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Monday 3 December 2018

Re: Natural Resources and Environment Discussion Paper

Dear Ms Collins,

The Nature Conservation Society of South Australia (NCSSA) appreciates the opportunity to provide comment on the Natural Resources and Environment Discussion Paper (henceforth the Discussion Paper), which looks at how critical environmental issues will affect or be affected by planning policy in the state's new planning system. 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 management of protected areas. We are therefore keenly interested in how the state's new planning system can protect and conserve the biodiversity of South Australia, both for the benefits it provides to our society but also for its own intrinsic value.

As you may be aware, NCSSA provided comment on the draft State Planning Policy for Biodiversity in September this year. This submission reiterates and builds on a number of points we made at that time. Consistent with our mandate of promoting nature conservation, NCSSA's principle interest in this Discussion Paper is the Biodiversity theme, however we recognise that successful biodiversity conservation is inextricably linked to a number of the other issues discussed, including adapting to climate change and sustainable water use. We have also provided some specific comments in relation to Green Infrastructure and Water Sensitive Urban Design, as they relate to nature conservation.

NCSSA concurs with the Discussion Paper that planning 'plays a significant role in balancing competing priorities and resolving tensions ..., in order to realise what our communities want' and particularly that 'the state's future prosperity and liveability will depend on how effectively we address and respond to the impacts of climate change'. Although we agree with many of the comments in both the Discussion and Background papers in relation to biodiversity conservation in general and native vegetation protection in particular, our primary comment is that the Discussion Paper does not describe clearly enough how the new Planning and Design Code will address the issues it raises; for example what requirements will be in place to ensure biodiversity will be considered at all levels of urban development, how the Code will facilitate action to protect and enhance our biodiversity across every landscape, or even how native vegetation will be better mapped and protected. Instead, the Discussion

Paper states that the current suite of policies are adequate, following minor review, and will be the basis for the new Code.

This is a once-in-a-generation opportunity to improve the planning system, to fully incorporate protecting nature in line with community expectations and to make our communities future-ready, particularly in light of a changing climate. We therefore urge the Department of Planning, Transport and Infrastructure (DPTI) to be bolder and to set a clearer mandate for future land use planning that will successfully integrate biodiversity conservation into our everyday thinking and actions. Although the draft State Planning Policy for Biodiversity is a step toward achieving this, more detail is now required to explain how its vision will be realised. Two outstanding issues for resolution include the knowledge about biodiversity that will be required to underpin the new Code as well as how planning policies and instruments will be integrated with other relevant legislation.

Current knowledge about biodiversity and a mandate for filling gaps

A key gap in the current settings is a comprehensive understanding of South Australia's biodiversity, and we don't believe this critical issue has yet been adequately addressed. The Background Paper alludes to some of the issues relating to knowledge gaps, including the need for native vegetation to be better mapped and protected, but without providing an analysis of the current status of knowledge or outlining any solutions to fill existing gaps. NCSSA understands that gaining and maintaining a comprehensive understanding of South Australia's biodiversity is a large task. However, we believe that the knowledge currently held across a range of organisations about South Australia's biodiversity must be audited and then made accessible in order to successfully implement the first iteration of the Planning and Design Code in July 2020, particularly so that planners can make informed decisions with regards to biodiversity protection that will be robust to judicial review. Improving and extending on our knowledge of biodiversity, underpinned by a detailed, costed work plan, should be identified as a high priority for supporting future generations of the Code.

Legislative reform and integration

NCSSA urges DPTI to seize this unique opportunity, particularly with this reform being undertaken concurrently with the planned repeal of the *Natural Resource Management Act 2004* and replacement with the *Landscapes SA Act*, to better integrate land use planning with natural resource management planning. An integrated approach will assist in addressing the issue of the cumulative impact of a number of smaller decisions on biodiversity, as well as better identify opportunities for the restoration of priority ecosystems, both of which will be fundamental to reversing biodiversity decline in South Australia. Improving the integration of the *Native Vegetation Act 1991* with the *Planning, Development and Infrastructure Act 2016*, in order to improve the protection of precious remnants of our native vegetation, should also be a high priority.

Please refer to the following pages for more specific comments on the Discussion and Background papers. If you would like to clarify or discuss any of the points raised please contact me on [REDACTED] or via email at [REDACTED]

Yours sincerely,



Julia Peacock
Nature Advocate

NCSSA general comments on the Natural Resources and the Environment Discussion and Background papers

In relation to nature conservation, NCSSA concurs with the Discussion Paper that:

- Protecting and re-establishing biodiversity is important to restoring and maintaining our functioning ecosystems ... and making our environment more resilient to the anticipated impacts of climate change,
- South Australia has a strong history of prioritising the conservation of our natural environment with the parks system covering more than 21% of the state. Protecting and conserving these areas of natural environment and improving the connectivity between biodiversity corridors will be increasingly more important for continuing health, wellbeing and enjoyment,
- The number of threatened species is growing and today 63% of the state's mammals, 29% of birds and 23% of vascular plants are considered threatened,
- The successful incorporation of biodiversity must be considered at all stages of urban development, and
- Contact with nature enriches our physical, psychological, social and spiritual health and wellbeing.

From the Background Paper, NCSSA concurs that:

- Our patterns of land clearance, consumption and development have ... fragmented and disrupted ... natural eco-systems, resulting in a significant loss of biodiversity and natural character,
- Action to protect and enhance our biodiversity needs to occur across every landscape, from our cities to the outback and must recognise that private landholders manage a large proportion of the state's land and its biodiversity, and
- That "the accelerated loss and fragmentation of intact native vegetation" is a key challenge, and that "native vegetation needs to be better mapped and protected".

However, the Discussion Paper effectively argues that current policies in relation to biodiversity are adequate to support the new Planning and Design Code, following minor 'refinement'. Given that this refinement refers to 'minimising different interpretations' of these policies, business-as-usual will therefore proceed for the foreseeable future. NCSSA is therefore concerned that DPTI is missing an opportunity to be bold in these reforms and to set a clearer mandate for future land use planning that will successfully integrate biodiversity conservation into our everyday thinking and actions.

It would be helpful for the Discussion Paper to more explicitly weigh up the pros and cons of alternate tools and mechanisms available through the planning system to achieve biodiversity conservation, for example zones and overlays, and to lay out in more detail the current situation and proposals for improvement. For example, the Discussion Paper foreshadows that in the first generation of reform to the Code, consideration will be given to establishing "one conservation zone, with spatial overlays (such as coast) that apply where required to trigger referrals and reflect state interests." It would be helpful to provide some detail as to why this option is considered preferable, how the 'one conservation zone' would be defined and mapped, how the overlays might be described and defined, and what spatial and other information would be required to support both these mechanisms.

Current knowledge about biodiversity and a mandate for filling information gaps

A key gap in the current settings is a comprehensive understanding of South Australia's biodiversity. The Background Paper alludes to some of the issues relating to information gaps, including the need for native vegetation to be better mapped and protected, and suggests that the new system may 'consider mapping and using overlays for areas of nature protection and for vulnerable species (linking with mapping from the *Environment Protection and Biodiversity Conservation Act 1999*)'. NCSSA believes that the critical issue of what information about biodiversity will be needed to underpin the implementation of the Code should be addressed in a more fulsome and systematic way, with gaps to be addressed as a high priority.

NCSSA understands that gaining and maintaining a comprehensive understanding of South Australia's biodiversity, for example understanding the whereabouts of species (as a useful unit of 'biodiversity') in time and space, is a large task. However, we believe that the knowledge currently held across a range of organisations about South Australia's biodiversity must be audited and then made accessible in order to successfully implement the first iteration of the Planning and Design Code in July 2020, particularly so that planners can make informed decisions with regards to biodiversity protection that will be robust to judicial review. Improving and extending on our knowledge of biodiversity, underpinned by a detailed, costed work plan, should be identified as a high priority for supporting future generations of the Code.

To elaborate on the two components of this task, we suggest it is necessary to:

- *Collate and make accessible current information*

Clearly, the new Code should be underpinned with the most comprehensive information on biodiversity that is currently available. Data from peer-reviewed, robust sources should be drawn together to form a 'black and white' spatial layer that collates all information relevant to biodiversity protection to inform both strategic planning and case-by-case decision making. We suggest this should include:

- the SA Land Cover dataset, held by DEW and of which we believe DPTI would be aware¹, which would provide the most comprehensive mapping of native vegetation extent currently available,
- records in Nature Maps of species and ecosystems across the state, including those threatened with extinction at a state level,
- records of significant and regulated trees and roadside vegetation of conservation significance, and
- mapping from the federal environment department of matters of national environmental significance, which includes species and ecosystems threatened with extinction at a national level.

Mechanisms to improve the accuracy and comprehensiveness of this information should also be included in the new system. An example for consideration is the Queensland system where individuals can apply to correct information on regulated vegetation².

A second spatial layer of 'grey' records should also be collated, with information from such sources as expert opinion, grey literature such as data from environmental impact assessment processes and voluntary or community-based survey work. Whilst not as robust at the 'black-and-white' layer, this layer could be used as 'flags for further investigation', particularly by planners in decision-making on specific applications.

- *Improving and extending on the current knowledge*

NCSSA is concerned that it is not until generation 2 or beyond of the Code that DPTI has flagged the "opportunity to improve the associated mapping and incorporate it into future generations of the Code". The need to systematically improve the knowledge base about biodiversity and associated mapping is urgent and should be pursued as high priority so that decisions can be taken reliably, and defended in court as required.

¹ <https://data.environment.sa.gov.au/Land/Data-Systems/SA-Land-Cover/Pages/default.aspx>

² <https://www.qld.gov.au/environment/land/management/vegetation/maps>

Legislative reform and integration

The recently-released State of the Environment report highlighted that “our native plants and animals are in serious trouble with many in decline and likely to become extinct. Opportunities for improvement are in prioritising and coordinating conservation across the landscape, improved protection of threatened species and ecosystems, and **restoration of priority ecosystems** (*emphasis added*).”³ It also highlighted that “recent legislative changes to better integrate our conservation legislation with planning and development legislation could improve for early prevention of land degradation and loss of biodiversity.”⁴ NCSSA therefore urges DPTI to seize this opportunity to integrate biodiversity conservation through both natural resource management planning and land use planning. Regional natural resource management bodies include biodiversity conservation in their plans and these aspirations should be integrated with the Regional Planning process proposed under the *Planning, Development and Infrastructure Act 2016*. Joining up these processes, in whatever way is feasible and effective, will lead to better integrated outcomes, particularly in identifying areas where ecosystems can be restored and establishing connectivity between areas protected for conservation, especially in peri-urban, regional and rural settings.

NCSSA is particularly concerned about the protection of native vegetation. Whilst the Background Paper observes that ‘there is conflict between *Native Vegetation Regulations 2017* and the *Development Regulations 2008* regarding the definition of a building for setback distances, resulting in different interpretations by councils’, it does not provide any details regarding how this might be resolved. We would argue that there are deeper, more systematic issues with the way native vegetation and planning legislation currently interact. This is in part due to referrals to the Native Vegetation Council (NVC) only being required where vegetation is mapped, yet no existing Development Plans contain mapped vegetation.

As mentioned earlier, the SA Land Cover data provide the current, best estimate of extent of native vegetation which we understand is robust enough to use as mapping for planning purposes. NCSSA therefore proposes that referrals for direction should be made to the Native Vegetation Council (NVC) in the following circumstances as part of the new system:

1. Any proposed vegetation clearance other than minor clearance. This could be based on the ‘levels of assessment’ recently stipulated by the NVC⁵, where only ‘permitted clearance without conditions’ would be considered ‘minor’,
2. Any proposed buildings or dwellings located close to mapped native vegetation or large trees, since constructing a building or dwelling can result in significant additional clearance for access and safety,
3. Any proposed subdivision of land or boundary realignments for land containing mapped as native vegetation, since this will capture the inevitable cumulative clearance that will result once the land is developed following the subdivision and allow for early engagement with developers to ensure clearance is avoided wherever practicable, and
4. Any clearance in areas identified as being of high biodiversity value, for example due to the presence of threatened species, regardless of if it is mapped as ‘native vegetation’ or otherwise recognised as a conservation area.

These requirements would result in earlier engagement with proposed land use changes and more opportunities to avoid clearance of remnant native vegetation than is currently the case.

³ <https://www.epa.sa.gov.au/soe-2018>

⁴ <https://www.epa.sa.gov.au/soe-2018/land/key-messages>

⁵ <https://www.environment.sa.gov.au/managing-natural-resources/native-vegetation/clearing/pathways-for-clearance-approval>

NCSSA comments on Theme 3: Biodiversity questions on page 32 of the Discussion Paper

Can the Code protect biodiversity in areas not identified as native vegetation and in modified landscapes with biodiversity values?

As mentioned earlier, if the new Code is underpinned with all the available information, both the 'black and white', peer reviewed and robust information as well as the 'grey' sources of opinion and unpublished reports, a much fuller appreciation of the full biodiversity value of a range of landscapes, including modified landscapes, would be encapsulated by and therefore protected through the Code.

Can planning policy assess the cumulative impact of development on biodiversity?

Yes, indeed it is imperative that the planning system assess cumulative impact and we strongly supported this intention as part of the draft State Planning Policy for Biodiversity. On a strategic level, this should involve robust Regional Planning, integrated with natural resource management planning, that identifies and protects natural values across all tenures. On a project-by-project level, the suggestions we have made in relation to referrals to the NVC would help to address the cumulative impact of likely clearance as a result of new dwellings and subdivisions.

Can planning policy play a role in protecting and encouraging backyard biodiversity?

Yes, particularly in relation to mapping and protecting significant and regulated trees.

Do we need a policy to protect and encourage development of roadside vegetation?

Yes. As DPTI is likely to be aware, the NVC has recently released interim guidelines for the management of remnant native vegetation on roadsides⁶. Although we are yet to provide comment, NCSSA is concerned that these guidelines will provide insufficient protection for the biodiversity values of roadside remnant vegetation.

⁶ <https://yoursay.sa.gov.au/decisions/managing-roadside-veg-guidelines/about>

NCSSA comments on Theme 1.1: Green Infrastructure and Water Sensitive Urban Design

General comments

NCCSA strongly supports requirements for green infrastructure (GI) and water sensitive urban design (WSUD) in both new and retrofitted developments, and we wish to refer DPTI to the work of two research centres at the University of Melbourne that could feed into the policy design for our new planning system – the Waterway Ecosystem Research Group (WERG)⁷ and the Green Infrastructure Research Group (GIRG)⁸. Current research projects, including investigating how to deliver water regimes that support healthy streams in urban settings and the best use of stormwater for the watering of street trees for urban greening, would undoubtedly help to inform the new Code.

As we suggested in relation to the draft State Planning Policy for Biodiversity, NCSSA also suggests that future land-use planning and development in South Australia be undertaken consistent with the principles of Biodiversity Sensitive Urban Design (BSUD). This is an emerging field of thinking and research that seeks to incorporate existing ecological knowledge into a framework that can be used by planners.

As all of these fields of endeavour are relatively new, there is a particular role for policies under the new Code to require monitoring of performance of WSUD, GI and BSUD features in order to imbed learning and encourage improvement. This includes the direct features of interest (such as quantity of water diverted to infiltration systems, degrees of cooling as a result of canopy cover and the biodiversity supported by GI features) but also indirect benefits, like the improvements to wellbeing of people living in cooler, greener spaces.

Should existing WSUD and GI policies also apply to regional areas and for all development scales and types?

Yes. Arguably, more can be achieved in smaller scale developments. For example, when designing WSUD installations, research by the WERG has found that by limiting the amount of hard surface (like roads, roofs and other hard surfaces, known as ‘directly connected imperviousness’) to below 2% of the catchment area, stream health can be retained. A target such as this is more likely to be achieved in regional areas.

⁷ <https://thewerg.org/>

⁸ <https://thegirg.org/>