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Submission to the Environment and Communications References Committee inquiry into Australia's faunal extinction crisis

About ACF

ACF is one of Australia's peak environmental organisations. We represent a community of more than 500,000 people who are committed to achieving a healthy environment for all Australians. For more than 50 years ACF has been a strong advocate for Australia's forests, rivers, people and wildlife. ACF is proudly independent, non-partisan and funded by donations from our community.

Australia's extinction crisis

Australia, like the world, is in the grips of an extinction crisis. Species are disappearing at 1,000-10,000 times the natural rate.¹ It is no secret that biodiversity in Australia is in substantial decline. As one of the few mega-biodiverse developed nations in the world, our title as a global leader on extinction and biodiversity loss is shameful. Since 2000 Australia's list of nationally threatened species and ecological communities has increased by more than 30% (from 1,483 to 1,947 - as at 31 July 2018).

Australia has the highest number of mammals declared extinct since the arrival of Europeans, with 27 mammals formally declared extinct. This list is expected to shortly grow, with an additional 9 mammals likely to be added to the extinct category.² Some of these species, such as the Capricorn rabbit rat and broad-cheeked hopping mouse likely disappeared in the mid 20th century. However Australia's faunal extinction record is not something of the distant past. Since 2009, three species of animal, the bramble cay melomys, the Christmas Island pipistrelle and Christmas Island skink have gone extinct. In response to these disappearances, leading researchers undertook a forensic approach to understand what led to each extinction. They note a number of key issues in terms of policy and management including:

¹ De Vos, J. M., Joppa, L. N., Gittleman, J. L., Stephens, P. R. and Pimm, S. L. (2015), Estimating the normal background rate of species extinction. *Conservation Biology*, 29: 452-462. doi:[10.1111/cobi.12380](https://doi.org/10.1111/cobi.12380)

² "Threatened species: nine mammals and mountain mistfrog could join" 10 Jul. 2018, <https://www.theguardian.com/environment/2018/jul/11/threatened-species-nine-mammals-and-mountain-mistfrog-could-join-extinction-list>. Accessed 7 Aug. 2018.

“a lack within national environmental legislation and policy of explicit commitment to the prevention of avoidable extinctions, lack of explicit accountability, inadequate resources for conservation (particularly for species not considered charismatic or not of high taxonomic distinctiveness), inadequate biosecurity, a slow and inadequate process for listing species as threatened, recovery planning that failed to consider the need for emergency response, inability of researchers to identify major threatening factors, lack of public engagement and involvement in conservation decisions, and limited advocacy.”³

Many of these key issues are touched in the content of this submission.

The key drivers of species loss are well known. The major drivers of habitat loss are well understood to include: habitat clearing and fragmentation, invasive species and inappropriate fire regimes as well as disease, pollution, over-exploitation and climate change.

The loss of threatened species (and of biodiversity more generally) is truly a wicked problem. Turning around the trajectories of imperilled species will take decades, rather than years or months. The threats that species face are multi-faceted and reinforcing, for example the loss of habitat compounds the impact of feral cats on small mammals and birds. There is no single silver bullet to solve this crisis, it will involve multi-pronged policy and reform, including effective national leadership, law reform and substantial increases in funding for species recovery.

The Australian State of Environment Report 2016 clearly highlights the decline in Australia's biodiversity, noting:

“Based on the information available about vegetation extent and condition, and the small number of species for which there is some understanding of trends in distribution and abundance, the status of biodiversity in Australia is generally considered poor and deteriorating.”⁴

The full impact of faunal extinction remains poorly understood. However there are multiple dimensions to the loss of species, including impacts to ecosystem function and ecosystem services, as well as scientific understanding and research. More broadly there is a moral, ethical and cultural importance for protecting species from extinction, which can have various profound impacts on communities and individuals.

Extinction events can have profound cultural implications. There are deep connections between Indigenous culture and custom and Australia's wildlife. Extinction events break these connections. They can and have significant impacts on communities and can further perpetuate social inequality. As noted by mammal researchers in central Australia:

³ Woinarski, J. C., Garnett, S. T., Legge, S. M. and Lindenmayer, D. B. (2017), The contribution of policy, law, management, research, and advocacy failings to the recent extinctions of three Australian vertebrate species. *Conservation Biology*, 31: 13-23. doi:[10.1111/cobi.12852](https://doi.org/10.1111/cobi.12852)

⁴ "Overview of state and trends of biodiversity | Australia State of the" <https://soe.environment.gov.au/theme/overview/biodiversity/topic/overview-state-and-trends-biodiversity>. Accessed 7 Aug. 2018.

“Two of the authors of this review have, during ethnozoological research, shown older Aboriginal people stuffed museum specimens of mammal species that became extinct during their lifetimes, and been struck by the depth of emotional response by those Aboriginal elders—stroking these skins, singing the songs of these animals, crying at their loss, and the feeling that they had failed in their responsibility to maintain these species in their country. It is an affinity for nature and a lesson that the rest of society should learn. Else, the many extinctions expected in the future will be seen as inconsequential. Furthermore, if such high rates of extinction of mammals are condoned in Australia, there may be little hope for the world’s biodiversity more generally.”⁵

There should be no doubt that Australia is in an extinction crisis, and that it is likely to accelerate as the pressures on our natural world continue to grow, including over-consumption and unsustainable growth. Our current suite of laws, policies and funding mechanisms are not up to the task of solving this crisis. Extinction remains legal in Australia despite international obligations and targets that direct us to avert all avoidable extinctions.

Key recommendations of this submission are summarised below:

Australia’s international obligations

1. *Australia’s draft strategy for nature (our National Biodiversity Strategy and Action Plan to the Convention on Biological Diversity) must be significantly improved. The strategy must include goals and targets which are specific, measurable, auditable and time-bound and be built with data collection, monitoring and reporting in mind. It should include measurable targets which will work toward:*
 - a. *Ending extinctions in Australia;*
 - b. *Ensuring the retention of native vegetation and habitats;*
 - c. *Improving the protection and resilience of terrestrial, marine and freshwater habitats;*
 - d. *Addressing major threats to biodiversity, including habitat loss, invasive species, fire, disease, pollution and climate change;*
 - e. *Improving the resilience of our natural environment to adapt to climate change;*
 - f. *Improving the size, connectivity and management of our protected area estate;*
 - g. *Growing the funding and resources available for biodiversity conservation in Australia;*
 - h. *Removing perverse incentives which inhibit conservation and damage the environment; and*
 - i. *Improving access, ownership and participation, acknowledging traditional knowledge and customs, and recognising the rights of Traditional Owners in the management and conservation of country.*

⁵ John C. Z. Woinarski, Andrew A. Burbidge, Peter L. Harrison Mammal loss in Australia Proceedings of the National Academy of Sciences Apr 2015, 112 (15) 4531-4540; DOI:10.1073/pnas.1417301112

- 2. The strategy must effectively reflect all 20 of the Aichi Targets (in-part captured above). The final strategy must include mechanisms which will enable the targets to be updated to reflect global post-2020 conservation goals.*

Adequacy of existing environmental law

- 3. There needs to be national leadership on protecting native fauna in Australia. This includes strong national laws, policies and increased funding for species recovery.*
- 4. The Australian Government should institute a complete overhaul of the national environment laws to protect threatened species. This should be backed by the introduction of strong and independent national institutions; including:*
 - a. An independent National Environmental Protection Authority that operates at arm's-length from government to conduct transparent environmental assessments and inquiries as well as undertake monitoring, compliance and enforcement actions.*
 - b. An independent National Sustainability Commission that develops enforceable national environmental protection standards, bioregional plans as well as recovery and threat abatement plans.*
- 5. New laws should include a legislated requirement to develop science-based recovery plans for all threatened species that are enforceable, binding, and require climate impact assessment for species and its critical habitat.*
- 6. Australia's environment laws must ensure permanent protection of threatened species habitat by ending land clearing and logging of old growth and high conservation value native vegetation and protecting ecosystems of national importance to protect species before they become threatened.*
- 7. The Australian Government should end exemptions for industries from national environmental law*
- 8. New national environment laws must guarantee community rights and participation in environmental decision making, including; open standing provisions; review of decisions based on their merits; third-party enforcement provisions; and protections from cost orders in public interest proceedings.*
- 9. The EPBC Act offsets policy (2012) and offsets assessment guide must be independently reviewed for its effectiveness and whether it has improved environmental outcomes for threatened species.*

Protecting Critical Habitat

- 10. Establish new national environmental laws which include strong provisions to protect critical habitats and climate refuge for species.*
- 11. Establish a national sustainability commission to set national threatened species recovery standards, including working with the Threatened Species Scientific Committee to identify and list critical habitat.*

12. *Establish a new national critical habitat register which applies across all land tenures, with mandatory consultation and education programs.*
13. *Ensure the registering of critical habitat occurs within 12 months of a species being added to the national threatened species list.*
14. *Adopt a persistence approach to critical habitat listing, which accounts for climate change adaptation and impacts.*

National Reserve System

15. *National leadership is required to drive strategic growth and improve management effectiveness of Australia's protected area estate that builds connectivity, climate resilience, and ensures threatened species habitat across all land tenures is adequately protected and managed.*
16. *The Australian Government should establish a protected area investment program that strategically invests in:*
 - a. *the creation of new public and private protected areas that prioritise the protection of critical habitats, climate refugia and connectivity for wildlife*
 - b. *the management of threats to threatened species within existing reserves nationwide*

Traditional knowledge and management for species recovery

17. *Increase Indigenous involvement in recovery planning preparation and implementation and where the opportunity exists, properly resource appropriate traditional knowledge initiatives in support of the species' recovery.*

Adequacy of existing funding streams

18. *Invest \$200 million per year to establish a threatened species recovery fund that invests directly in recovery plan implementation and strategic priority recovery actions for Australia's most threatened species.*
19. *Invest at least \$170 million per year for the strategic growth of the National Reserve System, providing grants to public and private partners to purchase land for new protected areas; establish and manage Indigenous Protected Areas (IPAs); to establish and manage private land conservation covenants and to improve management effectiveness of existing reserves*
20. *That all environmental grants claimed to target threatened species be independently audited against recovery planning criteria as to ascertain the utility of the project in benefiting threatened species, and to develop an accurate estimate of environmental expenditure on threatened species recovery.*
21. *That the ANAO complete its previously earmarked audit of the Green Army programme*

Monitoring

22. *The Australian Government must commit to collecting, and the prompt, transparent and regular release of data on:*
 - a. *the state and trends of threatened species,*
 - b. *state and impacts on critical habitat of threatened species: and*
 - c. *outcome-focussed monitoring of species conservation efforts and spending.*
23. *The Australian Government should develop a publicly available framework to assess and monitor the effectiveness of recovery plans*
24. *Establish a searchable database reporting on the status and implementation of all recovery actions and make such a database publicly available.*

Australia's international obligations

The Convention on Biological Diversity (CBD) is the pre-eminent global convention which covers the protection and restoration of the environment under the United Nations. It is one of the most widely ratified UN global agreements, with 196 parties. Australia signed the convention in June 1992 and subsequently ratified the convention in June 1993. The United States is the only country not party to the convention.

In 2010 the convention endorsed the *Strategic Plan for Biodiversity 2010-2020*, which included the Aichi Biodiversity Targets. The Aichi Targets are a set of 20 global targets for nation states to work towards to address the global biodiversity crisis and implement the CBD's strategic plan. Whilst all Aichi targets relate to the protection of biodiversity, Target 12 is the most explicit when it comes to preventing extinction, stating 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.

It is clear that Australia will not meet this target nor the majority of other Aichi targets by 2020.⁶

The Aichi targets are an important mechanism that provide direction to states as to the policy settings, funding and legal frameworks that should be implemented to address biodiversity loss. Whilst the targets have provided a guide for driving conservation ambition, their potential has not been fully realised.

Under the CBD each nation state is required to prepare a National Biodiversity Strategy and Action Plan (NBSAP) to implement the conventions strategic plan and meet the Aichi targets.

In late 2017 the Australian Government released the new *Draft Strategy for Nature 2018 - 2030* for consultation until March 2018. The draft strategy is meant to operate as the pre-eminent strategy for nature protection and operates as Australia's NBSAP.

ACF, and a large number of other organisations and individuals were highly critical of the draft strategy. Specifically the strategy:

- contains no measurable or time bound targets for addressing Australia's biodiversity decline.
- contains lofty, yet imprecise goals. Whilst many of these goals are noble in their ambition, there is no clear indication as to how these goals will be achieved in the document. The discussion under each goal is limited and often vague in relation to the implementation of policy.
- fails to reflect the CBD Aichi targets, which remain in place to 2020. The draft strategy also fails to provide a pathway to meeting or making significant progress toward the Aichi Targets.
- provides no clear platform or ambition for post-Aichi target development. Rather it positions Australia as a global laggard on biodiversity conservation issues.

⁶ Australia's Biodiversity Conservation Strategy 2010-2030: An Independent Review of Progress
<http://www.environment.gov.au/submissions/bio-cons-strategy/submissions/humane-society-international.pdf>

- provides no detail as to how it will align state and regional action with national priorities and international obligations. It provides no information on the incentives, policies and intergovernmental forums that will drive these actions.
- relies on a yet to be developed action plan, that is not available for review. It is impossible to provide meaningful comment on conceptual policy tools with no examples or content to assess.
- does not include or sufficiently detail, reporting frameworks that enable domestic or international monitoring of our progress on implementation.

If Australia is to arrest our Faunal extinction crisis, we need strong national leadership. As a mega-diverse, developed and prosperous nation Australia must lead on biodiversity conservation and protection.

Recommendations

1. *The draft strategy for nature must be significantly improved. The strategy must include goals and targets which are specific, measurable, auditable and time-bound and be built with data collection, monitoring and reporting in mind and include measurable targets which will work toward:*
 - a. *Ending extinctions in Australia;*
 - b. *Ensuring the retention of native vegetation;*
 - c. *Improving the protection and resilience of terrestrial, marine and freshwater habitats;*
 - d. *Addressing major threats to biodiversity, including habitat loss, invasive species, fire, disease, pollution and climate change;*
 - e. *Improving the resilience of our natural environment to adapt to climate change;*
 - f. *Improving the size, connectivity and management of our protected area estate;*
 - g. *Growing the funding and resources available for biodiversity conservation in Australia;*
 - h. *Removing perverse incentives which inhibit conservation and damage the environment; and*
 - i. *Improving access, ownership and participation, acknowledging traditional knowledge and customs, and recognising the rights of Traditional Owners in the management and conservation of country.*
2. *The strategy must effectively reflect all 20 of the Aichi Targets (in-part captured above). The final strategy must include mechanisms which will enable the targets to be updated to reflect global post-2020 conservation goals.*

Adequacy of existing environmental law

The primary piece of legislation for protecting threatened species nationally, the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), has mostly failed in its fundamental task of protecting threatened species. There are a number of key reasons for this. Specifically the EPBC Act:

- allows too much ministerial discretion when it comes to approving environmental harmful activities, meaning that areas of critical importance for biodiversity, threatened species and cultural heritage may be easily destroyed;

- focuses on a narrow set of environmental issues (matters of national environmental significance) and excludes some matters completely – such as climate change;
- allows politics to unduly influence the assessment of projects by placing the Minister who approves the projects directly in charge of the public servants assessing them;
- does not allow communities to challenge approval decisions that may destroy the environment based on their actual impacts (known as ‘merits review’). Instead challenge is only enabled if there is an error of law;
- does not provide for third party enforcement, whereby, as an example, citizens can use the courts to ensure that conditions of approval are adhered to;
- has outdated and limited community consultation and does not truly reflect the rights of Indigenous Australians in consultation requirements for environmental approvals;
- does not provide for adequate data and information sharing, especially in relation to threatened species conservation;
- provides limited ability to enable the Commonwealth to play a proactive and powerful role in strategic landscape planning, despite aspirations around strategic environmental assessment and bio-regional planning. Subsequently cumulative impacts on MNES are poorly considered;
- has a “critical habitat register” for threatened species but listings are discretionary with very few undertaken and there are limited enforcement capabilities outside of Commonwealth jurisdiction;
- does not provide for emergency listing of threatened species;
- has only protected one third of threatened ecological communities that qualify and does not protect climate refugia for threatened species;
- exempts forestry activities from any form of assessment or transparent monitoring through Regional Forest Agreements;
- has no monitoring requirements or ministerial accountability for the maintenance and recovery of threatened species, critical habitats and ecological communities; and
- creates an exemption for significant impacts to threatened species, based on a vague ‘national interest’, which is poorly defined and has been open to abuse

There have been numerous critiques of the EPBC Act, including by Godden and Peel, who noted:

“deficiencies of the EPBC Act include a variable record of government application of its environmental impact assessment provisions, coupled with the substantial costs to environmental groups of litigating cases under the legislation in an attempt to ensure government and proponent accountability. Further, recent amendments to the EPBC Act, rushed through the federal Parliament in late 2006, seem designed to reduce the breadth and transparency of environmental decision-making under the legislation in order to enhance the ‘efficiency’ of the assessment process for development proponents.”⁷

The reality is since the Act came into effect only 21 projects out of more than 6,100 have been stopped due to unacceptable impacts on matters of national environmental significance and threatened species. This is less than 0.3% of projects assessed over 18 years.

⁷ "Godden, Lee; Peel, Jacqueline --- "The Environment ... - AustLII."
<http://www5.austlii.edu.au/au/journals/MelbULawRw/2007/5.html>. Accessed 7 Aug. 2018.

This is primarily due to the discretion afforded to decision makers. Refusals have relied on Ministers taking moves to protect threatened species, in the face of powerful vested industry lobbyists and interests, rather than a system that embeds environmental protection at its core based on independent advice.

The current operating model puts senior public servants, which act at the direction of the Minister of the day, as decision delegates under the EPBC Act regulatory regime. This system creates conflict of interest, whereby delegates may be inappropriately directed by the Ministers office to make a decision in a certain way. It creates an avenue for undue influence of regulatory decision making through the political and partisan lobbying of Ministers offices. Lack of transparency on how decisions are made and a lack of institutional independence are significant contributors to the poor performance of the EPBC Act in protecting threatened species.

Despite having national environmental laws that are intended to protect threatened species, analysis completed by the University of Queensland – in conjunction with the Australian Conservation Foundation, WWF Australia, and The Wilderness Society – has found that since the EPBC Act has come into effect, approximately 7.6 million hectares of threatened species habitat has been destroyed due to bulldozing or logging.

That's an area of threatened species habitat larger than the state of Tasmania destroyed in just 17 years.

These statistics tell a damning story. Despite high aspirations to protect biodiversity and threatened species, our national environmental law has fundamentally failed at addressing the most significant driver of extinction – the loss, destruction and fragmentation of forests and bushlands.

The analysis highlights that despite national protections, species such as the koala, red goshawk, greater glider, and yakka skink have suffered huge losses of habitat over the past 18 years. These losses are contributing significantly to the decline of populations and ultimately driving these species to extinction.

What is more concerning is that only 0.78 million hectares – or 10% of the overall area lost – was mapped as occurring in areas assessed under the national environmental law, although that does not mean that the particular referral explained the losses observed.

The iconic koala has been hardest hit, with almost 1 million hectares of habitat destroyed since 2000. The full analysis is at [Attachment A](#).

Beyond systemic analysis, there are countless real examples of the EPBC Act failing to protect threatened fauna at a project level. From enabling the destruction of bushland habitat for the Roe 8 Highway in Perth to facilitating the destruction of the most important habitat for the endangered Black Throated Finch for the Carmichael Coal Mine in Central Queensland, the EPBC Act has persistently prioritised development over the protection of wildlife.

It is clear urgent interventions to genuinely protect threatened species are required. Australia needs a new generation of national environmental laws to effectively protect wildlife habitats and avert a tidal wave of extinctions.

Case Study: Palm Cockatoo

The Australian palm cockatoo (*Probosciger aterrimus macgillivrayi*) is listed as 'vulnerable' under the Environment Protection and Biodiversity Conservation Act (EPBC) (Cwth) and 'near threatened' under Queensland's Nature Conservation Act (NCA) 1992.

It is Australia's largest cockatoo, and has the unusual habit of using tools to drum on trees as part of its reproductive biology.

The Palm Cockatoo is threatened by a cumulative combination of factors that are now significantly exacerbated by mining and exploration. Approximately 85% of palm cockatoo nesting habitat on Cape York Peninsula is covered by mining and exploration leases.

As the price of bauxite slowly climbs with increased demand from China, massive swathes of habitat will be cleared over the coming decades.

The very nature of bauxite mining precludes the possibility of rehabilitation to pre-mining forest diversity. Further, neither the Queensland nor Commonwealth governments are considering the combined impact of multiple mining operations in this unique region.

According to advice from the Commonwealth's Threatened Species Scientific Committee, the palm cockatoo faces the threat of extinction through the loss of suitable nesting hollows arising from the cumulative impact of fire, cyclones, and mining.

A key flaw in the approvals process under current national environment laws is the unwillingness to consider the cumulative impact of a number of individual projects on a population of threatened species across a geographic area.

Professor Rob Heinsohn from ANU's Fenner School of Environment and Society is currently leading research into the population dynamics of palm cockatoos throughout Cape York. Based on new and ongoing research into population interactions across the Cape's sub-regions, he believes the threats are understated. A recent study of vocalisations and genetics has shown that the palm cockatoo populations on the east and west coasts are separated. This means that mining operations in the west may threaten the entire west coast population due to lack of connectivity across the entire species range.⁸ A new population viability analysis is likely to lead to palm cockatoos being uplisted to 'Endangered' under IUCN criteria.⁹

Without the identification and protection of critical habitat, and more effective environmental laws, the cumulative impacts are likely to cause a significant decline in palm cockatoo numbers. We risk destroying what ecologists call source populations. Once source

⁸ Keighley MV, Heinsohn R, Langmore NE, Murphy SA, penalba JV (2018) Genomic population structure aligns with vocal dialects in Palm Cockatoos (*Probosciger aterrimus*); evidence for refugial late-Quaternary distribution? *Emu - Austral Ornithology*, DOI: 10.1080/01584197.2018.1483731

⁹ Keighley MV (2017) Cultural diversity and meta-population dynamics in Australian palm cockatoos, the legacy of landscape and biogeographic history. PhD Thesis (ANU)

populations are gone, the recovery of any species is challenging, costly, and never guaranteed.

If we continue to assess each mining proposal in a piecemeal way, we will be blind to the long-term impacts of incremental habitat loss from multiple projects. This is illustrated by various environmental reports associated with different mining projects, each acknowledging a confirmed impact on the palm cockatoo, but each claiming that it will not be significant.

Regional Forest Agreements

A major flaw in the EPBC Act is the exemption from assessment and approval provisions for logging activities which take place under a Regional Forest Agreement. This exemption continues, despite logging having serious impacts on threatened species and their habitat, including the critically endangered Leadbeater's possum in Victoria, the critically endangered Swift parrot in Tasmania, and the vulnerable Koala in NSW, to name just a few. These exemptions are based on outdated assessments of forest ecosystem health, with most RFAs now nearing their 20 year expiry. The cumulative impacts of habitat loss, degradation and fragmentation from logging, fire, invasives and climate change are pushing forest dependent threatened species to the brink and strong new laws and institutions, alongside new national parks and industry reform, are needed to protect forests and wildlife. Regional Forest Agreements have been an abject failure when it comes to protecting threatened species habitat, and the exemption for the logging industry from national environmental law must end.

Deforestation

Deforestation and clearing remains the single biggest driver of habitat loss and biodiversity decline in Australia. Domestically it is one of the leading causes and contributors to wildlife decline and extinction. In Queensland there has been a 400% increase in clearing rates from 2010 to 2016. In 2015-16 reporting year 395,000 hectares of native vegetation was destroyed, and area larger than the entire ACT. Clearing occurred in a range of areas, including in known critical habitat areas for Koalas and within reef catchments. As discussed above and at [Attachment A](#), since the EPBC Act came into effect, approximately 7.6 million hectares of threatened species habitat has been destroyed due to bulldozing or logging.

Effective regulation of land-clearing is a necessary and urgent intervention in Australia, given that eastern Australia has now become a global land clearing hotspot.¹⁰ This designation has largely been brought about through weakening regulatory requirements in the *Vegetation Management Act 1999 (VM Act)* in Queensland in 2012 and poorly regulated clearing in NSW.

Recovery Planning and Conservation advices

Threatened Species Recovery Plans, developed under the EPBC Act are the Australian Government's key instrument for bringing threatened species back from the brink. They bring together the knowledge, science, and actions needed to recover threatened species and ecological communities.

¹⁰ Global deforestation hotspot: 3m hectares of Australian forest to be lost in 15 years
<https://www.theguardian.com/environment/2018/mar/05/global-deforestation-hotspot-3m-hectares-of-australian-forest-to-be-lost-in-15-years>

For decades scientists, government agencies, community members and not-for-profits have worked together to tackle threats over long time horizons via threatened species recovery planning. Recovery plans are documents specified under national environmental law (the EPBC Act), but also have been developed and implemented at the state level. Recovery plans (which can be for single species, multiple species or ecosystems) are a critical part of the fight against extinction of native wildlife.

The key benefit of recovery planning frameworks is they bring stakeholders together to solve conservation problems over long time frames, they identify knowledge gaps, threats and options for recovery. Importantly recovery plans outline costed actions for the recovery of threatened species based on the best available knowledge and science. For example, the Australian Government released the Regent Honeyeater recovery plan which has costed actions set out over a 5-year time frame at a total cost of \$3.12 million. Of Australia's 1947 threatened species and ecological communities, less than half are covered by a recovery plan. To date there are approximately 446 national recovery plans that cover nearly 800 threatened plants, animals and ecosystems.

In response to questions on notice at 2018 budget estimates the Department of Environment and Energy noted:

As of the beginning of June 2018 there were 180 threatened species and ecological communities which required a recovery plan to be prepared.

Five years ago, in June 2013 there were 185 threatened species and ecological communities which required a recovery plan.

Since June 2013, there have been 32 recovery plans completed under the EPBC Act, covering 98 threatened species and three ecological communities, and 617 conservation advices have been approved and published bringing the total proportion of listed threatened species and ecological communities covered by either a recovery plan or a conservation advice to 99.7 per cent.¹¹

As alluded to in the above response the Department (and the Government) has shifted from recovery plan development to focussing on conservation advices. The pivot of the department to almost exclusively focussing on conservation advices marks a worrying trend. Conservation advices are a useful document, but are not an adequate replacement for recovery plans. The distinction between the two is clear. Conservation advices are shorter, less detailed and contain no requirement for consultation. Further, these advices are not binding on decision makers. The EPBC Act only requires a Minister or their delegate to "have regard to" a conservation advice.

On the other hand, recovery plans are flexible documents that can occur for a single species, multiple species or an entire eco-region. They have specified structure, including setting out threats, actions and identifying critical habitat. Importantly, recovery plans have community and expert consultation built in and bind decision makers to "not act inconsistently" with the plan. This ensures that recovery plans can operate as a binding

¹¹ Question on notice no. 18 Portfolio question number: 18 2018-19 Budget estimates Environment and Communications Committee, Environment and Energy Portfolio

standard on decision making, if the content of them are explicit enough. For example many recent recovery plans include guidance to decision makers. However more often these sections are sufficiently vague as to not enforce any meaningful decision making criteria under the EPBC Act.

Analysis completed by the Australian Conservation Foundation, BirdLife Australia and Environmental Justice Australia in 2015 found that of the 120 most endangered animals covered by recovery plans, 80 (67%) listed habitat loss as a significant threat and recommended active protection of habitat. Despite this only 12 (10%) had a plan that indicated a prescriptive limit on the future loss of habitat.

The shift in to favouring conservation advices within the Department of Environment and Energy is primarily driven by the lack of adequate resources rather than any meaningful policy. Rather than addressing any inefficiencies in recovery planning, such as streamlining consultation, the Department has taken a simple yet far less effective approach to threatened species management. The end result is generally a poorer standard of management document to guide threatened species management and one that has no impact in regulatory decision making. The claim of the department above (of 99.7 percent coverage) is misleading, as it treats conservation advices and recovery plans as equivalent. There remain 180 recovery plans to be developed, with this number only being reduced by 5 over 5 years. In addition, at the time of writing, of the 746 species and ecological communities covered by a recovery plan only 168 (22.5%) have a recovery plan in force that is a subsequent (revised) plan. More than 300 species have a recovery plan which is out of date or passed its review time frame.

Coalition Government's One Stop Shop Policy

Australia could and should be doing more to protect matters of national environmental significance, including threatened species and important places. The EPBC Act has failed in its fundamental mission due to a lack of adequate standards and thresholds and too much decision maker discretion.

The "One Stop Shop" policy for environmental approvals has been strongly opposed by the Australian community as evidenced by a petition to the Australian senate of more than 105,000 signatures in 2016. This opposition is due to the reforms diminution of environmental standards and abandonment of appropriate environmental leadership by the federal government. The failure of the policy has been evidenced in the need for federal intervention in Queensland following the weakening of land clearing laws in that state by the Newman Government in 2013.

Ensuring national leadership and setting clear national standards for environmental protection will play an important role in both improving environmental outcomes and ensuring alignment with state and territory regulatory regimes. The federal government has a unique opportunity to set environmental national outcome standards and protections for wildlife though the upcoming statutory review of the EPBC Act, without having to delegate decision making or weakening environmental protections - which are hallmarks of the One Stop Shop policy.

EPBC Act Offsets Policy

The primary mechanism used to justify the destruction of threatened species habitat is the EPBC Act offsets policy 2012. At the time of its release, the EPBC Act policy was flagged as leading practise. However its application has demonstrated it is anything but.

The offsets policy has clearly been used to justify the destruction of critical habitats for threatened species, such as the destruction of black throated finch habitat at the Carmichael Coal Mine. In that case species experts noted how calculations in the offsets assessment guide were misrepresented. Specifically the recovery team noted:

There are manifest errors in the use of the offset calculator in terms of the risk of loss both with and without offsets. The offset calculator has been used in direct contradiction from the way it was designed to be used, and this has resulted in a drastic under-reporting of the offset area needed to offset the project impacts. In critical offset habitat where BTF occur, the risk of loss with and without the offset is neutralised because any future loss would trigger another offset requirement (Maseyk et al. 2017). Additionally, classifying core and marginal offset areas as nature refuges will not reduce the risk of loss of proposed offset areas. Adani state that offset areas are most at risk of loss from future mining projects; however, nature refuges do not necessarily provide protection from mining activities. The risk of loss estimates used within the offset calculator need immediate rectification.¹²

The policy also established the offsets assessment guide, which despite its aspirations, has not improved transparency in offsets assessments. This is because the guide is prone to gaming. Small changes to assumptions in the guide, such as risk of loss, time to ecological benefit and confidence levels have significant bearing on the overall offset requirement.

It is an abject failure of policy that there is no publicly available register of offsets 6 years after the policy came into effect. More worrisome is the reality that the Department of the Environment and Energy is unable to provide information as to the outcomes and performance of offsets since the policy came into place. The policy was scheduled to undergo a technical review in 2013 and full review in 2017, with the document itself stating:

A technical review of the policy and guide will be undertaken one year after they come into effect. Subsequent reviews will be undertaken every five years. The use of offsets is a developing policy area, and this policy incorporates current international best practice.¹³

Neither of these reviews have yet occurred. It is clear there has been a failure to effectively implement, monitor and track the performance of the EPBC offsets policy. Decision maker discretion to not apply the policy in certain cases (such as the clearance of threatened species habitat at Kingvale Station, EPBC 2016/7751) undermine stakeholder confidence in the legislation and the regulator. An urgent, independent review of the EPBC Act offsets policy, along with greater transparency of offset data and performance, is needed.

¹²The Black-throated Finch Recovery Team response to the Carmichael Mine Biodiversity Offset Strategy and Black-throated Finch Management Plan http://birdlife.org.au/documents/BTF_Recovery_Team_Carmichael_Mine_Report.pdf

¹³ EPBC Offsets Policy 2012 http://www.environment.gov.au/system/files/resources/12630bb4-2c10-4c8e-815f-2d7862bf87e7/files/offsets-policy_2.pdf

Recommendations

3. *There needs to be national leadership on protecting native fauna in Australia. This includes strong national laws, policies and increased funding for species recovery.*
4. *The Australian Government should institute a complete overhaul of the national environment laws to protect threatened species. This should be backed by the introduction of strong and independent national institutions; including:*
 - c. *An independent National Environmental Protection Authority that operates at arm's-length from government to conduct transparent environmental assessments and inquiries as well as undertake monitoring, compliance and enforcement actions.*
 - d. *An independent National Sustainability Commission that develops enforceable national environmental protection standards, bioregional plans as well as recovery and threat abatement plans.*
5. *New laws should include a legislated requirement to develop science-based recovery plans for all threatened species that are enforceable, binding, and require climate impact assessment for species and its critical habitat.*
6. *Australia's environment laws must ensure permanent protection of threatened species habitat by ending land clearing and logging of old growth and high conservation value native vegetation and protecting ecosystems of national importance to protect species before they become threatened.*
7. *The Australian Government should end exemptions for industries from national environmental law*
8. *Along with stronger protections, new national environment laws must guarantee community rights and participation in environmental decision making, including; open standing provisions; review of decisions based on their merits; third-party enforcement provisions; and protections from cost orders in public interest proceedings.*
9. *The EPBC Act offsets policy (2012) and offsets assessment guide must be independently reviewed for its effectiveness and whether it has improved environmental outcomes for threatened species.*

Protecting Critical habitat

Alongside the regulation of development, the EPBC Act gives the Australian Government powers to protect threatened species. This includes overseeing the development of recovery plans for threatened species and ecological communities and the provision to list habitat that is critical to the survival of a species on a national, critical habitat register.

The EPBC Act defines critical habitat as 'habitat critical to the survival of a listed threatened species or ecological community.'¹⁴ The law establishes a wide variety of matters that may be taken into account when identifying critical habitat. This includes whether the habitat is used during times of stress (for example; fire, flood, drought), is essential during any part of a species life cycle, is used by important populations, is necessary to maintain genetic diversity and evolutionary potential, provides a corridor, or any other way habitat may be critical.¹⁵

¹⁴ EPBC Act s 207A (4)

¹⁵ The EPBC Regulations 2000 sub-section 7.09

The designation of critical habitat in Australia primarily occurs through the national critical habitat register. It is important to note that critical habitat designation does not create parks or reserves. Instead it places restrictions on actions which would result in the destruction of critical habitat, including fines and even imprisonment for persons who knowingly damage critical habitat.

Improving Australia's approach to the management and protection of critical habitat will have important benefits for the recovery of threatened species and the awareness of species conservation in the broader Australian public. Paired with an improvement in recovery planning processes and threatened species list management, stronger critical habitat laws will greatly improve transparency and accountability in threatened species conservation. Similarly, such measures will also provide important signals to governments and developers regarding the location of critically important environmental values that must be avoided when planning development projects.

Despite having over 1900 nationally listed threatened species and ecological communities, Australia's national critical habitat register lists only 5 places as critical habitat (see Attachment B). The most recent critical habitat listing on the register was in 2005.

In early 2018 ACF undertook analysis of existing recovery plans for animals listed as critically endangered and endangered under the EPBC Act ([Attachment B](#)). Out of 230 listed species it was identified that 127 (55%) had recovery plans and 105 (45%) had clearly identified critical habitat that was essential to their survival. These included specific areas and locations as well as specific environmental values that would easily enable the listing of critical habitat. Of the species surveyed, 25 (10%) had identified critical habitat wholly or partly located on Commonwealth land. Despite this, only 2 had habitat listed on the national critical habitat register.

Given the immediacy of threats and the importance of conservation actions for protecting critically endangered and endangered wildlife, it is of significant concern that no critical habitat has been listed for any species since 2005. It is clear that there are species on both Commonwealth and other land tenures that warrant the listing of their critical habitat.

The existing legislation fails on a number of fronts. It fails in building public, industry and government awareness of critical habitat areas. It is subject to the political whims of ministers who are afforded broad ministerial discretion and may be subject to the pull of vested industry interests. It does not account for climate change or how this will drive species range shifts into the future.

Our current law provides patently inadequate legal protection to prevent the destruction of critical habitat. Addressing these issues requires clear legal protection that place prescriptive limits on the destruction and loss of critical habitat.

Recommendations

- 10. Establish new national environmental laws which include strong provisions to protect critical habitats and climate refuge for species.*
- 11. Establish a national sustainability commission to set national threatened species recovery standards, including working with the Threatened Species Scientific Committee to identify and list critical habitat.*

12. *Establish a new national critical habitat register which applies across all land tenures, with mandatory consultation and education programs.*
13. *Ensure the registering of critical habitat occurs within 12 months of a species being added to the national threatened species list.*
14. *Adopt a persistence approach to critical habitat listing, which accounts for climate change adaptation and impacts.*

National Reserve System

Australia's Strategy for the National Reserve System 2009-2030 is the current national policy guiding the growth and management of a national network of protected areas, the National Reserve System (NRS). It is underpinned by international agreements including the Convention on Biological Diversity (CBD), ratified by Australia in 1993.

The NRS policy establishes national targets for a comprehensive, adequate, representative (CAR) reserve system that included the protection of critical habitat for threatened species and ecosystems and sites critical for climate change resilience.

Under the NRS Strategy, targets were set and agreed to by all state and territory governments. These targets included:

- examples of at least 80 per cent of all regional ecosystems in each bioregion by 2015
- examples of at least 80 per cent of all regional ecosystems in each subregion by 2025
- core areas for the long-term survival of threatened ecosystems and threatened species habitats in each of Australia's bioregions by 2030
- critical areas for climate change resilience, such as refugia, to act as core lands of broader whole of landscape scale approaches to biodiversity conservation by 2030.

Priority actions under Theme 3 of the NRS Strategy identify a series of approaches for expanding the protected area estate including accelerating acquisition, facilitating state and territory governments to implement and fund Indigenous Protected Areas and Private Protected Areas, improving incentives for private land conservation, growing partnerships with Traditional Owners, and better application of IUCN guidelines.

In addition to comprehensive and representative elements of the CAR guidelines, protecting threatened species and ecosystems, sites critical for climate change resilience, landscape corridors, areas of high endemism, migration refugia among other ecological considerations are prioritisation targets of the current NRS policy. The deadline for these targets is 2030.

To-date, Australia's growth in protected areas has been largely ad-hoc with no national leadership and little or no progress from most jurisdictions on these targets.

In 2010, Australia reiterated its CBD commitments agreeing to a strategic plan for 2011-2020 known as the Aichi Targets. Specifically, Aichi Target 11 established Australia's obligation to protect 17% of the land and 10% of the ocean to expand our NRS to ensure it is ecologically representative. Further, Australia's commitment to Aichi Target 12 is effectively a policy commitment to avoid extinction and improve the status of threatened species.

Currently the NRS covers 19.63 percent of the country, this includes strict protected areas as well some private and Indigenous Protected Areas. IPA's now make up 45% of the NRS. Despite this coverage there are 1,691 ecosystems and 121 nationally significant species that

lack any representation within protected areas.¹⁶ In addition, 49 of Australia's 85 bioregions do not meet the minimum protected area requirements as established in the NRS targets.¹⁷ WWF-Australia estimates an additional 53 million hectares need protection to reach current national and international policy commitments for a representative reserve system.

The benefit of protecting populations of threatened species within the NRS is demonstrated by the increase of northern hairy-nosed wombats in Epping Forest National Park. Established in 1974 to protect the last known population of wombats, thought to be numbering between 30 to 70 individuals at the time, the national park is now home to around 200 individuals with a second population established on a private nature refuge with a total population around 250.

Unfortunately, there are very few examples of secure protected areas (such as national park) established to protect populations and habitat of threatened species despite commitment to do so under the NRS.

There are a range of other species throughout Australia where the lack of secure protection and adequate management across public and private land undermine recovery efforts. Examples on publicly owned state forest includes the koala (NSW), greater glider, leadbeater's possum and swift parrot. Examples on private land include the golden-shouldered parrot, buff-breasted button-quail, night parrot. Ongoing land clearing on Cape York Peninsula is a direct threat to habitat for both the golden-shouldered parrot and the buff-breasted button-quail. And while night parrot habitat has been protected by conservancies, land tenure laws result in ongoing threats from mining and grazing.

These and many other examples highlight the lack of national leadership to ensure Australia's NRS addresses the critical habitat requirements for threatened fauna. A key flaw in the NRS is the vulnerability of private protected areas to habitat destruction from grazing, mining and logging.

While IPAs make a substantial contribution to the NRS, they remain vulnerable to threats such as mining and funding arrangements are far from secure. The result is that investments in managing populations of threatened species are not guaranteed protection from incompatible land uses such as mining. Further, lack of adequate resources for managing existing reserves poses further problems, whereby threats within reserve require active and ongoing management. However, this does not preclude the need to protect important areas of critical habitat for threatened species.

Recommendation:

- 15. National leadership is required to drive strategic growth and improve management effectiveness of Australia's protected area estate that builds connectivity, climate resilience, and ensures threatened species habitat across all land tenures is adequately protected and managed.*
- 16. The Australian Government should establish a protected area investment program that strategically invests in:*
 - a. the creation of new public and private protected areas that prioritise the protection of critical habitats, climate refugia and connectivity for wildlife*

¹⁶ Taylor MFJ (2017) *Building Nature's Safety Net 2016: State of Australian terrestrial protected areas 2010-2016*. WWF-Australia, Sydney.

¹⁷ Ibid

b. the management of threats to threatened species within existing reserves nationwide

Traditional knowledge and management for species recovery

Traditional ecological knowledge and the management of threatened species is a vital component of species recovery. Approximately 51% of Australia is covered by various Indigenous tenures¹⁸ and Indigenous lands support some or all of the most important habitat for many threatened species.¹⁹ In some cases the only opportunity for effective species recovery management occurs on indigenous land.²⁰

Without Indigenous led conservation programs using both contemporary and traditional indigenous management practices some threatened species and critical habitats would receive little management. Recent research identified that 32% of threatened vertebrate species were under active management on Indigenous lands through various management agreements.²¹

Indigenous lands contribute to a substantive part of the Australia's protected area estate in the form of Indigenous Protected Areas, Aboriginal owned national parks, and jointly managed protected areas. In addition, indigenous land management practices are being returned to landscapes through partnerships on private land and other arrangements. The management of threatened species in these landscapes and more broadly requires culturally appropriate approaches and partnerships that enable and empower Indigenous land management practitioners to apply traditional knowledge towards species recovery.

Recommendation:

17. Increase Indigenous involvement in recovery planning preparation and implementation and where the opportunity exists, properly resource appropriate traditional knowledge initiatives in support of the species' recovery.

Adequacy of existing funding streams

The Federal environment budget has declined dramatically since 2013, shouldering a disproportionate share of 'budget repair'. Since 2013, the proportion of total Commonwealth spending devoted to the Federal Environment Department has nearly halved when evaluated over the forward estimates (decline of 42%). The Natural Heritage Trust (NHT) Special Account, the primary vehicle for biodiversity and threatened species spending, will shrink from \$262m in 2013 to \$146m by 2021, a cut of almost 50%.

The federal Environment Department has been cut by 37% since 2013, at the same time significant job losses have occurred in critical areas of the portfolio, including the Biodiversity and Conservation Division.

¹⁸ Renwick AR et al (2017) Mapping Indigenous land management for threatened species conservation: An Australian case-study, PLoS ONE 12(3): e0173876. <https://doi.org/10.1371/journal.pone.0173876>

¹⁹ Moggridge B, (2018) *Indigenous engagement vital to saving species*. TSR Hub. <http://www.nespthreatenedspecies.edu.au/publications-tools/article-indigenous-engagement-vital-to-saving-species>

²⁰ Renwick AR (2017)

²¹ Ibid.

The sad thing is the costs of recovering threatened species are not exorbitant in the context of national budgets. Previous research has highlighted that the majority of recovery plans could be implemented with a modest investment. Studies completed in 2009 highlighted that 50 percent of recovery plans could be implemented for less than \$200,000, with only 16 plans exceeding the \$1 million mark.²² When looked at in total, these costs average out to approximately \$100,000 per annum per recovery plan. Similar research has estimated that for just \$10 million annually all Australia's bird species could be secured from extinction,²³ and that an investment of \$290 million over 10 years would be enough to save all Australia's threatened macropods.²⁴

As noted above, there is now no Australian Government program that supports the establishment of new protected areas across Australia. Yet there are many gaps in the National Reserve System that need to be filled, including critical corridors and climate refuges that will be essential for supporting threatened species.

Recovery programs for threatened species can be effective, but it is apparent the current resources allocated to the protection of Australia's threatened species are not up to the task of preventing extinction and improving the conservation status of the species and ecosystems most in need.

Spending on threatened species

The Department of the Environment and Energy is responsible for the delivery of grants for biodiversity protection. Such grants normally are funded out of the National Heritage Trust special account and are administered through a variety of programmes, including:

- The Green Army Programme (discontinued)
- The 20 Million Trees Programme
- National Landcare Programme
- Threatened Species Community Grants Programme

Since 2013 the Department of Environment and Energy has regularly reported on the total amount of funding spent on threatened species. In the year one report on the implementation of the Department's threatened species strategy, the Threatened Species Commissioner reported that more than \$210 million was reported on threatened species conservation.²⁵ More recently this figure has been put at more than \$250 million.

For the most part, this figure is derived from the accumulation of grant funds under generic programs, such as the Green Army programme, 20 Million Trees programme and the National Landcare Programme. It is unclear from publicly available information exactly how this gross figure is made up or the methodology that contributes to it, nor has any

²² Ortega-Argueta, A., 2009. Evaluating recovery planning for threatened species in Australia University of Queensland. http://espace.library.uq.edu.au/view/UQ:178617/s40668237_PhD_totalthesis.pdf

²³ McCarthy, M. A., Thompson, C. J. and Garnett, S. T. 2008, Optimal investment in conservation of species. *Journal of Applied Ecology*, 45: 1428–1435. doi: 10.1111/j.1365-2664.2008.01521.x

²⁴ Roache, M. 2001, WWF The Action Plan for Threatened Australian Macropods 2011-2021 http://awsassets.wwf.org.au/downloads/sp151_action_plan_for_threatened_australian_macropods_1aug11.pdf

²⁵ Threatened Species Strategy - Year One Report Department of the Environment and Energy, 2016 <http://www.environment.gov.au/system/files/resources/dc0680d1-c280-4500-8cc3-b071fda69d34/files/threatened-species-strategy-year-one-report.pdf>

information as to the calculation approach been supplied through Freedom of Information requests.²⁶

Misrepresentation of threatened species funding

There are limited details available as to the projects that constitute the government's \$250 million figure for threatened species projects. Full details of projects reported as threatened species funding were provided by the Department on notice to the Senate Environment and Communication Committee.²⁷ This document provided an itemised list of projects, including title, location, description and amount funded (it should be noted that this document is not provided on the Department's website, but only via the Senate Committee).

In 2016 ACF conducted an audit of Green Army Projects which the Department had stated provided benefit to threatened species from rounds 1 – 4 of the programme. The Department identified 323 Green Army projects as supporting threatened species in Rounds 1 - 3, whereas ACF's review identified 135 projects that met criteria that would reasonably define it as being a threatened species project – such as identifying the threatened species to be targeted, referencing a recovery plan or similar management document. Our review was based on the project identifying the specific threatened species and/or ecological community that will benefit from the project, or providing other relevant information about the scope of the project, such as working to a conservation management plan or quantifying habitat to be restored/connected.

The discrepancy between the Department's list and our review, is that the Department's list includes what are, in essence, natural resource, catchment management, local amenity and infrastructure works, as projects to recover threatened species. Many projects make broad reference to restoration of threatened species habitat without specifying which species and communities are being targeted and quantifying how.

There are numerous case studies of projects that ostensibly are reported to benefit threatened species, which on closer evaluation appear to provide questionable benefit. For example, some built heritage and tourism projects have been included that do not involve any works to support threatened species. Such as: *Heritage Garden, Building, Ship Conservation – Melbourne Conservation and Management*, which is described as

- *“Design and implementation of a restored heritage garden at Glenfern*
- *Restoration of the Ellis Stones garden at Como House and Garden*
- *Heritage garden and building maintenance at Como House and Garden, Rippon Lea House and Gardens and Labassa*
- *Stone conservation at the Old Melbourne Gaol*
- *Timber deck conservation at the Polly Woodside*
- *Site invigilation as part of birthday events for the Polly Woodside (130yrs) and Old Melbourne Gaol (170yrs).*²⁸

²⁶ "Absolute scandal!: how does restoring a ship help ... - The Guardian." 13 Feb. 2018, <https://www.theguardian.com/environment/2018/feb/14/incongruous-species-funding-in-the-most-unl-kely-places>. Accessed 1 Sep. 2018.

²⁷ Senate Standing Committee on Environment and Communications Legislation Committee, 8 December 2017 https://www.scribd.com/document/371114239/Environment-Threatened-Species-Funding-Table-sanit#fullscreen&from_embed

²⁸ Senate Standing Committee on Environment and Communications Legislation Committee, 8 December 2017 https://www.scribd.com/document/371114239/Environment-Threatened-Species-Funding-Table-sanit#fullscreen&from_embed

There are examples, of projects that are framed to be threatened species recovery projects, but are more focussed on infrastructure and amenity improvement, such as the *Burnett River Riparian Restoration Project / Gayndah River Walk*:

“The Burnett River is pivotal to the town and the river riparian area within the township has been severely impacted by the 2011 and 2013 floods. Flood recovery work has been carried out by the council to restabilise the river bank, but this project will repair and regenerate the River Walk. The project will remove pest plants and exotic species, incorporate the plantings of seedlings and cuttings propagated from some of the areas' identified rare and remnant species, and create public access ways (including wheelchair access) and information boards and signage.”²⁹

Or similarly the *Johnson River Cassowary Corridor Enhancement*, which purportedly targeted endangered Cassowary habitat, though primarily involved weed management in town centre landscapes in the town of Innisfail, in regional Queensland (as outlined in Image 1 below).

It is highly contestable whether Cassowaries would benefit from the Johnstone River Cassowary Corridor enhancement project. It also possible to argue that this was an inefficient and poorly designed approach to restoring Cassowary corridor habitats. Wildlife corridors are an important ecological function that enable species to disperse through their range. They will be critical in the coming years as species need to adapt to climate change. The Federal Government produced a map of priority Cassowary corridors in Queensland in 2009.³⁰ As presented in Image 2 below, none of these priority corridors occurred in Innisfail.

The project “Limiting Mountain Bike Weed Dispersal into Vulnerable Bushland” is another peculiar Green Army project, details of which are in Table 1 below.

Table 1 - Description of Limiting Mountain Bike Weed Dispersal into Vulnerable Bushland Green Army Project (provided by the Department of the Environment)³¹

Limiting Mountain Bike Weed Dispersal Into Vulnerable Bushland	TAS	This Green Army project aims to protect the natural values of a continuously linked, protected native forest zone being developed into tracks and trails by the Cradle Coast Mountain Bike Club (CCMBC). The Green Army will build a Mountain Bike Wash down Station at CCMBC Base and implement weed control to stop incursion into the surrounding bushland areas. The ultimate plan is for the trail system to extend into the Dial Range. A season of weed control and the commencement of an awareness raising program about weed dispersal will reduce the incidence of weed incursion by instilling a message of user responsibility to protect the environment they enjoy riding in through interpretive/instructive signs and gear hygiene promotion.	Perameles gunnii (eastern barred bandicoot) VU; Dasyurus maculatus (spotted tailed quoll) VU; Alcedo azurea subsp. diemenensis (azure kingfisher) EN; Litoria raniformis (green and gold frog) VU; Astacopsis gouldi giant freshwater crayfish) VU; Lathamus discolor (swift parrot) EN; Sarcophilus harrisii (Tasmanian devil) EN; Galaxiella pusilla (eastern dwarf galaxias) VU; Prototroctes maraena (Australian grayling) VU.
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²⁹ Ibid

³⁰ Potential Cassowary Habitat <https://www.environment.gov.au/system/files/resources/496201ad-f3d7-447e-9bbe-d0af3f0f9d1a/files/casuarius-casuarius-johnsonii-map.pdf>

³¹ Senate Standing Committee on Environment and Communications Legislation Committee, 8 December 2017 https://www.scribd.com/document/371114239/Environment-Threatened-Species-Funding-Table-sanit#fullscreen&from_embed

Image 1 - Red dots indicate Johnstone River Cassowary Corridor Enhancement

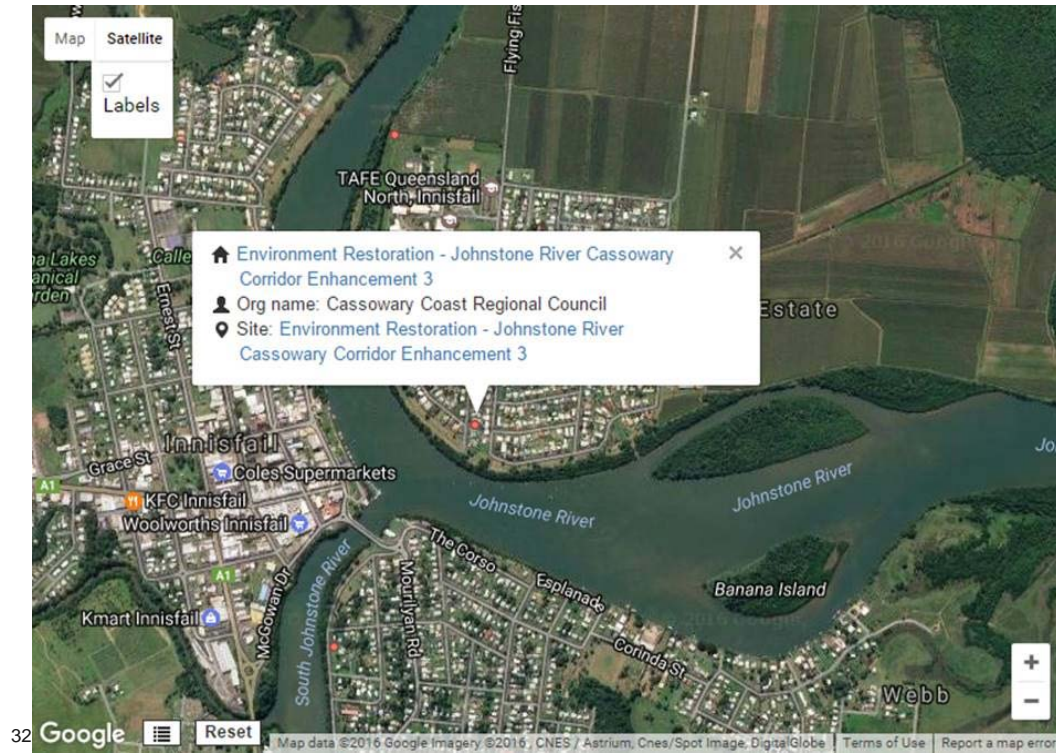
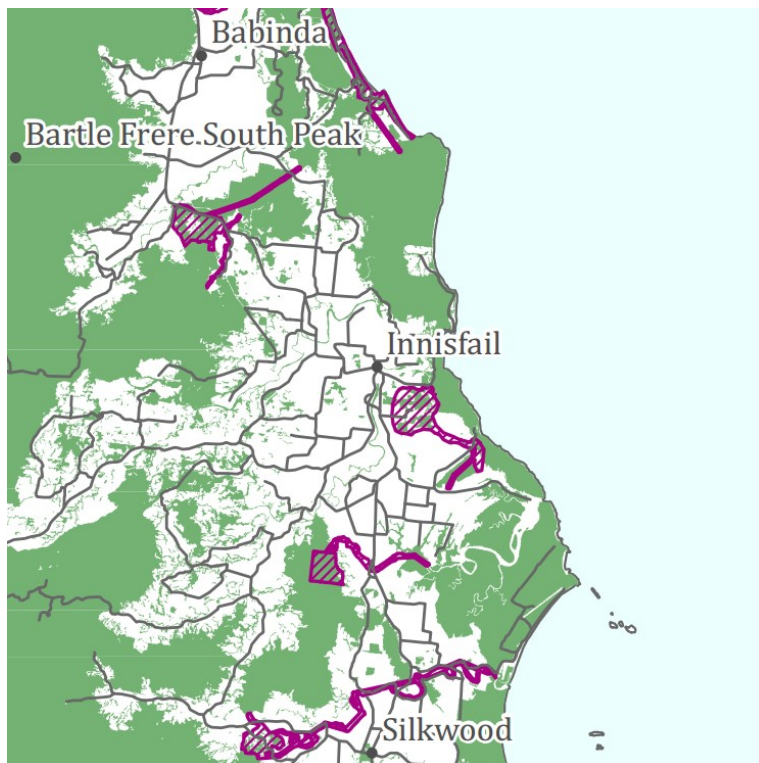


Image 2 – Commonwealth Mapping of Cassowary corridors (purple) around Innisfail³³



³² <https://fieldcapture.ala.org.au/home/projectExplorer>

³³ <https://www.environment.gov.au/system/files/resources/496201ad-f3d7-447e-9bbe-d0af3f0f9d1a/files/casuarus-casuarus-johnsonii-map.pdf>

It is clear from the description and the various fauna that are proposed to benefit from the action that this project is not a threatened species project. There is no clear scientific evidence that demonstrates a mountain bike wash station to limit weed dispersal will benefit the recovery of quolls, tasmanian devils, swift parrots or other endangered animals

It is important to note that these projects may be worthwhile environment and heritage projects in their own right, but ostensibly, they are not delivering targeted threatened species outcomes.

National Threatened Species Strategy

Threatened species recovery in Australia is not a new phenomenon. Legislative, policy and funding frameworks have operated nationally for decades. For example, the Threatened Species Network operated during the mid-2000's under the Howard government, which built partnerships and volunteerism into the threatened species conservation model.

The Threatened Species Strategy does have some good elements including a commitment to science and proposals for system improvements in recovery planning and species listing processes. The strategy also sets clear targets against which its success or otherwise can be measured. However, it is notable that some of these, including targets for improvements in recovery planning and finalisation of the Leadbeater's Possum Recovery Plan remain clearly unmet.

The strategy's focus and emphasis on science along with the funding provided to the Threatened Species Hub via the government's National Environmental Science Programme, is welcome and is vitally important for building knowledge, understanding and driving innovation in threatened species conservation.

Specific concerns relating to the drafting and content of the existing Threatened Species Strategy include:

- The approach to setting the target species in the threatened species strategy is unclear (notably the 20 birds and 20 mammals).
- There was limited public consultation or justification of the species selected, some of which are not of high risk ecologically.
- The exclusion of entire classes of species, such as frogs, reptiles, aquatics and invertebrates from the strategy.
- Whilst the strategy talks to "restoring habitats", to date the strategy has done very little by way of protecting or safeguarding critical habitats on mainland Australia.
- There are limited resources that were allocated to implementing the strategy. Whilst the government has claimed more than \$250 million has been made available for implementing the strategy, as noted above, this is an inflated representation.
- Lack of whole-of-government and inter-agency buy-in and poor internal coordination within the Department of Environment and Energy across regulatory and grant decision making.

In 2018 the Australian National Audit Office evaluated the performance of the threatened species prospectus, but did not look closely at government claims regarding threatened species spending. As noted by the ANAO:

*The objective of the audit was to assess the effectiveness of the Department of the Environment and Energy's design of the Threatened Species Prospectus as an innovative approach to attract investment from private and philanthropic sources.*³⁴

Given the number of general environment grants being presented as threatened species projects, it is recommended an independent audit of projects and their threatened species outcome be undertaken by the ANAO or another independent body.

Recommendations

18. *Invest \$200 million a year to establish a threatened species recovery fund that invests directly in recovery plan implementation and strategic priority recovery actions for Australia's most threatened species.*
19. *Invest at least \$170 million per year for the strategic growth of the National Reserve System, providing grants to public and private partners to purchase land for new protected areas; establish and manage Indigenous Protected Areas (IPAs); to establish and manage private land conservation covenants and to improve management effectiveness of existing reserves.*
20. *That all environmental grants claimed to target threatened species be independently audited against recovery planning criteria as to ascertain the utility of the project in benefiting threatened species, and to develop an accurate estimate of environmental expenditure on threatened species recovery.*
21. *That the ANAO complete its previously earmarked audit of the Green Army programme.*

Monitoring

Accountability and monitoring of the implementation of recovery plans is manifestly inadequate. Despite recommendations in reports commissioned by the federal Department of the Environment³⁵ and inquiries conducted by the Australian Senate³⁶ there remains no auditable or transparent mechanism for the public to determine what specific recovery actions have been funded or implemented as part a national recovery plan.

There are at least 315 recovery plans that are more than five years old. The vast majority of these have not been reviewed since their original preparation. Although considerable effort and expense went into the original study and preparation of recovery measures for the relevant species, lack of monitoring has left the return on this investment uncertain.

At a recent estimates committee the Department noted that:

*"The Department does not hold aggregated data concerning the extent of clearing of habitat for nationally listed threatened species."*³⁷

³⁴ Funding Models for Threatened Species Management 19 March 2018
<https://www.anao.gov.au/work/performance-audit/funding-models-threatened-species-management>

³⁵ Watson, J.E.M., Bottrill, M.C., Walsh, J.C, Joseph, L.N. and Possingham, H.P. 2011. Evaluating threatened species recovery planning in Australia. Prepared on behalf of the Department of the Environment, Water, Heritage and the Arts by the Spatial Ecology Laboratory, University of Queensland, Brisbane

³⁶ Australian Senate Environment and Communications References Committee - Effectiveness of threatened species and ecological communities' protection in Australia – Final Report http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/Completed_inquiries/2010-13/threatenedspecies/report/index

³⁷ Question on notice no. 147 Portfolio question number: 147 2018-19 Budget estimates Environment and Communications Committee, Environment and Energy Portfolio

Most Australians would find it shocking that the federal environment department, the primary agency and regulator for nationally threatened species, does not collect data on threatened species habitat loss.

Recommendations:

22. *The Australian Government must commit to collecting, and the prompt, transparent and regular release of data on:*
 - a. *the state and trends of threatened species;*
 - b. *state and impacts on critical habitat of threatened species; and*
 - c. *outcome-focussed monitoring of species conservation efforts and spending.*
23. *The Australian Government should develop a publicly available framework to assess and monitor the effectiveness of recovery plans*
24. *Establish a searchable database reporting on the status and implementation of all recovery actions and make such a database publicly available.*