



AUSTRALIAN NETWORK for PLANT CONSERVATION INC

ANPC Submission Response to Statutory Review of the NSW Biodiversity Conservation Act 2016

21 April 2023

Summary

The Australian Network for Plant Conservation (ANPC) appreciates this opportunity to make a submission on the statutory review of the NSW Biodiversity Conservation Act 2016 and provides the following comments and recommendations. We highlight a number of areas where the current legislation is not achieving its stated objectives and suggest how to improve biodiversity conservation across NSW. We also note where components of the legislation are working well.

Major Points

1) Application of precautionary principle.

The BC Act objectives are required to be consistent with the principles of ESD, in particular we note from *Protection of the Environment Administration Act 1991* Section 6(2):

‘(a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by—

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment,

The precautionary principle needs to be embedded in all aspects of the BC Act, including listing of threatened species, populations, and ecological communities; consideration of regulatory actions; and implementation of recovery actions in the Saving Our species program. Currently, the regulatory side of the BC Act does not give enough consideration of the precautionary principle. Below we provide an example of where the precautionary principle needs to more adequately applied in regulation of Serious and Irreversible Impact to species and ecological communities.

2) Failure to adequately apply the concept of Serious and Irreversible Impact (SAIL)

The concept of SAIL was developed for the *BC Act* to identify, through a sound scientific underpinning, those species, populations and ecological communities that cannot tolerate further loss. The SAIL list is based on criteria that themselves are underpinned by global best practice, i.e., the extinction risk criteria from IUCN Red List for Species or Ecosystems (critically Endangered criteria, see Le Breton et al. 2019 for SAIL application to NSW flora). The precautionary principle needs to be applied to those entities recognised as SAIL, in particular *Protection of the Environment Administration Act 1991* Section 6(2)(a)(i) ‘careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment’, i.e., for all SAIL listed entities, losses to development must be avoided, (red flagged) and there should be no option for mitigation or offsetting for SAIL entities. This is a necessary foundation to avoid ongoing species declines and extinctions. It set a bar for where there can be no further acceptable loss. Offsetting



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as employed in NSW, involves losses now for potential future gains and does not adequately apply the precautionary principle to SAI entities and fails to ensure there is no offsetting for SAI entities.

3) Failure to list any new Areas of Outstanding Biodiversity Value (AOBV) since the commencement of the BC Act

AOBV criteria are based on global best practice criteria for IUCN Key Biodiversity Areas (IUCN 2016) and are needed as a mechanism to bridge the gap between management of protected areas for conservation and management and conservation of threatened entities. AOBV provide criteria for identifying and then protecting areas, including key refugia for biodiversity, areas of high concentrations of threatened species, areas of high ecological integrity. Application of AOBVs aligns with the Kunming-Montreal Global biodiversity framework, including the role for AOBVs in 'reducing to near zero the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity'.

At the time of the enactment of the *BC Act*, four species that had identified critical habitat (under the previous *Threatened Species Conservation Act*) were transferred to AOBV listings under the *BC Act*. It has now been over 5 years and there have been no additional listings of AOBV under the *BC Act*, even though guidelines have been developed (DPIE 2021), and several key AOBV candidates have been assessed as warranting listing as AOBV.

4) Failure to adequately resource and deal with threats to biodiversity including clearing, weed, pests, pathogens, adverse fire regimes and climate change.

The *BC Act* has currently over 1100 threatened species listings and a funded Saving Our Species (SOS) program. As only a subset of threatened listings currently have active funding for conservation, it is clear that recovery of species, populations and ecological communities is underfunded and needs additional resourcing as clearly indicated by (Wintle et al. 2019).

Further there are some 39 Key Threatening Processes listed under the *BC Act*, including key threats such as clearing and fragmentation, weeds, pests and pathogens and high fire frequency. However, many of these remain major threats to ongoing decline in biodiversity (including clearing, feral deer, and horses, feral goats, pathogens, high fire frequency and weeds). Significantly increased resourcing is needed to ameliorate these threats to prevent both declines in existing threatened species and alarmingly, more species, populations and ecological communities declining to become eligible for threatened status.

5) Need to make threatened listings as comprehensive and up to date as possible.

In order to actually prevent extinctions, reduce species declines, enact suitable conservation measures and flag consideration in regulation, species and ecological communities must have been assessed as to whether they warrant listing as threatened or not. This requires that the schedules of threatened listings under the *BC Act* are **both** comprehensive and up to date. To achieve this, all taxonomic groupings where data are available should have comprehensive listings and these need to be regularly revised to keep them up to date.

Currently, vertebrate listings are relatively comprehensive (although some frog and reptile groups may need further consideration). However, vascular plant listings are far from comprehensive (Alfonzettii et



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al. 2019) and while sufficient data are available for vascular plants to be assessed as threatened or otherwise (i.e., to reach a comprehensive set of listings), at present we estimate that the list of threatened vascular plants on the BC Act represents only 40-50% of those vascular plants that should currently warrant listing as threatened. For these threatened but currently unlisted plants there is a high risk of decline and even extinction. This lack of comprehensive listings for plants has been highlighted in assessments of the impacts of the 2019/20 fires on plants (Gallagher 2020, Gallagher et al. 2021, 2022) where numerous unlisted NSW plant species have been identified as warranting listing as threatened. Clearly further urgent resourcing for the NSW Threatened Species Scientific Committee is needed to make the vascular plant listings comprehensive. Failure to do so will see ongoing global plant extinctions in NSW.

There are very few listings for non-vascular plants, fungi and invertebrates on the *BC Act*, largely due to a lack of adequate information on taxonomy, distribution, life history and threats for these organisms. It remains an issue as to how protection of these poorly known groups can be better accommodated under the BC Act, although more comprehensive listings of associated ecological communities or AOBVs may provide a way forward.

The list of threatened ecological communities is also not comprehensive and needs urgent resourcing to develop a comprehensive set of threatened ecological communities for NSW.

Consultation questions and responses:

1. How effective are the objects of the Biodiversity Conservation Act to restore, conserve and enhance biodiversity today and into the future?

The precautionary principle needs to be embedded in all aspects of the BC Act and relevant components of the LLS Act, including listing of threatened species, populations, and ecological communities; consideration of regulatory actions; and implementation of recovery actions in the Saving Our species program. Currently, the regulatory side of the BC Act does not give enough consideration of the precautionary principle. Below we provide an example of where the precautionary principle needs to more adequately applied in regulation of Serious and Irreversible Impact to species and ecological communities.

The concept of SAIL was developed for the BC Act to identify, through a sound scientific underpinning, those species, populations and ecological communities that cannot tolerate further loss. The SAIL list is based on criteria that themselves are underpinned by global best practice, i.e., the extinction risk criteria from IUCN Red List for Species or Ecosystems (critically Endangered criteria, see Le Breton et al. 2019 for SAIL application to NSW flora). The precautionary principle needs to be applied to those entities recognised as SAIL, in particular Protection of the Environment Administration Act 1991 Section 6(2)(a)(i) 'careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment', i.e., for all SAIL listed entities, losses to development must be avoided, (red flagged) and there should be no option for mitigation or offsetting for SAIL entities. This is a necessary foundation to avoid ongoing species declines and extinctions. It sets a bar for where there can be no further acceptable loss. Offsetting as employed in NSW, involves losses



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now for potential future gains and does not adequately apply the precautionary principle to SAIL entities and fails to ensure there is no offsetting for SAIL entities.

2. *Is the current purpose to conserve biodiversity consistent with the principles of Ecologically Sustainable Development appropriate?*

The purpose is consistent but as described above the application of the precautionary principle in parts of the BC Act and associated regulations is deficient (see Q1 above).

3. *How could the Act best support national and international biodiversity aspirations including climate change adaptation, nature positive and restoration goals?*

One aspect that has not been adequately pursued is Areas of Outstanding Biodiversity Value (AOBVs). Within the BC Act and regulation, AOBV criteria are based on global best practice criteria for IUCN Key Biodiversity Areas (IUCN 2016) and are needed as a mechanism to bridge the gap between management of protected areas for conservation and management and conservation of threatened entities. AOBV provide criteria for identifying and then protecting areas, including key refugia for biodiversity, areas of high concentrations of threatened species, and areas of high ecological integrity. Application of AOBVs aligns with the Kunming-Montreal Global biodiversity framework, including the role for AOBVs in 'reducing to near zero the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity'.

At the time of the enactment of the *BC Act*, four species that had identified critical habitat (under the previous *Threatened Species Conservation Act*) were transferred to AOBV listings under the *BC Act*. It has now been over 5 years and there have been no additional listings of AOBV under the *BC Act*, even though guidelines have been developed (DPIE 2021), and several key AOBV candidates have been assessed as warranting listing as AOBV.

4. *How could the Act better integrate Aboriginal knowledge and support the aspirations of Aboriginal people in biodiversity conservation?*

Ongoing engagement with indigenous people.

5. *How current and comprehensive are the existing elements of the Act for biodiversity conservation?*

There is an urgent need to ensure the current listings under the BC Act are both comprehensive and up to date. In order to actually prevent extinctions, reduce species declines, enact suitable conservation measures and flag consideration in regulation, species and ecological communities must have been assessed as to whether they warrant listing as threatened or not. This requires that the schedules of threatened listings under the *BC Act* are **both** comprehensive and up to date. To achieve this, all taxonomic groupings where data are available should have comprehensive listings and these need to be regularly revised to keep them up to date.

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(Alfonzettii et al. 2019) and while sufficient data are available for vascular plants to be assessed as threatened or otherwise (i.e., to reach a comprehensive set of listings), at present we estimate that the list of threatened vascular plant on the BC Act represents only 40-50% of those vascular plants that should currently warrant listing as threatened. For these threatened but currently unlisted plants there is a high risk of decline and even extinction. This lack of comprehensive listings for plants has been highlighted in assessments of the impacts of the 2019/20 fires on plants (Gallagher 2020, Gallagher et al. 2021, 2022) where numerous unlisted NSW plant species have been identified as warranting listing as threatened. Clearly further urgent resourcing for the NSW Threatened Species Scientific Committee is needed to make the vascular plant listings comprehensive. Failure to do so will see ongoing global plant extinctions in NSW.

There are very few listings for non-vascular plants, fungi and invertebrates on the *BC Act*, largely due to a lack of adequate information on taxonomy, distribution, life history and threats for these organisms. It remains an issue as to how protection of these poorly known groups can be better accommodated under the BC Act, although more comprehensive listings of associated ecological communities or AOBVs may provide a way forward.

The list of threatened ecological communities is also not comprehensive and needs urgent resourcing to develop a comprehensive set of threatened ecological communities for NSW.

In addition, there is an urgent need for adequate resourcing and for management of threats to biodiversity (see Wintle et al. 2019 Spending to save: What will it cost to halt Australia's extinction crisis? Conservation Letters 12:e12682).

Also as outlined in response to Q3, there is a need to apply the AOBV concept beyond critical habitat for four species.

6. *Is there other architecture that should be included to achieve the objects of the Act?*

To achieve no further extinctions three key elements are needed. Firstly, an up to date and comprehensive set of listings of what is threatened (see response to Q5), Secondly sufficient funding for recovery actions to halt decline in species and to manage existing and emerging threats to stop further species becoming threatened. Thirdly, a capacity in legislation and regulation to actually stop further clearing, particularly for those species, populations and ecological communities that have been identified as not tolerating further loss (see response to Q1), ie. the application of red flags (no further loss and no permitted mitigation or offsetting) for species, populations and ecological communities listed as SAIL. This is critical to prevent ongoing declines and extinctions.

Conserving threatened species and ecological communities

7. *How could the Biodiversity Conservation Act best support landscape-scale actions to prevent species from becoming threatened?*

Increased resourcing to mitigate threats.



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8. *Are there improvements that could be made to Areas of Outstanding Biodiversity Value and the Saving our Species program to give them a greater role in enhancing biodiversity?*

AOBVs

AOBV criteria are based on global best practice criteria for IUCN Key Biodiversity Areas (IUCN 2016) and provide criteria for identifying and then protecting areas of key refugia for biodiversity, areas of high concentrations of threatened species, areas of high ecological integrity. Application of AOBVs aligns with the Kunming-Montreal Global biodiversity framework, including the role of AOBVs in 'reducing to near zero the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity'.

At the time of the enactment of the BC Act, four species that had identified critical habitat (under the previous Threatened Species Conservation Act) were transferred to AOBV listings under the BC Act. It has now been over 5 years and there have been no additional listings of AOBV under the BC Act, even though guidelines have been developed (DPIE 2021), and several key AOBV candidates have been assessed as warranting listing as AOBV.

Increased resourcing for development of, listing and management of AOBV is urgently needed.

SOS program

The BC Act has currently over 1100 threatened species listings and a funded Saving Our Species (SOS) program. As only a subset of threatened listings currently has active funding for conservation, it is clear that recovery of species, populations and ecological communities is underfunded and needs additional resourcing as clearly indicated by (Wintle et al. 2019). Additionally, for many funded threatened species only a small subset of the known distribution in NSW is included in any SOS conservation program. For remaining parts of the distribution, no effective conservation is undertaken. This is not species conservation but site conservation for many entities and risks increased species declines and losses.

Further there are some 39 Key Threatening Processes listed under the BC Act, including key threats such as clearing and fragmentation, weeds, pests and pathogens and high fire frequency. However, many of these remain major threats to ongoing decline in biodiversity (including clearing, feral deer, and horses, feral goats, pathogens, high fire frequency and weeds). Significantly increased resourcing is needed to ameliorate these threats to prevent both declines in existing threatened species and alarmingly, more species, populations and ecological communities declining to become eligible for threatened status.

9. *How can perspectives of Aboriginal people and indigenous knowledge be embedded in the conservation of threatened species and ecological communities?*

Increased engagement across implementation of conservation measures for threatened entities and management of threats to biodiversity.



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Private land conservation and investment

10. How could the Biodiversity Conservation Act best support partnerships with private landholders to conserve, restore and enhance biodiversity across New South Wales?

11. How could the Act best support strategic landscape-scale biodiversity conservation outcomes and improve connectivity?

Adoption of global best practice ecological restoration. See for example the recently developed Australian 'Florabank Guidelines – best practice guidelines for native seed collection and use' (funded by the NSW Environmental Trust) <https://www.florabank.org.au/guidelines/> and the SER Australasia 'National standards for the practice of ecological restoration in Australia' <https://www.seraustralasia.com/standards/National%20Restoration%20Standards%202nd%20Edition.pdf>.

Referencing, and adopting and resourcing the recommendations given in the ANPC's 'Healthy Seeds Roadmap - A strategic plan to improve native seed supply for ecological restoration in NSW' (funded by the NSW Environmental Trust) which details how to secure a reliable, genetically-appropriate, native seed supply in NSW for restoration <https://www.anpc.asn.au/healthy-seeds/>.

12 How could the Act enable financial investment by government, businesses and philanthropic organisations?

Fundamentally it is the government's role to fund and implement biodiversity conservation and the government should therefore provide the necessary funding that is adequate to mean needs (eg. see Wintle et al. 2019). Encouraging businesses and philanthropic organisations to also invest is worthwhile, but it cannot come at the cost of less investment by the government.

Biodiversity Offsets Scheme

13. Is the Biodiversity Conservation Act providing an effective mechanism to ensure that the right developments and land use changes are being assessed?

14. Does the Act provide the appropriate framework for avoiding and minimising impacts, and addressing serious and irreversible impacts?

Clearly not.

The concept of SAIL was developed for the BC Act to identify, through a sound scientific underpinning, those species, populations and ecological communities that cannot tolerate further loss. The SAIL list is based on criteria that themselves are underpinned by global best practice, i.e., the extinction risk criteria from IUCN Red List for Species or Ecosystems (critically Endangered criteria, see Le Breton et al. 2019 for SAIL application to NSW flora). The precautionary principle needs to be applied to those entities recognised as SAIL, in particular Protection of the Environment Administration Act 1991 Section 6(2)(a)(i) 'careful evaluation to avoid, wherever practicable, serious



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or irreversible damage to the environment', i.e., for all SAI listed entities, losses to development must be avoided, (red flagged) and there should be no option for mitigation or offsetting for SAI entities. This is a necessary foundation to avoid ongoing species declines and extinctions. It sets a bar at where there can be no further loss. Offsetting as employed in NSW, involves losses now for potential future gains and does not adequately apply the precautionary principle to SAI entities. Additionally, the current listings are neither comprehensive (particularly for vascular plants) nor up to date- see response to Key Point 5 above.

15. Can the Act in its current form result in improved ecological and environmental outcomes?

This can only happen if the following points are addressed. Firstly, an up to date and comprehensive set of listings of what is threatened (see response to Q5). Secondly sufficient funding for recovery actions to halt decline in species and to manage existing and emerging threats to stop further species becoming threatened (see for example Wintle et al 2019). Thirdly, a capacity in legislation and regulation to actually stop further clearing, particularly for those species, populations and ecological communities that have been identified as not tolerating further loss (see response to Q1), ie the application of red flags (no further loss and no permitted mitigation or offsetting) for species, populations and ecological communities listed as SAI at a minimum. This is critical to prevent ongoing declines and extinctions.

16. How can complexity and costs be minimised while still achieving positive biodiversity outcomes?

Enact red flags for all SAI entities.

17. How could the Act better support an effective and efficient offset market?

Biodiversity Certification

18. How can the Biodiversity Conservation Act support better 'up front' consideration of impacts on biodiversity from development?

Impacts need to be assessed on a case-by-case basis. Cumulative impacts also need to be incorporated. Red flags for SAI entities need to be applied and enacted with no exceptions.

19. How can the Act support better consideration of impacts on biodiversity from development at a regional level?

Enact red flags for all SAI entities. Cumulative impacts also need to be incorporated.

Regulating impacts on, and caring for, native animals and plants



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20. How could the Biodiversity Conservation Act best support the protection of native animals and plants?

See major points above and responses to Q 1,3,5,6,8 above. Enact red flags for all SAI entities. Cumulative impacts also need to be incorporated.

21. Are the requirements and conditions for biodiversity conservation licences in the Act suitable?

22. Do you have any suggestions for improvements?

See major points above and responses to Q 1,3,5,6,8 above. Enact red flags for all SAI entities. Cumulative impacts also need to be incorporated.

23. How should wildlife licensing be modified to allow for climate-adaptation conservation activities?

Compliance and enforcement

24. Are the Biodiversity Conservation Act's penalties and enforcement instruments an effective way to support the Act to achieve its objectives?

25. How can the Act give the community more confidence and clarity in the approach to regulation?

Public registers of all offsetting is needed (see Kujala et al. 2022).

26. Should the Act be strengthened to require data collection under the regulatory frameworks in place?

Yes, along with public registers for all data.

27. Is the risk assessment approach suitable?

Other important matters

28. Do you have any feedback on these matters or other issues you would like considered in the review of the Act?

See main points 1-5 at top of this submission.



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Thank you for this opportunity.

Yours sincerely,

Dr Tony Auld
President

On behalf of the Management Committee of the Australian Network for Plant Conservation Inc.

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