



**Biodiversity  
Council**

# Delivering on nature positive: 10 essential elements of national environmental law reforms

**Biodiversity Council, 2023**

Swift Parrot. Image: HeatherW/Flickr CC-BY-NC-2.0



# Further information

## For more information:

Contact: [enquiries@biodiversitycouncil.org.au](mailto:enquiries@biodiversitycouncil.org.au)

## How to cite this material:

Biodiversity Council (2023) **Delivering on nature positive: 10 essential elements of national environmental law reform**. Biodiversity Council, Melbourne.

# Acknowledgements

The Biodiversity Council acknowledges the First Peoples of the lands and waters of Australia, and pays respect to their Elders, past, present and future and expresses gratitude for long and ongoing custodianship of Country.

Contributing authors: Peter Burnett, Sarah Brugler, Jack Pascoe, Jan McDonald, Euan Ritchie, Patrick O'Connor, Rachel Morgain, Jaana Dielenberg, Hugh Possingham, Martine Maron, Rachel Lowry, Rebecca Spindler, James Trezise and Brendan Wintle.

# Contents

Executive Summary .....	1
Introduction .....	2
Global Goals for Nature .....	2
Delivering on nature positive: 10 essential elements of national law reform .....	3
1. Measurable and time-bound nature positive goals and targets .....	3
2. Specific environmental standards .....	4
Box 1: Criteria for new national environmental standards to be assessed against .....	4
3. Protections for culturally significant entities and elevating Indigenous peoples' voices .....	5
4. Regulation of cumulative impacts alongside comprehensive regional planning .....	6
5. Critical habitat protections and regional planning .....	7
6. Rigorous rules for biodiversity offsets .....	9
7. A new EPA.....	10
8. Legal review, robust accountability and public participation .....	10
9. Natural capital accounting, improved environmental data and streamlined listing processes .....	11
10. Integrating climate change considerations .....	12
References .....	13



The Biodiversity Council was founded by 11 universities including its host the University of Melbourne, with support from The Ian Potter Foundation, The Ross Trust, Trawalla Foundation, The Rendere Trust, Isaacson Davis Foundation, Coniston Charitable Trust and Angela Whitbread.



# Executive Summary

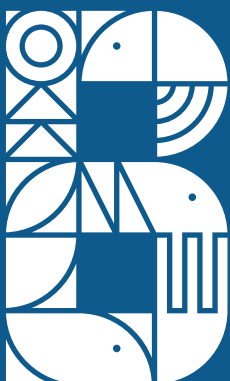
## 10 essential elements of national environmental law reforms

Australia needs strong laws, policies, institutions, enforcement and funding to reverse the current trajectory of biodiversity decline and to promote the role of Caring for Country led by Indigenous peoples in accordance with their customs and responsibilities. Those laws are under development but much of the detail is yet to be tabled.

Having a nature positive goal is a critical step in the right direction. The Biodiversity Council has identified 10 essential elements necessary for new environmental laws, policies and institutions to deliver on Australia's nature positive commitment. These 10 elements are presented as an interdependent high level package. That is, they do not work in isolation and each element is dependent on one another. Underpinning this, will be the need to effectively resource and implement any new system (including resourcing and implementing conservation actions more broadly).<sup>1</sup>

The 10 essential elements are:

1. Nature positive goals and targets should be measurable and time-bound, and align with international commitments
2. New, legally binding national environmental standards should be specific enough to deliver protection and restoration
3. The voice of Indigenous peoples needs to be elevated in decisions that affect culture and Country and protections for culturally significant entities established
4. All decisions should account for cumulative impacts and there needs to be a comprehensive regional planning regime that will protect the most environmentally sensitive areas from development
5. There needs to be strong protections for critically important areas for threatened species and ecological communities, accompanied by streamlined and effective recovery strategies and threat abatement plans
6. There should be rigorous rules about the use of biodiversity offsets to ensure they deliver a nature positive outcome
7. The new EPA needs to be trusted, accountable, and a truly independent statutory body with an appropriately qualified board that can ensure compliance and enforcement of environmental laws
8. There needs to be full access to legal review, robust accountability and effective consultation through public participation frameworks
9. Comprehensive national natural capital accounting should drive improved environmental data management along with strengthened and streamlined listing processes
10. Environmental laws should take the threat of climate change seriously and explicitly integrate climate considerations into decisions



## About the Biodiversity Council

The Biodiversity Council brings together expertise spanning First People's and Western knowledge to help tackle Australia's biodiversity decline and extinction crisis.

*All six Australian marine turtle species are federally listed as Vulnerable or Endangered. Green turtle image: Randall Ruiz/ Unsplash*



# Introduction: Delivering on nature positive

Australia is one of the world's few mega-diverse countries. The continent is home to an extraordinary diversity of species, most of which are found nowhere else on Earth. Since European colonisation impeded First People from fulfilling their role as custodians of Country, Australia has become the world leader in the extinction of mammals, and we are ranked second for the overall loss of biodiversity.<sup>2</sup> We have had three animals declared extinct since 2009, the Christmas Island pipistrelle, Christmas Island forest skink, and the Bramble Cay melomys; hundreds more species face potential extinction in coming years.<sup>3</sup> The best available science tells us that 19 Australian ecosystems are showing signs of collapse<sup>4</sup> and our national list of threatened species and ecological communities has exploded to more than 2000 with the status of many more species currently unclear and threats to biodiversity left largely unchecked.

Nature in Australia, which includes biodiversity, is in crisis. Our native plants, animals and ecosystems are being decimated by a range of threats, the most serious of which are: habitat destruction and modification, invasive species, inappropriate fire regimes, pollution, and climate change related impacts (e.g. coral bleaching).<sup>5</sup>

Australia's species and ecosystems should be protected by the EPBC Act<sup>6</sup>, our primary national environmental law, but it continues to fail in its most fundamental task. For example, between 2000 -

2017, more than 7.7 million hectares of threatened species habitat has been destroyed.<sup>7</sup>

An independent review of the EPBC Act (the Samuel Review), released in 2021, found that the EPBC Act has been failing our threatened plants and animals for the past 20 years, that it does not facilitate the maintenance or restoration of the environment, is not set up to deal with modern environmental challenges, and is neither effective nor efficient in the way it regulates environmental impacts.<sup>8</sup>

In 2022, the government announced a Nature Positive Plan<sup>9</sup> which commits to law reform intended to be 'the most comprehensive remaking of national environmental law since the EPBC Act was introduced'. The following commitments have been made as part of that law reform promise:

- No new extinctions
- Protect 30% of terrestrial and marine ecosystems by 2030
- Establish an independent Environmental Protection Australia (EPA)
- Establish a national data agency (Environment Information Australia)
- Work in partnership with Indigenous peoples, including to develop standalone cultural heritage legislation
- Create a Nature Repair Market

## Global Goals for Nature

*Nature positive by 2030 is a global goal for nature and is being used to guide urgent action to halt nature loss now so that by 2030, based on a current baseline, nature is visibly and measurably on the path of recovery.<sup>10</sup> The Australian Government is also committed to ambitious new global goals and targets under the Kunming-Montreal Global Biodiversity Framework (GBF). Headline targets within the GBF include to ensure at least 30% of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under restoration by 2030, and to protect at least 30% of its terrestrial and inland water areas and marine and coastal areas by 2030. Importantly, the GBF recognises the need to work in partnership with Indigenous peoples and includes bio-cultural objectives.<sup>11</sup>*

*Red handfish are currently known from only two small 50m long patches of reef in south-eastern Tasmania, and are thought to have a total population of approximately 100 adults. Image: Rick Stuart-Smith/Wikimedia Commons CC-BY 3.0*





# 10 essential elements of national environmental law reforms

1. Nature positive goals and targets should be measurable and time-bound, and align with international commitments

## Why it's important:

There are no measurable targets in existing national laws to protect nature. This is different to our Climate Change Act 2022 (Cth) which sets a target to reduce emissions by 2030 to align with a goal for net zero by 2050. We need the same for nature laws.

Measurable and time-bound goals allow progress to be assessed and policies to be adjusted as necessary. Incorporating specific targets with deadlines binds successive governments to action, both legally and politically. They also give the clearest policy signals to business and society.

The Australian Government has adopted the rhetoric of the global goal for nature of 'Nature positive by 2030' under the Nature Positive Plan. But rhetorical targets only matter if they directly shape laws, policy, actions, and outcomes.

*The Vulnerable Yakka skink is one of many species that has declined with the clearing of brigalow forests. Brigalow forests once occupied 14 million hectares in Queensland and New South Wales, today only 8% remain and large areas of the remainder are heavily degraded. Image: Scott Eipper/Flickr CC BY-NC 2.0*

## What needs to change:

Nature positive should be clearly defined in law. A development is nature positive when it brings measurable gains for nature beyond any loss.

New legislation should have an objective to deliver a nature positive Australia by a specific date, and this should be reflected through the entire architecture of new legislation. Every legislative decision must deliver a nature positive outcome.

Legislating a nature positive target by a specific date (i.e. by 2030 with a 2050 goal for recovery), against a baseline of 2020 or commencement of legislation,<sup>12</sup> is also a critical step for driving transformational change in Australia's national environmental protection and restoration legislation.

The articulation of nature positive in Australian law also needs to be aligned with the international community's understanding of 'nature positive by 2030.' The legislation must also align its regulatory framework and conservation planning instruments with the goals and targets of the Kunming-Montreal Global Biodiversity Framework, which include global bio-cultural objectives and commitments to work with Indigenous peoples.



## 2. New, legally binding national environmental standards should be specific enough to deliver protection and restoration

### Why it's important:

The key problem with our existing environmental laws is that they have been poorly implemented, are driven by process rather than environmental outcomes, and allow too much discretion to decision makers in applying the EPBC Act. If Australia is to meet its aspirations of nature positive and no new extinctions, our national environmental laws must shift away from the 'box-ticking', subjective and discretionary approach in the EPBC Act. We need clearer guardrails for decision-making and laws that focus on delivering positive environmental outcomes. Setting explicit national environmental standards will set clear expectations for regulatory decisions and much needed guidance for communities, proponents and decision makers.

### What needs to change:

New legally binding and enforceable national environmental standards need to provide the framework for decision-making under reformed nature laws, setting benchmarks for assessment, consultation, information and substantive decisions. They will effectively be the backbone of our new environmental laws, so it's critical that the government gets them right.

The new standards need to drive a paradigm shift to be outcome-focussed, set clear parameters for

objective decision-making (i.e. not discretionary or subjective determinations) and be underpinned by the principles of conservation, restoration, and enhancement. Critically, new national environmental standards should apply equally to all industries, including those previously subject to exemptions from national environmental law through mechanisms such as through Regional Forestry Agreements. Standards should also set proactive benchmarks on land and sea managers for protection and restoration of important habitat and heritage areas, such as critical habitats and national heritage places, and directly shape management arrangements for these areas.

The Government has committed to developing standards for matters of national environmental significance, Indigenous peoples' engagement and participation in decision-making, biodiversity offsets, regional planning, community engagement and consultation, and data and transparency, as part of its Nature Positive Plan. For national environmental standards to be effective, they must follow specific criteria outlined in Box 1 below. These criteria have been developed to be consistent with the directions and intent of the Samuel Review.

The Standards need to apply to all levels of government and, as recommended by the Samuel Review, there needs to be rigorous, transparent oversight by the Commonwealth in any accreditation model for State and Territory laws to ensure a consistent standard of protection and restoration, as well as a streamlined approach to regulation by all governments.

## Box 1: Criteria for new national environmental standards to be assessed against

National Environmental Standards need to:

- Be underpinned by the principles of conservation, restoration and enhancement, and the precautionary principle, which says we should be conservative where there are risks of serious or irreversible environmental harm.
- Be specific and outcomes focused, avoiding qualified or rubbery language that facilitates the 'box-ticking' approach of the EPBC Act. This also means avoiding discretionary or subjective determinations such as the 'reasonableness' or 'acceptability' of impacts.
- Ensure that all decisions deliver nature positive outcomes.
- Apply directly to relevant decisions at project and/or regional scales.
- Contain measurable goals and measurement protocols within each standard.
- Avoid exemptions so that all industries are subject to the same rules.
- Embed participation of Indigenous peoples in decision making and incorporation of their knowledge.
- Use clear and unambiguous language, which is easy to interpret for decision makers, proponents and communities alike and can be enforced by the courts.
- Ensure transparency in decision-making and require open sharing of environmental data in the public interest.
- Ensure decisions are evidence-based and underpinned by the best available science and data.



### 3. The voice of Indigenous peoples needs to be elevated in decisions that affect culture and Country and protections for culturally significant entities established

#### Why it's important:

The destruction of Juukan Gorge has thrown into sharp focus the failure of our national environment and heritage laws to protect matters of significant cultural importance and the injustice associated with the desecration of Country and culture.<sup>13</sup> This extends to the loss of wildlife that holds special value, such as totemic or culturally significant species for Indigenous peoples and their communities.

Traditional Custodians have a complex relationship with Country that extends through Lore, to kinship (spiritually and physically) with plants, animals, water, and ecological communities and which creates obligations to follow Lore through reciprocal care.

This can create additional responsibilities for some species and requires greater recognition of their significance (which may not fit within an threatened species listing process).

#### What needs to change:

The participation of Indigenous peoples and incorporation of their knowledge and the elevation of cultural priorities for Country needs to be meaningfully embedded in all policy development and decision-making processes. In addition, there is also a significant opportunity to embed an independent Indigenous peoples champion within new legislation through the establishment of a Land and Sea Country Commissioner (A voice for Country).<sup>14</sup> Such a position could be a powerful advocate for the healing of Country and provide independent advice on land and sea management. Importantly, this position would help create cultural authority across the reformed legislation and would work alongside the Threatened Species Commissioner.

New national environmental laws also need to create a mechanism for the listing of species and ecosystems of significance for Traditional Custodians as Culturally Significant Entities (a listing mechanism which could also recognise culturally significant seascapes and landscapes). This would complement Indigenous heritage listing and would need to be accompanied by a realignment of policy and practice to promote the traditional management of culturally significant entities.



*Rangers inspect Tjakura (great desert skink) burrows after a burn on Anangu Country. Image: Jaana Dielenberg*



4. All decisions should account for cumulative impacts and there needs to be a comprehensive regional planning regime that will protect the most environmentally sensitive areas from development

**Why it's important:**

The EPBC Act has a very narrow focus on direct and proximate impacts. Its 'bottom-up' and project-by-project approach does not require decision-makers to consider the broader environmental context, or the cumulative impacts of many different projects being approved over time. This is known as 'death by a thousand cuts' decision making. Nor does the EPBC Act identify areas of high conservation value where development cannot be allowed because of the major or irreversible harm that would result.

**What needs to change:**

Regional plans need to make it clear where development can never occur due to high environmental values. In areas where plans indicate that development can occur, plans need to contain as much information as possible about the conditions on which approval could be given, such as whether biodiversity offsets may be required and importantly, that all development must be required to deliver a nature positive outcome.

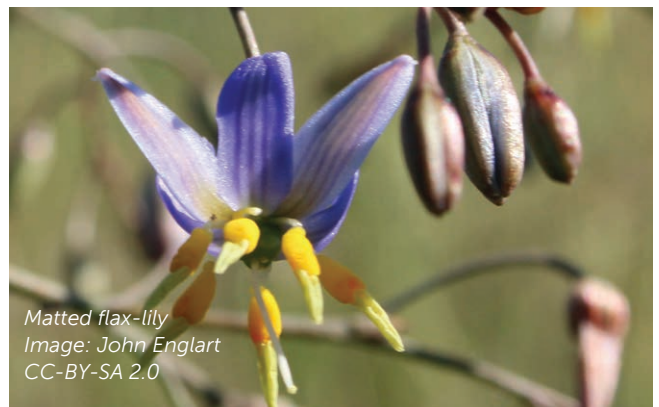
Cumulative impacts need to be considered throughout the legislative decision-making process, including at the level of individual actions, as well as through regional plans. Managing cumulative impacts requires setting clear goals and targets ensuring that cumulative impacts do not lead to the decline in the conservation status of a matter of national environmental significance, and that any decision is made in accordance with these goals and targets. For example, conservation plans and relevant management plans should set cumulative impact thresholds (which would require setting baselines and specification of outcomes) for relevant matters of national environmental significance.

For regional plans to be effective, they will need to be prepared in close consultation with, and place binding obligations on, the States and territories, so that both levels of government can take full ownership of them. The federal budget will need to support a national program of comprehensive regional planning that identifies and protects areas of high conservation significance, while also prioritising conservation and recovery actions.



*Despite being protected under federal environmental law, just three out of 775 development applications that potentially impacted endangered southern black-throated finch habitat were knocked back since 2000.<sup>15</sup> Image: Public Domain*

*Below: Threatened species found in Victorian basalt plains grasslands (shown on p10).*



*Matted flax-lily  
Image: John Englart  
CC-BY-SA 2.0*



*Golden sun moth  
Image: Leo  
CC-BY-NC 2.0*



*Grassland earless dragon  
Image: Michael  
Mulvaney CC BY 3.0*



5. There needs to be strong protections for critically important areas for threatened species and ecological communities, accompanied by streamlined and effective recovery strategies and threat abatement plans

**Why it's important:**

Critical habitat - as the name suggests - is fundamental to the survival, conservation, and recovery of threatened species. Regulatory measures for critical habitat have proven to be successful in other jurisdictions. For example, strict limits on the destruction or disturbance of critical habitat under the United States' Threatened Species Act, have contributed to the recovery of some species and the stabilisation of many others.<sup>16</sup>

Statutory conservation plans - which include conservation advice, recovery, and threat abatement plans - provide guidance on the management and research actions to support the recovery of listed entities and tackle key threats. Conservation planning is expected to play a key role in identifying critical habitat.

*Agriculture and development have reduced Victoria's basalt plains grasslands to less than 3% of their pre-European extent. Most of what remains is on private land and at high risk of development or agricultural intensification. Image: Libby Rumpf*

Australia's framework for the recovery of threatened species and ecological communities has performed poorly and needs an overhaul. The system is plagued by the development of plans that are written with good intent but never or poorly implemented, often due to lack of resourcing. 30% of the nations listed threatened species are not monitored at all.<sup>17</sup> There is also a general lack of integration across conservation planning instruments and other policy and regulatory frameworks, leading to comprehensive plans that are effectively left to collect dust on a bookshelf.

Australia already has a national framework for the listing and protection of critical habitats, but it too has been left to languish, largely due to weak and inconsistent penalty provisions across land tenures. Only five critical habitats have been included in the register in 23 years, with the last being added in 2005.

**What needs to change:**

The lack of protection and inadequate management of areas critical to the survival of threatened species and ecological communities has been one of the biggest failures of our existing laws. Identifying, protecting, and effectively managing critical habitats must be one of the highest priorities in our new national environmental laws.





New national environmental laws should adopt a scientifically robust definition of critical habitat that recognises areas essential for the recovery of species or ecological communities, including those areas that are likely to become increasingly important under a changing climate, applying the precautionary principle.

Critical habitat should be mapped where possible, but provision should also be made for identifying areas based on key habitat descriptors where mapping may not be possible or feasible. Critical habitat for threatened species may also appear sporadically (e.g. flowering forests, flooded inland waterways), so new laws should have provision for emergency listing of critical habitat, as it does currently for species.

Listing of critical habitat or critical protection areas should occur at the time of listing or as soon as feasibly possible following listing (for example within 12 months through the development of conservation planning instruments). This should be undertaken based on expert scientific advice.

New national environmental laws should specify that critical habitat areas must not be destroyed or impacted by development and penalty provisions for damaging these areas must apply equally across land tenures. A map of critical habitat areas must be maintained and be easily accessible to the general public.

New recovery strategies need to set out the key measures needed to protect, manage and recover threatened species and ecological communities and who is responsible for implementing each

element of the strategies. They also need to inform regulatory decision making, specify key impact thresholds for each protected matter, including cumulative impact thresholds, and identify if and when any form of offsetting would be appropriate. Importantly, recovery strategies must be binding on decision makers and subject to regular reporting and accountability mechanisms.

In addition, there needs to be a commitment to include long-term monitoring in recovery strategies, supported by adequate funding.

Substantial resourcing is required to quickly develop all recovery strategies and implement their actions, which should include the meaningful participation of Indigenous groups and integration of Indigenous knowledge.

Reformed recovery strategies will also need to have a focus on climate adaptation and be able to be updated based on substantial new information or in response to catastrophic events such as bushfires and floods.

Similarly, reformed threat abatement plans should be used to tackle major national scale threats that require proactive management, such as invasive species, based on a systematic prioritisation of high risk threats.

Both the development and implementation of conservation plans must be effectively resourced and streamlined, with conservation experts empowered to develop strategies and plans and support for their implementation and ongoing monitoring.



*Since 1965 the number of Endangered Carnaby's black cockatoos has halved and it has become locally extinct in some areas. The decline is due primarily to the clearing of feeding and breeding habitat, including Endangered Banksia Woodlands of the Swan Coastal Plain ecological community. Image: Jean and Fred Hort/Flickr CC BY 2.0 DEED*





## 6. There should be rigorous rules about the use of biodiversity offsets to ensure they deliver a nature positive outcome for every Matter of National Environmental Significance

### Why it's important:

Biodiversity offsetting, that is, the practice of protecting or restoring similar environmental values to compensate for their destruction elsewhere, has grown significantly in regulatory practice in the past two decades. Offsetting schemes have been consistently criticised as failing, because these schemes do not result in no net loss of biodiversity, let alone net-gain or nature positive outcomes.<sup>18</sup>

Biodiversity offsets are not explicitly addressed in the EPBC Act, but have become almost the norm under the Act. The Samuel Review found that the current approach to offsets exacerbates environmental decline because it is 'ineffective at compensating for loss and inconsistently implemented'; and '[t]he 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'.

The risk with biodiversity offsets is they facilitate the ongoing destruction with uncertain ecological consequences, enabling regulatory regimes to effectively 'run down' nature.

### What needs to change:

Biodiversity offsetting needs a major overhaul. It will be important to limit its application to areas or matters where it is clear that it can deliver a genuine nature positive outcome at the project scale and within an ecologically relevant timeframe.

Biodiversity offsets should only be used when the proponent has demonstrated that they have stepped through and utilised the entire mitigation hierarchy to its full possible extent. That is, prior to the consideration of offsets, all feasible avoidance and minimisation actions must have been included in the conditions of approval for the project.<sup>19</sup>

Offsets should be limited to impacts on nature that we can replace – otherwise, nature positive will remain forever out of reach. This means recognising that we cannot draw down most old-growth habitats or high condition ecosystems, because they cannot be re-created in ecologically-meaningful timeframes. Similarly, critically endangered ecological communities or critical habitat of threatened species should not be offset. Further, any offset calculations should be published for transparency.<sup>20</sup>



*Greater gliders rely on old trees with large tree hollows - a feature that is hard to offset. Image: Sam Horton CC BY SA 4.0*

A reformed offsets regime needs to ensure that offsets are only permitted where it can be demonstrated that:

- There is a focus on restoration and threat management activities and that 'averted loss' offsets are not enabled;
- There is clear evidence that the mitigation hierarchy has been applied;
- There is clear scientific evidence that it is feasible, in both principle and practice, to offset the impact or the species or habitat concerned;
- The offset is 'like for like' or ecologically equivalent - in other words, benefits the same species or ecosystem that is impacted;
- The impacts are on habitats or ecosystems that are able to be restored or recreated within ecologically relevant timeframes; and
- The offset will deliver a clear and measurable nature positive outcome.

Codifying offset requirements in law is critical, as the current approach of relying on policy has led to poor and inconsistent decision making. There must be a regulatory requirement for the disclosure of offset obligations and performance on a dedicated public register and for the performance of the scheme to be published on an annual basis.

A list of 'matters that are able to be offset' should be developed based on clear scientific evidence of offsetability, which is informed by updated conservation planning instruments. These measures would greatly improve trust and integrity in the overall offsetting system.

7. The new EPA needs to be trusted, accountable, and truly independent statutory body with an appropriately qualified board that can ensure compliance and enforcement of environmental laws

**Why it's important:**

There has been an alarming lack of compliance and enforcement of the EPBC Act. This has been devastating for the environment, and has also meant that Australians have lost faith in our national environmental laws. Transparency and certainty are essential to address the failings of the EPBC Act. Clear pathways for participation and consultation are necessary for the community and business to have confidence that the laws are operating as intended and delivering verifiable nature positive environmental outcomes.

Strong new institutions are needed to create trust within the community. A well-resourced and independent EPA which acts transparently and with strong governance oversight is needed to ensure decisions are made consistently and based on legal parameters set by national standards (which are therefore not prone to political interference) in a robust system.

**What needs to change:**

The Government has committed to the establishment of a new national body named Environment Protection Australia (EPA).

The new EPA must be responsible for making transparent decisions under the new environmental laws. To ensure such an agency is truly independent and well-resourced, it needs to be:

- a statutory authority governed by a full and appropriately-qualified board (not just a single statutory office-holder or corporation sole); and
- funded through a standing appropriation (indexed to inflation) that can only be reduced by Act of Parliament.

Circumstances where the Environment Minister can 'call in' the decision needs to be limited and clearly defined otherwise, the independence and integrity of the EPA is undermined. If the minister decides to take a decision out of the hands of the EPA by exercising 'call in' powers, the Standards and other rules of decision-making should continue to apply. In particular, any decisions called in and taken by the Minister should be subject to merits review and the EPA should be able to audit individual decisions.

8. There needs to be full access to legal review, robust accountability and effective consultation through public participation frameworks

**Why it's important**

Access to the legal system is a crucial component of maintaining public confidence in environmental decision-making. Public sector decisions made under environmental laws must therefore be accountable through open legal standing rights for third parties, along with merits review.

Merits review allows for an independent examination of decisions and is a safeguard against corruption, while third party standing rights enable community members to enforce breaches of environmental laws.

Transparency and accountability mechanisms ensure that governments can be held accountable for their decisions and that citizens have access to the information they need to inform the exercise of their rights. Communities must be empowered to engage with the assessment process through clear and easily accessible information and appropriate consultation timeframes.

**What needs to change**

All key documents informing decisions made under environmental laws must be published routinely on the Internet and in an accessible way, taking into account Indigenous peoples participation in decisions. Decision-makers need to be accountable through public access to judicial review and the full range of legal remedies.

The Minister should only override the normal process of EPA decision-making by 'calling in' major or controversial decisions on limited 'national interest' grounds. Where the Minister does this, the decision should still be bound by the Standards and other rules of decision-making. The Minister also needs to be required to publish a full statement of reasons for the decision in accordance with legislative time-frames.

The Samuel recommendation for a limited form of 'merits review' for decisions under the EPBC Act, should also be implemented.

All legislative instruments made under the new laws should be able to be disallowed by either House of Parliament.



## 9. Comprehensive national natural capital accounting should drive improved environmental data management along with strengthened and streamlined listing processes and long-term monitoring

### Why it's important:

Good environmental decision-making depends on access to comprehensive data, and effective implementation of decisions and rigorous assessment of the outcomes cannot occur without extensive monitoring.<sup>21</sup> The Samuel Review identified poor data availability and a lack of coordinated collation as a major failing of the existing system and recommended establishing a national environmental information supply chain and an overhaul of the environment department's information systems.

The only long-term and credible assessment of the state of Australia's threatened species - the Threatened Species Index ([www.tsx.org.au](http://www.tsx.org.au)) - is funded on a shoestring. Previous programs for long-term landscape-scale biodiversity monitoring have not been consistently or adequately supported (e.g. the Long-term Ecological Research Network <https://www.ltern.org.au/>).<sup>22</sup>

### What needs to change:

The government needs to make major and ongoing investments in both comprehensive national environmental data and supporting systems, including easy Internet-based access to this data. It needs to negotiate cooperative arrangements with States and Territories to share data and ensure wide and easy access, and that what data is available is accurate and reliable.

Comprehensive national natural capital accounts are needed to arrange environmental information in an optimal form to support decision-making.<sup>23</sup> In particular, accounts facilitate the assessment of gains and losses towards policy objectives including net positive. They also assist in the identification and monitoring of environmental thresholds and trends. New national capital accounting must be supported by well-funded long-term monitoring programs.

There needs to be a new State of the Environment reporting framework, which should be based on continuous natural capital accounting, and requirements for state and federal governments to respond to reported findings within a suitable time frame.

Australia needs a new national environmental information system operated by Environment Information Australia (EIA) which must aim to provide a comprehensive picture of the Australian environment that is accessible to all. The information system must be included in the legislative framework and supported by enduring data supply chain arrangements, including a well-funded National Environmental Data Strategy. The Council welcomes the government's initial allocation of funding to EIA in the 2022-23 Budget but notes that a comprehensive national environmental information system will require ongoing major investment.

The national Threatened Species Scientific Committee needs to be significantly bolstered to enable it to rapidly assess species and ecological communities at risk of extinction, assess key threats and emerging threatening processes and advise on key actions for recovery.

*There has been no conservation assessment of the extinction risk of the Waratah even though it is subject to extensive illegal flower collecting, climate change and changed fire regimes. Image: Rachael Gallagher/WSU*





## 10. Environmental laws should take the threat of climate change seriously and explicitly integrate climate considerations into decisions

### Why it's important:

Climate change is likely to become the greatest threat to nature and heritage areas in Australia. It increases the likelihood and severity of catastrophic events, such as the 2019–20 bushfires, that killed an estimated 3 billion vertebrate animals and more than 60 billion invertebrates,<sup>24</sup> and is the major threat to our coral reefs through the combined effects of ocean acidification and increased ocean temperatures.<sup>25</sup> Rapid-fire catastrophes such as fire, flood, and disease are a common path to a species' extinction.<sup>26</sup>

Despite this, our national environmental laws do not require that the climate impacts of new or expanded projects (such as new coal mines) are considered. The 'Safeguard Mechanism' is not enough, as it only applies to the largest of projects and even then leaves in place a right to pollute.<sup>27</sup> Under the EPBC Act, 740 fossil fuel projects have been approved without any consideration of their carbon emissions (direct or indirect).<sup>28</sup> Two new coal projects have been approved as recently as this year, the world's hottest year since records began.

*Scientists assessing the severity of coral bleaching at Orpheus Island in 2017. Since 2011 extreme climatic events have led to abrupt and extensive mortality of key marine habitat-forming organisms - corals, kelps, seagrasses, and mangroves - along over 45% of the Australian coastline. Image: Tory Chase/ARC Centre of Excellence in Coral Reef Studies, CC-BY-ND-2.0*

### What needs to change:

Climate change considerations must be explicitly integrated into environmental decision making at every level in the new laws, including measures to account for the likely carbon emissions from proposed actions and to ensure that decisions address the likely impact of such emissions on the Australian environment (including their impact on the carbon budget and targets set under the Climate Change Act 2022 (Cth)).

Three key changes are needed to enable this:

1. Regulatory decisions should explicitly consider the impacts of activity on global emissions, that is to say new laws must account for the scope 1, 2 and 3 emissions that arise from a project.
2. Regional plans need to address climate mitigation and adaptation priorities.
3. Regional and conservation planning should consider both current climate impacts on protected matters and future climate impact scenarios.

Further, all plans, policies and decisions under nature positive laws need to take full account of the likely impacts of climate change and include appropriate adaptation and resilience measures.



# References

- 1 Wintle, BA, Cadenhead, NCR, Morgain, RA, Legge, SM, Bekessy, SA, Cantele, M, Possingham, HP, Watson, JEM, Maron, M, Keith, DA, Garnett, ST, Woinarski, JCZ & Lindenmayer, DB 2019, 'Spending to save: What will it cost to halt Australia's extinction crisis?', *Conservation Letters*, vol. 12, no. 6, p. e12682.
- 2 Waldron, A, Miller, DC, Redding, D, Mooers, A, Kuhn, TS, Nibbelink, N, Roberts, JT, Tobias, JA & Gittleman, JL 2017, 'Reductions in global biodiversity loss predicted from conservation spending', *Nature*, vol. 551, no. 7680, pp. 364–36; Woinarski, JC, Burbidge, AA & Harrison, PL 2015, 'Ongoing unraveling of a continental fauna: decline and extinction of Australian mammals since European settlement', *Proceedings of the National Academy of Sciences*, vol. 112, no. 15, pp. 4531–4540.
- 3 Woinarski, JC, Garnett, ST, Legge, SM & Lindenmayer, DB 2017, 'The contribution of policy, law, management, research, and advocacy failings to the recent extinctions of three Australian vertebrate species', *Conservation Biology*, vol. 31, no. 1, pp. 13–23.
- 4 Bergstrom, DM, Wienecke, BC, van den Hoff, J, Hughes, L, Lindenmayer, DB, Ainsworth, TD, Baker, CM, Bland, L, Bowman, DMJS, Brooks, ST, Canadell, JG, Constable, AJ, Dafforn, KA, Depledge, MH, Dickson, CR, Duke, NC, Helmstedt, KJ, Holz, A, Johnson, CR, McGeoch, MA, Melbourne-Thomas, J, Morgain, R, Nicholson, E, Prober, SM, Raymond, B, Ritchie, EG, Robinson, SA, Ruthrof, KX, Setterfield, SA, Sgrò, CM, Stark, JS, Travers, T, Trebilco, R, Ward, DFL, Wardle, GM, Williams, KJ, Zylstra, PJ & Shaw, JD 2021, 'Combating ecosystem collapse from the tropics to the Antarctic', *Global Change Biology*, vol. 27, no. 9, pp. 1692–1703.
- 5 Kearney, SG, Carwardine, J, Reside, AE, Fisher, DO, Maron, M, Doherty, TS, Legge, S, Silcock, J, Woinarski, JCZ, Garnett, ST, Wintle, BA & Watson, JEM 2019, 'Corrigendum to: The threats to Australia's imperilled species and implications for a national conservation response', *Pacific Conservation Biology*, vol. 25, no. 3, pp. 328–328.
- 6 Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act.)
- 7 Ward, MS, Simmonds, JS, Reside, AE, Watson, JEM, Rhodes, JR, Possingham, HP, Trezise, J, Fletcher, R, File, L & Taylor, M 2019, 'Lots of loss with little scrutiny: The attrition of habitat critical for threatened species in Australia', *Conservation Science and Practice*, vol. 1, no. 11, p. E117.
- 8 Samuel, G 2020, 'Final Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)', Department of Agriculture, Water and the Environment, Canberra, October, Accessed at: <https://epbcactreview.environment.gov.au/resources/final-report>
- 9 Department of Climate Change, Energy, Water and Environment, 2022, 'Nature Positive Plan: better for the environment, better for business', Canberra, December 2022. Accessed at: <https://www.dcceew.gov.au/sites/default/files/documents/nature-positive-plan.pdf>
- 10 See here: <https://www.naturepositive.org/>
- 11 Convention on Biological Diversity Secretariat, Kunming-Montreal Global Biodiversity Framework, 22 December 2022: <https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222>
- 12 Note: There is work to be done by the scientific community to get the indicators right for any baseline. However there are existing indicators that could be used. For example, the threatened species index, extent and condition of native vegetation, population data, and indicators used in the State of the Environment Report (Cth).
- 13 See for example: Australian Government 2022, 'Australian Government response to the Joint Standing Committee on Northern Australia's: A Way Forward: Final report into the destruction of Indigenous heritage sites at Juukan Gorge and Never Again: Inquiry into the destruction of 46,000 year old caves at the Juukan Gorge in the Pilbara region of Western Australia - Interim Report'. Accessed at: <https://www.dcceew.gov.au/sites/default/files/documents/australian-response-to-destruction-of-juukan-gorge.pdf>
- 14 <https://invasives.org.au/our-work/voice-of-country/>
- 15 Reside, A., Cosgrove, A., Pointon, R., Trezise, J., Watson, J., & Maron, M. (2019). How to send a finch extinct. *Environmental Science & Policy*, 94, 163–173.
- 16 Suckling, K, Mehrhoff, LA, Beam, R & Hartl, B 2016, 'A wild success, a systematic review of bird recovery under the Endangered Species Act', Center for Biological Diversity. Accessed at: <https://biologicaldiversity.org/campaigns/esa/pdfs/WildSuccess.pdf>
- 17 Scheele, BC, Legge, S, Blanchard, W, Garnett, S, Geyle, H, Gillespie, G, Harrison, P, Lindenmayer, D, Lintermans, M & Robinson, N 2019, 'Continental-scale assessment reveals inadequate monitoring for threatened vertebrates in a megadiverse country', *Biological Conservation*, vol. 235, pp. 273–278.
- 18 See for example: Henry, K, Keniry, J, Leishman, M, & Mrdak, M 2023, 'Final Report: Independent Review of the Biodiversity Conservation Act 2016', Accessed at: <https://www.parliament.nsw.gov.au/tp/files/186428/Independent%20Review%20of%20the%20Biodiversity%20Conservation%20Act%202016-Final.pdf>
- 19 See for example: <https://theconversation.com/5-things-we-need-to-see-in-australias-new-nature-laws-217271>
- 20 There are offset calculators currently, but the calculations are not routinely published by the Government so there is uncertainty as to whether offsets are being calculated properly.
- 21 Keith, H, Vardon, M, Stein, JA, Stein, JL & Lindenmayer, D 2017, 'Ecosystem accounts define explicit and spatial trade-offs for managing natural resources', *Nature Ecology & Evolution*, vol. 1, no. 11, pp. 1683–1692.
- 22 Pickrell, J 2017, 'Australia to ax support for long-term ecology sites', *Science*, vol. 357, no. 6352, pp. 632–633.
- 23 See for example: Dasgupta, P 2021, 'The Economics of Biodiversity: the Dasgupta Review', London, HM Treasury.
- 24 van Eeden LM, Nimmo D, Mahony M, Herman K, Ehmke G, Driessen J, O'Connor J, Bino G, Taylor M, Dickman CR 2020, 'Impacts of the unprecedented 2019–2020 bushfires on Australian animals. Report prepared for WWF-Australia', Ultimo NSW. Accessed at: [file:///C:/Users/sbrugler/Downloads/WWF\\_Impacts-of-the-unprecedented-2019-2020-bushfires-on-Australian-animals.pdf](file:///C:/Users/sbrugler/Downloads/WWF_Impacts-of-the-unprecedented-2019-2020-bushfires-on-Australian-animals.pdf)
- 25 Hoegh-Guldberg, O, Mumby, PJ, Hooten, AJ, Steneck, RS, Greenfield, P, Gomez, E, Harvell, CD, Sale, PF, Edwards, AJ, Caldeira, K, Knowlton, N, Eakin, CM, Iglesias-Prieto, R, Muthiga, N, Bradbury, RH, Dubi, A & Hatzilolos, ME 2007, 'Coral Reefs Under Rapid Climate Change and Ocean Acidification', *Science*, vol. 318, no. 5857, pp. 1737–1742.
- 26 Legge, S, Woinarski, JCZ, Scheele, BC, Garnett, ST, Lintermans, M, Nimmo, DG, Whiterod, NS, Southwell, DM, Ehmke, G, Buchan, A, Gray, J, Metcalfe, DJ, Page, M, Rumpff, L, van Leeuwen, S, Williams, D, Ahnyong, ST, Chapple, DG, Cowan, M, Hossain, MA, Kennard, M, Macdonald, S, Moore, H, Marsh, J, McCormack, RB, Michael, D, Mitchell, N, Newell, D, Raadi, TA & Tingley, R 2022, 'Rapid assessment of the biodiversity impacts of the 2019–2020 Australian megafires to guide urgent management intervention and recovery and lessons for other regions', *Diversity and Distributions*, vol. 28, no. 3, pp. 571–591.
- 27 Hoffmann, AA, Rymer, PD, Byrne, M, Ruthrof, KX, Whinam, J, McGeoch, M, Bergstrom, DM, Guerin, GR, Sparrow, B, Joseph, L, Hill, SJ, Andrew, NR, Camac, J, Bell, N, Riegler, M, Gardner, JL & Williams, SE 2019, 'Impacts of recent climate change on terrestrial flora and fauna: Some emerging Australian examples', *Austral Ecology*, vol. 44, no. 1, pp. 3–27.
- 28 For more information on the Safeguard Mechanism see here: <https://www.dcceew.gov.au/climate-change/emissions-reporting/national-greenhouse-energy-reporting-scheme/safeguard-mechanism>
- 29 Hughes, L, Rayner, J, Rice, M, Arndt, D 2023, 'Beating around the bush: how Australia's national environmental law fails climate and nature', Climate Council of Australia. Accessed at: [https://www.climatecouncil.org.au/wp-content/uploads/2023/09/CC\\_MVSA0367-CC-Report-EPBC-Act\\_V7-FA-Screen-Single.pdf](https://www.climatecouncil.org.au/wp-content/uploads/2023/09/CC_MVSA0367-CC-Report-EPBC-Act_V7-FA-Screen-Single.pdf)





The Biodiversity Council brings together leading experts including Indigenous Knowledge holders to promote evidence-based solutions to Australia's biodiversity crisis. It was founded by 11 universities: The University of Melbourne, The University of Western Australia, The Australian National University, The University of Adelaide, The University of Sydney, The University of Queensland, Deakin University, The University of Canberra, Monash University, Macquarie University, and The University of New South Wales. It is host by The University of Melbourne. It receives support from The Ian Potter Foundation, The Ross Trust, Trawalla Foundation, The Rendere Trust, Isaacson Davis Foundation, Coniston Charitable Trust and Angela Whitbread.

*Image: Kangaroo Island in March 2020 following the Black Summer fires.*