

Chapter 6

Policy and funding arrangements

We do not need more strategies. We need to measure the condition of our environmental assets properly...Then we need to get more funds to...the right place at the right time. We have had 20 or 30 years of strategy-writing and weasel words when in fact the core business...requires resources and a commitment to do it. So biodiversity conservation is not being taken seriously in this country. To have 1,790 listed species in Australia in 2013, which is about the same number as we had 20 years ago, suggests it has been a complete failure.¹

6.1 As outlined in the first chapter, key national policy documents and funding arrangements relating to the protection of threatened species and ecological communities include:

- *Australia's Biodiversity Conservation Strategy 2010-2030*;
- the Caring for our Country program;
- the Clean Energy Future's Biodiversity Fund; and
- *One Land - Many Stories: Prospectus of Investment*.

6.2 These policies and programs are discussed further below.

Biodiversity Strategy

6.3 As outlined in Chapter 1, one of the primary Commonwealth policy documents relating to threatened species and ecological communities is *Australia's Biodiversity Conservation Strategy 2010-2030* (the Biodiversity Strategy), which SEWPAC describes as 'a guiding framework for conserving our nation's biodiversity', stating that:

The strategy outlines national priorities for action to help stop the decline in Australia's biodiversity and outlines ten national targets, including increasing native habitat for biodiversity conservation.²

6.4 The committee notes that the strategy describes these ten targets as 'interim national targets for the first five years'.³ As outlined in Chapter 1, they include to:

- achieve a national increase of 600 000km² of native habitat managed primarily for biodiversity conservation across terrestrial, aquatic and marine environments;

1 Mr Peter Cosier, Wentworth Group of Concerned Scientists, *Committee Hansard*, 15 February 2013, p. 32.

2 SEWPAC, *Submission 143*, p. 8.

3 Biodiversity Strategy, p. 13.

- reduce by at least 10% the impacts of invasive species on threatened species and ecological communities in terrestrial, aquatic and marine environments;
- all jurisdictions will review relevant legislation, policies and programs to maximise alignment with Australia's Biodiversity Conservation Strategy; and
- establish a national long-term biodiversity monitoring and reporting system.⁴

6.5 In 2011, the Australian Government also released a consultation draft of the *Australian Government Biodiversity Policy*, which 'complements' the Biodiversity Strategy.⁵ ACF expressed support for the 'foundation principles' articulated in this policy, which it felt supports the notion that 'it is better to prevent biodiversity decline before it happens'. It also supported the policy's 'focus on causes that reduce the health of biodiversity on a landscape scale'.⁶ The landscape approach is discussed later in this chapter.

6.6 However, some other submissions were highly critical of the Biodiversity Strategy. For example, WWF-Australia expressed incredulity that the strategy does not articulate a single target directly aimed at recovering threatened species or ecosystems.⁷ WWF-Australia compared this to targets agreed to by Australia under the *Convention on Biological Diversity* in 2010 (often referred to as 'Aichi targets'), and particularly:

Target 12: 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.⁸

6.7 Professor John Woinarski similarly observed that none of the 10 targets in Australia's Biodiversity Strategy relate directly to the retention of native plant and animal species. He suggested that:

The foreshadowed 2015 review of Australia's Biodiversity Conservation Strategy 2010-2030 should be used to remedy its current deficiency of lacking a fundamental commitment to the prevention of extinction, with such change making Australia's strategy more in harmony with that of the Convention on Biodiversity's Strategic Plan for Biodiversity 2011-2020 and the Aichi Targets.⁹

4 Natural Resource Management Ministerial Council 2010, *Australia's Biodiversity Conservation Strategy 2010-2030*, Australian Government, 2010, p. 14.

5 See further SEWPAC, *Australian Government Biodiversity Policy – Consultation draft*, at: <http://www.environment.gov.au/epbc/publications/consultation-draft-biodiversity-policy.html>, (accessed 18 April 2013).

6 ACF, *Submission 147*, p. 2.

7 WWF-Australia, *Submission 81*, p. 6.

8 WWF-Australia, *Submission 81*, p. 6; see also Convention on Biological Diversity, COP 10 Decision X/2 *Strategic Plan for Biodiversity 2011-2020* at <http://www.cbd.int/decision/cop/default.shtml?id=12268> (accessed 5 April 2013). See also 'Aichi' targets at: <http://www.cbd.int/sp/targets> (accessed 5 April 2013).

9 Professor John Woinarski, *Submission 48*, p. 11.

6.8 The only target in the Biodiversity Strategy which mentions threatened species and ecological communities is Target 7, which is 'to reduce the impacts of invasive species on threatened species and ecological communities by at least 10%'. However, the Invasive Species Council was highly critical of the Biodiversity Strategy, and particularly Target 7. The Council was concerned that:

It is not clear what the strategy target implies as there is no quantitative information about invasive species impacts on threatened biodiversity. Very little monitoring of threatened species and ecological communities is conducted...The only baseline information available is the number of threatened species and ecological communities threatened by invasive species...Halfway to the target deadline, there is no implementation plan and no identification of costs.¹⁰

6.9 In fact, the Invasive Species Council reported that it had been told by Commonwealth environment officers to regard the target as 'aspirational'.¹¹ The Invasive Species Council remarked that 'there has been no feasibility assessment and no costed plan, rendering it an aspiration destined to fail'.¹²

6.10 Mr Peter Cosier from the Wentworth Group of Concerned Scientists seemed exasperated with the current approach:

...we are spending billions of dollars a year in this country and there is no plan...to conserve Australia's biodiversity or to restore the health of landscapes...We have a [biodiversity] strategy, but if you read it you will weep...We have plans and strategies, but we have no spatial plans. We do not know where critical habitat for endangered species is. We do not know the best place to invest money in restoring and repairing vegetation along our rivers.¹³

6.11 Mr Atticus Fleming from AWC emphasised the need for 'practical on-ground work', arguing that 'what really works for threatened species is getting out and doing things on the ground'.¹⁴ He expressed the view that:

There is sometimes too much of a focus on process rather than on the outcome. And the focus really needs to be on the outcome. In other words, do not be too prescriptive about how you do it; be focused on the outcome which is: we want more Gouldian finches. Often whoever is on the ground is going to be in a better position to judge what the specific on-ground activities need to be and when they need to be taken in order to deliver that outcome.¹⁵

10 Invasive Species Council, *Submission 140*, p. 7.

11 Invasive Species Council, *Submission 140*, p. 7.

12 Invasive Species Council, *Submission 140*, p. 17.

13 Mr Peter Cosier, Wentworth Group of Concerned Scientists, *Committee Hansard*, 15 February 2013, p. 33.

14 Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 19.

15 Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, pp 21–22.

6.12 SEWPAC submitted that the Biodiversity Strategy, endorsed by all states and territories, is a 'guiding framework for conserving our nation's biodiversity' and:

...functions as a policy umbrella over other more specific national frameworks including Australia's Native Vegetation Framework (soon to be released), the Australian Weeds Strategy (Natural Resource Management Ministerial Council 2007) and the Australian Pest Animal Strategy (Natural Resource Management Ministerial Council 2007).¹⁶

Funding programs

6.13 The committee received a great deal of evidence relating to funding for threatened species and communities. In particular, current Commonwealth programs, such as the Caring for Our Country and Biodiversity Fund, were criticised for a number of reasons, including their short term-focus; lack of specific targets; and lack of focus on threatened species and ecological communities.¹⁷

6.14 Key issues raised were:

- the quantity of funding needed to protect threatened species and communities;
- whether it is better to focus on landscapes or species;
- the need for dedicated funding for threatened species and communities, and particularly for recovery and threat abatement activities;
- the need for longer term funding;
- the need for funding for surveys, data and monitoring in relation to threatened species and communities; and
- the need for accountability, including effective and efficient spending (including prioritisation of spending).

6.15 These issues are discussed in turn below.

Quantum of funding needed

6.16 Submissions were highly critical of funding arrangements in relation to threatened species and communities with many describing it as 'grossly inadequate'.¹⁸

16 SEWPAC, *Submission 143*, p. 8.

17 For example Professor John Woinarski, *Submission 48*, p. 10; WWF-Australia, *Submission 81*, pp 2, 6–7; Save the Bilby Fund, *Submission 16*, p. 3; Zoos Victoria, *Submission 41*, p. 4; Professor David Lindenmeyer, *Submission 15*, p. 3; BirdLife Australia, *Submission 82*, p. 12; AWC, *Submission 162*, p. 4.

18 See, for example, BirdLife Australia, *Submission 82*, p. 1; WWF-Australia, *Submission 81*, p. 2 and see also p. 6.

It was suggested that the amount of funding for threatened species management and monitoring is insufficient and needs to be increased.¹⁹

6.17 WWF-Australia submitted the that 'overall funding via Caring for Our Country and Biodiversity Funds is grossly inadequate to the task of recovering protected matters to the point they can be de-listed. The quantum needs to be increased significantly to meet the need'.²⁰

6.18 HSI similarly felt that there is a 'need for substantially more resources to be dedicated to the conservation of threatened species and ecological communities':

Greater funds at all levels of government are required so that threatened species laws in all jurisdictions can be reviewed, strengthened and fully resourced as well as implemented. Even for those species or communities that do succeed in getting listed under the act, there are no further resources currently available to implement vital recovery plans. Without the injection of funds this will result in increasing numbers of species competing for ever-limited resources...²¹

6.19 Opinions varied on how much more might need to be spent overall.²² ACF, for example, suggested that we need to spend \$2 million per year per listed threatened species 'as a baseline capability for recovery planning and management'.²³ With approximately 1800 listed species at the federal level, the committee notes that this works out to \$3.6 billion per year. This compares, for example, to the \$2 billion committed by the Commonwealth Government under the Caring for our Country program from 2013–14 to 2017–18.²⁴

6.20 Others argued that 'we can do more with existing funds'. For example, Mr Fleming from the AWC argued that:

...we can do a lot for a relatively modest amount of money, provided we get the framework set up correctly. In other words, provided that there is a high level of accountability in terms of how those funds are sent out and

19 See for example, Professor David Lindenmayer, *Submission 15*, p. 1; Save the Bilby Fund, *Submission 16*, p. 3; ANEDO, *Submission 137*, p. 4; BirdLife Australia, *Submission 82*, p. 7; Clarence Valley Conservation Coalition, *Submission 38*, p. 4; Dr Andrew Burbidge, *Submission 46*, p. 2; Yarra Ranges Council, *Submission 69*, p. 2; Blue Mountains Conservation Society, *Submission 75*, pp 1–2; HSI, *Submission 88*, p. 6; Urban Bushland Council WA, *Submission 114*, p. 4; Australasian Bat Society, *Submission 110*, p. 13; Invasive Species Council, *Submission 140*, p. 11.

20 WWF-Australia, *Submission 81*, p. 2; see also BirdLife Australia, *Submission 82*, p. 1.

21 Ms Alexia Wellbelove, HSI, *Committee Hansard*, 15 February 2013, p. 20.

22 For example Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 2; cf ACF, *Submission 147*, p. 6.

23 ACF, *Submission 147*, p. 6.

24 See further: *Caring for our Country 2013–2018*, <http://www.nrm.gov.au/about/caring/overview.html> (accessed 22 April 2013).

how they are used, and that accountability is tied to these on-ground results, we will be able to do a lot with a relatively modest amount of money.²⁵

6.21 Professor Hugh Possingham and Associate Professor Michael McCarthy argued that 'if conservation spending is invested wisely, a relatively modest increase in spending can make a real difference':

For example, approximately \$3 million is spent annually on conserving threatened Australian birds...tripling the resources allocated to Australia's threatened bird species to \$10 million per year could reduce the number of extinctions over the next 80 years to almost zero, and reduce the number of threatened species by 15%.²⁶

6.22 Some were grateful for funding received from programs such as Caring for Our Country and the Biodiversity Fund. The NT government submitted that Commonwealth government funding programs, including Caring for Our Country and the Biodiversity Fund, are a 'significant contributor' to the management of key threats to threatened species and communities.²⁷

6.23 Similarly, the Regent Honeyeater Project felt that it is 'extremely important that government be congratulated' for supporting its work 'so solidly and for so long'. The project submitted details of its success in securing 'a future for several plant and animal species that were about to drop out of the region'—thanks to the support of government and thousands of volunteers.²⁸

6.24 SEWPAC explained that the Caring for our Country program has provided funding since 2008 for activities across all land tenures, including through regional natural resource management organisations:

There have been many landscape-scale projects to abate key threats to biodiversity and protect various habitat types as well as various projects aimed specifically at particular threatened species. Examples of the latter include the \$10 million that was committed to work with the Tasmanian government and others to combat the sudden large decline in Tasmanian devils caused by the devastating devil facial tumour disease.²⁹

6.25 SEWPAC submitted that the Australian government has committed more than \$2 billion to continue Caring for our Country from 2013–14 to 2017–18, and that

25 Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 21.

26 For example Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 2, citing McCarthy, M. A., Thompson, C. J. & Garnett, S. T. "Optimal investment in conservation of species" *J. Appl. Ecol.* 45, 1428–1435, (2008) and Carwardine, J. et al. Prioritizing threat management for biodiversity conservation. *Conservation Letters* 5, pp 196–204, (2012). And see also the discussion on prioritisation approaches later in this chapter.

27 SEWPAC, *Submission 159*, p. 2.

28 Regent Honeyeater Project, *Submission 12*, p. 1.

29 SEWPAC, *Submission 143*, p. 9.

The program will continue to address the protection and conservation of threatened species, ecological communities and other ecosystems of national importance, for example those that support migratory species. To improve integration of its regulatory and non-regulatory functions, the design of the next phase of the program includes an increased emphasis on using formal strategic documents, such as recovery plans, to inform investment decisions.³⁰

6.26 SEWPAC also discussed the 'more recent initiative' of the Clean Energy Future's Biodiversity Fund. SEWPAC submitted that this program will provide \$946.2 million over its first six years 'to encourage individuals, organisations and communities to work in partnership to achieve positive landscape-scale biodiversity and carbon outcomes'. SEWPAC told the committee that 313 projects valued at \$270 million over six years are underway under round one of the Biodiversity Fund. SEWPAC explained that many threatened species and ecological communities will benefit from these projects—for example, approximately \$10 million will go to help restore koala habitat.³¹ Another example given by SEWPAC was the \$50 million that will be provided over for four years for on-ground conservation work in Northern Australia, particularly to help address the threats of invasive species, changes to land uses and fire management.³²

6.27 However, the committee notes that in the 2013 Federal Budget, the government redirected \$32.3 million over four years from the Biodiversity Fund to other government priorities, including the Tasmanian Forests Agreement. Further, the government announced that it would 'rephase' funding of around \$225.4 million from the Biodiversity Fund over four years.³³ The committee also notes the more recent further reduction in funding for the Biodiversity Fund of \$213 million over the forward estimates announced on 16 July 2013.³⁴

What to focus on? Species or landscapes?

6.28 There was debate during the committee's inquiry as to whether it is better to focus on single species or to take a 'landscape' approach.

30 SEWPAC, *Submission 143*, p. 9.

31 SEWPAC, *Submission 143*, p. 9.

32 SEWPAC, *Submission 143*, p. 9.

33 Australian government, *Budget 2013-14, Budget Paper No. 2, Part 2: Expense Measures, Sustainability, Environment, Water Population and Communities*, at: http://www.budget.gov.au/2013-14/content/bp2/html/bp2_expense-22.htm (accessed 30 July 2013).

34 The Hon Mark Butler MP, Minister for the Environment, Heritage and Water, "Australia to move to a floating price on carbon pollution in 2014", *Joint media release with the Prime Minister, the Hon Kevin Rudd MP, and the Treasurer, the Hon Chris Bowen MP*, 16 July 2013, at: <http://minister.innovation.gov.au/markbutler/mediareleases/pages/australiatomovetoafloatingpriceoncarbonpollutionin2014.aspx> (accessed 2 August 2013).

6.29 ACF expressed support for 'solutions at a landscape scale'. They suggested that focussing on species and ecosystems that are at risk treats only the 'symptom' rather than the causes that reduce the health of biodiversity at a landscape scale.³⁵

6.30 SEWPAC stated that the focus on landscapes was a 'prominent theme' of the Hawke review and the Commonwealth government's response to the Hawke review:

...biodiversity conservation requires a strategic approach that focuses on conserving ecosystem function and important areas of habitat at a landscape scale.³⁶

6.31 The Director of National Parks explained why they take a landscape approach:

...when you are a management agency considering actions to take, and investments to make, we need to be very sure that our resources are well targeted and achieve the multiple objectives that we are responsible for to the greatest extent possible. This generally means that we take a landscape approach to protecting habitats rather than individual species, as many of the known and hypothesised threats and causes of decline operate at landscape scales.³⁷

6.32 Other submissions concluded that a mixture of both approaches is needed: there were suggestions that the Commonwealth government (and some states) have focussed too much on ecosystems alone in recent years.³⁸ For example, Dr Andrew Burbidge commented that in recent times, at the Commonwealth level there has been an emphasis on 'landscape scale conservation rather than species conservation':

Landscape conservation has become a buzz word and a lot of money has been put into the idea of conserving things at the landscape level.³⁹

6.33 Dr Burbidge argued that the landscape approach 'simply does not work for threatened species. For threatened species you need to address the threats and you need to understand the biology of the species concerned so that you can manage them'.⁴⁰ He acknowledged that:

While broadscale conservation is needed, the pendulum swung too far away from species work – both are needed and to some extent complement each

35 ACF, *Submission 147*, p. 2.

36 SEWPAC, *Submission 143*, p. 1.

37 SEWPAC, *Committee Hansard*, 15 February 2013, p. 62.

38 See, for example, Associate Professor Mark Lintermans, *Submission 60*, pp 2–3; cf Mr Graham Tupper, ACF, *Committee Hansard*, 15 February 2013, p. 22; AWC, *Submission 162*, p. 4; Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 21; Arid Lands Environment Centre, *Submission 151*, p. 1; Dr Rupert Baker, *Submission 141*, p. 2; Australasian Bat Society, *Submission 110*, p. 12.

39 Dr Andrew Burbidge, *Committee Hansard*, 7 March 2013, p. 2 and also *Submission 46*, p. 2.

40 Dr Andrew Burbidge, *Committee Hansard*, 7 March 2013, p. 2.

other, so long as the broad-scale work is targeted towards the major threats to species.⁴¹

6.34 Professor Stephen Garnett from BirdLife Australia agreed: 'we believe that there needs to be dedicated funding. There has been a shift in the balance towards landscapes in recent years. You can have a very good-looking landscape and still lose the threatened species within it'.⁴²

6.35 The NT government also noted that, in the NT, on-ground management of threatened species has 'relied heavily on funding support through Australian Government grant programs' and that, in the past 5-6 years, there has been a 'substantial shift' in the focus of such programs away from threatened species:

Previously, funding programs such as Natural Heritage Trust had specific provisions for projects targeting threatened species; the Australian Government supported the Threatened Species Network (TSN), which funded smaller-scale, community-based action on threatened species; there was support and participation in national recovery teams; and there was some funding available for basic research on threatened species. Priorities and targets under the current suite of programs (including Caring for our Country and the Land Sector Package) focus on building landscape resilience and, while this may include addressing threatening processes and include benefit to threatened species as an assessment criteria, a specific focus on threatened species has been lost.⁴³

6.36 The same problem was articulated by the AWC, which felt that 'the pendulum has swung a little too far' towards landscape scale projects:

Available Commonwealth funding is currently directed primarily towards landscape-scale or regional programs...While these programs are intended to deliver important conservation benefits, they are not delivering the targeted support that is required for threatened species conservation.⁴⁴

6.37 Zoos Victoria was also concerned with the shift of focus in recent years to landscape-scale approaches, arguing that it 'is leaving many species dangerously vulnerable'.⁴⁵ Ms Rachel Lowry from Zoos Victoria explained:

...even if you just protect a landscape rather than managing the landscape within it, there is no assurance that the species within the landscape will thrive as a consequence of you doing that. The data suggest quite clearly that the species do need to be our primary focus and that we have not really gained any traction in the last 20 years by making that shift.⁴⁶

41 Dr Andrew Burbidge, *Submission 46*, p. 2.

42 Professor Stephen Garnett, BirdLife Australia, *Committee Hansard*, 20 February 2013, p. 7.

43 Department of Land Resource Management, NT Government, *Submission 159*, p. 4.

44 AWC, *Submission 162*, p. 4; see also Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 21.

45 Zoos Victoria, *Submission 42*, p. 3.

46 Ms Rachel Lowry, Zoos Victoria, *Committee Hansard*, 20 February 2013, pp 3-4.

6.38 Zoos Victoria did acknowledge that the landscape versus species approach is somewhat of a false dichotomy:

When it comes to on-ground action...single-species and landscape-scale approaches both essentially employ the same site-based methodologies (i.e. both involve management targeting a collection of discrete sites).⁴⁷

6.39 Zoos Victoria suggested that the use of iconic threatened species 'can be an extremely powerful tool to generate community support and involvement'.⁴⁸ They felt that it is easy to connect to a species, but 'much harder to connect to a landscape'.⁴⁹ Zoos Victoria cited the Red-tailed Black-Cockatoo recovery program as 'a great illustration of the role an iconic threatened species can play in promoting habitat conservation at a landscape scale'.⁵⁰

6.40 However, SEWPAC explained that the landscape approach was as a result of the fact that:

The most significant threats to Australia's biodiversity—such as harvesting, land clearing and fragmentation of habitat, invasive species, inappropriate fire regimes, grazing, changes in hydrology and climate change—operate at a landscape scale.⁵¹

Dedicated funding for species recovery

6.41 Several submissions called for funding to be more dedicated towards threatened species. For example, WWF-Australia was concerned that:

At present the contribution of the \$2.2 billion Caring for Our Country program toward threatened species and community recovery is unknown. We have no idea of what Caring for Our Country (or Natural Heritage Trust before it) has or is likely to have achieved in terms of halting or reversing declines of listed species and communities.⁵²

6.42 BirdLife Australia similarly observed that accountability for threatened species funding has been 'poor – either non-existent or poorly thought out so that the wrong things are reported...A failure to monitor is at best a cavalier use of public funds'.⁵³

47 Zoos Victoria, *Submission 42*, p. 3; Ms Rachel Lowry, Zoos Victoria, *Committee Hansard*, 20 February 2013, pp 3–4.

48 *Submission 42*, p. 2.

49 Ms Rachel Lowry, Zoos Victoria, *Committee Hansard*, 20 February 2013, p. 3.

50 Zoos Victoria, *Submission 42*, p. 2.

51 SEWPAC, *Submission 143*, Attachment A, p. 1.

52 WWF-Australia, *Submission 81*, p. 6.

53 BirdLife Australia, *Submission 82*, p. 12.

6.43 WWF-Australia suggested that 'possibly the only action under Caring for Our Country likely to have resulted in genuine and lasting threatened species recovery was the expansion of strictly protected areas in the national reserve system'.⁵⁴

6.44 AWC proposed the establishment of a separate, dedicated 'Threatened Species Fund' or at least a dedicated Commonwealth funding program to support, on a competitive basis, projects which have as their primary objective the survival/recovery of threatened species.⁵⁵ The AWC stressed that the Fund should be tied to the delivery of measurable improvements in populations and reflect the emerging role of non-government organisations, indigenous rangers and other landholders. The AWC further submitted that the proposed Fund must have a 'high degree of accountability'—that is, provision of funding must be conditional on proponents reporting on the achievement (or otherwise) of their population targets.⁵⁶

6.45 Similarly WWF-Australia submitted that one of the main conditions of Commonwealth conservation funding should be 'demonstrable recovery of threatened matters as the major outcome of all investment'.⁵⁷

6.46 Batwatch Australia also called for more strategic funding approaches:

...there is a need for a publicly available overarching strategy for the allocation of funding for threat abatement and management which demonstrates government commitment to the process of species recovery and can articulate where and why compromises are being made with the intent of maximising the use of limited funds.⁵⁸

6.47 Batwatch Australia continued:

No such plan appears to currently exist and this makes it impossible to gauge the effectiveness, or lack thereof, of funding disbursements and/or threat abatement activities. For example, whilst substantial funding has been allocated to flying-fox related issues it has not been allocated to the highest priority conservation issues and not for the purposes of conservation.⁵⁹

6.48 Some submissions criticised the fact that, until recently, recovery plans have not been given priority for funding under Caring for our Country.⁶⁰ For example, Dr Martin Taylor from WWF-Australia declared:

54 WWF-Australia, *Submission 81*, p. 7.

55 AWC, *Submission 162*, p. 4; see also p. 1; and Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 21.

56 AWC, *Submission 162*, p. 5.

57 WWF-Australia, *Submission 81*, p. 6.

58 Batwatch Australia, *Submission 139*, p. 2.

59 Batwatch Australia, *Submission 139*, p. 2.

60 See, for example, Dr Tanzi Smith, *Submission 103*, p. 2; Name Withheld, *Submission 120*, p. 2; Mary River Catchment Coordinating Committee, *Submission 115*, p. 2; Save the Bilby Fund, *Submission 16*, p. 4.

There is no spending on recovery planning; we just heard about recovery plans. Why isn't Caring for our Country funding recovery plans for the species? It is baffling why that money is spent the way it is...⁶¹

6.49 Zoos Victoria similarly noted that:

Threatened species recovery programs in regional areas greatly expanded with increased Federal funding that became available under the Natural Heritage Trust. This funding source has subsequently declined under Caring for Our Country (i.e. in terms of the funding allocation specific to threatened species). Zoos Victoria believes that this has reduced the effectiveness of recovery programs in delivering on-ground actions and it would be timely for a review of federal funding mechanisms.⁶²

6.50 Similarly, the Mary River Catchment Coordinating Committee suggested that there needs to be a 'clear path for funding implementation of recovery plans, including for example, a specific category within the Caring for Our Country process'.⁶³ The Save the Bilby Fund similarly felt that we need to ensure that grants and funding are aligned with recovery planning processes for threatened species.⁶⁴ Along the same lines, the Invasive Species Council recommended that 'criteria for funding priorities under Caring for Our Country include implementing Threat Abatement Plans'.⁶⁵

6.51 SEWPAC advised:

While no specific Australian Government funding program exists for the sole purpose of implementing recovery and threat abatement plans, the funding of on-ground conservation measures consistent with identified recovery and threat abatement plan actions comes from a range of Australian Government programs including Caring for our Country and the Biodiversity Fund. These programs are further complemented by state and territory government funding programs which contribute to the conservation of threatened species and ecological communities by supporting actions identified in national recovery plans. Therefore, the investment of funding in recovery and threat abatement plans varies from year to year against a range of other competing conservation priorities, the activities of other relevant organisations and the status of the plan (i.e. development, implementation, review).⁶⁶

6.52 In response to questions on this issue, SEWPAC told the committee that:

The assessment of grant applications under the Biodiversity Fund and Caring for Our Country, take into account their consistency with any plans related to the environmental assets they address. The extent to which Threat

61 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 23.

62 Zoos Victoria, *Submission 42*, p. 4.

63 Mary River Catchment Coordinating Committee, *Submission 115*, p. 2.

64 Save the Bilby Fund, *Submission 16*, p. 4.

65 Invasive Species Council, *Submission 140*, p. 10.

66 SEWPAC, *Submission 143*, p. 6.

Abatement Plans, Recovery Plans, conservation advices or other strategic frameworks have been considered in applicants' proposals is a key consideration in the assessment of those projects. It is a requirement that all projects with a focus on species recovery be consistent or link with, these plans where they are in place.⁶⁷

Need for long term funding programs

6.53 Many submissions suggested that funding arrangements in relation to threatened species and ecological communities need to have a longer term focus.⁶⁸ For example, WWF-Australia submitted that:

Caring for Our Country and Biodiversity Fund are largely devoted to short term approaches spread over the landscape, without much regard for matters listed under the EPBC Act.⁶⁹

6.54 Indeed, Dr Taylor expressed his frustration that:

Currently the conservation spend of this government—and this is an enduring problem—is all on short-term fixes. There is almost no spending to secure an enduring conservation management arrangement in the landscape.⁷⁰

6.55 Similarly, the Wildlife Disease Association Australasia was concerned that the 'short funding cycles and rapidly changing priorities' appear to 'reflect election cycles and make little concession to the need for long term, stable commitment and funding to obtain best outcomes from threatened species management'.⁷¹ ACF similarly lamented the 'mismatch of the political cycle with the ecological cycle'.⁷²

6.56 Professor Woinarski agreed, warning that:

...if we continue with current policies and resourcing, the number of extinctions of Australian species will magnify greatly. This trend may be concealed but further exacerbated because many Australian species (examples include black cockatoos, western swamp tortoise, platypus) are long-lived, have low reproductive output and work to a 'slow' life history,

67 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 18 [Q.17].

68 See for example Professor David Lindenmayer, *Submission 15*, p. 3; Dr Greg Clancy, *Submission 52*, p. 1; Zoos Victoria, *Submission 42*, p. 4; see also Zoo and Aquarium Association, *Submission 27*, p. 1; Dr Adrian Manning, *Submission 30*, p. 1; Dr Peter Kyne, *Submission 51*, p. 1; Dr Andrew Burbidge, *Submission 46*, p. 3; WWF, *Submission 81*, p. 6; BirdLife Australia, *Submission 82*, p. 7; Arid Lands Environment Centre, *Submission 151*, p. 2; Mr David Hudson, *Submission 99*, p. 1; Yarra Ranges Council, *Submission 69*, p. 2; Dr Andrew Burbidge, *Submission 46*, p. 3.

69 WWF-Australia, *Submission 81*, p. 6.

70 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 23.

71 Wildlife Disease Association Australasia, *Submission 117*, p. 2.

72 Mr Graham Tupper, ACF, *Committee Hansard*, 15 February 2013, p. 23.

such that the consequences of failed policies and threats operating now may be evident only, but unresolvable, in decades to come.⁷³

6.57 BirdLife Australia agreed with the need for longer-term funding:

...almost all threatened species projects have had to persist from grant to grant, few having commitments lasting for more than three years and most having to make annual bids for funding renewal, a frustrating and inefficient process. However, almost all conservation success stories have achieved results only after decades of research, adaptive management and monitoring... For most species it is entirely predictable that recovery will take decades but it has not been possible to negotiate long-term funding from government.⁷⁴

6.58 Professor Garnett from BirdLife Australia elaborated on this during the committee's hearing:

The declines in species can take a long time—can take decades. To reverse a process like that takes at least as long as that. So if you are looking at recovering vegetation before you can let the species recover you are looking at many decades. Short-term funding can have short-term goals but unless there is some guarantee of long-term funding you can lose your gains very quickly. I would like to see a process where you are not having funding going from one three-year cycle to another and people deciding, 'Well, that species has had three years of funding; it does not deserve it this time. We need to go on to other species.'⁷⁵

6.59 BirdLife Australia recommended that threatened species investment 'be guaranteed over sufficiently long periods to allow recovery'.⁷⁶ They suggested funding be provided 'for up to eight years at a time with independent review and potential extension after four years'.⁷⁷

Need for threatened species surveys, mapping, monitoring and research

6.60 The committee received a great deal of evidence to suggest that there is insufficient funding for surveys, mapping and monitoring of the status of threatened species and communities—as well as research relating to the effectiveness of

73 Professor John Woinarski, *Submission 48*, p. 2.

74 BirdLife Australia, *Submission 82*, p. 11; see also Professor Stephen Garnett, BirdLife Australia, *Committee Hansard*, 20 February 2013, p. 8.

75 Professor Stephen Garnett, BirdLife Australia, *Committee Hansard*, 8 February 2013, p. 8.

76 BirdLife Australia, *Submission 82*, p. 7.

77 BirdLife Australia, *Submission 82*, p. 12; see also Professor Stephen Garnett, BirdLife Australia, *Committee Hansard*, 20 February 2013, p. 8.

management interventions.⁷⁸ This issue was also apparent in the evidence relating to 'data deficient' species, as discussed in Chapter 2 of this report.

6.61 Dr Taylor from WWF-Australia told that the committee that 'what we need is actual on-ground surveys':

...there is a crying need for comprehensive faunal and plant surveys in Australia, because we just have no idea in many cases what has happened to the threatened species. Are they going up? Are they going down? We actually have no idea in most cases. The US has a better system because it is mandatory. Congress actually requires the agencies....to report to congress every two years on the status of every single threatened species. We have no equivalent here. We do have the periodic biodiversity assessments, but very little of that involves going out. It is just expert opinion. So there will be some guy sitting in an office in Cairns saying, 'What's happened to the lemuroid ringtail possum,' and they will say, 'Oh, I think it's okay'.⁷⁹

6.62 Professor David Lindemayer believed that 'there is a massive under-investment in biodiversity monitoring in Australia. This means that it is not possible to determine when management interventions have been effective and when they have not'.⁸⁰ Dr Burbidge agreed, arguing that: 'Australia is not monitoring the changes in species abundance in the wild to any significant degree'.⁸¹

6.63 Professor Woinarski was similarly critical that:

...for many threatened species (and ecological communities), monitoring programs, if present at all, may be ad hoc, lack statistical power (and hence cannot reliably detect trends), have no integration across the range of the species, are not linked iteratively with varying experimental management options, focus on activities (e.g. extent of predator baiting or fire management) rather than outcomes (such as population size), occur infrequently and haphazardly, and their results are not reported or interpreted regularly and publicly. Consequently, it is very difficult to assess whether the status of species is improving or deteriorating, and

78 Save the Bilby Fund, *Submission 16*, pp 3–4; Professor John Woinarski, *Submission 48*, pp 8–9; Ms Petrina Maizey, Gold Coast and Hinterland Environment Council and Save Bahrs Scrub Alliance, *Committee Hansard*, 22 February 2013, p. 13; Mr Philip Collier, *Submission 32*, p. 4; Dr Peter Kyne, *Submission 51*, p. 1; Associate Professor Mark Lintermans, *Submission 60*, p. 4; NPA NSW, *Submission 145*, p. 3; Yarra Ranges Council, *Submission 69*, p. 3; BirdLife Australia, *Submission 82*, p. 12; ANEDO, *Submission 137*, p. 4; see also Mr Andrew Heaver, *Submission 119*, pp 2–3; Ms Rachel Lowry, Zoos Victoria, *Committee Hansard*, 15 February 2013, p. 2.

79 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, pp 25–26; see also Mr Graham Tupper, ACF, *Committee Hansard*, 15 February 2013, p. 25.

80 Professor David Lindenmayer, *Submission 15*, p. 1.

81 Dr Andrew Burbidge, *Committee Hansard*, 7 March 2013, p. 2.

almost impossible to measure the cost-effectiveness of management interventions.⁸²

6.64 Some submissions were concerned that funding programs do not have sufficient focus on research and monitoring activities. For example, the NT government expressed concern that 'national funding programs now have no provisions to support basic research and monitoring activities that are still needed to underpin threatened species management and recovery'.⁸³

6.65 Mr Atticus Fleming from the AWC agreed that 'science does not play as critical a role in the overall framework for a number of our funding programs, as it should'. He explained that:

The science comes, not just into identifying what needs to happen, but into the estimates of populations and distributions of these species. If the government is funding a feral animal control program there is some basic science that needs to happen. You need an estimate of the numbers of feral animals before you start and at the end so that you know whether the money that has gone in has delivered the result that was intended.⁸⁴

6.66 In same vein, Arid Lands Environment Centre suggested that changes to the Caring for our Country program and Biodiversity Fund are needed to include more research into 'determining effective management approaches on country rather than simply restoring habitat'.⁸⁵

6.67 Professor Garnett of BirdLife Australia discussed the need for monitoring of spending:

...if funding is provided, it ought to be contingent on proper monitoring. The monitoring of certain species is really pretty woeful. If you look at health and education, they spend something like 10 per cent of their funds on monitoring. Nothing like that percentage is spent on environmental funding. That leads to wastage, we think.⁸⁶

6.68 However, SEWPAC advised that:

As set out in the Monitoring Evaluation Reporting and Improvement (MERI) Strategy, Caring for Our Country funding recipients are able to allocate up to 10 per cent of their project budget to support monitoring, evaluation and reporting activities to help gauge progress and delivery of project and program level objectives. A similar approach has been adopted for Round One Biodiversity Fund projects.⁸⁷

82 Professor John Woinarski, *Submission 48*, p. 9.

83 Department of Land Resource Management, NT Government, *Submission 159*, p. 4.

84 Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 22.

85 Arid Lands Environment Centre, *Submission 151*, p. 1.

86 Professor Stephen Garnett, BirdLife Australia, *Committee Hansard*, 20 February 2013, p. 7.

87 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 20 [Q.18].

6.69 In response to the committee's questions as to what funds are available for surveys and monitoring of threatened species, SEWPAC also outlined a number of other projects being funded under the Caring for our Country initiative and the Biodiversity Fund:

...for example: monitoring of the vulnerable black-footed rock wallaby in South Australia's Anangu Pitjantjatjara Yankuytjatjara (APY) Lands; wildlife surveys and monitoring of the vulnerable greater bilby in the Southern Tanami Indigenous Protected Area in the Northern Territory; and monitoring of the endangered mahogany glider in far-north Queensland following Cyclone Yasi.⁸⁸

6.70 The Director of National Parks also outlined a number of biodiversity monitoring and research programs, 'with a major (but not exclusive) focus on protection of threatened species' in each of the six Commonwealth national parks.⁸⁹

6.71 At the same time, the committee heard that the *2011 Commonwealth State of the Environment report* itself noted that there was inadequate information available on the state of many individual species or groups of species.⁹⁰ Indeed, some submitters were quite critical of State of Environment reporting in Australia: it was described as 'sub-standard' and as not providing 'any substantive information on trend patterns in biodiversity conservation, including the effectiveness (or otherwise) of management interventions'.⁹¹

6.72 Several submissions suggested some form of national monitoring program be established for Australia's threatened species. For example, BirdLife Australia suggested that investment is needed in a national information system, including collection, management and distribution of information about threatened species management at local and regional scales, and includes monitoring and evaluation'.⁹²

6.73 Similarly, Professor Woinarski recommended that a 'nationally integrated monitoring program' be established for Australia's threatened species. He suggested that results from this monitoring could be 'reported regularly through a nationally coordinated scheme, with such reporting constituting an important component of State of the Environment Reports, and with results interpreted at geographical and taxonomic scales as a basis for allocating conservation investment'.⁹³

88 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 20 [Q.18].

89 Director of Commonwealth Parks, *Submission 144*, p. 5.

90 See SEWPAC, *Australian State of the Environment Report 2011*, pp 579–581; and also Mr Graham Tupper, ACF, *Committee Hansard*, 15 February 2013, p. 26; NPA NSW, *Submission 145*, p. 3; Mr Jeremy Tager, *Submission 89*, p. 1.

91 Professor David Lindenmayer, *Submission 15*, p. 1; see also Dr Andrew Burbidge, *Submission 46*, p. 2; see also Mr Jeremy Tager, *Submission 89*, p. 2.

92 BirdLife Australia, *Submission 82*, pp 12–13.

93 Professor John Woinarski, *Submission 48*, p. 9.

6.74 The committee notes that one of the targets of the Biodiversity Strategy is to establish a national long-term biodiversity monitoring and reporting system by 2015.⁹⁴ However, Mr Cosier from the Wentworth Group of Concerned Scientists was sceptical, telling the committee that 'we have been trying for 20 years in this country to get a national environmental monitoring program in place'. He suggested that regional bodies should be resourced to do environmental monitoring.⁹⁵

6.75 The committee also notes that another of the recommendations of the Hawke review was to develop a system of 'national environmental accounts'.⁹⁶ BirdLife Australia and ACF both expressed support for the development of 'national environmental accounts' to monitor the status of matters of national environmental significance, such as threatened species and communities, recognising that 'a very real and sustained commitment to monitoring the status of threatened species and their response to management activities is desperately needed'.⁹⁷

6.76 SEWPAC reported that the Commonwealth government is 'working towards a national long-term biodiversity monitoring and reporting system' through the *National Plan for Environmental Information* and the system of national environmental accounts.⁹⁸

6.77 The committee heard also about a number of other existing programs, partnerships and institutions that are working to improve access to information, research and data about biodiversity. This included, for example:

- The Terrestrial Ecosystem Research Network (TERN): funded by the Australian government.⁹⁹ It was described as a 'whole architecture for coordinating field surveys and for coordinating environmental information'. It was suggested that increased funding could be provided to the TERN to 'supercharge' it with a lot of very well-coordinated field surveys'.¹⁰⁰
- The Atlas of Living Australia—a partnership funded by the Commonwealth government under the National Collaborative Research Infrastructure Strategy. Developed and administered by the CSIRO, the Atlas is intended to

94 Biodiversity Conservation Strategy, p. 14.

95 Mr Peter Cosier, Wentworth Group of Concerned Scientists, *Committee Hansard*, 15 February 2013, p. 33.

96 Hawke review, recommendation 67 and pp 384–392.

97 BirdLife Australia, *Submission 82*, p. 7; see also Professor Stephen Garnett, BirdLife Australia, *Committee Hansard*, 20 February 2013, p. 9.

98 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 24 [Q.21].

99 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 24 [Q.21]; see also TERN at: www.tern.org.au (accessed 23 April 2013).

100 Dr Martin Taylor, WWF-Australia, *Committee Hansard*, 15 February 2013, p. 26.

be national database of all of Australia's flora and fauna that could be accessed through a single, easy to use web site.¹⁰¹

- The National Species Profile and Threat register (SPRAT), administered by SEWPAC. This is a database designed to provide information about species and ecological communities listed under the EPBC Act. Some felt that SPRAT 'plays a critical role in providing guidance as to the key threats facing listed species communities'. However, concerns were expressed that 'there appears to be little emphasis placed on maintaining the currency of the SPRAT profiles and this inevitably compromises the value of the register'.¹⁰²
- The National Environmental Research Program (NERP) through which:

...the Australian Government has dedicated around \$20 million per year over the period 2011-2015 for research into key environmental issues, including research priorities that aim to better inform the protection and management of threatened species and ecological communities. NERP comprises five large research hubs researching priority biodiversity issues in terrestrial and marine ecosystems across Australia, including Northern Australia, the Great Barrier Reef, Torres Strait and tropical rainforests. There is also funding available within the program for addressing emerging priority information needs, such as identifying the quality and extent of koala habitat, identifying priorities for managing invasive plant species in the Lake Eyre Basin and improving the efficiency of environmental flows in the Murray Darling Basin.¹⁰³
- BushBlitz—a partnership of government, non-government organisations and industry, managed by the Australian Biological Resources Study within SEWPAC, which documents plants and animals, including threatened species, in properties across Australia's National Reserve System:

Since the program began in 2010, Bush Blitz has discovered about 600 new and undescribed species and has added thousands of species to what is already known – providing baseline scientific data that will help us protect our biodiversity for generations to come.¹⁰⁴
- The Centre for Australian National Biodiversity Research¹⁰⁵ and the Australian National Botanic Gardens in relation to threatened plant species. It was noted that the Australian National Botanic Gardens:

101 Mr Philip Collier, *Submission 32*, p. 2; NPA NSW, *Submission 145*, p. 4; and see further <http://www.ala.org.au/about-the-atlas/atlas-background/> (accessed 8 April 2013).

102 Batwatch Australia, *Submission 139*, p. 2; see also Ms Lee Curtis, *Submission 48*, p. 2; see further SEWPAC, *Species Profile and Threats Database*, at: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl> (accessed 23 April 2013).

103 SEWPAC, *Submission 143*, p. 12; see also SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 20 [Q.18]; Professor Helene Marsh, TSSC, *Committee Hansard*, 15 February 2013, p. 66; Director of National Parks, *Submission 144*, pp 4 and 7.

104 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 20 [Q.18].

105 Director of Commonwealth Parks, *Submission 144*, p. 3; SEWPAC, *Submission 143*, p. 12.

...has a major role in the conduct of research into threatened plants and ex situ conservation. The Gardens cultivates selected species, maintains seed banks as an insurance against extinction in the wild, and supports species recovery actions such as reintroduction and translocation of threatened species.¹⁰⁶

Effective spending

6.78 The committee heard strong evidence that money 'spent on threatened species could be spent more effectively', with a more strategic, targeted approach being taken to fund threatened species management.¹⁰⁷ For example, BirdLife Australia believed that, in recent years, Commonwealth funding for threatened species has been 'haphazard', with little coordination of funding, and the 'dissipation of much effort into small projects that deliver little benefit'.¹⁰⁸

6.79 A range of approaches were discussed, including 'triage' and 'prioritisation' approaches to conservation. While used in a medical context, triage is the process of determining the priority of patients' treatments based on the severity of their condition.¹⁰⁹ In a conservation context, triage has been described as 'the process of prioritising the allocation of limited resources to maximise conservation returns, relative to the conservation goals, under a constrained budget'.¹¹⁰

6.80 However, some were wary of so-called 'triage' approaches. It was suggested that we should not 'give up' on certain species, but we should treat all threatened species as worth saving.¹¹¹ For example, Dr Burbidge expressed concern that:

If we say we give up on the most threatened and most difficult species now and then we have some slightly less difficult ones, which will get very difficult in the future and we give up on them as well, it is just the thin end of the wedge towards a long, slow disappearing of lots of things. Certainly we need to look at priorities in terms of funding now and where that money might be best spent, but I think triage is a very negative and 'Let's give up' type of idea.¹¹²

6.81 The Australasian Bat Society insisted we should not accept species extinction:

106 Director of Commonwealth Parks, *Submission 144*, p. 5.

107 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 28; see also, for example, Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*; Dr Greg Clancy, *Submission 52*, p. 3; BirdLife Australia, *Submission 82*, p. 12; The Wilderness Society, *Submission 129*, p. 4; Ms Claire Parkes, Wentworth Group of Concerned Scientists, 15 February 2013, p. 36.

108 BirdLife Australia, *Submission 82*, p. 15.

109 See further: <http://en.wikipedia.org/wiki/Triage> (accessed 6 March 2013).

110 Bottrill et. Al., "Is conservation triage just smart decision making?", p. 1 at: http://www.uq.edu.au/spatialecology/docs/Publications/2008_Bottrill_et_al_IsConservationTriage.pdf (accessed 23 April 2013).

111 Professor John Woinarski, *Committee Hansard*, 7 March 2013, p. 5.

112 Professor John Woinarski, *Committee Hansard*, 7 March 2013, p. 5.

Debates about species triage is an indication that Governments are not committing enough resources to the protection and management of Australia's threatened species and communities...We should not have to choose whether to save a species or not, and advancing a concept based on the reality of triage means accepting that we should be comfortable with current levels of funding and inefficient processes.¹¹³

6.82 Mr Fleming from the AWC expressed the view that:

We can do a lot with the existing funding if it is allocated the right way...As long as we are investing the funds that we have correctly, we should be able to save everything.¹¹⁴

6.83 However, Mr Fleming emphasised the need for clear objectives and accountability for funding projects:

Any project that seeks funding should have a clear objective...in terms of species. A, B, C, D will have their populations increased by a certain amount. Then you need to demonstrate that what you are going to do on the ground will deliver that increase, and you need to report on that increase. These are all fairly simple principles, I think, but they have not found their way into a lot of the government programs.¹¹⁵

6.84 Most submitters seemed to agree that funds relating to threatened species and ecological communities could be spent more efficiently and more effectively.¹¹⁶ For this reason, many submissions expressed support for some form of a 'prioritisation approach' to allocating funding in relation to threatened species.¹¹⁷ They recommended that governments allocate limited funding to prevent large numbers of species from becoming at risk rather than large sums of funds on single species.¹¹⁸ For example, Wildlife Queensland expressed the view that:

...with the limited funds available it is necessary to determine where those funds are best focussed to achieve the best outcome. While the loss of one species is one too many, is it better to stop a number of species from becoming endangered or at risk than spend large sums of money on recovery plans that have limited chance of success.¹¹⁹

6.85 Professor Hugh Possingham and Associate Professor Michael McCarthy put forward their 'rational prioritisation approach', arguing that 'given a limited budget for

113 Australasian Bat Society, *Submission 110*, p. 13.

114 Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 22.

115 Mr Atticus Fleming, AWC, *Committee Hansard*, 22 February 2013, p. 20.

116 See, for example, Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 2; CSIRO, *Submission 77*, p. 5.

117 See, for example, CSIRO, *Submission 77*, p. 5; BirdLife Australia, *Submission 82*, p. 10; The Wilderness Society, *Submission 129*, p. 4.

118 Wildlife Queensland, *Submission 76*, p. 4.

119 Wildlife Queensland, *Submission 76*, p. 3.

threatened species management, we must prioritise which species to protect and which actions to undertake'. They explained:

Our research shows that rational use of cost and success information in prioritisation substantially increases the number of species managed. The use of a rational prioritisation approach, inclusive of conservation costs and likelihood of success, will deliver the greatest outcomes for threatened species. This approach, developed by our researchers over the past few years, has been successfully used to more than double the number of species that will be secured.¹²⁰

6.86 They also stressed the importance of defining a clear objective:

For example, is the objective to avert extinctions yet allowing for the continued declines of other species or is it to recover species to remove them from the threatened list (we cannot currently do both)...¹²¹

6.87 Associate Professor McCarthy explained that their 'rational prioritisation approach' considers the benefit, the expected change, the risk of extinction and the cost: 'It is just a case of multiplying the benefit by the change and extinction and dividing by the cost, and you have your index'.¹²² In other words:

Essentially you think of the benefits you can achieve by protecting a particular species which would essentially be how much you can reduce the risk of extinction and, to some extent, how much you care about that species. You can measure how much benefit you will receive if you spend a certain amount of money. Essentially the ratio of those two numbers gives you how important it is and you can list the species according to that index. It is a basic cost-benefit analysis. It is a really simple way to do this prioritisation.¹²³

6.88 Associate Professor McCarthy further explained 'the idea would be that you would factor into the prioritisation the public's perception of the value of losing or saving particular species'.¹²⁴ For example, in New Zealand, kiwis and the kakapo were 'quarantined' from the prioritisation process, as iconic New Zealand animals.¹²⁵

6.89 The committee received evidence that several jurisdictions have implemented prioritisation frameworks, including Queensland, Tasmania and New Zealand.

6.90 In 2005, the Queensland government commenced implementation of its 'Back on Track' program, which was 'the first species prioritisation framework to be

120 Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 2.

121 Professor Hugh Possingham and Associate Professor Michael McCarthy, *Submission 127*, p. 2.

122 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 30.

123 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 28.

124 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 31.

125 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 28.

implement in Australia'.¹²⁶ The Queensland Minister for Environment and Heritage Protection submitted that 'Back on Track was developed to enable to strategic allocation of conservation resources to recover the greatest number of threatened species'.¹²⁷ He told the committee that threatened species are priorities 'on the basis of status (probability of extinction), consequence of extinction (value) and the potential for successful recovery. This framework is in place, and is now due for review'.¹²⁸

6.91 However, the Australasian Bat Society was critical of the Back on Track programme, expressing concern that the program was based on a 'poorly derived set of criteria'.¹²⁹

6.92 Birdlife Australia also noted that some states have recently developed prioritisation approaches, with 'varying degrees of success'. They indicated that:

The Tasmanian process is a good example: it calculated that 171 threatened species on the priority list and could all be secured over a 50 year period for an estimated cost of approximately \$155 million.¹³⁰

6.93 The committee was also heard that New Zealand has recently implemented a prioritisation approach to threatened species funding, and that 'as a result about twice as many species are being protected as would have been the case prior to going through this process'.¹³¹ Associate Professor McCarthy further explained the New Zealand process:

They made a list. They thought, 'We've got this amount of money,' and went down the list. The things that were towards the bottom of the list lost out. They can now work on more than 300 species that are receiving funding to try and help prevent their further decline and extinction. Prior to that, there was about half that number. They are able to work on more species, essentially, with the same amount of money. That is also beneficial. In this case, the Department of Conservation in New Zealand was able to show the government that they were able to spend the money efficiently.¹³²

6.94 However, others were doubtful about prioritisation. For example, Dr Todd Soderquist and Dr Deborah Ashworth believed that prioritisation processes 'are inherently flawed and will lead to an illogical misallocation of conservation resources'. They went on to explain:

126 Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 10. See also Queensland Department of Environment and Heritage Protection, *Back on Track species prioritisation framework*, at: <http://www.ehp.qld.gov.au/wildlife/prioritisation-framework/> (accessed 16 April 2013).

127 Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 10.

128 Minister for Environment and Heritage Protection Queensland, *Submission 130*, p. 10.

129 Australasian Bat Society, *Submission 110*, p. 15 and also p. 9.

130 BirdLife Australia, *Submission 82*, p. 11.

131 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 28.

132 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, p. 29.

In theory, the cheapest and most feasible recovery projects end up at the top of the list and the most expensive and least feasible at the bottom... The simplicity of this approach is very seductive... Yet, for these prioritisation models to have any meaning, they require that all input is correct... that all essential actions for each species be identified decades in advance.¹³³

6.95 They further believed that 'attempts to implement the outcomes of prioritisation models are failing' and that:

Success in threatened species management is better achieved by constant rebalancing of resources based on field evidence; adaptive implementation with transparent peer review; and acceptance that expert guesses should not dictate calcified decisions. This is readily achieved by adjusting organisational policy, philosophy and training.¹³⁴

6.96 However, it was submitted that decisions are being made all the time about where to allocate funding for threatened species and ecological communities, and it is better to do that under a systematic, rational framework. For example, Ms Rachel Lowry from Zoos Victoria observed that it is not always clear under the current system why some species get funding and others do not:

...for example, the Baw Baw frog—has had a decline in its population of over 98 per cent in the last 20 years yet has had funding pulled to even monitor the species. Yet you look at other species, such as the Tasmanian devil, which—rightly so—is receiving quite a large portion of support... we lack a framework across our nation that helps organisations like ours understand why decisions are being made...¹³⁵

6.97 BirdLife Australia argued that prioritisation approaches:

...help ensure that funds are directed to taxa genuinely in need to minimise the chances of further extinction. The process should involve a high degree of public participation and transparency (e.g. funding allocations should be published on an annual basis and open to public comment).¹³⁶

6.98 Associate Professor McCarthy argued that their prioritisation approach simply focuses the recovery planning process and 'does greater good for the same amount of money'.¹³⁷ He observed that prioritisation 'gets presented as a cold, hard decision', but that:

...hard decisions are being made regardless of how we do it, simply because we do not have enough money and resources being spent across Australia by federal government and state government. There is also a lot of investment by individuals and organisations putting a lot of time and, in

133 Dr Todd Soderquist and Dr Deborah Ashworth, *Submission 2*, p. 1.

134 Dr Todd Soderquist and Dr Deborah Ashworth, *Submission 2*, p. 2.

135 Ms Rachel Lowry, *Committee Hansard*, 20 February 2013, pp 4–5; see also BirdLife Australia, *Submission 82*, p. 12.

136 BirdLife Australia, *Submission 82*, p. 12.

137 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, pp 32 and 30.

some cases, money into saving threatened species. Across all of that, there is just not enough, so we are making hard decisions anyway and giving some species less chance than others. We think it is just better to do that rationally, because otherwise we are going to be sorely disappointed in decades time when a lot of other species that we had not thought about have declined severely or gone extinct.¹³⁸

6.99 Government agencies and departments seemed to be supportive of a more strategic approach to threatened species funding. For example, AFMA submitted that we need to find 'more cost effective solutions for dealing with threatened species':

One solution is to develop formal and transparent risk-based approaches to species status and priority. AFMA has done this for its fisheries over the past five years, starting with almost 2,000 species it is now focused on less than 70.¹³⁹

6.100 The Director of National Parks also seemed to accept that:

It is inevitable that priorities need to be set in threatened species conservation. The resources required to implement all current and proposed recovery plans and to reverse the multiple threatening processes are beyond what are realistically likely to be available to government and non-government agencies alike....it would be an advance to adopt a more objective basis for establishing priorities, one which gave greater emphasis to relative conservation status, taxonomic distinctiveness and the importance of ecosystem function in identifying target species. However, consensus on an appropriate regime would be difficult to achieve.¹⁴⁰

6.101 The Director of National Parks further observed:

There are analogies, actually, with the public health system. How much do you put into preventative health—that is, managing the whole system—versus the emergency care, the hospitals?...How much do you put into the large scale? How much do you put into the fine scale? There are no right answers to this.¹⁴¹

6.102 When asked whether the department has considered prioritisation approaches, SEWPAC responded as follows:

Prioritisation and decision-making tools may assist in achieving systematic and defensible biodiversity investment decisions. Consistent with the Australian government's response to the independent review of the EPBC Act, the department is committed to developing better prioritisation processes and decision-making tools that increase transparency,

138 Associate Professor Michael McCarthy, *Committee Hansard*, 20 February 2013, pp 28 and 32.

139 AFMA, *Submission 148*, Attachment 2, p. 1.

140 Director of National Parks, *Submission 144*, p. 9.

141 Mr Peter Cochrane, Director of National Parks, *Committee Hansard*, 15 February 2013, p. 71.

accountability and efficiency in prioritising resource allocation to threatened species conservation effort.¹⁴²

6.103 At the same time, SEWPAC expressed some caution:

Various tools and approaches are promoted by sectors of the scientific community and have engendered some level of interest and debate within the scientific, conservation management and government spheres. These need to be carefully examined to assess which are the most appropriate for resolving threatened species prioritisation issues.¹⁴³

6.104 SEWPAC informed the committee that:

The department is engaged in exploring these approaches with state and territory jurisdictions and is working collaboratively with the Australian government's National Environmental Research Program Environmental Decisions Hub on a project to examine the potential of a national approach.¹⁴⁴

6.105 Representatives from SEWPAC also told the committee that:

...the reality is that we should be focusing much more on the outcome that we are trying to achieve and perhaps have some more flexibility in what are the best tools that we can adapt to the particular circumstances of individual species or groups of species and to really look at how we can bring those limited resources to bear on how to get the best outcome in terms of protection and recovery of species and communities rather than saying that there is one particular approach that will deliver everything for everyone.¹⁴⁵

Proposals including for a separate biodiversity statutory authority

6.106 Several submissions argued that there is a need for an independent body and/or separate statutory authority to oversee and/or regulate threatened species protection and biodiversity conservation.¹⁴⁶ For example, the Wentworth Group suggested that an Independent Environment Commission be established.¹⁴⁷

6.107 The Invasive Species Council put forward a proposal for a national body entitled 'Environment Health Australia'—along the lines of Animal Health Australia and Plant Health Australia, primarily to address environmental biosecurity issues—for

142 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 23 [Q.20].

143 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 23 [Q.20].

144 SEWPAC, *Answers to questions on notice from public hearing*, 15 February 2013, p. 23 [Q.20].

145 SEWPAC, *Committee Hansard*, 15 February 2013, p. 69.

146 For example Professor David Lindenmayer, *Submission 15*, p. 3; Zoo and Aquarium Association, *Submission 27*, p. 1; NPAC, *Submission 142*, p. 3; Mr Leigh Howard, Young Lawyers' Section, Law Institute of Victoria, *Committee Hansard*, 20 February 2013, p. 23; see also Tim Flannery, *After The Future: Australia's New Extinction Crisis*, Quarterly Essay Issue 48, p. 76.

147 Wentworth Group of Concerned Scientists, *Submission 57*, p. 4; see also Ms Claire Parkes, Wentworth Group of Concerned Scientists, *Committee Hansard*, 15 February 2013, p. 37.

example, 'to develop and promote more ecologically informed approaches to protect species, ecological communities and ecological processes from invasive species'.¹⁴⁸

6.108 Another suggestion was that Australia needs a national genome storage network facility to store and retrieve the genomes of our Australian's native wildlife. He noted that there are seed bank schemes to store the genomes of plants, but there is no equivalent for animals.¹⁴⁹

Committee view

6.109 The committee recognises evidence from the department that the Biodiversity Strategy is an overarching guiding framework. However, the committee acknowledges evidence that its targets are not sufficiently focussed on threatened species and ecological communities. Further, it is disappointing that the targets are considered to be 'aspirational'. Nevertheless, the committee welcomes the targets that have been set, and in particular the target to establish a national long-term biodiversity monitoring and reporting system. However, the committee recommends that, when the Biodiversity Strategy is reviewed in 2015, consideration is given to incorporating concrete targets that reflect the 'Aichi' targets agreed to by Australia under the Biodiversity Convention.

Recommendation 28

6.110 The committee recommends that, when the Biodiversity Strategy is reviewed in 2015, consideration is given to incorporating concrete targets that reflect the targets agreed to by Australia under the Biodiversity Convention.

6.111 However, the committee also recognises the importance of action on-the-ground. As Mr Cosier told the committee 'we do not need more strategies'. In this context, the committee heard that it is crucial to fund on-ground work to protect and manage threatened species and ecological communities.

6.112 The committee recognises that a mix of landscape and species-specific programs are appropriate. However the committee is concerned that, in recent years, government policy and programs have been too focussed on 'landscape' solutions. The committee recognises that many threats operate at a landscape scale, and that protecting landscapes also protects habitats. While there is a legitimate place for protecting landscapes, it should not be exclusive: there is also a need to consider and target specific species. In particular, the committee is persuaded by evidence that there is a need for targeted funding streams directed to threatened species and ecological communities. As discussed in earlier chapters of this report, this should include funding for implementation of specific actions within recovery plans, conservation advices and threat abatement plans and advices.

6.113 The committee considers that this funding could be sourced by realigning existing funding programs, such as Caring for our Country and the Biodiversity Fund, and generally diverting funding from bureaucratic outcomes towards on-ground

148 Invasive Species Council, *Submission 140*, p. 13.

149 Dr John Clulow, *Submission 97*, pp 1–2.

action. The committee also recognises the need for longer-term funding in relation to threatened species and ecological communities, and suggests that this be considered when establishing targeted funding streams.

Recommendation 29

6.114 The committee recommends that the Commonwealth government adjusts current funding under the Biodiversity Fund and Caring for our Country to provide targeted funding streams for threatened species and ecological communities. This dedicated funding should include funding for implementation of specific actions within recovery plans, conservation advices and threat abatement plans and advices.

6.115 In particular, the committee recognises the evidence outlined in Chapter 4 of this report that feral animals and fire regimes are two of the biggest threats to threatened species and communities. Funding programs should therefore give high priority to on-ground projects addressing feral animals and fire regimes.

Recommendation 30

6.116 In light of the evidence that feral animals and fire regimes are two of the biggest threats to threatened species and communities, the committee recommends that funding programs give high priority to on-ground projects addressing feral animals and fire regimes.

6.117 The committee was concerned to hear that funding has declined for threatened species over recent years.¹⁵⁰ However, it is also essential that funding for threatened species programs is spent effectively and efficiently. The committee heard evidence that, even with modest amounts of money it is possible to have a significant and positive impact, provided the money is spent wisely and in an accountable, strategic manner. The committee is persuaded by evidence that the current approach to threatened species funding is ad hoc, unstrategic and unsystematic.

6.118 The committee recognises that, when it comes to work projects for threatened species and ecological communities, it is important to ensure that there is an accountability framework for those projects. We need to set priorities, concrete targets and objectives and measure and report performance towards those targets.

6.119 In particular, when funding relevant projects, there is a need to ensure that initial baselines are established against which success and progress can be measured and benchmarked. This will also enable the identification of projects that are achieving successes and for which funding should be continued.

150 See, for example, Zoos Victoria, *Submission 42*, p. 4.

Recommendation 31

6.120 The committee recommends that all funding grants under relevant Commonwealth government programs, whether for the management of threatened species, ecological communities, threatening species or invasive species should include metrics to establish initial benchmarks and requirements to measure the outcomes from the project against those initial benchmarks.

6.121 The committee notes the evidence, from organisations and individuals such as Birdlife Australia and Professor Woinarski, of the need for longer-term funding, especially in recognition of the fact that threatened species recovery can be a long-term process and it can take time to achieve meaningful and lasting differences. The committee recommends that this is recognised in relevant Commonwealth funding programs for threatened species, and that there should be some provisions for funding grants to be awarded over longer timeframes, subject to ongoing success against measured objectives.

Recommendation 32

6.122 The committee recommends that the Commonwealth government adjust relevant funding programs to enable funding grants relevant to threatened species and ecological communities to be awarded over longer timeframes, subject to ongoing success against measured objectives.

6.123 In terms of allocating funding, the committee is particularly persuaded by evidence of the urgent need for a national prioritisation approach to identify funding priorities in relation to threatened species and ecological communities, which in turn would improve the efficiency and effectiveness of spending in this area. The committee notes with frustration SEWPAC's evidence that it is 'exploring approaches' and working on a project to 'examine the potential of a national approach'.¹⁵¹ The committee believes that, under the current ad hoc approach, processes to award funding are in any case giving priority to certain problems, with seemingly little strategic thought being given to which species need funding more than others. The committee acknowledges that formal prioritisation may require some difficult decisions to be made, but funding should be provided for work that will deliver the most valuable and achievable outcomes for species.

6.124 The committee therefore recommends that the Commonwealth government develop and implement a national species prioritisation program to guide decision-making in relation to funding for threatened species and ecological communities. However, it is important that any prioritisation list is regularly reviewed based on the latest available scientific evidence.

151 SEWPAC, *Answers to questions on notice, public hearing*, 15 February 2013, p. 23 [Q 20].

Recommendation 33

6.125 The committee recommends that the Commonwealth government develop and implement a national species prioritisation program to guide decision-making in relation to funding for threatened species and ecological communities. This program should be regularly reviewed based on the best available scientific evidence.

6.126 The committee also acknowledges evidence that more work is needed for surveys, mapping, monitoring and research relating to threatened species and ecological communities. The committee notes that efforts are being made in this regard. In particular, the committee notes SEWPAC's evidence that the Commonwealth government is working towards a national biodiversity monitoring system, and the current work on a system of national environment accounts. The committee notes that, under the Biodiversity Strategy, the national biodiversity monitoring and reporting system should be established by 2015.

Recommendation 34

6.127 The committee recommends that the Commonwealth government establish the national biodiversity monitoring system and system of national environment accounts by 2015, as recommended by the Hawke review and *Australia's Biodiversity Conservation Strategy 2010–30*.

6.128 The committee also noted the evidence that there are a number of existing research programs, networks and databases that aim to improve access to information, research and data about biodiversity, including for example, the National Environmental Research Program, the Terrestrial Ecosystem Research Network, the National Species Profile and Threat Register. The committee considers that maximum value should be extracted from these programs to implement the monitoring and accounting frameworks recommended.

6.129 The committee also notes evidence that, under the US Endangered Species legislation, relevant agencies are required to report to US Congress on the status of each and every threatened species listed under that legislation. The committee considers that Australia would benefit from a similar arrangement. The committee therefore recommends that SEWPAC report, as part of the regular preparation of national accounts to parliament, on the status of EPBC-listed threatened species and communities.

Recommendation 35

6.130 The committee recommends that the *Environment Protection and Biodiversity Conservation Act 1999* be amended to require the Department of Sustainability, Environment, Water, Population and Communities report, as part of the regular preparation of national accounts to Parliament on the status of species, and communities listed as threatened under the *Environment Protection and Biodiversity Conservation Act 1999*.