Re: Planning Design Code, PHASE TWO (RURAL AREAS)

Dear Planning Design Code Team

Thank you for the opportunity to comment on this part of the planning reform process.

In this submission, I address bushfire risk matters, Renewable energy infrastructure and other general matters as they interact with planning and native vegetation clearance.

Two months is actually not sufficient time to seek feedback on Phase Two (Rural Areas). It should be noted that many community members are constantly torn between which Government consultation process they try to participate in, and the often unsatisfactory circumstances around Government planning and consultation circumstances. There are near continuous consultation processes underway which impact on native vegetation, biodiversity and other environment related impacts. It would have been preferable for this consultation to have extended to 30 January, and it is unlikely that Phase two by itself will lead to an operational planning framework that will deliver better planning outcomes. At risk are fire risk impacts, climate change resilience and protection of native vegetation and ecosystems.

Please acknowledge the following summary key issue in the What We Have Heard document

A “Develop on Clear Land” Principle

It is requested that the Planning Commission acknowledge the recommendation for a Develop on Clear Land Principle. This principle should underpin the direction of the State Planning Framework to support economic growth in a way that does not continue the destruction of native vegetation and natural assets as incidental to planning approvals. Poorly located infrastructure, land divisions, broad scale native vegetation clearance for solar farms and inappropriately located tourism developments in parks and native vegetation, highlight planning areas where urgent reform is required.”
FIRE RISK AND PLANNING

Foundation comment

The concept of general, low, medium and high bushfire risk used as a basis for planning decisions as fundamentally flawed. Under extreme and catastrophic conditions, there is an extreme and catastrophic risk almost everywhere across rural South Australia. This has always been the case and should be better recognized by the planning framework. With climate change and hotter drier conditions, South Australia will experience even more fast moving extreme grass and crop fires. In many cases, native vegetation is where these fires slow down and provide opportunities for control and have in fact been utilised as last resort refuge. Pinery, Wangary, Keyneton (1&2) Yorketown and many other fires provide examples of difficult and fast moving grass and crop fires that were all or largely within general bushfire risk zones, but the impacts of these fires were or could have equally been extreme and catastrophic. Planning should transition towards looking at how to improve the resilience of critical infrastructure and occupied dwellings and businesses across all risk zones, rather than simply approving developments with native vegetation removal.

Hazards (Bushfire – Outback) Overlay P. 1441

Assessment Provisions (AP)
Desired Outcomes (DO)

DO 1
RE: “Development is located to minimise the threat and impact of bushfires on life and property”, where is the environmental objective? Why is it missing? This is inconsistent with the CFS Mission to protect life, property and environmental assets. Planning should share the same value in its construct.
  • Please add a desired outcome to develop on cleared land and in cleared areas

DO 2
RE: “To facilitate access for emergency service vehicles to protect assets and lives from bushfire danger”. This is over-aspirational and unachievable. Such an outcome is only possible with small fires, but once conditions become severe, extreme or catastrophic, emergency services vehicles and fire crews cannot be expected to save lives and property. They do what they can to assist, but cannot “protect”

Performance Outcomes and Deemed to Satisfy / Designated Performance Outcome Criteria

Habitable Buildings PO 1.1
RE: Residential and tourist accommodation “(b) minimise the need to clear native vegetation”. This clause is so weak that it is meaningless. It continues the current situation where developments are approved first and then consequential Native Vegetation Clearance Approval is granted by the Native Vegetation Council and the best they can do is suggest minor reductions in clearance or changes in location within the site.
The Native Vegetation Council should be able to assess and rule on the full clearance impact of a development, including the direct footprint, the Asset Protection Zone, the need for a Bushfire Buffer Zone, any potential need for fuel reduction burning in Conservation Zones that should not be undertaken for life and property issues, but is commonly undertaken under DEW and CFS approval mechanisms for just that reason.
Recommendations

- It is recommended that clause (b) is strengthened to read: Development is not built on, or encroaches within, an area that will result in significant native vegetation clearance.
- It is recommended that the CFS Development Assessment Service be able to provide advice and say no, where new developments are unsafe and will never be safe.
- It is recommended that the Native Vegetation Council be able to say no, when the impact of native vegetation clearance on all aspects of the development is too high. The CFS Development Assessment Service should provide advice within the constraints of native vegetation clearance approval.
- It is recommended that there be a classification for an unprotectable approval of a detached dwelling where a person seeks to build a habitable structure within an unsafe environment without destroying the environment. This would be similar to the actual current situation where many houses are built in the Adelaide Hills, Island Beach, American River, Tulkà, Coffin Bay, Vivonne Bay, D’Estrees Bay and many other places where people actually choose to live within the environment despite being within intact native vegetation and without any substantial asset protection zones.

DTS/DPF 1.1

- RE: “an asset protection zone with a minimum width of 50m already exists and can continue to be maintained around the accommodation; and (b) the asset protection zone is contained wholly within the allotment of the development". This clause is deeply concerning. Current native vegetation clearance exemptions around dwellings is up to 20 metres around the dwelling only. Why is the Planning framework increasing this to 50 metres, which as a circular area will result in excessive clearance of native vegetation? Any native vegetation clearance greater than the 20 metre distance between a structure and a fuel source that may impact on the BAL resilience should be referred to the CFS Development Assessment Unit for advice and the Native Vegetation Council for approval before approval is granted.

Vehicle Access –Roads and Driveways

PO 2.1

- Re Roads are designed and constructed to: “(b) avoid the unnecessary clearance of native vegetation”, strengthen to Roads must not be built on, or result in significant native vegetation clearance

PO 2.2

RE: Where the furthest point of the building from the nearest public road is greater than 30m, driveways are designed and constructed to:..."(b) avoid the unnecessary clearance of native vegetation", suggest strengthening to “b) avoid significant impacts on native vegetation and the unnecessary clearance of native vegetation.

Hazards (Bushfire – Regional) P. 1446

Comments on this section will mirror comments on: Hazards (Bushfire – Outback) Overlay P. 1441

Hazards (Bushfire – General Risk) P. 1454

Comments on this section broadly mirror comments on: Hazards (Bushfire – Outback) Overlay P. 1441 with the addition of: Land Division, PO 4.1
RE: Land division is designed to: “c. ensure each allotment contains a suitable building envelope that is located away from any vegetation that would pose an unacceptable risk in the event of bushfire”. There is no clarity on what defines an unacceptable risk. Throughout the landscape, buildings are approved, then native vegetation is cleared or modified for Asset Protection Zones, Bushfire Zones and additional fuel reduction I Conservation zones. This goes beyond achieving BAL resilience. If a land division is approved with a given BAL resilience and an asset protection zone, but a bushfire Buffer Zone is then required up to 1km wide then what defines how this will be assessed in the development approval. If Bushfire Buffer Zones are omitted at approval and subsequently required, then why was the full clearance impact not considered at the time of approval. The land division at Penneshaw on the boundary of the Baudin Conservation Park is a classic example where planning failed to address the full impacts:

**Recommendation**

Strengthen the clause to read: *c. ensure each allotment contains a suitable building envelope that is located away from any vegetation that would pose an unacceptable risk in the event of bushfire including that reasonable steps have been undertaken to ensure that additional subsequent asset protection and bushfire buffer zones will not be required.*

PO 4.3

Re: Bushfire Buffer Zone around a land division to isolate residential allotments from areas that pose an unacceptable bushfire risk. Figure I is unrealistic when considered in the context of many, potentially most land divisions near native vegetation. The diagram is more closely aligned to an Asset Protection Zone of up to 100 metres for multiple dwellings, including a roadway. Bushfire Buffer zones typically extend from beyond an asset protection zone and can be up to 1000 metres wide. It is unacceptable for the Planning Design code to be showing a diagram that looks like an Asset Protection Zone but using the words Bushfire Buffer Zone. It is of extreme concern that land divisions are still being approved without regard to the full impact assessment of what is required.

There is also general confusion across Planning and the CFS around terminology of zones. This has been created by the stubbornness by some in Government agencies to act when concerns were raised over many years.

In Bushfire Management Planning the South Australian Zone Standard does not properly define the area immediately surrounding occupied dwellings and outbuildings, but does define the larger zones which should be applied for and approved via a DEW process or a CFS process. These larger zones should also be identified and incorporated in planning approvals for land divisions and tourism developments etc.

**Recommendation:**

*It is strongly recommended that before the Planning Design Code is commenced, that CFS, DPTI and DEW agree on common terminology and provide planning guidance that makes sense and is consistent across agencies. A recommended solution is:*

<table>
<thead>
<tr>
<th>DEFENDABLE SPACE</th>
<th>0 to 20 metres surrounding a residential dwelling or 10 metres surrounding a council approved shed or outbuilding where vegetation is managed to low fuel levels.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSET PROTECTION ZONE</td>
<td>0 to 100 metres surrounding a group or line of residential dwellings, occupied commercial/industrial sites, critical infrastructure or tourism where vegetation is managed to low fuel levels (can sit over the top of the defensible space).</td>
</tr>
<tr>
<td>BUSHFIRE BUFFER ZONE</td>
<td>100 to 1000 metres strategically located to reduce risks to group or line of residential dwellings, occupied commercial/industrial sites,</td>
</tr>
</tbody>
</table>
critical infrastructure. Please note that Bushfire Buffer Zones usually extending from an asset protection zone when needed to increase protection for built assets, but can be detached from an asset protection zone in some circumstances, typically when placed to protect environmental assets. This matter was addressed in a previous consultation response! It would also be beneficial to identify that the Bushfire Zone Overlay is a for Risk Classification which is different to Defendable Space, Asset Protection Zones and Bushfire Buffer Zones which are Management Zones.

**Hazards (Bushfire – High Risk) Overlay P. 1461**

Comments on this section broadly mirror the comments made under Hazards (Bushfire – General Risk) P. 1454, Hazards (Bushfire – Regional) P. 1446 and Hazards (Bushfire – Outback) Overlay P. 1441 with the addition of:

**DTS/DPF 4.2**

Re: Development meets the following requirements:

(a) an asset protection zone with a minimum width of 100m already exists and can be maintained around the accommodation; and

(b) the asset protection zone is contained wholly within the allotment of the development.

By definition under the State Bushfire Zoning Standard that describes bushfire management zones, and Asset Protection Zone must not be more than 100 metres. It appears that there is considerable confusion regarding Asset Protection Zones and Bushfire Buffer Zones.

**Recommendation**

*It is strongly recommended that DPTI assemble the key players covering CFS, DEW, NVC and conservation nominees to complete the work to have input into the Planning Design code and prevent widespread confusion next year.*

**Hazards (Bushfire – Medium Risk) Overlay P. 1469**

Comments on this section broadly mirror the comments made under Hazards (Bushfire – General Risk) P. 1454, Hazards (Bushfire – Regional) P. 1446, Hazards (Bushfire – Outback) Overlay P. 1441 and Hazards (Bushfire – High Risk) Overlay P. 1461

**Hazards (Bushfire – Urban Interface) Overlay**

Comments on this section broadly mirror the comments made under Hazards (Bushfire – General Risk) P. 1454, Hazards (Bushfire – Regional) P. 1446, Hazards (Bushfire – Outback) Overlay P. 1441, Hazards (Bushfire – High Risk) Overlay P. 1461 and Hazards (Bushfire – Medium Risk) Overlay P. 1469

**RENEWABLE ENERGY**

The Significant Landscape Protection Overlay described on p1552, and described from pg. 1656 does not provide adequate protection for native vegetation, or groundwater or surface water, or
ecosystems that may be impacted by renewable electricity development that will continue to rapidly expand.

I strongly reject the proposition under Renewable Energy Facilities PO 7.1 that “Renewable energy facilities located as close as practicable to existing transmission infrastructure to facilitate connections and minimise environmental impacts as a result of extending transmission” This is a business objective, not a planning objective. The planning objective should be to guide development in strategic locations where there is opportunity for co-development and growth without decimating intact native vegetation which is now happening across the state with solar farms trying to plug into existing sub stations regardless of the environmental impact.

Clause Renewable Energy Facilities (Solar Power)PO 9.1 for “Solar power facilities generating 5MW or more are not located on land of high environmental, scenic or cultural value”. Is not sufficient as this will result in largely intact and important native vegetation being cleared for poor planning and short term cost cutting. Cultana and Monash solar farms provide clear examples.

PO 9.2
RE: “Solar power facilities allow for movement of wildlife …”
I do commend the Planning team for including this section. Thank you!

Recommendation

Please add in another option. (g) or create a fully enclosed predator free area if there is scientific or ecological justified opportunity to contribute to threatened species recovery.

General Renewable matters
I have contributed previously on renewable matters previously via the Productive Economy Policy Discussion Paper and specifically requested that two matters would be acknowledged in the “What we have heard” response document. One of these matters was for a “Develop on Clear Land” Principle.

I have slightly edited this recommendation to read:

It is requested that the Planning Commission acknowledge the recommendation for a Develop on Clear Land Principle. This principle should underpin the direction of the State Planning Framework to support economic growth in a way that does not continue the destruction of native vegetation and natural assets as incidental to planning approvals. Poorly located infrastructure, land divisions, broad scale native vegetation clearance for solar farms and inappropriately located tourism developments in parks and native vegetation, highlight planning areas where urgent reform is required.”

In regard to area consuming solar farms it is particularly important that such a “Develop on clear land Principle is adopted”, because of the land area required and the potential to decimate large areas on intact native vegetation and ecosystems.

In context, Australia is has now achieved renewable electricity generation equivalent to around just 20% of its needs. If we consider that we may need not just a further 80% for Australia’s needs, but may in addition become an exporter of electricity to Asia or an exporter of hydrogen or other energy based products, then the further growth in South Australia as a sunny and windy place could be many times greater than what we have experienced to date.
The good news is that there are real and tangible solutions so that we do not need to trash our environment and ecosystems to play a large role in the energy transition. Wind electricity has a relatively low clearance impact despite having a larger visual impact.

A key opportunity lies in those areas of cleared marginal grazing land that sit Above the Goyder line which would provide key opportunities for co-existence of solar farming and grazing, or as marsupial habitat in fenced cat and fox free facilities.

**Wind Electricity**

I support the measures which provide a sound planning foundation for wind development. Wind farms should be located to minimise the impacts on native vegetation, birds and other fauna. However, compared with solar farms, wind farms are less likely to result in large areas of native vegetation removal.

**Solar farms**

The Integrated System Plans prepared by AEMO to date do not have sufficient regard to native vegetation, so there is a need for a stronger State Level Planning Framework to provide clear planning direction.

The State Planning Framework is not providing adequate protection for native vegetation, and examples of the Monash Solar Project and Cultana Solar Project provide examples of where the Planning Framework is failing South Australia’s environment.

Of significant concern is the fact that such developments are approved under infrastructure provisions which seem to act as a wildcard for approval without adequate regard to consequences.

Once there is planning approval, then clearance of native vegetation is then granted by the Native Vegetation Council that can do very little to say no, or move to a better location, as they are limited in what can be suggested.

The Monash Solar Farm provides an excellent example of bad planning to approve a solar farm located simply to connect into an existing substation. The Project first won planning approval without regard to the environmental impacts and then native vegetation clearance approval was sought. The proponents Data Report claimed that all of the native vegetation of the mallee swale landscape was old regrowth and not intact but this was largely false. The proponents and the Native Vegetation Council were not required to consider the additional Asset Protection and bushfire Buffer Zones that would occur in the Cooltong Conservation Park, so in essence, the stage was set for total disregard of native vegetation, habitats and the Riverland Biosphere Reserve.

In my submission, I referred to the time based photography from the 1940s and showed that for most of the clearance site. It could be demonstrated that the native vegetation, tree-for-tree, was intact original native vegetation that had never been cleared and it was wrong for the Data Report to claim that it had.

I also showed what I believed would be the inevitable asset protection and bushfire buffer zone burning that would be undertaken by the Department of Environment and Water to reduce their potential risk of a fire impacting on the facility.

The Native Vegetation Council approved the native vegetation clearance with some reduction of area which was probably all they could do.

The key issues to note from this example are that:

1. A general statement suggesting: “Large scale solar farms discouraged from areas of high environmental, scenic or cultural value” will be grossly inadequate. It is likely that
only established Conservation Parks would meet the threshold of “high environmental value”, whilst all other areas of native vegetation intact or otherwise, will be described as not intact, not high quality, not significant etc. In South Australia, it could almost be argued that all remnant native vegetation under private ownership is somewhat degraded.

**Recommendation**
It is strongly recommended that the New System Policy strongly discourages development of solar farms in areas of native vegetation, and incorporates suitable asset protection and bushfire buffer zones in cleared land to prevent harm to native vegetation.

2. **The full environmental impact of the development should be considered and addressed before planning approval is granted.** It is an absurd loophole that the Native Vegetation Council only gets a say after a Solar farm receives planning approval, and that much of the consequential native vegetation clearance and Bushfire Asset Protection Zines and Buffer Zones are not considered in the original planning approval. This loophole makes a mockery of the claim that the planning system has regard for the environment. All native vegetation and biodiversity habitat clearance should be defined and addressed by the Native Vegetation Council before planning approval or ministerial approval is granted, particularly because there are so many better alternatives across South Australia.

**Recommendation**
The full direct and consequential impact of native vegetation clearance should be quantified by the Native Vegetation Council and a decision of any native vegetation clearance should be obtained by the Native Vegetation Council before planning or ministerial approval is granted for a solar farm.

3. **All native vegetation should be protected, not just significant native vegetation.**
Experience has shown that one of the first claims made by development proponents is that the native vegetation that they wish to clear is degraded and not significant. It could actually be argued that most of South Australia’s remnant native vegetation is degraded and not significant.

With climate change, species extinction and risk of widespread desertification, there is no longer any scope for clearing native vegetation at scale when it is just not necessary. South Australia has enough cleared marginal land to accommodate vast amounts of solar electricity generation, but it is acknowledged that it will be necessary to plan ahead as to where substations and transmission links should be located to support such development.

**Pumped Hydro Electricity, Groundwater and Desalination**
The Planning Design Code must anticipate the key impact trigger issues and ensure that there are approval constraints and conditions to prevent significant and cumulative harm to the environment.

**Recommendation**
*With pumped hydro schemes the following issues must be addressed, noting the assumption that all water storages and piped systems leak or have the potential to leak:*

1. **Stygofauna in groundwater beneath pumped hydro operations may be placed at risk**
2. **Any sea water that could be potentially used could leak destroying groundwater ecosystems and potentially creating salt scolds that could cause serious and irreversible harm to surface vegetation, streams and ecosystems.**
3. **Any brackish water or partially treated/shandied seawater used in the pumped hydro scheme could leak destroying groundwater ecosystems and potentially...**
creating salt scolds that could cause serious and irreversible harm to surface vegetation, streams and ecosystems.

4. Polluted water such as from existing mine sites or low quality groundwater, and polluted water at low pH levels could result in serious and irreversible harm to surface vegetation, streams and ecosystems.

General planning policies in relation to zone overlays

Planning approvals for carelessly located developments are decimating native vegetation including significant and hollow trees. The regulated trees legislation as weak as it is, does not apply in the vast majority of rural and regional areas. Developments are often approved first and then consequential approval is granted for vegetation clearance with virtually no ability for the Native Vegetation Council to say no. And South Australia’s level site first culture is taking over in rural and regional areas just as it has infected Metropolitan Adelaide. For example, at Island Beach on Kangaroo Island, entire blocks of sensitive callitris/mallee heathland dunes are being 100% cleared and level sited for holiday homes.

Other recommendations I endorse (selection)

Conservation Zones

- Define the phrase “public amenity”
- Clarify whether tourist accommodation is to be considered in reserves areas beyond temporary tents rather than permanent facilities (cabins), and under what conditions. (preferably in safer locations that do not require native vegetation destruction.
- Ensure it applies spatially to all reserves and wilderness protection areas and also include Native Forest Reserves.
- 10. Public notification and exemptions for performance assessed development and what is restricted development should be consolidated in one location in the code.

Heritage

- List contributory items in the Historic Areas Overlay
- Replace current demolition controls in Historic Area Overlay with:
  - A Contributory Item should not be demolished or removed, in total or in part unless:
    (a) the part of the item to be demolished or removed does not contribute to the heritage value, historic character or desired character of the zone; or
    (b) the demolition part of a building, or addition to that building, in a manner which does not diminish the level of contribution to the historic character of the zone made by the building on the site of the demolition.
- The poor appearance or condition of a contributory item should not serve as justification for its demolition or significant modification.
- Heritage Area Statements for State Heritage Areas and Historic Areas should contain detailed policy in line with those that currently apply.
- The Heritage Overlays should clearly express the importance of preserving heritage values.
- Include pictorial guides
- Remove deemed to satisfy provisions for conservation work
- Include public notification provisions in Heritage Overlays
- Clarify which policies apply to properties within the State Heritage, Local Heritage and Historic Area Overlays and which apply to adjacent sites
- Clarify what are acceptable changes in the Historic Area Overlay
- Clarify what is suitable development for applications involving alterations and additions to properties in the State Heritage Area and State Heritage Places Overlays
- State Heritage Place Overlay should refer to preservation of whole landscapes
- Define or clarify the phrase “extent of listing” in the State and Local Heritage Place Overlays and the phrase “visible from the public realm” in the Historic Area Overlay.

I would like to follow up and discuss the fire management and renewable electricity components of this submission.

Kind regards

Tim