in their effectiveness and implementation, which the DNP is working to address (ANAO 2019).

All Commonwealth entities are required to report on ecologically sustainable development (ESD) activities and outcomes in their annual reports (section 516A). The intent is to provide a mechanism to ensure the Commonwealth is considering ESD in its operations, but this has been lost over time. The reality is that most Commonwealth entities report on their use of recycled paper or the energy efficiency of buildings, but exclude the environmental impacts of the policies and programs they implement. It is an administrative burden with no real benefit.

The Department is required to report annually on the operation of the EPBC Act. This is currently delivered as part of the Department's annual report. Despite some recent improvements, in practice this reporting is focused on outputs and activities rather than the outcomes arising from the operation of the Act. The measures used to report publicly on the operation of the Act consolidate performance information across several programs and they change from year to year. This greatly reduces the usefulness of the reporting effort.

11.1.2 There are significant gaps in current monitoring and evaluation of the EPBC Act and no cohesive framework

The activities to monitor and report on the EPBC Act are patchy and inconsistent. The various monitoring and reporting requirements in the EPBC Act lack a clear overall purpose and intent.

The broad policy areas of the EPBC Act (Chapter 3), combined with the lack of clearly defined outcomes that the Act seeks to achieve (Chapter 1), provide a challenging foundation for monitoring and evaluating the effectiveness of the Act. Furthermore, the Department lacks the systems (Chapter 10) to collect data on its regulatory activities. This makes assessment of where resources are directed, and the efficiency of activities, difficult.

There are gaps in both the intent and coordination of monitoring, evaluation, review and reporting of the operation of the EPBC Act. Each of the parties involved in the implementation of the Act reports annually on their activities, but the extent to which they articulate and report on outcomes related to the Act varies. All take a different approach.

Limited resources, unclear requirements and a lack of commitment and delivery have resulted in sporadic review and reporting of the range of plans that influence on-ground outcomes and engagement activities. Evaluations are largely delivered as static documents – based on data that are inaccessible and once-off analysis that is unrepeatable – and often there is no adaptive management response.

There is no consistent approach to understanding the links between activities and shorter-term outcomes, or to testing the logic and assumptions about whether activities will ultimately lead to the intended outcomes. The absence of a strategic monitoring and evaluation framework means that there are information gaps that hinder effective evaluation, the resources that are dedicated to monitoring are likely to be inefficient, and there is no clear pathway to learn lessons, adapt and improve.

Long-term monitoring is essential to telling the broader story and track overall outcomes for matters of national environmental significance (MNES) in a timely and meaningful way. To date, this effort has been extremely limited and poorly targeted. Project scale monitoring provides an understanding of individual impacts, but this monitoring is insufficient to understand cumulative impacts in the national context. Overall outcomes for MNES are difficult to track and, as a result, it is very difficult to assess whether the Act is performing.

Poor performance is rarely detected in a timely way and there is an over-reliance on changes following decadal reviews based on disparate and patchy information. Improvements to tweak the different management levers and ensure they are operating effectively are not timely, with reform opportunities often reserved for major reviews, such as this one.

To answer the fundamental question of whether the EPBC Act is operating effectively and efficiently, this Review has relied on diverse, disparate and, at times, patchy sources of information as well as the knowledge of contributors. The lack of a data-driven, contemporary and authoritative source of information to assess the performance of the Act provides clear evidence of a failure in monitoring, evaluation and reporting. In modern public policy, this is unacceptable.

11.2 Recommended reforms for monitoring and evaluation of the EPBC Act

11.2.1 A specific monitoring and evaluation framework for the EPBC Act

Effective monitoring and reporting on environmental outcomes is fundamental to the effective implementation of the reforms recommended by the Review.

A comprehensive and coherent monitoring and evaluation framework is needed to track whether the environmental outcomes articulated in the National Environmental Standards are being achieved. This is distinct from the role of the Environment Assurance Commissioner (EAC), who is responsible for auditing whether the Standards are being adhered to by governments.

This framework will enable several key questions to be answered:

- Is the EPBC Act achieving its intended outcomes?
- Is the EPBC Act operating efficiently?
- Is there a need to adjust the National Environmental Standards and other settings across the EPBC Act to deliver the intended outcomes?

To ensure commitment, accountability and longevity, the requirement for the framework should be established in legislation. To support the implementation of the framework, Standards will need to set clear expectations for monitoring, evaluation and reporting across the EPBC Act.

The framework should specify:

- the key outcomes to be measured, noting that the outcomes and objectives of the National Environmental Standards for MNES provide a key basis for this
- the spatial and temporal scale at which outcomes should be measured and the timing and processes for reporting and identifying management responses at the different levels of operation (regulator, MNES and project level)

- the logic to link the monitoring and evaluation of the various parts of the EPBC Act to agreed, high-level outcomes
- a set of key indicators to be used across the Act's operations to support tracking of performance against outcomes (including proxies and surrogates as needed) to be aligned with the system of environmental-economic accounts and linked to the designated National Environmental Information Assets (Chapter 10)
- the scope and expectations for data collection and monitoring, evaluation and reporting required at the different levels and for different activities and plans, considering the potential impact and risk of the relevant activities
- the long-term monitoring required to ensure the baseline and trend information is available to consider progress against the indicators and support predictive ecosystem modelling (Chapter 10).

The reforms recommended by this Review, particularly the establishment of National Environmental Standards for MNES and data and information reform, provide a solid foundation for the development of a monitoring and evaluation framework for the EPBC Act as a whole. The monitoring and evaluation framework will influence how the delivery of the national environmental data and information supply chain is prioritised (Chapter 10).

Reflecting the core Commonwealth environmental responsibilities, the framework should be organised around the MNES. A fundamental part of the framework will be a monitoring and evaluation plan for each National Environmental Standard for MNES. This plan will set triggers and thresholds for proactive interventions to prevent environmental harm and identify adjustments to the management settings if these thresholds are breached (Appendix B).

An overarching framework will enable the Commonwealth to draw upon existing monitoring and reporting efforts, including those done by others for their own accountabilities. Where possible, the framework should be developed collaboratively and draw on existing monitoring and reporting systems and standards. Examples include the long-term monitoring framework for the Regional Land Partnerships Program (Capon et al. 2020), the indicators identified in the national State of the Environment report, the national environmental-economic accounts and established monitoring approaches such as the Reef 2050 Long-term Sustainability Plan (Commonwealth of Australia 2018).

A clear framework enables the Commonwealth to set clear expectations for the monitoring and reporting activities that it requires of others, so that this can be coherently aggregated and synthesised. It will also ensure that duplication is minimised, and that new monitoring activities fill genuine gaps.

The Ecologically Sustainable Development (ESD) Committee (Chapter 4) should be responsible for developing the monitoring and evaluation framework and establishing the baseline from which future performance against the National Environmental Standards for MNES can be properly measured. The ESD Committee will be responsible for:

- preparing and maintaining the monitoring and evaluation framework for the EPBC Act, to be approved by the Environment Minister
- delivering a strategy to identify and deliver the long-term, systematic monitoring required to understand trend and condition of MNES and the attribution of changes to relevant causes
- preparing, or delegating responsibility for preparing, monitoring and evaluation plans to align with each of the National Environmental Standards for MNES, to be approved by the Environment Minister (Appendix B)
- reviewing and providing advice to the Environment Minister on the National Environmental Standard for environmental monitoring and evaluation of outcomes (section 11.2.2)
- delivering an annual statement to the Environment Minister on environmental performance under the EPBC Act (section 11.2.3)
- working with the national environmental information supply chain custodian to ensure monitoring and evaluation data needs are part of the information supply chain (Chapter 10)
- publishing performance statements and ensuring the data that underpin them are available and accessible, consistent with the National Environmental Standard for data and information (Appendix B)
- delivering guidance and associated technical standards across the breadth of the EPBC Act monitoring and evaluation framework.

Alongside the review of environmental outcomes, the recommended Environment Assurance Commissioner (EAC) will provide confidence that decision-makers, including the Environment Minister and accredited parties, are properly implementing their arrangements, commitments and making correct decisions.

A comprehensive framework backed by the systems needed to support its implementation will mean the next review of the EPBC Act will start with a comprehensive evidence base on which judgements can be made.

11.2.2 A National Environmental Standard for environmental monitoring and evaluation of outcomes

Early work to develop a monitoring and evaluation framework for the EPBC Act should explore to what extent requirements for monitoring and evaluation at the different levels of operation should be embedded in the legislation. This process should identify opportunities to streamline and simplify how monitoring and reporting requirements are captured in the EPBC Act and across the recommended suite of National Environmental Standards (Appendix B).

A National Environmental Standard for environmental monitoring and evaluation of outcomes will ensure that all parties understand their obligations to monitor, evaluate, report on and review their activities in a way that is consistent with, and contributes to, the overarching framework. It will simplify communication of requirements and support the implementation of the monitoring and evaluation framework by enabling timely and consistent updates. The National Environmental Standard for environmental monitoring and evaluation of outcomes should align with aspects of other National Environmental Standards, such as the monitoring and reporting section of the recommended overarching National Environmental Standards for MNES (Appendix B), so that the full set of Standards complement each other.

A National Environmental Standard for environmental monitoring and evaluation of outcomes would:

- ensure timely information and response to state and trends, pressures and threats to matters protected by the EPBC Act, and support evaluation of whether the activities under the Act are achieving its outcomes
- apply to all parties responsible for activities relevant to the EPBC Act's outcomes at a range of scales, including individual projects and regional plans, and State, Territory and Commonwealth legislation and policies implemented or accredited under the EPBC Act
- require each party to prepare, maintain and implement a monitoring and evaluation plan consistent with the monitoring and evaluation framework for the EPBC Act, adequately resource this plan and publish it online.

Consistency with the National Environmental Standard for environmental monitoring and evaluation of outcomes should be a requirement for accreditation, where this is relevant. This requirement should include preparing clear, accessible guidance material on how the Standards apply to regulated parties.

Each monitoring and evaluation plan should:

- be appropriately tailored to the potential risk and impact of the activity
- be consistent with the plans prepared for each MNES, as they are relevant to the responsibility and activities of that party, including outlining the data to be collected
- establish a process that provides confidence in the timely detection of 'early warning signs' and approaching of thresholds that may compromise environmental outcomes and identify the potential management responses if thresholds are approached
- be consistent with the National Environmental Standard for Indigenous engagement and participation in decision-making and reflect a collaborative development process with relevant stakeholders, including experts on MNES, the regulated community, community to be impacted, and Indigenous Australians.

All parties with a monitoring and evaluation plan should publish monitoring results, analyses, evaluation against indicators and thresholds online annually in a consistent and easily accessible way. Data, information and analyses on which the plan is based should be provided and made public, consistent with the National Environmental Standard for data and information, in a time frame sufficient to support aggregated reporting on MNES and EPBC Act outcomes.

11.2.3 Transparent and independent reporting on EPBC Act environmental outcomes

In line with the monitoring and evaluation framework for the EPBC Act, annual reporting on the environmental outcomes achieved through operation of the Act, and the efficiency of achieving those outcomes, should be enhanced. The ESD Committee should be assigned this responsibility, in line with their role in preparing and advising on the EPBC Act monitoring and evaluation framework.

The ESD Committee should consolidate reporting inputs from across the EPBC Act's operations to prepare an annual statement for the Environment Minister on environmental performance under the Act.

The statement should consider the achievement of the outcomes as set out in the National Environmental Standards for MNES. When the outcomes have not been achieved, the statement should include whether any thresholds are being approached, significant changes from the previous year, and identify necessary adjustments to the Standards or proactive management actions as required. The annual statement should be publicly available, with information provided in a transparent, searchable and easy-to-understand way.

These statements will support a regular check of whether particular activities, management activities and different policy levers are leading to certain outcomes, and will allow adjustments to be made if things are going off track. Regular reporting provides the opportunity for the Commonwealth to adjust the settings – for example, by revising the National Environmental Standards.

Recommendation 33 To monitor and evaluate the effectiveness of the EPBC Act the Commonwealth should immediately:

a) establish a National Environmental Standard for environmental monitoring and evaluation of outcomes to ensure that all parties understand their obligations to monitor, evaluate, report on and review their activities.

b) assign the Ecologically Sustainable Development Committee responsibility for the oversight and management of monitoring, evaluating and reporting on the outcomes of the Act. Immediate priorities of the Ecologically Sustainable Development Committee should be developing a monitoring and evaluation framework and preparing monitoring and evaluation plans for the National Environmental Standards for MNES.

Recommendation 34 In the second tranche of reforms, the EPBC Act should be amended to require formal monitoring, evaluation and reporting on the effectiveness of the Act in achieving its outcomes. Specifically, amendments should include requirements to:

a) deliver a comprehensive and coherent monitoring and evaluation framework that includes appropriate mechanisms for embedding the framework including governance

b) require a long-term strategy to identify and achieve systematic monitoring required to understand the trend and condition of MNES

c) deliver an annual statement by the Ecologically Sustainable Development Committee to the Environment Minister and the Environment Assurance Commissioner. The statement should evaluate environmental performance under the Act, how the outcomes for MNES are tracking, and make recommendations for adjustments as required

11.3 Monitoring and evaluation of Australia's environmental management system is fragmented

11.3.1 The environment and its management are inherently complex

The EPBC Act is only one 'lever' used by governments in Australia to manage the national environment. The problems observed in the monitoring and evaluation of the EPBC Act are equally relevant to the monitoring and evaluation of Australia's broader environmental management system.

The management of Australia's environment is a shared responsibility between the Commonwealth and the States and Territories, and jurisdictions work in partnership with the community and the private sector (Chapter 1). Many different organisations are involved at different levels, with different purposes, obligations, accountabilities and methods. Natural variability, including climate variability, and lengthy time lags add a further challenge to understanding the link between human interventions and observed changes. The environment is clearly in decline, and the Commonwealth, States and Territories are able to 'pass the buck' meaning no one is accountable.

The Commonwealth has a clear leadership and stewardship role in maintaining a healthy national environment and an overarching responsibility to monitor and report on the national environment to meet its international obligations. The 1992 Intergovernmental Agreement on the Environment (CoAG 1992) recognises that the Commonwealth has a particular interest in facilitating the effective and efficient coordination of nature conservation across all jurisdictions. The Agreement identifies the need for a national strategy, prepared at the Commonwealth level, to set outcomes and goals and the allocation of tasks to all States and the Commonwealth, and monitoring and reporting on the achievement of those outcomes and goals.

To report at the national level, the Commonwealth must synthesise data and input from many activities led by multiple layers of government and non-government organisations. Data collected from the various programs and jurisdictions must be synthesised and tailored to the reporting needs of various international agreements, which may differ in timing, expectation and methodology. This includes regular reporting on implementation of the United Nations Convention on Biological Diversity (Box 38), the Convention on the Conservation of Migratory Species, the Sustainable Development Goals, World Heritage properties, and others.

Box 38 Australia's biodiversity strategies – a complex reporting challenge

Since the EPBC Act commenced 2 decades ago, a consistent series of strategies have intended to outline how Australia's environment is being managed, partly to fulfil international reporting obligations.

Despite these strategies, the environment has continued to decline (Chapter 1) and there have been minimal tangible signs of success at the national level from having the strategies in place. Considering the shortcomings in some of these plans is beneficial to gain insights into best approaches for monitoring, evaluation and reporting in the future.

Reporting on progress towards Australia's Biodiversity Conservation Strategy 2010–2030 (the Biodiversity Strategy) is a good example of the range of challenges involved in aggregating information against national and international environmental priorities.

The Biodiversity Strategy was developed as Australia's principal instrument for implementing the United Nations Convention on Biological Diversity. The targets in the Biodiversity Strategy underpinned the latest Sixth National Report to the Convention on Biological Diversity, published in March 2020.

Continued next page

Box 38 (continued)

The sixth national report describes progress against a confusing array of targets and measures, taking a largely qualitative and activity-based approach. It reports on the huge range of activities occurring across the country that contribute towards biodiversity conservation, and demonstrates the significant effort involved in capturing the disparate and fragmented sources of information. While 'ticking the box' for the reporting requirement, the report does not provide an update that is meaningful or accessible to the community.

The 2010 Biodiversity Strategy had some strong features, including a 20-year outlook, 5-yearly reviews and a target to deliver a new long-term national biodiversity monitoring and reporting system.

The first 5-year review of the Biodiversity Strategy in 2016 identified several challenges to tracking progress, including a lack of national datasets to provide baselines to measure progress, a lack of accountability and enduring governance, and unclear expectations for implementation at multiple levels.

The target to establish a national long-term biodiversity monitoring and reporting system was not achieved within the intended time frame, influenced by the lack of a plan for implementation and adequate resourcing.

The next iteration of the national plan, Australia's Strategy for Nature, was finalised in November 2019 and drew on the recommendations of the 5-year review of the Biodiversity Strategy. A much simpler document, which reports on the new strategy, will be streamlined and made more accessible by the 'Australia's Nature Hub' website. However, whether this approach will realise the intended benefits has yet to be demonstrated, and there is still no comprehensive monitoring and evaluation framework to underpin it.

For more information, see the Australia's biodiversity strategies further reading at the end of the report.

Some of the monitoring and evaluation approaches across the national environmental system are strong and have benefited from decades of investment and effort (Box 39), others are emerging and some, like many under the EPBC Act, are immature. The mixed responsibilities and obligations for heritage management in Australia mean that a variety of different monitoring methodologies are used.

Box 39 Examples of environmental monitoring, evaluation and reporting

The Reef 2050 Long-term Sustainability Plan provides the overarching strategy for the Great Barrier Reef, developed by the Australian and Queensland governments and partners (Commonwealth of Australia 2018). It is underpinned by a funded, coordinated and integrated monitoring, modelling and reporting program to support an adaptive management approach (GBRMPA n.d.). It guides the coordination and alignment of existing long-term monitoring programs in order to capitalise on existing investment and avoid duplication. It also informs annual report cards and the Great Barrier Reef Marine Park Authority's 5-yearly outlook reports.

The Australian Government's Regional Land Partnerships program has a long-term monitoring framework for projects, which builds on improved practices for collecting and storing information on on-ground activities under previous programs. The current work has a greater emphasis on processes to support monitoring and evaluation of ecological outcomes at the project and program level, with an aim to promote more robust, long-term ecological modelling and evaluation more broadly (Capon et al. 2020).

11.3.2 Monitoring and reporting efforts are inconsistent and siloed

No cohesive mechanism brings the various national and jurisdictional reporting efforts together to present a picture of the performance of our national system of environmental management.

National and international reporting on the environment involves high-cost efforts to gather and analyse data each reporting period. Strategies come and go, and the lack of consistent, long-term measures means that the outcomes and focus of strategies are influenced by the priorities of the day. The reporting effort does not tell a coherent story of how things are changing over time.

Several State and Territory Governments produce State of the Environment reports, but there is limited consistency between the reports due to differing objectives, monitoring methodologies and reporting time frames.

The format and approach to international reports are largely dictated by the relevant international body. There is currently little domestic alignment, which leads to repeated information collection efforts across multiple agencies and jurisdictions, and bespoke approaches and methodologies. Reports are largely delivered as static documents with limited links to the underlying data, reducing the scope for further exploration and re-use of the information.

The need to improve is recognised, and changes are being gradually implemented across a range of aspects. Recent work on Australia's Sustainable Development Goals reporting platform aims to provide a single point of access to understand Australia's progress against the goals, links to the underlying data, and minimise duplication of reporting efforts (DFAT n.d). As part of the development of the 2021 State of the Environment report, pragmatic approaches to better align environmental reports across international, national and sub-national levels are being explored with States and Territories, including the potential to align with the Sustainable Development Goals.

However, these efforts only grapple with parts of the overall effort required to move towards more transparent, repeatable and effective reporting and review at the national level. They remain relatively isolated and are not integrated with specific reporting requirements in the EPBC Act to track delivery of outcomes for MNES.

Consistent across all reporting efforts is the lack of a consolidated information base and time-series monitoring information. This is a major impediment to evaluating the effectiveness of our environmental management activities. In Australia, time-series information that shows trends and patterns over time is particularly limited. An understanding of long-term trends and the effectiveness of interventions requires long-term (decadal-scale) continuity and consistency in monitoring.

Environmental-economic accounts (EEA) have continued to be widely acknowledged in strategies, reports and by stakeholders as a mechanism to provide a cohesive approach to consistent national monitoring and reporting on the environment and to better describe the relationship between the environment and the economy. A system of EEAs could support the establishment of baseline information and monitoring of change and be linked to state of the environment reporting. Where they are linked to economic statistics, environmental-economic accounts can help mainstream consideration of the value of the environment in broader policies and decisions – an aspect that is currently done poorly and inconsistently.

Work on a system of national EEAs has been led by the Australian Bureau of Statistics and the Department, but uptake has been slow (Box 40). The EEAs have failed to be widely applied in public policy and reporting in Australia. Those that have been produced have seen limited, if any, use in decision-making. They also haven't provided the envisaged overarching framework and structure to underpin consistent reporting. For example, they have yet to be meaningfully incorporated into State of the Environment reporting at the State and Territory or Commonwealth level, although some jurisdictions (such as the ACT) have made some progress in this area. Because the development of the accounts has largely been undertaken in isolation of other environmental information initiatives, the work has not led to broader improvements in the collection and management of environmental information.

The involvement of the Australian Bureau of Statistics in the accounts development provides some long-term stability (Box 40) but, unless there is a reason to drive their use or uptake, the short-term nature of program funding means they are unlikely to deliver a long-term solution.

Box 40 Progress on a system of environmental-economic accounting

Environmental-economic accounting is a framework for organising statistical information to help decision-makers better understand how the economy and the environment interact. The importance of the environment and its contribution to our economic and social wellbeing is often overlooked because it is not fully reflected in traditional financial accounting methods, which have developed and improved over decades.

The ultimate outcomes of a national system of environmental-economic accounts include that:

- policy and decisions by government, business and community take into account the benefits of a healthy environment
- decision-makers balance social, economic and environmental outcomes
- return on investment into the environment can be demonstrated
- information on the condition and value of environmental assets is fully integrated into measures of social and economic activity.

In practice, EEA brings together information on the environment and how it is changing over time in a consistent way that can be easily integrated with social and economic data. The common national approach to EEA agreed as part of the 2018 National Strategy and Action Plan (the EEA Strategy) will adopt the internationally agreed System of Environmental-Economic Accounting (SEEA) framework, which follows a similar accounting structure to the System of National Accounts that underpins national economic reporting. It starts by classifying and measuring the extent of environmental assets, then considers the condition or health of the asset and the range of goods and services that the asset provides. The values of those services are estimated based on market transactions or techniques to assess non-market value.

Internationally, an Experimental Ecosystem Accounting framework has been developed to complement the central SEEA framework. Ecosystem accounting is a subset of environmental-economic accounting that looks at ecosystem extent, condition, services and monetary value.

Through an environmental-economic accounting approach, the value of a national park may be demonstrated through the income from park entry fees and the value of tourism to the local economy. The park also provides health benefits for physically active park visitors, with a value estimated from avoided health care costs. Other benefits include pollination for local agriculture, water supply and filtration, climate change mitigation, biological diversity and flood protection.

The Australian Bureau of Statistics (ABS) produced a selected set of environmental-economic accounts annually from 2014 to 2019, but has not produced a set in 2020 because the ABS wants to explore refinements that will improve uptake. These annual accounts consider the more transactional aspects of the environment, including consumption and value of water and energy and source of greenhouse gas emissions across the economy. These accounts are missing the ‘bridge’ to link environmental change to social and economic impacts.

The 2018 EEA Strategy aims to improve the policy relevance and use of accounts by setting out a roadmap with intermediate outcomes delivered over 5 years, including improving the consistency of reporting on Australia’s environment and the coordination of, and access to, the data that underpin it. The focus of this work has been on developing methods for valuing the environment as an asset and the services that it provides, including accounting approaches for waste, land, ecosystems and oceans. Ecosystem accounts present environmental, social, cultural and economic information about ecosystems. Several pilot accounts are underway, including an ecosystem account for the Gunbower-Koondrook-Perricoota Forest Icon Site in the Murray–Darling Basin, which is a Ramsar-listed wetland (Mokany et al. 2020).

CSIRO has continued to develop and enhance its modelling capability (Box 34) to support comprehensive, rigorous and regular accounting for changes in the status of biodiversity as a whole at a range of levels, aligned with the international SEEA.

Continued next page

Box 40 (continued)

Despite these efforts, environmental-economic accounts have yet to be mainstreamed and implemented in Commonwealth or jurisdictional-level reporting.

The United Kingdom has made some ground in integrating and applying an environmental accounting approach. Both environmental and natural capital (ecosystem) accounts are released periodically as statistical bulletins. Through an independent Natural Capital Committee, the concepts, terminology and application of natural capital accounting has been embedded in annual reporting on the sustainable use of natural capital, advice to government and guidance for planners, communities, landowners and corporate entities.

For more information see the Environmental-economic accounting further reading at the end of the report.

The complexity of the environment, different approaches across the national system of management, and the huge array of reporting requirements that change over time makes delivering a coordinated strategy for monitoring and evaluation extremely challenging. Inputs to the Review are consistent with other recent work that suggests a strong appetite among stakeholders to improve the culture of environmental monitoring and evaluation, harmonise reporting where possible and improve the knowledge sharing between the different organisations involved.

The lack of an overarching framework to support evidenced-based and adaptive management and optimise our monitoring and reporting effort remains a key shortcoming that needs to be addressed.

11.3.3 The purpose of national State of the Environment reporting is not clear

The national State of the Environment (SoE) report is the established mechanism that seeks to ‘tell the national story’ on Australia’s system of environmental management. Despite recent improvements in the way the national SoE report is presented – as the centrepiece of monitoring and environmental reporting on Australia’s national environmental system – it is dated.

The EPBC Act requires the preparation of the national SoE report every 5 years (Section 516B). Five national SoE reports have been delivered, the first in 1996 and the most recent in 2016. The practice has been for the SoE report to be prepared by a team of independent authors and the approach to each report has been determined by the authors. This has affected the capacity to use the SoE report as the driver for establishing longitudinal datasets to enable a proper understanding of long-term trends.

Although the national SoE report provides an important overview of the state and trend of Australia’s environment, it is an amalgam of insights drawn from disparate sources. It does not generate a consistent data series across reports and is an attempt to report on everything for everyone. As a nation there is no requirement to stop, review and where necessary change course.

Reporting at the national level shows that environmental outcomes are poor, but we have no way to understand the success or failure of various interventions and no formalised process for adaptive management.

The EPBC Act provides no guidance as to the purpose or objective of the national SoE report. Although provision is made for this to be clarified in Regulations, this has never been done. The SoE relies on collating available data and information. Authors have repeatedly highlighted the inadequacy of data and long-term monitoring as a key challenge to effective environmental management. The SoE report’s purpose is not clear and it lacks a coherent framework that supports consistency over time.

National SoE reports provide little insight into the effectiveness of different activities to manage the environment and the government is not required to respond. The timing of the reports is misaligned with the decadal review process, which is the primary mechanism for adaptive management.
The links between SoE reporting and other initiatives, such as the development of national environmental-economic accounts (Box 40), is not clear. This is another demonstration of siloed reporting effort.

11.4 Recommended reforms for monitoring and evaluation of the Australian environmental management system

11.4.1 A framework for reporting on broader environmental outcomes

Currently, assessing the environmental performance of the EPBC Act and the relative effectiveness of the management activities at different levels of government is extremely difficult. Understanding the outcomes from the different 'levers' used by governments to manage the environment is relevant to Reviews such as this one, which present the opportunity to reset the regulatory system more fundamentally.

The Commonwealth has a clear leadership role because the broader framework benefits from national consistency and alignment with its international reporting obligations. A more consistent approach to various national-level reporting efforts that draws on an authoritative, ongoing information base (Chapter 10) could significantly improve the quality of reporting and how environmental management activities are communicated.

A broader monitoring and evaluation framework, developed in collaboration with jurisdictions, is needed to better understand the performance of the different parts of the national environmental management system. The monitoring and evaluation framework for the EPBC Act should be nested within this broader framework. This framework would establish long-term environmental indicators that don't change as priorities change and enable streamlined whole-of-environment reporting. This would better support consistent, repeatable analysis of trends and a greater ability to attribute outcomes to individual management levers or external drivers.

The oversight of the ESD Committee and the environmental information supply chain Custodian to improve reporting on the performance of the EPBC Act will provide a springboard for greater collaboration and alignment in broader national reporting, underpinned by the national environmental information supply chain. In this way, the EPBC Act reforms will provide the foundation to better align monitoring and evaluation across the national environmental management system.

An identical, mirrored approach to environmental reporting between the different jurisdictions would simplify national-level reporting. However, in most cases this would fail to account for natural regional variation and potentially require complex legislative and cultural change. Instead, a transparent and repeatable method to organise, translate and synthesise different national and jurisdictional reporting approaches to align with a given agreed outcome could deliver improvements, rather than 'reinventing the wheel'. A consistent reporting framework across the Commonwealth and jurisdictions would reduce duplicated reporting effort and deliver savings across governments and stakeholders, supporting a 'report once, use many times' approach.

11.4.2 A revamp of national State of the Environment reporting

A revamp of national SoE reporting is required to provide the foundation for Commonwealth leadership on the environment and a springboard for the development of a broader monitoring and evaluation framework. The SoE should be the vehicle through which Australia, as a nation, tells a consistent and clear story on the environment and how it is changing over time, both to itself and to the world.

The national SoE report should continue to be independently prepared, so that judgements are made at arm's length and without fear or favour. This independence should be hard-wired into the EPBC Act.

The report should provide an expert synthesis and assessment of the national environment, which builds on agreed national indicators that stand the test of time. These indicators should include those that support an annual evaluation of the EPBC Act National Environmental Standards for MNES, complement the environmental-economic accounts and, as much as possible, be consistent with international reporting requirements.

As discussed in Chapter 3, government should consider the benefits of separating the delivery and governance of the SoE report, along with other national and international reporting, from the operation and governance of the EPBC Act to reduce complexity and reflect the broader scope of the report beyond biodiversity protection and conservation. For example, New Zealand establishes its environmental reporting requirements in a separate piece of legislation, the *Environmental Reporting Act 2015*.

Pending more significant legislative change, the SoE report should be structured around a nationally agreed evaluation framework, which the data and information collected by many can support. This framework will provide focus and consistency to the reports, while being sufficiently flexible so as not to limit the ability of the report to consider information in new ways or address emerging issues.

The national SoE report should examine the state and trends of Australia's environment and the underlying drivers of these trends, including interventions that have been made and current and emerging pressures. It should provide an outlook for Australia's environment, based on future scenarios.

The SoE will continue to draw on multiple 'lines of evidence' in response to the scope and complexity of the task, but the report should base its approach around the agreed system of national environmental-economic accounts. Once the environmental-economic accounting framework is more mature, the SoE report could also provide an independent assessment of how the environment has been valued in decisions over the previous reporting period, considering any trade-offs made by governments between the environment and economic productivity.

The Commonwealth should be required to formally respond to the national SoE report to identify and address inadequacies and priorities for intervention. This response should be tabled in the Australian Parliament. The Commonwealth should respond in the form of a national plan for the environment, which identifies priority areas for action and the levers that will be used to act. The plan would provide a consolidated, strategic view of how the Commonwealth is holistically delivering environmental management and restoration. The Commonwealth should report on its implementation of the plan annually.

This revamp of the national SoE report requires an ongoing commitment to resourcing and maintaining capacity for national-scale monitoring. Ideally, national SoE reports should be published on a cycle that enables comprehensive input into strategic planning and the statutory reviews of the operation of the EPBC Act. This will support adaptive management – the system should not be 'set and forget'.

The EPBC Act should be amended to set the formal objectives for the national SoE report, ensure its independence, require the Commonwealth to respond and to better align the timing of the report so that it provides contemporary input on environmental outcomes for consideration in the decadal statutory review.

The next State of the Environment report is due to be delivered in 2021. The Commonwealth should provide a formal response to the 2021 report, even if it is not yet a statutory requirement. The 2021 SoE report should also begin embedding and integrating environmental-economic accounting.

11.4.3 Accelerated effort on national environmental-economic accounts

Environmental-economic accounting (EEA) provides a mechanism to underpin consistent ESD reporting across governments (Box 40). The collaborative development of a nationally consistent system will support greater coordination and the capacity to better tell a national-level story.

Efforts to finalise the development of these accounts need to be accelerated so that they can be integrated into public policy.

Continued development of the methodology and maturity of national ecosystem accounts could provide a strong framework to underpin EPBC Act monitoring and reporting. Internationally, approaches are being explored for constructing 'species accounts' and transforming the data they contain into summary statistics that reflect species diversity and are tailored to specific end uses (King et al. 2016).

More effort is required to break down silos and embed the slowly maturing EEA into the implementation of the EPBC Act. EEA can support the implementation of the EPBC Act and the Review's recommended reforms in several ways. They can provide:

- the foundation for State of Environment reporting, as discussed in section 11.4.2, and the monitoring and evaluation framework for the EPBC Act
  - development of ecosystem accounting methodologies should be closely linked to the establishment of the National Environmental Information Assets to inform evaluation of performance against the National Environmental Standards for MNES
- a consistent structure and approach for estimating the change in value of a natural asset (such as a wetland) from the degradation that may occur as the result of an action
- a structured way to assess future changes in the value of environmental assets, aligned with the predictive modelling capability discussed in Chapter 10
- a consistent approach to support the ESD Committee's advice to the Minister, considering all factors of ESD (as discussed in Chapter 4)
  - the ESD Committee may also have a role in providing guidance to decision-makers and proponents on the consistent application of discount rates and time horizons for economic analysis to reflect sustainable development and intergenerational concepts.
- clear metrics of natural capital to support investment in restoration (Chapter 8).

The development of EEAs has lacked a clear national-level policy demand. The multiple areas of this reform package that benefit from a system of EEAs will provide the demand to accelerate their development and application.

As part of the reporting framework for the Act, the Minister should aim to table a set of national EEAs alongside traditional budget reporting. The accounts would include ecosystem accounts and an economic value assigned to environmental services. This would give the accounts more visibility and assist in making more mainstream the consideration of the impact of our actions on our environmental assets with a focus on MNES and the services that they provide.

An initial set of national EEAs, including land, ecosystem and species accounts, should be tabled with the 2021–22 Budget.

This requirement could replace the poorly implemented annual reporting requirement on ESD for Commonwealth agencies, increase accountability and provide further impetus for accelerated development, use and ongoing improvement.

Recommendation 35 The Commonwealth should immediately agree to deliver a published response to the 2021 State of the Environment report. The response should provide a strategic national plan for the environment, including annual reporting on the implementation of the plan.

Recommendation 36 In the second tranche of reform, the EPBC Act should be amended to provide a sound legislative basis for the Commonwealth's national leadership and reporting role including amendments to:

a) set out the purpose of the national State of the Environment report to provide the national story on environmental trends and condition, and require that it be independent, based on a consistent, long-term set of environmental indicators, and align the timing of the report to enable it be used as a contemporary input into the decadal review of the Act

b) require a government response to future State of the Environment reports that should be tabled in the Australian Parliament in the form of a strategic national plan for the environment and annual reports on the implementation of the plan

c) require a set of national environmental-economic accounts to be tabled annually in the Australian Parliament alongside traditional budget reporting.

Recommendation 37 As part of the third tranche of reform, the Commonwealth, in its national leadership role, should build on its own reforms by pursuing harmonisation with States and Territories to streamline national and international reporting by delivering:

a) a national environmental monitoring and evaluation framework, developed in collaboration with jurisdictions, to better understand the performance of the different parts of the national environmental management system

b) a nationally agreed system of environmental-economic accounts to support streamlined environmental reporting. These accounts should be continuously improved over time.

12 The reform pathway

12.1 Fundamental reform is needed

This Review has found compelling evidence that Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The country is not on a trajectory to achieving the fundamental objective of the EPBC Act to protect the environment, conserve biodiversity and ensure that future development is ecologically sustainable. Nor is the Act set up to do so. Iconic places and critical parts of the environment have been compromised and continue to be in decline. This downward trend needs to be slowed through immediate reforms and reversed through longer-term reforms.

The EPBC Act is ineffective and not fit for current or future environmental challenges, and reform is long overdue. The lack of integration of the environmental responsibilities of the States, Territories and the Commonwealth is exacerbated by the construction of the Act and the way it is implemented by governments. Accountability for achieving environmental and heritage outcomes is not clear and investment in the restoration of the environment is inadequate. The way the Act operates results in duplication in regulatory processes, which is inefficient and costly.

Stakeholders do not trust the EPBC Act, and how it is implemented, to deliver outcomes for the environment, business or the community. The Act is dated, ineffective and inefficient. Past attempts at reform have been unsuccessful, and the Act remains largely unchanged from its original form. The inaction of the last two decades is a large part of the reason why the Review recommends such a fundamental reform to the Act and its operation. It is also the reason for the urgency in in which Government should pursue reform.

A commitment to a clear pathway of staged reform, including substantial legislative changes, is required to achieve the improvements. This Review recommends a reform pathway of continuous improvement of the law and its operation – not one to 'set and forget'. This requires ongoing monitoring and evaluation, and adjustments as lessons are learnt and new information and ways of doing things emerge. Stakeholders must be willing to accept reform. This can best be achieved through sensible incremental changes.

If fully realised, the package of 38 recommendations from this Review will ensure Australia's future development needs are achieved in a sustainable way. This reform pathway will deliver long-term economic growth, environmental improvement and the effective protection of Australia's iconic places and heritage for the benefit of current and future generations.

This Review is recommending that National Environmental Standards – underpinned by accreditation and independent oversight and audit – be implemented as the foundation for effective national environmental management. Standards should be supported with regional planning, improved information, strong independent compliance and incentives to encourage restoration.

Immediate legislative changes should be made to start to stabilise the current rate of environmental decline. However, these will not be enough. More fundamental reform of the EPBC Act and a longer-term, staged reform pathway that can adapt over time are also needed.

Effective administration of a regulatory system is not cost-free. The recommended reforms seek to improve the overall efficiency of the system. It is important to consider how to best fund the implementation of a reformed system, including the fair costs that should be recovered from proponents.

- In principle, government should pay for elements that are substantially public benefits (for example, the development of National Environmental Standards).
- Business should pay for those elements of the regulatory system required because they derive private benefits by impacting the environment (for example, assessments and approvals, and compliance).
- Costs should be shared for elements of the regulatory system that have mixed benefits (for example, data and information).

12.2 Staging reform

The Review recommends a pathway of staged reform. Urgent reform, medium-term priorities and long-term action are all required to deliver the comprehensive change that is needed. Not everything can be done straight away, and transition periods will be required. The details of complex policy challenges will take time to work through, to ensure any change to legislation and the administration of the law is set up for success. However, given the urgent concerns identified by this Review, the Australian Government should not wait for everything to be ready.

For the staged reform pathway to work, foundational reforms must commence immediately to amend the EPBC Act and make the National Environmental Standards. Reforms to enable improved data and information, monitoring and planning and restoration should commence immediately and be in place within the next year 2 years (Figure 12).

12.2.1 Immediate steps should be taken to start reform

The Review has recommended that National Environmental Standards be immediately made, with strong Commonwealth oversight by the independent Environment Assurance Commissioner (EAC). For the Standards to work, implementation needs to be supported by the provision of expert advice, transparency of decision-making, access to data and information, strong independent compliance and enforcement, effective monitoring and evaluation, access to justice and investment in restoration. The Review has prepared recommended National Environmental Standards (Appendix B).

The recommended National Environmental Standards should set clear rules for decision-making. These should be immediately finalised as part of a full suite of Standards and adopted by early 2021 to kick-start change.

Pursuit of bilateral agreements with the States and Territories should be underpinned by the National Environmental Standards, and subject to the rigorous oversight of the EAC. This requires an immediate tranche of legislative changes to create legally enforceable Standards and to create the position of Environment Assurance Commissioner.

While it is important that the Commonwealth provides a sound mechanism for willing States and Territories to enter these arrangements, the appetite to do so may vary. Streamlining with States and Territories is not the sole goal of reform.

Immediate amendments to enable National Environmental Standards, and more effective bilateral agreements should be accompanied by those to establish the comprehensive advisory committee structure and the EAC to ensure environmental outcomes are being achieved. An interim national environmental information supply chain custodian should also be appointed during the immediate reform stages.

The process for delivering complex reforms and the mechanisms required to underpin continuous improvement should also commence immediately. This will enable policy development to occur, implementation plans to be finalised and resourcing commitments to be made.

Tranche 1 reforms

Immediately implement priority reforms

Create enforceable National Environmental Standards with stable accreditation settings and independent oversight.

- Amend the Act to establish the National Environmental Standards as Regulations (Recommendation 3). The full suite of National Environmental Standards should be implemented. To do this, the recommended Standards developed by this Review should be adopted and remaining Standards developed as a matter of priority.

- The National Environmental Standards should initially reflect current legal settings and should be applied through new bilateral agreements (Recommendation 14) and as a benchmark for Regional Forest Agreements (RFAs) (Recommendation 15).
- Establish the position of the Environment Assurance Commissioner to deliver oversight and audit functions (Recommendation 23).
- Recast the statutory advisory committees and ensure appropriate secretariat support and resourcing (Recommendation 12).
- Implement a modern suite of compliance and enforcement powers assigned to an independent compliance function in the Commonwealth and through accredited parties – and improve transparency and accountability for the application of these powers (Recommendation 30).
- Repair the EPBC Act to fix inconsistencies, gaps and conflicts (Recommendation 9) and improve durability of the settings for accredited decision-makers (Recommendation 14). Revise the offsets policy (Recommendation 27).

Instigate work on complex enabling reforms

- Examine the feasibility of mechanisms to leverage private-sector investment, to deliver the scale of restoration required for sustainable future development in Australia (Recommendation 28).
- Appoint an interim environmental information supply chain custodian responsible for delivering an information supply chain and ensure it is adequately supported (Recommendation 31). Begin to overhaul the systems needed to capture value from the supply chain.
- Develop monitoring and evaluation plans for each matter of national environmental significance (MNES) (Recommendation 33) to build a framework for monitoring, reporting and evaluating the performance of the Act. Immediately establish environmental and performance baselines to inform future work.
- Continue to improve information supply chains and define National Environmental Information Assets in policy (Recommendation 31). Accelerate the development of national environmental-economic accounts.

Indigenous-specific reforms

- Instigate a review of national-level cultural heritage protections (Recommendation 7) and co-design reforms important to Indigenous Australians.
- Require transparent and respectful consideration of Indigenous knowledge and science in decision-making (Recommendation 5).
- Make an initial National Environmental Standard for Indigenous engagement and participation in decision-making based on the recommended Standard (Recommendation 5), and then further refine this Standard through an Indigenous-led process.
- Work with Indigenous Australians to meet their aspirations to manage their land in partnership with the Commonwealth (Recommendation 8).

12.2.2 Within 12 months, deliver more effective protections and greater efficiency of implementation of the National Environmental Standards and accreditation model

To deliver the reform framework, the work needed to develop and implement the necessary enabling reforms should be finalised within 12 months – including for planning and restoration, transparency, data and information, monitoring and evaluation mechanisms.

Ongoing commitments to invest in the information supply chain are needed to support reform. Reforms should not wait for perfect data to be available, but a process of continuous improvement should be in place by the end of 2021.

The National Environmental Standards should also be refined based on early implementation results. A comprehensive redrafting of the EPBC Act should be undertaken to support the efficient implementation of the recommended Standards-based accreditation model and for Commonwealth-led changes. The National Environmental Standards for MNES should be refined to enable them to deliver the level of environmental protection necessary for the environment to be sustainable (Recommendation 4). A comprehensive program of Commonwealth-funded strategic national and regional plans should commence (Recommendation 26).

Tranche 2 reforms

Make comprehensive amendments to the EPBC Act within 12 months

To deliver more effective and efficient National Environmental Standards, accreditation and decision-making:

- Enable proactive measures to recover, repair and enhance MNES (Recommendation 4).
- Implement robust accreditation arrangements (Recommendation 24) and rationalise Commonwealth assessment pathways (Recommendation 18).
- Enable regional plans and strategic national plans (Recommendation 25).
- Overhaul Parts 3 to 10 of the EPBC Act to support the effective integration of the Standards into decision-making of the Commonwealth or an accredited party (Recommendation 4). Revise the MNES triggers for water and nuclear actions (Recommendation 1) and revise the RFA provisions (Recommendation 15).
- Amend provisions for strategic assessments and remove section 160 of the EPBC Act (Recommendation 16).
- Implement limited merits review (Recommendation 13).

Build on information and data and monitoring and evaluation mechanisms

- Deliver the national environmental information supply chain roadmap and strategy and formalise arrangements for the environmental information supply chain custodian (Recommendation 32).
- Finalise a long-term environmental monitoring strategy and monitoring and evaluation framework, including indicators (Recommendation 34). Formalise the National Environmental Information Assets (Recommendation 32).
- Commit to a strategic plan in the Commonwealth's response to the 2021 State of the Environment report (Recommendation 36) to clarify the long-term purpose of the report and to require tabling of national environmental-economic accounts in the Parliament (Recommendation 36).

12.2.3 Finalise legislative reform

The final phase of reform should complete the full legislative overhaul to efficiently and effectively deliver the new framework.

Tranche 3 reforms

Finalise legislative reform of the EPBC Act by 2022

Finalise the redrafting the EPBC Act to fully modernise it. This should include considering options to restructure or separate the major functions of the Act. Agreed arrangements for joint management of Commonwealth reserves should be formalised.

Overhaul the legislation

- Restructure the EPBC Act to clarify and simplify it (Recommendation 10). Consider separate Acts, including for environmental reporting and parks and reserves.
- Reform major functions, including wildlife trade regulation (Recommendations 20, 21 and 22) and joint management of national parks (Recommendation 8).

Other supporting arrangements

Implement a long-term environmental monitoring strategy and mechanisms to leverage private investment in environmental restoration (Recommendation 28).

12.2.4 Continuous improvement

Work should also commence immediately to embed the processes for continuous improvement including those that ensure:

- the National Environmental Standards and their application are reviewed and improved regularly
- the EPBC Act and associated administration of the Act are reviewed and updated regularly
- there is sustained engagement with Indigenous Australians to codesign reforms that are important to them
- key gaps in the information supply chain are filled and made accessible
- departmental systems are reviewed and improved where needed
- the State of the Environment report is remains aligned with the national monitoring and evaluation framework and national environmental economic accounts.

12.2.5 Updating intergovernmental arrangements

The Commonwealth and the States and Territories will need to better align their regulations and systems if the accreditation approach recommended in this Review is to be fully realised. For the Commonwealth, this means fully implementing a Standards-based accreditation model to facilitate better integration with other legal frameworks. For the States and Territories, adjusting their arrangements to mirror the Commonwealth's means they can take full advantage of an accreditation framework.

The Commonwealth should continue to play a leadership role to ensure that national environmental management is leading Australia toward ecologically sustainable development. The Review recommends the Commonwealth actively pursues the cooperation and coordination of jurisdictions.

Recommendation 38 In the third tranche of reform, the Commonwealth should instigate a refresh of intergovernmental cooperation and coordination to facilitate collaboration with the States and Territories, including:

a) greater consistency and harmonisation of environmental laws

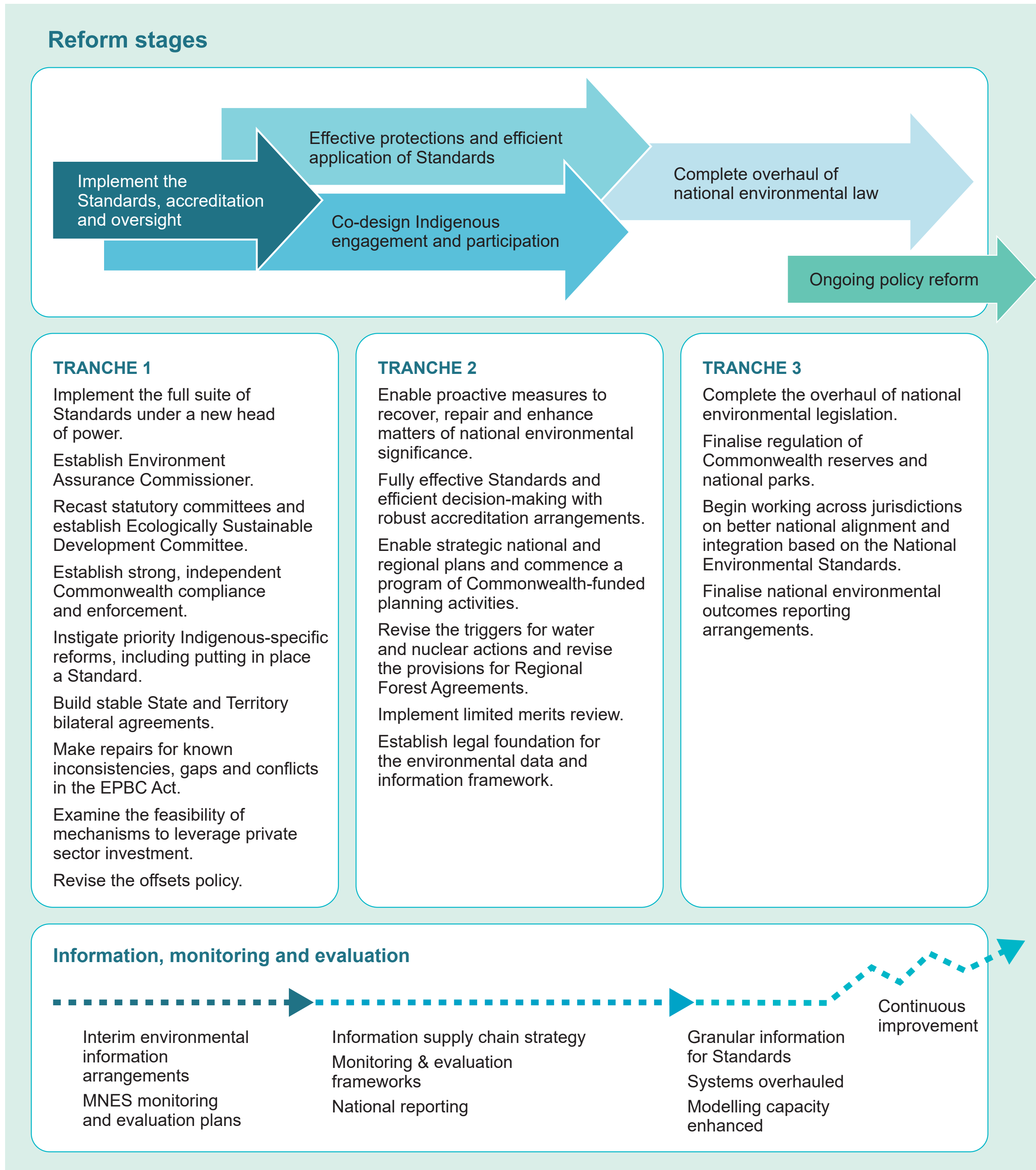
b) finalising a single national list of protected matters to facilitate streamlining under the common assessment method

c) a shared future program of regional planning and strategic national plans

d) leveraging Commonwealth reforms in data and information

e) consolidating monitoring and reporting on environmental outcomes across Australia through the State of the Environment report and other reporting.

Figure 12 Recommended reform pathway



Appendix A: Stakeholders the Reviewer met with

Stakeholders the Reviewer met with (in alphabetical order):

Aboriginal Areas Protection Authority NT
ACT Government departments
Aṉangu Traditional Owners
Association of Mining and Exploration Companies
Australian Academy of Science
Australian Conservation Foundation
Australian Heritage Council
Australian Institute of Aboriginal and Torres Strait Islander Studies
Australian Institute of Marine Science
Australian Land Conservation Alliance
Australian Local Government Association
Australian Marine Conservation Society
Australian Panel of Experts on Environmental Law
Australian Petroleum Production & Exploration Association
Australian Wildlife Conservancy
BHP Billiton
Birdlife Australia
Bush Heritage Australia
Business Council of Australia
Central Land Council
Centre for Biodiversity and Conservation Science, University of Queensland
Chamber of Minerals and Energy, WA
Coalition of Peaks NACCHO
CSIRO
Department of Agriculture, Water and the Environment (including the former Department of Environment and Energy)
Department of Agriculture, Water and the Environment's Environmental Markets Expert Advisory Group
Dr Ian Cresswell, Western Australian Biodiversity Science Institute
Dr Megan Evans, Public Service Research Group, UNSW
Dr Peter Burnett, ANU College of Law
Environmental Defenders Office
Environmental Justice Australia
Geoscience Australia
Glencore Australia Holdings
Great Barrier Reef Marine Park Authority
Greening Australia
Humane Society International
Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mines

Indigenous Advisory Committee
Invasive Species Council
Kakadu Joint Board of Management
Law Council of Australia
Liberal Nationals Party Coalition back bench committee
Minerals Council of Australia
Ministerial Indigenous Heritage Roundtable
Mr Chris Sarra, Director-General, Queensland Department of Aboriginal and Torres Strait Islander Partnerships
National Environmental Law Association
National Environmental Science Program Clean Air and Urban Landscapes
National Environmental Science Program Earth Systems and Climate Change Hub
National Environmental Science Program Marine Biodiversity Hub
National Environmental Science Program Northern Australia Environmental Resources Hub
National Environmental Science Program Threatened Species Recovery Hub
National Environmental Science Program Tropical Water Quality Hub
National Farmers' Federation
National Landcare Network
National Native Title Council
New Hope Group
North Australian Indigenous Land and Sea Management Alliance Ltd
Northern Land Council
Northern Territory Government departments
NRM Regions Australia
NSW Aboriginal Land Council
NSW Government departments
NSW Minerals Council
Office of the National Data Commissioner
Origin Energy Limited
Productivity Commission
Professor Allan Dale, James Cook University
Property Council of Australia
Queensland Government departments
Queensland Resources Council
Rio Tinto
Santos
Senator Rex Patrick
Senator Sarah Hanson-Young
Senex
Senior Officials Group (Meeting of Environment Ministers)
Shell Australia
South Australian Government departments
Tasmanian Government departments
The Hon. Alan Tudge MP
The Hon. Ben Morton MP
The Hon. Katie Allen MP

The Hon. Lily D'Ambrosio (MP Victoria)
The Hon. Lucy Wicks MP
The Hon. Matt Canavan MP
The Hon. Matt Kean MP
The Hon. Steve Dawson MP
The Hon. Sussan Ley MP
The Hon. Terri Butler MP
The Hon. Trent Zimmerman MP
The Nature Conservancy
The Wilderness Society
Threatened Species Scientific Committee
Uluṟu-Kata Tjuṯa Joint Board of Management
Urban Development Institute of Australia
Victorian Aboriginal Heritage Council
Victorian Government departments
Wentworth Group of Concerned Scientists
Western Australian Government departments
Wildlife and Threatened Species Bushfire Recovery Expert Panel (Office of the Threatened Species Commissioner)
Woodside Energy
Wreck Bay Aboriginal Community Council
WWF Australia

Participants in the consultative group

Australian Academy of Science
Australian Conservation Foundation
Australian Petroleum Production and Exploration Association
Business Council of Australia
Coalition of the Peaks NACCHO
Dr Megan Evans, Public Service Research Group, UNSW
Dr Peter Burnett, ANU College of Law
Environment Defenders Office
Humane Society International
Law Council of Australia
Minerals Council of Australia
Mr Peter Yu, Vice President First Nations, Australian National University
National Farmers' Federation
Professor Brendan Wintle, Threatened Species Recovery Hub
Professor Michael Douglas, Northern Australia Environmental Resources Hub
Property Council of Australia
Urban Development Institute of Australia
Wentworth Group of Concerned Scientists
WWF Australia

Experts invited to provide input on the National Environmental Standards for MNES

Australian Fisheries Management Authority
Australian Heritage Council
Australian Institute of Marine Science
Australian Radiation Protection and Nuclear Safety Agency
Australian World Heritage Advisory Committee
Department of Agriculture, Water and the Environment
Great Barrier Reef Marine Park Authority
Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development
Indigenous Advisory Committee
National Environmental Science Program Marine Biodiversity Hub
National Environmental Science Program Threatened Species Recovery Hub
National Environmental Science Program Tropical Water Quality Hub
Threatened Species Scientific Committee

Experts who provided input on the National Environmental Standard for data and information

Australian Academy of Science
Department of Agriculture, Water and the Environment
Dr Peter Burnett, ANU College of Law
Professor Brendan Wintle, Threatened Species Recovery Hub
Professor Rob Vertessy, University of Melbourne
The Western Australian Biodiversity Science Institute
Threatened Species Scientific Committee

Appendix B: Recommended National Environmental Standards

National Environmental Standards describe the outcomes that contribute to effective environmental protection and management as well as the fundamental processes that are needed to support the effective implementation of the EPBC Act. Standards enable consistency and flexibility across decisions and recognise that the overall outcome is best accomplished by the collective achievements of all activities.

The Review recommends that the full suite of National Environmental Standards should be immediately developed and implemented to provide clear rules and improved decision-making. All the Standards are necessary to improve decision-making by the Commonwealth and to provide confidence in agreements with accredited parties.

The full suite of Standards should include:

- matters of national environmental significance
- Commonwealth actions and actions involving Commonwealth land
- transparent processes and robust decisions, including:
  - judicial review
  - community consultation
  - adequate assessment of impacts on MNES – including climate considerations
  - disclosure of emissions profile
  - quality regional planning
- Indigenous engagement and participation in decision-making
- compliance and enforcement
- data and information
- environmental monitoring and evaluation of outcomes
- environmental restoration, including offsets
- wildlife permits and trade.

To accelerate the process, the Review has developed in detail recommended National Environmental Standards for:

- matters of national environmental significance (Appendix B1)
- Indigenous engagement and participation in decision-making (Appendix B2)
- compliance and enforcement (Appendix B3)
- data and information (Appendix B4).

These have been developed and refined following extensive consultation with science, Indigenous, environmental and business stakeholders, and with input from technical experts (Appendix A).

The National Environmental Standards set out in detail in this Appendix should be adopted in full. The remainder of the suite of Standards should be developed without delay to enable the full suite of 9 Standards to be implemented immediately. Standards should underpin accreditation arrangements with States and Territories.

The National Environmental Standards should be read and implemented together. The common intent is that Standards are relevant to all decision-makers operating or accredited under the EPBC Act. Additional requirements for the application of individual Standards are provided in those Standards.

Application of the National Environmental Standards by the Commonwealth Environment Minister

National Environmental Standards should be made and implemented by the Environment Minister.

The collective activities and decisions made by the Environment Minister under the EPBC Act should be consistent with the National Environmental Standards. The Standards are relevant to activities and decisions at all scales, including policies, plans and programs.

This includes decisions on the approval of individual projects or actions, where they trigger the EPBC Act. A decision by the Environment Minister to approve an action under the EPBC Act must not prevent a National Environmental Standard from being met.

In considering the accreditation of the regulatory processes or arrangements of third parties under the EPBC Act, the Environment Minister must be satisfied that the processes or arrangements proposed for accreditation can meet the National Environmental Standards and that the parties assure accountability for the outcomes.

The EPBC Act should provide discretion for the Environment Minister to make a decision that is inconsistent with the National Environmental Standards. The use of this power should be a rare exception, justified in the public interest. When doing so, the Minister should publish a statement of reasons, including reasons and environmental implications of the decision.

Application by third parties following accreditation

The National Environmental Standards enable the outcomes sought through the EPBC Act to be more effectively integrated into broader environmental management responsibilities and activities of others (such as a State, Territory or other Commonwealth agency), so long as they can demonstrate that they can act consistently with the Standards.

The collective activities and decisions of a third party under an accredited regulatory process or arrangement should be consistent with the National Environmental Standards. The Standards are relevant to activities and decisions at all scales, including policies, plans and programs. This includes decisions about the approval or authorisation of individual projects or actions. An accredited party must not allow an activity, such as an individual project, that prevents a Standard from being met.

In limited circumstances, such as where an accredited party believes it is in the national interest to undertake an activity or make a decision that would prevent the party from meeting a National Environmental Standard, the party must refer that activity to the Commonwealth Environment Minister for decision.

Appendix B1: Recommended National Environmental Standards for Matters of National Environmental Significance

National Environmental Standards for matters of national environmental significance

Matters of national environmental significance (MNES) are identified in the EPBC Act. The National Environmental Standards for matters of national environmental significance includes an overarching Standard that relates to all MNES and matter-specific Standards. These elements should be read together and in conjunction with other National Environmental Standards and the existing requirements of the EPBC Act.

The environmental outcomes articulated in the National Environmental Standards are the national intent for the protection and conservation of MNES.

Decisions at all scales and by all parties should work together to protect, conserve and improve outcomes for MNES. Progress towards the environmental outcome will result from the collective achievements of the combination of activities.

Overarching MNES Standard

Element	Description
Environmental Outcome	Matters of national environmental significance are protected and enhanced, and decision-making actively contributes to improvements in their conservation and management.
National Standard	1) Actions, decisions, plans and policies that relate to MNES: a) Are consistent with the **objects of the EPBC Act** and the **principles of ecologically sustainable development** (including the **precautionary principle**) and reflect a **principle of non-regression.** b) Do not have **unacceptable** or **unsustainable** impacts on MNES, having regard to the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. c) Minimise harm to MNES, including employing all reasonable measures to avoid and then to mitigate **significant impacts**, and then lastly apply appropriate **offsets.** d) Are not inconsistent with relevant international agreements, recovery plans, management plans and threat abatement plans, and have regard to and ensure decisions reflect any approved conservation advice where relevant. e) Maintain and improve conservation, recovery and sustainable management, address detrimental **cumulative impacts** and key threatening processes and fill information gaps that impede recovery and appropriate management, including i) use all reasonable efforts to prevent actions contributing to detrimental **cumulative impacts** or exacerbation of **key threatening processes.** f) Are based on the best available information. Data and information should be stored and shared consistent with best practice data and information management.

Element	Description
National Standard cont.	2) Engagement is undertaken with governments, the community, landholders and Indigenous peoples, consistent with the EPBC Act and National Environmental Standards. 3) Monitoring, reporting and evaluation demonstrates compliance with National Environmental Standards.
Monitoring and Reporting	1) A plan must be prepared and implemented to monitor and evaluate the outcomes of actions, decision, plans and policies for each MNES by all parties responsible for applying the National Environmental Standards for MNES. Each monitoring and evaluation plan must: a) address impacts for the relevant MNES, and be designed to understand and track all **cumulative impacts** at the relevant scale (e.g. national, state-wide, regional plan areas or project site), b) cover all actions, activities, decisions, plans, or policies that impact the outcomes for MNES, relevant to the scale, c) establish the baseline, key indicators and targeted outcomes, monitoring activities, evaluation and reporting processes relevant to the protected matter and the activities being conducted, d) be based on the best available evidence, and accord with best practice for data and information management, and other relevant National Environmental Standards and guidelines, e) be over a time frame and area relevant to the potential risk or benefit to the MNES, f) be designed to ensure the state of the MNES and any changes in its state can be quantified, with the power of analysis to detect change in the MNES explicitly identified, and g) identify thresholds of change in the MNES (distribution, abundance, condition, or integrity) at all relevant scales that will trigger specific mitigation or recovery actions. 2) The monitoring plan, results, analyses, evaluation of performance against indicators and thresholds, underpinning data and information on which they are based, must be made publicly available consistent with the EPBC Act and National Environmental Standards, and any relevant conditions of approval or accreditation. 3) Monitoring and evaluation plans must be reviewed and updated every 5 years.
Review	National Environmental Standards should be reviewed and updated regularly, including when there are substantive changes to the EPBC Act or relevant administrative arrangements, or major events that may impact the status of protected matters.

This Standard should be applied in conjunction with all other relevant National Environmental Standards.

Definitions

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Key threatening processes: means a threatening process included in the list referred to in section 183 of the EPBC Act.

Objects of the EPBC Act: see section 3 of the EPBC Act.

Offset: measures that may be used once it has been demonstrated that all reasonable steps have been taken to avoid and minimise impacts, that are provided to compensate, repair or replace an impacted value, including changes to the integrity, quality, condition and/or extent of habitat. Offsets must be consistent with the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time), or an accredited policy relating to offsets of a state or territory. Offsets must be **achievable** and **ecologically feasible**:

- An **offset** is **achievable** where demonstrated scientific knowledge exists on how to restore the habitat with a high confidence of success, and its long-term protection is assured (for example through conservation covenants or conservation agreements), and
- An **offset** is **ecologically feasible** where it can be demonstrated that the species or community can be reliably restored in a timeframe proportionate to effectively address the impact of the action and enough space exists to undertake restoration (not ecologically or tenure constrained).

Principles of ecologically sustainable development (including the **precautionary principle):** see section 3A of the EPBC Act.

Principle of non-regression: this principle seeks to ensure the overall protection of the environment is not diminished over time. It is consistent with the principles of ecologically sustainable development, the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time) and the Australian Government commitment to maintain environmental protections.

Significant impact: a 'significant impact' is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment, and upon the intensity, duration, magnitude and geographic extent of the impacts. All of these factors should be considered when determining whether an action is likely to have a significant impact. See the *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (2013) for more information about assessing the significance of impacts on matters of national environmental significance.

Unacceptable or unsustainable: section 46(3)(c) of the EPBC Act requires that actions approved under a bilateral agreement not have unacceptable or unsustainable impacts on relevant MNES. Whether impacts are unacceptable should be determined with reference to the nature and context of the proposed action, past decisions, and best available information.

Matter-specific Standards

World Heritage

World Heritage properties are cultural and/or natural heritage places considered to have Outstanding Universal Value by the international community. They are properties inscribed on the UNESCO World Heritage List that Australia has committed to protect under the World Heritage Convention for present and future generations.

Element	Description
Environmental Outcome	The **Outstanding Universal Value** of Australia's **World Heritage properties** is identified, protected, conserved, presented and transmitted to future generations.
National Standard	The conservation and management of World Heritage properties is supported by actions, decisions, plans and policies that: 1) Protect and manage the **World Heritage values**, including the **Outstanding Universal Value** and **associated attributes** and conditions of **integrity and/or authenticity** of each **World Heritage property** in accordance with the **World Heritage Management Principles**, and with input from the Australian community, from those with rights or interests in the place, particularly Traditional Owners, and from experts. 2) Ensure the **Outstanding Universal Value** of the property, and associated **attributes** and conditions of **integrity and/or authenticity** are not adversely impacted, taking into account both individual and **cumulative impacts**, including by ensuring that decisions, at a minimum: a) avoid actions within, or that have an impact on, a **World Heritage property**, unless consistent with the **Outstanding Universal Value**(s) of the property. 3) Are not inconsistent with a management plan for the property made in accordance with the EPBC Act. 4) Develop and implement management arrangements that ensure the **Outstanding Universal Value** of the property, and associated **attributes** and conditions of **integrity and/or authenticity** of **World Heritage properties** are conserved and maintained. 5) Monitor and report on the state of the values, attributes and conditions of **World Heritage properties**.
Further Information	International commitments relating to World Heritage: Australia is a signatory to the *Convention for the Protection of the World Cultural and Natural Heritage* (commonly known as the 'World Heritage Convention'). Signatories to the convention agreed to take effective and active measures for the protection, conservation and presentation of the cultural and natural heritage. See also: General information about Australia's listed heritage places Australian Heritage Database UNESCO World Heritage List – Australian properties

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Attributes: attributes are the tangible or intangible elements, aspects or processes of a property though which its Outstanding Universal Value is manifest. Attributes should be understood in accordance with the use of the term in the *World Heritage Operational Guidelines* (2019).

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Integrity and authenticity: integrity and authenticity should be understood in accordance with the definitions at paragraphs 79–95 of the *World Heritage Operational Guidelines* (2019). Adverse impacts on integrity and authenticity may include detrimental change to the integrity of key habitats, threatened species or ecosystem processes which are attributes of a World Heritage property, and detrimental change to the ability of a site to authentically express its cultural values through its attributes, such as Traditional Owners' expression of culture through Country.

Outstanding Universal Value: Outstanding Universal Value should be understood in accordance with paragraphs 49–53 and 77–78 of the *World Heritage Operational Guidelines* (2019), and includes the criteria under which the property is inscribed on the World Heritage List, the statements of authenticity and/or integrity, and the statement of protection and management. These may include natural, human or cultural values related to listed property.

World Heritage Management principles: defined in regulation 10.01 of the EPBC Regulations.

World Heritage property: defined at section 13 of the EPBC Act. Includes the areas within the boundary of the listed property. Where properties have a buffer zone these zones should be taken into account.

World Heritage Values: defined at section 12(3) of the EPBC Act.

National Heritage

National Heritage places comprise natural, historic and Indigenous places of outstanding heritage significance to Australia. National Heritage places also support Australia's commitments under international conventions.

Element	Description
Environmental Outcome	The **National Heritage values** of Australia's National Heritage places are identified, protected, conserved, presented and transmitted to future generations.
National Standard	The conservation and management of National Heritage places is supported by actions, decisions, plans and policies that: 1) Protect and manage the **National Heritage values** of a place in accordance with the **National Heritage Management Principles**, and with input from the Australian community, from those with rights or interests in the place, particularly Traditional Owners, and from experts. 2) Ensure the **National Heritage values** of a place are not adversely impacted, taking into account both individual and **cumulative impacts**, including by ensuring that decisions, at a minimum: a) avoid actions within, or that have an impact on, a **National Heritage place**, unless consistent with its **National Heritage values** of the place. 3) Are not inconsistent with a management plan for the place made in accordance with the EPBC Act. 4) Develop and implement management arrangements that ensure the **National Heritage values** of **National Heritage places** are conserved and maintained. 5) Monitor and report on the state of the **National Heritage values** of **National Heritage places.**
Further Information	Australian Heritage Database General information about Australia's listed heritage places

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

National Heritage place: defined at section 324C(3) of the EPBC Act. Includes the areas within the boundary of the listed place.

National Heritage Management Principles: defined in regulation 10.01E of the EPBC Regulations.

National Heritage values: defined at section 324D of the EPBC Act. Identified in the gazetted National Heritage listing instrument and are published on the Australian Heritage Database. These may include natural, human or cultural values related to listed place.

Wetlands of International Importance (Ramsar wetlands)

Wetlands of international importance are globally recognised important wetlands and listed under the Convention on Wetlands of International Importance (Ramsar Convention), or declared by the Minister to be a declared Ramsar wetland under section 16 of the EPBC Act.

Element	Description
Environmental Outcome	The **ecological character** of each **Ramsar wetland** is maintained through the conservation, management and wise use of the wetland, having regard to ecologically sustainable development.
National Standard	The conservation, management and wise use of **Ramsar wetlands** is supported by actions, decisions, plans and policies that: 1) Protect and manage the **ecological character** of **Ramsar wetlands** in accordance with the **Ramsar Management Principles**, and with input from the Australian community, from those with rights or interests in the place, particularly Traditional Owners, and from experts. 2) Prevent **detrimental change** to the **ecological character** of a **Ramsar wetland**, taking into account both individual and **cumulative impacts**, including by ensuring that decisions, at a minimum: a) avoid actions within, or that have an impact on the **ecological character** of, a **Ramsar wetland**, unless they promote the conservation, management and/or wise and sustainable use of the wetland. 3) Develop and implement management arrangements that ensure the **ecological character** of **Ramsar wetlands** are conserved and maintained. 4) Monitor and report on the state of the ecological character of Ramsar wetlands.
Further Information	International commitments relating to wetlands Australia is a signatory to the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the 'Ramsar Convention'). Signatories to the convention agreed to halt and, where possible, reverse, the worldwide loss of wetlands and to conserve those that remain through wise use and management. See also: General wetlands information Australian wetlands database – information about Australia's Ramsar wetlands, including location and boundary maps, Ramsar Information Sheets and Ecological Character Descriptions. Australian National Guidelines for Ramsar Wetlands

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Detrimental change: a change which results in:

- areas of the wetland being destroyed or substantially modified
- a substantial and measurable change in the hydrological regime of the wetland, for example, a substantial change to the volume, timing, duration and frequency of ground and surface water flows to and within the wetland
- the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependent upon the wetland being seriously affected
- a substantial and measurable change in the water quality of the wetland – for example, a substantial change in the level of salinity, pollutants, or nutrients in the wetland, or water temperature which may adversely impact on biodiversity, ecological integrity, social amenity or human health, or
- an invasive species that is harmful to the ecological character of the wetland being established (or an existing invasive species being spread) in the wetland.

See *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (2013).

Ecological character: the combination of the ecosystem components, processes and benefits/services that characterise a wetland at a given point in time (Ramsar Resolution IX.1 Annex A para 15). The ecological character of each Australian Ramsar wetland is as described in its Ecological Character Description and Ramsar Information Sheet.

The Australian wetlands database provides information about Australia's Ramsar wetlands. Some Ramsar wetlands have catchments that cross state or territory borders. Catchment mapping is available.

Ramsar Management Principles: defined in regulation 10.02 of the EPBC Regulations.

Ramsar wetland(s): includes the areas within the boundary of the listed wetland, and its buffer zone (as relevant). The Australian wetlands database provides information about location and boundaries of Australia's Ramsar wetlands. Some Ramsar wetlands have catchments that cross state or territory borders. Catchment mapping is available.

Threatened Species and Ecological Communities

Threatened species and ecological communities are listed under section 178 of the EPBC Act, following a scientific assessment of their threat status against a set of criteria in the EPBC Act. The Australian Government and all states and territories have agreed to a common assessment method for the assessment and listing of threatened species.

Element	Description
Environmental Outcome	Threatened species and ecological communities are protected, conserved, managed and recovered over time.
National Standard	The conservation and recovery of each **listed threatened species and ecological community** is supported by actions, decisions, plans and policies that: 1) Are not inconsistent with relevant **recovery plans** and **threat abatement plans**. 2) Have regard to relevant **conservation advices**, and ensure decisions reflect that advice. 3) Consider **best available information** and data to ascertain areas of **habitat** (including **habitat critical to survival**), **important populations** and **condition thresholds**. 4) Employ all reasonable measures to avoid and then to mitigate impacts to **listed threatened species and ecological communities**. 5) Employ **achievable** and **ecologically feasible offsets** to counterbalance residual significant impacts, only after all reasonable steps to avoid and mitigate impacts are taken. 6) Support the rights of Indigenous Australians to practice customary activities and traditions, consistent with **section 211 of the** *Native Title Act 1993*. 7) Promote the survival and/or enhance the conservation status of **listed threatened species and ecological communities**, taking into account both individual and **cumulative impacts**, by: a) Maintaining and improving **habitat** of all **listed threatened species**, including by ensuring that actions and decisions, at a minimum: i) avoid adverse impacts to the extent or quality of **habitat critical to the survival** of the species, and ii) ensure **no net reduction** of **habitat** of a **listed threatened species**. b) Maintaining and improving **population** numbers for all **listed threatened species**, including by ensuring that actions and decisions, at a minimum: i) avoid adverse impacts that are likely to result in the loss of individuals or **populations** of **highly restricted and small and declining species**, and ii) ensure **no net reduction** in the **population** of a **listed critically endangered or endangered species** or **important population** of a vulnerable species.

Element	Description
National Standard cont.	c) Maintaining and improving the extent and condition of **listed endangered and critically endangered ecological communities**, including by ensuring that actions and decisions, at a minimum: i) avoid adverse impacts to the extent or quality of areas of **highly restricted and sensitive ecological communities** ii) avoid adverse impacts to areas of **listed ecological communities** that meet high **condition thresholds and classes**, and iii) ensure **no net reduction** in the extent or condition of a **listed endangered or critically endangered** ecological community. d) Not exacerbating **key threats** to the **listed threatened species or ecological community**. e) Developing and implementing management arrangements that address **cumulative impacts** and key threats and support the recovery of **listed threatened species and ecological communities**. Requirements in Commonwealth areas: 8) Do not kill, injure, take, trade, keep or move a **listed threatened species or ecological community**, except where a **permit** is issued.
Further Information	International commitments relating to threatened species and ecological communities: Australia is a signatory to the following international conventions that aim to protect, conserve and restore biological diversity and natural resources: • *Convention on Biological Diversity (Biodiversity Convention)* • *Convention on Conservation of Nature in the South Pacific (Apia Convention)* • *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).* See also: The Species Profiles and Threats (SPRAT) database contains links to Recovery Plans and Conservation Advices as well as an interactive map showing the species modelled habitat and other important information sources like listing advices and Threat Abatement Plans.

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Best available information: is the best and most up to date information available for species and communities that provide important context for consideration in actions, decisions, plans and policies and which may not be reflected in all statutory documents. This may be through research, monitoring, unpublished recent listing assessments and/or conservation action implemented as part of statutory plans, or population or habitat impacts which arise from unexpected events that change a species situation in the wild for example; Wildfires, disease outbreaks, drought, cyclones or contamination events.

Condition Thresholds and Classes: most Ecological Community listings since 2007 specify condition thresholds and classes. These are intended to focus national legal protection on patches or occurrences of a TEC that are functional, relatively natural and in relatively good condition. They specify a minimum condition and higher condition classes to understand relative importance of a patch, and to guide management and goals for restoration.

Conservation advice: an approved conservation advice is a document prepared in accordance with section 266B(2) of the EPBC Act.

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Habitat: the biophysical medium or media: (a) occupied (continuously, periodically or occasionally) by an organism or group of organisms; and (b) once occupied (continuously, periodically or occasionally) by an organism or group of organisms and into which organisms of that kind have the potential to be introduced, and (c) biophysical media projected to become suitable for occupation under future climates if specified in the Conservation Advice.

Habitat critical to the survival of a species or ecological community: habitat identified in a recovery plan or conservation advice for the species or ecological community as habitat critical for that species or ecological community, or habitat listed on the Register of Critical Habitat maintained by the Minister under the EPBC Act. Where no Recovery Plan is in force under the EPBC Act, habitat critical to the survival includes areas that are demonstrated to be necessary for a listed threatened species or ecological community:

- for activities such as foraging, breeding, roosting, or dispersal,
- for the long-term maintenance of the species or ecological community (including the maintenance of species essential to the survival of the species or ecological community, such as pollinators),
- to maintain genetic diversity and long-term evolutionary development, or
- for the reintroduction of populations or recovery of the species or ecological community.

This definition is consistent with the *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (2013).

Highly restricted and small and declining species: critically endangered or endangered listed species with distributions, population sizes and decline which is highly precarious to their survival as demonstrated by species that meet Criteria B, C or D of the Common Assessment Method.

Highly restricted and sensitive ecological communities: ecosystems that meet the criteria for Critically Endangered or Endangered under Criterion 2 of regulation 7.02 of the EPBC Regulation because their geographic distribution is very restricted or restricted and the nature of its distribution makes it likely that the action of a threatening process could cause it to be lost in the near or immediate future.

Important population: a population that is necessary for a species' long-term survival and recovery. This may include populations identified as such in Conservation Advices and Recovery Plans, and/or that are demonstrated to be:

- key source populations either for breeding or dispersal
- populations that are necessary for maintaining genetic diversity, and/or
- populations that are near the limit of the species' range.

This definition is consistent with the *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (2013).

Key threats: the threats to a species or ecological community identified in a Recovery Plan, Key Threatening Process or Threat Abatement Plan as key threats to that species or community.

Listed threatened, endangered or critically endangered species or ecological community: should be understood with reference to section 528 of the EPBC Act.

No net reduction: the net outcome of activities to avoid, mitigate and offset impacts as a result of an action, measured against a stipulated baseline. See *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time) for further information.

Offset: measures that may be used once it has been demonstrated that all reasonable steps have been taken to avoid and minimise impacts, that are provided to compensate, repair or replace an impacted value, including changes to the integrity, quality, condition and/or extent of habitat. Offsets must be consistent with the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time), or an accredited policy relating to offsets of a state or territory. Offsets must be **achievable** and **ecologically feasible**:

- An **offset** is **achievable** where demonstrated scientific knowledge exists on how to restore the habitat with a high confidence of success, and its long-term protection is assured (for example through conservation covenants or conservation agreements), and
- An **offset** is **ecologically feasible** where it can be demonstrated that the species or community can be reliably restored in a timeframe proportionate to effectively address the impact of the action and enough space exists to undertake restoration (not ecologically or tenure constrained).

Permit: a permit required under Part 13 of the EPBC Act.

Population: a population of a species or ecological community means an occurrence of the species or community in a particular area, as defined under section 528 of the EPBC Act.

Recovery plan: a plan made or adopted under section 269A of the EPBC Act.

Section 211 of the ***Native Title Act 1993*****:** provides that holders of native title rights covering certain activities do not need authorisation required by other laws to engage in those activities.

Threat Abatement Plan: a plan made or adopted under section 270B of the EPBC Act.

Migratory Species

Migratory species are those animals that migrate to Australia and its external territories or pass though or over Australian waters during their annual migrations. Examples of migratory species are species of birds (e.g. albatrosses and petrels), mammals (e.g. whales) or reptiles (e.g. marine turtles). Migratory species are those listed on international migratory species conventions and agreements to which Australia is a party.

Element	Description
Environmental Outcome	Migratory species are protected, conserved and managed within Australia.
National Standard	The protection, conservation and management of migratory species within Australia is supported by actions, decisions, plans and policies that: 1) Are in accordance with a relevant **Wildlife Conservation Plan** and are not inconsistent with a relevant **Threat Abatement Plan**. 2) Consider **best available information** and data to ascertain areas of **important habitat** and **ecologically significant proportions** of a listed migratory species. 3) Employ all reasonable measures to avoid and then to mitigate impacts to listed migratory species. 4) Employ **achievable** and **ecologically feasible offsets** to counterbalance residual significant impacts, after all reasonable steps to avoid and mitigate impacts are taken. 5) Support the rights of Indigenous Australians to practice customary activities and traditions, consistent with **section 211 of the** *Native Title Act 1993*. 6) Promote the survival and/or enhance the conservation status of listed migratory species taking into account both individual and **cumulative impacts** by: a) Maintaining and improving **habitat** and the conditions supporting **ecologically significant proportions** of the **population** of listed migratory species within Australia, including by ensuring that actions and decisions, at a minimum: i) avoid adverse impacts to **important habitat** for a listed migratory species, ii) avoid adverse impacts to the lifecycle (breeding, feeding, migratory pathways or resting behaviour) of an **ecologically significant proportion** of the **population** of a listed migratory species, iii) ensure **no net reduction** in the **population** of a listed migratory species in Australia, and iv) ensure **no net reduction** in the **habitat** of a listed migratory species in Australia. b) Not exacerbating **key threats** to listed migratory species. c) Developing and implementing management arrangements that address **cumulative impacts** and key threats and support the recovery of listed migratory species.

Element	Description
National Standard cont.	Requirements in Commonwealth areas: 7) Do not kill, injure, take, trade, keep or move a listed migratory species in a Commonwealth Area, except where a **permit** is issued. Requirements for cetaceans: 8) Do not take, keep, move, interfere with (harass, chase, herd, tag, mark or brand), treat (divide or cut up, or extract any product from the cetacean) or possess a cetacean, except where a **permit** is issued.
Further Information	International commitments relating to migratory species: Australia is a signatory to the following international conventions and agreements that aim to protect, conserve and restore populations and habitats of migratory species: • *Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention)* • *China Australia Migratory Birds Agreement (CAMBA)* • *Japan Australia Migratory Birds Agreement (JAMBA)* • *Republic of Korea Australia Migratory Birds Agreement (ROKAMBA)* See also: The Species Profiles and Threats (SPRAT) database contains links to Wildlife Conservation Plans and as well as an interactive map showing the species modelled habitat and other important information sources like listing advices, Threat Abatement Plans, survey guidelines and policy statements. EPBC Act Policy Statement 3.21 – Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species National Light Pollution Guidelines for Wildlife Including Marine Turtles, Seabirds and Migratory Shorebirds

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Best available information: is the best and most up to date information available for migratory species that provide important context for consideration in actions, decisions, plans and policies and which may not be reflected in all statutory documents. This may be through research, monitoring, and/or conservation action implemented as part of statutory plans, or population or habitat impacts which arise from unexpected events that change a species situation in the wild for example; Wildfires, disease outbreaks, drought, cyclones or contamination events.

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Ecologically significant proportion: listed migratory species cover a broad range of species with different life cycles and population sizes. Therefore, an 'ecologically significant proportion' of the population varies with the species. Factors that should be considered include the species' population status, genetic distinctiveness and species-specific behavioural patterns (site fidelity, and dispersal rates). See *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (2013).

Habitat: the biophysical medium or media: (a) occupied (continuously, periodically or occasionally) by an organism or group of organisms; and (b) once occupied (continuously, periodically or occasionally) by an organism or group of organisms and into which organisms of that kind have the potential to be introduced, and (c) biophysical media projected to become suitable for occupation under future climates if specified in the Conservation Advice.

Important habitat: for a migratory species is:

- Habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant proportion of the population of the species; and/or
- Habitat that is of critical importance to the species at particular life-cycle stages; and/or
- Habitat that is utilised by a migratory species which is at the limit of the species range; and/or
- Habitat within an area where the species is declining.
- Habitat as specified in the relevant Wildlife Conservation Plan.

This definition is consistent with the *Significant Impact Guidelines 1.1: Matters of National Environmental Significance* (2013). Important habitat for migratory shorebirds is defined in *EPBC Act Policy Statement 3.21 – Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species* (2015).

Key threats: the threats to a listed migratory species identified in a Wildlife Conservation Plan, Key Threatening Process or Threat Abatement Plan as key threats to that listed migratory species.

No net reduction: the net outcome of activities to avoid, mitigate and offset impacts as a result of an action, measured against a stipulated baseline. See *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time) for further information.

Offset: measures that may be used once it has been demonstrated that all reasonable steps have been taken to avoid and minimise impacts, that are provided to compensate, repair or replace an impacted value, including changes to the integrity, quality, condition and/or extent of habitat. Offsets must be consistent with the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time), or an accredited policy relating to offsets of a state or territory. Offsets must be **achievable** and **ecologically feasible**:

- An **offset** is **achievable** where demonstrated scientific knowledge exists on how to restore the habitat with a high confidence of success, and its long-term protection is assured (for example through conservation covenants or conservation agreements), and
- An **offset** is **ecologically feasible** where it can be demonstrated that the species or community can be reliably restored in a timeframe proportionate to effectively address the impact of the action and enough space exists to undertake restoration (not ecologically or tenure constrained).

Permit: a permit required under Part 13 of the EPBC Act.

Population: a population of a species or ecological community means an occurrence of the species or community in a particular area, as defined under section 528 of the EPBC Act.

Section 211 of the *Native Title Act 1993***:** provides that holders of native title rights covering certain activities do not need authorisation required by other laws to engage in those activities.

Threat Abatement Plan: a plan made or adopted under section 270B of the EPBC Act.

Wildlife Conservation Plan: a plan made or adopted under section 285 of the EPBC Act.

Commonwealth Marine Environment

The Commonwealth marine area is any part of the sea, including the waters, seabed, and airspace, within Australia's exclusive economic zone and/or over the continental shelf of Australia, that is not state or Northern Territory waters. The Commonwealth marine area stretches from 3 up to 200 nautical miles from the coast. The Commonwealth marine area includes most of Australia's oceans. The EPBC Act protects 'the environment' of the Commonwealth marine area.

Element	Description
Environmental Outcome	The environment of **Commonwealth marine areas** is protected and sustainably managed.
National Standard	The protection of the Commonwealth marine environment is supported by actions, decisions, plans and policies that: 1) Are not inconsistent with **marine park management plans** and have regard to relevant **marine bioregional plans**. 2) Employ all reasonable steps to avoid and then to mitigate impacts to the environment of the **Commonwealth marine area**, including by ensuring that actions and decisions, at a minimum: a) not result in a known or potential pest species becoming established in the **Commonwealth marine area**, b) not modify, destroy, fragment, isolate or disturb an important or substantial area of habitat such that an adverse impact on marine ecosystem functioning or integrity in a **Commonwealth marine area** results, c) maintain connectivity of **population**(s) of a marine species or cetacean including its life cycle (for example, breeding, feeding, migration behaviour, life expectancy) and spatial distribution, d) maintain and improve air quality or water quality (including temperature) which may adversely impact on biodiversity, ecological integrity, social amenity or human health, e) not result in persistent organic chemicals, heavy metals, mainland run-off, pollution or other potentially harmful substances accumulating in the marine environment such that biodiversity, ecological integrity, social amenity or human health may be adversely affected, or f) not damage or destroy heritage values of the **Commonwealth marine area** (including underwater cultural heritage). 3) Employ **achievable** and **ecologically feasible** offsets to counterbalance residual significant impacts, after all reasonable steps to avoid and mitigate impacts are taken. 4) Ensure the management arrangements of fisheries operating in **Commonwealth marine areas** are consistent with the Guidelines for the Ecologically Sustainable Management of Fisheries (as updated from time to time). Requirements in Commonwealth areas: 5) Do not kill, injure, take, trade, keep or move a listed marine species, except where a **permit** is issued.

Element	Description
Further Information	Marine park management plans Marine Bioregional Plans Guidelines for the Ecologically Sustainable Management of Fisheries (as updated from time to time) EPBC Act Policy Statement 2.1 – Interaction between offshore seismic exploration and whales: Industry guidelines

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Commonwealth marine area: defined by section 24 of the EPBC Act.

Marine bioregional plans: section 176 of the EPBC Act provides for the making of bioregional plans. The Minister must have regard to Marine Bioregional Plans in making any decision under the EPBC Act to which the plans are relevant.

Marine park management plans: section 366 of the EPBC Act requires that marine parks must have management plans in place as soon as practicable after being proclaimed. Section 367 requires that management plans must provide for the protection and conservation of the parks.

Offset: measures that may be used once it has been demonstrated that all reasonable steps have been taken to avoid and minimise impacts, that are provided to compensate, repair or replace an impacted value, including changes to the integrity, quality, condition and/or extent of habitat. Offsets must be consistent with the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time), or an accredited policy relating to offsets of a state or territory. Offsets must be **achievable** and **ecologically feasible**:

- An **offset** is **achievable** where demonstrated scientific knowledge exists on how to restore the habitat with a high confidence of success, and its long-term protection is assured (for example through conservation covenants or conservation agreements), and
- An **offset** is **ecologically feasible** where it can be demonstrated that the species or community can be reliably restored in a timeframe proportionate to effectively address the impact of the action and enough space exists to undertake restoration (not ecologically or tenure constrained).

Permit: a permit required under Part 13 of the EPBC Act.

Population: a population of a species or ecological community means an occurrence of the species or community in a particular area, as defined under section 528 of the EPBC Act.

Great Barrier Reef Marine Park

The Great Barrier Reef Marine Park has a special status, as it is the substantial part of a World Heritage area (listed in 1981) as well as a separate matter of national environmental significance. The Great Barrier Reef Marine Park's inclusion as a separate matter of national environmental significance ensures the assessment and approval processes of the EPBC Act are more clearly and completely applied to the Great Barrier Reef Marine Park itself, particularly in relation to the management activities of the Great Barrier Reef Marine Park Authority. The Marine Park is fundamental to and underpins regulation and management of the Great Barrier Reef.

Element	Description
Environmental Outcome	The environment, biodiversity and heritage values of the Great Barrier Reef Marine Park are protected and conserved for current and future generations.
National Standard	The long-term protection and conservation of the environment, biodiversity and heritage values of the Great Barrier Reef Marine Park is supported by actions, decisions, plans and policies that: 1) Protect and manage the Great Barrier Reef, consistent with: a) management arrangements for the Great Barrier Reef Marine Park, b) the Objectives and Guiding Principles of the Great Barrier Reef Intergovernmental Agreement 2015, c) the Objectives of the Reef 2050 Long-Term Sustainability Plan, and d) all other relevant plans relating to the Great Barrier Reef Marine Park. 2) Employ all reasonable measures to avoid and then to mitigate impacts to the environment, biodiversity and heritage values of the Great Barrier Reef Marine Park. 3) Employ **achievable** and **ecologically feasible offsets** to counterbalance residual significant impacts, only after all reasonable steps to avoid and mitigate impacts are taken. 4) Manage **key threats** and **cumulative impacts** on the condition of the GBR, including: a) comply with the Reef 2050 Cumulative Impact Management Policy and the Net Benefit Policy, and other relevant management arrangements for the Great Barrier Reef, or where these are unavailable use all reasonable efforts to prevent detrimental **cumulative impacts** or exacerbation of **key threats**. 5) Support the rights of Indigenous Australians to practice customary activities and traditions, consistent with **section 211 of the** *Native Title Act 1993*.
Further Information	Marine Park management plans Marine Bioregional Plans Guidelines for the Ecologically Sustainable Management of Fisheries (as updated from time to time) The Commonwealth Harvest strategy policy The Commonwealth Bycatch strategy Great Barrier Reef Intergovernmental Agreement 2015 Reef 2050 Long-Term Sustainability Plan

Element	Description
Further Information cont.	Reef 2050 Water Quality Improvement Plan 2017–2022 Reef 2050 Plan Cumulative Impact Management Policy Reef 2050 Plan Net Benefit Policy EPBC Act Referral Guidelines for the Outstanding Universal Value of the Great Barrier Reef World Heritage Area Great Barrier Reef Marine Park Zoning Plan The Retrospective Statement of Outstanding Universal Value for the Great Barrier Reef Strategic Assessment for the Great Barrier Reef 2014 Great Barrier Reef Outlook Report 2019 Reef 2050 Long-Term Sustainability Plan Australian Heritage Database Additional policies, plans and position statements are available from the Great Barrier Reef Marine Park Authority

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Key threats: the threats to the Great Barrier Reef identified in Management Plans, Key Threatening Processes or Threat Abatement Plans as key threats to the Great Barrier Reef.

Offset: measures that may be used once it has been demonstrated that all reasonable steps have been taken to avoid and minimise impacts, that are provided to compensate, repair or replace an impacted value, including changes to the integrity, quality, condition and/or extent of habitat. Offsets must be consistent with the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time), or an accredited policy relating to offsets of a state or territory. Offsets must be **achievable** and **ecologically feasible**:

- An **offset** is **achievable** where demonstrated scientific knowledge exists on how to restore the habitat with a high confidence of success, and its long-term protection is assured (for example through conservation covenants or conservation agreements), and
- An **offset** is **ecologically feasible** where it can be demonstrated that the species or community can be reliably restored in a timeframe proportionate to effectively address the impact of the action and enough space exists to undertake restoration (not ecologically or tenure constrained).

Section 211 of the *Native Title Act 1993***:** provides that holders of native title rights covering certain activities do not need authorisation required by other laws to engage in those activities.

Protection of the Environment from Nuclear Actions

The Australian Government is committed to maintaining high levels of radiation protection, and of nuclear safety and security in Australia and around the world. The EPBC Act protects the whole of the environment from impacts of nuclear actions.

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) sets a consistent approach to radiation protection and safety in the Commonwealth, consistent with international best practice in radiation and nuclear regulation.

Element	Description
Environmental Outcome	The community and the environment are protected from the harmful effects of radiation and radioactive material that may result from **nuclear actions.**
National Standard	The protection of the community and the environment from the harmful effects of radiation and radioactive material is supported by actions, decisions, plans and policies that: 1) Are consistent with the **ARPANSA national codes** for radiation protection, and provide an evidence-based approach to assessment, mitigation and management of radiation risks, including that: a) both human health and environmental outcomes are considered, and decisions made with knowledge and understanding of radiation risks, b) radiological impact on biological diversity, the conservation of species and the natural health of ecosystems is demonstrated and provides assurance that radiation protection objectives are met, and c) the best level of radiation protection under the prevailing circumstances through an ongoing, iterative process is demonstrated and implemented. 2) Ensure that mining and mineral processing actions that meet or exceed the radioactivity level prescribed in EPBC Act regulations provide and implement best practice radiation protection plans, arrangements and targets, consistent with **ARPANSA national codes** including: a) progressive approach to radiation protection for the life cycle of an operation including siting, construction, operation, rehabilitation, closure and post closure and include iterative evaluations at each stage, b) final landform and land use that reflects the lowest reasonably achievable residual impact on the community and environment from residual risks of radiation and radioactive material, including management of voids and out-of-pit waste rock dumps and tailings storage facilities, and c) independent assessment of the closure cost estimate of the mine and facilities, accompanied by assurance of the availability of the necessary resources (financial and otherwise) to achieve closure.
Further Information	ARPANSA Regulatory Publications, including fundamental principles for radiation protection and safety, codes referenced by legislation, regulations or conditions of licence and guides that provide recommendations on how to comply.

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

ARPANSA National codes: the regulatory codes and standards as set and updated from time to time by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

Nuclear actions: defined under section 22 of the EPBC Act.

Protection of Water Resources from Coal Seam Gas Development and Large Coal Mining Development

The Australian Government listed the 'water trigger' as a matter of national environmental significance in 2013, in response to community concerns regarding the impacts of coal seam gas and coal mining on water resources such as groundwaters, rivers, wetlands and springs.

The Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) was established to provide independent scientific advice to the Australian Government Environment Minister and relevant state ministers on the potential water-related impacts of proposed coal seam gas or large coal mining developments, and to provide greater transparency in the regulatory process.

Element	Description
Environmental Outcome	Protection of a **water resource**, which is or is likely to be significantly impacted by **coal seam gas or large coal mining developments**, including any impacts of associated salt production and/or salinity.
National Standard	The protection of **water resource(s)** from the impacts of **coal seam gas and large coal mining developments** are supported by actions, decisions, plans and policies that: 1) Ensure all relevant components of an action, plan or policy are considered together in determining its potential to impact on a **water resource**. 2) Consider **best available information** and data consistent with IESC Information Guidelines, and other relevant policies, including: a) a scientifically robust evidence base to enable full assessment of all risks, impacts and mitigation measures, including trigger points, b) baseline and impacted conditions (encompassing natural spatial and temporal variability), c) **uncertainty** associated with all risks should be quantified where possible and reduced to acceptable levels, and d) monitor, evaluate and report on the biodiversity, water quality and ecosystem functions of the water resource(s) before, during and – where legacy effects are likely – after an action. 3) Obtain and take into account independent expert scientific advice from the IESC. a) both the advice and response should be published by the decision-maker consistent with the EPBC Act and National Environmental Standards, and any relevant conditions of approval or accreditation. b) Consider the potential multiple and **cumulative impacts** of the action and climate change on the water resource(s) over the full period that works or their impacts remain in the landscape (to at least 100 years). 4) Ensure conditions within **water resource(s)**, including water level/pressure and water quality, maintain (and where possible improve) **ecosystem services** and access by associated users. 5) Employ **achievable** and **ecologically feasible offsets** to counterbalance residual significant impacts, only after all reasonable steps to avoid and mitigate impacts are taken.
Further Information	IESC Information Guidelines, Explanatory Notes and Fact Sheets.

This Standard should be applied in conjunction with the Overarching MNES Standard, relevant matter-specific Standards and other National Environmental Standards.

Definitions

Best available information: is the most comprehensive information possible, based on and including all the available data, to enable the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC) to provide robust scientific advice to government regulators on the water-related impacts of coal seam gas and large coal mining development proposals. See *Information guidelines for proponents preparing coal seam gas and large coal mining development proposals* (2018) for further explanation of the IESC's information requirements.

Coal seam gas or large coal mining developments: as defined in section 528 of the EPBC Act

Cumulative impacts: the collective impacts from all actions, decisions, plans, policies and other pressures, measured against a stipulated baseline. See *Significant Impact Guidelines 1.2* (2013), *Significant Impact Guidelines 1.3* (2013) and *Reef 2050 Plan: Cumulative Impact Management Policy* (2018) for further explanation of the concept of cumulative impacts.

Ecosystem services: The benefits and services obtained from water resources. These include:

- provisioning services (e.g. use by other industries and use as drinking water)
- regulating services (such as the climate regulation or the stabilisation of coastal systems)
- cultural services (including recreation and tourism, science and education); and
- supporting services (e.g. maintenance of ecosystem function).

Offset: measures that may be used once it has been demonstrated that all reasonable steps have been taken to avoid and minimise impacts, that are provided to compensate, repair or replace an impacted value, including changes to the integrity, quality, condition and/or extent of habitat. Offsets must be consistent with the *EPBC Act Environmental Offsets Policy* (2012, as updated from time to time), or an accredited policy relating to offsets of a state or territory. Offsets must be **achievable** and **ecologically feasible**:

- An **offset** is **achievable** where demonstrated scientific knowledge exists on how to restore the habitat with a high confidence of success, and its long-term protection is assured (for example through conservation covenants or conservation agreements), and
- An **offset** is **ecologically feasible** where it can be demonstrated that the species or community can be reliably restored in a timeframe proportionate to effectively address the impact of the action and enough space exists to undertake restoration (not ecologically or tenure constrained).

Water resource(s) (as defined by the *Water Act 2007*) means:

a) surface water or ground water; or

b) a watercourse, lake, wetland or aquifer (whether or not it currently has water in it); and,

c) includes all aspects of the water resource (including water, organisms and other components and ecosystems that contribute to the physical state and environmental value of the water resource).

Uncertainty: the state, even partial, of deficiency of information related to the understanding or knowledge of an event, its consequence, or its likelihood.

Appendix B2: Recommended National Environmental Standard for Indigenous Engagement and Participation in Decision-Making

National Environmental Standard for Indigenous engagement and participation in decision-making

This recommended National Environmental Standard has been prepared relying on the inputs of Indigenous leaders and non-Indigenous practitioners who have contributed to the Review.

This recommended National Environmental Standard should be immediately adopted as an initial Standard. Following this, and in line with the principles of this Standard, it should be refined through a process led by the Indigenous Advisory Committee.

Element	Description
Outcome	**Indigenous Australians** are empowered to be **engaged** and participate in decision-making, and their views and knowledge are respectfully and transparently considered in the legislative and policy processes that support the protection and management of the environment under the EPBC Act.
National Standard	1) **Engagement** and participation of **Indigenous Australians** in decision-making should be enabled for activities at all scales including individual projects, scientific research activities, regional plans, and environmental assessment activities under government legislation and policies. 2) **Engagement** and participation in decision-making should be conducted consistently with **existing national, State/Territory legal frameworks** that recognise **Indigenous Australians**’ cultural rights and interests. 3) **Engagement** and participation in decision-making should be undertaken with a view to ensuring the right of **Indigenous Australians** to be involved in the design, implementation, monitoring and reporting aspects of the activity. 4) **Indigenous Australians** should be adequately supported and resourced by the proponent or decision-maker, via their representative organisation, where their participation is a requirement of a statutory process under the EPBC Act. 5) **Indigenous Australians** have the **right to initiate** their engagement and participation in decision-making with all parties undertaking activities related to the EPBC Act. 6) The engagement and participation of **Indigenous Australians** should commence early. **Indigenous Australians** should be given adequate time for their own deliberation and decision-making processes to occur, to support their proper participation in EPBC Act decision making processes. 7) The views and knowledge provided by **Indigenous Australians** should be transparently reported (where approval for publication from the owners of those views has been provided). a) a proponent or entity seeking approval or accreditation from the Commonwealth is required to demonstrate how views or knowledge have been included or excluded in a proposal and the reasons for doing so. b) a decision maker or accredited decision maker is required to demonstrate how views or knowledge have been included or excluded in a decision, and the reasons for doing so.

Element	Description
National Standard cont.	8) **Indigenous Australians** have the right to **self-determine** the way their knowledge is shared and used. Knowledge holders have the right to control how their information concerning cultural practices, traditions or belief is collected, curated, integrated, analysed, used, shared and published. 9) Where prior approval for the use of knowledge is given by the Indigenous knowledge holders, all parties should commit to a **two-way transfer of knowledge**. 10) Enabling engagement and participation of **Indigenous Australians** in decision-making should be conducted in a way that demonstrates **cultural awareness and competency**. 11) Monitoring, reporting and evaluation demonstrates compliance with this National Environmental Standard, including the assessment of the performance of all decision makers against this Standard.
Monitoring and Reporting	The Indigenous Advisory Committee will: 1) At the commencement of this Standard prepare a monitoring, evaluation, reporting and review plan, to be reviewed annually (or as described in the review plan). 2) Set clear and measurable performance indicators for measuring the success of the Standard. 3) Identify the necessary data and information to be collected to support review and reporting on the application of this Standard. 4) Publish an annual report outlining national performance against all the elements of this Standard
Review	National Environmental Standards should be reviewed and updated regularly, including when there are substantive changes to the EPBC Act or relevant administrative arrangements.

This Standard should be applied in conjunction with all other relevant National Environmental Standards.

Definitions

Cultural awareness and competency: means (but is not limited to) understanding that for Aboriginal and Torres Strait Islander peoples the health and wellbeing of Country and people are all one, protocols are important, Aboriginal and Torres Strait Islander culture, knowledge and obligations to Country are diverse. Cultural competence includes knowing when to leave in the event of ‘sorry business’ or other significant cultural events.

Engaged or engagement: is a sustained process that provides Indigenous Australians with the opportunity to actively participate in decision-making from the outset of defining the problem to be solved and which continues during the development of policies, programs or projects and the evaluation of outcomes.

Existing national, state/territory legal frameworks: includes, but is not limited to, legislation relating to native title rights and interests, statutory land rights (whether established by statute, grant, transfer or Trust) and Aboriginal and Torres Strait Islander heritage protection.

Indigenous Australians: includes individuals that identify as Aboriginal or Torres Strait Islanders, representative organisations of Indigenous communities, Traditional Owners or Native Title holders including legislative (i.e. Prescribed Body Corporate entities under the Native Title Act 1993) and non-legislative bodies. Engagement may need to involve more than one group of representatives, dependent on the scale of the activity.

Right to initiate: noting that the onus is on the relevant proponent or decision maker to undertake engagement where it is a requirement.

Self-determine: consistent with the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) Articles 1–8.

Two-way transfer of knowledge: involves ensuring access to western-scientific information and methodologies for Indigenous Australians, and the recording and use of Indigenous knowledge by organisations in accordance with agreed protocols. Additionally, it involves acknowledging the importance of developing respectful and meaningful relations with Indigenous Australians in order to provide opportunities for Indigenous people to be fully involved in the protection and management of the environment.

Appendix B3: Recommended National Environmental Standard for Compliance and Enforcement

National Environmental Standard for compliance and enforcement

This National Environmental Standard for compliance and enforcement sets the national intent for compliance and enforcement activities to ensure the protection and conservation of matters protected under the EPBC Act.

This National Environmental Standard for compliance and enforcement is relevant to the Commonwealth Environment Minister, or other Commonwealth decision-maker authorised under the EPBC Act, and third parties following accreditation, consistent with common application of all National Environmental Standards.

Application of the National Environmental Standard by an authorised Commonwealth compliance and enforcement decision-maker

The National Environmental Standard should be implemented by the decision-maker authorised under the EPBC Act to undertake compliance and enforcement actions or activities, including for example the recommended independent Office of Compliance and Enforcement.

The collective activities and decisions made by the authorised Commonwealth compliance and enforcement decision-maker(s) under the EPBC Act should be consistent with the National Environmental Standard. The Standard is relevant to activities and decisions at all scales including policies, plans and programs.

This includes decisions regarding compliance and enforcement of individual projects or actions, where they are likely to have significant impacts on matters protected under the EPBC Act. A decision by the authorised Commonwealth compliance and enforcement decision-maker(s) to undertake compliance and enforcement activities under the EPBC Act must not prevent a National Environmental Standard from being met.

Element	Description
Environmental Outcome	The EPBC Act requirements, and those under accredited arrangements, are complied with and enforced so that matters covered by the EPBC Act are protected. Decisions demonstrate integrity, consistency and transparency to foster public trust in compliance and enforcement activities.
National Standard	1) Compliance and enforcement functions must have robust governance arrangements that ensure: a) independence from actual, perceived or implied political influence, b) risk focused prioritisation of activities towards achievement of the **objects of the Act** and the National Environmental Standards, c) management of conflict(s) of interest, including avenues for the public to raise concerns and for those concerns to be transparently responded to, d) compliance and enforcement is proportionate to the seriousness of identified non-compliance,

Element	Description
National Standard cont.	e) the level of compliance effort provides adequate certainty of breaches being detected and acted upon to achieve an effective deterrent against non-compliance, f) adequate resourcing for efficient and effective operation of the elements of this National Environmental Standard, and g) adequate training of staff on the requirements of the EPBC Act and accredited arrangements associated with compliance and enforcement. 2) Compliance and enforcement functions must be supported by legislation, legal capability and capacity that ensures: a) a comprehensive suite of **legal powers and penalties** that at a minimum align with the EPBC Act, and provide assurance that this National Environmental Standard is being met, b) an ability to intervene before potential environmental harm occurs and respond to potential or actual harm in a timely manner, c) information sharing of the compliance and enforcement activities with any **Commonwealth oversight functions**, and d) there is adequate resourcing for litigation to ensure legal enforcement actions are not constrained. 3) Compliance and enforcement functions must have the following monitoring, intelligence and analytical capabilities: a) surveillance and investigation systems that can detect and respond to potential non-compliance across the jurisdiction, b) on-the-ground, remote sensing and electronic communications surveillance options to detect non-compliance where necessary, c) a risk-based focus toward both current and future risks to non-compliance, d) clear avenues for public reporting of potential non-compliance and processes to ensure public reports are responded to in a timely manner, and e) collaborative arrangements with other agencies to gather intelligence, where appropriate, and with adequate consideration of relevant laws, implied duties of confidence and avoiding prejudice to persons being investigated for offences. 4) Compliance and enforcement functions must have the following investigations and decision-making capabilities: a) risk-based procedures for escalation and actions, focused on activities with the highest risk of non-compliance or environmental harm,

Element	Description
National Standard cont.	b) mechanism(s) to ensure that similar cases, or those that result in cumulative harm, be managed in a consistent manner commensurate with the environmental risk to matters protected under the EPBC Act and potential benefit gained from non-compliance, c) for minor non-compliance, have regard to an individual's or organisation's willingness to return to compliance and their specific circumstances, d) internal tracking and record keeping of investigations and decision-making, and e) meet published timeframes for resolution of investigations and decision-making. 5) Compliance and enforcement functions must have escalation procedures for serious non-compliance that include clear and viable paths to enforcement, including: a) the use of administrative actions, civil procedures and criminal prosecutions, and b) ensuring remediation orders that repair environmental damage are used when monetary penalties are unlikely to provide adequate disincentive. 6) Compliance and enforcement functions must have complaint resolution capability and capacity that: a) enables timely escalation and resolution of private and third party complaints about compliance and enforcement activities. This includes avenues to escalate to the relevant **Commonwealth oversight functions**, and b) provides clear avenues for legal review equivalent to those for applicable compliance and enforcement decisions under the EPBC Act. 7) Compliance and enforcement functions must have transparency, communication and accountability systems that ensure: a) published materials clearly explain compliance obligations to support voluntary compliance, b) transparency and accountability are consistent with the Commonwealth's confidentiality and information handling requirements under relevant legislation, such as the Privacy Act 1988 (Cth), c) up-to-date public registers of resolved potential compliance and enforcement actions, and d) an ability for the public to request information through clear policies and published processes.

Element	Description
National Standard cont.	8) Compliance and enforcement functions must support collaboration including: a) data-sharing relationships with relevant organisations where appropriate within the restrictions of relevant laws, and b) processes for escalation to relevant **Commonwealth oversight functions** in cases where a systemic risk to matters protected under the EPBC Act is identified that is unable to be resolved by the Commonwealth or accredited party in a timely manner.
Monitoring and Reporting	1) Accurate and complete monitoring and compliance records must be maintained, provided annually to the Commonwealth except where otherwise agreed, and provided upon request to any relevant **Commonwealth oversight functions**. 2) Publish release an annual report outlining performance against all the elements of this National Environmental Standard and priorities for the following year. 3) Maintain an up-to-date public compliance register showing activities and outcomes of decisions taken.
Review	This National Environmental Standard should be reviewed and updated regularly, including when there are substantive changes to the EPBC Act or relevant administrative arrangements, or major events that may impact the status of protected matters.
Further information	*Privacy Act 1988* *Regulatory Powers (Standard Provisions) Act 2014* OECD Best Practice Principles for Regulatory Policy 2014 OECD Regulatory Enforcement and Inspections Toolkit 2018

This Standard should be applied in conjunction with all other relevant National Environmental Standards.

Definitions

Commonwealth oversight functions: Includes but is not limited to the Environment Assurance Commissioner and legislated Commonwealth oversight bodies such as the Australian National Audit Office.

Legal powers and penalties: Legal powers and penalties are defined in the EPBC Act, and include injunctions (Division 14), directed environmental audits (Division 12), civil and criminal penalties including liabilities for executive officers of a body corporate (detailed throughout Part 3 for each protected matter), remediation of environmental damage (Divisions 14A and 14B), enforceable undertakings (Sections 486DA and 486DB), and the ability to publicise contraventions.

Objects of the EPBC Act: see Section 3 of the EPBC Act.

Appendix B4: Recommended National Environmental Standard for Data and Information

This National Environmental Standard for data and information (Standard for D&I) sets the expectations for all parties involved in the implementation and evaluation of the EPBC Act to support the delivery of the national environmental information supply chain (**supply chain**) by requiring the collection, curation, integration, analysis, use and sharing of best available information to defined technical standards.

In addition to the common application of the National Environmental Standards by the Commonwealth Minister for the Environment and third parties following accreditation, the Standard for D&I applies to proponents seeking an approval under the EPBC Act or from another party under an accredited arrangement, and recipients of **relevant funding**. Where the requirements of this Standard for D&I conflict with the provisions in the recommended National Environmental Standard for Indigenous engagement and participation in decision-making, the latter will have precedence.

To support this Standard for D&I the Commonwealth will ensure that a national environmental information supply chain Custodian (the **Custodian**) is assigned and provided with appropriate technical and policy support. Initially, the **Custodian** can be assigned on an interim basis.

The **supply chain** will provide confidence that decisions are informed by the best available evidence. The **Custodian** will have overall responsibility for the long-term stewardship of environmental information. The **Custodian** will be accountable for the delivery of an efficient **supply chain**, and will outline expectations for best available evidence, provide clear guidance on requirements for the sharing and publishing of information, and define technical standards.

The **supply chain** and this Standard for D&I support the objectives that the current attributes and condition of matters protected by the EPBC Act are *known* and that decisions concerning the protection and conservation of MNES are *informed* by comprehensive information maintained in a relevant and readily-accessible form. The **supply chain** and this Standard for D&I also support regional planning, broader environmental management and restoration, and reporting functions such as State of the Environment reports and national environmental economic accounts.

This Standard for D&I also establishes **National Environmental Information Assets** to provide certainty and accountability for priority components of the national environmental information supply chain. These will initially be outlined as policy, and later be mandated in legal instruments that will provide certainty and accountability for the sustained delivery of essential information streams to inform and support the implementation of the full suite of recommended National Environmental Standards.

<table>
<tr><th>Element</th><th>Description</th></tr>
<tr><td>Environmental Outcome</td><td>Decisions made in the operation and evaluation of the EPBC Act are informed by the best available evidence.

That the current and future condition and trends of matters protected by the EPBC Act and related pressures, threats, impacts and restoration outcomes, are understood and accessible to interested parties.</td></tr>
<tr><td>National Standard</td><td>1) The Custodian will:

a) establish and refine a suite of designated National Environmental Information Assets and identify the organisation(s) accountable for their delivery, and

b) issue guidance on requirements for best available evidence and technical standards to support the provision and use of relevant environmental data and information by all parties.

2) The Commonwealth and accredited parties will:

a) share and publish relevant environmental data and information consistent with Custodian guidance,

b) in making any regulatory decisions relating to matters protected by the EPBC Act, set monitoring, evaluation and reporting requirements that comply with this and other National Environmental Standards, and Custodian guidance,

c) require compliance with this National Environmental Standard from proponents seeking regulatory approvals,

d) require recipients of relevant funding from the Commonwealth and recipients of relevant funding from accredited parties to comply with this National Environmental Standard,

e) ensure reports, plans, advice and information relevant to operation of the Act, including though an accredited arrangement, are made publicly available in a searchable digital form and are easy to find, access and interrogate, and

f) provide upon request by the Custodian or for the audit or oversight of an accredited arrangement(s) by the Commonwealth, any data and information relevant to the discharge of their respective obligations.

3) Proponents seeking approval decisions under the Act or an accredited arrangement will:

a) make all relevant environmental data and information publicly available by providing it consistent with Custodian guidance including for compatibility, searchability and accessibility

b) meet Custodian requirements for best available evidence when making applications or complying with conditions issued under the Act

c) comply with monitoring and evaluation requirements across the relevant National Environmental Standards and consistent with Custodian guidance.</td></tr>
</table>

Element	Description
National Standard cont.	d) provide upon request any information relevant to the audit or oversight of an accredited arrangement(s) by the Commonwealth. 4) Recipients of relevant government funding that are subject to this National Environmental Standard under 2(d) will: a) make all relevant environmental data and information publicly available by providing it consistent with **Custodian** requirements including for compatibility, searchability and accessibility b) comply with monitoring and evaluation requirements across all relevant National Environmental Standards and consistent with **Custodian** guidance
Monitoring and Reporting	1) The **Custodian** will: a) at the commencement of this National Environmental Standard prepare a monitoring, evaluation, reporting and review plan, to be reviewed annually. b) identify and collect data and information resources to support review and reporting on the application of this National Environmental Standard and discharge of its duties. c) publish an annual report outlining national performance against all the elements of this National Environmental Standard, the operation of the **supply chain** and priorities for the following year.
Further Information	Department of Agriculture, Water and the Environment environmental information policy and guidance National Environmental Information Assets and associated technical standards and guidelines Plans, policies and guidelines published from time to time on the websites of the Department of Agriculture, Water and the Environment and the **Custodian** National Environmental Information Assets and associated technical standards and guidelines Plans, policies and guidelines published from time to time on the websites of the Department of Agriculture, Water and the Environment and the **Custodian**
Review	National Environmental Standards should be reviewed and updated regularly, including when there are substantive changes to the EPBC Act or relevant administrative arrangements, or major events that may impact the status of protected matters.

This Standard should be applied in conjunction with all other relevant National Environmental Standards.

Definitions

Advice: Formal advice provided by EPBC Act statutory committees to the Environment Minister, or similar arrangements of an accredited party.

Custodian: The national environmental information supply chain Custodian (the Custodian) is the entity assigned with the oversight of the **supply chain.** Prior to legislative amendments to formally establish the position of custodian, an interim Custodian should be nominated by the Commonwealth Minister.

National Environmental Information Asset (NEIA): An essential information stream required to implement, monitor and improve National Environmental Standards. A suite of NEIAs will be established in a process overseen by the Custodian to provide certainty and accountability for priority components of the National Environmental Information Supply Chain. Each NEIA will identify a responsible organisation, collaborative partners, and the data and processes to deliver the information required. NEIAs will initially be defined in policy. Amendments to the EPBC Act should require that NEIAs become legal instruments.

Relevant environmental data and information: Data and information relating to the current and future condition and trends of matters protected by the EPBC Act and related pressures, threats and restoration outcomes in different contexts:

- in the case of a party operating or accredited under the EPBC Act, all data and information that relates to the implementation and evaluation of the National Environmental Standards, the delivery and maintenance of the **supply chain** and the maintenance of the **National Environmental Information Assets.**
- in the case of a proponent, all data and information that is assembled or generated by the proponent or their agent(s), for the purposes of securing a regulatory approval or complying with approvals.
- in the case of a recipient of **relevant funding,** all environmental data and information that is gathered or generated as part of the funded activity.

Relevant funding: funding for activities that influence or impact the outcomes to be achieved under the National Environmental Standards. This includes activities related to research, environmental management, environmental restoration and heritage protection and includes grants, procurements and incentive programs**.**

Supply chain: The National Environmental Information Supply Chain is a system of processes and skills to convert raw data into the end products needed to inform decision-making and the implementation, evaluation, reporting and assurance of the National Environmental Standards and other aspects of the EPBC Act, including State of the Environment reporting. Over time and with oversight from the **Custodian**, the Supply Chain will become more coordinated, consistent and complete.

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Further reading

About the EPBC Act

A series of fact sheets is available on the Review website:

- Scope of the EPBC Act
- Protected areas and heritage
- Biodiversity protection
- Assessments and approvals
- Strategic approaches
- International movement of wildlife
- Indigenous involvement
- Compliance and enforcement
- Partnerships and advice
- Information and reporting
- Decision making

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