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### Inquiry into Australia's Faunal extinction crisis

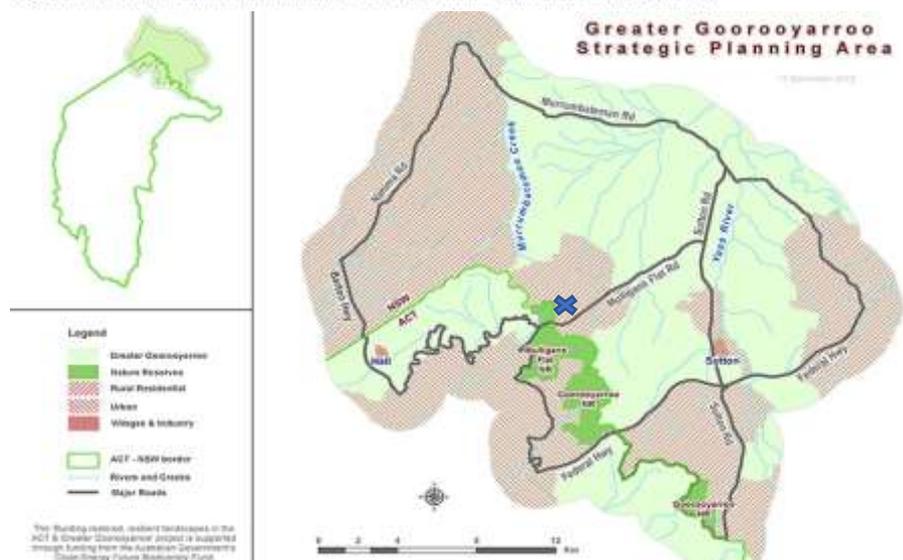
I make this submission on behalf of the Sutton Solar Action Group (SSAG) based in Sutton NSW, just over the northern ACT border. We apologise for the lateness of the submission in the Committee's process, but we have only just recently become aware of the Inquiry.

A developer has lodged an application with the NSW Department of Planning and Environment to build an 850 acre, utility scale solar plant in Sutton, NSW. This proposed development is 3.5kms from **Mulligans Flat Nature Reserve** and **Goorooyaroo Nature Reserve**. The area sits also within the **Greater Goorooyaroo Strategic Planning Area**. (see Figure 25 below).

Link to NSW Major Projects for more:

[http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=8703](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8703)

Figure 25: NSW-ACT Greater Goorooyaroo Area (Greater Goorooyaroo Strategy 2013)



**X** Proposed Springdale Development

The SSAG was formed amongst a group of concerned residents who are trying to protect our valley from development that will damage the biodiversity, ecology and connectivity of this region and contribute to even further decline in the threatened species who live here. The immediate area is a sanctuary and a connection between the last remaining large area of native vegetation and the rest of NSW. Many of us around the valley are trying to restore some of what we've lost through our habitation of this land.

The development was referred by the NSW Government to the Commonwealth due to “matters of national environmental significance”.

The Department’s Environmental Reporting Tool (ERT) identified –

...“threatened species and communities that may occur within 5km of the proposed action. Based on the information in the referral documentation, the location of the action, species records and likely habitat present in the area, there are likely to be significant impacts to:

- Golden sun moth (*Synemon plana*) – critically endangered
- Natural temperate grassland of the south eastern highlands – critically endangered

In addition, there is some risk that there may be significant impacts on the following matters and levels of impact should be further investigated.

- Superb parrot (*Polytelis swainsonii*) – vulnerable
- Striped legless lizard (*Delma impar*) – vulnerable
- White box – yellow box – Blakely’s red gum grassy woodland and derived native grassland (Box Gum Woodland) – critically endangered”

The guideline for preparing the assessment goes on to say,

“This list is not exhaustive and it is the proponent’s responsibility to ensure any relevant protected matters under this controlling provision are adequately assessed for the Commonwealth decision-makers consideration”.

In excess of 100 objections were received in relation to the development and those objections, together with a range of submissions from government departments, various agencies and organisations are all currently with the developer for response.

As highlighted above, the area within 5km of the proposed action, includes the Mulligan’s Flat and Gorooyarroo Nature Reserves, the two of which combines make up the largest and most intact contiguous area of box gum grassy woodland reserve in public ownership in Australia.

To protect this valuable area, that borders on the ACT, the Yass Valley Council (YVC) has moved to create an RU6 ‘buffer zone’ for land that is within 5kms of the NSW/ACT border, or what is being called peri-urban area (see figure 27 below).

YVC believe there is a need to:

- Protect the biodiversity and natural resources of the area,
- Prevent development of an important environmental corridor,
- Contain the urban growth of the ACT that would impact on the biodiversity of the area, and
- Prevent development that may diminish the cultural and scenic contribution of this area.

One of our major objections to this development is based on information provided to Yass Valley Council by the NSW Government Office of Environment & Heritage (NSW OEH) submission in response to the Draft Yass Valley Settlement Strategy (YVSS) 2016-2036 (27/3/17) (images and text

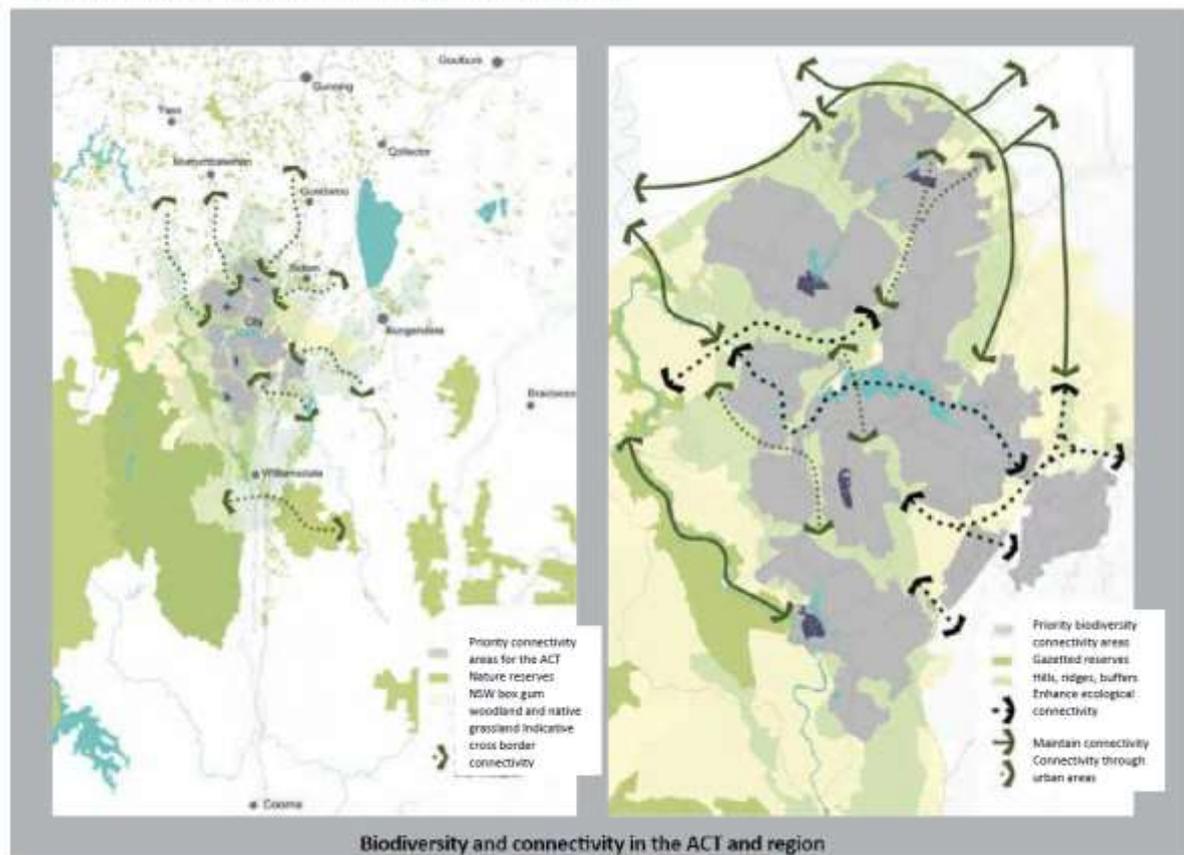


- “The land adjacent to Mulligans Flat and Goorooyarroo Nature Reserve that is in Yass Valley LGA is of high ecological and strategic connectivity importance (Figure 28 below). This is because of the movement of individual animals across the area (e.g. seasonal movements of birds) and the recolonization back and forth of native plants and animals, and potential expansion of habitat for locally extinct species from the Sanctuary...
- The potential for ‘spill over’ of plants and animals from the Sanctuary has high conservation value and represent an opportunity for neighbouring landholders and agencies to improve ecological and habitat values in the wider area.

On Page 95 of the YVSS under Justification for the recommended outcome:

- The area contains as its core some of the largest and most diverse areas of Commonwealth listed Critically Endangered Ecological Box Gum Grassy Woodland Communities left in Australia. This type of woodland once covered a vast area of eastern Australia, but now only small fragments remain. About half these woodlands in this area are protected in ACT reserves, and others are embedded in rural land in Yass Valley LGA. **Landscape-scale connectivity is critically important to fully realise their conservation value.** (Identified in National Recovery Plan)

Figure 28: Biodiversity and connectivity in the ACT and region, ACT Planning Strategy



Source: ACT Planning Strategy 2012; prepared by ACT Government

The SSAG argues that, development is development, and this proposal is ‘dramatic’ and ‘intensive’ land-use change, which is in no way beneficial for the environment and biodiversity. If approved it will open the floodgates for further development in our region.

The Springdale EIS states how ‘low impact’ this development will be, but with terms like ‘levelling and grading’ “to achieve more suitable gradients” peppered through the EIS for roadways, siting of the solar trackers as well the 24 buildings on the site does not sound low impact. This site is going to be **‘engineered’ to suit the development**, not the other way around. If you look online for photos of

large-scale solar sites you will see they are flat and usually in desert scapes. Not valleys, like where this development is proposed.

Whilst biodiversity legislation specifically mentions only native flora and fauna species, when it comes to exotic trees, ie large pines or any other trees that were planted by early generations, developers **neglect to mention** the amount that will be removed as part of the development. Removing significant stands of exotics in rural areas, predominately large radiata pine windbreaks and scattered paddock trees, is not doing anything for the environment or biodiversity.

The development would mean the removal of approximately 600 large radiata pines as well large scattered paddock trees. Trees are trees, they are old growth in the middle of the flood plain that provide habitat, shade and stability for the soil. The vegetation clearing includes at least 14 hollow bearing trees/stags. The developer acknowledges that they are potential breeding habitat for the **superb parrot**, however their mitigation strategy is to provide nesting boxes. The following linked article to David Lindenmayer's, four (4) year study into nesting boxes, suggests that this is not necessarily a suitable 'mitigation strategy' for this species.

<http://www.nespthreatenedspecies.edu.au/images/People/SfSS6%20Feb%202018%20web.pdf>

Given the superb parrot's current status, we consider 14, a large number of potential 'homes' to be lost in one area.

The NSW *Biodiversity Conservation Act 2016*, was introduced to provide better environmental outcomes and reduce regulatory burden. Schedule 4 - Key threatening process (Section 4.31) specifically includes –

- Alteration to the natural flow regimes of rivers and streams and their **floodplains** and wetlands;
- The clearing of native vegetation;
- Loss of hollow-bearing trees; and
- Removal of dead wood and dead trees.

All of these will be a feature of the Springdale development.

Some 340 Golden Sun Moths (GSM) have also been identified on the site. Of major concern, is that the EIS has a mitigation strategy to preserve, only the best areas. This is quite alarming in that neighbouring ACT, in areas set aside for 'GSM Conservation', are **not showing** an increase in the species. The reports (see links below) appear to be monitoring to see if there has been '**no significant decline**'. Do we consider that no significant decline is an outcome we should be striving for? Is this the aim of the environmental movement? The numbers are obviously declining due to their habitats being destroyed. <https://littlenationalhotel.com.au/wp-content/uploads/sites/6/2018/05/Golden-Sun-Moth-Monitoring-Report-16062017.pdf> and [http://www.planning.act.gov.au/data/assets/pdf\\_file/0006/1185063/GSM-Lawson-South-2017-report.pdf](http://www.planning.act.gov.au/data/assets/pdf_file/0006/1185063/GSM-Lawson-South-2017-report.pdf)

Because monitoring efforts are so fragmented, it's hard to make accurate accounts of threatened species. <http://fennerschool.anu.edu.au/news-events/why-we-are-measuring-health-australian-vegetation-poorly>  
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/conl.12260>

With the exponential rise of renewable energy development across the Yass Valley and Upper Lachlan regions, who knows how many trees have been remove. The impact could be disastrous!

One has to question the priorities of environmental consultants involved in the various EIS processes. This appears a major failing of biodiversity policies.

Section 13 of the NSW Government's EPA, State of the Environment 2015 Report, under the heading 'Native Vegetation' at section 13 states –

Clearing rates for native vegetation in NSW have generally been relatively stable over the past 10 years. Sixty-one per cent of NSW remains covered by native vegetation.

**Only 9% of NSW has vegetation considered to be in close to natural condition.**

Condition is variable in the remaining 52% but has deteriorated, largely due to the effects of different land-use and land management regimes.

<https://www.epa.nsw.gov.au/about-us/publications-and-reports/state-of-the-environment/state-of-the-environment-2015/13-native-vegetation>

Based on the above highlighted section, it is highly unlikely to find vegetation that is in any way close to natural condition. Yet NSW uses this kind of assessment to condone land clearing and habitat destruction especially removing trees of all types both native and exotic.

**If we are serious about preventing the further decline of threatened species, then we need to urgently revisit the current process for dealing with such developments, otherwise we will seal the fate of a large number of species.**

We are also very concerned about the effects of covering the land with impervious surfaces. The EIS mentions that the temperature around the panels will be 20 degrees hotter, but claim that the land cools off at night so no problem! We suggest that research from around the world disagrees.

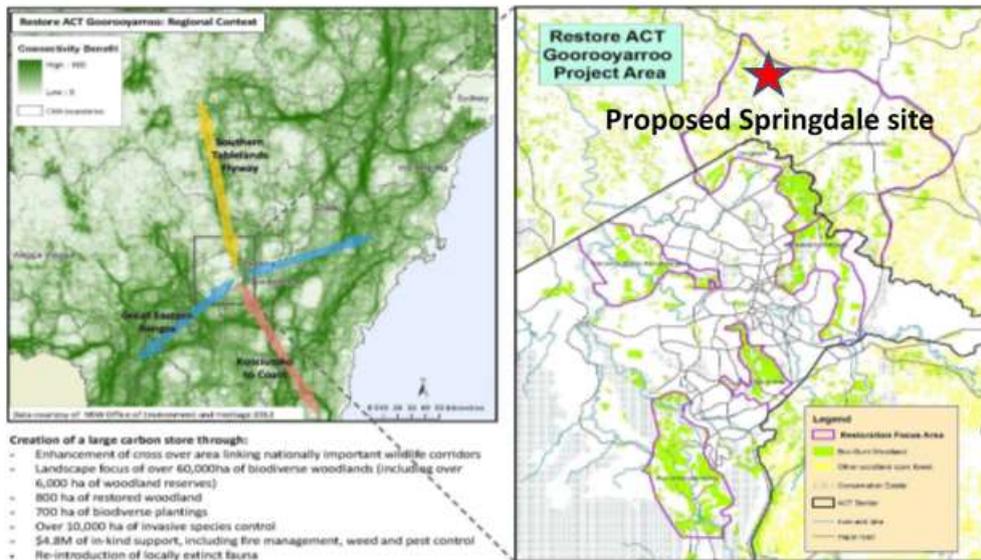
There are a number of papers that raise concerns about the impacts of large-scale solar and how these will interact with the landscape. The evidence shows how these projects impact every living creature from the soil to the birds in the sky. The following two examples, the first from Lancaster University in the UK, looks at microclimates and how shading and temperature changes can effect soil carbon (climate change). <https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.12437> and the second from the University of Arizona that looked at the changes in temperature and 'heat island effect' and how this will affect the surrounding area:

[https://www.researchgate.net/publication/309121531\\_The\\_Photovoltic\\_Heat\\_Island\\_Effect\\_Large\\_r\\_solar\\_power\\_plants\\_increase\\_local\\_temperatures\\_Open\\_access\\_httpwwwnaturecomarticlesrep35070](https://www.researchgate.net/publication/309121531_The_Photovoltic_Heat_Island_Effect_Large_r_solar_power_plants_increase_local_temperatures_Open_access_httpwwwnaturecomarticlesrep35070)

In regards to birdlife, there are concerns on how large-scale solar and the PV panels may impact them. The first is from the Natural England Evidence

Review <http://publications.naturalengland.org.uk/publication/6384664523046912> and the second from the American Bird Conservancy <https://abcbirds.org/wp-content/uploads/2015/05/PP-Solar-Energy.pdf>. It is easy to understand that the reflection off large-scale solar development could look like water to birds as they fly over.

Bearing in mind that the location proposed for the Sutton Solar development is under the Southern Tablelands Flyway (see figure below), this is of particular concern.



Images taken From the Yass Valley Settlement Strategy

### Role of the various State Departments:

In the Springdale Solar Development project, three key areas of State Government have a role.

- Office of the Environment & Heritage (OEH)
- Department of Energy (DE)
- Department of Planning and Environment (DPE)

It should be noted that in the NSW Government's case, the OEH comes under the DPE, however there is a Minister for Planning and a Minister for the Environment. There is also a Minister for Energy.

What has become apparent to the SSAG and those closely watching the Springdale development, is there is little if any dialogue between these Departments and the final say on the development, rests with the DPE, even though it does not rate this area as an optimum solar zone.

In respect to this development, the OEH **recommends** leaving hollow bearing trees for breeding habitat for the superb parrot, but goes on to say,

***"If this is not the desired option for the proponent, then they can either assume loss of Superb Parrot breeding habitat and look for suitable offsets **OR** undertake surveys in the breeding season (mid-Oct Nov is optimal) to determine whether these trees represent breeding habitat or not."***

There is an abundance of research papers which demonstrate the importance of retaining scattered trees in the landscape. One paper in particular is based on local research by Darren Le Roux from the ANU and is attached.

<https://www.researchgate.net/publication/320283467> The value of scattered trees for wildlife  
 Contrasting effects of landscape context and tree size

Even the NSW OEH have published material that supports the important contribution of scattered trees in the landscape.

We will return to the issue of offsets later in this paper.

As for a one-time survey in mid Oct Nov as suggested, what will that prove? We are experiencing one of the worst droughts in living memory. Anyone who lives in this vicinity will tell you what impact that has had this year on the fauna in the area. Does that mean such fauna will never return? They certainly won't if we allow their habitat to be destroyed as is proposed by the developers. They say in their EIS that removing trees within the footprint of the solar panels won't affect connectivity, yet they provide no evidence to support such a statement, which is a consistent theme throughout the EIS and many other like it. Just make a bold statement and hope that no one refutes it.

So, in other words, the state office responsible for the environmental issues on the site, can't tell the developer what they must do in relation to a course of action, they can only recommend. Is there little wonder why an inquiry like yours has to be called to consider the issue of the 'species extinction crisis'?

When discussing renewable energy projects such as Springdale, the developers and their supporters continually raise the Paris Agreement, we are yet to hear someone ask about the UN Convention on Biological Diversity and in particular the Aichi Targets, (see Targets 11 and 12).

<https://www.cbd.int/sp/targets/>

#### **Target 11 –**

By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

#### **Target 12 –**

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

It is highly unlikely that Australia will meet either of those targets.

#### **Offsets, how useful are they?**

In May 2018 the Environmental Defenders Office NSW (EDO NSW) were successful in obtaining documents under Freedom of Information law (FOI) that showed the Australian Government identified significant areas where the *NSW Biodiversity Offsets Policy for Major Projects*, (which assesses whether and on what basis projects can undertake broadscale land clearing), failed to meet the environmental standards of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Despite this, the policy was approved thus allowing projects that impact on threatened plants and animals to be assessed under a lesser standard.

[https://www.edonsw.org.au/foi\\_offsets\\_win\\_hsi](https://www.edonsw.org.au/foi_offsets_win_hsi)

The issue of offsets was highlighted in the following interview on ABC Radio National “The trouble with offsets” on 16 March 2014.

*“The ANU’s Phil Gibbons, who helped develop offset policy for the federal and NSW governments, says the theory behind offsetting is very attractive”.*

*‘A fair-minded person would agree that **if a developer destroys some of Australia’s natural capital in making a buck**, then they should really offset that impact elsewhere,’ he said. ‘But **the devil is in the detail.**’*

*Gibbons said he sees an increasing number of examples where governments are cutting corners. Some offsets are not like for like and others are not being properly managed or restored. Some sites have been approved that weren’t in danger of being cleared or lost in the future.*

*‘Anything that you do in terms of an offset must be a genuine gain, must be something that would not have happened anyway as under business as usual,’ Gibbons said. ‘I think what people are doing is getting very creative in finding biodiversity gains when really they are things that would have happened anyway.’ **With less and less good quality bush to be found**, developers are putting up old cattle paddocks and mine sites as offsets, land which they say will be restored to its original state.*

*However, according to restoration ecologist Professor Richard Hobbs, those **sites can take decades to develop**, and there’s **no guarantee they will be the same as what was cleared**. He scoffed at the idea that Australia’s biodiversity will be no worse off under offsetting, and called the practice ‘a Faustian pact’. ‘I’ll say it’s a furphy. To me it is akin to some guy going into that art gallery and pointing at the Mona Lisa on the wall and saying sorry mate we need that bit ... so the Mona Lisa has to go. But we will paint you another one.’ ‘We run the risk of trading something irreplaceable for the **short term development gains with the mirage of having a good conservation outcome in the future through the activities of the offset.**’*

The proposed life span of the Springdale development is 30 years, when it will be decommissioned (as it’s assumed that newer technologies will make these obsolete), and returned to its pre-development condition. This will be impossible due to the ‘engineering’ of the site to suit the proposed development, not the development being engineered to suit the site. The approximately 600 trees can’t be reinstated, that habitat is lost forever, nor does replacing them with tube stock, which will take many years for them to grow and by then the fauna sought to be protected, will be gone.

That means removing all the aboveground infrastructure will again inflict significant ground disturbance for the second time in 30 years. How is this a good outcome for biodiversity and the environment?

Items to be removed at the conclusion of the Springdale development will include:

- 22 shipping containers,
- Security fencing,
- All the concrete pads for the shipping containers, as well as the other onsite buildings,
- All roadways that have been created,
- Any causeways built,

- Over 300,000 solar panels. (One would hope they'd be recycled, however at present there is no legislation to cover disposal of these, unlike TV's and PC monitors),
- All steel posts that were driven in to hold the solar arrays. How many? No one can say. (One assumes they will be very difficult to pull out of the ground and it has been speculated that they will be cut off at ground level), and
- All underground cabling

Of course, one of the biggest concerns for residents is, who might be the owner in 30 years' time and what money will be set aside for the decommissioning?

### **Conclusion –**

What impact will this type of project and the many others currently being constructed around the country, have on the biodiversity in their local areas?

In the case of the Springdale development, the SSAG and many other local residents, have not been heartened by the NSW Government's response to date.

As earlier mentioned, it appears that the three key areas of Government who have responsibility for such projects, have no communication between them, and if anything, the OEH is at the bottom of the pecking order. The DPE override both the DE and the OEH.

They each act in silos and the Planning Department, who is the body where decisions are made, direct the OEH as to how they should phrase submissions on particular projects. They recommend courses of action that allow development to proceed, regardless of issues in the EIS. The DE, who you would think would have a major say in such projects, appear to have not made a submission in relation to any of the current renewable energy projects under consideration in NSW.

One of the major failings in the process, that the committee might wish to consider making a recommendation on, is that the DPE seek comments from other departments on development proposals, but those departments are asked to comment only on that particular submission, and only in relation to matters in that EIS. So even though the department submitting a response knows that a totally different response may have been provided previously about a certain geographical area, they don't include that, because they weren't asked to comment, as it is related to different project.

Developers are well versed in how to game the system to get the desired outcome and it appears that they are aided by a dysfunctional planning and approval process within the NSW Government.

The system is flawed, and it is little wonder why the DPE is undergoing its own internal review of the integrity of decision making with a view of undertaking a holistic review of governance across the planning system. Not before time, however how much of the environment in that state has been decimated in the intervening period.

It appears that developers' demands' and needs are far more vital to the NSW state government than local residents and the threatened species in the area come in a poor third.

It is little wonder then that threatened species and their habitat and foraging areas are in decline due to the anthropogenic impact of man-made structures and changes to biophysical environments, ecosystems, biodiversity and natural resources in this region. And whilst a number of

environmental groups are working on the problem, many are focussed at the global impact and seem impervious to the fact that the decline is being driven on a project by project basis.

In a perceived effort to arrest the decline of the superb parrot, the NSW government has allocated \$400,000 towards a regionally-based conservation project to help save the threatened species <https://www.environment.nsw.gov.au/news/behind-the-scenes-for-the-superb-parrot-and-woodlands>.

The proposed Springdale development sits in this area. One questions the point of trying to improve habitat when on the other hand, the government is condoning the removal of existing habitat. Where's the net gain? The lag time between removal of trees and any tube stock becoming viable for habitation or foraging (assuming they survive) will certainly mean the death of many species.

Likewise, Greening Australia has spent significant sums of money in the Springdale vicinity, from government grants, undertaking large plantings of drooping she-oaks (*Allocasuarina verticillata*) to help create habitat to encourage the Glossy Black Cockatoo back to the area. Many people have undertaken their own plantings of other native trees for habitat restoration. This work could ultimately be useless if large numbers of trees are removed from the development site.

This again exemplifies the real concern in this space, that the left hand has no idea of what the right hand is doing, if in fact, they even care.

Your Committee has an opportunity to at least place these issues onto the national agenda and recommend that states have a far more coordinated approach to such developments.

We all know that renewable energy is the way of the future, let's do it in a way though that doesn't decimate another part of our precious environment.

The SSAG would be happy to appear before the Committee if that was desired.

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