Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100, Parliament House
Canberra ACT 2600

By email: ec.sen@aph.gov.au

26 August 2022

Dear Committee Secretary,

Senate Inquiry into Australia's Fauna and Flora Extinction Crisis – Committee's call for Supplementary Submissions

Thank you for the invitation to contribute to the committee's revised terms of reference.

Despite the range of inquiries and reports since 2018, we do not have any additional insights to contribute. The recommendations we made in 2018 remain as urgent and relevant as they were then.

We refer the committee to our original submission, dated 14 September 2018. Our original submission does not appear in the committee database, but we gave evidence to the committee about our submission in Hobart on 4 February 2019. We **attach** our original submission here, for the committee's reference.

We maintain our support for the recommendations in our original submission. We do not propose to add to the substance of that submission here. Rather, we emphasise the significance of the Australian Government's inaction on environmental law reform since we lodged our submission in 2018; and make the following brief 'calls to action':

1. **Law reform must be an urgent priority of this government**: the findings of the most recent *State of the Environment Report 2021* (released in July 2022) are consistent with every previous State of the Environment report. The findings of that report detail ongoing ecological decline and loss across almost every indicator that was assessed. Far from being unexpected, those findings demonstrate that action to halt and reverse Australia's record of biodiversity loss is more urgent than ever.
2. **The recommendations of Samuel Review should be adopted in full**: we commend to the Committee the recommendations of the independent Samuel Review of the *Environment Protection and Biodiversity Conservation Act 1999* (October 2020). We urge the Committee to advocate, in the strongest possible terms, for immediate action by the Australian Government to reform Australia's national environmental laws, following Professor Samuel's recommendations in full.
3. **Recent extreme events such as the 2019-20 bushfires and 2020-22 repeated floods on the east coast provide compelling support for the argument that Australia's environmental laws cannot simply be tweaked but require an holistic and comprehensive overhaul**: the findings of the Royal Commission into National Natural Disaster Arrangements (2020) demonstrate the catastrophic scale of ecological impacts from the 2019-20 bushfire season. We note, in particular, the Royal Commission's findings from paragraphs 16.11 to 16.22 of its final report, and the Royal Commission's finding that "[t]here is a need to better integrate consideration of environment and heritage assets in emergency planning and response. This requires accessible data, including on the location of environmental, heritage and cultural sites, the distribution of species and ecological communities and priorities to guide response efforts" [at para 16.20]. Australia's environmental laws do not demand the collection, maintenance or reporting of those kinds of data,

and threatened species lists are incomplete, with a strong bias towards charismatic species, particularly mammals. These shortfalls, among others, will continue to undermine effective conservation-oriented emergency responses without urgent and holistic environmental law reform.

Yours sincerely

Jan McDonald and Phillipa McCormack

About the authors:
We have a combined experience of over 40 years in the policy and practice of nature conservation law in Australia.

Professor Jan McDonald is a Professor of environmental and climate law at the Faculty of Law, University of Tasmania. She is a past President and Board Member of the National Environmental Law Association, was a member of the Australian Panel of Experts on Environmental Law, and is a member of the editorial boards of three international environmental law journals. Since 1990, she has taught a wide range of environmental law subjects at undergraduate and postgraduate levels. Her research is broad-ranging. It includes a leading text (*Environmental Law in Australia,* 2nd Ed, with Godden L & Peel J, OUP) and over 50 peer-reviewed articles. Her current focus is on the legal reforms required to respond to the impacts of climate change.

Dr Phillipa McCormack is a postdoctoral research fellow at the Adelaide Law School, The University of Adelaide, and an affiliated member of the Centre for Marine Socioecology. Phillipa's doctoral thesis examined how *Australia's legal frameworks for biodiversity conservation facilitated adaptation to climate change*. She is the author of approximately 30 articles on biodiversity, climate adaptation and conservation law; editor for the journals *Frontiers in Climate: Law & Policy* and *Journal of International Wildlife Law & Policy*; current Board Member of the National Environmental Law Association (NELA) and the National Director of NELA's education portfolio, and a member of the governance board for Natural Resource Management South, Southern Tasmania's statutory regional NRM body.

14 September 2018

Senator Janet Rice
Chair, Environment and Communications Standing Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Senator

Inquiry into Australia's faunal extinction crisis
Submission by Professor Jan McDonald & Dr Philippa McCormack

We welcome this opportunity to provide a submission to the Senate Inquiry into Australia's faunal extinction crisis (Inquiry). This inquiry is critically important. Australia has the worst mammal extinction rate in the world and the fourth worst species extinction rate overall (IUCN Red List, 2018). This inquiry is also timely because the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) ('EPBC Act') is due for its second decadal review in 2019, presenting an opportunity for meaningful reform of this important piece of legislation.

This submission is based on the submitters' combined experience of over 35 years in the policy and practice of nature conservation law in Australia.

Professor Jan McDonald is a Professor of environmental and climate law at the Faculty of Law, University of Tasmania. She is a past President and current Board Member of the National Environmental Law Association, a member of the Australian Panel of Experts on Environmental Law, and a member of the editorial boards of three international environmental law journals. Since 1990, she has taught a wide range of environmental law subjects at undergraduate and postgraduate levels. Her research is broad-ranging, focussing in the legal reforms required to respond to the impacts of climate change.

Dr Phillipa McCormack is a lecturer at the Faculty of Law, University of Tasmania and a Member of the Institute for the Study of Social Change and the Centre for Marine Socio-ecology. Phillipa's doctoral thesis examined how *Australia's legal frameworks for biodiversity conservation facilitated adaptation to climate change*. She is the author of 10 articles on biodiversity and conservation law, commissioning editor of the Australian Environment Review, and winner of the 2017 Law Council of Australia Essay Prize.

We have read the submissions of the Law Council of Australia's Environmental and Planning Law Committee and the Australian Network of Environmental Defenders' Offices, and agree broadly with the recommendations of those submissions. We also broadly endorse the recommendations contained in a range of recent reports that build upon the work of the Australian Panel of Experts on Environmental Law, including:

- Blueprint for the Next Generation of Australian Environmental Law and supporting technical documents, particularly Technical Paper 3: Terrestrial Biodiversity Conservation and Natural Resources Management Governance (Australian Panel of Experts on Environmental Law, 2017).
- Restoring the Balance: The case for a new generation of Australian environmental laws (BirdLife Australia, 2018)

• Next Generation - Biodiversity Laws: Best practice elements for a new Commonwealth Environment Act (EDO NSW and Humane Society International, 2018).

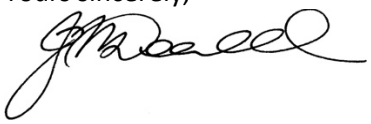
We do not seek to restate the views of these groups. Instead, this submission addresses specific aspects of the following terms of reference:

(c) The Commonwealth Government's international and domestic obligations to conserve threatened fauna
(d) Adequacy of Commonwealth environment laws to protect threatened fauna, including from key threatening processes
(e) Adequacy and effectiveness of protections for critical habitat for threatened fauna under the EPBC Act
(f) Adequacy of management of the National Reserve System ('NRS') and connectivity conservation
(i) Adequacy of adaptive management responses
(k) Adequacy of existing compliance mechanisms for enforcing Commonwealth environment laws.

We also attach several recent publications which address the issues raised in our submission.

We would be happy to respond to any questions the Committee may have, if appropriate.

Yours sincerely,



Jan McDonald & Philippa McCormack

Senate Environment and Communications References Committee inquiry into Australia's faunal extinction crisis

Jan McDonald & Philippa C McCormack

Summary of recommendations

(c) The Commonwealth Government's international and domestic obligations

- To meet its international or domestic obligations to protected threatened species and populations, and prevent extinctions, the Commonwealth must reform the EPBCA in the ways outlined below, resource its implementation, and establish agency independence to enforce obligations.

(d) Adequacy of Commonwealth environment laws to protect threatened fauna

- The EPBC Act's objectives should be replaced with substantive outcomes-based objects
- The Act should impose a duty on decision makers to to prevent extinction and remove or minimise the Minster's discretion.
- The EIA trigger of 'significant' impacts should consider the effect of multiple activities and the interaction of other stressors not related to the proposed activity.
- Exemptions for forestry and offshore oil development should be removed.
- Duties of active management are required. Recovery planning and implementation should be fully funded. Alternatively, bioregional or landscape scale strategic planning should address the recovery needs of listed species.
- An evaluation of the conservation effectiveness of biodiversity offsetting is essential.
- A threat abatement plan should be prepared to outline the Commonwealth's plan for addressing the impacts of anthropogenic climate change.

(e) Adequacy and effectiveness of protections for critical habitat

- All critical habitat identified in a recovery plan should be registered and protected.
- Identification of critical habitat should take into account the impacts of future climate change.

(f) Adequacy of management of the National Reserve System ('NRS') and connectivity conservation

- The failure to achieve a nationally comprehensive, adequate and representative reserve system has increased the threat of extinction for native fauna and threatens native flora populations, ecological communities and broader ecosystem processes.
- The NRS needs to be completed, taking into account CAR criteria and the importance of future climate refugia.
- The impacts of climate change and identification of climate refugia must be considered when identifying areas of high priority for addition to the NRS.
- Enhancing continental connectivity is an important climate adaptation strategy for biodiversity, including threatened fauna. The *National Wildlife Corridors Plan*, or a similar successor, should be funded and implemented.

(i) Adequacy of adaptive management responses

- Commonwealth conservation law requires adaptive management mechanisms at the project, program and regime level.

(k) Adequacy of existing compliance mechanisms for enforcing Commonwealth environment laws.

- The EPBCA's compliance mechanisms are underutilised. Improved resourcing and greater agency independence would greatly enhance enforcement.

- In the absence of better resourcing and stronger commitments to enforcement, retention of the EPBCA's third party enforcement provisions is essential.

TOR (c) International and domestic obligations to conserve threatened fauna

The Commonwealth Government has responsibility for ensuring that Australia's international legal obligations are effectively represented in domestic law, implemented and achieved. Australia has ratified the Convention on Biological Diversity ('CBD'). The Convention imposes on parties the obligation to "promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies" (Art 8(f)). It also obliges them to "develop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations" (Art 8(k)).

In 2010, the Commonwealth Government signed up to global targets under the CBD and the *United Nations Strategic Plan for Biodiversity 2011-2020*, known as the 'Aichi Targets' (https://www.cbd.int/sp/targets/). Aichi Target 12 provides that "*by 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained*".

The *Environment Protection and Biodiversity Conservation Act* 1999 (Cwth) (EPBCA) implements the international obligations and undertakings set out above, as well as other international agreements such as the Ramsar Convention, CITES and a range of migratory bird treaties. The Act provides that an object of the Act is "to promote the conservation of biodiversity" (s 3(1)(c)). To achieve that object, the Act purports to contain provisions to

> (i) protect native species (and in particular prevent the extinction, and promote the recovery, of threatened species)… [s (2)(e)]

The Act establishes a list of threatened species, including native fauna (Part 13, Div 1); provides for the preparation of recovery plans, threat abatement plans, conservation advices and wildlife conservation plans to prevent listed threatened species from becoming extinct (Part 13, Div 5); prohibits actions with a significant impact on listed threatened species without Commonwealth approval (ss 18, 18A); and requires the Minister to not act inconsistently with the CBD, a recovery plan or threat abatement plan for a listed threatened species, and to have regard to any approved conservation advice for the species (s 139).

On the face of it, Australia's legal framework appears to give effect to our international obligations to prevent extinction. However, the most recent *Australia: State of the Environment* report, released in 2017,[1] demonstrates continuing declines in populations of native fauna and their habitats (along with biodiversity outside the scope of this Inquiry, such as native vegetation, ecological communities and invertebrate species).[2] This decline is reflected in Australia's 2014 report on implementation of the CBD.[3] It is clear that Australia's domestic legal frameworks are not achieving the objects of the EPBC Act, or Australia's international obligations under the CBD.

Australia is also a signatory to the United Nations Framework Convention on Climate Change. While it is not an obligation relating to conservation of fauna, climate change is recognised nationally and internationally as a key threat to species future viability. Australia has already recorded its first climate change driven faunal extinction.[4] The connection between progress on climate change and meeting global biodiversity targets is strong. Meeting and exceeding our emissions reduction commitments

[1] Cresswell ID & Murphy HT (2017) *Australia State of the Environment 2016: Biodiversity* - Independent report to the Australian Government Minister for the Environment and Energy.
[2] Woinarski, J, Burbidge A & Harrison P, 'Ongoing unraveling of a continental fauna: decline and extinction of Australian mammals since European settlement' (2015) 112(15) *PNAS* 4531.
[3] Australian Government, Department of the Environment, *Fifth National Report to the Convention on Biological Diversity*, Commonwealth of Australia 2014, 3.
[4] Woinarski, J, 'A very preventable extinction' (2016) *Nature* 535: 493*;* Fulton, Graham, 'The Bramble Cay melomys: the first mammalian extinction due to human-induced climate change', *Pacific Conservation Biology* (2017) 23, 1–3, http://dx.doi.org/10.1071/PCv23n1_ED.

under the Paris Agreement will be critical to managing the impacts of climate change on habitat for threatened species in both terrestrial and marine environments.

(d) Adequacy of Commonwealth environmental laws to protected threatened fauna, including from key threatening processes

(i) The objects of the EPBC Act

A fundamental problem with existing environmental legislation for protecting threatened species, including the EPBC Act, is the failure to connect ambitious statutory objects clauses with substantive obligations. As is often the case, the objects clause of the EPBC Act is replete with procedural rather than substantive goals. For example, one EPBC Act object is "to *provide for* the protection of the environment, especially those aspects of the environment that are matters of national environmental significance" (emphasis added). This indirect framing creates a procedural purpose, rather than a substantive or outcomes-oriented goal of actually achieving a protected environment.[5] As the climate changes, indirect objects clauses may be insufficient for determining conservation success or failure.

The problem of the lack of substantive objects is exacerbated by the absence of weak statutory obligations. Neither the EPBCA nor any state environmental legislation contains any obligations on any decision-maker to actually achieve its statutory purposes. Duties instead imposing obligations to "have regard to", "try", "endeavour", "aim", "promote" or "pursue" the purposes.[6] In general, decision makers are required to balance competing interests, involving a trade-off between conservation and "development". Balancing mandates typically privilege development, as decision makers lack clear guidance about how to exercise their discretion in such cases. Even comparatively strong duties, such as requiring a decision to be "consistent with" statutory purposes have been interpreted as requiring no more than that a decision is "not antipathetic" to the purposes.[7]

Stronger duties could enhance the implementation of objects clauses, and help to ensure that reformed legal purposes support more adaptive conservation under climate change. Legal reform will be necessary to require decision makers to achieve or at least 'further' statutory objects such as 'preventing extinction', in all decision making under the Act. We argued in a recent paper that:

> Where objectives are specified, the statutory duty should be to exercise powers and functions to achieve the conservation of biological diversity and ecological integrity and not merely to consider the matter in the exercise of a power or function.[8]

(ii) Limits on the scope of EPBC Act protection

The scope of the EPBC Act is limited in two key respects. First, the prohibition on activities that adversely affect listed species and ecological communities is limited by the threshold of "significance": only activities with *significant* impacts require approval. This threshold of significant impact means that the vast majority of development proposals will only require assessment at a local or State level, which lies outside the scope of national law. When combined with the limited consideration of cumulative impacts and the absence of strategic assessments at the landscape or bioregional level, this represents a critical deficiency in the protection afforded under the Act, since

[5] McCormack, PC, 'The legislative challenge of facilitating climate change adaptation for biodiversity' (2018) 92 *Australian Law Journal* 1, 9-10.
[6] Ibid.
[7] Ibid.
[8] McDonald, Jan et al, 'Rethinking legal objectives for climate-adaptive conservation' (2016) 21(2) *Ecology and Society* 25.

numerous activities that individually fall under the threshold of significant may combine to have a very large effect on species.

The second key limit is that is exempts several important types of activity altogether. All forestry operations conducted pursuant to regional forest agreements are expressly exempted, creating a significant gap in relation to the protection of terrestrial fauna.[9] While the logic of undertaking comprehensive regional assessments as a prelude to settling the RFAs was laudable, in practice these assessments lacked the rigour needed to ensure appropriate species protections, and the oversight of forestry operations in complying with substantive species protection obligations contained in the RFAs rests with the forestry agencies who are also tasked with promoting the industry.[10] In the marine context, the impacts of offshore petroleum activities on threatened species and cetaceans is outsourced to NOPSEMA.

(iii) Problems with the discretionary nature of obligations for species protection

The EPBC Act gives the Environment Minister too much discretion in making key decisions affecting species. These include:

- deciding whether to take protective actions, such as eg listing a species that is threatened with extinction;
- determining whether an activity will have a "significant" impact on a species; and
- 'taking into account' the presence of a listed species when deciding to approve an action that may have a significant impact on the species).

The Minister is not required to refuse a development proposal even if it is likely to have a significant impact on a MNES, such as a listed threatened species. The Act permits the Minister to issue a conditional approval. This happens in the overwhelming majority of cases. There are no consequences under any Commonwealth law (for government or any other actor) for a failure to prevent threatened fauna from becoming extinct.[11] The absence of enforceable duties on decision-makers to use their powers to achieve the Act's objects and the broad discretion afforded the Minister to approve developments with adverse impacts are key weaknesses of the legislative framework as they permit the Minister to consistently prefer harmful activities over species protection.

The wide discretion afforded to the Minister is especially problematic in light of the increasing use of biodiversity offsets as conditions on the approval of activities with significant adverse impacts. The literature on biodiversity offsets is vast and it is beyond the scope of this inquiry to revisit the many submissions made in the inquiry that specifically addressed in this issue.[12] The recommendations of that Inquiry have not yet been implemented and there has been a steady increase in the use of offsets to enable harmful activities to proceed. There has been no systematic evaluation of the effectiveness of offsets in achieving the no net loss or net gain benchmark. As has already been

[9] Feehely J, Hammond-Deakin N & Milner, *One Stop Chop* (ANEDO, 2013); EDO Tasmania*, State Forests, National Interests* (EDO Tasmania, 2016).
[10] McDonald J, 'Regional Forest (Dis)Agreements: The RFA Process and Sustainable Forest Management' (1999) 11 *Bond Law Review* 295.
[11] For example, Woinarski, Burbidge and Harrison (2015), above n2, recommend a coronial inquiry equivalent for extinction, to learn lessons, improve conservation practice and avoid future extinctions.
[12] Senate Environment and Communications References Committee, *Environmental Offsets* (Commonwealth of Australia 2014); These submissions are analysed in Foerster, A and McDonald, J, 'Thresholds, scale and strategy for biodiversity offsets in Australia: where to draw the line?' (2016) 28(1) *Environmental Law and Management*, 13-30; and McDonald, J, McCormack P & Foerster A, "Promoting resilience to climate change in Australian conservation law: The case of biodiversity offsets" (2016) 39(4) *UNSW Law Journal*, 1612-1651.

noted, indicators point to an ongoing decline in species health, which strongly suggests that biodiversity offsets are failing to achieve their goal of no net loss.

(iv) EPBC Act lacks obligations to actively protect species

The EPBCA contains few obligations to take proactive measure to protect species.

The primary tool of active management is the recovery plan. The EPBCA previously set strict deadlines for completion of recovery plans depending on the risk category in which a species had been listed. This approached was dropped in 2006 because of insufficient resources. It is now up to the scientific body responsible for listing to provide guidance on what, if anything, can be done to recover a species and to recommend whether there should be a recovery plan (s189(1B)). In advising the Minister on whether there should be a recovery plan, the value of the species to humanity must be taken into account as well as its importance to ecosystems (s 274).

In practice recovery plans are only prepared where the ecology of the species leads to complex management needs, or because of the nature of the threats posed or because of the number of stakeholders affected or involved in implementation.[13] The number of recovery plans is far fewer than the number of listed species, and always lags listing by at least several years. A recent ACF/Birdlife/EJA report found that only about 10 per cent of listed critically endangered and endangered species had recovery plans that placed any limits on the future loss of habitat.[14]

Implementation of recovery plans and threat abatement plans also require strengthening. Even when prepared, plans may not have funding for implementation and frequently place no limits on future loss of habitat, even where this has been identified as a significant threat.[15] This requires more rigorous requirements for baseline data, monitoring, reporting and evaluation of management and recovery actions.[16] For example, recovery plans should include measurable recovery actions and outcomes, and the Minister required to regularly report against those outcomes and adjust agency effort in response.

These failings suggest that either recovery planning and implementation should be prioritised and fully funded and or an alternative approach be taken that strategically addresses the recovery needs of multiple listed species across bioregions. Consistent with the Hawke Review of the *Environment Protection and Biodiversity Conservation Act* recommendations, comprehensive regional and multi-species recovery plans for ecological communities can be an effective use of resources, recognising the clear link between habitat protection and improved prospects of survival for threatened species.[17]

Issues relating to critical habitat are discussed separately under TOR (e).

(v) Accounting for the impacts of climate change

[13] Cresswell and Murphy, above n1.
[14] ACF, Birdlife Australia, and Environmental Justice Australia*, Recovery Planning: Restoring life to our threatened species* (ACF, Birdlife Australia, and Environmental Justice Australia, 2015).
[15] Ibid.
[16] The importance of monitoring performance was recognised in the *Report on the Review of the first five years of Australia's Biodiversity Conservation Strategy 2010–2030* (prepared by the Biodiversity Working Group convened under the Meeting of Environment Ministers) (Commonwealth of Australia 2016), 2, 14,15.
[17] Hawke, A, *The Australian Environment Act: Report of the Independent Review of the Environment Protection and Biodiversity Conservation Act 1999.* (Australian Government 1999), [5.20].

The explicit and implicit goals of most Australian conservation laws are to preserve the environmental status quo. These laws, including the EPBC Act, typically reflect a false presumption that nature is "stationary", and that biodiversity can be preserved indefinitely within historical, "native" distributions and species compositions. This presumption is demonstrably false: Australian biodiversity continues to decline, with three vertebrate species becoming extinct since just 2009.[18] Furthermore, climate change is already triggering species redistributions in both terrestrial and marine environments.[19]

Conservation laws such as the EPBC Act that are based on static purposes will be ill-equipped to prevent extinctions or facilitate adaptation-oriented approaches to conservation as the climate changes.[20] This demands some re-evaluation of the over-arching goal of conservation in the face of climate change that allows for more dynamic conceptions of nature, without in any way undermining the importance of preserving as much biodiversity as possible.[21]

Systems for characterising and listing the attributes of species and areas deserving conservation status should be capable of reflecting changes in the system, since new assemblages are also likely to have unique and important conservation value. There is also a growing case for the protection through covenanting of properties containing *future* climatic habitat, since most laws governing conservation covenants currently require owners to demonstrate the existing, rather than potential, natural values of a covenanted property.

Similarly, the recovery actions identified in recovery plans and conservation advices need to factor in future climate change. Many current advices under the EPBC Act specify that restoration must occur within the original range of the ecological community. Where climatic conditions prevent a return to the original range, this goal will be costly, or impossible, to achieve. Similarly, conservation covenants on private land are often directed at protecting a particular natural feature such as a listed, threatened population of flora and/or fauna species, an ecological community, a patch of old growth forest, a site of geoconservation importance, or another natural feature identified as a priority for conservation such as a Ramsar listed wetland or habitat for migratory species. There is evidence that owners of covenanted properties have petitioned to have a covenant revoked when a listed value has been lost or become degraded.[22]

(vi) Accounting for cumulative impacts on biodiversity

The State of the Environment Report 2016 confirms Australia's biodiversity decline is largely due to the cumulative impacts of multiple pressures The Federal Court's narrow interpretation of the Minister's obligation to consider the cumulative impacts of proposed activities highlights the inadequacy of the EPBCA's position on cumulative impacts.[23] The EPBCA should oblige the Minister to consider both the combined impact of past and likely future activities, the interaction of impacts from proposed activities and other stressors, and the prospect of approval setting a precedent for further development in the same location or of a similar type.

[18] Cresswell and Murphy, above n1.
[19] Pecl, Gretta T et al, 'Biodiversity redistribution under climate change: impacts on ecosystems and human well-being' (2017) 355(6332) *Science* eaai9214 1.
[20] McCormack 2018, above n5.
[21] McDonald et al, 2016 above n8; and McCormack, 2018, above n5.
[22] Rissman AR, Owley J, Shaw RM & Thompson B, 'Adapting Conservation Easements to Climate Change' (2015) *Conservation Letters* 8(1) 68-76; Hardy MJ, Fitzsimons JA, Bekessy SA, and Gordon A, 'Exploring the Permanence of Conservation Covenants' (2016) *Conservation Letters* (online) doi: 10.1111/conl.12243.
[23] *Tarkine National Coalition Inc v Minister for the Environment* FCAFC 89.

Increasing the use of strategic and regional planning tools to more proactively assess and manage impacts on threatened species could also enhance consideration of cumulative impacts.[24] Well-implemented bioregional planning would protect ecological integrity at a landscape scale, whilst ensuring that economic uses are located in the most appropriate places. The Committee acknowledges the work done by the Australian Panel of Experts on Environmental Law in developing the *Blueprint for the Next Generation of Environmental Laws* and commends that work to the Senate.

(vii) Failure to address climate change as a key threatening process

As we have noted above, climate change will exacerbate existing threats to Australia's threatened fauna, such as habitat loss and fragmentation, new (introduced and native) invasive species and inappropriate fire regimes. It will also become an increasingly significant threat to fauna in its own right, destroying or disturbing habitat through sea level rise, rising temperatures and changing rainfall patterns, and triggering species to redistribute across the landscape, undermining ecological interactions and processes. Research by the Commonwealth Scientific and Industrial Research Organisation ('CSIRO') indicates that climate change could "lead to most places in Australia having, by 2070, environments that are more ecologically different from current conditions than they are similar".[25]

The EPBC Act does allow for the identification of key threatening *processes* and the preparation of threat abatement plans for each process, but to date these have focused heavily on invasive species. 'Loss of terrestrial climatic habitat caused by anthropogenic emissions of greenhouse gases' is listed as a key threatening process, but anthropogenic climate change will affect far more than terrestrial climatic habitat, so a new listing is required. The full implications of anthropogenic climate change should be listed as a key threatening process under the EPBC Act.

Even in relation to the more limited key threatening process of the 'Loss of terrestrial climatic habitat…', the Commonwealth Government has elected not to produce a threat abatement plan. The Threatened Species Scientific Committee recommended at the time that a nationally coordinated threat abatement plan was not a "feasible, effective or efficient way to abate the process". The committee noted that a threat abatement plan:

- "could not effectively reduce losses of climatic habitat, since the internationally-distributed causal factors (climate change due to anthropogenic greenhouse gas emissions) would continue;
- would not contribute any additional threat mitigation over and above current initiatives;
- would involve setting up further consultative bodies and duplicate consultation which has already taken place during development of the [National Greenhouse Strategy ('NGS')]; and
- would duplicate actions underway or planned as part of the NGS".[26]

The National Greenhouse Strategy (1998) is no longer government policy and there is no similarly comprehensive or ambitious national climate policy to replace it. The lack of national guidance for

[24] The 2009 Hawke Review of the EPBC Act advocated greater use of bioregional planning mechanisms within the Act, Hawke, above n17.
[25] Dunlop M, et al, *Implications for policymakers: Climate change, biodiversity conservation and the National Reserve System* (CSIRO 2012).
[26] Threatened Species Scientific Committee, http://www.environment.gov.au/biodiversity/threatened/key-threatening-processes/loss-of-habitat-caused-by-greenhouse-gases.

addressing climate threats to biodiversity, including to threatened fauna, is an increasingly urgent conservation challenge.

A national threat abatement plan should be prepared to guide decisive, landscape- and bioregion-scale action to address this threat.

(e) Adequacy and effectiveness of protections for critical habitat

Habitat loss and disturbance is a major threat to a majority of threatened fauna listed under the EPBC Act. Identifying critical habitat is important for prioritising recovery efforts and assessing the significance of impacts, particularly for endangered and critically endangered species. Under the EPBCA, the Minister is required to maintain a register of Critical Habitat on Commonwealth land (EPBC Act, s.207A) but has discretion as to whether critical habitat identified in a recovery plan is included on the register. It is an offence to take an action that will significantly damage registered critical habitat (EPBCA, Section 207B).

The discretionary nature of the decision to register areas of critical habitat fundamentally undermines the protections afforded by these provisions. In practice, only five places have ever been listed despite growing evidence that the critical habitat of some species is contracting due to land clearing and climate change. **All critical habitat identified in a recovery plan should therefore be registered** and protected under s.207B.

The current restricted application of protections to Commonwealth land is a further constraint. Effective protection of critical habitat requires identification and protection across all tenures and jursidictions. The provisions of the *EPBC Act should be extended to include registered critical habitat on any public land, including land owned or managed by a State or local government.* This would be consistent with Australia's international obligations under the CBD and Aichi Targets.

Even if implemented effectively, the concept of critical habitat is not defined in a way that recognises the implications of climate-driven species redistributions and the need for climate-adapted habitat to provide refuge from threats such as bushfire, new invasive species and habitat loss.
Habitat that is critical to the survival of a population of fauna (whether declared critical habitat or not) is regularly destroyed in the process of approved developments, through the operation of the Commonwealth Government's offsetting policy. This also has implications for fauna that are not (yet) listed as threatened, and for the survival of threatened ecological communities and ecosystems. **The identification, registration and protection of critical habitat should take into account the impacts of climate change.**

(f) Adequacy of management and extent of the National Reserve System (NRS), stewardship and covenants, and connectivity corridors

The National Reserve System (**NRS**) is a critical component of Australia's overall framework for nature conservation and for meeting our CBD commitments. The goal of the NRS is to protect a comprehensive, adequate and representative (CAR) sample of Australia's unique bioregions. The NRS currently covers approximately 17% of Australia's landmass, a significant proportion of which is Indigenous Protected Areas.

Despite increased coverage by virtue of large IPAs, the NRS falls significantly short in meeting CAR criteria. Bioregions in the central and parts of western NSW are under-represented, and there are significant gaps at the sub-bioregional level across the country. The protected area network in Australia had its foundations in what have been referred to as "residual" lands – areas otherwise not

required for economic uses, which historically were set aside for recreation. The result has been that biodiversity in most need of protection has not necessarily received it.[27] More recently there has been an increased focus on areas needed for biodiversity conservation, but significant gaps remain for underrepresented bioregions.

The WWF calculated that in 2012, on land 1,655 of 5,815 ecosystems had no representation in the NRS. Another 696 were over half way towards meeting a standard of 15% by area of their pre-clearing extent, while 2,049 were under half way towards meeting this standard. Reservation of an additional 57 million hectares was still necessary if all ecosystems were to be brought up to the 15% standard, but in some cases filling the gaps would require protection of all the remaining uncleared areas, as well as natural regeneration of other areas, and possibly replanting others.[28] In NSW, coastal bioregions are well represented but inland bioregions, dominated by agriculture, are underrepresented. Even on the coast, however, some sub-bioregions are poorly represented, particularly the flat and fertile coastal lowlands, in contrast to steeper areas. By 2016, of 85 bioregions only 36 had attained the Aichi target of having 17% of their area protected, with 24 having less than 8% of their area under protection.[29]

In addition to limited coverage, over 48% per cent of the NRS consists of IUCN categories V and VI, which allow grazing, mining, and in some cases forestry.[30] As part of the process of completing the NRS to meet CAR criteria, the status of some reserves may need to be upgraded to limit the impact of these activities. Reserves will still be important under climate change, although they may contain different ecosystems from those for which they were originally established, as species move, or become more or less abundant. The failure to achieve a nationally comprehensive, adequate and representative reserve system undermines conservation of fauna (reducing habitat availability and adaptive capacity) but also threatens native flora populations, ecological communities and broader ecosystem processes. Addressing gaps and weaknesses in the current network therefore remains a high priority.

There is a strong case for expansion of the NRS to ensure protection of a CAR network of bioregions, with appropriate connectivity between areas. The NRS should be expanded through additions to the public protected area estate and, where appropriate, through secure private conservation initiatives.

When identifying areas of high priority for addition to the NRS, it is imperative that planners **consider the impacts of climate change when selecting and managing NRS sites**, and identification of climate refugia. Early research results also indicate that only 14% of identified climate change refugia identified fell with the existing NRS.[31]

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[27] Pressey, RL & Bottrill, MC, 'Opportunism, Threats, and the Evolution of Systematic Conservation Planning.' (2008) 22(5) *Conservation Biology*, 1340-1345; Fuller R et al 'Replacing underperforming protected areas achieves better conservation outcomes' (2010) 466 *Nature*, 365-367.

[28] Taylor MFJ, Fitzsimons JA, Sattler PS, *Building Nature's Safety Net 2014: A decade of protected area achievements in Australia (*2014 WWF-Australia, Sydney) (www.wwf.org.au/buildingnaturesafetynet2014)

[29] Taylor, MFJ, *Building Nature's Safety Net 2016: State of Australian terrestrial protected areas 2010-2016. (2017* WWF-Australia, Sydney).

[30] Department of the Environment and Energy *Ownership of protected areas*. At <http://www.environment.gov.au/land/nrs/about-nrs; Adams VM and Moon, K, 'Security and equity of conservation covenants: Contradictions of private protected area policies in Australia' (2013) 30 *Land Use and Policy* 114-119.

[31] Reside, A. et al, *Climate change refugia for terrestrial biodiversity: defining areas that promote species persistence and ecosystem resilience in the face of global climate change, (*National Climate Change Adaptation Research Facility, Gold Coast, 2016).

Finally, **expansion of the NRS should be accompanied by renewed commitment to ensuring connectivity between protected areas.** Enhancing continental connectivity is an important climate adaptation strategy for biodiversity, including threatened fauna. No Commonwealth law currently mentions, facilitates or requires activities that enhance connectivity. The National Wildlife Corridors Plan offered a valuable mechanism for improving continental connectivity, including for climate adaptation. The government webpage about the plan has been archived and, presumably, the plan has effectively been 'shelved'. The plan should be revived, and should be appropriately funded and implemented.

Commonwealth management planning for NRS areas is significantly better than most protected area management planning in Australia. It is up-to-date and usually (but not always) acknowledges climate change. A climate change policy sits behind the management plans, affording some guidance for Commonwealth protected area managers. However, management of protected areas that are not Commonwealth-owned (that is, private, and state-owned public protected areas) is typically less comprehensive and/or effective, with thousands of state-managed protected areas including national parks, with no formal management plan.

(h) Adequacy of existing funding streams

Both the overall and relative value of funding for environmental programmes has declined significantly in recent years. The inadequacy of current funding levels prompted the State of the Environment Report 2016 to suggest that "major reinvestments across long timeframes [are needed] to reverse deteriorating trends."[32] While private and philanthropic funding can be a valuable complement, it cannot replace the obligation of Commonwealth to provide adequate funding for Australia to give effect to its Aichi targets on halting species decline.

More funding is clearly needed, accompanied by a more strategic approach to allocation of funding to support recovery planning and implementation, private land conservation, expansion and management of the NRS, and investigation of rehabilitation and translocation opportunities.

(i) Adequacy of adaptive management responses

Adaptive forms of management are crucial for avoiding fauna extinctions, and will become even more important as the climate continues to change. **Adaptive management is needed at the project, programme and regime levels.**

Adaptive management is not effectively reflected or incorporated in Australia's conservation laws. Mechanisms are needed to enable the law to ensure that the overall performance of conservation laws meets Australia's international commitments. Reform of the law itself is generally slow and resource intensive. This means that laws like the EPBCA and regulations require inbuilt flexibility mechanisms to enable them to respond to changes in scientific knowledge or environmental conditions. At present, there is no mechanism in the EPBCA for consistent or programmatic monitoring of the *effectiveness* of conservation measures that have been implemented. Conditions may be imposed with the aim of ensuring no significant impacts on species, and a proponent may comply with these conditions without actually having to demonstrate that the conditions achieved their overall objective. This has become particularly problematic since the dramatic increase in the use of biodiversity offset arrangements as a condition attaching to approval.[33]

[32] Cresswell and Murphy, above n1.
[33] McDonald, McCormack & Foerster, 2016, above n12.

The EPBC Act also lacks mechanisms to ensure adaptive management of species recovery programs. The limited resources available for recovery planning mean that once a recovery plan is prepared, there is little scope for monitoring its effectiveness and amendment to ensure effectiveness.

Finally, and perhaps most worryingly, there is very little evidence of any form of adaptive management at the project level. Under the guise of providing "certainty" to proponents, conditions attaching to approval are not subject to change where monitoring shows that they are not achieving their desired conservation outcomes. It is essential that conditions clearly articulate the conservation outcome they are designed to achieve, and require alteration of actions where they fall short of those outcomes.[34]

There should also be mechanisms for requiring enforceable undertakings or imposing conditions on approvals relating to numbers of new jobs to be created or economic benefits to be derived. This is because the Minister's exercise of discretion to permit activities that will adversely impact listed species is typically based on these economic gains. Yet there have been many examples of economic benefits being overstated in environmental impact statement documents and a far lower economic gain being realised in practice. An adaptive approach should allow for conditions that require prescribed economic benefits to be demonstrated or to impose higher environmental conditions in cases where the promised economic benefits are not delivered in full.

(k) Adequacy of existing compliance mechanisms for enforcement

Lack of adequate enforcement undermines biodiversity conservation efforts. The EPBCA contains a range of compliance and enforcement mechanisms but these mechanisms are underutilised for a range of reasons. Enforcement is the responsibility of the Department of Environment. Enforcement and compliance are weak. ANAO audits have been critical of the Department of Environment's compliance monitoring, noting a "generally passive approach to managing non-compliance".[35] Post-approval oversight is poor, with little in the way of active oversight. This stems from under-resourcing and the Department's lack of independence.

In practical terms, the staffing levels of the Department of Environment leave offer little scope for consistent monitoring and enforcement of compliance with environmental approvals conditions. There are no Commonwealth environmental enforcement officers onsite in any part of Australia, making detection and policing highly dependent on the oversight of members of the public or interested organisations. Locating responsibility for approval and post-approval compliance areas in the one agency exacerbates this problem, and exposes the Department to political influence.

Even where breaches of the Act have been brought to the attention of the Department, there is a lack of political will to act. While there have been some important civil and criminal enforcement actions, there have also been instances where the Department has declined to Act. The Department's reluctance to engage the proponent in respect of non-performance of the fishway on the Paradise Dam and the use of electric deterrent fences against flying foxes on North Queensland lychee farms are two prominent examples of this reluctance to enforce non-compliance with the Act.[36]

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[34] Ibid.

[35] ANAO Report No. 43 2013–14, *Managing Compliance with Environment Protection and Biodiversity Conservation Act 1999 Conditions of Approval*; and ANAO Audit Report No. 7 2015–16*, Managing Compliance with the Wildlife Trade Provisions of the Environment Protection and Biodiversity Conservation Act 1999.*

[36] McGrath C, 'Flying foxes, dams and whales: Using federal environmental laws in the public interest' (2008) 25 EPLJ 324., at 345-346.

These deficiencies arise not from weaknesses in the legislative framework *per se*, but in the institutional arrangements under which the Act is administered. It points to a pressing need for an **independent agency to be entrusted with this role, and properly funded to perform it.** These issues are the subject of recommendations of APEEL and a recent paper by the EDO NSW and Humane Society International (HSI) *Next generation biodiversity laws – Best practice elements for a new Commonwealth Environment Act*. We broadly endorse the recommendations of that report in relation to the need for new Commonwealth environmental protection institutions.

Additional resources are needed to enable Department to fulfil their monitoring and enforcement obligations. In the absence of better resourcing and stronger commitments to enforcement, retention of the EPBCA's third party enforcement provisions is essential. This includes the right of interested third parties seek judicial review of decisions made under the EPBC Act and to seek injunctions to prevent non-compliance under ss. 475 and 487 of the EPBC Act.