



Your ref: CM 13014
Our ref: DOC24/459837

Ms Sara Mehryar
Assistant Strategic Planner, Sustainable Growth
Wollondilly Shire Council

By email: sara.mehryar@wollondilly.nsw.gov.au

Dear Ms Mehryar

I refer to your letter dated 11 June 2024 seeking advice from the Biodiversity, Conservation and Science Group (BCS) of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) on a draft Planning Proposal for 1838 Barkers Lodge Road, and 1455 and 1475 Burragorang Road, Oakdale (proposal).

BCS understands that Council is seeking early feedback on preliminary notification documents for the proposal, which seeks to amend the *Wollondilly Local Environmental Plan 2011* to enable low density residential development for approximately 208 lots.

BCS has reviewed the information provided and recommends that:

- consideration be given to further avoidance of impacts to threatened ecological communities and threatened species habitat, including critically endangered ecological communities which are also Serious and Irreversible Impact entities
- the proposal addresses urban heat mitigation
- a flood impact and risk assessment be undertaken in accordance with the Flood Risk Management Manual and its supporting flood risk management guidelines, with particular attention to Flood Impact and Risk Assessment (LU01) and Support for Emergency Management Planning (EM01)
- the proposal addresses Ministerial Direction 4.1 Flooding.

Detailed BCS comments are provided at Attachment A.

If you have any further questions about this issue, please contact Dana Alderson, Senior Project Officer Planning at dana.alderon@environment.nsw.gov.au.

Sincerely

25/07/2024

Susan Harrison
Senior Team Leader Planning Greater Sydney
Regional Delivery
Biodiversity, Conservation and Science

BCS) advice - draft Planning Proposal for 1838 Barkers Lodge Road, and 1455 and 1475 Burratorang Road, Oakdale.

BCS has reviewed:

- *Planning Proposal P-22086 1838 Barkers Lodge Road, 1455 Burratorang Road & 1475 Burratorang Road, Oakdale* prepared by Gyde Consulting dated 16 May 2024 (PP report)
- *Oakdale Rezoning Project Biodiversity Development Assessment Report* prepared by Biosis dated 25 March 2024 (BDAR)
- *Strategic Bushfire Study Barkers Lodge Road Oakdale Planning Proposal* prepared by Black Ash Bushfire Consulting dated 27 March 2024 (Bushfire report)
- *Vegetation Management Plan* prepared by Restore dated 22 March 2024 (VMP)
- *Water Cycle Management Strategy Report, Oakdale Planning Proposal* prepared by Colliers dated 14 March 2024 (WCMS report).

Biodiversity

The site contains critically endangered ecological communities (CEECs) and habitat for several threatened species. This includes Shale Sandstone Transition Forest in the Sydney Basin Bioregion (SSTF) and Sydney Turpentine Ironbark Forest (STIF) which are both CEECs under the *Biodiversity Conservation Act 2016* (BC Act). The proposal involves direct and indirect impacts to these CEECs (refer Figure 15 of the BDAR), as well as threatened species habitat.

As much of the site is mapped on the [Biodiversity Values Map](#), future development under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) will trigger the Biodiversity Offsets Scheme and require preparation of a Biodiversity Development Assessment Report (BDAR).

These CEECs are also Serious and Irreversible Impact (SII) entities pursuant to clause 6.7 of the *Biodiversity Conservation Regulation 2017*. For Part 4 development, a decision maker must not grant approval if they determine the proposal is likely to have a serious and irreversible impacts (SII) on biodiversity values.

Direct impacts and proposed land use zoning

The proposal will result in the removal of 6.82ha of native vegetation, including 3.07ha of CEECs as well as habitat for the threatened Cumberland Plain Land Snail, Powerful Owl and Southern Myotis. Only some retention of vegetation is proposed in the C2 Environmental Conservation zone, as vegetation in the C3 Environmental Management zone will be managed by clearing/thinning for asset protection and open space purposes.

The BDAR acknowledges that biodiversity values within the C3 zone will be impacted through management as an Inner Protection Area (Figure 16, Bushfire report, p.55). The canopy and understorey will be limited and will resemble mown lawn and gardens rather than a native vegetation community. Refer to page 107 of [Planning for Bushfire Protection 2019](#) (PBP). Further, the C3 zone under the *Wollondilly LEP 2011* permits a range of permissible uses, many of which are not consistent with biodiversity conservation.

The BDAR states that it has conservatively assumed that all existing vegetation within the development footprint will be removed (p.73). BCS considers that there is opportunity for further avoidance of direct biodiversity impacts, and the creation of a larger C2 zoned conservation area that is less awkwardly shaped, and which is more likely to have successful outcomes for the retention of biodiversity values in the long term. Furthermore, BCS recommends that the proposal commit to retaining existing vegetation within the development footprint, particularly hollow-bearing trees (HBTs).

Indirect impacts

The BDAR states that “indirect impacts are not expected to occur as a result of the proposal, and will be avoided through the mitigation measures provided in Section 7” (p.83).

BCS advises that indirect impacts may result from the proposal as follows.

The areas of retained native vegetation within the C2 and C3 zones will be subject to indirect impacts including, but not limited to, weed infestations, stormwater runoff and an increase in use for walking and other passive recreation purposes. This is amplified by the elongated shape of the C-zoned lands, and large edge-area ratio.

In addition, BCS notes that the voluntary planning agreement (VPA) proposes improvements to open space and community facilities including new flood lighting in the adjoining Willis Park. As these works are required due to the additional population generated by the proposal, indirect impacts on the retained vegetation in the C2 and C3 land should be included in the assessment of impacts on biodiversity resulting from the rezoning. Any impacts of these works on biodiversity values off site should also be addressed.

Future development applications will be required to consider the above indirect impacts, including whether indirect impacts will contribute to SAIL. Mitigation measures must be applied to all indirect impacts from works both within and off site related to the proposal.

Management of retained vegetation

BCS understands that it is proposed that management of retained native vegetation will occur under a vegetation management plan (VMP) linked to a community title scheme, with a section 88B instrument under the NSW *Conveyancing Act 1919*. Previous advice provided by BCS dated 26 September 2022 suggested that there were several options for the management of the conservation land. The proponent should justify why these other options are not supported.

In relation to the proposal's VMP, a map of the Vegetation Management zones (VMZs) should be provided to clearly show the location of the VMZs.

The BDAR emphasises that avoidance of impacts for the proposal has included 'redesign of subdivision to retain remnant native vegetation and hollow-bearing trees with a proposed C2 and C3 zoning' (p.66). As such the proposal must ensure that HBTs are retained within the C2 and C3 land. BCS recommends the VMZ mapping shows the location of HBTs to be retained, and Table 2-1 'VMP management zones and objectives' be updated to identify which VMZs contain HBTs and clearly state that they are to be retained. This is important to ensure that HBTs are retained when the 25% canopy removal occurs for the purpose of creating APZs.

Design principles

BCS previously advised that the proposal should be consistent with the following design principles to respond to the biodiversity values on the site:

Principle	BCS comment
Prevent fragmentation of conservation land through a minimum lot size which does not allow further subdivision (other than to subdivide off conservation land from development land).	The proposal includes a minimum lot size of 5ha for the C2 land, and 4000sqm and 5ha for the C3 land which will prevent further subdivision of the land. It is noted however that the conservation land is awkwardly shaped, with long fingers of retained vegetation and a large edge-area ratio.
Prevent impacts from development on conservation land by: <ul style="list-style-type: none"> - ensure active open space is provided within the development land - provide buffers to conservation land within the development via a perimeter road, shared cycle/pedestrian paths or open space - ensure stormwater and effluent systems do not discharge into existing or proposed conservation land 	<ul style="list-style-type: none"> - No active open space is proposed within the development land, though embellishments are to be made to the adjoining sportsfields. Passive open space is provided in the C3 land. - Some instances where buffers are not provided. - Stormwater in the south of the precinct will be directed to a stormwater detention basin situated in the C3 land, location of discharge point is not known. - APZs proposed in C3 land.

<ul style="list-style-type: none"> - ensure APZs sited on development land - retention of existing vegetation within development land for amenity and urban cooling. 	<ul style="list-style-type: none"> - The BDAR states that all existing vegetation within the development footprint will be removed. Mitigation of urban heat has not been addressed in the PP report.
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Urban heat mitigation

As noted above, BCS recommends that the proposal commit to retain vegetation within the development footprint, not only for biodiversity but also canopy cover to improve amenity and provide shade for urban heat mitigation. The small lots proposed are unlikely to be large enough to accommodate planting of new shade trees, and retention of existing mature trees is an easy way to ensure immediate shading of the new development.

BCS recommends the proposal address urban heat mitigation with reference to the *Wollondilly Urban Tree Canopy Plan and Landscape Strategy* (McGregor Coxall, December 2020).

Flooding

At pre-scoping stage, BCS recommended preparation of a flood impact and risk assessment (FIRA) if the site is flood affected. BCS has reviewed section 4 'Flood assessment' of the WCMS report and notes that it outlines the methodology undertaken for the flood assessment. Appendix D of the WCMS report provides flood maps for the 1% AEP existing and developed scenarios.

Section 4 of the WCMS report does not provide adequate information about flood risk, constraints and impacts. The assessment is limited to the 1% AEP as provided in Appendix D. It is unclear from the information in the WCMS report whether the proposal is consistent with Ministerial Direction 4.1 Flooding.

A flood impact and risk assessment (FIRA) should be undertaken in accordance with the [Flood Risk Management Manual](#) and its supporting flood risk management guidelines, with particular attention to [Flood Impact and Risk Assessment \(LU01\)](#) and [Support for Emergency Management Planning \(EM01\)](#). The deliverables of the FIRA should be in general accordance with Table 6 of the guideline. The FIRA must consider the compatibility of the proposed development with the flood function and behaviour of the land. The FIRA should provide detailed consideration and recommendations for flood related development controls. The FIRA should be undertaken by qualified engineers who have experience and advanced skills in catchment hydrology and floodplain hydraulics and have a good working knowledge of flood risk management practices and guidance in NSW.

As such, BCS recommends the WCMS report be updated as follows:

- address the full range of flood risk. To achieve this, flood behaviour would be examined for a range of events. Typical events examined may include the 10% or 5%, 1%, 0.5% or 0.2% AEP and probable maximum flood (PMF) for both existing and developed scenarios
- identify the constraints that flood places on the land (floodways, flood storage, flood hazard and emergency response issues) determined for a number of events, typically 10% or 5%, 1%, 0.2% or 0.5% AEP and PMF
- identify the impact of the development on flooding and on the existing and future community for the full range of flooding
- identify how these impacts can be managed to minimise the growth in risk to the community due to the development. This includes details of any management measures to be implemented to minimise the impacts and risks posed to the existing and future community due to development
- address climate change impacts.

BCS also provides the following comments on the 1% AEP flood maps provided in Appendix D:

- The maps of the post-development scenario should show the proposed zoning as depicted in Figure 10 of the PP Report instead of the existing undeveloped scenario
- The flood hazard maps (Figures B003 and C003) may require revision as areas shown in Figures B001 and C001 that have flood depth greater than 1m are categorised H1
- Appendix D shows adverse impacts on the downstream community particularly north of Burragorang Road. These impacts should be addressed and mitigated as part of the planning proposal.

The proposal should be updated following the completion of the above flood assessment to address consistency with Direction 4.1.

END OF SUBMISSION