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Ms Paula Luethen  
Presiding Member  
Natural Resources Committee

c/o- Parliamentary Officer  
Parliament House  
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Friday 6 August 2021

Dear Ms Luethen,

**Re: Submission to the Natural Resources Committee's review of the *Native Vegetation Act 1991***

The Nature Conservation Society of South Australia (NCSSA) appreciates the opportunity to provide a submission to this review of the *Native Vegetation Act 1991*, and the extension in time to do so.

Since 1962, the NCSSA has been a strong advocate for the protection of native vegetation and biodiversity in South Australia with particular attention being paid to nationally and state listed threatened plants, animals and ecological communities and the management of protected areas. Specifically, the NCSSA has played a key role in advocating for legislative protection of South Australia's native vegetation over many years, including by providing monitoring data to support the first iteration of South Australia's clearance controls, introduced in 1983.<sup>1</sup>

In the NCSSA's view, the *Native Vegetation Act 1991* (the NV Act) is **one of South Australia's most important pieces of environmental legislation** for nature conservation.

Although it has been 30 years since the NV Act in its current form was introduced, its central logic remains sound: **clearance is not permitted** except for in specific circumstances as described in the NV Act and as outlined in the associated *Native Vegetation Regulations 2017*. The Objects of the NV Act – particularly for the **conservation, protection and enhancement of native vegetation** – remain as relevant and important today as they were in 1991.

Regulating native vegetation clearance necessarily means that not all landholders can clear in the manner they may wish to, however, these controls must be understood in the context of **extensive clearance of native vegetation in South Australia**, particularly across the agricultural region where native vegetation is now largely confined to small pockets and scattered remnants. For example, there is less than 10% of original forest cover remaining in the Mount Lofty Ranges.<sup>2</sup>

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<sup>1</sup> [Native Vegetation Heritage - History of Ag SA \(pir.sa.gov.au\)](http://pir.sa.gov.au)

<sup>2</sup> [https://www.epa.sa.gov.au/soe-2018/files/13703\\_soer2018\\_biodiversity\\_issues\\_report.pdf](https://www.epa.sa.gov.au/soe-2018/files/13703_soer2018_biodiversity_issues_report.pdf)

Whilst the basic architecture of the NV Act remains sound, the NCSSA is deeply concerned that the clearance of native vegetation in South Australia **continues at an unacceptably high rate**. Despite 30 years having passed since the introduction of the current NV Act, its Objects have not yet been achieved, including a central objective to ‘prevent further loss of the quantity and quality of native vegetation in the State’. Rather, the best available evidence suggests **nearly half a million hectares of native vegetation** has been lost since 1990.<sup>3</sup>

The NCSSA therefore strongly supports inquiry into why this has occurred and what action is necessary to ensure the Objects of the NV Act are achieved. The NCSSA regularly comments on individual clearance applications made under the NV Act, and also engages at the strategic level with its implementation, for example in commenting on proposed guidelines and other policy settings under the Act. Based on this experience, the NCSSA believes this inquiry should explore **five key issues** outlined in the summary on the following page.

The NCSSA believes **efforts must be redoubled** to stem the ongoing and unacceptably high rates of native vegetation clearance in South Australia if biodiversity loss is to be halted and reversed. This includes ensuring the NV Act is both strengthened and adequately administered.

A key reason for this is to protect the ecological function that native vegetation provides, including as habitat for wildlife. **Threatened species**, such as the Kangaroo Island Dunnart, the Swamp Antechinus and the Chestnut-rumped Heathwren, rely on the presence of native vegetation that is in good condition. In the Mount Lofty Ranges, there is evidence that even species currently considered ‘common’ are declining, such as the Superb Fairy-wren, Silvereve and Willie Wagtail.

As well as providing habitat for our unique wildlife, native vegetation also provides a **range of other benefits** including maintaining soil and waterway health, providing shade and shelter to stock and supporting pollination. A key benefit is storage of carbon, with the vegetation protected under Heritage Agreements established under the NV Act reportedly capturing more than 73 million tonnes of carbon per year.<sup>4</sup> These benefits need to be recognised and explicitly valued.

As the Committee may be aware, Australia is a signatory to the global Convention on Biological Diversity. The most recent draft global biodiversity framework seeks signatories to commit to protecting 30% of all land and sea areas by 2030. This target is evidence-based: set to ensure the arrest of the current rapid erosion of ecosystem services in the terrestrial, freshwater, and marine realms.<sup>5</sup> A year-on-year net loss of remnant native vegetation is not compatible with this target.

I trust the Committee will find the attached detailed submission useful. I also wish to appear before the Committee to further explain this submission and provide answers to any questions the Committee may wish to ask.

Yours sincerely,



Patrick O'Connor  
President

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<sup>3</sup> <https://data.environment.sa.gov.au/Content/Publications/SA-Land-Cover-Layers-1987-2015-Technical-Summary.pdf>

<sup>4</sup> Native Vegetation Council Annual Report 2014-2015

<sup>5</sup> [A Global Deal For Nature: Guiding principles, milestones, and targets | Science Advances \(sciencemag.org\)](#)

### Five key issues this review of the NV Act should address:

1. The level of **education** of and **understanding** by the community regarding the benefits of native vegetation, as well as their knowledge of rights to manage and obligations to protect, which currently appears to be low.

This issue became particularly apparent in the wake of the 2019-20 bushfire season, when calls to review the NV Act were made.

2. The lack of appreciation of the **true cost of native vegetation clearance**, particularly in terms of loss of ecological function, as demonstrated by:
  - the **high rate of approval of clearance** applications, particularly through the numerous **exemptions** to the Act and many **delegations** in decision-making,
  - the difficulty of applying the '**mitigation hierarchy**' of avoid, reduce and then "offset" clearance in practice, meaning clearance is not minimised,
  - the apparent under-resourcing for the **administration** of the Act, particularly as reflected in the low level of staffing of the Native Vegetation Branch,
  - the apparent lack of resourcing for **compliance action** for suspected breaches of the Act, including staffing to support the Change Detection Program, and
  - the lack of consideration of the full range of benefits native vegetation provides, including **carbon storage**.
3. The **lack of financial support** provided for the management of native vegetation, particularly for conservation on private land (i.e. for Heritage Agreement owners),
4. The practice of "**offsetting**" the damage from clearance in one place by "gaining biodiversity" elsewhere.

There is inadequate oversight of the on-ground delivery of "offsetting", with evidence to show post-approval compliance is low. This means the agreed actions for achieving a "significant environmental benefit" are not even being undertaken in many cases.

Further, even if the agreed actions are undertaken, there is no systematic, comprehensive ecological monitoring to confirm "offsetting" actually provides the purported "environmental benefit".

Independent assessment of "offsetting" is confounded by limited publicly available information, particularly regarding expenditure of the more than \$30 million reportedly paid into the Native Vegetation Fund since 2008, primarily for "offsets".

5. Opportunities to **improve interaction with other relevant legislation**, for example to ensure native vegetation conservation through Heritage Agreements is supported in the pastoral region and to reduce clearance through better land-use planning, for example for large scale solar farms.

The NCSSA's responses to the Inquiry's Terms of Reference:

**5. Inquire into the extent of native vegetation loss in SA since Federation to 1991, the extent of loss or gain since the 1991 Act and an assessment of the status of threatened species in SA and their dependence on native vegetation.**

The NCSSA strongly supports inquiry into the extent of vegetation loss in South Australia and the concurrent assessment of the status of threatened species and their dependence on native vegetation as a critical first step in reviewing the *Native Vegetation Act 1991* (the NV Act). The NCSSA will therefore address this Term of Reference first.

The NCSSA contends that the decline in extent and condition of native vegetation poses one of the greatest threats to biodiversity conservation across South Australia and that this loss is already being exacerbated by the effects of climate change in some areas. Reversing the decline in the extent, quality and ecological function of South Australia's native vegetation, as reflected in the Objects of the NV Act, is therefore a principal requirement for achieving long-term biodiversity conservation.

*Native vegetation loss in South Australia since Federation (1900) to 1991*

Following European arrival in 1836, subsequent Federation in 1900 and up until the mid-1980s when clearance controls were first introduced, native vegetation loss in South Australia was extensive, particularly in the agricultural areas.<sup>6</sup>

Indeed, native vegetation clearance for agricultural development has historically been incentivised by the Federal and State governments through low-cost finance, tax concessions, cheap land and lease conditions that required the removal and management of native vegetation.<sup>7</sup>

Precise clearance rates from 1900 to 1991 are not readily available, however, Bradshaw 2012 summarises broad clearance patterns as follows:

'In 1861, the newly formed government of Australia passed the Crown Lands Alienation Act, which was designed to 'open up' the colony to settlement. Over the following century, that single Act effectively guaranteed the rapid clearing of vegetation by unrestricted settlement, for it penalized entitled landholders, via a forfeit to the Crown, for failing to 'develop' their lands (Braithwaite 1996). Thus, most land clearing occurred in south-eastern Australia from the turn of the 19th century to the mid-20th century.'<sup>8</sup>

In South Australia, clearing post-World War 2 accelerated loss to 50% of native vegetation in the agricultural zone<sup>9</sup> and by the time the first clearance controls are introduced in South Australia in 1983, more than 75% of the native vegetation in South Australia's agricultural region had been cleared.<sup>10</sup>

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<sup>6</sup> [https://www.pir.sa.gov.au/aghistry/natural\\_resources/native\\_vegetation\\_conservation/national\\_parks](https://www.pir.sa.gov.au/aghistry/natural_resources/native_vegetation_conservation/national_parks)

<sup>7</sup> Evans, MC 2016. Deforestation in Australia: drivers, trends and policy responses. *Pacific Conservation Biology*, 22: 130-150.

<sup>8</sup> Bradshaw, CJA 2012. Little left to lose: deforestation and forest degradation in Australia since European colonisation. *Journal of Plant Ecology*, 5 (1): 109-120.

<sup>9</sup> Getting the Balance Right: Protecting and improving native vegetation in South Australia, Native Vegetation Council, 2017.

<sup>10</sup> *Vegetation Clearance in South Australia* 1976. Report of the Interdepartmental Committee on Vegetation Clearance.

### *Native vegetation loss or gain since the 1991 Act*

Subsequent to the introduction of clearance controls in 1983, the *Native Vegetation Management Act* was passed in 1985, which included a mechanism for compensation payments. In the years following the 1985 Act, relatively little broad-acre clearance was approved and almost \$70 million was paid in compensation.<sup>11</sup>

In the early 1990s new legislation in the form of the *Native Vegetation Act 1991* was introduced, with sunset clauses that drew compensation to a close. Also formally drawn to a close was any further broad-acre clearance - the NV Act made it clear that any approvals for clearance will only be given in exceptional circumstances, or for individual trees.<sup>12</sup>

However, while broad-acre clearing of native vegetation has technically been prevented since 1991, clearance of native vegetation is still permitted under the NV Act and the associated *Native Vegetation Regulations 2017* (NV Regulations) under specific circumstances (see response to Term of Reference #2 for details), and illegal clearing continues to occur.

Although the data and/or mapping to track on precise clearance rates since the introduction of the current NV Act in 1991 are not readily available, the available evidence indicates that South Australia **continues to lose considerable extent of native vegetation despite clearance controls**. This ongoing loss is reported in the Department for the Environment’s Technical Report 2018/01 detailing changes in land cover in South Australia between 1990 and 2015<sup>13</sup>, which states:

“Between 1990 and 2015 native vegetation per cent cover has been decreasing across South Australia. The estimated loss of 497,616 ha ... over that period had good confidence.”

Further evidence of substantial, ongoing loss of South Australia’s native vegetation can be obtained from the Annual Reports of the Native Vegetation Council (NVC), established under the NV Act (see response to Term of Reference #2 for details of the role of the NVC).

Although data are incomplete and not consistently presented across all years, NVC Annual Reports record more than **70,000 hectares of approved clearance** over the period 2008-2020, as well as approval to clear more than **10,000 scattered trees** (Table 1), noting these figures don’t include permitted but non-reported clearance or illegal clearance.

	No. applications	Hectares approved	Trees approved
<b>2008-2020 Act</b>	345*	10,164.53	1,489
<b>2011-2020 Regulations</b>	1,870	61,175.69	9,337
<b>TOTAL</b>	<b>2,215</b>	<b>71,340.22</b>	<b>10,826</b>

\*For period 2011-2020: 249 applications were made under the Act, data on applications made under the Regulations are not available for the years prior to 2011

Table 1: Approved clearance under the NV Act and NV Regulations based on publicly accessible Native Vegetation Council Annual Reports

<sup>11</sup> [https://pir.sa.gov.au/aghistry/natural\\_resources/native\\_vegetation\\_conservation/national\\_parks](https://pir.sa.gov.au/aghistry/natural_resources/native_vegetation_conservation/national_parks)

<sup>12</sup> [https://pir.sa.gov.au/aghistry/natural\\_resources/native\\_vegetation\\_conservation/national\\_parks](https://pir.sa.gov.au/aghistry/natural_resources/native_vegetation_conservation/national_parks)

<sup>13</sup> <https://data.environment.sa.gov.au/Content/Publications/SA-Land-Cover-Layers-1987-2015-Technical-Summary.pdf>

The Clearance Register for the period January 2010 – January 2020<sup>14</sup> records more than **130,000 hectares of approved clearance**. The large discrepancy between this figure and the total from NVC Annual Reports is likely due to the exclusion of two large applications made in 2017 for grazing and watering points respectively, that together totalled 104,300 ha. These were excluded from NVC Annual Reports because the “vegetation has not been removed”.<sup>15</sup>

Extensive historical loss and ongoing decline in native vegetation was also reported in recent analysis undertaken for the South Australian State of the Environment Report<sup>16</sup> which found:

- native forests cover only about 9% of the South Australia’s land area, with less than 10% of the original forest cover remaining in the Mount Lofty Ranges, and less than 4% remaining in the Adelaide Plains relative to their extents immediately before Europeans first came to Australia.
- overall native vegetation is in a State-wide decline in cover, with the regions doing the worst also those with the most people.

#### *Status of threatened species in SA*

One of the impacts of extensive native vegetation clearance in South Australia has been to push many of our native wildlife species to the brink of extinction. Since European settlement, an estimated 73 species have become extinct in South Australia, with many more species listed as threatened (at risk of extinction in the future) at the national and/or state level.<sup>17</sup>

The NCSSA has a long-standing interest in protecting and recovering South Australia’s threatened flora and fauna. The Society has instigated and supported a number of studies, including on the Yellow-footed Rock Wallaby, the Kangaroo Island Dunnart and the Swamp Antechinus, which have provided critical information on the status of these species and what action is needed to ensure their conservation. However, despite the NCSSA’s efforts and the efforts of many others, the vast majority of South Australia’s threatened animals continue to head towards extinction, and ongoing native vegetation loss, fragmentation and decline in condition is a major contributor to this.

Recent analysis through the South Australian State of the Environment Report<sup>18</sup> found:

- 12% of native plant species are threatened with extinction across the State, of which the South East has the highest proportion (25%)
- 12% of South Australia’s native animal species are considered threatened with extinction, with the highest proportion of threatened species (23%) reported in the Adelaide and Mount Lofty Ranges
- over 70% of the State’s wetlands have been lost since European colonisation, and 99% of those remaining cannot be considered ‘intact’.

This analysis was underpinned by the SA Trend and Condition Report Cards<sup>19</sup> that found the trend in native terrestrial fauna was declining in all but 3 regions of the state (SA Arid Lands, Alinytjara Wilurara and Kangaroo Island) based on expert assessments of the abundance and distribution for 779 taxa, across four vertebrate groups (mammals, bird, reptiles and frogs). The report and supporting Technical Summary acknowledge that land clearance remains a key pressure in this decline due to a combination of direct habitat loss, degradation and fragmentation.<sup>20</sup>

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<sup>14</sup> [Department for Environment and Water | Clearance application register](#)

<sup>15</sup> Native Vegetation Council Annual Report, 2018-19

<sup>16</sup> [https://www.epa.sa.gov.au/soe-2018/files/13703\\_soer2018\\_biodiversity\\_issues\\_report.pdf](https://www.epa.sa.gov.au/soe-2018/files/13703_soer2018_biodiversity_issues_report.pdf)

<sup>17</sup> [Department for Environment and Water | Threatened species in South Australia](#)

<sup>18</sup> [State of the Environment SA 2018 \(epa.sa.gov.au\)](#)

<sup>19</sup> [Trend and Conditions Reports \(environment.sa.gov.au\)](#)

<sup>20</sup> [https://data.environment.sa.gov.au/Content/Publications/RC404\\_land%20native%20fauna\\_tech.pdf](https://data.environment.sa.gov.au/Content/Publications/RC404_land%20native%20fauna_tech.pdf)

A similar situation was reported for native terrestrial flora with the trend declining in all but 2 regions of the state (SA Arid Lands and Alinytjara Wilurara) however the data used to generate this report were relatively aged, limited in scope and availability, and largely based on expert opinion.<sup>21</sup>

#### *Threatened ecological communities*

In addition to threatened species that depend on native vegetation there is also the critical issue of the management of threatened ecological communities, including some that are unique to South Australia. Examples include the Iron grass natural temperate grassland of South Australia, Peppermint box (*Eucalyptus odorata*) grassy woodland of South Australia, Swamps of the Fleurieu Peninsula and Kangaroo Island Narrow-leaved Mallee (*Eucalyptus cneorifolia*) Woodland that are all listed as Critically Endangered under the national *Environment Protection and Biodiversity Conservation Act 1999*. Key threats to these ecological communities include vegetation clearance, physical disturbance and fragmentation, road and rail maintenance activities, grazing and weed invasion.

This trend of ongoing decline in threatened species as observed in South Australia is consistent with national trends, as highlighted by the Threatened Species Index<sup>22</sup>, which averages the change in populations of all threatened species measured based on a compared to a base year.

The clear trend is one of decline for threatened plants across Australia (Figure 1).

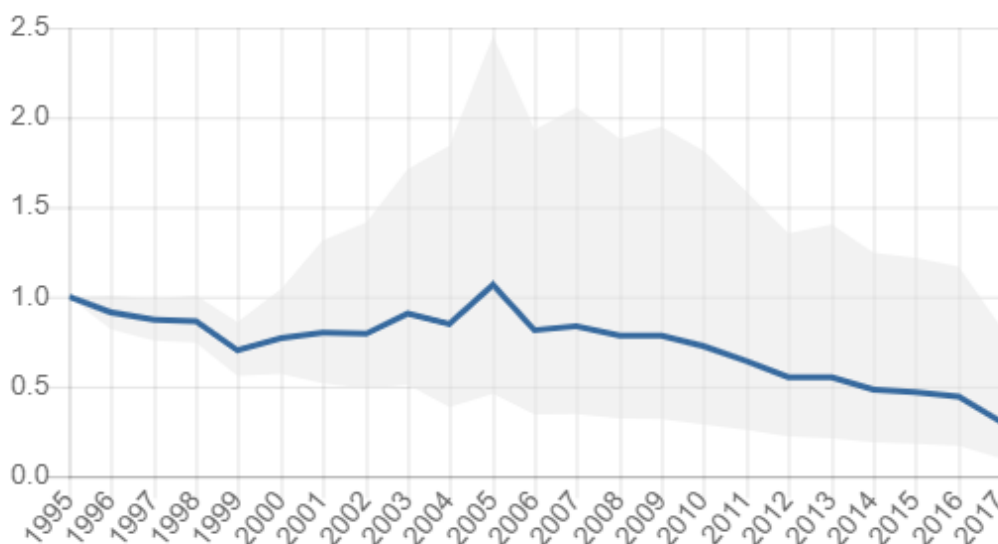


Figure 1. Threatened Plant Index, showing a decline in the average populations of threatened plants compared to a base year.

<sup>21</sup> [https://data.environment.sa.gov.au/Content/Publications/Booklet\\_28\\_RC403\\_LandPlants.pdf](https://data.environment.sa.gov.au/Content/Publications/Booklet_28_RC403_LandPlants.pdf) & [https://data.environment.sa.gov.au/Content/Publications/RC403\\_land%20native%20flora\\_tech.pdf](https://data.environment.sa.gov.au/Content/Publications/RC403_land%20native%20flora_tech.pdf)

<sup>22</sup> <https://tsx.org.au/tsx/#/>

### *Extent versus condition of native vegetation*

An important distinction for the Committee to understand is the difference between extent and condition of native vegetation. It has been recently demonstrated that even where native vegetation is present and formally “protected” in the reserve system, it is being degraded through processes including inappropriate grazing management<sup>23</sup> and inappropriate fire regimes.<sup>24</sup>

The importance of vegetation condition as well as extent is demonstrated through the NCCSA’s long-term monitoring of woodland birds in the Mount Lofty Ranges, which shows that the abundance of birds has declined markedly over the past 20 years (Figure 2). Although this may be attributable in part to loss of extent of native vegetation over that time, with almost 2000 ha and more than 2700 scattered trees approved for clearance in the Mount Lofty Ranges over the past decade, declining habitat quality (i.e. vegetation condition) is also likely a contributing factor to the drop in total abundance of woodland birds of 45% which has been observed over the life of the current NV Act.

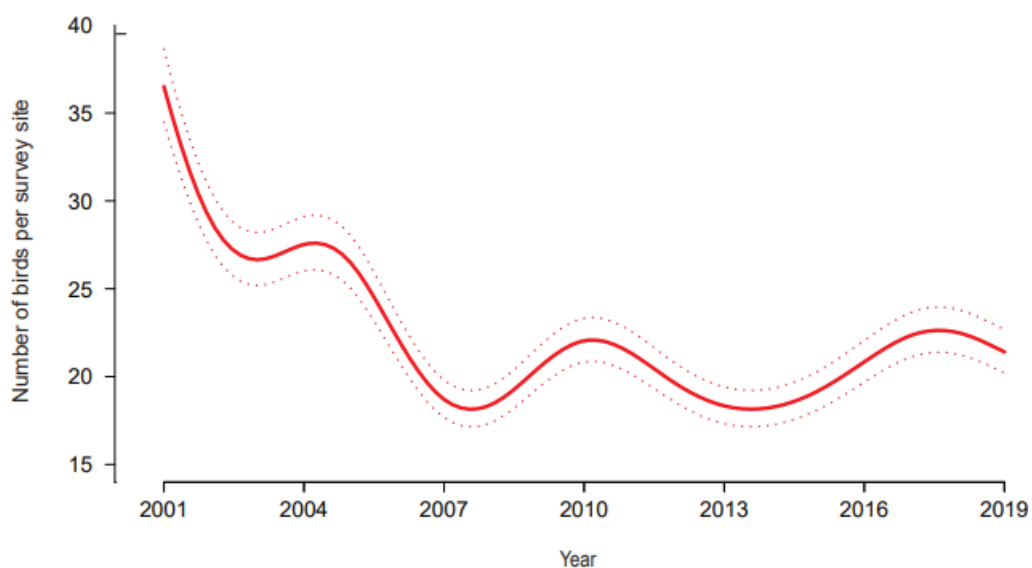


Figure 2: total decline in abundance of woodland birds in MLR in 20 years due to past and concurrent clearance and quality decline of vegetation.

The birds most affected by this decline in extent and condition tend to be woodland specialists, such as the Chestnut-rumped Heathwren, Superb Fairy-wren, and Spotted Pardalote.<sup>25</sup> In contrast, more generalist, and often more aggressive birds, such as the Australian Magpie, Rainbow Lorikeet and the Sulphur-crested Cockatoo are increasing in response to the changes in habitat in the Mount Lofty Ranges.

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<sup>23</sup> Prowse TAA, O'Connor PJ, Collard SJ, & Rogers DJ. 2019. Eating away at protected areas: Total grazing pressure is undermining public land conservation. *Global Ecology and Conservation*, 20 <https://doi.org/10.1016/j.gecco.2019.e00754>

<sup>24</sup> Prowse TAA, Collard SJ, Blackwood A, O'Connor PJ, Delean S, Barnes M, Phillip P, Possingham H. 2017. Prescribed burning impacts avian diversity and disadvantages woodland specialist birds unless long-unburnt habitat is retained. *Biological Conservation*, 215, 268-276.

<sup>25</sup> Prowse TAA, O'Connor PJ, Collard SJ, Peters, KJ and Possingham HP. 2021. Optimising monitoring for trend detection after 16 years of woodland-bird surveys. *Journal of Applied Ecology*, In press <https://doi.org/10.1111/1365-2664.13860>



## **Summary**

Clearance has been extensive since the current NV Act was introduced, as shown by the percentage cover of native vegetation decreasing by nearly half a million hectares since 1990 and the large area (more than 70,000 hectares) and high number of scattered trees (more than 10,000) reportedly approved for clearance since 2008.

Threatened species, and biodiversity more generally, continue to decline in South Australia, as demonstrated by long-term monitoring.

Many threatened species depend directly on native vegetation for habitat: this habitat must be of sufficient area (extent) and quality (condition) for species to persist. Even 'common' species are declining under current settings.

In light of this, there is an urgent need for better protection and further enhancement of South Australia's native vegetation, including through the NV Act.

## 1. To review the functioning of the *Native Vegetation Act 1991* in South Australia and how it compares to other jurisdictions across Australia.

To adequately review the functioning of the Act, the NCSSA suggests the Committee consider both the architecture of the Act – how it is structured and is intended to function – and how it has been administered in practice from 1991 to the present.

### *Function of the Act - architecture*

The fundamental premise of the NV Act is that native vegetation in South Australia is to be conserved, protected and enhanced, as outlined in its Objects. It therefore functions primarily by **preventing clearance** except in specific circumstances as outlined in the NV Act and associated NV Regulations.

The NCSSA refers the Committee to the NV Act itself and associated guidelines<sup>26</sup> that outline its function, but by way of brief summary of its key concepts, the NV Act:

- establishes **control on clearance**, specifically preventing the clearance of ‘intact stratum’ except in the very specific circumstances including native vegetation harvesting and for cold burns. It also establishes ‘conditions of consent’ for clearances.
- provides for a body, the **Native Vegetation Council (NVC)**, to implement a range of tasks, including determining clearance applications.
- provides for the NVC to **delegate** decision-making to other agencies and individuals.
- provides for **Regulations** outlining exemptions to clearance controls.
- outlines the **Principles of Native Vegetation Clearance** that the NVC must adhere to in making decisions under the NV Act and Regulations.
- provides for a system of “**Significant Environmental Benefits**” or SEBs, which are “offsets” for vegetation clearance. This includes a system of establishing and assigning ‘credit’ for offsets, including to third parties, establishing management plans and providing for a register of SEBs.
- establishes the **Native Vegetation Fund**, managed and controlled by the NVC. The Fund can receive monies from a range of sources, including the payment of “offsets” to compensate for approved clearances. Funds must be used for the preservation and maintenance of native vegetation, as well as the establishment or regeneration of native vegetation.
- establishes **Heritage Agreements**, which are binding agreements between the Minister for the Environment and landholders to preserve or enhance native vegetation.
- provides for **financial assistance** to landholders to manage native vegetation.
- provides for **compliance mechanisms** including civil enforcement proceedings, ‘make good’ and enforcement orders and authorised officers.

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<sup>26</sup> Guide for applications to clear native vegetation under the *Native Vegetation Act 1991* and *Native Vegetation Regulations 2017*, Native Vegetation Council, July 2020

Similarly, the NCSSA refers to Committee to the Regulations themselves and associated Guide<sup>27</sup>, however, a brief summary of the Regulations is that they:

“... outline the circumstances where clearing native vegetation is permitted, outside of the clearance controls in the *Native Vegetation Act 1991* (the Act). The Regulations allow clearance for activities that are routinely carried out by South Australians, including building new homes, managing farms, upgrading or establishing infrastructure or making recreational trails. The Regulations seek to balance the requirements of South Australians to clear for everyday activities with the need to protect and restore the remaining native vegetation in South Australia.”<sup>28</sup>

The approval pathways are:

**Pathway 1: Permitted Clearance Without Conditions (self-assessed by proponent)**

- Division 1 – notification to the NVC not required, examples include vegetation within 10 metres of a building, clearance for the maintenance of a dam, for ongoing grazing practices or for safety reasons.
- Division 2 – notification to the NVC required, examples include vehicle tracks and fences, and for plant and animal control.

**Pathway 2: Fire Hazard Reduction (requires CFS approval)**

- Minor activities where no CFS approval required – e.g. clearance within 20 metres of a dwelling and up to 5 metres wide along a fence line
- CFS approval required for large trees, fuel reduction activities, fire breaks and access tracks.

**Pathway 3: Vegetation Management (requires a Management Plan approved by the NVC)**

This pathway allows for activities in which vegetation clearance (and regrowth) is required, and in which the ongoing management of native vegetation must be facilitated by a management planning process, including:

- Guideline for Roadside Vegetation Management
- Guideline for Maintenance of Existing Agriculture, Forestry or Farming
- Guideline for Ecological Purposes and Guideline for Ecological Prescribed Burning
- Guideline for Grazing of Domestic Stock.

**Pathway 4: Risk Assessment (requires NVC approval and a Significant Environmental Benefit (SEB) offset):**

- Major developments
- Mining, petroleum and exploration activities
- Other activities where the level of risk associated with the activity is not yet known.

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<sup>27</sup> Guide to the *Native Vegetation Regulations 2017*, Native Vegetation Council 2017.

<sup>28</sup> Guide to the *Native Vegetation Regulations 2017*, Native Vegetation Council 2017.

### *Function of the Act and Regulations - administration*

The NCSSA regularly comments on individual clearance applications, as well as providing comment on policy or strategic documents. Issues with the administration of the NV Act and Regulations include:

- **Almost all clearance applications are approved**, with outright refusal very rare. This is reflected in analysis of approvals as recorded in the Clearance Application Register<sup>29</sup>, which shows just 21 out of a total of 1428 applications – or 1% – classified as “refused” over the period January 2010 – January 2020.
- Many **proponents believe they should be exempt from the Act** which, in some cases, has led to inappropriate exemptions being granted. These include two projects specifically named within the Regulations themselves (for the SA Motorsport Park at Taillem Bend and for developments within Flinders Chase National Park). These and other exemptions undermine the integrity of the Act and prevent the achievement of its Objects.
- Particularly, the **exemption for declared ‘major projects’** reduces the NVC’s role from decisive to advisory. A current example is a proposal for a rocket launching facility on the southern tip of Eyre Peninsula, in an area known as Whalers Way.<sup>30</sup> The area is intact coastal vegetation which is habitat for threatened species, however, the NVC is unable to uphold the Objects of the NV Act and prevent vegetation clearance for the project due to its ‘major project’ status. The area is also supposedly ‘protected’ as a Heritage Agreement (see Term of Reference #6 for further discussion of this).
- The majority of applications are made under the Regulations (80% over the period January 2010 – January 2020). The NCSSA understands that the NVC operates on the general understanding that it **cannot outright refuse applications made under the Regulations**, a matter which requires further legal advice and testing to resolve. This was a critical issue for the NVC’s recent considerations regarding proposed clearance within Flinders Chase National Park.
- For applications that are made under the Regulations, it is too late to **meaningfully apply the mitigation hierarchy**. Genuine avoidance of clearance would almost always involve moving to another site, and proponents are invariably past the point of being able to do that by the time the NVC are considering their proposal. Similarly, it is often difficult to meaningfully assess the feasibility of reducing clearance, particularly since proponents invariably argue that it is too costly to do so. A recent example is the upgraded Eyre Peninsula transmission line, which ElectraNet argued had to be adjacent to the existing line primarily for cost reasons, resulting in clearance of nearly 200 hectares of native vegetation, including through Conservation Parks and seven Heritage Agreements.
- For the minority of applications made under the NV Act (rather than the Regulations), dispute over whether native vegetation is “**intact stratum**”, which is a measure of degradation, does not generally serve a useful purpose. Given the ongoing loss of South Australia’s vegetation, the NCSSA believes all native vegetation, even if degraded, is worthy of protection and therefore does not believe limiting protection only to “intact stratum” remains appropriate.
- **Survey** for clearance applications is often inadequate. An example is a clearance application for a beef feed lot near Tintinara, where a single day of survey was conducted to assess the

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<sup>29</sup> [Department for Environment and Water | Clearance application register](#)

<sup>30</sup> [Planned rocket launch pad at Whalers Way approved for test launches despite opposition - ABC News](#)

condition of the native vegetation, in the middle of summer following several dry years. Such level of effort fails to identify the full range of species diversity present at the site, which impacts on the assessment process (for example, whether or not rare or threatened species occur at the site). This, in turn, impacts calculations for the required 'offset'.

- The provisions of the NV Act and Regulations **focus on flora** and therefore do not adequately reflect the all components of biodiversity. Other elements of biodiversity should be included, including threatened ecological communities (both at the State and federal level). More generally, the provisions of the NV Act and Regulations are **not well integrated** with national environment legislation.
- The 'formulas' for determining if a clearance is '**seriously at variance**' with the Principles of Clearance are not biologically meaningful, and the 'moderating factors' mean that most clearances can be assessed as being not 'seriously at variance'. An example is if the clearance is for habitat of threatened species, it can still be reduced from 'seriously at variance' to 'at variance' using the 'moderating factor' of it being "non-essential habitat for threatened species and the clearance will have a negligible impact on that species local population over the long term (i.e. next 20 to 50 years)". This would be virtually impossible to determine in practice, particularly with low survey effort.
- The **staffing** levels within the Native Vegetation Branch have reduced over time. The NCSSA understands that there was once a large team of Assessment Officers who assisted applicants with navigating the approval process as well as undertaking field visits, but that the number of staff currently administering the Act is now substantially reduced.
- Resourcing for **compliance activity** under the NV Act appears inadequate. Specifically, the NCSSA understands that a key Departmental officer responsible for assessing imagery to support the Change Detection Program, which identified up to 50% of suspected illegal clearance activity in any given year prior to 2019-20, has left and has not been replaced.
- More broadly with respect to compliance, only a **small number** of suspected illegal clearances appear to have been pursued in court and penalties for breaches seem inadequate to deter offending.
- It is impossible to assess **the likelihood of any proposed "offset" providing the purported 'significant environmental benefit'** for any given clearance application at the time of approval, since many proposals do not provide sufficient detail of what they intend to do.
- Many proponents believe they should be **exempt from "offsetting" requirements** and/or that their obligations should be reduced. For example, the NCSSA was involved in numerous discussions with SA Power Networks who believe they should not have to "offset" clearance under powerlines. Recent changes to the formula for calculating the required "offset" have led to **significant lowering of payments** required for clearances across the vast majority of the State. Further discussion of the offsetting system is provided in response to Term of Reference #4.
- Many decisions are made by **delegation** to other agencies – in 2019-2020, more than 1,200 hectares were approved for clearance in decisions made under delegation<sup>31</sup> to agencies for whom native vegetation conservation is not their central remit, including those responsible for mining, energy and transport.

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<sup>31</sup> Native Vegetation Council Annual Report 2019-2020

As the Committee may be aware, the Regulations for the NV Act were re-drafted in 2017. The NCSSA suggests the Committee should investigate the impact of this re-write, for example on the number of applications received, the percentage that are approved and the associated impact on clearing in SA.

Other key questions the NCSSA believes the Committee should pursue through this inquiry include:

- How has the level of staffing (FTE) supporting the administration of the Act changed since the Act was introduced in 1991? This should include both central agency staff and regional staff, including authorised officers.
- What resources are dedicated specifically to compliance with the Act?
- Why has the Change Detection Program, which detects up to 50% of suspected breaches of the NV Act on average each year, been allowed to lapse due to 'lack of resources', as reported in the NVC Annual Report for 2019-20?
- Have all suspected breaches been adequately pursued?
- Are the number of prosecutions and other compliance outcomes over the life of the Act as would be expected for an Act that covers most of the State?
- Are penalties adequate to deter offending?

Based on this experience of the administration of the NV Act in recent years, the NCSSA believes the NV Act needs to be **strengthened and adequately resourced**, with specific suggestions as follows:

- Remove inappropriate exemptions to the NV Act, such as for 'major projects' and for individually named projects (e.g. SA Motorsport Park at Tailem Bend and for developments within Flinders Chase National Park) that prevent the Objects of the Act being achieved and undermine its integrity
- Strengthen requirements for proponents to demonstrate their adherence to the 'mitigation hierarchy', including through requiring the costing of alternative options
- Review delegations for decision-making under the NV Act
- Ensure all native vegetation is protected under the NV Act, not just vegetation deemed to be "intact stratum"
- Mandate that adequate survey be undertaken to assess the true impact of a clearance application to adequately identify the full range of biodiversity of a site, including threatened species
- Broaden the matter protected under the Act to include threatened ecological communities (both in SA and nationally recognised) and explore opportunities to better integrate the NV Act with national environmental legislation
- Reflect carbon storage and other ecosystem services in considerations relating to clearance applications
- Amend the formulas for assessing if a clearance is 'seriously at variance' with the Principles of Clearance to ensure they are biologically meaningful and are appropriate for achieving the Objects of the Act
- Increase staffing to administer the Act, including for compliance

### *How it compares to other jurisdictions*

As a South Australian-based eNGO, the NCSSA cannot provide the Committee with a comprehensive comparison of the NV Act with other Australian jurisdictions, however, the NCSSA notes that all States and Territories are signatories to the National Native Vegetation Framework (except Victoria, which supports the Framework in-principle).<sup>32</sup> A central goal of the Framework is to increase the national extent and connectivity of native vegetation.

The NCSSA refers the Committee to Evans (2016)<sup>33</sup> for a comprehensive analysis of land clearance in Australia since the 1970s. The NCSSA notes that, whilst South Australia was the first jurisdiction to introduce land clearing controls, this occurred after 75% of the agricultural zone had been cleared.

## **2. Explore the outcomes of any similar reviews in other jurisdictions in the past 3 years.**

Again, as a state-based eNGO, the NCSSA is not in a position to provide the Committee with a comprehensive exploration of all similar reviews in other Australian jurisdictions in the past three years.

However, the NCSSA is aware of a review in Victoria that resulted commenced in 2015 and resulted in changes in 2017<sup>34</sup>. Key changes included expanding the definition of protected native vegetation (from only vegetation that ‘makes a significant contribution to Victoria’s biodiversity’ to include all native vegetation), expanding the considerations of types of habitats that contribute to biodiversity conservation (for example, to specifically include wetlands) and widening the scope of decision guidelines beyond biodiversity to include ‘other values of native vegetation’, such as for waterway protection.

The NCSSA is also aware of a report by the NSW Natural Resources Commission (NRC) from July 2019 following reforms to the native vegetation management in that state in 2017<sup>35</sup>. In summary, the report shows:

- Clearing rates have increased almost 13-fold – from an annual average rate of 2,703ha a year under the old laws to 37,745ha under the new laws;
- Biodiversity in 9 out of 11 regions is now at risk;
- Unexplained clearing has increased, with the NRC concluding “compliance frameworks are inadequate and high rates of clearing pose a major risk”;
- The proposed ‘set aside’ areas and areas managed under conservation agreements that were supposed to offset cleared areas are woefully inadequate being 33,743 hectares below the minimum required area.<sup>36</sup>

The NCSSA is also aware that changes were made to Queensland’s land clearance controls in 2018, but is not aware if these changes were preceded by a review.

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<sup>32</sup> [Australia's Native Vegetation Framework - download the Framework \(environment.gov.au\)](#)

<sup>33</sup> Evans, MC 2016. Deforestation in Australia: drivers, trends and policy responses. *Pacific Conservation Biology*, 22: 130-150.

<sup>34</sup> [Review project history | Review of the native vegetation clearing regulations | Engage Victoria](#)

<sup>35</sup> Land management and biodiversity conservation reforms. Final advice on a response to the policy review point. Natural Resources Commission, NSW, July 2019.

<sup>36</sup> <https://www.edo.org.au/2020/04/02/native-veg-clearing-nsw-regulatory-failure/>

In considering practices in other jurisdictions, the NCSSA urges the Committee to reflect on the full range of factors that impact on rates of land clearance, which in addition to regulation can include economic factors such as commodity prices, climatic and biophysical factors such as rainfall, soil and vegetation type, as well as personal and social factors, such as localised awareness of and support for carbon markets.<sup>37</sup>

### **3. To investigate into the level of awareness, education and engagement of the community on the Native Vegetation Act.**

The NCSSA suspects that the level of awareness, education and engagement of the community with the *Native Vegetation Act 1991* is relatively low, and that this has been exacerbated by reductions in staffing to administer the Act over recent years.

#### *Bushfire*

A particular issue where awareness, education and engagement of the community in relation to native vegetation management is critical is bushfire. Following the 2019/20 bushfire season, the NCSSA is aware that calls were made for 'loosening' of clearance controls under the NV Act, for example:

“People have had enough of the bureaucracy. They want to be able to put decent boundary breaks in and better protect their properties (Michael Pengilly, KI Mayor).”<sup>38</sup>

However, the subsequent Independent Review of the 2019/20 bushfire season undertaken by Mick Keelty found:

“The Native Vegetation Council (NVC) is criticised for being slow to respond to hazard reduction applications but the problem appears to be with the community’s understanding of the process.”<sup>39</sup>

As the Review report summarised, the NV Act and NV Regulations were amended after the 2009 Victorian Bushfire Royal Commission into the Black Saturday Fires to give authority to approve or undertake fuel hazard reduction activities to individual landholders and the Chief Officer of the CFS. As a result of these amendments, the NVC is now mostly removed from the fuel hazard reduction process except for directly approving a small number of ecological burns on private land.

The Keelty Review highlighted that the CFS needs greater capacity to support native vegetation management, and included the associated action of “Increase CFS resources to support native vegetation management”.<sup>40</sup> Unfortunately, this has been deferred to a “longer term action” in the Marshall Government’s response to that report.<sup>41</sup>

The NCSSA also notes the exemptions that exist for fire hazard reduction through the NV Regulations, including clearing within 20 metres of a dwelling and up to 5 metres wide along a fenceline, and with CFS approval, the removal of large trees, fuel reduction activities, fire breaks and access tracks.

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<sup>37</sup> Heagney, EC, Falster, DS & Kovac, M. 2021. Land clearing in south-eastern Australia: Drivers, policy effects and implications for the future. *Land Use Policy*, 102, 105243.

<sup>38</sup> [Royal Bushfire Commission: Native veg review needed: Pengilly | Stock Journal | South Australia](#)

<sup>39</sup> Independent Review into South Australia’s 2019-20 Bushfire Season. Report written by Independent Bushfire Review Team, June 2020.

<sup>40</sup> Independent Review into South Australia’s 2019-20 Bushfire Season. Report written by Independent Bushfire Review Team, June 2020.

<sup>41</sup> [Final%20Comprehensive%20Response%20to%20Independent%20Bushfire%20Review%20Report%20-%202023%20September%202020.pdf \(safecom-files-v8.s3.amazonaws.com\)](#)



There is also a community perception that fire ‘wicks’ along roadsides<sup>42</sup>, however, there is also evidence that fire moves more slowly through native vegetation relative to other vegetation types<sup>43</sup>, like grasses. In any event, the Guidelines for the Management of Roadside Native Vegetation and Regrowth Vegetation include provisions for fire management, such as for fence line and transverse fire breaks (see Term of Reference 4, below, for further discussion of this).<sup>44</sup>

#### **4. Investigate the management of native vegetation in regard to road reserves and other property, including financial and vegetation offsets.**

##### *Roadside vegetation*

Roadside vegetation can be of very high biodiversity value – particularly in areas of the State where there has been broad scale clearance for agriculture. In these areas, such as on the Eyre and Yorke Peninsulas, remnant roadside vegetation and scattered paddock trees provide important habitat for flora and fauna and in some areas represent the only remaining remnants of the original vegetation. Due to its linear nature and accessibility, roadside vegetation is subject to a range of ecological threats such as illegal vegetation clearance and firewood collection, physical disturbance from road and rail maintenance activities, grazing and weed invasion.

Whilst the NCSSA acknowledges the need to actively manage roadside vegetation for safety and access (for example, for large agricultural machinery), due to its high conservation value, the management of roadside vegetation needs to be regulated. This is critical because the NCSSA is aware of a number of occasions where populations of species of high conservation concern, such as Spalding Blown Grass (*Lachnagrostis limitanea*) which is listed at both the state and national levels as endangered and the Pale Flax-lily (*Dianella longifolia* var. *grandis*) which listed as is rare in South Australia, have been destroyed by roadside vegetation removal or ‘improvements’ such as road shoulder sealing.

In South Australia, the management of roadside vegetation is the responsibility of local government bodies and state road authorities in accordance with “roadside vegetation management plans” required under the NV Regulations. Although the NCSSA is aware that some local governments have developed such plans, there may be others that have not, which could lead to inconsistencies in the way roadside vegetation is managed across the State.

The Committee may therefore wish to seek further clarity regarding which plans exist, and specifically whether plans reference the Rail and Roadside Significant Sites System (RSS)<sup>45</sup> which was developed by the Department of Infrastructure and Transport to assist in the identification and protection of important cultural and natural heritage sites along rail corridors and roads that it maintains. Although the system provides a useful framework for the protection of roadside vegetation, many Council and utility workers, roadside contractors and landholders are not aware of the system or the need to refer to the database for location of threatened species that occur at these sites to avoid adverse impacts from their activities.

The NCSSA also refers the Committee mapping showing the location of roadside vegetation in the agricultural parts of the State<sup>46</sup>, however, there are many areas where no such mapping has been undertaken such as on the Eyre Peninsula, the lower end of the Yorke Peninsula and Kangaroo Island.

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<sup>42</sup> [KI fire frustration lingers, calls to change native vegetation laws | Stock Journal | South Australia](#)

<sup>43</sup> [Bushfire | Geoscience Australia \(ga.gov.au\)](#)

<sup>44</sup> Guidelines for the Management of Roadside Native Vegetation and Regrowth Vegetation

<sup>45</sup> [Roadside Significant Sites Database - Department for Infrastructure and Transport - South Australia \(dpti.sa.gov.au\)](#)

<sup>46</sup> [https://data.environment.sa.gov.au/Content/Publications/NEW\\_A3\\_RoadsideVeg\\_FEB2020.pdf](https://data.environment.sa.gov.au/Content/Publications/NEW_A3_RoadsideVeg_FEB2020.pdf)

Further resources are required to complete the mapping of roadside vegetation across the State if we are to effectively manage these important remnants of native vegetation.

### *Offsets*

The use of 'offsets' to compensate for the unavoidable, residual adverse impacts of a clearance activity on native vegetation is becoming increasingly popular both in Australia and overseas, particularly to facilitate infrastructure developments and mining.

The central premise of an 'offset' is that negative impacts on biodiversity in one place can be 'offset' by undertaking positive actions elsewhere.

Both within Australia and overseas there are a wide range of mechanisms and metrics that are applied to guide the establishment of an 'offset'. Unfortunately, the rapid growth and broad application of 'offset' programs often lacks both scientific rigour and resources for ongoing monitoring to determine whether the 'offset' area is achieving the intended outcome of 'no net loss' for biodiversity.

The NCSSA refers the Committee to Maron et al<sup>47</sup> which provides a review of biodiversity offset policies across Australia and Lindenmayer et al<sup>48</sup>, which provides an ecological assessment of an unsuccessful offset in southern NSW that entailed the establishment of nest boxes to compensate for losses of natural hollows due to the widening of Australia's most heavily used interstate freeway, the Hume Highway.

"Offsetting" in South Australia was introduced with the current iteration of the Act, in 1991, although the NCSSA understands that the NVC's policy approach to the way "offsetting" is to be delivered has changed substantially over the past 30 years.

Currently, in South Australia, an "offset" is known as a 'Significant Environmental Benefit' (SEB). Section 29(11) of the NV Act provides four ways that a SEB may be achieved:

1. Establishing and managing native vegetation on land (requires NVC approval)
2. Protecting and managing existing areas of native vegetation on land (requires NVC approval)
3. Entering into a Heritage Agreement which provides for ongoing protection of established native vegetation on land (requires NVC and Environment Minister approval)
4. Payments into the Native Vegetation Fund (quantity requires NVC approval).

The first of these three options are referred to as an 'on ground' SEB because an area is identified for management, usually an existing area of native vegetation. The size of the required area is based on a formula (metric). The final option is a monetary payment into the Native Vegetation Fund, the quantum of which is also based on a formula (metric).

Under the NV Act, according to the South Australian SEB Policy, a SEB must result in an overall environmental gain, considering both the loss of vegetation at the impact site and the gain in vegetation (either condition, protection and/or extent) to be achieved through actions undertaken elsewhere. The SEB aims to compensate for the residual adverse impacts of an activity on native vegetation after all other steps in the mitigation hierarchy have been considered. Unfortunately, as

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<sup>47</sup>Maron M, Bull JW, Evans MC & Gordon, A 2015. Locking in loss: Baselines of decline in Australian biodiversity offset policies. *Biological Conservation*, 192: 504-512 <http://dx.doi.org/10.1016/j.biocon.2015.05.017>

<sup>48</sup>Lindenmayer D, Crane M, Evans M, Maron M, Gibbons P, Bekessy S & Blanchard W 2017. Anatomy of a failed offset. *Biological Conservation*, 210:286-292. [DOI:10.1016/j.biocon.2017.04.022](https://doi.org/10.1016/j.biocon.2017.04.022)

discussed earlier in this submission, true adherence to the mitigation hierarchy in all clearance applications is questionable.

#### *Establishing and delivering an on-ground SEB*

There is little publicly available information on the current number and size of on-ground SEB areas in South Australia<sup>49</sup> except for locations which are available from the online mapping tool Nature Maps.<sup>50</sup>

Similarly, there is currently little, if any, publicly available information providing details about monitoring and assessment of the condition of SEB offset areas in South Australia.

A review of existing biodiversity offset methodologies employed in South Australia (Crossman et al., 2009<sup>51</sup>) concluded that resourcing for the establishment, management, tracking and ongoing evaluation and enforcement of “offset” areas was insufficient. This report also stated that limitations in the information available about both clearance and SEB areas had made it very difficult to evaluate the effectiveness of the SEB scheme in achieving significant environmental benefits or, indeed, “no net loss” – both in terms of quantity and quality of vegetation (and indirectly biodiversity) across the state (Crossman et al., 2009).

The former Department of Environment, Water & Natural Resources completed an internal review of SEB compliance and monitoring in 2010<sup>52</sup>, based on 38 sites located in four NRM Regions including 19 in the SA Murray Darling Basin region, 12 in the Adelaide and Mt Lofty region, five in the South East region and two in the Northern and Yorke region. The review found that only 13 (34%) had submitted a Management Plan to the NVC and most of these were considered less than satisfactory. Of great concern was the fact that a Management Plan had not been submitted for 22 sites (58%). Management Plans are a fundamental component of the SEB offset and should be approved before clearance applications are given approval.

The 2010 internal review also found that, of the 38 SEB sites assessed, a startling 26 (68%) had undertaken either no or limited follow-up work for maintaining or improving the condition of vegetation in the SEB Area. This level of commitment to ongoing management of offset areas is unacceptable and further compliance and monitoring is essential if SEBs are to be effective in maintaining or improving the biodiversity conservation values of offset areas. Depending on the site, specific follow-up work includes activities such as weed control, pest animal control, revegetation plantings or infill, fencing to protect remnants from stock grazing and erosion control. Failing to address these key land management issues will lead to further degradation at SEB sites and undermine the biodiversity benefit that such areas are intended to provide.

The 2010 review recommended that an appropriately resourced program for monitoring compliance with clearance conditions and biodiversity value of SEB offsets was required that included:

- an annual program for assessing compliance of all clearance approvals from 1 January 2011, and
- a project to assess the compliance of the remaining 165 sites not assessed during the review.

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<sup>49</sup> [Department for Environment and Water | Offsetting](#)

<sup>50</sup> [NatureMaps Home \(environment.sa.gov.au\)](#)

<sup>51</sup> Crossman ND, Williams A, Coggan A, Collard S, Proctor W, Kinnane E, Jaunay L, Bartsch D & Bryan BA 2009. *Establishing a Biodiversity Market for South Australia: Stage 1 – Review and Scoping*. CSIRO

<sup>52</sup> Fisher A, Hurrell B, Wallace R, Della Torre B, Jaunay L & Allanson A 2010. SEB Compliance and Monitoring 2009-2010 Final Project Report Department of Environment, Water & Natural Resources Native Vegetation and Biodiversity Management Unit

As far as the NCSSA is aware, neither of these recommendations have yet been implemented more than ten years on. There is an urgent need for further resources for both compliance with SEB conditions and ecological monitoring to determine whether offsets are being delivered, and if so, are achieving the intended biodiversity outcomes.

Questions for the Committee to pursue regarding on-ground SEBs:

- What response was made to the 2010 compliance and monitoring report that indicated woefully inadequate compliance with on-ground SEB requirements?
- Specifically, is there any systematic monitoring of compliance with on-ground SEB commitments currently being undertaken?
- Does a ‘register’ of SEB sites exist, and is it fully populated?
- How many existing SEB sites are subject to NVC-approved management plans?

#### *Payment in the Native Vegetation Fund*

According to NVC Annual Reports, more than \$30 million has reportedly paid into the Native Vegetation Fund, mainly for “offsets”, since 2008 but there is very little publicly available information regarding how these funds have been spent. Specifically, there is no publicly available evidence to demonstrate that the requisite “significant environmental benefit” has been achieved as required to compensate for vegetation clearances with these funds.

Information available on the reported \$12.4m of grants that have been paid out of the Fund to date is only of the highest level and does not demonstrate any specific environmental benefit (Figure 2).<sup>53</sup>

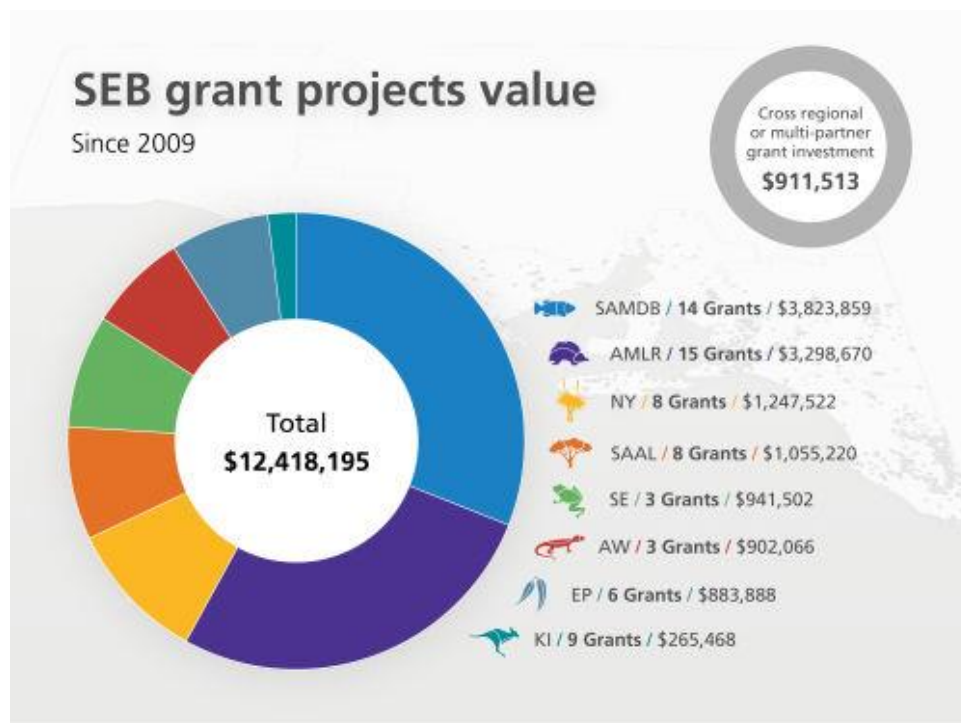


Figure 2. Graph from the Department for Environment and Water website outlining how funds from the Native Vegetation Fund have been expended

<sup>53</sup> [Department for Environment and Water | Significant Environmental Benefit Grants](#)

There is a clear need for greater transparency regarding expenditure from the Native Vegetation Fund, particularly regarding how the required “significant environmental benefit” has been achieved for each clearance.

Questions for the Committee to pursue regarding “offset” payments:

- How much has been expended from the Native Vegetation Fund for offsets since 1991?
- How have funds expended? For example, what policies or criteria have been used to guide decision making?
- What evidence is available to demonstrate that this expenditure has achieved the requisite “significant environmental benefit”?
- Have funds from the Native Vegetation Fund been used for anything other than their intended purpose? Specifically, have they ever been used to pay staff salaries rather than deliver on-ground actions?
- Have payments ever been made for SEB areas on land already dedicated for conservation, such as under the National Reserve System?
- Have there ever been multiple payments made to the same SEB site?

#### *Metrics for calculating SEB requirements*

The current approach to SEBs is outlined in the SEB Policy with associated metrics for calculating requirements outlined in the SEB Guide.<sup>54</sup>

For payments into the Native Vegetation Fund, the Guide outlines metrics that assume an average figure of \$20,000/ha to restore a degraded site in moderate condition to one of good condition over a 10 year period. The NCSSA is concerned that this assumption could underestimate the cost of management and that it is only for 10 years, rather than in perpetuity. The NCSSA refers the Committee to the NSW Biodiversity Conservation Trust, which manages funds in a way such that the ongoing costs of land management can be met, in perpetuity.<sup>55</sup>

Unique, long-term research examining the environmental gains from commitments by landholders to improve the management of vegetation on their properties in the Mount Lofty Ranges showed that gains were modest and took a long time (10 years) to accrue.<sup>56</sup> This research can be applied to current “offsetting” arrangements, and it indicates that due to these modest gains in condition, for any “offsetting” in similar ecosystems, a high offset multiplier is required for every hectare cleared to achieve the requisite equivalent gains. This is not being achieved in practice, with the area being “better managed” being determined by an uncalibrated metric without proper evidence-based research work.

NCSSA was involved in a consultation with DEW about the SEB Policy and Guide in 2017 and a review of the SEB metric calculations in 2019. The review resulted in a significant reduction in the figures used to calculate the “Economies of Scale” for large parts of the state compared with previous figures and

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<sup>54</sup> Guide for calculating a Significant Environmental Benefit under the *Native Vegetation Act 1991* and *Native Vegetation Regulations 2017*, July 2020

<sup>55</sup> [Home | BCT \(nsw.gov.au\)](#)

<sup>56</sup> Bond AJ, O’Connor PJ & Cavagnaro TR. 2019. Remnant woodland biodiversity gains under 10 years of revealed-price incentive payments. *Journal of Applied Ecology* 56:1827–1838.

reduced subsequent payments into the NV Fund. This remains a key concern for NCSSA as the funds levied appear inadequate to meet the costs of achieving the required “environmental benefit”, along with the reduction in the SEB points and payments for medium and small trees proposed for clearance.

*Locking in loss and the risks of ‘reconstruction’*

“Offsets” are usually provided through ‘better managing’ existing vegetation, since:

“The management and protection of remnant vegetation in moderate condition will generally provide the greatest gain.”<sup>57</sup>

This approach means that extent of vegetation is always being lost through clearance.

A recent policy change to address this means there is now a requirement for reconstructing vegetation for large clearances above a certain ‘damage’ threshold. Whilst large scale restoration (reconstruction) of habitat is clearly needed, the NCSSA remains concerned that there is currently insufficient evidence to demonstrate that reconstructed vegetation communities can ever recreate the functioning ecology of remnant vegetation. If such areas are to be a requirement for SEB’s then these uncertainties and extremely long time frames to reconstruct mature vegetation communities and the habitat they provide need to be accounted for. The financial input to see an area of revegetation establish and recreate a mature, self-sustaining, functional ecosystem would need to be calculated over 100-200 years whereas most SEB contracts do not extend for such a timeframe.

Questions for the Committee to pursue:

- Do the metrics used to calculate SEB payments result in payments that equal the actual cost of management actions in order to achieve a “significant environmental benefit” that is maintained in perpetuity?
- How much habitat has been ‘reconstructed’ using SEB funds, and has there been any monitoring of the success of this?

The NCSSA notes that in 2019, Carillion Holdings Pty Ltd applied to clear 15 scattered and 2.35 hectares of native vegetation at their Peppertree Wines property, which is one of the few clearance applications refused by the NVC. The area proposed to be cleared had been dedicated as a SEB following earlier clearance, and the NCSSA commends the NVC for following the SEB Policy and ensuring that:

“The SEB Area must be conserved in perpetuity for the growth of native vegetation and must not be used in a way that is inconsistent with that dedication.”

## **6. Any other related matter.**

### *Heritage agreements*

Since the Heritage Agreement program was first introduced in 1980, more than 2800 landholders have agreed to ensure the long-term protection of over 1.8 million hectares of the state’s native vegetation.<sup>58</sup>

Unfortunately, funding to support the program have reduced over recent years, as demonstrated in a recent report which found funding for Heritage Agreement landholders from the Native Vegetation Fund declined by more than 99 percent, from \$453,000 per year in 2009 to \$4,000 per year in 2018,

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<sup>57</sup> Policy for a Significant Environmental Benefit under the *Native Vegetation Act 1991* and *Native Vegetation Regulations 2017*, Native Vegetation Council, July 2020.

<sup>58</sup> [Department for Environment and Water | Heritage Agreements](#)

according to NVC Annual Reports. There has also been a long-term decline in the establishment of new Heritage Agreements: there were 811 new Heritage Agreements established from 1990 to 1999 (81 per year), declining to 310 from 2000 to 2009 (31 per year) and 117 between 2010 and 2019 (12 per year).<sup>59</sup>

A recent attempt to revitalise the program received \$3m of funding over two years to 2021<sup>60</sup>, but funding for future years has not yet been guaranteed.

The NCSSA believes significantly increased and sustained funding is required to support Heritage Agreement owners, and that this should be based on the actual cost of delivering the required conservation actions.

A specific example of a Heritage Agreement under threat is at Whalers Way, as mentioned under Term of Reference #1. There is a proposal to build a rocket launching facility on pristine coastal vegetation, and this is exempted from the NV Act via a 'major project' declaration.

As included in the SEB Policy,

“A Heritage Agreement is an agreement between the Minister and the owner of the land, is binding on any current or future owners or occupiers of the land and may only be varied or terminated with the approval of the Minister and NVC.”

Unfortunately, the NVC has approved an amendment to this Heritage Agreement based on information of questionable accuracy regarding the condition of the site, and habitat for threatened species will be destroyed if a permanent rocket-launching facility is approved.

If greater support were provided to Heritage Agreement owners, the NCSSA believes that alternative options, including clearance for industrial facilities, would be less attractive.

The NCSSA also believes that greater harmonisation is required between the NV Act and the *Pastoral Land Management and Conservation Act 1989* to make it clear that Heritage Agreements can be entered into on pastoral leases. The proposed *Pastoral Lands Bill* will not achieve this, rather, it will make these conservation agreements less likely, if not impossible, on pastoral lands.

### *Solar farms*

In 2018, the NCSSA wrote to the Environment Minister regarding a 'spike' in clearance of native vegetation for solar farms in SA.

Whilst the NCSSA supports the transition of SA to a low carbon economy, this need not come at the cost of precious remnant native vegetation and the biodiversity it supports. **Clearance for solar farms was the leading cause of loss of our remnant native vegetation between 2016 and 2018**, responsible for nearly 60% of the area approved for clearance, an area of nearly 4,000 ha (this figure excludes two large areas of clearance for watering points and grazing in the pastoral zone).

NCSSA understands that a range of factors influence the location of a solar farms, such as amount of sunlight each day and the location of transmission lines and substations. However, clearance of native vegetation in the southern, agricultural region of South Australia has been extensive, and it should be

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<sup>59</sup> Kumar S, Pennington A & Cowell S 2019. A Natural Legacy: Revitalising private land conservation in South Australia for nature, people and thriving rural landscapes. A report to Nature Foundation of South Australia, Australian Land Conservation Alliance and The Pew Charitable Trusts

<sup>60</sup> [Nature Foundation - Revitalising Private Conservation](#)

possible to locate solar farms on already-cleared, often marginally productive, land whilst still meeting other requirements.

Solar farms by their nature have a relatively short lifespan (20-30 years), after which time the technology for any given set of panels will be superseded. Native vegetation, once cleared, is expensive and difficult (if not impossible) to replace through revegetation.

Better planning is therefore required to avoid large clearances for infrastructure and other forms of development. The NCSSA acknowledges the introduction of the Native Vegetation Overlays as part of recent reforms to the land-use planning system in South Australia<sup>61</sup>, and the Committee may wish to investigate the operation of these overlays since they became effective in March 2021.

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<sup>61</sup> [Planning and Design Code](#)