BirdLife Australia's Submission to the Environment and Communications References Committee for inquiry on "Australia's faunal extinction crisis."

Thank you for the opportunity to provide input to the Environment and Communications References Committee's inquiry into *Australia's faunal extinction crisis*. This submission and the appendices attached provide evidence of the need for reform.

Australia is a land of unique landscapes that support a rich, diverse and globally recognised avifauna but it continues to have some of the highest rates of land clearing in the world, it oversees growing lists of threatened species and a broad range of threats, such as fire, weeds and pest animals continue to increase.

The Australian Government's own State of Environment (SoE) series provides ample evidence of the crisis – not only are more and taxa becoming threatened, but listed taxa are edging closer to extinction. Recent bird extinctions also speak to the neglect of successive governments to acknowledge and arrest the decline of many species as they edge closer to extinction.

The failure of Australian governments to meet international and domestic obligations is characterised by a lack of accountability. Reviews of national polices, strategies, frameworks and legislation consistently point to a lack of implementation and enforcement.

Recovery Plans are the Commonwealth's primary vehicle for saving species, but reform is needed to improve outcomes for Australia's most threatened species:

- mechanisms to ensure Recovery Plans place prescriptive limits on loss of habitat, and strong new provisions to protect critical habitats and climate refuge for species;
- a $200 million a year threatened species recovery fund that invests directly in recovery plan implementation and strategic priority recovery actions; and
- auditing and reporting on the performance of threatened species recovery efforts.

Our current national environmental laws are clearly not strong enough to protect critical habitats or recover threatened species. They are facilitating a trajectory towards extinction. A review of the US Endangered Species Act shows that strong laws can, and do, save threatened birds (the average population increase of birds protected by the Act was 624%).

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Australia requires a new generation of environment laws that genuinely protect nature and restore our threatened species. It will require the establishment of independent institutions free from political interference, and improved accountability towards meeting our international commitments to biodiversity conservation.

To help save threatened species outside the National Reserve System, the Australian Government should adopt the IUCN standard for Key Biodiversity Areas (KBAs). KBAs use scientific criteria to identify the globally important habitat for threatened species regardless of tenure. BirdLife Australia's KBA program successfully engages land managers to monitor threatened birds and provide improved stewardship for nature's hotspots.

A new generation of nature laws, funded implementation of recovery plans, adoption of the international Key Biodiversity Areas standard and a strong focus on measuring impact will recover Australia's most threatened flora and fauna. This can be achieved most cost-effectively by leveraging partnerships with civil society groups, whose passionate volunteers and donors are already helping in fight against extinctions.

Paul Sullivan
CEO

## BirdLife Australia's background

BirdLife Australia is an independent grassroots charity with over 126,000 supporters throughout Australia. Our primary objective is to conserve and protect Australia's native birds and their habitat. Our organisation is a partner in the world's largest conservation partnership through BirdLife International.

BirdLife Australia has played a major role in threatened species conservation and avifauna monitoring throughout our 110-year history. We have has invested in long-term threatened bird conservation programs, often in partnership with other stakeholders, bringing together research, education, on-ground remediation, advocacy and campaigning. The organisation relies on its volunteers and citizen science involving thousands of Australians to deliver our programs.

Our core programs adopt a long-term, multi-species and landscape scale approach to conservation, including for Beach-nesting Shorebirds, Migratory Shorebirds, Woodland Birds, Mallee Birds and critical threatened bird habitat (Key Biodiversity Areas). Our Preventing Extinctions program focuses on threatened birds that are most likely to become extinct and require leadership from BirdLife Australia.

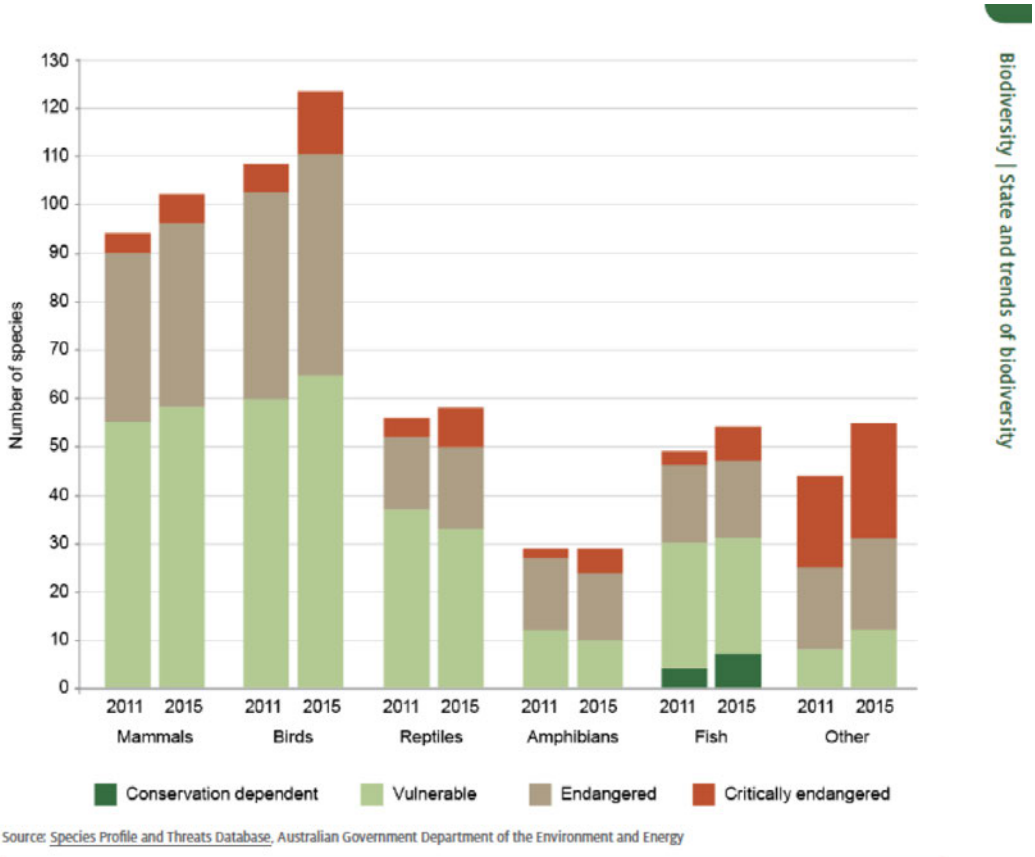
As an organisation founded as an ornithological society, BirdLife Australia's programs are informed by science. For example:

- BirdLife Australia published the award-winning seven volume Handbook of Australian, New Zealand & Antarctic Birds (HANZAB). HANZAB documented the ecology, behaviour and morphology of each of the 952 species ever recorded in our region;
- BirdLife Australia was the major funding partner for an Australian Research Council project that aimed to understand the factors underlying success in threatened species management. One outcome of this project was the *Action Plan for Australian Birds 2010,* providing the most comprehensive reviews of the status of all Australian bird species. This follows similar volumes in 2000 and 1992;
- We periodically report on the status and trends in Australia's bird taxa (e.g. State of Australia's Birds 2015[1]) and are a key partner in the National Threatened Species Index Project, bringing together threatened species data from many custodians and synthesising this to produce aggregated regional, national and guild trend indices. See www.nespthreatenedspecies.edu.au/projects/threatened-species-index;
- Our programs and strategy are guided by advice from the Research & Conservation Committee, comprising of esteemed ecologists from across Australia.

[1] BirdLife Australia (2015) *The state of Australia's birds 2015: Headline trends for terrestrial birds*. Carlton, VIC. BirdLife Australia

*a) the ongoing decline in the population and conservation status of Australia's nearly 500 threatened fauna species;*

The Australian Government's State of Environment (SoE) series provides clear evidence of an extinction crisis for Australia's fauna. Not only are more taxa becoming threatened, but listed taxa are becoming closer to extinction. This trend is evidenced by increasing numbers of critically endangered taxa (see Figure BIO14 copied from SoE series below).




Source: Species Profile and Threats Database, Australian Government Department of the Environment and Energy

**Figure BIO14** **Number of fauna species listed under the *Environment Protection and Biodiversity Conservation Act 1999*, 2011 and 2015**

## Recent Extinctions

Four bird taxa have been the subject of extensive searches that have not yielded sightings and are thought to have gone extinct in recent times – the southern Star Finch (last seen 1980s), White-chested White-eye (1980s), Tiwi Hooded Robin (1990s) and Mt Lofty Ranges Spotted Quail-thrush (1980s) – and are likely to be judged extinct when assessed for the next Action Plan for Australian Birds. Although it has long been realised that they were scarce, little effort was made to find remaining populations, let alone undertake research or identify and manage threats. Instead the occasional observations and warnings of likely extinction evoked no action by responsible authorities.

## Trends in Australian birds

There are two contrasting threads of evidence on birds overall. For threatened species there has been a levelling of what had been a steep decline in the Red List Index, an index that accommodates changes up and down in IUCN Red List status from one time period to the next.

Indeed, in 2016 there was a slight improvement because the status of many seabird taxa nesting on Macquarie Island improved five years after the last rabbit was found; the culmination of a successful pest eradication program on the Island (Figure 1).

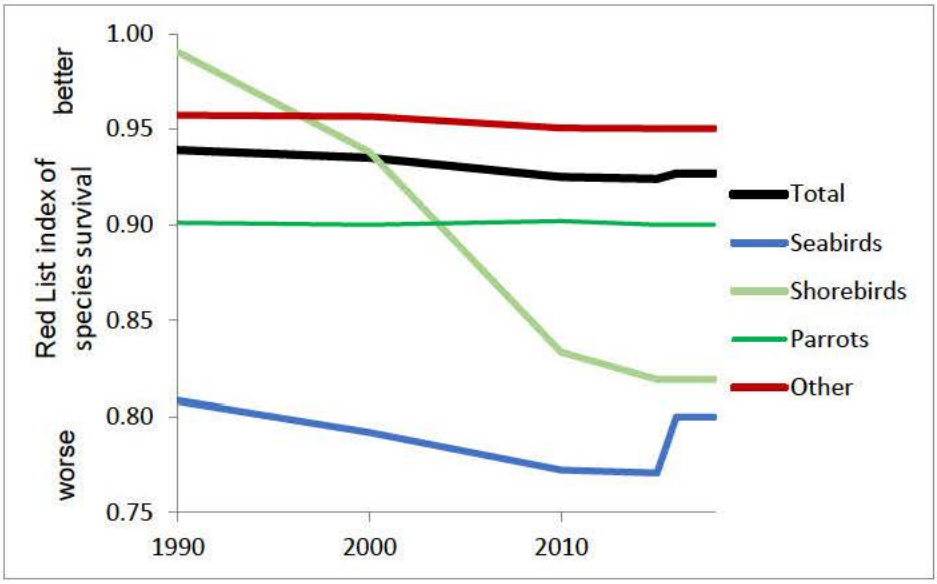



**Figure. 1. IUCN Red List Index for all threatened Australian birds as well as shorebirds, seabirds, parrots and other taxa, from 1990 to 2018.**

This improvement is reflected in the number of taxa improving in status compared to those declining (Figure 2). As illustrated in Garnett et al. 2018[2], recovery of threatened species is possible, but only when resources are committed for extended periods. The results from Macquarie Island and elsewhere reflect substantial investment in threatened species management in the 20 years up to 2010.

[2] (Garnett et al. eds 2018. *Recovering Australian Threatened Species: A Book of Hope*. CSIRO Publishing

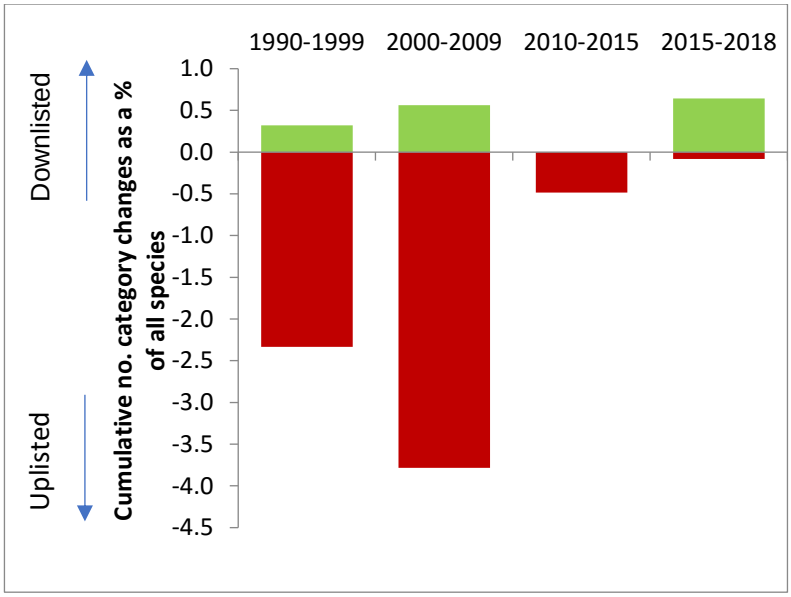



Figure 2. The number of species and subspecies of bird increasing or decreasing in IUCN Red List status in the last 28 years as a proportion of all Australian bird taxa

Unfortunately, there are strong indications that this levelling off is a hiatus before further declines. Work on The Threatened Bird Index (http://www.nespthreatenedspecies.edu.au/projects/threatened-species-index) is suggesting ongoing declines among many taxa for which adequate monitoring data is available for calculating trends. This will translate into changes in IUCN Red List status unless urgent action is taken to halt and then reverse declines.

There is also compelling evidence that many so-called common bird species are experiencing significant declines in abundance and distribution (BirdLife Australia 2015), and we anticipate the rate of EPBC listings (new listings and uplistings) will only increase (in volume and pace) over the next 10-50 years.

## Multiple taxa perilously close to extinction, ignored by government

Recent research identified a group of threatened birds at high risk of extinction in the next 20 years (Table 1). More than half of the top 20 taxa are not listed as priority taxa under the national threatened species strategy. Typically, these are taxa that have not attracted significant recovery effort, funding and/or lack recovery plans, representing the failure of successive Australian Governments to meet our international obligation to protect and conserve biodiversity. As a result, BirdLife Australia was impelled to prioritise these taxa in new program that aims to prevent the extinction of highly imperiled, neglected taxa.

**Table 1. The probability of extinction among the 20 Australian bird taxa thought most likely to be made extinct in the next 20 years under current management** (see Geyle et al. 2018[3]). Taxa listed in bold were *not* included in the 20 priority species of the national Threatened Species Strategy.

| Taxon name | Estimated probability of extinction in the next 20 years |
|---|---|
| **King Island brown thornbill, *Acanthiza pusilla archibaldi*** | **0.94** |
| Orange-bellied parrot, *Neophema chrysogaster* | 0.87 |
| **King Island scrubtit, *Acanthornis magna greeniana*** | **0.83** |
| Western ground parrot, *Pezoporus wallicus flaviventris* | 0.75 |
| **Houtman Abrolhos painted buttonquail, *Turnix varius scintillans*** | **0.71** |
| Plains-wanderer, *Pedionomus torquatus* | 0.64 |
| Regent honeyeater, *Anthochaera Phrygia* | 0.57 |
| **Grey range thick-billed grasswren, *Amytornis modestus obscurior*** | **0.53** |
| **Herald petrel, *Pterodroma heraldica*** | **0.52** |
| **Black-eared miner, *Manorina melanotis*** | **0.47** |
| Northern eastern bristlebird, *Dasyornis brachypterus monoides*[A] | 0.39 |
| Mallee emu-wren, *Stipiturus mallee* | 0.34 |
| Swift parrot, *Lathamus discolour* | 0.31 |
| Norfolk Island boobook, *Ninox novaeseelandiae undulata*[A] | 0.27 |
| **Mount Lofty Ranges chestnut-rumped heathwren, *Calamanthus pyrrhopygia parkeri*** | **0.24** |
| **Fleurieu Peninsula southern emu-wren, *Stipiturus malachurus intermedius*** | **0.17** |
| Helmeted honeyeater, *Lichenostomus melanops cassidix* | 0.17 |
| **Cocos buff-banded rail, *Hypotaenidia philippensis andrewsi*** | **0.17** |
| **Western bristlebird, *Dasyornis longirostris*** | **0.16** |
| Alligator Rivers yellow chat, *Epthianura crocea tunneyi* | 0.15 |

[3] Geyle et al. 2018. Pacific Conservation Biology https://doi.org/10.1071/PC18006)

## Global biodiversity decline, Australia as one of the worst performers.

Biodiversity is declining globally, with species losses over the last century many times higher than the background rate. The drivers of decline largely result from the human population pressures; the need for resources to support agriculture, extractive industries and urban development.

But in many respects, Australia is a global anomaly. Australia is renowned worldwide for its unique and diverse flora and fauna. We are a wealthy nation with comparatively good governance and a high degree of political stability. Yet Australia is one of the worst performers for preventing extinction (IUCN 2015a; b). Most of the continent is remote from urban communities and intensive areas of human development, yet we have high rates of extinction, with many of these having occurred in remote areas.

## *c) the international and domestic obligations of the Commonwealth Government in conserving threatened fauna;*

Australia is party to numerous international conventions and agreements committing Australia to the protection and conservation of biodiversity. The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), in protecting matters of national environmental significance (MNES), is the key piece of national environmental legislation that facilitates Australia's efforts to meet these international obligations.

Key national policies, strategies and associated programs (e.g. Australia's Biodiversity Conservation Strategy 2010 – 2030, National Landcare Programme, National Reserve System, Australia's Native Vegetation Framework) provide a framework for articulating and delivering on national biodiversity conservation priorities.

BirdLife Australia submits that these key instruments are largely failing to conserve Australia's threatened fauna (detailed above and below) and therefore are failing to help Australia meet its international obligations. This is evidenced by growing lists of threatened species and a lack of genuine commitment to the management of key threatening processes.

## National Biodiversity Strategy – weak and ineffective

As a party to the UN Convention on Biological Diversity, Australia's national biodiversity strategy provides the main instrument for Australia to implement its obligations under the convention at the national level. The recent draft National Biodiversity Strategy - "Australia's Strategy for Nature 2018-2030" (draft NBS) - lacked important characteristics of best-practice strategies and does not meet Australia's biodiversity crisis with sufficient ambition and leadership. Importantly, the draft NBS falls well short of the national strategy required under Article 6(a) of the United Nations Convention on Biological Diversity (CBD); perhaps partly because the federal government sought consensus with states and territories before public consultation, resulting in the lowest common denominator.

A 2015 review of the NBS found that Australia could not report its achievements against its ten targets because Australia lacks a comprehensive, national biodiversity monitoring program.

### Failure to respect Ramsar

The Australian Government's recent decision to declare a development proposal at Toondah Harbour (QLD), that will encroach on over 40 hectares of the Morton Bay Ramsar site, a 'controlled action' rather than 'clearly unacceptable' provides further evidence of the Australian Government's disregard for our international obligations. The Ramsar site provides habitat for listed migratory bird species, including the Critically Endangered Eastern Curlew and Endangered Bar-tailed Godwit. The decision sets a dangerous precedent for future development proposals that may impact on our other 65 Ramsar-listed wetlands.

In failing to meet its international obligations, the Commonwealth Government seriously undermines our credibility and fails to show the international leadership expected of a wealthy nation.

There are numerous reports (such as the Auditor-General Commonwealth performance Audit Report (No.31) 2006–07; Australian Senate Environment and Communications References Committee - Effectiveness of threatened species and ecological communities' protection in Australia[4]) that have examined the effectiveness of the Australian Governments management of threatened species. We refer these to the Committee.

### Recommendations

- Ensure our laws and policy give effect to our international commitments;
    - Australia's national biodiversity strategy must clearly align national policy and strategy targets with our commitments under international agreements;
    - Australia should develop environmental accounts which include threatened species, and biodiversity metrics (indicators) that will allow us to report on national progress towards meeting our international commitments to biodiversity conservation (e.g. Aichi Biodiversity Targets).
    - Improve accountability by establishing independent panels to review reports on Australia's progress against its international commitments (e.g. CBD, Ramsar reports)
    - Commit to a new generation of environment laws that genuinely protect nature.

### d) the adequacy of Commonwealth environment laws, including but not limited to the *Environment Protection and Biodiversity Conservation Act 1999*, in providing sufficient protections for threatened fauna and against key threatening processes;

As discussed in (c) above, effective biodiversity conservation legislation should work together with national policies, strategies and programs to protect and recover threatened species.

[4] 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/200-13/threatenedspecies/report/index

BirdLife Australia submits that the EPBC Act does not, in practice, provide strong enough legislative protections for threatened species and their habitat and does not include provisions aimed at recovering threatened species.

The EPBC Act is nearly two decades old and fails to tackle the drivers of biodiversity decline: the loss and degradation and loss of habitat; altered fire regimes; invasive species and climate change. While it includes some strong provisions, it allows for high levels of ministerial discretion in decision making and contains loopholes and exemptions such as Regional Forest Agreements that undermine the objectives of the Act. Under the EPBC Act, science is frequently ignored, and developments are allowed in areas that are known to provide important habitat for listed threatened species.

Many key concepts, such as significant or cumulative impacts, are poorly defined, leaving them vulnerable to subjective interpretation and exploitation, an issue that is exacerbated by the absence of a strong national environmental monitoring program, and insufficient resources to ensure compliance. The EPBC Act is particularly weak at protecting dispersed species, where low population densities mean demonstration of 'significant impact' is rarely possible and cumulative impact of multiple projects within the species' range is not considered.

These weaknesses are compounded by administrative and legislative processes that lack transparency, contain significant barriers to community participation and are heavily skewed towards the protection of business and economic interests. Recent reversals of land clearing controls in Queensland and NSW clearly show that some protections are all too easily unwound by vested interests influencing the government of the day.

In practice, current legislation focuses on discrete and reactive issues; typically, development proposals that may impact on Matters of National Environmental Significance. Our current national laws are not designed to address the big drivers of biodiversity decline; the loss and degradation of habitat (and the associated problem of loss of habitat connectivity), altered fire regimes, invasive species and climate change.

The scale and pervasiveness of these systemic and intractable issues requires strategic landscape-scale planning and a long-term commitment of resources. Yet one of the main instruments within the legislation that could support long-term action—species' Recovery Plans—has been systematically undermined, leaving it vulnerable to lobbying by business interests and governments seeking to avoid perceived barriers to economic activity.

At best, the current EPBC Act can slow a species' trajectory towards extinction, rather than arresting and reversing declines as they should.

### National Recovery Plans; optional and unenforceable

When the EPBC Act was first passed into law, the listing of a species as nationally threatened triggered a legal requirement for the development of a National Recovery Plan; a document that captures current understanding of how present and past threats contributed to the species' decline and the key actions needed to recover the species. While such plans are not directly enforceable, a strong plan can impose measures to help protect a species, for example by identifying areas of critical habitat that must be protected, specifying limits to loss or specifying clear, time-bound management

objectives for a species and its habitat. Importantly, the Environment Minister cannot approve an action that is inconsistent with a Recovery Plan.

In the five years or so following the introduction of the Act, a number of Recovery Plans showed clear intent to use the full powers and provisions of the Act to protect and recover species; by clearly specifying areas of critical habitat (e.g. Black-eared Miner) or by placing limitations on activities that could be undertaken within important areas within a species' range (e.g. Golden-shouldered Parrot, Hastings River Mouse).

But over time, Recovery Plans have become increasingly insipid as governments have sought to avoid strong prescriptions that might limit activities within a species' range or require resources for the implementation of priority actions.

Threatened Species Recovery Plans, developed under the EPBC Act, are the Australian Government's key instrument for bringing threatened species back from the brink, yet analysis by BirdLife, ACF and EJA showed that of the 120 most endangered animals covered by recovery plans, only 12 (ten per cent) had plans that placed any prescriptive limits on the future loss of habitat. Although most plans list habitat loss as a significant threat and recommend active protection of habitat, our research shows most recovery plans consistently avoid prescriptive measures to protect threatened species habitat[5].

In 2007, the EPBC Act was amended to allow the Minister to decide that a Recovery Plan is not required for individual listed species. In these cases, the only information required to be produced is a "Conservation Advice" produced as the time of listing; typically, a much shorter document that provides a high-level perspective on why a species has declined and the "simple" actions that are required for recovery. Most Conservation Advices lack the detail required to implement recovery actions. Worse still, these documents are not binding on decision makers.

As the lists of threatened species have grown, funding for the development and implementation of Plans has declined. Today, most listed species don't have Recovery Plans. For those that do, Recovery Plans were mostly drafted long ago and have not been updated within the required five-year time frame.

Our analysis shows that of the 67 nationally listed Endangered and Critically Endangered birds, only 11 are covered under up-to-date Recovery (six) or Regional (five) Plans; 28 species have out-of-date Recovery or Regional Plans and ten species that require an individual Recovery Plan do not have one (including Abbott's Booby, Australian Painted Snipe and Australasian Bittern). A further eighteen species only require a Conservation Advice, because it has been determined that they require "simple" recovery actions.

[5] http://www.birdlife.org.au/documents/OTHPUB-Recovery-Planning-Report.pdf

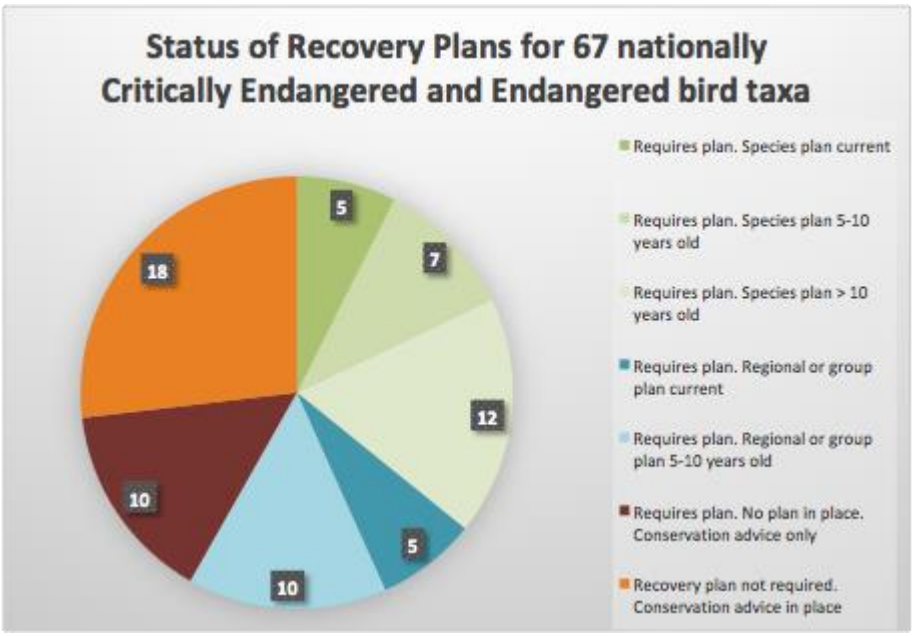



Figure 3. Status of recovery plans for endangered and critically endangered birds (as at January 2018).

Governments are not compelled or obliged to implement Recovery Plans and Conservation Advices. They can pick and choose between species to support and species to ignore.

Case studies demonstrating failure of the Act to protect threatened species are given in Appendix A and B.

Recommendations:

- A requirement to implement Recovery Plans would be one of the simplest and most direct ways to arrest the extinction crisis in Australia, as long as Recovery Plans were mandated to provide unambiguous and appropriate prescriptions preventing the loss of critical habitat, consistent with the best available science.
- Develop revised guidelines governing the preparation of Recovery Plans to ensure plans detail scientifically robust, specific, measurable and targeted restraints on the destruction of threatened species habitat and outline restorative outcomes that any approval decisions must work toward.
- Develop a publicly available framework to assess and monitor the effectiveness of Recovery Plans and mandate annual reporting on plan implementation, collated and managed by the Australian Government. This should include a searchable database reporting on the status and implementation of all recovery actions.
- Create strong national environment laws that genuinely protect Australia's natural environment. The Federal Government must retain responsibility for Matters of Environmental Significance and national oversight must be expanded to land clearing, biodiversity and ecosystems, water resources, climate change, air pollution and protected areas. New laws must not give blanket exemptions to states e.g. RFAs.
- Establish an independent National Sustainability Commission to set national environmental standards, undertake strategic regional planning and report on national environmental performance. The Commission should also develop enforceable national, regional, threat-

abatement and species-level conservation plans. This would provide the national leadership required to tackle complex and cumulative pressures such as habitat loss and degradation, invasive species, altered fire regimes and climate change.

- Establish an independent National Environmental Protection Authority to conduct transparent environmental assessments and inquiries as well as undertake monitoring, compliance and enforcement of environmental conditions and standards.
- Guarantee community rights and participation. Stronger environmental laws should improve the accountability of, and access to, environmental decision making.

### e) the adequacy and effectiveness of protections for critical habitat for threatened fauna under the Environment Protection and Biodiversity Conservation Act 1999;

Identification and protection of habitat critical to the survival of a species is vital to efforts to protect and recover threatened species. Despite their relative mobility, it is possible to define critical habitat for many threatened bird species. Despite this, critical habitat declarations and provisions are rarely used in Australia, at either the Commonwealth or state level. In fact, to date only five sites have been listed on the national register of critical habitat with the most recent being declared in 2005.

The brevity of the register is not due to a lack of technical information required to declare critical habitat, because this is available for many of Australia's highly threatened birds (i.e. we know its location). Instead critical habitats are rarely listed under the EPBC Act because listing is discretionary and the political will to declare areas of critical habitat is lacking. Even where critical habitat is identified through the recovery planning process, placement of such areas on the register has been limited. This may also be explained through the limited application of the register, which only applies to areas of land and sea owned or managed by the Australian Government.

Habitat destruction is not the only driver for threatened species decline, but it is one of the major ones. Therefore, securing and improving habitats for threatened species remains one of the most powerful and cost-effective conservation tools at our disposal. Indeed, under the US Endangered Species Act, actual protection of Critical Habitat is one of the key drivers that has led to the recovery of almost 99% of species under its care.

Protecting habitat that is critical to the survival of our most threatened species is essential to combating the current extinction crisis.

### Recommendations

- Australia undertake a systematic program of identifying and mapping critical habitat for threatened fauna, linking it to independent recovery planning processes.
- Reform the Register of Critical Habitat under national law to ensure its effectiveness, including an expansion of the register across tenures and appropriate consideration in regulatory decision making. Ensure registration of critical habitat occurs within 12 months of a species being added to the national threatened species list.
- Establish new national environmental laws which include strong provisions to protect critical habitats and climate refuge for species.

- 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.

## f) the adequacy of the management and extent of the National Reserve System, stewardship arrangements, covenants and connectivity through wildlife corridors in conserving threatened fauna;

The National Reserve System (NRS), including the Indigenous Protected Area network, is a foundation for the conservation of Australia's threatened species. However, the NRS is not yet comprehensive, adequate or representative, and many threatened species do not occur in it. Existing reserves and the existing reserve system are inadequate for the conservation needs of many species.

Some of the principal factors driving the decline of threatened species are tenure-blind, and the reserve system provides no or inadequate protection for threatened species against these threats. Hence, the reserve system has failed to ensure the viability and persistence of at least some threatened species occurring in them. Further, the conservation value of the National Reserve System is being subverted by inadequate management resources, degradation, downgrading, downsizing and de-gazettal. The National Reserve System will lose many of its biodiversity values if it operates as a series of isolated fragments; its enduring value depends upon maintaining or re-building landscape-scale connectivity and mobilising resources to actively manage the NRS for its biodiversity values.

The effectiveness of the reserve system is also contingent upon complementary off-reserve management, and this complementarity is not being delivered effectively.

### Key Biodiversity Areas identify important gaps in the NRS where key bird species are unprotected

Globally important sites for the conservation of nature are now being recognised internationally as Key Biodiversity Areas (KBAs). Using IUCN international standards based on strict scientific criteria [6] BirdLife Australia has identified 315 Australian sites of global importance to the conservation of nature. Key Biodiversity Areas (KBAs) are nature's hotspots. They are the most important places left for life on earth.

Based on extensive research and expert opinion, the 315 Australian KBAs, covering 5.7% of the landmass. An additional suite of KBAs is being considered for marine birds in both near shore and pelagic habitats. The non-statutory status of KBAs enables an independent, non-government approach to conservation, and appropriate management of these KBAs should guarantee the survival of almost all of Australia's bird species.

Under the Convention on Biological Diversity's 'Aichi' Target 11, world governments have committed to conserving, by 2020, at least 17 per cent of terrestrial and inland waters, "*especially areas of particular importance to biodiversity…through protected areas and other effective area-based conservation measures*." KBAs can help Australia meet Target 11 by providing direction for the future

[6] IUCN (2016) A Global Standard for the Identification of Key Biodiversity Areas, Version 1.0. First edition. Gland, Switzerland: IUCN. Available online from: https://portals.iucn.org/library/node/46259

expansion of Australia's National Reserve System (NRS) to make it more ecologically representative and to ensure it is protecting areas of importance to biodiversity.

While Australia has made significant progress towards Target 11, by overlaying KBAs with Australia's protected areas we have shown important gaps in the NRS where key bird species are unprotected or under-protected. Around half of the KBA estate has some level of protection (53.75%) but the average overlap of the NRS per KBA is less than half (48.74%). Less than 21% of our KBAs are fully protected (only 66 of 315 KBAs have more than 99% NRS overlap) and almost 17% (53 of 315) of our KBAs have no formal protection within the NRS.

## The importance of connectivity

When Birdlife Australia advocates for connectivity we are advocating for *functional* connectivity. Functional connectivity means that birds have enough resources of the right kinds within their reach to persist. Functional connectivity means that populations can shift over large distances at a decadal timescale, which will be critical to adapting to climate change. Functional connectivity is rarely the same thing as having an unbroken line of trees from one 'habitat patch' to another. Such 'structural connectivity' is typically not as important to birds as the total amount and suitability of habitat in a landscape for achieving functional connectivity.

To effectively address the needs of Australian avifauna, the NRS remains an essential part of ongoing efforts to sustain large scale ecological processes across land tenures. However, conservation based solely on even a modest system of protected areas will not suffice to ensure persistence of a significant proportion of native species. Species ecology, and the ecosystem processes that underlie functional landscapes transcend local districts, regions, or even bioregion. Processes that manifest at large scale - such as annual dispersal and migration, or seasonal shifts in appearance of nectar sources for nomadic species - occur over large areas or at locations spread across vast distances. Connectivity conservation has emerged to address the need for actions to be coordinated at large scale and are centered on complimenting the NRS. It involves the active management of natural and semi-natural landscapes across a range of tenures and working landscapes that is undertaken by individuals, communities, private organisations and governments and includes:

- Landscape conservation, where a continuum of natural vegetation is established and/or maintained across a landscape;
- Biodiversity and ecosystem conservation, where habitats critical for the movement of species across the landscape (permeability) are established and/or maintained;
- Ecosystem process conservation, where connectivity conservation actively manages for the retention of critical ecological processes; and
- Evolutionary process conservation, where connectivity conservation provides opportunities for the movement and interaction of individual animals.

The importance of the NRS as foundational to connectivity conservation is plainly acknowledged in the *National Wildlife Corridors Plan 2012* (NWCP). The NWCP and its supporting literature note the vital role of cross-tenure efforts in which protected areas are managed as part of a network of areas that contribute to functionally connected systems. This requires actions that contribute to maintaining connectivity at all scales for the benefit of the species. Such thinking is central to

strategies contained within a plan currently being prepared by BirdLife Australia for Australia's temperate woodland birds. The 'Woodland Birds Conservation Action Plan' addresses the conservation needs of 49 threatened or declining woodland-dependent birds across southeast Australia. It covers a vast area from Port Augusta (South Australia) and Tasmania along the east coast, Dividing Range and western slopes and plains of New South Wales and the ACT, to southeast Queensland near Maryborough. The needs of woodland birds across this diverse area are varied. However, each relies on connectivity of habitat at local, regional, or continental scales. The NRS contributes to connectivity at each of these scales and is vital to ensuring the persistence of locally resident, seasonally dispersive, and migratory or nomadic threatened species. The Woodland Birds CAP is already stimulating collaborative efforts involving connectivity initiatives in the Great Eastern Ranges and Gondwana Link corridors. These initiatives involve protected areas in cross-tenure efforts linked across multiple sites and regions, each connected and complimented by private land conservation efforts.

### Recommendations

- Strategically increase the comprehensiveness, adequacy and representativeness of the NRS, as well as maintaining and restoring connectivity of the NRS within the landscape. Ensure policy and resourcing (such as stewardship arrangements) provide more effective delivery of the complementary contribution of off-reserve management.
- Adopt the IUCN standard for Key Biodiversity Areas (KBAs), which uses scientific criteria to identify the most important habitat for threatened species to help prioritise expansion of the NRS and identify areas to target with resources to support off-reserve management.
- Measure and report on the performance of park management plans in a way that ensures that threats affecting threatened species in reserves are managed effectively to recover populations of threatened species.

### g) the use of traditional knowledge and management for threatened species recovery and other outcomes as well as opportunities to expand the use of traditional knowledge and management for conservation;

Indigenous engagement in threatened species conservation has increased greatly in recent decades but many opportunities remain. Research suggests that it is a mistake to try to separate traditional Indigenous knowledge of threatened species and their management from Indigenous worldviews – i.e. expanding the use of traditional knowledge for conservation can only be achieved through empowering and funding Indigenous people to be part of threatened species conservation work on their own terms.

### Recommendations:

- Increase the use of traditional knowledge in the management for threatened species recovery by, for example:
    - Providing adequate resourcing for developing collaborations and partnerships with Indigenous peoples following agreed Indigenous processes that allow for comprehensive and unhurried consultation;

- Making a key performance indicator of recovery plans the extent to which Indigenous people with interests in Country where a threatened species occurs have been empowered to participate in developing and implementing the plan;
- Resourcing capacity building for both ways learning and management in IPAs and with Indigenous ranger groups.

## h) the adequacy of existing funding streams for implementing threatened species recovery plans and preventing threatened fauna loss in general;

There exists no dedicated funding for the implementation of recovery plans.

Clearly 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 most in need.

Diminishing levels of government investment and constant changes to funding streams and priorities are a major impediment to species recovery. The past two decades have seen numerous different funding programs, each with different levels of funding and priorities. As a result, continuity in operation for long term programs and recovery teams is hard, and always below levels required. The programs are also regularly over-subscribed and require at least an order of magnitude increase in funding to deliver stated objectives. Furthermore, as the Senate Standing Committee on Environment and Communications Legislation Committee explored in February 2017, reports of expenditure on threatened species can be highly inaccurate.

All this is despite findings that threatened bird conservation has broad support from the Australian public and threatened birds are valued as a group, not just particular species with which people might have a strong affinity. Conservatively, Zander et al (2014)[7] found that Australians would be willing to pay about $14 million per year, and realistically about $70 million into a conservation fund for threatened Australian birds.

In any case the costs of recovering threatened species are not particularly high in the context of national budgets. Research suggests that most recovery plans could be implemented with a modest investment. Studies completed in 2009 highlighted that 50 per cent of recovery plans could be implemented for less than $200,000, with only 16 plans exceeding the $1 million mark.[8] When looked at in total, these costs average out to approximately $100,000 per annum per recovery plan. Similar

[7] Zander, K.K., Ainsworth, G. B., Meyerhoff, J., and S. T., Garnett (2014) *Threatened Bird Valuation in Australia* PLoS One. 9(6): e100411. doi: 10.1371/journal.pone.0100411

[8] 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

research has estimated that for just $10 million annually all Australia's bird species could be secured from extinction[9].

### BirdLife Australia's conservation programs are reliant on volunteers and private philanthropy.

Fortunately, civil society plays a pivotal role in threatened species conservation, bringing together and facilitating long term partnerships between government, universities, zoos, experts, landowners, volunteers and community groups. BirdLife Australia increasingly relies on private philanthropy to help fund its long-term recovery programs. In many ways, this has led to a review of the way our programs work. Governments have become funding partners rather than program owners. BirdLife Australia is focused on long-term landscape scale multi-species programs which foster collaboration to do more with less. And there is a strong focus on demonstrating impact to donors, partners, volunteers and funders.

Substantial funds for threatened species conservation are currently being made available through biodiversity offsetting processes associated with development. Most biodiversity offsets do not, however, meet BirdLife Australia's policy for best practice which requires no net-loss of habitat (for example see http://www.birdlife.org.au/documents/POL-Offsets-Policy.pdf). As a result, the use of offsets is locking in the loss of key habitat for threatened species.

There is now much research demonstrating that, for many species, there is no quick fix and that money will be wasted if programs, even expensive ones, are ended too early. This means that short-term funding has high and unnecessary opportunity costs since funding is certain to be needed for a long time and ending programs early will waste investment that has occurred.

### Recommendations:

- 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, leveraging partnerships with civil society.
- 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); and to establish and manage private land conservation covenants.
- Guarantee expenditure for the length of time needed to make a measurable difference, albeit with sufficient oversight to allow adaptation to new circumstances;
- Monitor and evaluate measurable *impacts* of interventions (see below) so that expenditure is accountable and spent on actions that have impact.

[9] 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

*i) the adequacy of existing monitoring practices in relation to the threatened fauna assessment and adaptive management responses;*

Australia has multiple continental scale systems for monitoring elements of our environment, from the climate, atmosphere, water and oceans, to earthquakes, vegetation and land cover. These environmental monitoring systems allow the Australian Government to make informed continental-scale decisions, and they support many industries including maritime, aviation and agriculture.

The same cannot be said for Australia's biodiversity; we do not have a long-term continental scale monitoring and reporting program to support national decision-making about conserving biodiversity. We do not even have a consistent, comprehensive system for monitoring priority species such as threatened or flagship species. This impedes Australia's capacity to set national priorities, manage threats and understand the effectiveness of our actions to conserve threatened species.

## Birdata: BirdLife Australia's national, citizen science monitoring program

Birdata is BirdLife Australia's Atlas project. Since 1998 a dedicated band of over 9,000 contributors has amassed over 1.2 million surveys, comprising over 18 million bird records. It is Australia's largest environmental dataset which is used to inform a range of activities, including decisions about developments assessed under the EPBC Act and species' listings at the Commonwealth and state levels.

Unlike most Atlases conducted around the world which collect data in grids, volunteer observers are asked to give the precise coordinates of where they are undertaking their survey. Knowing this information adds greatly to the value of the data and allows observers to go back to that precise location and conduct repeat structured surveys. With large numbers of observers collecting data, the Birdata app and website is used to provide a unique insight into changes in bird populations over time. This unique tool can be used for:

a) *State of Environment Reporting* - as birds are near the top of the food chain and exist in our forests, wetlands, oceans and grasslands, they can be effectively used as a barometer of ecosystem health – the canary in the coal mine. If guilds or groups of birds are declining, other flora and fauna are likely to be declining too. The Australian Government funded BirdLife Australia's *State of Australia's Terrestrial Birds 2015*, including the development of a set of bird indices which can inform conservation strategies, policies and decisions, as they do in the UK and USA.
b) *Species trend reporting* – these analyses inform timely threatened species listings and provide an early warning to ensure common birds do not become threatened. Early intervention is more likely to prevent decline at less cost. A good example of this type of work is the current analysis underway on Mallee Striated Grasswren, which was identified as a taxon of concern by BirdLife Australia's Mallee Bird Program. The results of the data analysis will inform the Threatened Species Assessment process and may result in a nomination for uplisting, which in turn should facilitate greater protection of and investment in this bird.
c) *Adaptive management* – BirdLife Australia designs specific structured surveys to monitor and evaluate the impacts of our conservation programs on species for the purpose of adaptive management.

BirdLife Australia engages thousands of volunteers to collate data, however it is difficult to secure funding for data curation, management, sharing and analysis at a national, region or program level.

In other publicly-funded policy areas such as health and education about 10% of the budget is spent on monitoring. A recent review of threatened species monitoring found that many taxa were not monitored at all, including about 25% of all threatened bird taxa. For taxa that are monitored, the quality of data is often unsuitable to support robust analyses of trends in either the target taxa or the threats affecting them; making it difficult for management to respond with confidence. The most pressing deficiencies are in monitoring design, data curation and availability, and links to management.

Recommendations:

- Fast track the development of National Environmental Accounts that monitor the status of nationally threatened species;
- Incorporate Bird population indices and threatened bird indices into State of the Environment reporting to;
    - Ensure accountability for delivering outcomes. A clear commitment is needed to effective public reporting of *outcomes* and interpretation of trends in Australian biodiversity;
    - Improve adaptive management of biodiversity;
    - Ensure all recovery plans include a dedicated section on long-term monitoring and funding requirements that;
        - spells out the design and the statistical strength expected;
        - explains the relevance of the aspect of a threatened species biology to be monitored and makes clear the links between monitoring and management;
        - describes data management, particularly access to data;
        - describe governance triggers if trajectories do not improve;
    - Require data from monitoring publicly funded threatened species conservation be made publicly available (or in the case of sensitive species available to qualified recovery stakeholders) within a defined, short, period after collection. Reporting should include data from all regulatory approvals that include monitoring as a condition of approval.
- Develop programs that foster the involvement of Indigenous Australians and the public generally in biodiversity monitoring;
    - Build on National Environmental Science Program's threatened species index work to support robust citizen science and specialist monitoring programs which inform adaptive conservation of threatened species.

j) the adequacy of existing assessment processes for identifying threatened fauna conservation status;

We would like to note major improvements in this facet of threatened bird species management but cannot comment on other faunal groups.

BirdLife Australia has been behind three Action Plans for Australian birds (1992, 2000 and 2010). The first two had little impact on listing. However, under the chairmanship of Professor Helene Marsh, the

Threatened Species Scientific Committee (TSSC) has considered the most recent plan in detail. Species and subspecies BirdLife Australia thought Critically Endangered and Endangered were considered first by the TSSC followed by Vulnerable taxa. As part of this process the TSSC and BirdLife Australia's Threatened Species Committee have been collaborating to ensure that the species and subspecies that will benefit most from accurate listing are considered by the TSSC and there is now reasonable correspondence between the two lists. Differences can be explained by;

- minor differences of opinion about some variables that affect the category of listing, but not whether a taxon is listed;
- differences in definition between the IUCN Red List criteria and those of the EPBC Act;
- a decision by BirdLife Australia not to press for change to taxa unlikely to benefit from EPBC listing given the urgency of listing among other groups and limitations in the capacity of the TSSC and its support staff in preparing applications for consideration;
- a legacy of taxa listed under the EPBC list in 1999 which do not meet the IUCN Red List criteria, but which are now very difficult to remove from the list because there needs to have been a demonstrable improvement in indicators.

There are plans for a new Action Plan in 2020 and the TSSC and the Department are providing advice to make the transfer of assessments even more efficient in future.

Recommendations:

- Improvements could be made to the listing process by aligning nationally threatened species listing with the IUCN Red List Categories and Criteria;
    - The current EPBC Act criteria for listing are based on a draft document available in in 1999 and failed to incorporate changes to the final IUCN criteria published in 2002 (e.g. they omit from listing taxa eligible for listing as Vulnerable because, even though stable, occur in small numbers or at a few sites);
    - Add to the Act the category Near Threatened, using the definitions of the IUCN Red List criteria. In the last Action Plan 61 taxa were listed as Near Threatened. While Near Threatened listing may not be as consequential as threatened listing, a category of Near Threatened would provide some legal mechanism for warning that taxa may need to be uplisted unless action is taken;
    - Make the listing process independent of the Minister by making the TSSC the decision maker.

## k) the adequacy of existing compliance mechanisms for enforcing Commonwealth environment law;

Compliance with the EPBC Act has historically been poorly monitored and enforced. The Australian National Audit Office (ANAO) Report, *Managing Compliance with Environment Protection and Biodiversity Conservation Act 1999 Conditions of Approval*, which examined Environment's monitoring of compliance was damning in relation to the Commonwealth Environment Department's management of compliance with conditions under the Act. It concluded that:

"*Environment had limited assurance regarding approval holders' compliance with approval conditions and was generally passive in its approach to managing non-compliance with EPBC Act conditions of approval*".

Findings of the follow up Audit, *Monitoring Compliance with Environment Protection and Biodiversity Conservation Act 1999 Conditions of Approval: Follow-on audit*, released in 2017 suggests that the Department has made progress in improving compliance mechanisms. However, it notes that;

"*performance information reported externally by Environment does not currently provide stakeholders with sufficient insights into the extent to which compliance monitoring activities have been effective in protecting the environment from significant impacts*".

Whilst recent progress may have been made in improving regulatory 'maturity', conditions imposed on developments are often difficult to monitor, do not provide adequate data regarding the impacts (or planned controlling provisions) on threatened species likely to be affected, and do not have adequate safeguards if developments exceed stated impact thresholds after approval. Offsets are increasingly being used to compensate for species impacts, despite the success of offsetting being unproven. BirdLife Australia maintains that offsets are rarely an appropriate response to proposed biodiversity loss. To effectively counter-balance a development impact, a biodiversity offset must deliver the same amount of the same biodiversity values as are to be lost. Despite the Australian Government having an Environmental Offsets Policy, the Commonwealth regularly approves developments with 'offset' packages that do not align with its own policy.

Clearly further improvements are needed to ensure conditions placed on developments which affect threatened species are having the stated effects. For example, conditions on projects that are likely to have significant impact on threatened species or deemed high risk should receive independent scientific review. Greater investment needs to be made in improving the quality of conditions to ensure that they both benefit the target threatened species and that compliance can readily be monitored in a manner that makes compliance easy to assess and enforce. The use of novel technologies such as remote sensing, automated recording for example, should be explored. This may require some research to develop efficient automated data analysis and reporting to enforcement agencies, but such research will then establish approaches to monitoring compliance that can be built into conditions. Indeed, improvements need to begin at the earliest phase of project planning. Environmental Impact Assessments should be completed by consultants from a certified pool of competent suppliers and selected by the government not the developer. This would promote removal of the commercial dependency between consultants and proponents to ensure the best possible advice was provided regarding avoiding and/or mitigating projects impacts on threatened species.

Consideration should be given to the APEEL suggestion[10] that a team is set up within the Australian National Audit Office to monitor and report on the performance of Commonwealth environmental agencies, and to advise the National Sustainability Commission on improvements required. The

[10] Australian Panel of Experts on Environmental Law (2017) *Blueprint for the Next Generation of Australian Environmental Law.*

Commissioner should also set best practice nation standards (e.g. for offsets), and ensure these standards are met.

Recommendations:

- Establish an independent National Sustainability Commission to set enforceable national environmental standards and report on national environmental performance.
- Empower the community to ensure compliance by providing citizens the ability to question and challenge decisions, ensure outcomes are enforced and hold decision makers to account, including through broad standing provisions, merits review and third-party enforcement rights and protections for costs in the public interest.

**l) Any other matter**

BirdLife Australia would like to refer to the Committee the report, *A Wild Success: A Systematic Review of Bird Recovery Under the Endangered Species Act* (Appendix C).

The review demonstrates how strong laws can recover threatened species, sometimes with quite spectacular results. It demonstrates that 85% of birds protected under the Act increased or stabilized their population size as a result of protection by the Act.

The average population increase was 624%.

The US Endangered Species Act (ESA) is the world's strongest law protecting animals and plants on the brink of extinction.

As described above, actual protection of Critical Habitat is a key driver, as is consistent federal funding to leverage State, as well as land manager involvement. The ESA also limits executive discretion, prescribing nondiscretionary actions or rules for the executive branch to implement; this and the citizen-suit provision provide ample opportunity for litigation to ensure compliance.

Federal agencies must also consult with the Fisheries and Wildlife services, for example, to ensure that actions are not likely to "jeopardize the continued existence" of species protected by the Act, or to adversely modify critical habitat. Several success factors outlined in the report are particularly relevant:

- there is very strong societal support for protection of endangered species;
- endangered species are individually and intensively managed across the entirety of their ranges within a strong, clear, well-established regulatory context;
- management is generally guided by quantitative recovery goals established by centralized federal recovery plans, (indeed 90% of currently listed birds have formal recovery plans (just over half of which specify the length of time expected to achieve the recovery goal - average 63 years);
- most management decisions are made under a "best available science" standard that encourages iterative scientific updating while limiting the influence of contrary economic and political interests; and

- most Endangered Species Act decisions and plans are subject to public review and enforcement.

The report notes that:
"*Sensitive but unprotected birds, on the other hand, tend to be passively or indirectly managed through broad, mostly discretionary, inconsistently funded and often incomplete regional, ecosystem and habitat-based systems. The goals of such systems rarely include quantitative species-specific targets. They provide important ecosystem protections and undoubtedly have slowed the decline of many species, but are not as effective as the highly directed, quantitative and species-specific provisions of the Endangered Species Act*".

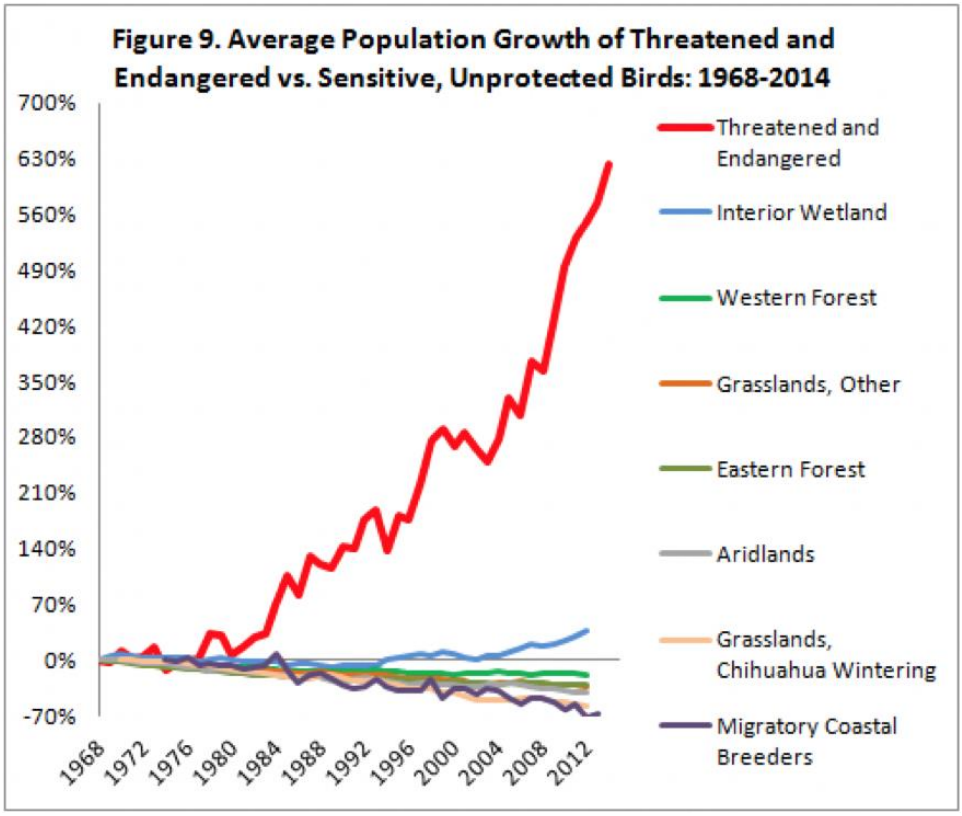



**Figure 4. Graph from "A wild success" demonstrating average population growth of threatened and endangered birds protected by the Endangered Species Act**.

These results clearly demonstrate the need for stronger nature laws here is Australia if we are to address the extinction crisis facing our native fauna.

**Appendices**

**Appendix A.** *Restoring the Balance: The Case for a new generation of Australian Environmental Laws*. http://www.birdlife.org.au/documents/OTHPUB-Restoring-the-Balance-Report.pdf

**Appendix B.** *Recovery Planning: Restoring life to our threatened species.* http://www.birdlife.org.au/documents/OTHPUB-Recovery-Planning-Report.pdf

**Appendix C.** *A Wild Success: A Systematic Review of Bird Recovery Under the Endangered Species Act.* https://www.esasuccess.org/pdfs/WildSuccess.pdf