



Williamsdale Solar Farm DA201528186 Tuggeranong District Block 1471

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The Conservation Council ACT region is the peak non-government environment organisation for the Canberra Region, and has been the community's voice for the environment in the Canberra region since 1979.

We represent the interests of community conservation organisations in the region as well as the broader environmental interests of all the citizens of the ACT.

Our mission is to achieve an ecologically sustainable and zero net carbon society through advocacy, education, research and engagement with community, the private sector and government.

The Conservation Council is active in a number of campaign areas. Our current focus includes:

- **Biodiversity Conservation** – protecting our unique ecological communities and the Bush Capital
- **Climate Change** – a regional, national and global challenge
- **Planning** – the right things in the right places
- **Transport** – connecting people and places
- **Waste** – being efficient through closed-loop systems
- **Water** – smart use of a scarce resource
- **Governance** – for a Smarter, Sustainable Canberra

1. Overview

The Conservation Council appreciates the opportunity to make representation on Development Application 201528186 District of Tuggeranong, 7839 Monaro Highway, Block 1470 – the proposed Williamsdale Solar Farm.

The proposal is for a fenced 29 hectare solar farm providing 10Mw AC capacity consisting of solar panels, inverters, security fencing, water tank, access tracks, landscape planting, internal access road, an underground grid connection from solar farm to ActewAGL substation, and new substation and site fencing.

The Conservation Council supports renewable energy including solar farms and we also support biodiversity protection.

The Conservation Council and its member groups welcome the ACT Government's endeavours to replace carbon based energy generation with renewable forms of generation, including solar. We note that it also makes much more economic sense to build large solar energy systems than a multitude of small domestic systems.

However, in making the switch to renewable energy we need to remember that we are doing it fundamentally to reduce the impact on our environment of carbon based energy, which is causing global warming and adverse climate change.

Given that we are trying to minimise the adverse environmental effects of energy provision, then we should be pursuing the same objective with any alternative energy source. This can be achieved by careful siting of any solar farm to avoid areas of high biodiversity value.

Our key concern is that the proposed solar farm will adversely impact biodiversity conservation particularly through removal of 116 Medium, High and Exceptional quality trees including 20 exotic and 96 Medium, High and Exceptional quality native trees, mostly *eucalyptus melliodora* (Yellow Box) and also *eucalyptus blakelyi*, *eucalyptus bridgesiana*, *eucalyptus rossii*, and *eucalyptus mannifera*.

Recommendation 1. :

The Williamsdale Solar Farm should not be built at the proposed location given that it will involve the removal of mature irreplaceable valuable trees

2. Rationale

In the ACT much of the protection of the environment that exists flows from national laws especially the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This Act identifies species and habitats that require protection and then the ACT planning laws look at those matters. If an area does not meet the qualities required for protection under the federal act then there is little further requirement on planners for environmental protection.

The Conservation Council is aware that the land proposed for the development is not of high or threatened biodiversity value as defined under the EPBC Act (although technically parts would qualify as low quality Yellow Gum Red Box grassy woodland). It also seems that there are no significant threatened species issues (although there is the possibility that the habitat is suitable for some species, e.g. Pink Tailed Worm Lizard (*Aprasia parapulchella*) and there are anecdotal reports of Striped Legless Lizard (*Delma impar*) being sighted at the location).

The Tree Assessment prepared by Enviro Links Design Pty Ltd (July 2015) says:

The vegetation character of the site is typically remnants of the Yellow Box - Red Gum Grassy Woodland, ecological community, consisting primarily of Eucalyptus melliodora and E. blakelyi with select instances of E. bridgesiana, E.rossii and E.mannifera. Several exotic deciduous and coniferous species have been planted primarily around the homestead in the east of the site and

adjacent to Angle Crossing Road. These include, in order of prominence, Pinus radiata, Quercus palustris, Prunus cerasifera 'Nigra', Cupressus sp. & Ulmus parvifolia.¹

There are environmental values at the site even if they do not reach the levels identified by the Federal Government for protection in its legislation. These values relate to the connectivity provided to wildlife, particularly birds, by large trees in the landscape, especially mature trees which might also offer hollows for shelter and nesting.

There is also value in the trees themselves. The ACT is home to some of the best remnants of Yellow Gum Red Box grassy woodland in Australia. This is a habitat that was once extant across a broad range of south-eastern Australia and it has been drastically reduced through settlement and rural practices.

Before European settlement, the temperate woodlands of the ACT and region, and their component floral and faunal communities, were once part of a great grassy woodland mosaic covering much of sub-coastal south-eastern Australia.²

Although in this instance the woodland is not identified as high-value it does have the core component of a high-value system – the trees. The Yellow Gum Red Box grassy woodland habitat needs more than protection in areas set aside for management. We also need areas with existing trees in order that future generations have options for restoration. Once the trees are gone it will take tens of generations to restore (rebuild?) the environment that was lost.

The Conservation Council has visited and looked at the site and was concerned with the original proposal for cutting down over 200 paddock trees. The current proposal has reduced the number of paddock trees proposed to be removed.

Looking over the site (from outside) it seems that if the site was moved to the north and west then even fewer trees would need to be removed.

***Recommendation 2. :
Consideration should be given to moving the site to the north and west in order to further reduce the number of trees that would need to be removed***

We note that the solar farm would occupy only a small part of a large government parcel of land and the original purpose of the acquisition might also constrain the positioning of any solar farm, e.g. development of an airfield.

¹ Enviro Links Design Pty Ltd *Tree Assessment* (July 2015), unnumbered

² ACT Government, *ACT Lowland Woodland Conservation Strategy*, p84

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It makes sense to place the solar farm on highly modified farmland. But even on farmland there is a range of possible sites with a range of environmental consequences. The government owns a large parcel of land at Williamsdale. It predominantly consists of pasture with scattered paddock trees (some of which technically qualifies as low quality endangered gassy woodland) with the density of the paddock trees varying across the property.

This solar farm proposal will have an environmental impact. It involves the removal of approximately 116 paddock trees which provide valuable shelter and nest site habitat to avifauna in particular – both those living in the vicinity and those moving through (Angle Crossing and on to Williamsdale is an important honeyeater migration route each autumn.)

The adverse environmental impacts of the proposal are explicitly acknowledged by the decision to modify the proposal by moving the siting of the farm back 200 metres from the Monaro Highway and thereby halving the number of trees that have to be cut down to make way for the farm.

An examination of Figure 6.3 (below) in the DA Report and Statement Against Criteria³ reveals that we can further reduce the need to cut down valuable habitat trees by moving the proposed solar farm further to the north and west.

³ Purdon Planning, *Part Block 1470 & 1471 Tuggeranong - DA Report & Statement against Criteria*, p46

Figure 6-3: Subject Site and Murrumbidgee River Corridor



Source: Purdon Planning; ACTMAPi

Any trees that do get cut down should be replaced by a significant replanting of suitable endemic paddock trees including protecting them from stock until they have grown sufficiently. This would be in addition to proposed privacy plantings around the solar farm to minimise its visual impact.

A significant replanting would involve a multiple of the number removed in order to improve the chance of having the same number of mature trees in the future.

Recommendation 3. :

Any trees that do get removed should be replaced by a significant replanting of suitable endemic paddock trees including protecting them from stock until they have grown sufficiently

Recommendation 4. :

Replanting of paddock trees should be in addition to proposed privacy plantings around the solar farm.

Recommendation 5. :

Replanting of paddock trees should be at a significant multiple of the number removed

The Tree Assessment Report makes several recommendations to protect individual trees and groups of trees and all of these recommendations should be implemented as a bare minimum if approval is given to the Development Application.

"1.3 Recommendations

Of note trees 1-4 have merit in retention. Tree 1 exhibits a significant lean but in an open paddock presents only a minor safety risk to the proposed infrastructure and related operations. Tree 2 is exhibiting more signs of decay and could be retained as a prominent landscape feature should the area around the homestead be considered undesirable for development. Trees 3 and 4 present the best specimens of the individually assessed trees and should be retained and protected from future development.

The following describes groupings of trees that have merit to retain based on an ecological, aesthetic and/or potential screening function rationale:

(Note: This report should be read in conjunction with drawing TA01& the Tree Assessment Schedule prepared by Enviro Links Design Pty Ltd –Refer Appendices)

- a) Trees situated within the assessment groups 8 & 9 as noted on drawing TA01 form a copse that would be desirable to retain. The trees are in relatively good health, of a mature size (average of 11-12m) and of a density that is greater than what is typical of the site. The majority of trees are part the recognised Yellow Box – Red Gum Grassy Woodland and should be retained to assist preservation of this habitat. The location of water bodies amongst the vegetation also adds to the significance of these trees in terms of habitat value.*
- b) Trees in group 7 have a similar character and value to those outlined in point a) above. There is added value in the trees in this group in their relationship to the intermittent / ephemeral creek bed to the north of the group. Some of the trees in the group form part of the Yellow Box- Red Gum Grassy Woodland and have value in their preservation. The remainder along the banks of the creek bed have potential habitat value. As the creek*

bed is likely to pose a constraint to the proposed development the trees within this zone could also be retained as part of this constraint.

- c) Trees at the southern end of Groups 8 & 9, whilst mainly part of the recognised Yellow Box-Red Gum Grassy Woodland also serve a secondary screening function. They would assist the amelioration of the full impact of the development from Angle Crossing Road.*
- d) Trees in groups 14 & 17, along the Angle Crossing Road verge and the immediately adjacent land lease (either side of the road) have high value as a combined vegetated screen. They form an effective and dense screen for views gained from Angle Crossing road and northbound Monaro Highway. Group 17 (***Pinus radiata***) is in fair health due to close proximity plantings. Selective thinning and replacement plantings could be undertaken to improve pine foliage and long term integrity. Supplementary Eucalypt plantings behind the main screen would also assist vegetation succession.*
- e) Retention of as many trees as is practically possible on the eastern side, included in group 15, would provide established screening vegetation of the site and reduce the need for extensive supplementary planting.*
- f) Yellow Box – Red Gum Grassy Woodland assessed in Group 5 represents relatively undisturbed examples of the natural lowland woodland habitat. These groups are the extremity of the large Yellow Box – Red Gum Grassy Woodland to the north and south of the blocks of the assessment."*

Recommendation 6. :

The recommendations of the Tree Assessment Report should be implemented as a bare minimum and should be a requirement for development approval

The Conservation Council acknowledge advice and assistance from member groups in preparation of these comments, particularly Friends of Grasslands and also Canberra Ornithologists Group.